

Technical catalogue ACP

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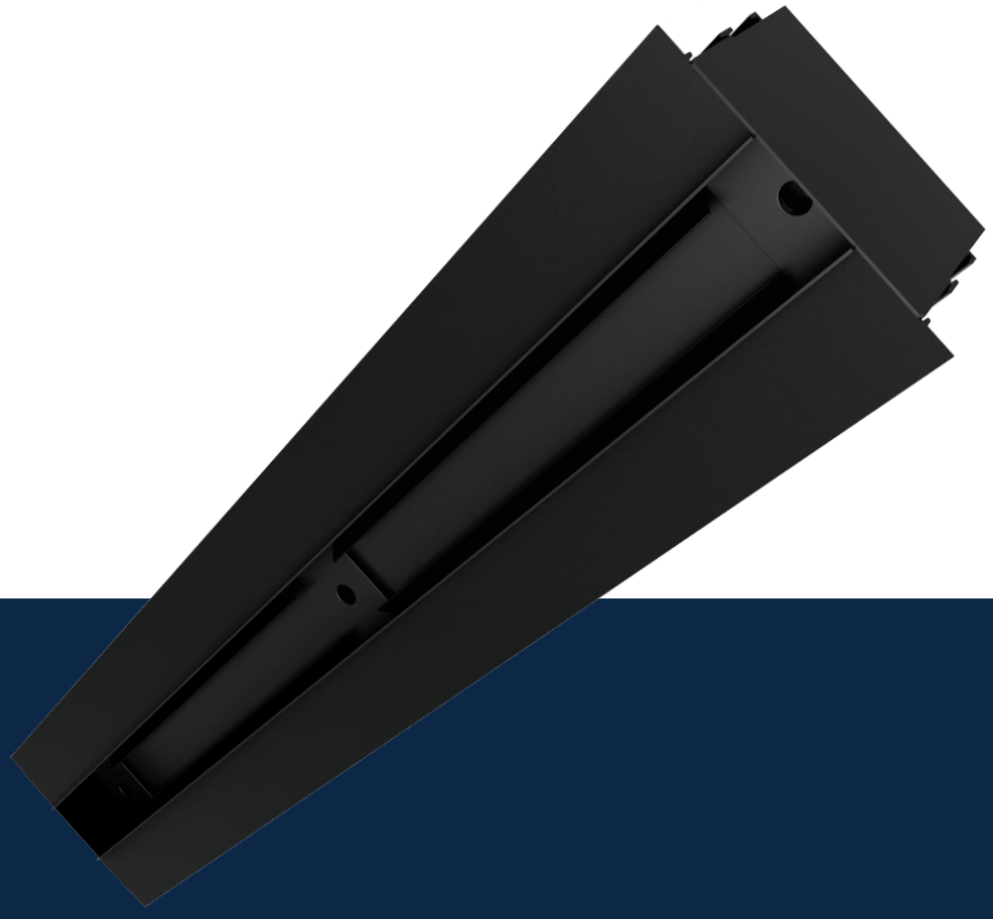
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Air through perfection

Linear diffuser

LENOX



ACP
Architectural diffusers

Linear diffuser

LENOX



Description

LENOX is an architectural linear diffuser, used to introduce or evacuate air.

The diffuser is an elegant and practical ventilation solution, and the design of the product determines a high level of induction rate.

LENOX integrates fully into the ceiling and is recommended for residential spaces, conference rooms, offices, classrooms, etc.

Technical specifications

Characteristics

The diffuser is made with a linear slot, centrally positioned, with the following dimensional options: 25, 38, 51, 64 or 76 mm.

The diffuser blades are segmented to a maximum length of 635 mm and allow multiple positioning options (up, down, center…) thus obtaining the direction of the air jet in the desired direction.

The blades are sliding and easily adjustable from the front of the diffuser.

Dimensional limits, diffuser length: minimum 0.3m and maximum 3m.

In the case of diffusers with a length > 3m, the execution is modular, and the product is delivered together with the necessary connecting parts (alignment strips).

Depending on the overall position, the modular parts are built without termination elements (caps), or with a single element - see assembly sections.

Perimeter configurations can be made by using corner sections (angle 90° and 135°).

Corner elements are inactive.

The product is delivered with the following elements: “U” type mounting system (bracket), fixing screw and masking cover for the screw.

The number of mounting systems depends on the length of the product.

Materials

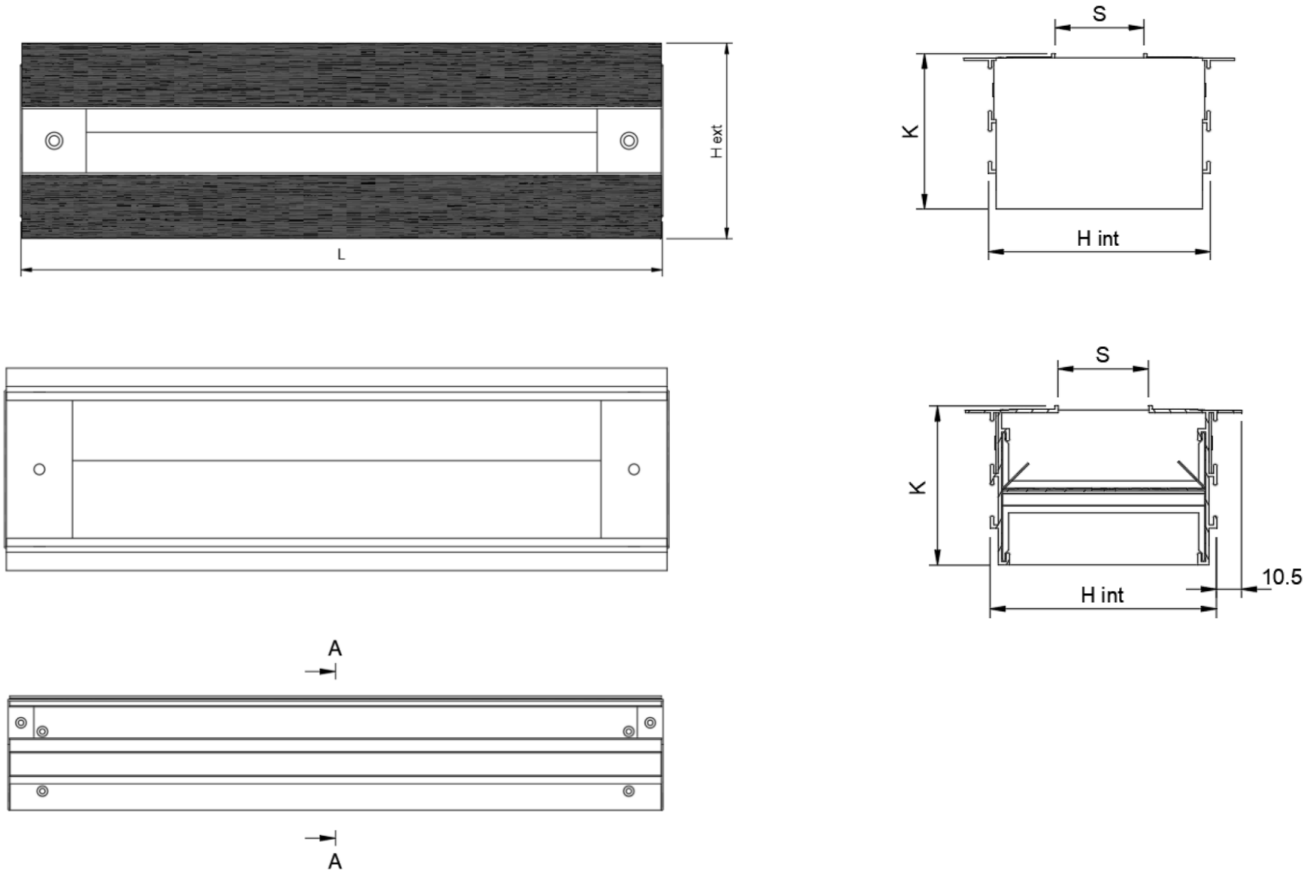
The diffuser is made of black anodized aluminum.

The blades are made of galvanized steel sheet electrostatic field painted in RAL 9005.

Other RAL colours are available on request.

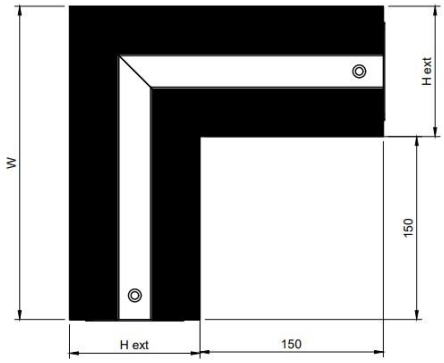
Technical drawing

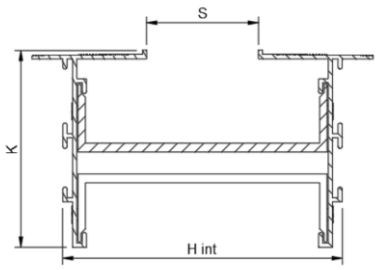
LENOX - Linear

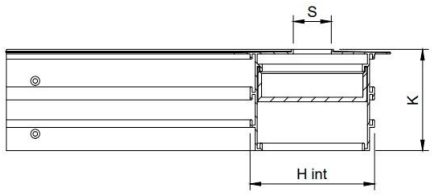


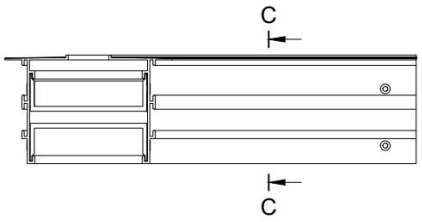
S [mm]	H int [mm]	H ext [mm]	W [mm]	K [mm]
25	82	103	253	66,8
38	95	116	266	66,8
51	108	129	279	66,8
64	121	142	292	66,8
76	133	154	304	66,8

LENOX - 90 ° angle

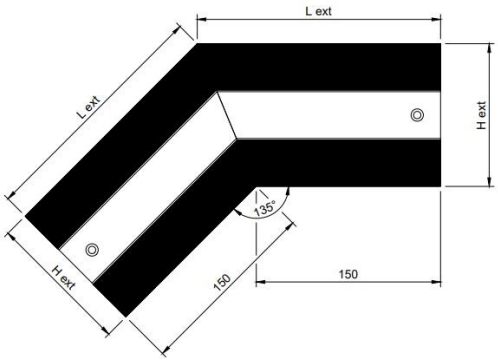


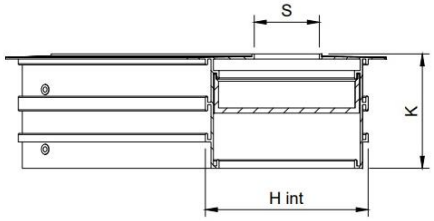


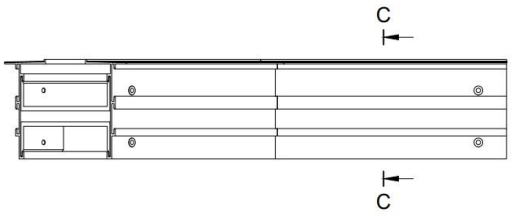




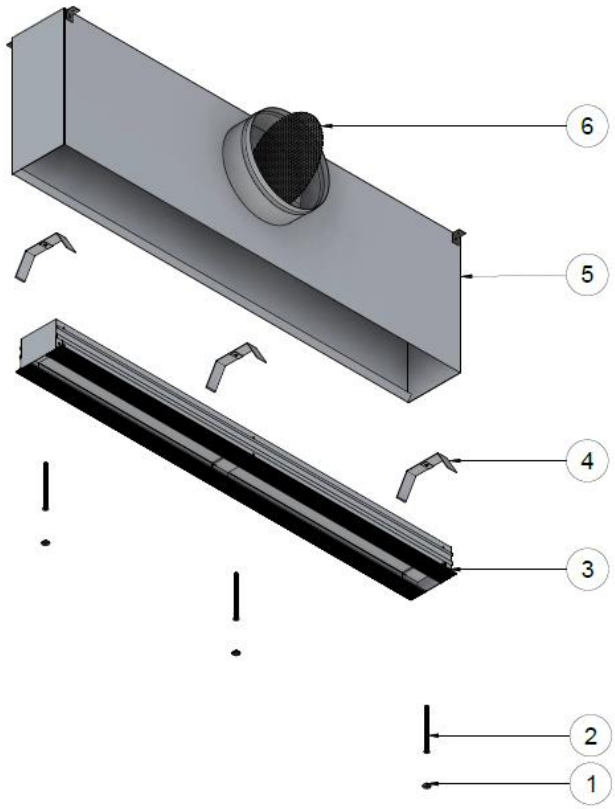
LENOX - 135 ° angle





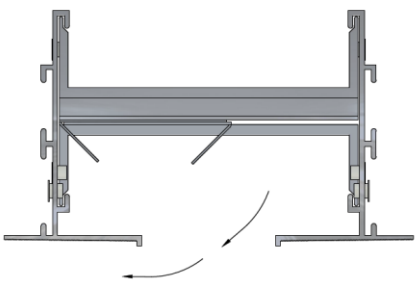


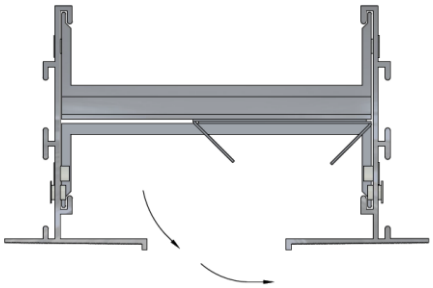
Product specifications

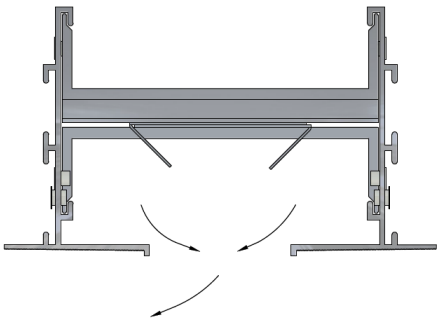


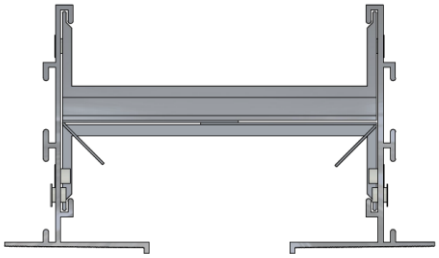
1 - Masking cap
2 - Fixing screw
3 - LENOX diffuser
4 - Bracket (“U” type system)
5 - Plenum box (optional)
6 - Perforated damper (optional)

Directing the air jet



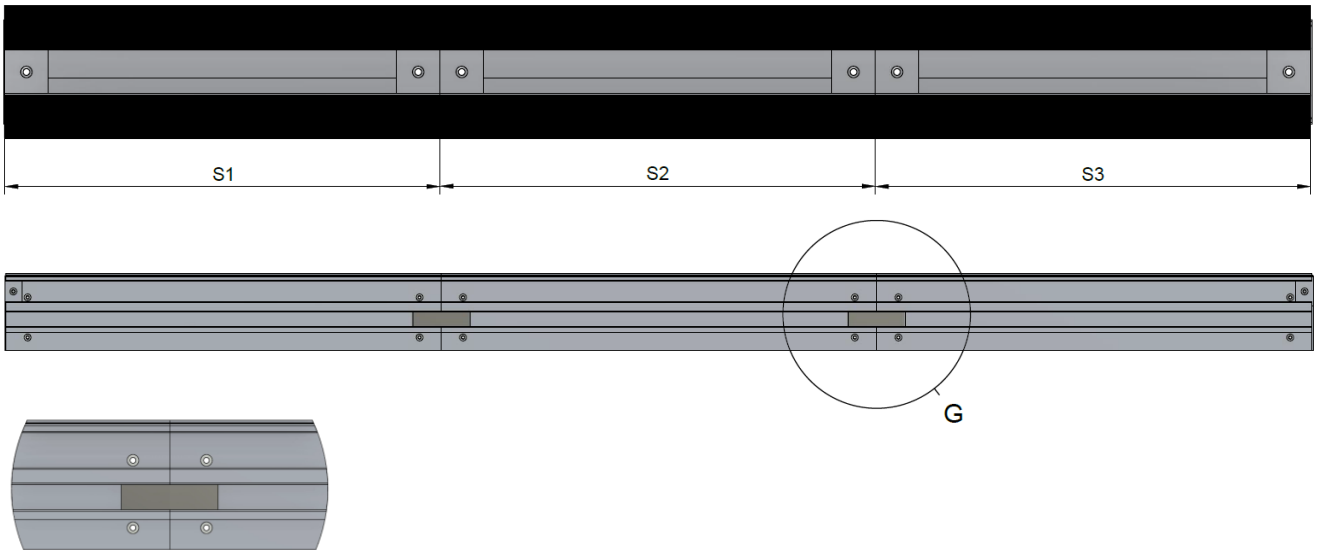






Section assembly

Long-length diffusers are made of modules with a maximum length of 3 m. In this case, the product is delivered with connecting elements between modules.



G – Mounting detail (connecting elements)

Accessories

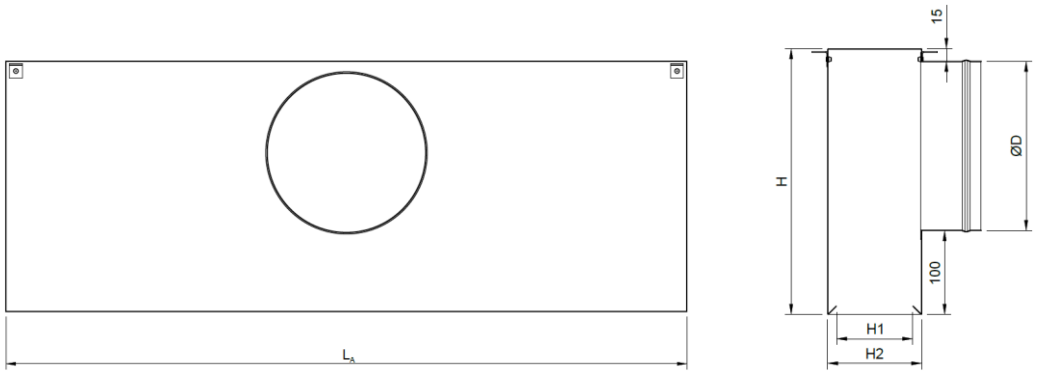
The diffuser can be supplied with a plenum connecting to a circular duct with horizontal connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

The plenum is delivered insulated or uninsulated.

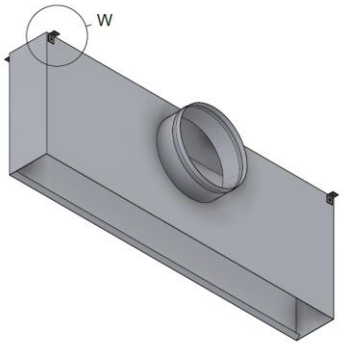
Optionally, a perforated damper can be mounted on the plenum connection to balance the air flow.

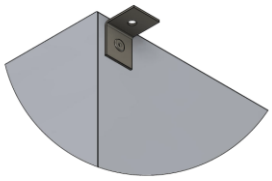
Adapter (plenum box)



$L_A = L_{LENOX} + 4$
H1 = H int LENOX + 2
H2 = H1 + 16
H – depending on ØD

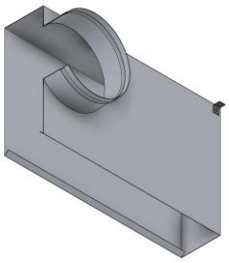
The adapter is made of Z140 galvanized steel sheet and is equipped with suspension lugs.



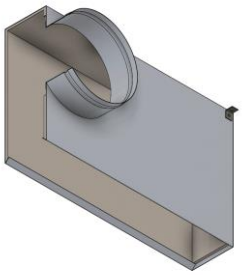


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.

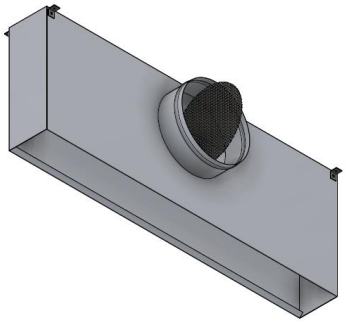


AN - Uninsulated adapter

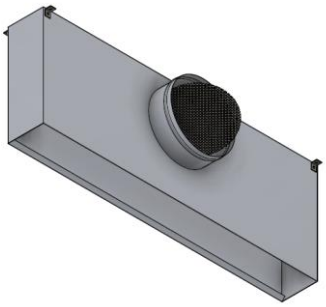


AIZ - Insulated adapter

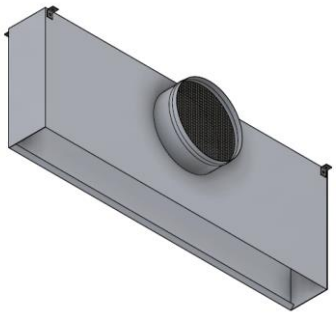
Perforated damper



Position 0°



Position 45°



Position 90°

The perforated damper is mounted on the adapter spigot and has the role of balancing the air flow.

Functional parameters

L x H [mm]	Slot dimension [mm]	ØD [mm]	Functional parameters							
600 x 82	25	150	Air flow [m^3/h]	**43**	**86**	**126**	**169**	**212**	**255**	**299**
			Pt [Pa]	2	8	19	33	51	74	99
			Ps [Pa]	2	7	16	29	45	64	87
			NR [dB(A)]	5	8	<15	20	29	36	40
			X [m]	0.6 1.5	1.8 2.7	2.7 3.7	3.0 4.0	3.0 4.3	3.4 4.9	3.7 5.5
1200 x 82			Air flow [m^3/h]	**68**	**137**	**205**	**273**	**338**	**406**	**475**
			Pt [Pa]	2	8	16	29	45	65	87
			Ps [Pa]	1	5	10	19	29	42	56
			NR [dB(A)]	6	9	<15	17	25	32	38
			X [m]	0.6 1.5	1.8 3.7	2.7 4.6	3.7 5.2	3.7 5.5	4.6 6.1	4.9 6.7
1500 x 82			Air flow [m^3/h]	**86**	**169**	**255**	**338**	**424**	**511**	**594**
			Pt [Pa]	2	9	20	35	54	78	105
			Ps [Pa]	1	5	10	19	29	42	56
			NR [dB(A)]	5	9	<15	18	26	22	38
			X [m]	0.6 2.1	2.1 4.0	3.0 5.2	4.0 5.8	4.6 6.1	4.9 6.7	5.2 7.3
600 x 82		200	Air flow [m^3/h]	**86**	**126**	**169**	**212**	**255**	**299**	**338**
			Pt [Pa]	7	17	30	47	67	89	117
			Ps [Pa]	7	16	28	45	64	85	112
			NR [dB(A)]	6	<15	20	28	35	41	44
			X [m]	1.5 2.7	2.7 3.4	3.0 4.3	3.4 4.6	3.7 5.5	3.7 5.8	4.0 6.1
1200 x 82			Air flow [m^3/h]	**118**	**187**	**255**	**324**	**392**	**457**	**525**
			Pt [Pa]	4	10	19	30	44	60	79
			Ps [Pa]	3	8	16	25	37	51	67
			NR [dB(A)]	4	8	<15	23	30	36	41
			X [m]	1.2 3.0	2.4 4.3	3.4 5.2	4.0 5.8	4.6 6.7	4.9 7.3	5.5 7.9
1500 x 82			Air flow [m^3/h]	**137**	**219**	**306**	**392**	**475**	**561**	**644**
			Pt [Pa]	2	6	14	23	35	51	70
			Ps [Pa]	1	5	11	18	27	40	55
			NR [dB(A)]	7	10	<15	23	29	35	40
			X [m]	1.5 3.4	2.7 4.6	3.7 5.5	4.3 6.1	4.6 6.7	5.2 7.3	5.5 7.9
600 x 95	38	150	Air flow [m^3/h]	**50**	**101**	**151**	**205**	**255**	**306**	**356**
			Pt [Pa]	2	9	22	37	61	91	117
			Ps [Pa]	0	8	19	31	52	78	99
			NR [dB(A)]	4	8	<15	22	31	39	44
			X [m]	1.2 2.1	2.1 3.4	2.7 4.0	3.0 4.6	4.0 5.2	4.3 5.8	4.6 6.1
1200 x 95			Air flow [m^3/h]	**119**	**187**	**255**	**324**	**392**	**457**	**525**
			Pt [Pa]	5	11	22	37	51	71	93
			Ps [Pa]	3	6	13	22	30	42	55
			NR [dB(A)]	5	10	<15	20	24	30	36
			X [m]	1.5 3.4	2.4 4.6	3.7 5.2	4.0 5.8	4.6 6.1	4.9 6.4	5.2 7.0
1500 x 95			Air flow [m^3/h]	**144**	**230**	**313**	**400**	**482**	**569**	**655**
			Pt [Pa]	3	14	25	41	61	85	109
			Ps [Pa]	0	6	11	19	29	40	50
			NR [dB(A)]	6	9	<15	20	26	31	37
			X [m]	1.5 3.4	2.7 4.6	4.0 5.5	4.6 6.4	5.2 7.0	5.5 7.6	6.1 8.2
600 x 95		200	Air flow [m^3/h]	**50**	**101**	**151**	**205**	**255**	**306**	**356**
			Pt [Pa]	1	8	19	32	55	79	106
			Ps [Pa]	0	7	18	30	52	74	100
			NR [dB(A)]	3	7	<15	23	31	40	41
			X [m]	1.2 2.1	2.1 3.4	2.7 4.0	3.7 4.6	4.0 5.2	4.3 5.5	4.6 5.8
1200 x 95			Air flow [m^3/h]	**119**	**205**	**288**	**374**	**457**	**544**	**630**
			Pt [Pa]	4	9	19	31	51	67	94
			Ps [Pa]	3	7	15	25	42	55	77
			NR [dB(A)]	6	9	<15	22	30	36	44
			X [m]	1.5 3.4	2.7 4.6	4.0 5.5	4.6 6.4	5.2 7.0	5.8 7.6	6.1 7.9
1500 x 95			Air flow [m^3/h]	**144**	**245**	**350**	**450**	**550**	**655**	**756**
			Pt [Pa]	4	10	21	32	51	68	99
			Ps [Pa]	3	7	15	24	37	50	74
			NR [dB(A)]	8	10	<15	23	30	36	43
			X [m]	1.5 3.4	3.0 4.9	4.0 6.1	5.2 7.0	5.5 7.6	6.1 8.2	6.4 8.8

L x H [mm]	Slot dimension [mm]	ØD [mm]	Functional parameters							
600 x 108	51	200	Air flow [m^3/h]	**68**	**137**	**205**	**273**	**338**	**406**	**475**
			Pt [Pa]	2	7	16	29	45	64	87
			Ps [Pa]	1	6	14	25	39	57	77
			NR [dB(A)]	6	9	<15	17	26	31	38
			X [m]	0.9 2.4	2.4 4.0	3.0 4.6	4.0 5.2	4.3 5.8	4.6 6.7	4.9 7.0
1200 x 108			Air flow [m^3/h]	**169**	**255**	**338**	**425**	**511**	**594**	**680**
			Pt [Pa]	4	8	10	23	34	46	60
			Ps [Pa]	2	5	10	15	22	30	39
			NR [dB(A)]	7	10	14	15	22	30	37
			X [m]	1.2 3.4	2.7 4.3	3.7 5.2	4.0 5.8	4.3 7.0	7.6 8.2	5.2 8.5
1500 x 108			Air flow [m^3/h]	**212**	**306**	**400**	**493**	**586**	**680**	**774**
			Pt [Pa]	4	9	16	24	34	46	59
			Ps [Pa]	2	5	9	13	19	25	33
			NR [dB(A)]	6	12	<15	22	29	34	39
			X [m]	1.8 3.7	3.7 5.2	4.0 5.8	4.3 7.0	4.9 7.9	5.5 8.5	6.4 9.1
600 x 108		300	Air flow [m^3/h]	**86**	**169**	**255**	**338**	**425**	**511**	**594**
			Pt [Pa]	2	7	16	28	44	63	86
			Ps [Pa]	2	7	15	27	42	60	82
			NR [dB(A)]	7	10	<15	17	24	29	37
			X [m]	1.5 3.0	2.4 3.7	3.0 4.3	3.7 5.2	4.0 5.8	4.3 6.7	7.9 7.6
1200 x 108			Air flow [m^3/h]	**169**	**288**	**406**	**525**	**644**	**763.2**	**882**
			Pt [Pa]	2	6	11	19	28	42	53
			Ps [Pa]	1	5	9	16	23	33	44
			NR [dB(A)]	6	9	<15	20	27	33	39
			X [m]	1.8 3.7	3.4 4.6	4.0 5.8	4.6 7.0	5.2 8.2	5.8 9.1	6.4 10.4
1500 x 108			Air flow [m^3/h]	**212**	**349**	**482**	**619**	**756**	**892**	**1026**
			Pt [Pa]	2	6	11	18	27	38	50
			Ps [Pa]	2	4	8	14	21	29	38
			NR [dB(A)]	9	13	<15	23	31	36	41
			X [m]	2.1 4.6	3.4 5.8	4.3 7.3	4.9 7.6	5.8 9.1	6.4 9.8	7.6 10.4
600 x 121	64	250	Air flow [m^3/h]	**169**	**245**	**324**	**400**	**475**	**550**	**630**
			Pt [Pa]	6	12	21	32	46	62	80
			Ps [Pa]	11	11	19	29	41	56	72
			NR [dB(A)]	9	13	<15	22	29	35	40
			X [m]	2.7 3.4	2.7 4.0	3.7 5.2	4.3 5.5	4.9 6.7	5.2 7.3	5.5 7.9
1200 x 121			Air flow [m^3/h]	**237**	**374**	**511**	**644**	**781**	**918**	**1055**
			Pt [Pa]	4	9	17	28	40	56	73
			Ps [Pa]	2	6	12	19	28	38	51
			NR [dB(A)]	8	14	<15	25	33	40	45
			X [m]	2.4 5.2	4.3 6.7	4.9 7.6	5.2 8.5	5.8 9.4	6.7 10.1	7.3 10.7
1500 x 121			Air flow [m^3/h]	**255**	**406**	**561**	**712**	**867**	**1018**	**1173**
			Pt [Pa]	3	8	16	26	37	52	69
			Ps [Pa]	0	5	9	15	22	30	40
			NR [dB(A)]	9	15	<15	23	31	38	43
			X [m]	2.4 4.9	3.7 6.4	4.6 7.6	5.5 8.8	6.4 9.8	7.0 10.7	8.2 11.6
600 x 121		300	Air flow [m^3/h]	**169**	**245**	**324**	**400**	**475**	**550**	**630**
			Pt [Pa]	5	11	18	28	40	54	70
			Ps [Pa]	5	10	17	26	37	51	65
			NR [dB(A)]	7	12	<15	20	27	33	38
			X [m]	2.7 3.4	2.7 4.0	3.7 5.2	4.3 5.5	4.9 6.7	5.2 7.3	5.5 7.9
1200 x 121			Air flow [m^3/h]	**237**	**381**	**525**	**670**	**817**	**961**	**1105**
			Pt [Pa]	3	8	15	24	35	49	65
			Ps [Pa]	2	6	11	19	28	38	51
			NR [dB(A)]	7	13	15	23	31	38	43
			X [m]	2.4 5.2	4.3 6.7	4.9 7.6	5.2 8.8	6.1 9.8	7.0 10.4	7.9 11.3
1500 x 121			Air flow [m^3/h]	**255**	**425**	**594**	**763**	**936**	**1105**	**1274**
			Pt [Pa]	2	7	13	22	33	47	62
			Ps [Pa]	2	5	9	16	23	32	43
			NR [dB(A)]	11	<15	16	26	34	40	46
			X [m]	2.4 4.9	3.7 6.4	4.9 7.9	5.8 9.4	6.7 10.1	7.6 11.3	8.5 11.9

L x H [mm]	Slot dimension [mm]	ØD [mm]	Functional parameters							
600 x 133	76	250	Air flow [m^3/h]	**212**	**288**	**363**	**443**	**518**	**594**	**669**
			Pt [Pa]	7	14	22	32	45	59	75
			Ps [Pa]	7	12	19	29	39	52	66
			NR [dB(A)]	9	12	<15	24	29	35	40
			X [m]	3.4 4.9	4.0 5.8	4.6 6.4	5.2 7.0	5.5 7.6	5.8 8.5	6.1 9.4
1200 x 133			Air flow [m^3/h]	**338**	**468**	**594**	**723**	**850**	**975**	**1105**
			Pt [Pa]	7	12	20	30	41	55	70
			Ps [Pa]	4	8	13	19	26	35	44
			NR [dB(A)]	11	<15	18	22	28	34	40
			X [m]	4.0 6.1	4.6 7.3	5.8 8.2	6.4 9.1	7.0 9.8	7.3 10.7	7.9 11.3
1500 x 133			Air flow [m^3/h]	**374**	**525**	**680**	**831**	**986**	**1155**	**1292**
			Pt [Pa]	6	10	20	31	43	57	73
			Ps [Pa]	3	6	11	16	23	30	39
			NR [dB(A)]	13	<15	16	24	32	39	45
			X [m]	3.7 6.4	5.2 7.6	6.1 8.8	7.0 9.8	7.3 10.7	7.9 11.3	8.5 12.2
600 x 133		300	Air flow [m^3/h]	**212**	**288**	**363**	**443**	**518**	**594**	**670**
			Pt [Pa]	7	13	21	31	42	56	71
			Ps [Pa]	6	12	19	29	39	52	66
			NR [dB(A)]	8	11	<15	18	25	31	36
			X [m]	3.4 4.9	4.0 5.8	4.6 6.4	5.2 7.0	5.5 7.6	5.8 8.5	6.1 9.4
1200 x 133			Air flow [m^3/h]	**338**	**493**	**644**	**799**	**950**	**1105**	**1256**
			Pt [Pa]	5	12	20	31	43	59	76
			Ps [Pa]	4	9	15	23	33	44	58
			NR [dB(A)]	10	14	<15	22	29	36	41
			X [m]	4.0 6.1	4.9 7.3	6.1 8.5	6.7 9.4	7.3 10.4	7.9 11.3	8.5 12.2
1500 x 133			Air flow [m^3/h]	**374**	**561**	**749**	**936**	**1120**	**1306**	**1494**
			Pt [Pa]	5	11	20	31	44	60	78
			Ps [Pa]	3	7	13	20	29	40	52
			NR [dB(A)]	12	<15	19	26	32	39	43
			X [m]	3.7 6.4	4.3 7.9	4.9 9.1	6.1 10.4	7.6 11.3	8.2 11.9	8.8 12.8

Note
The values provided are for the grille-plenum assembly.

The legend
ØD [mm] - Diameter plenum
X [m] - The length of the air jet at a speed of 0.5 and 0.25 m/s
NR [dB (A)] - Noise level considering room attenuation of 10 dB
Pt [Pa] - Total pressure loss
Ps [Pa] - Static pressure loss

Installation

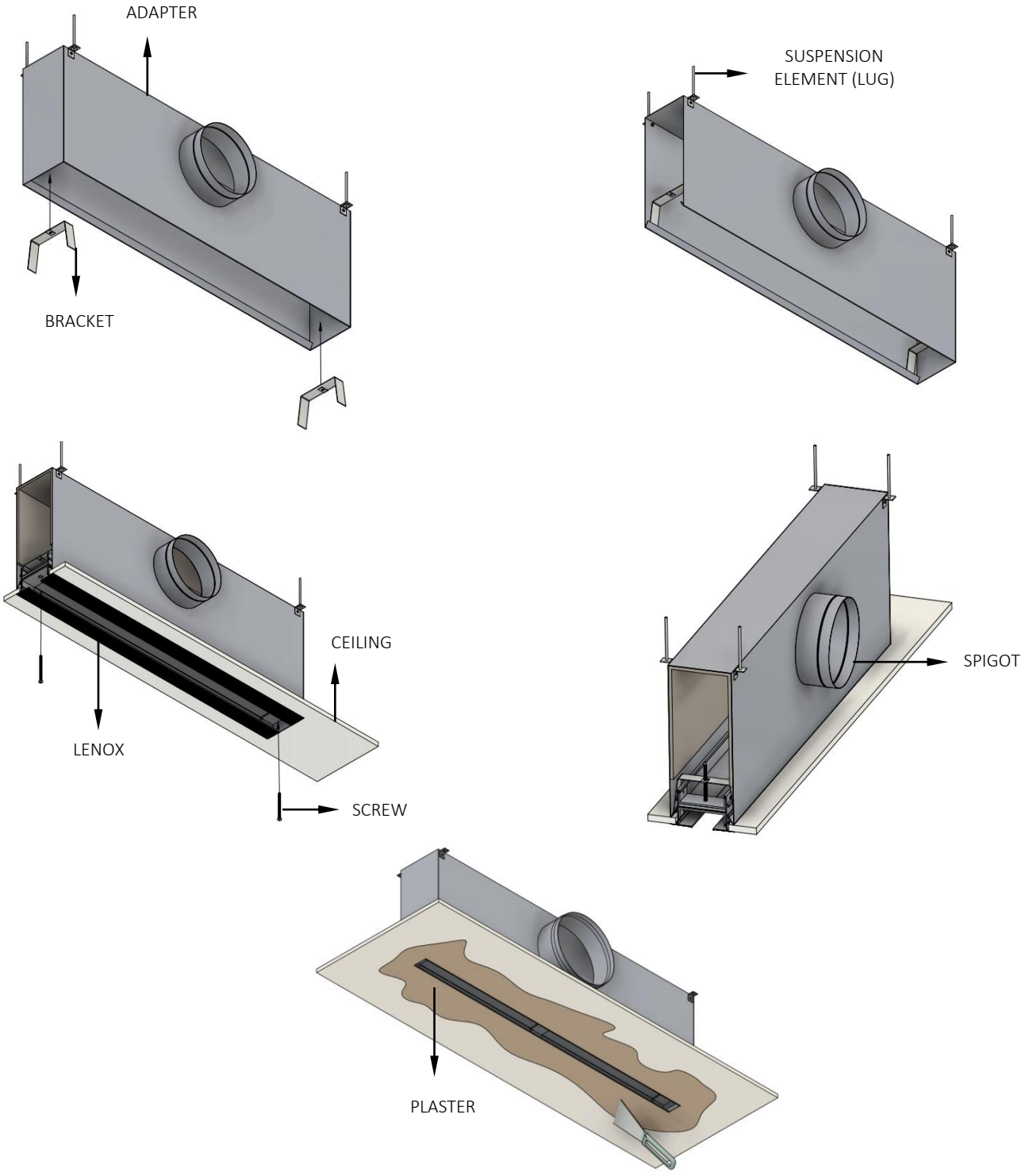
The diffuser is mounted in a false continuous ceiling or on the wall.

The fixing of the plenum diffuser is done by means of “U” type mounting systems (bracket), positioned inside the plenum and the screws.

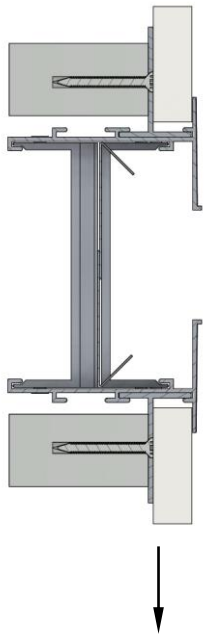
If the product does not have a functional role (inactive transition sections) or is installed on the wall, then a "T" profile can be used to fix the diffuser. This profile is requested separately.

After fixing, apply gypsum plaster (adhesive) over the diffuser frame and then apply wall paint.

Installation in continuous ceiling



Wall mounting and transition sections (no functional role)



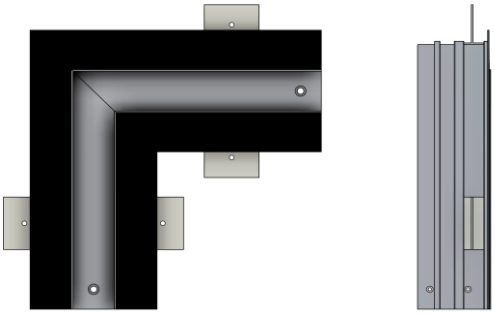


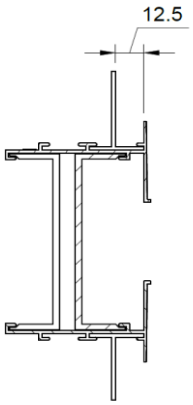
"T" PROFILE

The "T" profile is ordered together with the LENOX diffuser and is installed by the manufacturing department in the diffuser. The positioning of the "T" profile on the diffuser channel is done according to the thickness of the gypsum board (12.5 or 9.5 mm) . The gypsum board thickness is specified by the customer when ordering.

Fixing corner element (angle) in the ceiling

The corner elements, angle 90° and 135° are equipped by the production with "T" profile for gypsum thickness 12.5 mm. On request, they can be delivered with a "T" profile for gypsum thickness 9.5 mm.

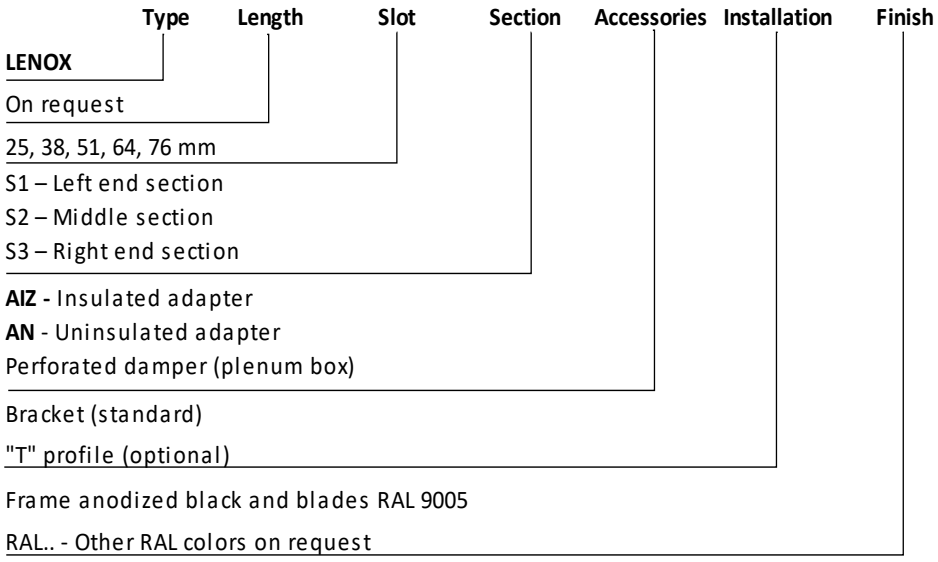






Order code

Example on how to place an order



Air through perfection

Architectural linear diffuser

LINES



ACP
Architectural diffusers

www.acp.ro

Architectural linear diffuser
LINES



Description

LINES is an architectural diffuser with pivoting linear nozzles, used to introduce air.

The product is an ideal ventilation solution for generous spaces being designed with essential features both aesthetically and functionally.

The airflow is directed a long distance to the desired areas.

Technical specifications

Characteristics

The LINES diffuser can be equipped, on request, with a perforated plate mounted on the diffuser connection (LINES-P).

The perforated sheet is painted in RAL9005 and has circular holes with a diameter of 5 mm.

LINES is available with a slot width of 20 or 35 mm.

The nozzles have a pivoting motion within ± 30° and facilitates the orientation of the air jet in the desired direction.

The design of the nozzles allows the introduction of the long air jet.

Dimensional limits, diffuser length: minimum 0.25m and maximum 1.25m.

The length of the linear nozzle is 250 mm.

The product is delivered with the following elements: mounting bracket, fixing screw and sealing gasket.

The number of mounting systems depends on the length of the product.

Materials

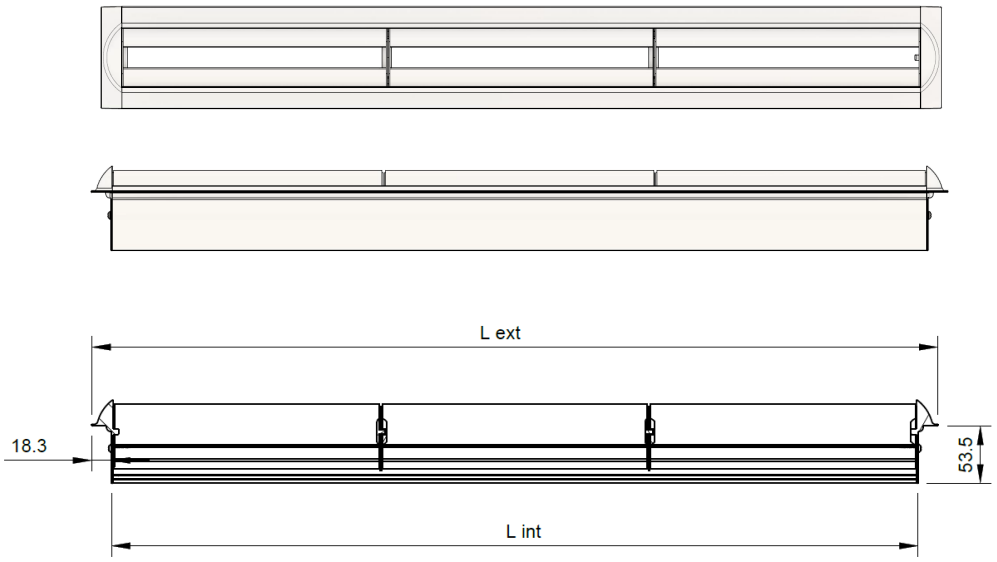
LINES is made of extruded aluminum electrostatic field painted in glossy white RAL 9016.

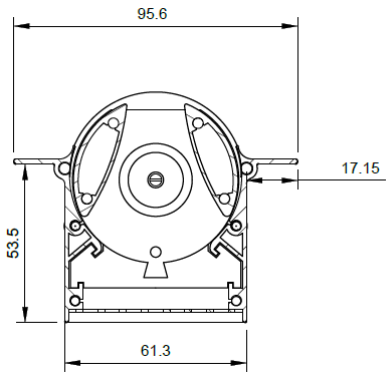
On request, the LINES diffuser can be delivered in any other shade from the RAL palette.

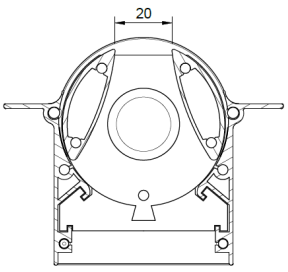
The perforated plate mounted on LINES-P is made of galvanized steel sheet with circular holes D5 mm and is electrostatic field painted in RAL9005.

Technical drawing

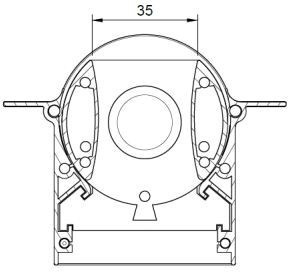
LINES





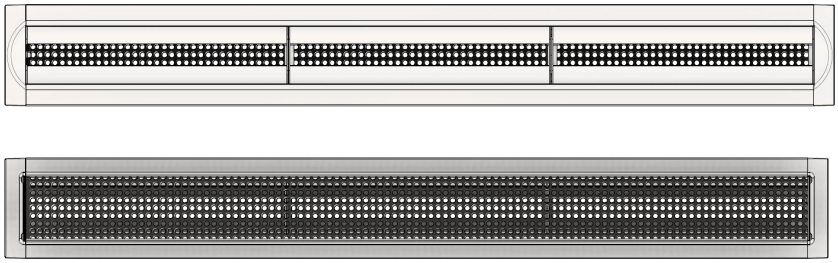


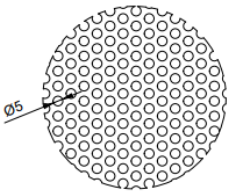
LINES – 20mm slot



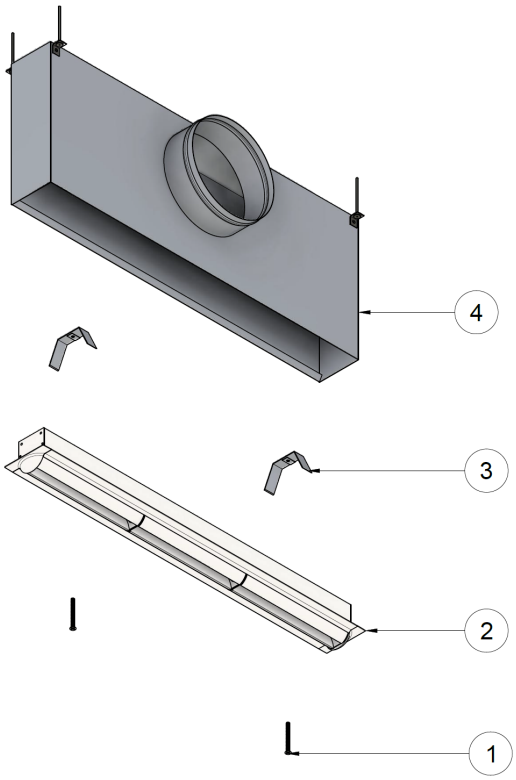
LINES – 35mm slot

LINES-P



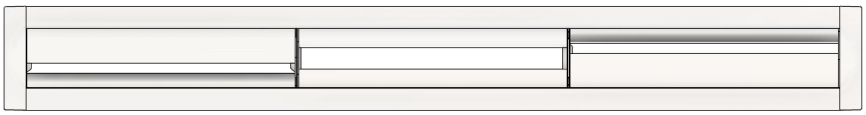


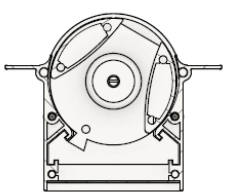
Product specifications



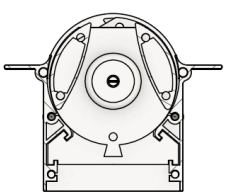
1- Fixing screw
2- LINES diffuser
3 - Bracket (“U” type system)
4- Plenum box (optional)

Directing the air jet

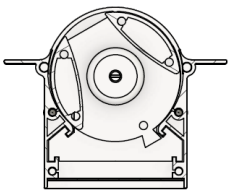




Down
(maximum 30°)



Center



Up
(maximum 30°)

Accessories

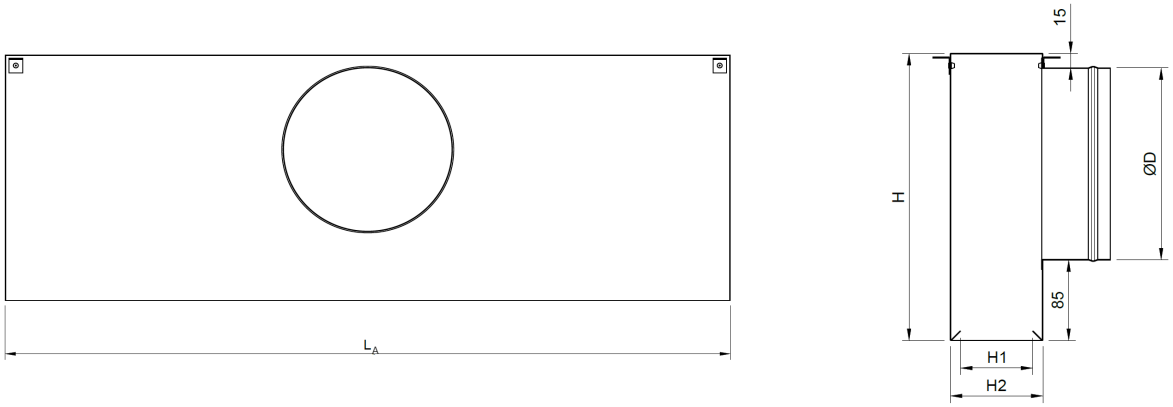
The diffuser can be supplied with a plenum connecting to a circular duct with horizontal connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

The plenum is delivered insulated or uninsulated.

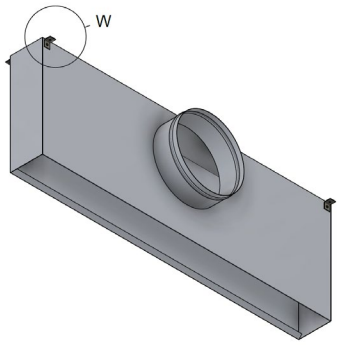
On request, the plenum can be provided with a perforated damper.

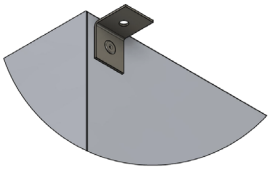
Adapter (plenum box)



$L_A = L_{LINES} + 10$
H1 = H int LINES + 2
H2 = H1 + 16
H depending on ØD

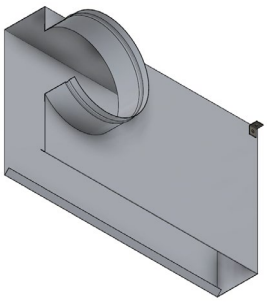
The adapter is made of Z140 galvanized steel sheet and is equipped with suspension lugs.



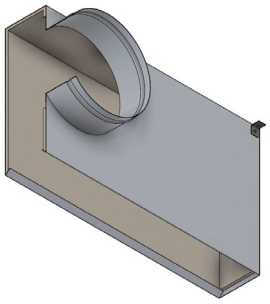


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.

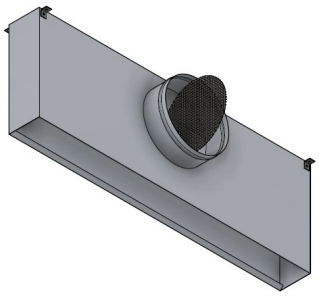


AN - Uninsulated adapter

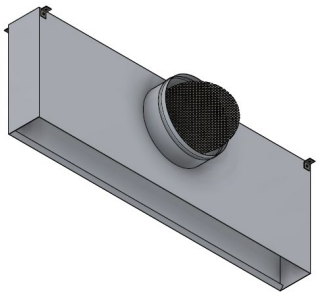


AIZ - Insulated adapter

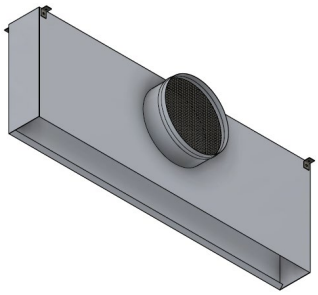
Perforated damper



Position 0°



Position 45°



Position 90°

The perforated damper is mounted on the adapter spigot and has the role of balancing the air flow.

Functional parameters

				WITH CEILING EFFECT			WITHOUT CEILING EFFECT		
Slot dimension [mm]	Air flow [m³/h]	NR [dB(A)]	ΔPt [Pa]	$X_{0,5}$ [m]	$X_{0,75}$ [m]	$X_{1,0}$ [m]	$X_{0,5}$ [m]	$X_{0,75}$ [m]	$X_{1,0}$ [m]
20	352	25	17,7	12,54	5,58	3,14	6,27	2,79	1,57
	418	30	25,0	17,65	7,86	4,43	8,84	3,93	2,21
	493	35	34,7	>20	10,94	6,16	12,29	5,47	3,08
	579	40	47,9	>20	15,09	8,49	16,90	7,54	4,25
35	536	25	13,6	16,59	7,39	4,16	8,31	3,69	2,08
	637	30	19,3	>20	10,44	5,88	11,73	5,22	2,94
	752	35	26,9	>20	14,54	8,19	16,35	7,27	4,09
	885	40	37,2	>20	>20	11,34	>20	10,07	5,67

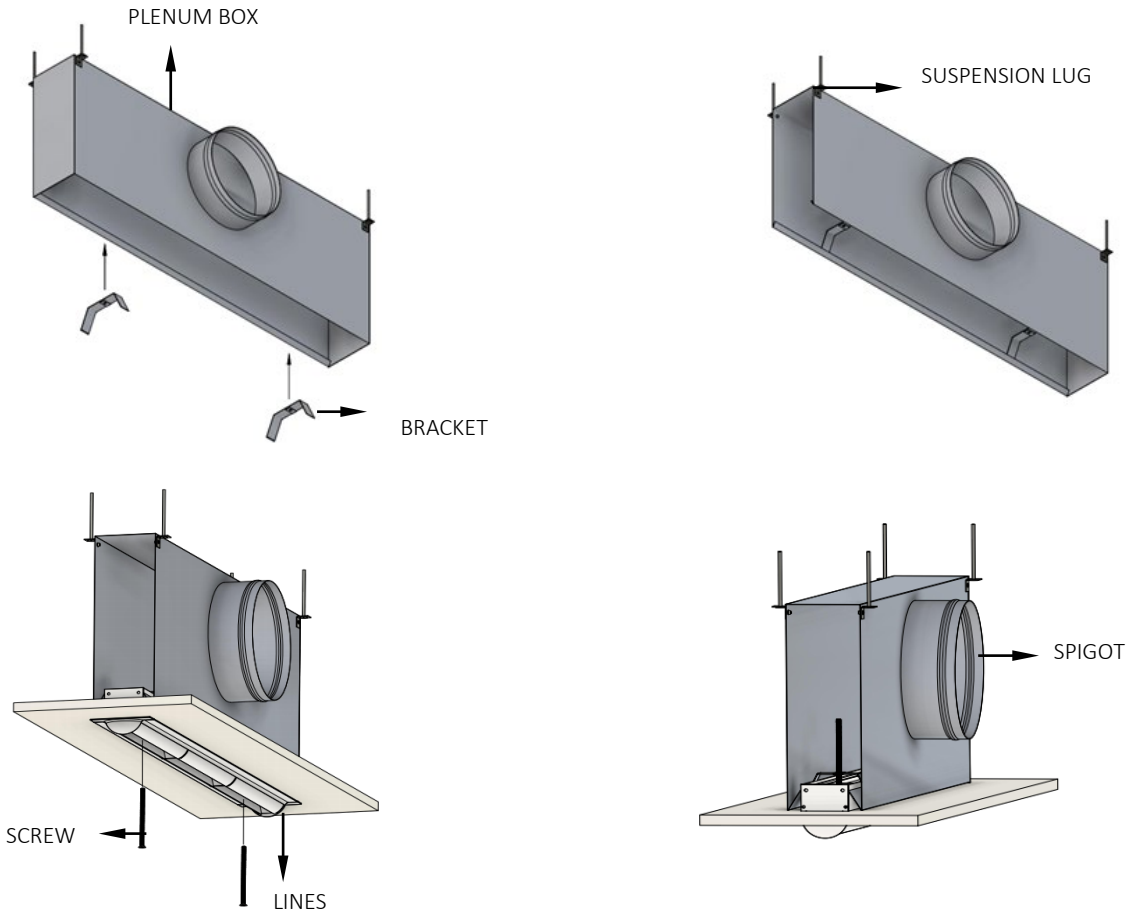
Note: The above air flows are given for 1 m linear diffuser.

The legend
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss
$X_{0,5}$ [m] - The length of the air jet at a speed of 0.5 m/s
$X_{0,75}$ [m] – The length of the air jet at a speed of 0.75 m/s
$X_{1,0}$ [m] - The length of the air jet at a speed of 1 m/s

Installation

The diffuser is mounted in a false continuous ceiling. The fixing of the plenum diffuser is done by means of “U” type mounting systems (bracket), positioned inside the plenum and the screws.

Installation in continuous ceiling



Order code

Example on how to place an order

Type	Length	Slot	Accessories	Finish
LINES				
LINES-P				
250…1250 mm				
	20, 35 mm			
		AIZ - Insulated adapter		
		AN - Uninsulated adapter		
			Perforated damper (plenum box)	
				RAL 9016
				RAL.. -Other RAL colors on request

Air through perfection

Linear diffuser with nozzles

DOTS



ACP
Architectural diffusers

www.acp.ro

Linear diffuser with nozzles
DOTS



Description

DOTS is an architectural diffuser with individually adjustable nozzles, used for air supply.

Suitable for heating or cooling in spaces with long distances between the diffuser and the occupied area, concert halls, museums, etc.

DOTS can be mounted on a wall, ceiling or rectangular duct.

The diffuser is recommended in various ventilation applications for the introduction of air.

Technical specifications

Characteristics

The constructive form and spherical design of the nozzles offer the possibility of an unlimited number of settings for the direction of the air jet.

The direction of the air jet can be easily adjusted manually to suit certain conditions and spaces.

Allows high airflow with low noise levels.

The length of the product depends on the number of nozzles: minimum 213 and maximum 3209 mm.

The product is delivered with the following elements: “U” type mounting system (bracket), fixing screws and sealing gasket.

The number of mounting systems depends on the length of the product.

Materials

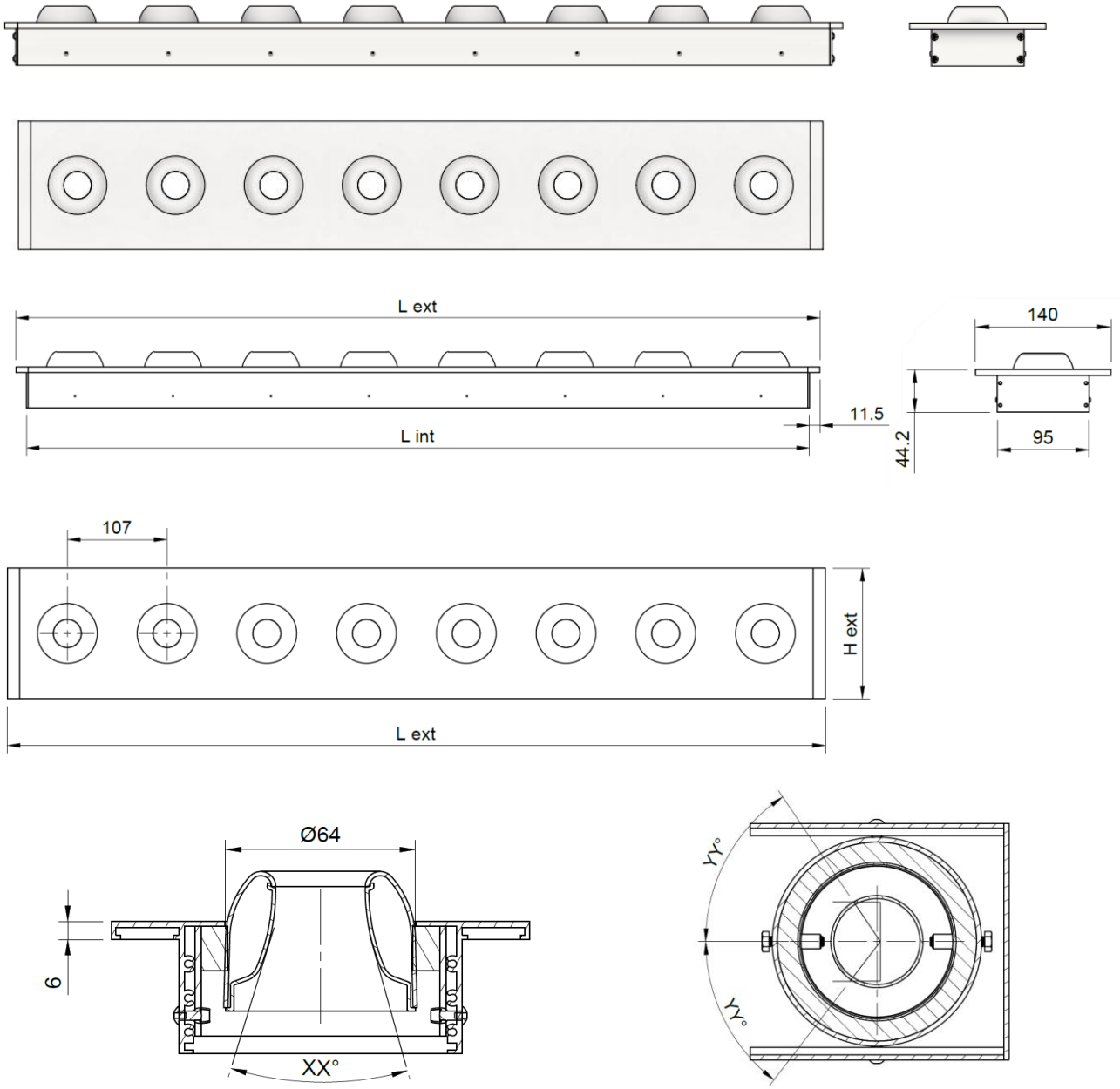
The diffuser is made of extruded aluminum electrostatic field painted in glossy white RAL 9016.

Other RAL colours are available on request.

The nozzles are made of aluminum and are painted in the shade of the diffuser.

The inside of the nozzle is made of RAL9005 black ABS plastic.

Technical drawing

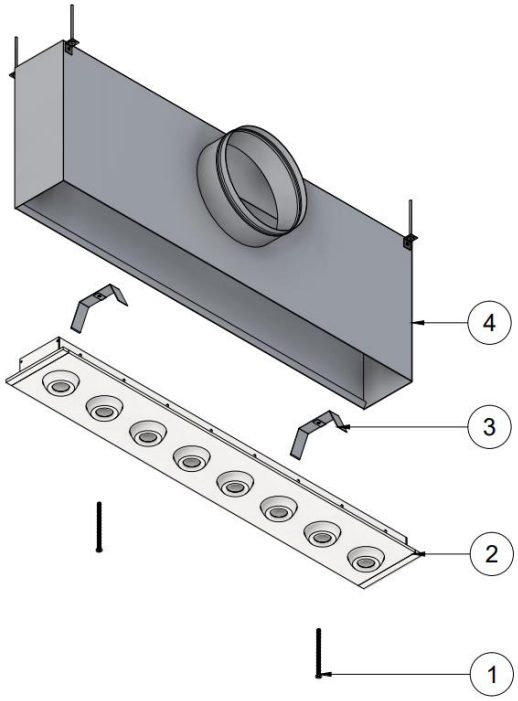


Dimensions

No. nozzles	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L int [mm]	213	320	427	534	641	748	855	962	1069	1176	1283	1390	1497	1604	1711

No. nozzles	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L int [mm]	1818	1925	2032	2139	2246	2353	2460	2567	2674	2781	2888	2995	3102	3209

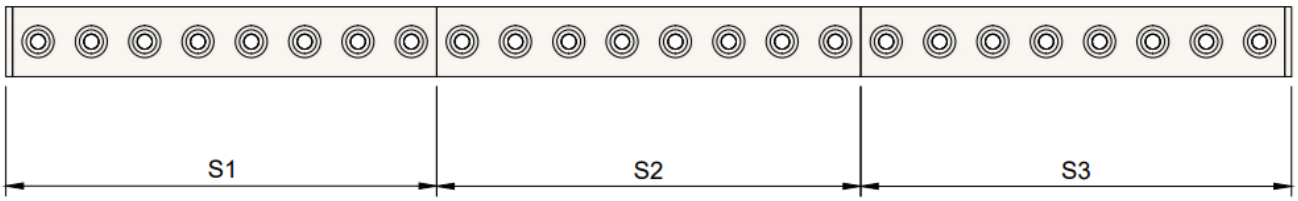
Product specifications



1 - Fixing screw
2 – DOTS diffuser
3 - Bracket (“U” type system)
4 – Plenum box (optional)

Section assembly

Long-length diffusers are made of modules with a maximum length of 3.2 m. In this situation the product is delivered with connecting elements between modules.





Sections assembly detail

Accessories

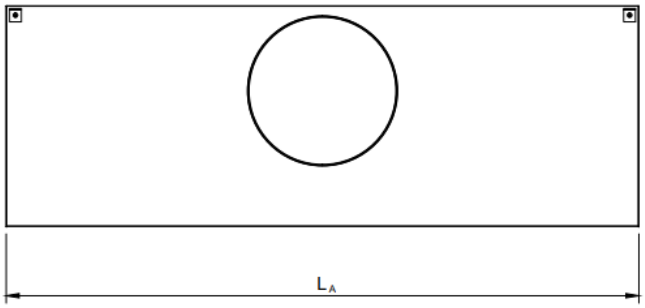
The diffuser can be supplied with a plenum connecting to a circular duct with horizontal connection.

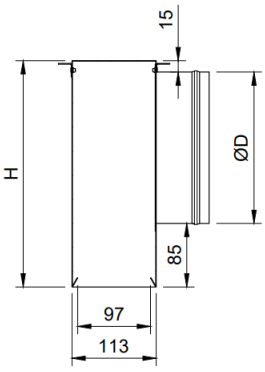
The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

The plenum is delivered insulated or uninsulated.

Optionally, a perforated damper can be mounted on the plenum connection to balance the air flow.

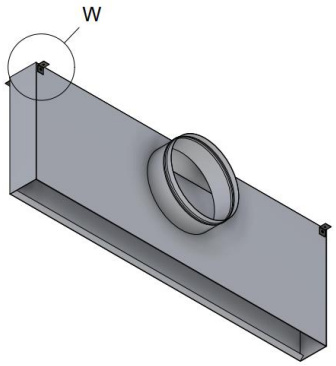
Adapter (plenum box)

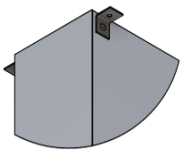




LA – L int DOTS + 8 mm
H – depending on ØD

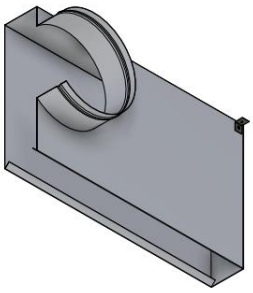
The adapter is made of Z140 galvanized sheet metal and is equipped with suspension elements (lugs).



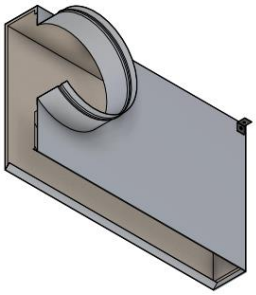


W - Suspension lug

On request, the plenum can be insulated inside with 6 mm thick elastomeric rubber.

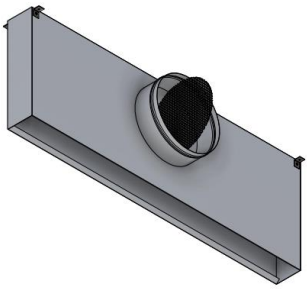


AN - Uninsulated adapter

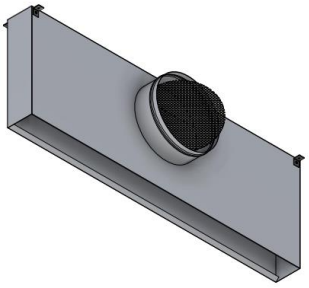


AIZ - Insulated adapter

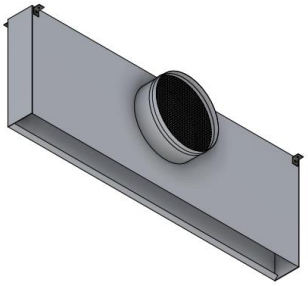
Perforated damper



Position 0°



Position 45°



Position 90°

The perforated damper is mounted on the adapter spigot and has the role of balancing the air flow.

Functional parameters

Air flow [m³/h]	Number of nozzles	3	5	6	8	10
	L X H [mm]	320 X 95	534 X 95	641 X 95	855 X 95	1069 X 95
	Ak [m²]	0.0021	0.0035	0.0042	0.0057	0.0071
50	$X_{0.5}$ $X_{1.0}$ [m]	5.0 1.5	3.5 1.5			
	Veff [m/s]	6.5	3.9			
	NR [dB(A)]	14.0	10.0			
	△Pt [Pa]	24.0	20.0			
100	$X_{0.5}$ $X_{1.0}$ [m]	8.0 4.5	7.0 4.0	6.0 3.5	5.5 3.0	5.0 2.5
	Veff [m/s]	13.1	7.9	6.5	4.9	3.9
	NR [dB(A)]	27.0	16.0	15.0	14.0	13.0
	△Pt [Pa]	75.0	31.0	24.0	23.0	20.0
200	$X_{0.5}$ $X_{1.0}$ [m]	16.0 8.0	12.0 6.0	10.0 5.0	9.0 5.5	8.0 5.0
	Veff [m/s]	26.2	15.7	13.1	9.8	7.9
	NR [dB(A)]	45.0	34.0	29.0	24.0	20.0
	△Pt [Pa]	220.0	109.0	78.0	52.0	33.0
350	$X_{0.5}$ $X_{1.0}$ [m]		25.0 12.0	20.0 10.0	16.0 9.0	13.0 8.0
	Veff [m/s]		27.5	22.9	17.2	13.8
	NR [dB(A)]		49.0	47.0	36.0	28.0
	△Pt [Pa]		315.0	251.0	101.0	70.0
500	$X_{0.5}$ $X_{1.0}$ [m]				24.0 13.0	22.0 12.0
	Veff [m/s]				24.6	19.6
	NR [dB(A)]				48.0	35.0
	△Pt [Pa]				240.0	152.0
700	$X_{0.5}$ $X_{1.0}$ [m]					26.0 17.0
	Veff [m/s]					27.5
	NR [dB(A)]					47.0
	△Pt [Pa]					310.0

The legend
Ak [m²] - The free surface
$X_{0,5}$ [m] - The length of the air jet at a speed of 0.5 m/s
$X_{1,0}$ [m] - The length of the air jet at a speed of 1 m/s
Veff [m/s] - Air speed in the diffuser
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

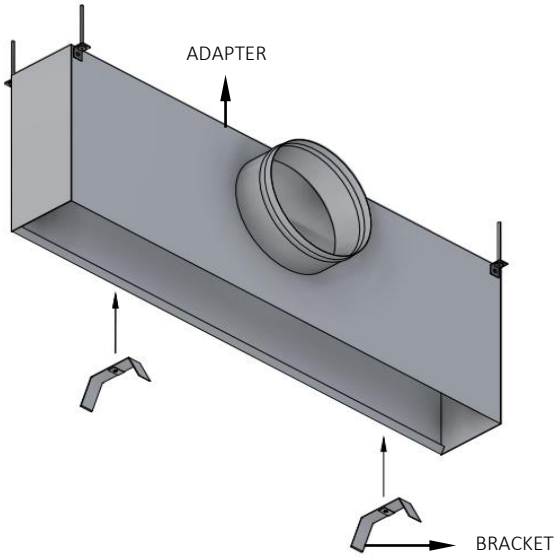
Installation

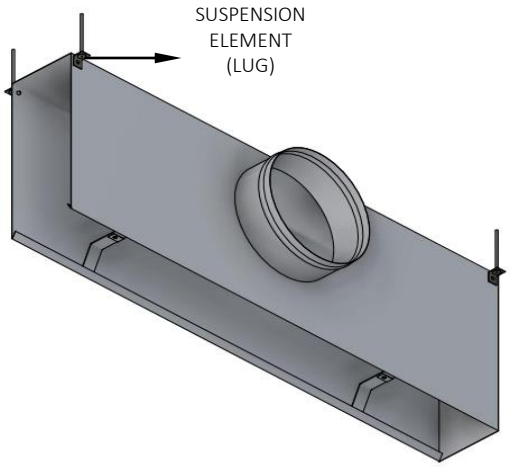
The diffuser can be mounted on the wall, ceiling or rectangular duct.

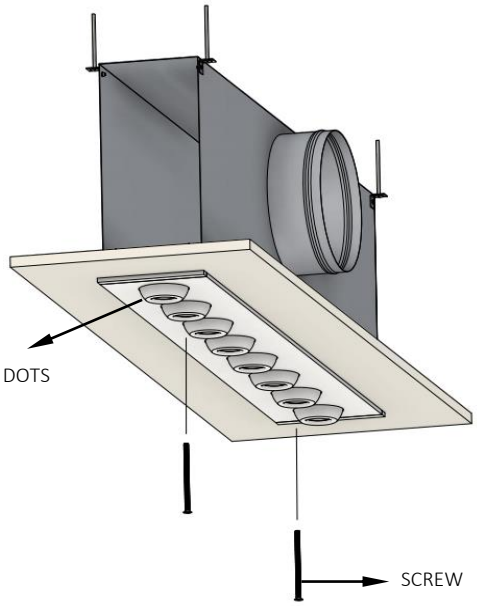
For ceiling mounting, the fixing of the plenum diffuser is done by means of “U” type fixing systems (brackets), positioned inside the plenum and the screws.

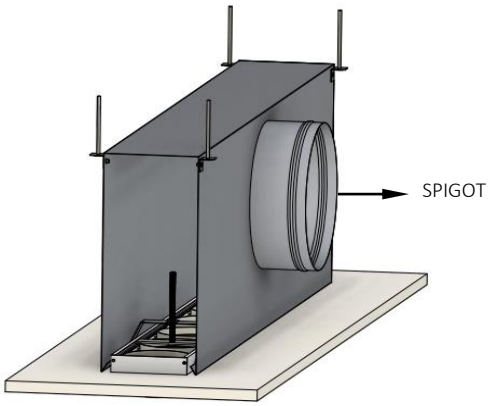
For mounting on a wall or rectangular duct, grille fixing screws can be used. Screw holes are only made on request.

False continuous ceiling mounting

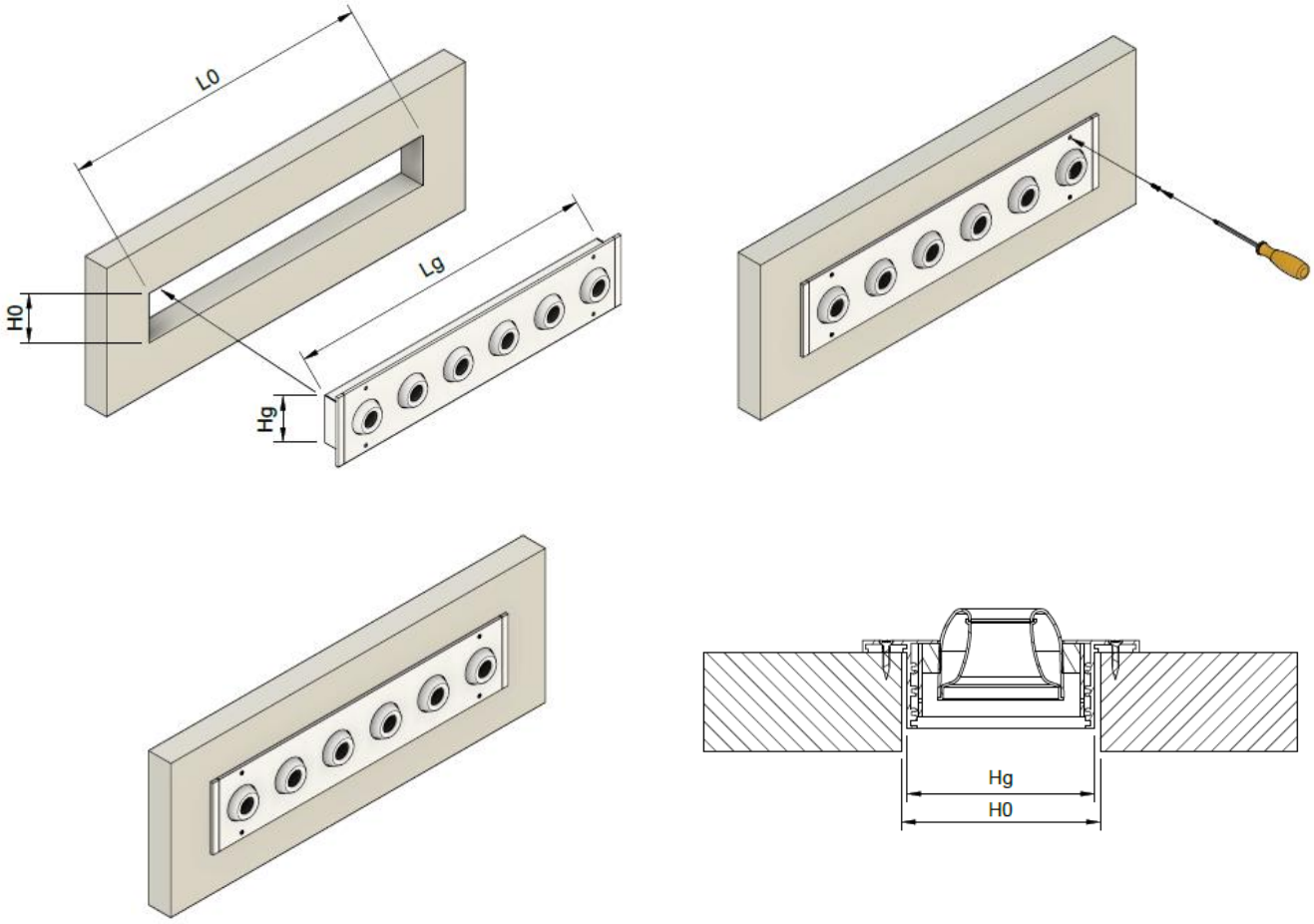








Wall /duct mounting



Order code

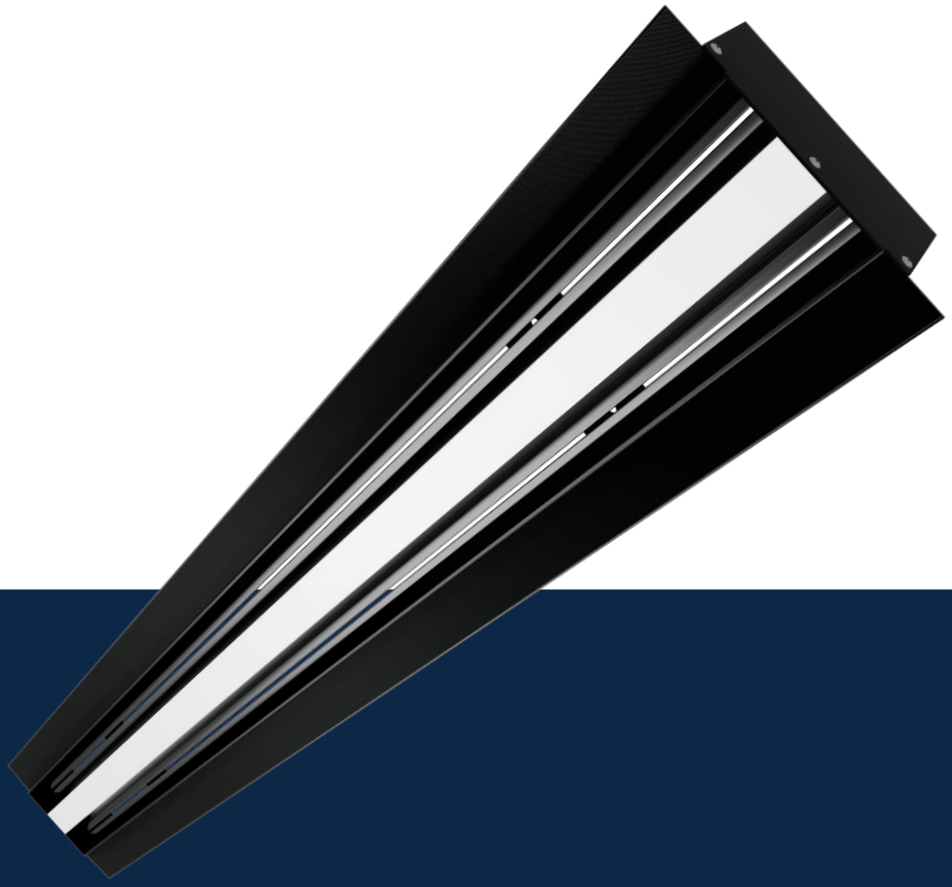
Example on how to place an order

Type	Length	Section	Accessories	Finish
DOTS				
	213 ... 3209 mm			
		S1 - Left end section		
		S2 - Middle section		
		S3 - Right end section		
			AIZ - Insulated adapter	
			AN - Uninsulated adapter	
			Perforated damper (plenum box)	
				RAL 9016
				RAL.. - Other RAL colors on request

Air through perfection

Linear diffuser

WING



ACP
Architectural diffusers

www.acp.ro

Linear diffuser
WING



Description

WING is an architectural, linear diffuser, used to introduce or evacuate air.

The diffuser is both an elegant and practical ventilation solution.

WING integrates fully into the ceiling and is recommended for residential spaces, conference rooms, offices, classrooms, etc.

Technical specifications

Characteristics

The diffuser is made with 1 to 4 slots with a width of 19 mm and is equipped with adjustable blades.

The diffuser blades allow to adjust the airflow.

Long-length diffusers have segmented blades at a maximum size of 1500 mm

For a uniform appearance of the enclosures, the WING diffuser can also be used for air evacuation.

Dimensional limits of diffuser length: minimum 0.3m and maximum 3m.

In the case of diffusers with a length > 3m, the execution is modular, and the product is delivered together with the necessary connecting parts.

Depending on the overall position, the modular parts are built without termination elements (caps), or with a single element - see assembly sections.

Perimeter configurations can be made by using corner sections (angle 90°).

Corner elements are inactive.

The product is delivered with the following elements: “U” type mounting system (bracket) and fixing screw.

The number of mounting systems depends on the length of the product.

Materials

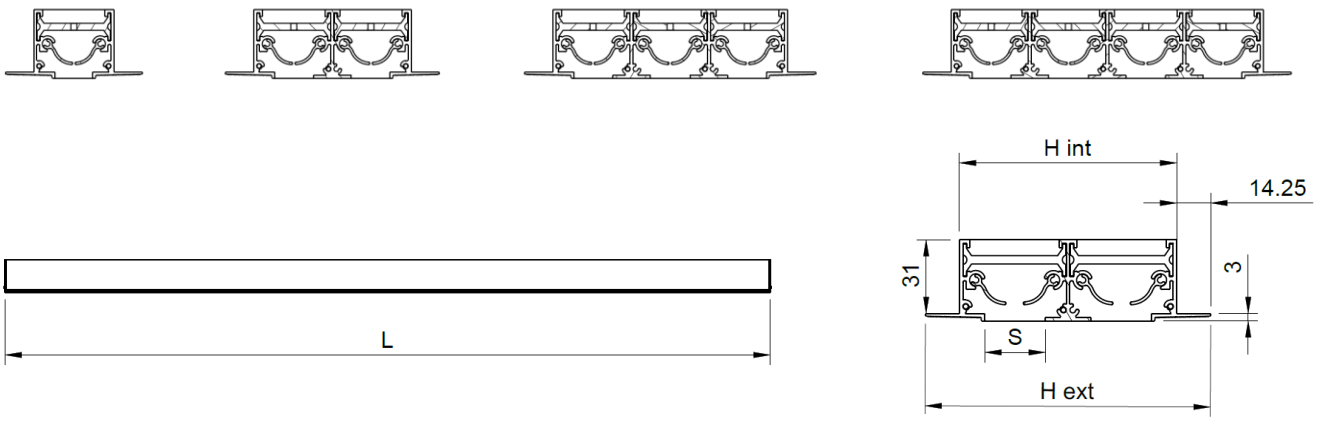
The outer frame and blades are made of black anodized aluminum.

In the case of diffusers with 2-4 slots, the inner frame is made of extruded aluminum painted in glossy white RAL 9016.

Technical drawing



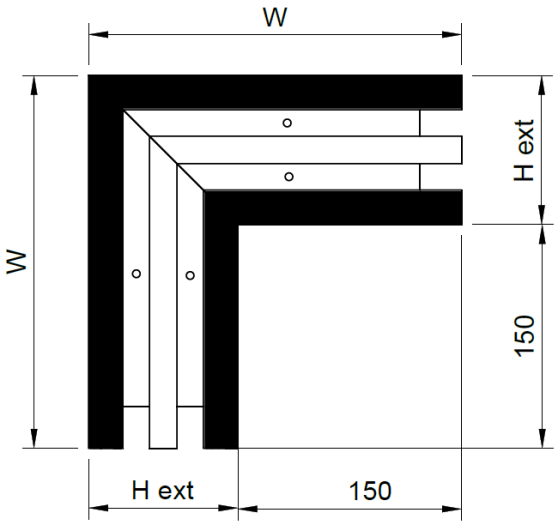
- 1 slot
- 2 slots
- 3 slots
- 4 slots

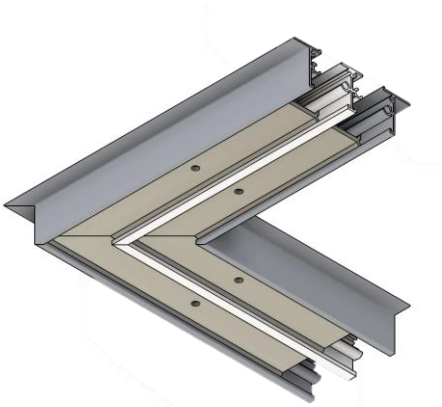


S [mm]	No. of slots	H ext [mm]	H int [mm]	W [mm]
19	1	69	40.5	219
	2	108	79.5	258
	3	147	118.5	297
	4	186	157.5	336

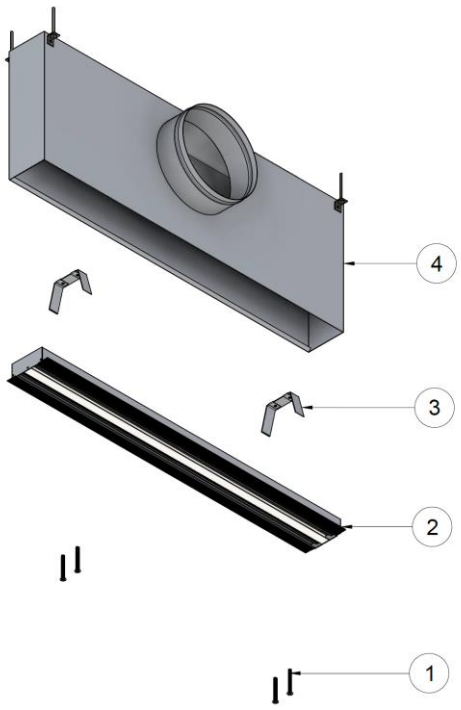
WING – 90◦ angle





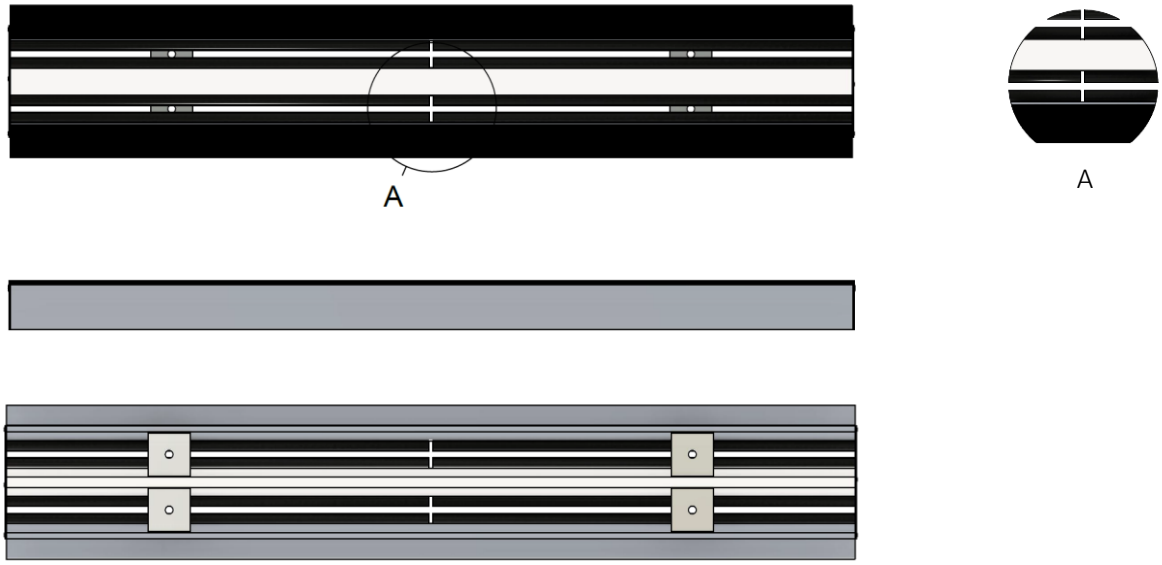


Product specifications



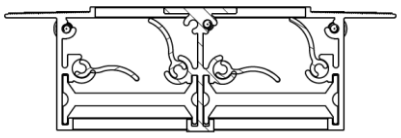
1 - Fixing screw
2 - WING diffuser
3 - Bracket (“U” type system)
4 - Plenum box (optional)

Long-length diffusers have segmented blades at a maximum size of 1500 mm. This makes it easier to adjust the diffuser blades to achieve the desired adjustment.

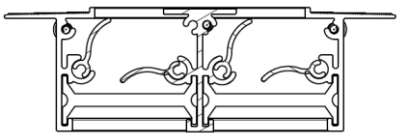


Positioning the blades

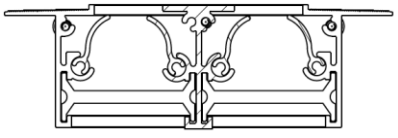
Direction of air jet to the left



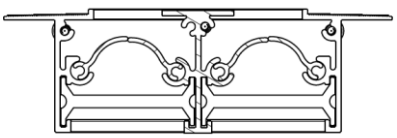
Direction of air jet to the right



Blades open



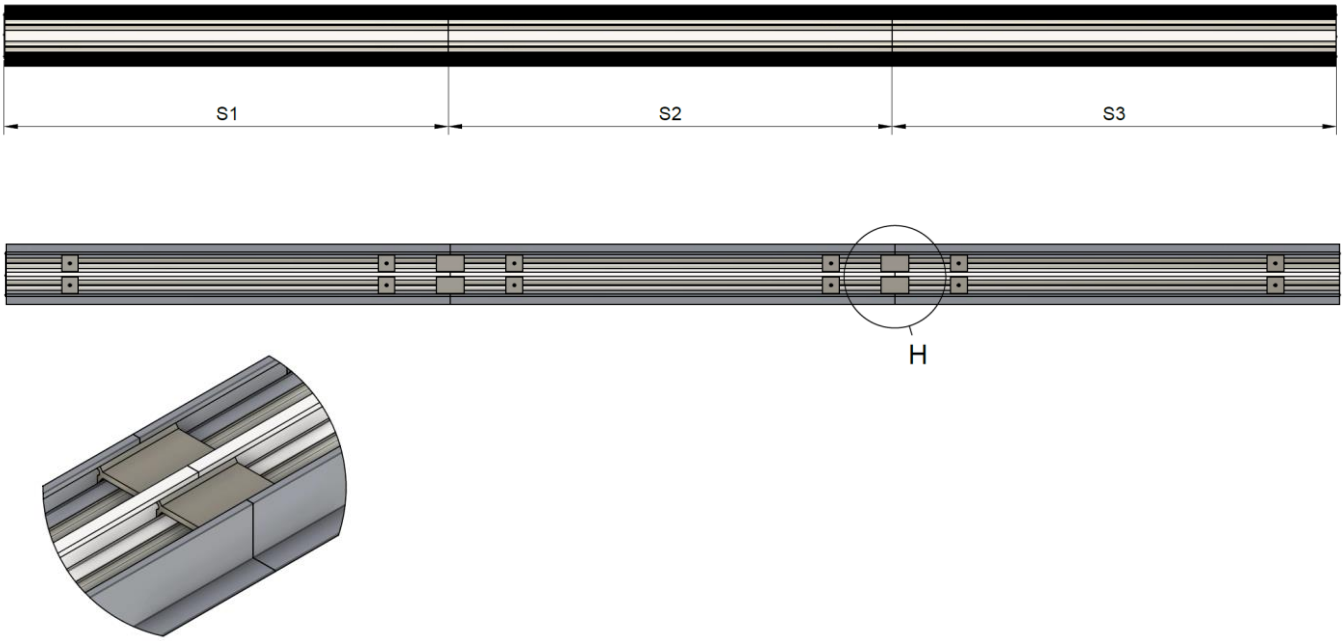
Blades closed



Section assembly

Long-length (large dimension) diffusers are made of modules with a maximum length of 3 m.

In this case, the product is delivered with connecting elements between modules.



H – Sections assembly detail

Accessories

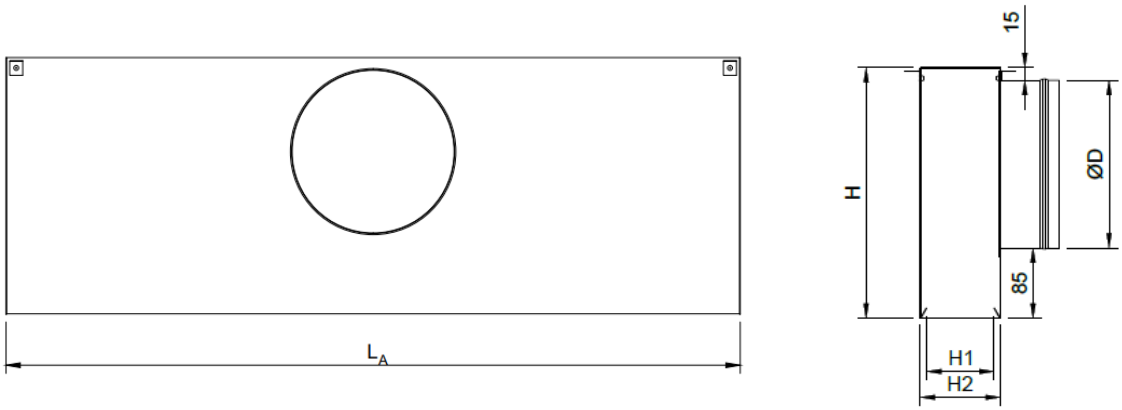
The diffuser can be supplied with a plenum connecting to a circular duct with horizontal connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

The plenum is delivered insulated or uninsulated.

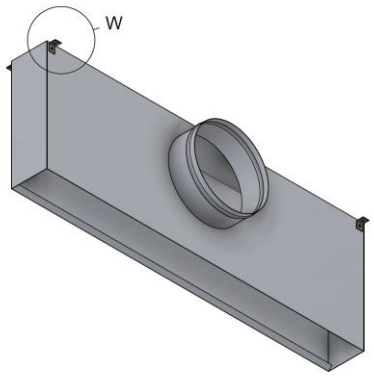
Optionally, a perforated damper can be mounted on the plenum connection to balance the air flow.

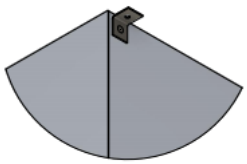
Adapter (plenum box)



$L_A = L_{WING} + 4$
$H1 = H\,int_{WING} + 2$
$H2 = H1 + 16$
H – depending on ØD

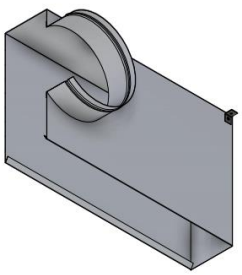
The adapter is made of Z140 galvanized steel sheet and is equipped with suspension lugs.



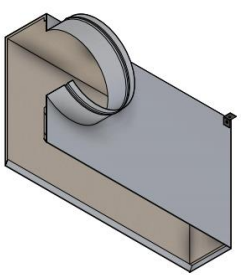


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.

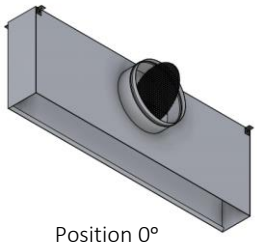


AN - Uninsulated adapter

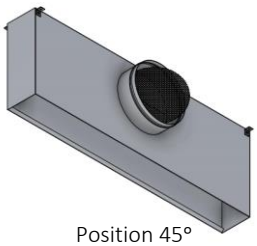


AIZ - Insulated adapter

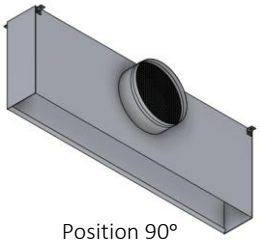
Perforated damper



Position 0°



Position 45°



Position 90°

The perforated damper is mounted on the adapter spigot and has the role of balancing the air flow.

Functional parameters

Air flow [m³/h]	Slots no. Ak [m²]	1 0.019
Length = 1000 mm		
33	X [m] (Horizontally)	1.00
	X [m] (Vertically)	1.00
	NR [dB(A)]	-
	ΔPt [Pa]	0.98
67	X [m] (Horizontally)	2.00
	X [m] (Vertically)	2.00
	NR [dB(A)]	-
	ΔPt [Pa]	4.02
106	X [m] (Horizontally)	4.00
	X [m] (Vertically)	3.00
	NR [dB(A)]	15.00
	ΔPt [Pa]	9.22
140	X [m] (Horizontally)	5.00
	X [m] (Vertically)	4.00
	NR [dB(A)]	21.00
	ΔPt [Pa]	16.18
173	X [m] (Horizontally)	5.00
	X [m] (Vertically)	4.00
	NR [dB(A)]	27.00
	ΔPt [Pa]	25.40
206	X [m] (Horizontally)	6.00
	X [m] (Vertically)	5.00
	NR [dB(A)]	31.00
	ΔPt [Pa]	36.38
240	X [m] (Horizontally)	7.00
	X [m] (Vertically)	5.00
	NR [dB(A)]	35.00
	ΔPt [Pa]	49.52
279	X [m] (Horizontally)	7.00
	X [m] (Vertically)	5.00
	NR [dB(A)]	38.00
	ΔPt [Pa]	64.72
312	X [m] (Horizontally)	8.00
	X [m] (Vertically)	5.00
	NR [dB(A)]	41.00
	ΔPt [Pa]	82.18

Air flow [m³/h]	Slots no. Ak [m²]	2 0.038
Length = 1000 mm		
67	X [m] (Horizontally)	1.00
	X [m] (Vertically)	1.00
	NR [dB(A)]	-
	ΔPt [Pa]	0.98
140	X [m] (Horizontally)	3.00
	X [m] (Vertically)	3.00
	NR [dB(A)]	-
	ΔPt [Pa]	4.02
206	X [m] (Horizontally)	5.00
	X [m] (Vertically)	4.00
	NR [dB(A)]	18.00
	ΔPt [Pa]	9.22
279	X [m] (Horizontally)	7.00
	X [m] (Vertically)	5.00
	NR [dB(A)]	24.00
	ΔPt [Pa]	16.18
346	X [m] (Horizontally)	8.00
	X [m] (Vertically)	6.00
	NR [dB(A)]	30.00
	ΔPt [Pa]	25.40
413	X [m] (Horizontally)	9.00
	X [m] (Vertically)	6.00
	NR [dB(A)]	34.00
	ΔPt [Pa]	36.38
485	X [m] (Horizontally)	9.00
	X [m] (Vertically)	7.00
	NR [dB(A)]	38.00
	ΔPt [Pa]	49.52
552	X [m] (Horizontally)	10.00
	X [m] (Vertically)	7.00
	NR [dB(A)]	41.00
	ΔPt [Pa]	64.72
625	X [m] (Horizontally)	11.00
	X [m] (Vertically)	8.00
	NR [dB(A)]	44.00
	ΔPt [Pa]	82.18

Air flow [m³/h]	Slots no. Ak [m²]	3 0.057
Length = 1000 mm		
106	X [m] (Horizontally)	2.00
	X [m] (Vertically)	2.00
	NR [dB(A)]	-
	ΔPt [Pa]	0.98
206	X [m] (Horizontally)	4.00
	X [m] (Vertically)	3.00
	NR [dB(A)]	-
	ΔPt [Pa]	4.02
312	X [m] (Horizontally)	6.00
	X [m] (Vertically)	5.00
	NR [dB(A)]	19.00
	ΔPt [Pa]	9.22
413	X [m] (Horizontally)	8.00
	X [m] (Vertically)	6.00
	NR [dB(A)]	26.00
	ΔPt [Pa]	16.18
519	X [m] (Horizontally)	10.00
	X [m] (Vertically)	7.00
	NR [dB(A)]	32.00
	ΔPt [Pa]	25.50
625	X [m] (Horizontally)	11.00
	X [m] (Vertically)	8.00
	NR [dB(A)]	36.00
	ΔPt [Pa]	36.38
725	X [m] (Horizontally)	12.00
	X [m] (Vertically)	9.00
	NR [dB(A)]	40.00
	ΔPt [Pa]	49.52
831	X [m] (Horizontally)	12.00
	X [m] (Vertically)	9.00
	NR [dB(A)]	43.00
	ΔPt [Pa]	64.72
932	X [m] (Horizontally)	13.00
	X [m] (Vertically)	10.00
	NR [dB(A)]	46.00
	ΔPt [Pa]	82.18

Air flow [m³/h]	Slots no. Ak [m²]	4 0.076
Length = 1000 mm		
140	X [m] (Horizontally)	2.00
	X [m] (Vertically)	2.00
	NR [dB(A)]	-
	ΔPt [Pa]	0.98
279	X [m] (Horizontally)	5.00
	X [m] (Vertically)	4.00
	NR [dB(A)]	-
	ΔPt [Pa]	4.02
413	X [m] (Horizontally)	7.00
	X [m] (Vertically)	6.00
	NR [dB(A)]	21.00
	ΔPt [Pa]	9.22
552	X [m] (Horizontally)	10.00
	X [m] (Vertically)	7.00
	NR [dB(A)]	27.00
	ΔPt [Pa]	16.18
692	X [m] (Horizontally)	11.00
	X [m] (Vertically)	8.00
	NR [dB(A)]	33.00
	ΔPt [Pa]	25.40
831	X [m] (Horizontally)	12.00
	X [m] (Vertically)	9.00
	NR [dB(A)]	37.00
	ΔPt [Pa]	36.38
971	X [m] (Horizontally)	13.00
	X [m] (Vertically)	10.00
	NR [dB(A)]	41.00
	ΔPt [Pa]	49.52
1105	X [m] (Horizontally)	14.00
	X [m] (Vertically)	10.00
	NR [dB(A)]	44.00
	ΔPt [Pa]	64.72
1244	X [m] (Horizontally)	15.00
	X [m] (Vertically)	11.00
	NR [dB(A)]	47.00
	ΔPt [Pa]	82.18

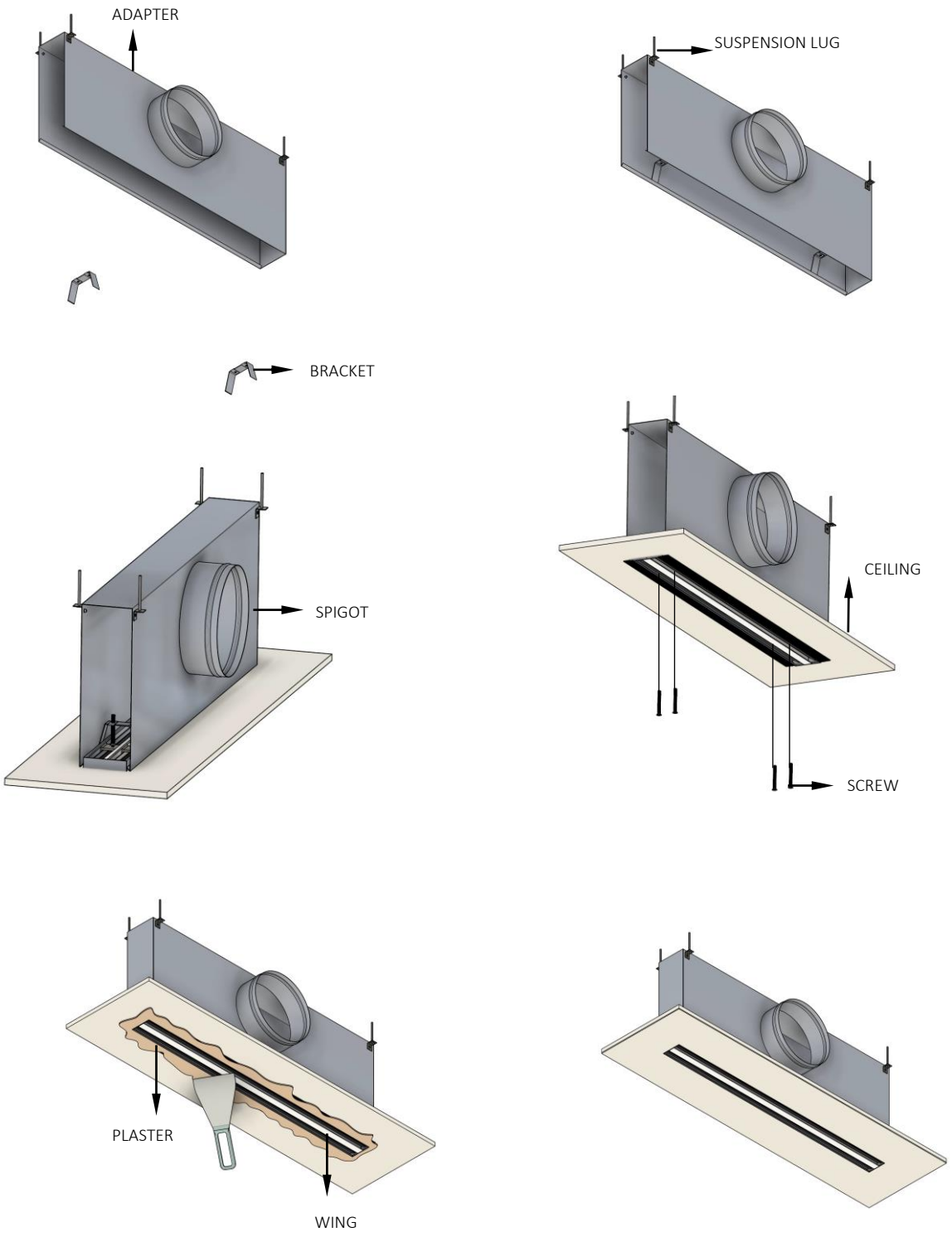
The legend
Ak [m²] - The free surface
X [m] - The length of the air jet at a speed of 0.375m/s
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

Installation

The diffuser is mounted in a false continuous ceiling. The fixing of the plenum diffuser is done by means of “U” type mounting systems (bracket), positioned inside the plenum and the screws.

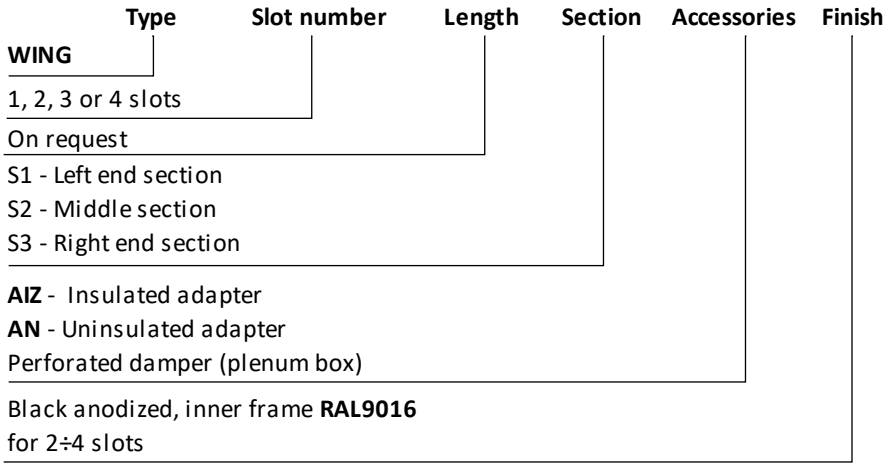
After fixing, apply gypsum plaster (adhesive) over the diffuser frame and then apply wall paint.

False continuous ceiling mounting



Order code

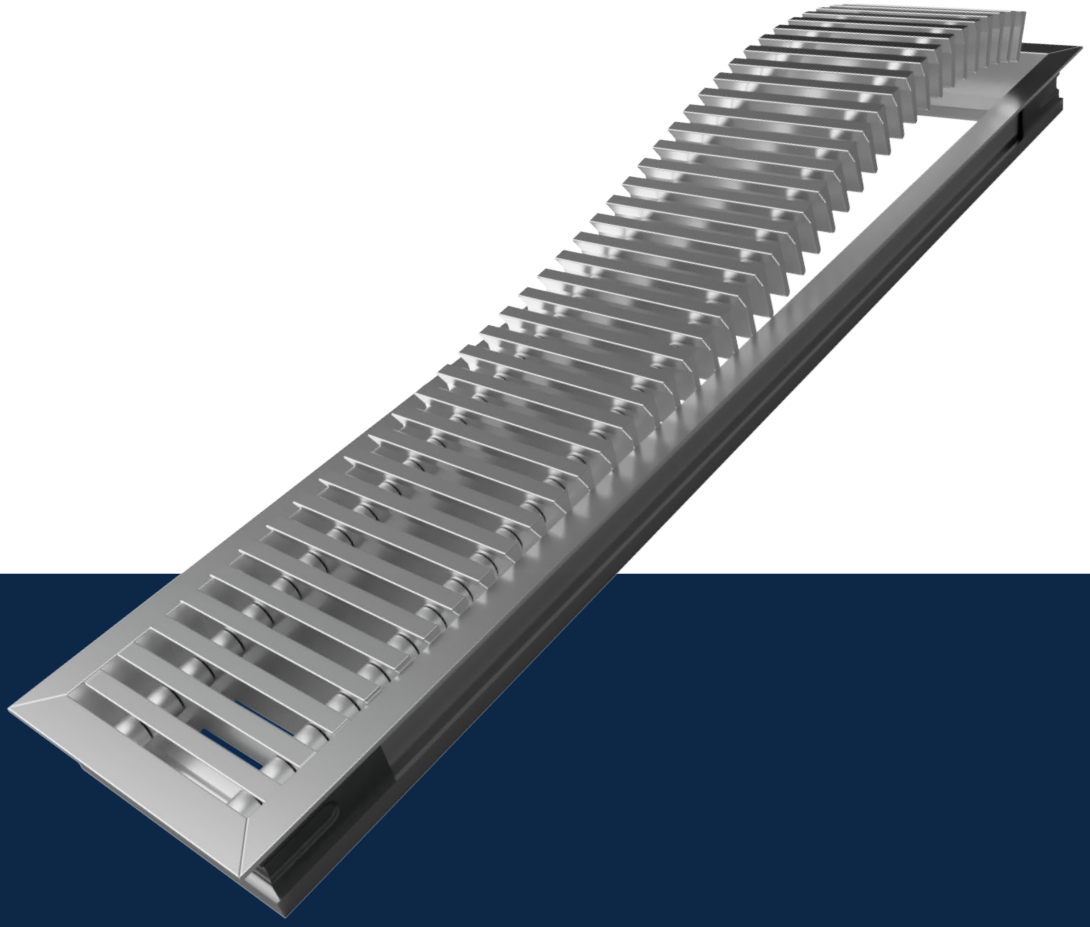
Example on how to place an order



Air through perfection

Floor grille

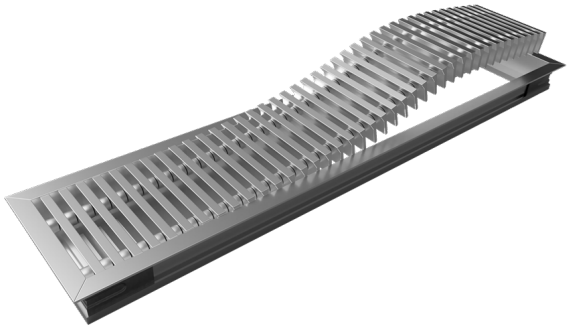
WAVE



ACP
Architectural diffusers

www.acp.ro

Floor grille
WAVE



Description

The WAVE linear floor grille is used for introducing or evacuating air.

It can be used in various applications of ventilation systems, for example floor convector.

Technical specifications

Characteristics

The grille is composed of the outer frame and the central part with blades .

The blades of the grille are profiled at 15° and are perpendicular to the length.

The blades area is removable allowing easy access behind the grille and easy mounting.

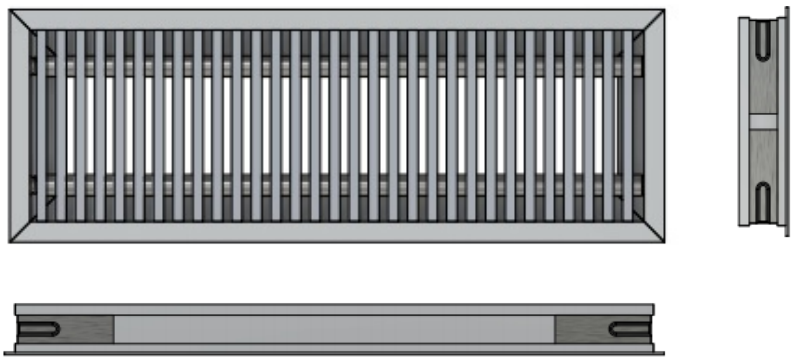
The grille frame is provided with a flange and serves to mask the contact area between the grille and the floor.

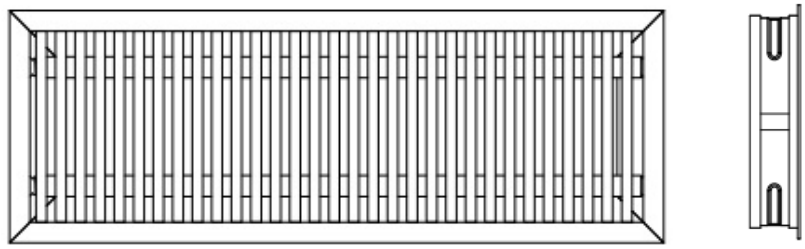
Dimensional limits: minimum 200x75 mm, maximum 3100x350 mm.

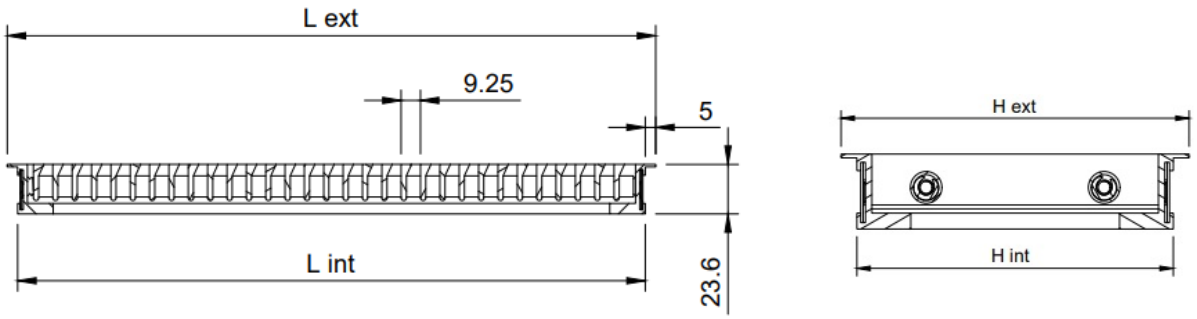
Materials

The product is made of extruded aluminum profiles with natural anodized finish.

Technical drawing







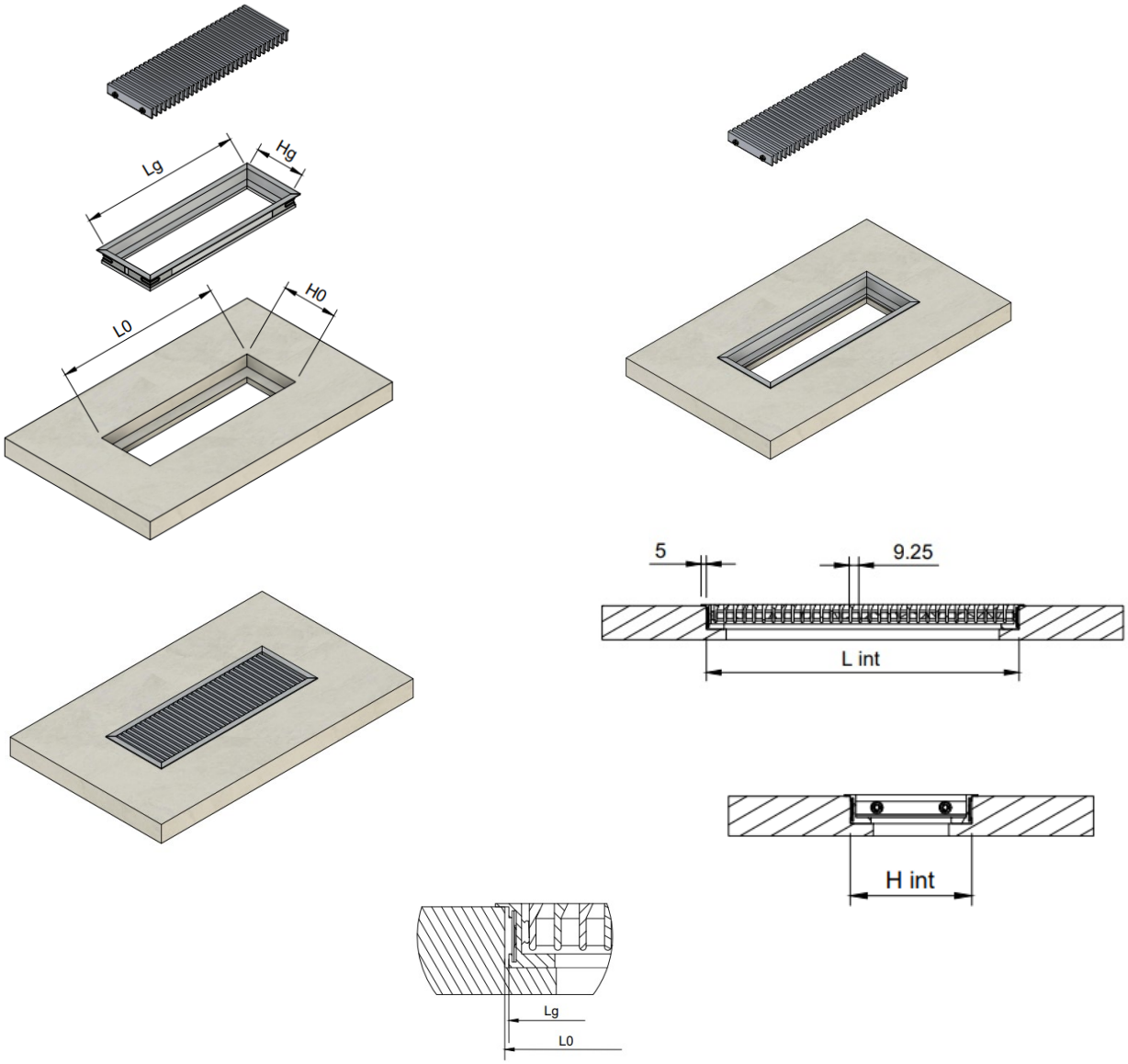
Functional parameters

Air flow [m³/h]	L x H [mm]	300 x 100	400 x 100	600 x 100	300 x 150	400 x 150	600 x 150	400 x 200	600 x 200	800 x 200	1000 x 200	500 x 300	600 x 300	800 x 300	1000 x 300
	Ak [m²]	0.008	0.011	0.017	0.017	0.023	0.035	0.034	0.052	0.07	0.089	0.072	0.087	0.117	0.148
100	Veff[m/s]	3.40	2.50												
	ΔPt Pa]	9.00	5.00												
	X [m]	3.60	3.10												
	NR [dB(A)]	22.00	20.00												
150	Veff[m/s]	5.10	3.70	2.40											
	ΔPt Pa]	20.00	11.00	5.00											
	X [m]	5.40	4.60	3.70											
	NR [dB(A)]	33.00	26.00	20.00											
200	Veff[m/s]	6.70	5.00	3.30	3.40	2.5									
	ΔPt Pa]	35.00	19.00	8.00	9.00	5.0									
	X [m]	7.20	6.20	5.00	5.10	4.4									
	NR [dB(A)]	41.00	34.00	24.00	24.00	20.00									
250	Veff[m/s]	8.30	6.10	4.00	4.10	3.10									
	ΔPt Pa]	54.00	29.00	13.00	13.00	7.00									
	X [m]	8.90	7.60	6.20	6.20	5.40									
	NR [dB(A)]	47.00	40.00	30.00	30.00	23.00									
300	Veff[m/s]		7.40	4.80	5.00	3.70	2.40								
	ΔPt Pa]		43.00	18.00	19.00	11.00	5.00								
	X [m]		9.20	7.40	7.50	6.50	5.20								
	NR [dB(A)]		45.00	35.00	35.00	28.00	20.00								
350	Veff[m/s]		8.60	5.60	5.80	4.30	2.80								
	ΔPt Pa]		58.00	25.00	26.00	14.00	6.00								
	X [m]		10.70	8.70	8.80	7.60	6.10								
	NR [dB(A)]		49.00	39.00	40.00	33.00	23.00								
400	Veff[m/s]			6.50	6.60	4.90	3.20	3.30	2.10						
	ΔPt Pa]			33.00	34.00	19.00	8.00	7.70	4.00						
	X [m]			9.90	10.00	8.60	7.00	7.00	5.70						
	NR [dB(A)]			43.00	44.00	36.00	26.00	27.00	20.00						
500	Veff[m/s]			8.10	8.30	6.20	4.00	4.10	2.70	2.00					
	ΔPt Pa]			51.00	54.00	30.00	13.00	13.00	6.00	3.00					
	X [m]			12.40	12.60	10.80	8.70	8.80	7.10	6.10					
	NR [dB(A)]			49.00	50.00	43.00	33.00	33.00	23.00	20.00					
600	Veff[m/s]					7.40	4.80	4.90	3.20	2.40					
	ΔPt Pa]					43.00	18.00	19.00	8.00	4.00					
	X [m]					13.00	10.50	10.60	8.60	7.40					
	NR [dB(A)]					48.00	38.00	38.00	28.00	21.00					
700	Veff[m/s]						5.60	5.70	3.70	2.80	2.20	2.70	2.20		
	ΔPt Pa]						25.00	25.00	11.00	6.00	4.00	6.00	4.00		
	X [m]						12.20	12.30	10.00	8.60	7.60	8.50	7.70		
	NR [dB(A)]						42.00	43.00	32.00	25.00	20.00	25.00	20.00		
800	Veff[m/s]						6.40	6.50	4.30	3.20	2.50	3.10	2.60		
	ΔPt Pa]						32.00	33.00	14.00	8.00	5.00	7.00	5.00		
	X [m]						14.00	14.10	11.40	9.80	8.70	9.70	8.80		
	NR [dB(A)]						46.00	46.00	36.00	29.00	23.00	29.00	24.00		
900	Veff[m/s]						7.20	7.40	4.80	3.60	2.80	3.50	29.00	2.10	
	ΔPt Pa]						41.00	42.00	18.00	10.00	6.00	10.00	6.00	4.00	
	X [m]						15.70	15.90	12.80	11.00	9.80	10.90	9.90	8.50	
	NR [dB(A)]						49.00	50.00	40.00	32.00	27.00	32.00	27.00	20.00	
1000	Veff[m/s]								5.40	4.00	3.10	3.90	3.20	2.40	
	ΔPt Pa]								22.00	12.00	8.00	12.00	8.00	4.00	
	X [m]								14.30	12.30	10.90	12.20	11.00	9.50	
	NR [dB(A)]								43.00	35.00	30.00	35.00	30.00	23.00	
1250	Veff[m/s]								6.70	4.90	3.90	4.80	4.00	3.00	2.30
	ΔPt Pa]								35.00	19.00	12.00	18.00	12.00	7.00	4.00
	X [m]								17.80	15.30	13.60	15.20	13.80	11.90	10.60
	NR [dB(A)]								49.00	42.00	36.00	41.00	37.00	29.00	24.00
1500	Veff[m/s]									5.90	4.70	5.80	4.80	3.60	2.80
	ΔPt Pa]									28.00	17.00	26.00	18.00	10.00	6.00
	X [m]									18.40	16.40	18.20	16.60	14.30	12.70
	NR [dB(A)]									47.00	41.00	46.00	42.00	35.00	29.00
2000	Veff[m/s]												6.40	4.70	3.80
	ΔPt Pa]												32.00	18.00	11.00
	X [m]												22.10	19.00	16.90
	NR [dB(A)]												50.00	43.00	37.00
2500	Veff[m/s]													5.90	4.70
	ΔPt [Pa]													27.00	17.00
	X [m]													23.70	21.10
	NR [dB(A)]													49.00	43.00

The legend
Ak [m²] - The free surface
Veff [m/s] - The speed of air in the grille
ΔPt [Pa] - Pressure loss
X [m] - The length of the air jet at a speed of 0.2 m/s
NR [dB (A)] - Noise level without room attenuation

Installation

Floor mounting



Order code

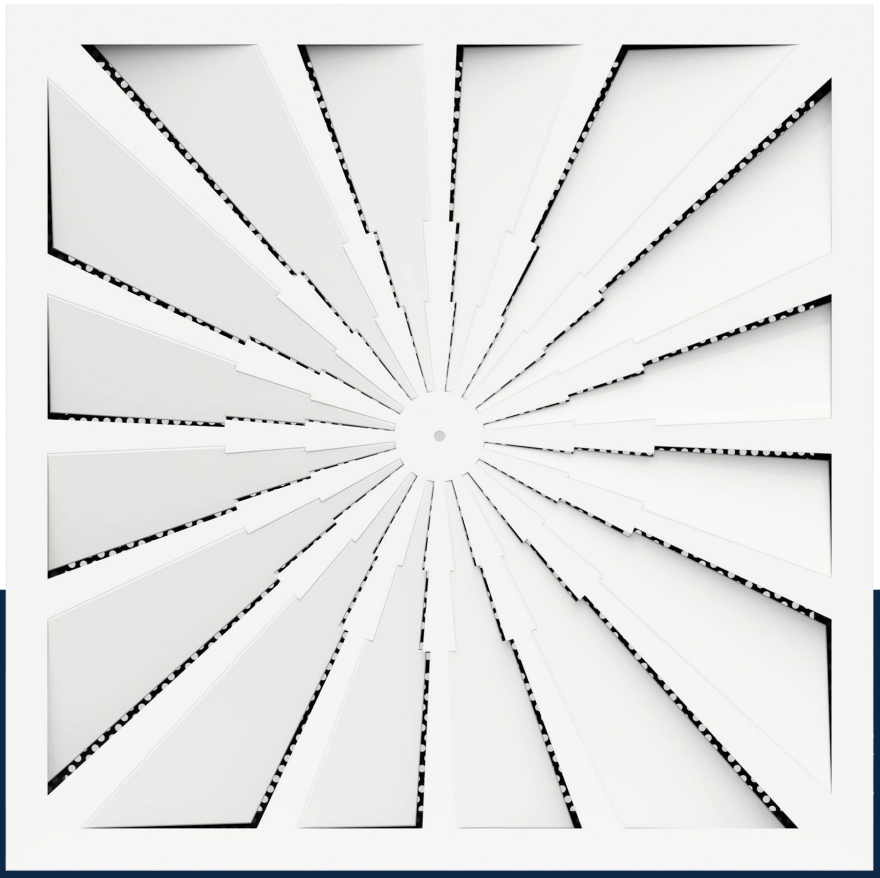
Example on how to place an order

Type	Dimensions
WAVE	
On request	

Air through perfection

Architectural diffuser

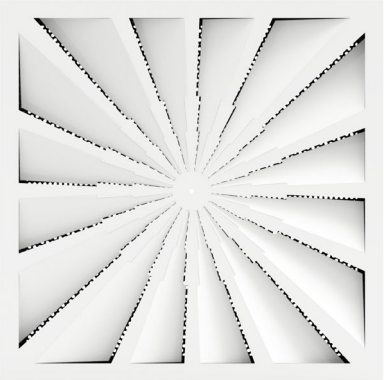
CRACK



ACP
Architectural diffusers

www.acp.ro

Architectural diffuser
CRACK



Description

CRACK is an architectural, square, swirl air diffuser used for introducing or evacuating air.

The diffuser is recommended for installations with constant or variable air flow.

CRACK is used in spaces with a height of <4.2 m.

The design of the product determines a high level of induction rate.

Technical specifications

Characteristics

The front plate has the external dimensions 595x595 mm.

The diffuser blades are fixed and arranged radially at the front plate level.

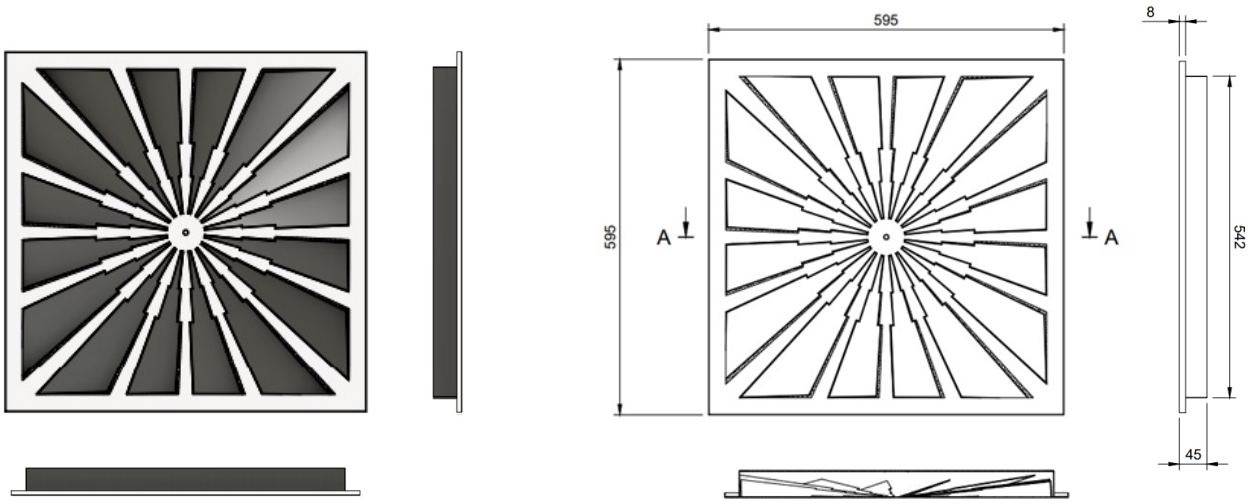
For a uniform appearance of the enclosures, the CRACK diffuser can also be used for air evacuation.

The product is delivered with the following elements: mounting bracket, fixing screw, screw cover cap and sealing gasket.

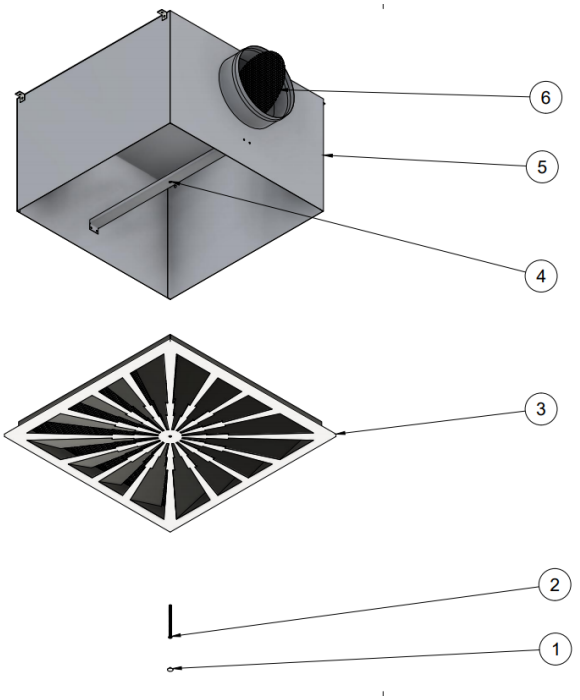
Materials

The diffuser is made of galvanized steel sheet and is electrostatic field painted. The front plate is painted in glossy white RAL 9016, and the connecting square connection is made of perforated sheet metal painted in black RAL 9005.

Technical drawing



Product specifications



1- Masking cap
2 - Fixing screw
3 - CRACK diffuser
4 - Bracket (mounting crossbar)
5 - Plenum box (opțional)
6 - Perforated damper (optional)

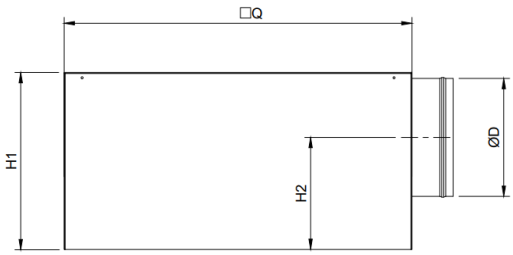
Accessories

The diffuser can be supplied with a plenum connecting to a circular duct with horizontal connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

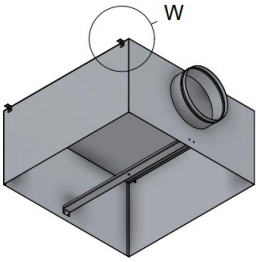
Optionally, a perforated damper can be mounted on the plenum connection to balance the air flow.

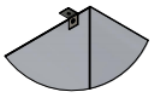
Adapter (plenum box)



ØD	□Q	H1	H2
mm	mm	mm	mm
250	552	340	200
315	552	410	237.5

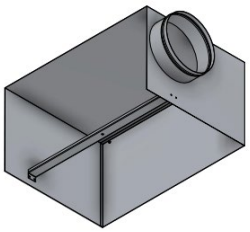
The adapter is made of galvanized steel sheet Z140 and is equipped with 4 lugs for suspension.



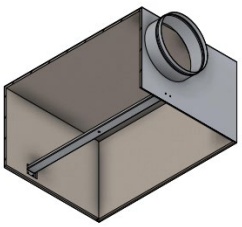


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.

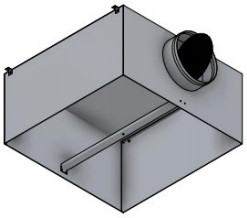


AN - Uninsulated adapter

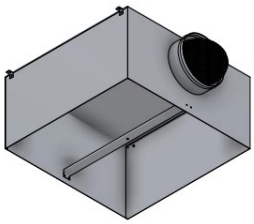


AIZ - Insulated adapter

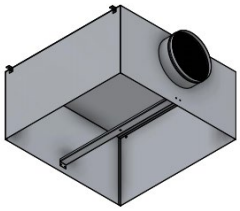
Perforated damper



Position 0°



Position 45°



Position 90°

The perforated damper is mounted on the adapter spigot and has the role of balancing the air flow.

Functional parameters

Dimension [mm]	Ak = 0,0447 m²		Blade position					
			0°		45°		90°	
	D [mm]	Air flow [m³/h]	ΔPt [Pa]	NR [dB(A)]	ΔPt [Pa]	NR [dB(A)]	ΔPt [Pa]	NR [dB(A)]
595x595	250	184	2	<15	3	<15	6	<15
		522	14	26	22	30	46	38
		846	38	39	57	44	122	51
		1188	75	50	113	56	240	62
595x595	315	184	1	<15	1	<15	3	<15
		575	10	26	14	28	28	31
		936	25	39	37	42	74	45
		1314	50	50	73	52	145	56

The legend
Ak [m²] - The free surface
D [mm] - Diameter of plenum connection
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

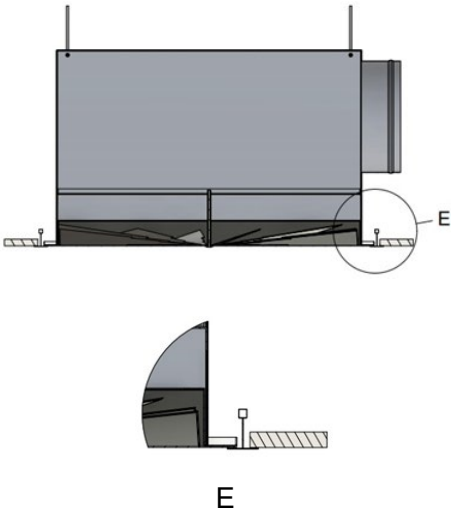
Note
0 ° blade position - damper open
45 ° blade position - damper inclined
90 ° blade position - damper closed
Values are provided for a plenum diffuser, horizontal (side) connection to duct.

Installation

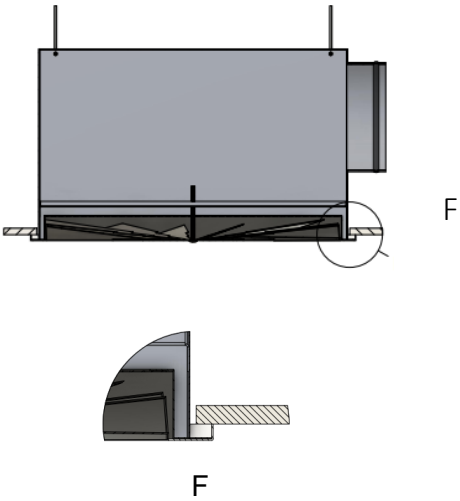
The diffuser can be mounted in 600 x 600 mm T-bar false ceiling, continuous ceiling or suspended.

The fixing of the plenum diffuser is done by using a central screw screwed into the mounting bracket, positioned inside of the plenum box.

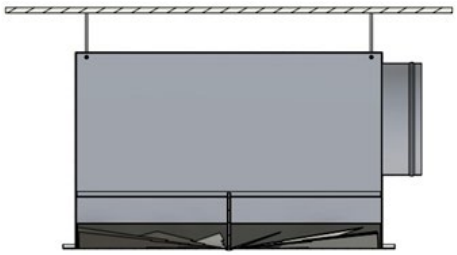
Installation in T-bar suspended ceiling



Installation in continuous ceiling



Suspended in the ceiling



Order code

Example on how to place an order

Type	Dimensions	Accessories	Finish
CRACK	595 x 595 mm	**AIZ -** Insulated adapter **AN** - Uninsulated adapter Perforated damper (plenum box)	**RAL 9016** - front plate **RAL 9005** - perforated sheet

Air through perfection

Architectural swirl diffuser

HELIO



ACP
Architectural diffusers

www.acp.ro

Architectural swirl diffuser
HELIO



Description

HELIO is an architectural, square, swirl air diffuser used for introducing or evacuating the air.

The diffuser is recommended for installations with constant or variable air flow and is intended for spaces with a height <4m.

The design of the product determines a high level of induction rate.

Technical specifications

Characteristics

The front plate has the external dimensions 595x595 mm and the circular connection Ø470 mm.

The diffuser blades are fixed and arranged radially at the front plate.

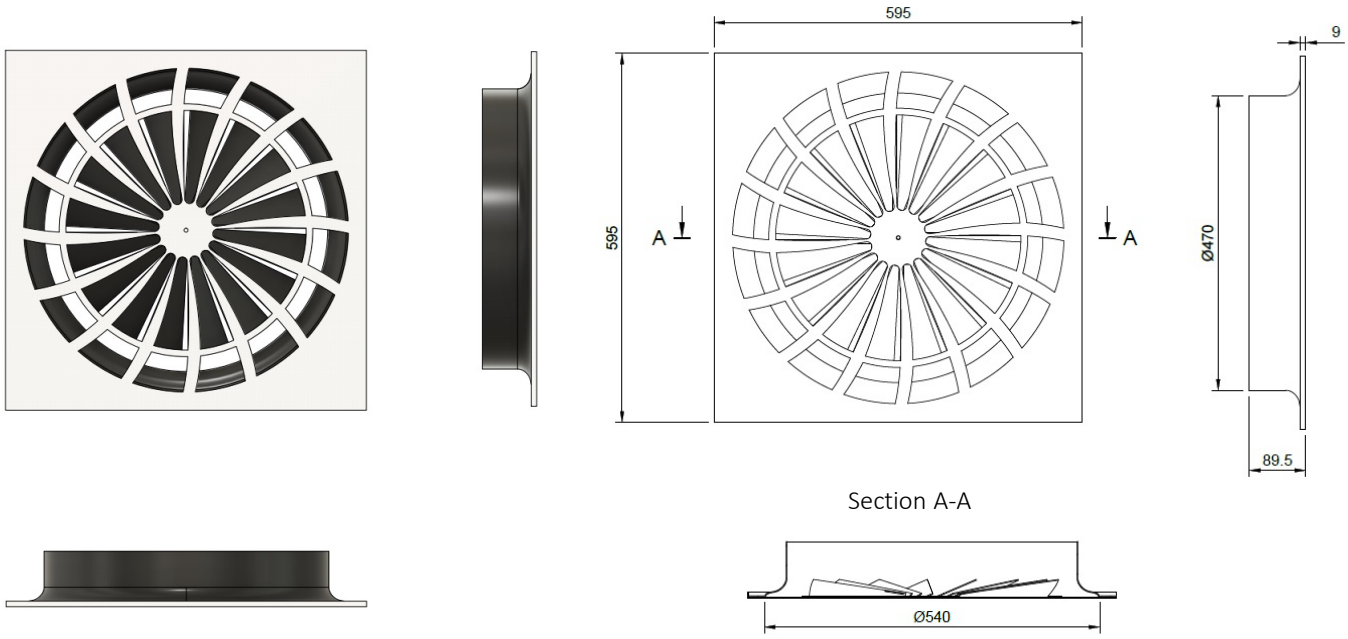
For a uniform appearance of the enclosures, the HELIO diffuser can also be used for air evacuation.

The product is delivered with the following elements: mounting bracket, fixing screw, screw cover cap and sealing gasket.

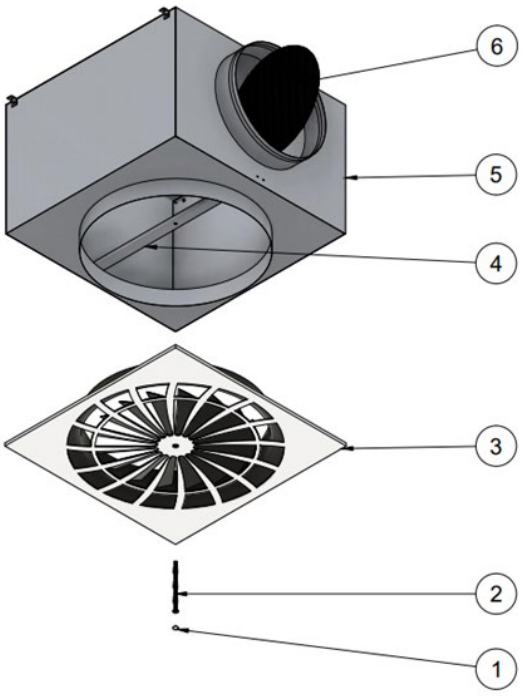
Materials

The diffuser is made of galvanized steel sheet and is electrostatic field painted. The front plate is painted in RAL 9016 glossy white, the blades and the circular connection in black RAL 9005.

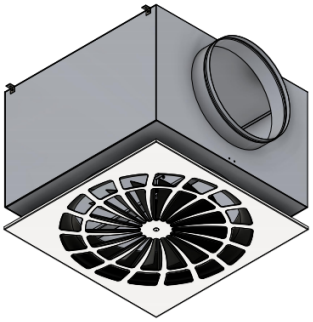
Technical drawing



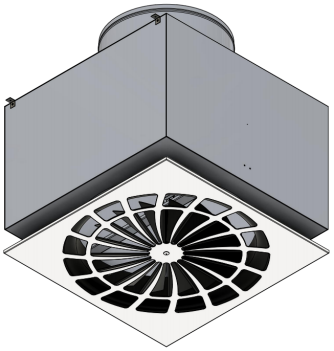
Product specifications



1- Masking cap
2 - Fixing screw
3 - HELIO diffuser
4 - Bracket (mounting crossbar)
5 - Plenum box (opțional)
6 - Perforated damper (optional)



Horizontal connection



Vertical connection

Accessories

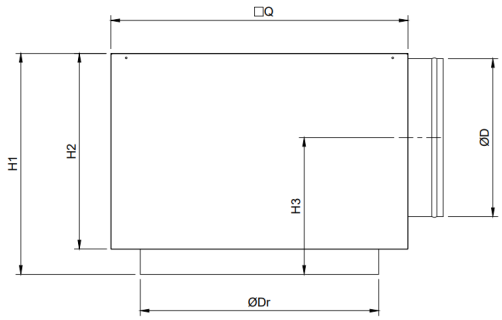
The diffuser can be supplied with a plenum connecting to the circular duct, with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

Optionally, a perforated damper can be mounted on the plenum connection to balance the air flow.

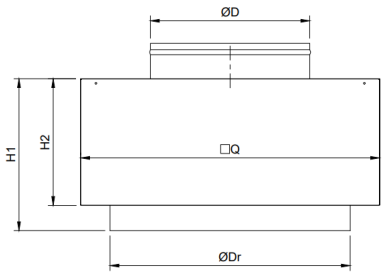
Adapter (plenum box)

Horizontal connection
(side/ lateral exit)



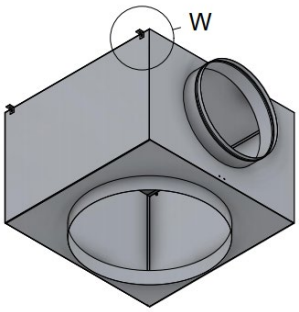
ØD	ØDr	□Q	H1	H2	H3
mm	mm	mm	mm	mm	mm
315	475	590	440	390	267.5

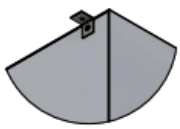
Vertical connection
(opposite/ exit)



ØD	ØDr	□Q	H1	H2
mm	mm	mm	mm	mm
315	475	590	300	250

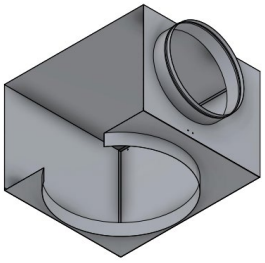
The adapter is made of galvanized steel sheet Z140 and is equipped with 4 lugs for suspension.



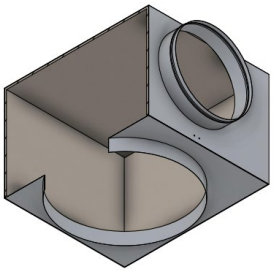


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.

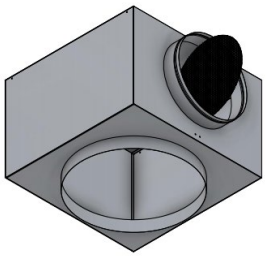


AN - Uninsulated adapter

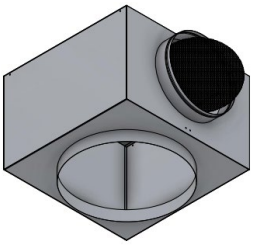


AIZ - Insulated adapter

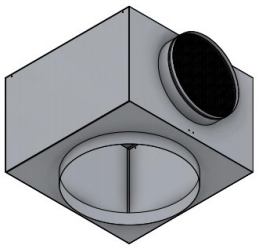
Perforated damper



Position 0°



Position 45°



Position 90°

The perforated damper is mounted on the adapter spigot and has the role of balancing the air flow.

Functional parameters

Air introduction - horizontal connection

Dimension [mm]	Ak = 0,0635 m^2		Blades positioning					
			0°		45°		90°	
	D [mm]	Air flow [m^3/h]	ΔPt [Pa]	NR [dB(A)]	ΔPt [Pa]	NR [dB(A)]	ΔPt [Pa]	NR [dB(A)]
595 x 595	470	720	14	23	18	24	38	34
		1044	29	34	38	36	80	44
		1368	50	43	65	45	138	53
		1674	75	50	97	53	206	61

Air introduction - vertical connection

Dimension [mm]	Ak = 0,0635 m²		Blades positioning					
			0°		45°		90°	
	D [mm]	Air flow [m³/h]	ΔPt [Pa]	NR [dB(A)]	ΔPt [Pa]	NR [dB(A)]	ΔPt [Pa]	NR [dB(A)]
595 x 595	470	720	9	27	14	30	34	35
		1008	17	36	27	40	66	45
		1278	28	43	43	47	106	53
		1566	41	50	65	54	159	61

The legend
Ak [m²] - The free surface
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss
D [mm] – Diffuser connection diameter

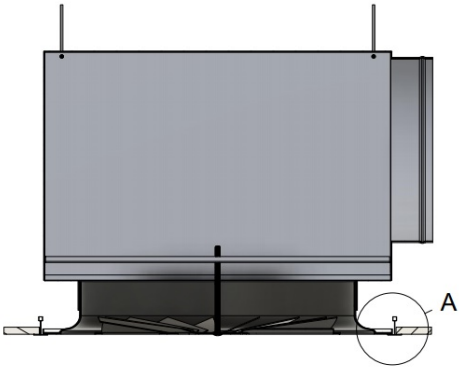
Note
0 ° blade position - damper open
45 ° blade position - damper inclined
90 ° blade position - damper closed
Values are provided for a plenum diffuser, connection diameter 315mm

Installation

The diffuser can be mounted in 600 x 600 mm T-bar false ceiling, continuous ceiling or suspended.

The fixing of the plenum diffuser is done by using a central screw screwed into the mounting bracket, positioned inside of the plenum box.

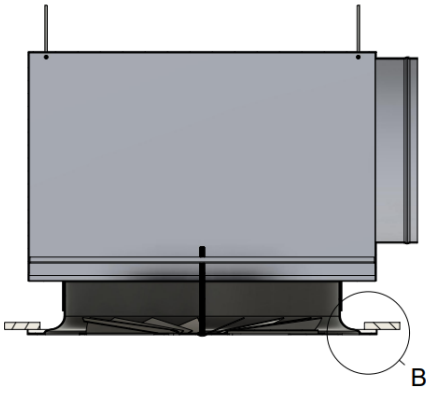
Installation in T-bar suspended ceiling

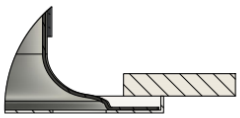




A

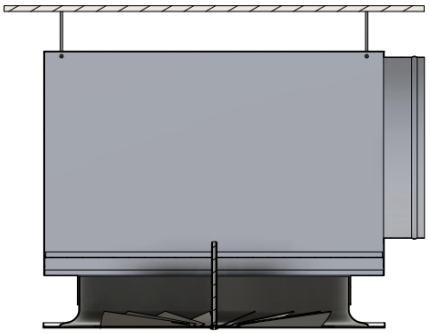
Installation in continuous ceiling





B

Suspended in the ceiling



Order code

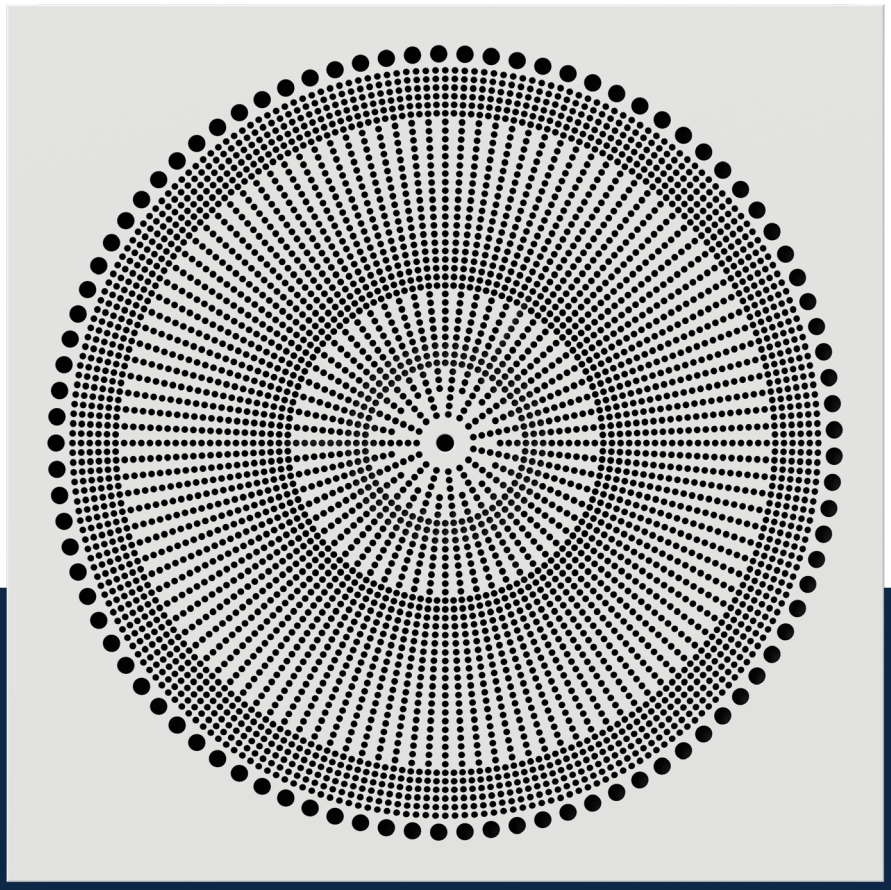
Example on how to place an order

Type	Dimensions	Accessories	Finish
HELIO			
	595 x 595 / D470 mm		
		AIZ - Insulated adapter **AN** - Uninsulated adapter Perforated damper (plenum box)	
			Front plate **RAL 9016** Blades and connection **RAL 9005**

Air through perfection

Architectural diffuser

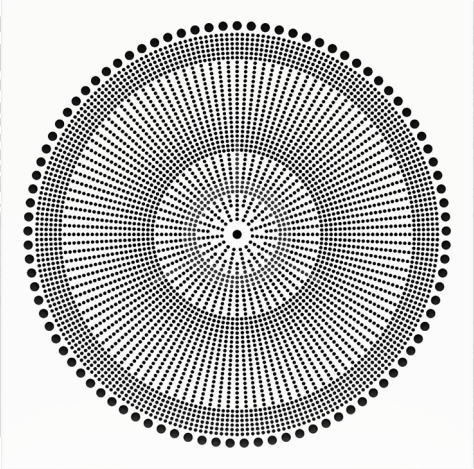
ECHO



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Architectural diffuser
ECHO



Description

ECHO is an architectural diffuser with a front plate with circular holes, used to introduce or evacuate air.

The diffuser is recommended for installations with constant or variable air flow and is intended for spaces with heights between 2.7 and 4 m.

The design of the product determines a high level of induction rate.

Technical specifications

Characteristics

The front plate has external dimensions 595x595 mm and the circular connection Ø250 mm.

For a uniform appearance of the enclosures, the ECHO diffuser can also be used for air evacuation.

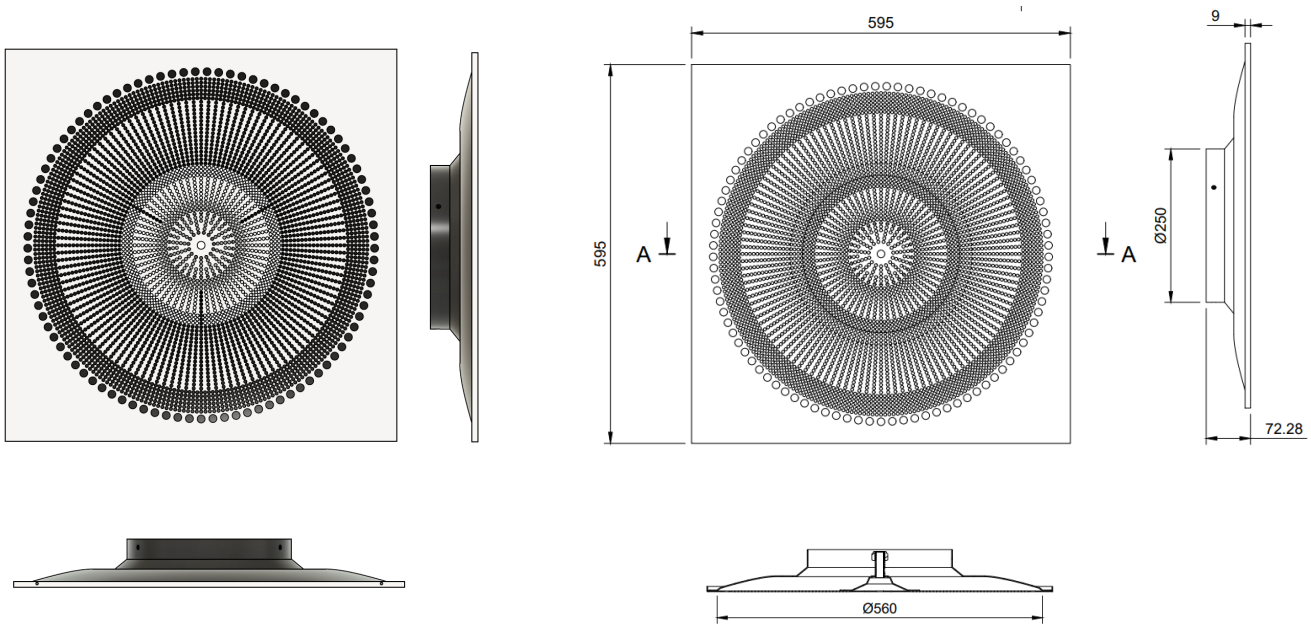
The product is delivered with the following elements: mounting bracket, fixing screw, screw cover cap and sealing gasket.

Materials

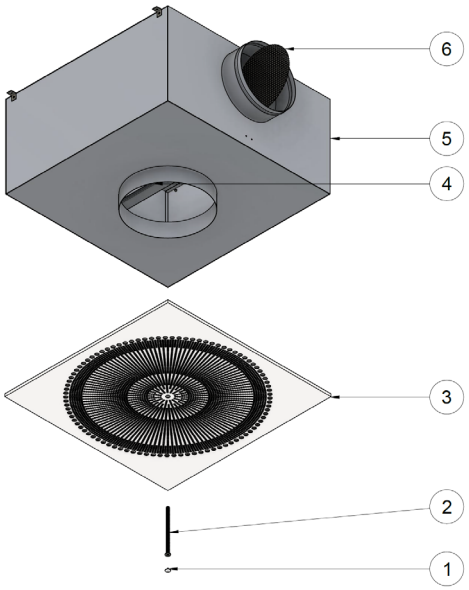
The diffuser is made of galvanized steel sheet and is electrostatic field painted.

The front plate is painted in RAL 9016 glossy white and the circular connection in black RAL 9005.

Technical drawing



Product specifications



1 - Masking cap
2 - Fixing screw
3 - ECHO diffuser
4 - Bracket (mounting crossbar)
5 - Plenum box (opțional)
6 - Perforated damper (optional)

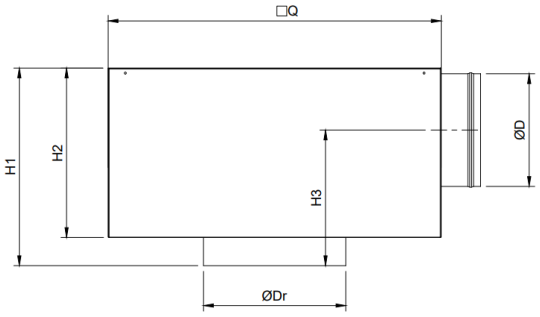
Accessories

The diffuser can be supplied with a plenum connecting to the circular duct, with horizontal or vertical connection. The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

Optionally, a perforated damper can be mounted on the plenum connection to balance the air flow.

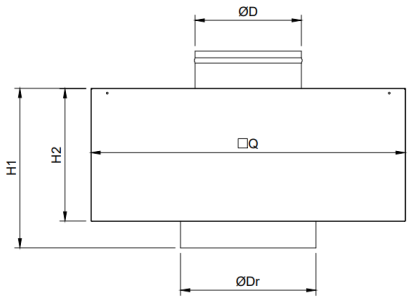
Adapter (plenum box)

Horizontal connection
(side/lateral exit)



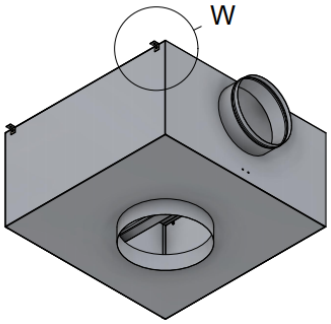
ØDr	□Q	H1	H2	H3
mm	mm	mm	mm	mm
255	590	Depending on ØD		

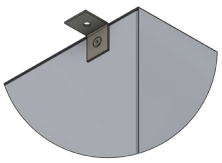
Vertical connection
(opposite exit)



ØDr	□Q	H1	H2
mm	mm	mm	mm
255	590	300	250

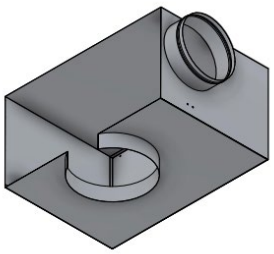
The adapter is made of Z140 galvanized steel sheet and has 4 suspension lugs.



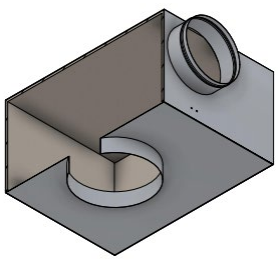


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.

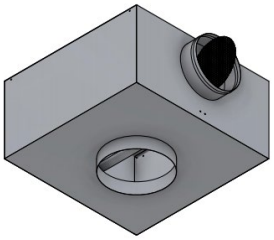


AN - Uninsulated adapter

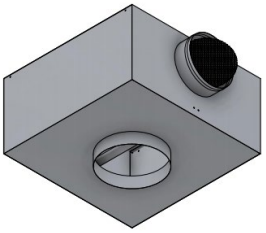


AIZ - Insulated adapter

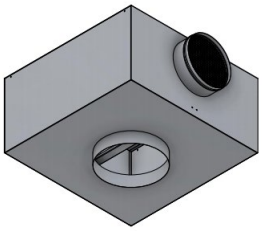
Perforated damper



Position 0°



Position 45°



Position 90°

The perforated damper is mounted on the adapter spigot and has the role of balancing the air flow.

Functional parameters

Air flow [m^3/h]	Dimension [mm]	595 x 595
	D [mm]	250
	Ak [m^2]	0.0289
400	$X_{0,2}$ [m]	1.35
	NR [db(A)]	23
	ΔPt [Pa]	22
500	$X_{0,2}$ [m]	1.7
	NR [db(A)]	31
	ΔPt [Pa]	35
600	$X_{0,2}$ [m]	2
	NR [db(A)]	38
	ΔPt [Pa]	48
700	$X_{0,2}$ [m]	2.4
	NR [db(A)]	43
	ΔPt [Pa]	65
800	$X_{0,2}$ [m]	2.8
	NR [db(A)]	48
	ΔPt [Pa]	84

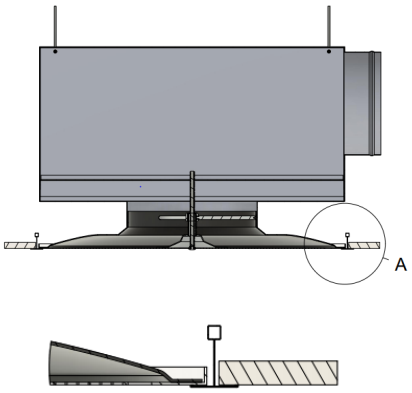
The legend
D [mm] – Diffuser connection diameter
Ak [m²] - The free surface
X [m] - The length of the air jet at a speed of 0.2 m/s
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

Installation

The diffuser can be mounted in 600 x 600 mm T-bar false ceiling, continuous ceiling or suspended.

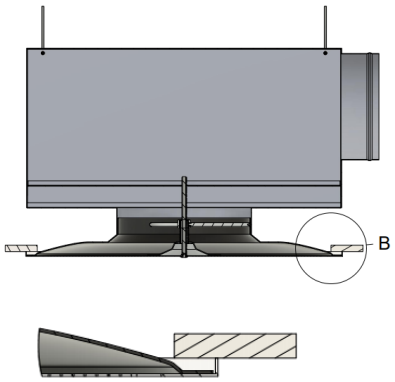
The fixing of the plenum diffuser is done by using a central screw screwed into the mounting bracket, positioned inside of the plenum box.

Installation in T-bar suspended ceiling



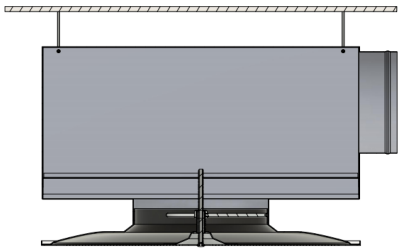
A

Installation in continuous ceiling



B

Suspended in the ceiling



Order code

Example on how to place an order

Type	Dimensions	Accessories	Finish
ECHO			
	595 x 595 mm / D250		
		AIZ - Insulatedadapter	
		AN - Non-insulatedadapter	
		Perforateddamper(plenumbox)	
			Frontplate**RAL 9016**
			Circularconnection**RAL 9005**

Air through perfection

Slot diffuser

SL-19



ACP
Slot diffusers

Slot diffuser
SL-19



Description

Linear slot diffuser 19 mm has adjustable blades and is used for introduction or evacuation of air.
The diffuser is recommended for installations with a constant or variable air flow and intended for mounting in a false ceiling.

Technical specifications

Characteristics

The diffuser can be made with 1 ÷ 4 slots 19 mm wide.
The diffuser blades are adjustable and allow airflow to be adjusted.
Long-length diffusers have segmented blades at a maximum size of 1500 mm
Perimeter configurations can be made by using corner sections (angle 90°).
Dimensional limits, diffuser length: minimum 0.3m and maximum 3.1m.
In the case of long-length diffusers, the construction is modular, and the delivery is made together with the necessary connecting parts.
The product is delivered with the following elements: “U” type mounting system (bracket), fixing screws and joining/alignment elements (for modular products).

Materials

The diffuser is made of electrostatic field painted extruded aluminum in glossy white RAL 9016 with black anodized aluminum blades (standard finish).

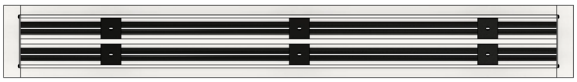
The following finishes are also available on request:

- EL - natural anodized aluminum (anodized) with anodized black blades
- LV - fully painted (including blades) in electrostatic field in any shade from the RAL palette

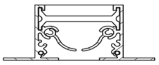
Technical drawing

SL-19 - Linear

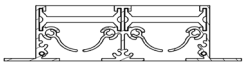




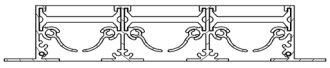
- SL-19-1 (1 slot)



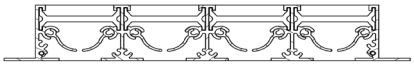
- SL-19-2 (2 slots)

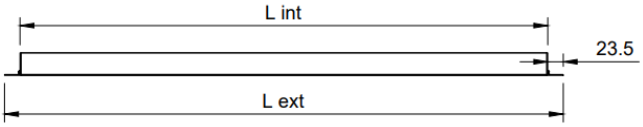


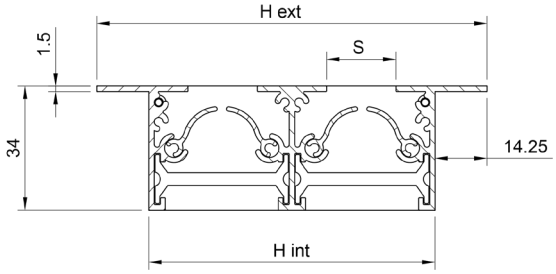
- SL-19-3 (3 slots)



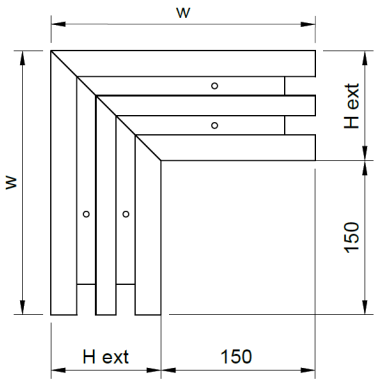
- SL-19-4 (4 slots)

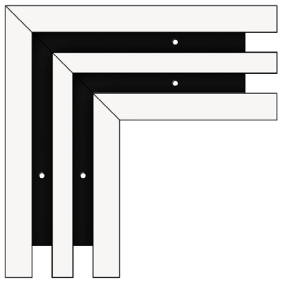






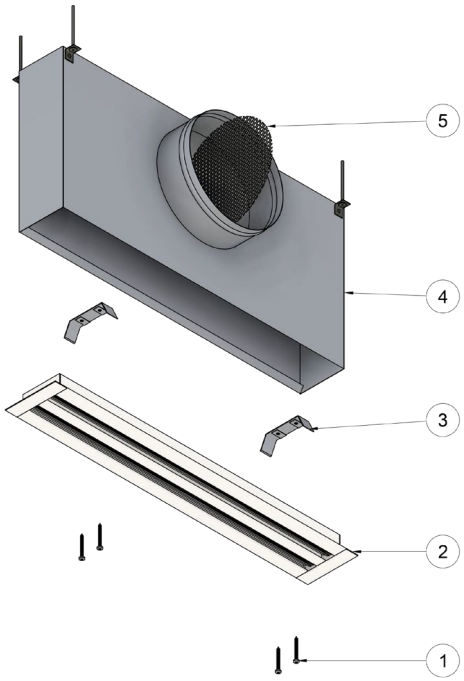
SL-19 – 90◦ angle





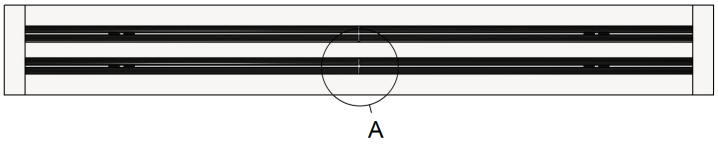
No.of slots	S [mm]	H int [mm]	H ext [mm]	W [mm]
1	19	41	69	219
2		80	108	258
3		119	147	297
4		158	186	336

Product specifications



1 - Fixing screw
2 - SL-19-2 slot diffuser
3 - Bracket (“U” type system)
4 - Plenum box (optional)
5 - Perforated damper (optional)

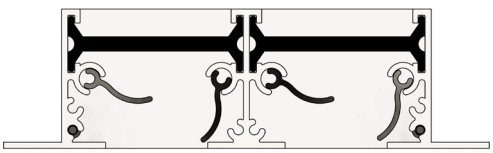
Long-length diffusers have segmented blades at a maximum size of 1500 mm. This makes it easier to adjust the diffuser blades to achieve the desired adjustment



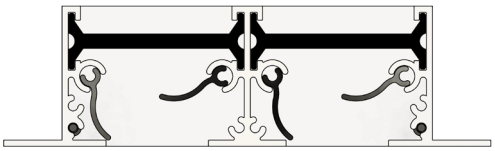


Positioning the blades

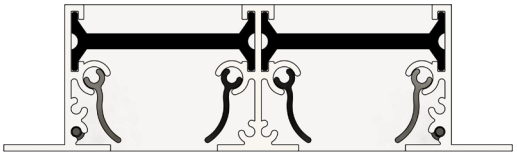
Direction of air jet to the left



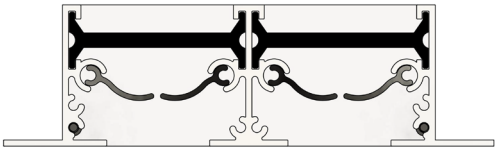
Direction of air jet to the right



Blades open



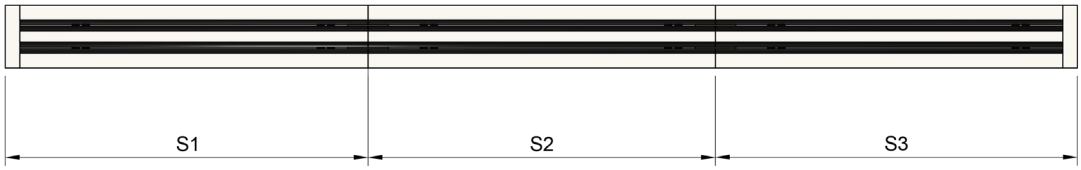
Blades closed

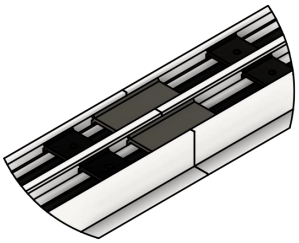


Section assembly

Long-length diffusers are made of modules with a maximum length of 3.1 m..

In this case, the product is delivered with connecting elements between modules.





SL-19-2-S1



SL-19-2-S2



SL-19-2-S3



Accessories

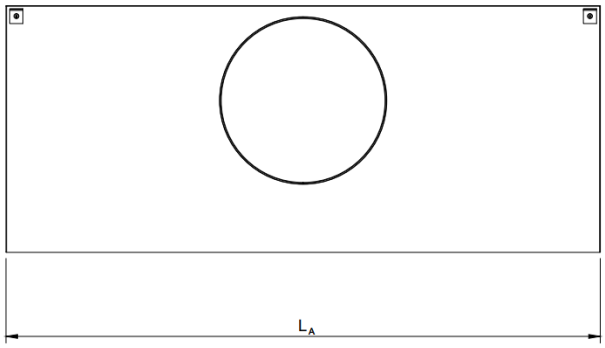
The diffuser can be supplied with a plenum connecting to a circular duct with horizontal connection.

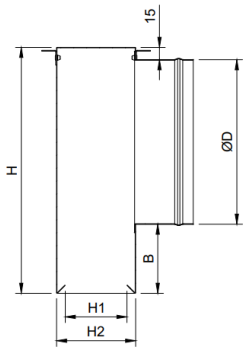
The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

The plenum is delivered insulated or uninsulated.

Optionally, a perforated damper can be mounted on the plenum connection to balance the air flow.

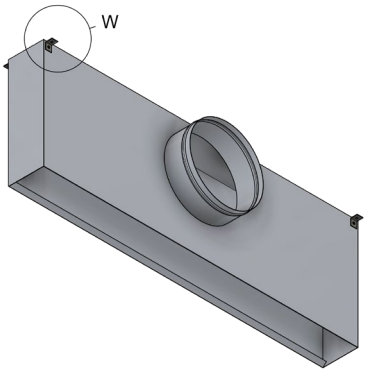
Adapter (plenum box)

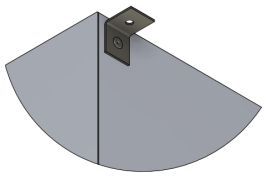




L_A = L int slot + 5 mm
B - 60 mm is recommended or depending on the request
H1 = H int slot + 2
H2 = H1 + 16
H - depending on ØD and request

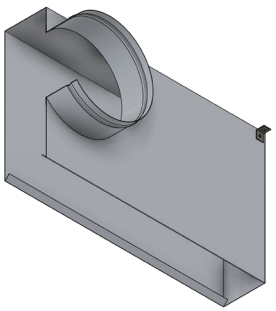
The adapter is made of Z140 galvanized steel sheet and is equipped with suspension lugs.



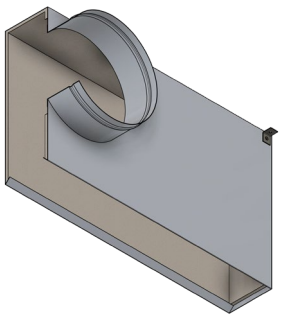


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.

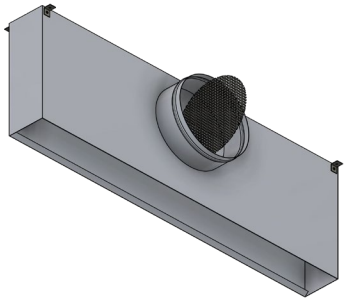


AN - Uninsulated adapter

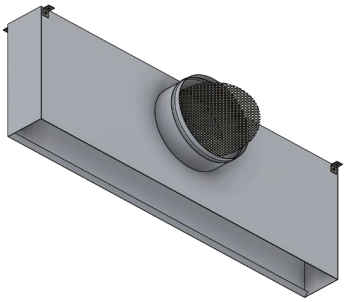


AIZ - Insulated adapter

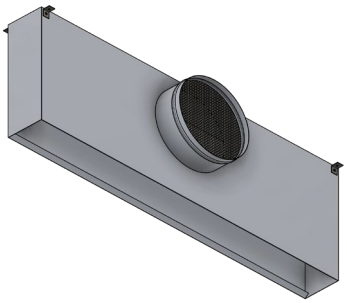
Perforated damper



Position 0°



Position 45°



Position 90°

The perforated damper is mounted on the adapter spigot and has the role of uniformizing and balancing the air flow.

Functional parameters

Air flow (m³/h)	No. of slots Ak(m²)	1 0.018
Length = 1000 mm		
72	X [m]	0.50
	NR [dB(A)]	10.00
	△Pt [Pa]	8.00
108	X [m]	1.80
	NR [dB(A)]	19.00
	△Pt [Pa]	16.00
144	X [m]	2.80
	NR [dB(A)]	25.00
	△Pt [Pa]	22.00
180	X [m]	4.00
	NR [dB(A)]	30.00
	△Pt [Pa]	39.00
216	X [m]	5.10
	NR [dB(A)]	35.00
	△Pt [Pa]	48.00
252	X [m]	6.00
	NR [dB(A)]	38.00
	△Pt [Pa]	60.00
288	X [m]	7.00
	NR [dB(A)]	39.00
	△Pt [Pa]	70.00
324	X [m]	7.80
	NR [dB(A)]	43.00
	△Pt [Pa]	90.00
360	X [m]	8.30
	NR [dB(A)]	47.00
	△Pt [Pa]	100.00

Air flow (m³/h)	No. of slots Ak(m²)	2 0.037
Length = 1000 mm		
108	X [m]	0.80
	NR [dB(A)]	8.00
	△Pt [Pa]	5.00
144	X [m]	1.50
	NR [dB(A)]	13.00
	△Pt [Pa]	7.00
180	X [m]	2.50
	NR [dB(A)]	17.00
	△Pt [Pa]	10.00
216	X [m]	3.40
	NR [dB(A)]	21.00
	△Pt [Pa]	15.00
252	X [m]	4.40
	NR [dB(A)]	26.00
	△Pt [Pa]	18.00
288	X [m]	5.00
	NR [dB(A)]	29.00
	△Pt [Pa]	23.00
324	X [m]	6.00
	NR [dB(A)]	32.00
	△Pt [Pa]	30.00
360	X [m]	6.50
	NR [dB(A)]	34.00
	△Pt [Pa]	38.00
540	X [m]	9.80
	NR [dB(A)]	42.00
	△Pt [Pa]	70.00

Air flow (m³/h)	No. of slots Ak(m²)	3 0.056
Length = 1000 mm		
144	X [m]	1.00
	NR [dB(A)]	6.00
	△Pt [Pa]	5.00
180	X [m]	1.90
	NR [dB(A)]	12.00
	△Pt [Pa]	6.00
216	X [m]	2.50
	NR [dB(A)]	15.00
	△Pt [Pa]	8.00
252	X [m]	3.50
	NR [dB(A)]	18.00
	△Pt [Pa]	9.00
288	X [m]	4.00
	NR [dB(A)]	20.00
	△Pt [Pa]	12.00
324	X [m]	4.80
	NR [dB(A)]	25.00
	△Pt [Pa]	15.00
360	X [m]	5.40
	NR [dB(A)]	27.00
	△Pt [Pa]	18.00
540	X [m]	8.30
	NR [dB(A)]	35.00
	△Pt [Pa]	37.00
720	X [m]	10.50
	NR [dB(A)]	41.00
	△Pt [Pa]	55.00

Air flow (m³/h)	No. of slots Ak(m²)	4 0.075
Length = 1000 mm		
180	X [m]	1.20
	NR [dB(A)]	7.00
	△Pt [Pa]	3.00
216	X [m]	2.00
	NR [dB(A)]	10.00
	△Pt [Pa]	4.00
252	X [m]	2.80
	NR [dB(A)]	14.00
	△Pt [Pa]	7.00
288	X [m]	3.40
	NR [dB(A)]	15.00
	△Pt [Pa]	8.00
324	X [m]	4.00
	NR [dB(A)]	18.00
	△Pt [Pa]	9.00
360	X [m]	4.60
	NR [dB(A)]	20.00
	△Pt [Pa]	10.00
540	X [m]	7.30
	NR [dB(A)]	31.00
	△Pt [Pa]	19.00
720	X [m]	9.50
	NR [dB(A)]	36.00
	△Pt [Pa]	32.00
1080	X [m]	13.20
	NR [dB(A)]	45.00
	△Pt [Pa]	60.00

The legend
Ak [m²] - The free surface
X [m] - The length of the air jet at a speed of 0.25 m/s
NR [dB (A)] - Noise level for 8dB room attenuation
ΔPt [Pa] - Pressure loss
Veff [m/s] - Air speed in the diffuser

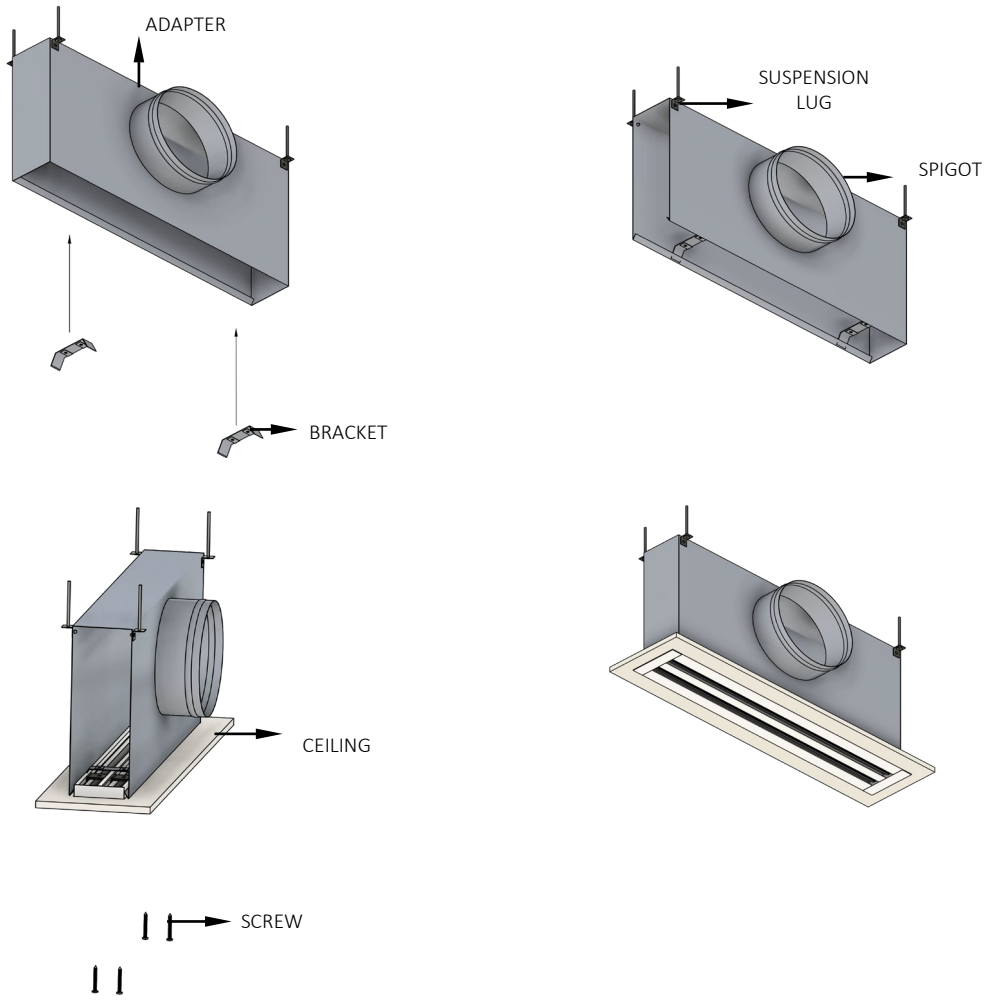
Note
Values are provided for a room height of 2.7m.
The length of the air jet is given for horizontal discharge.

Installation

The diffuser is mounted in a false continuous ceiling or on the wall.

The fixing of the plenum diffuser is done by means of “U” type mounting systems (bracket), positioned inside the plenum and the screws.

False continuous ceiling mounting



Order code

Example on how to place an order

Type	No. of slots	Length	Section	Accessories	Finish
SL-19					
	1, 2, 3 or 4 slots				
		300 ... 3100 mm			
			S1 - Left end section S2 - Middle section S3 - Right end section		
				AIZ - Insulated adapter **AN** - Uninsulated adapter Perforated damper (plenum box) **OBD** - Control damper	
					LN - RAL9016 with black blades (standard) **LV** - Fully painted (including blades) in RAL on request **EL** - Anodized aluminum, natural gray frame with black blades.

Air through perfection

Slot diffuser

SL-25



ACP
Slot diffusers

Slot diffuser
SL-25



Description

Linear slot diffuser 25 mm has adjustable blades and is used for introduction or evacuation of air.

The diffuser is recommended for installations with a constant or variable air flow and intended for mounting in a false ceiling.

Technical specifications

Characteristics

The diffuser can be made with 1 ÷ 4 slots 25 mm wide.

The diffuser blades are adjustable and allow airflow to be adjusted.

Long-length diffusers have segmented blades at a maximum size of 1500 mm

Perimeter configurations can be made by using corner sections (angle 90°).

Dimensional limits, diffuser length: minimum 0.3m and maximum 3.1m.

In the case of long-length diffusers, the construction is modular, and the delivery is made together with the necessary connecting parts.

The product is delivered with the following elements: “U” type mounting system (bracket), fixing screws and joining/alignment elements (for modular products).

Materials

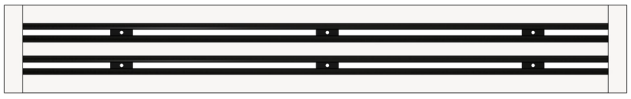
The diffuser is made of electrostatic field painted extruded aluminum in glossy white RAL 9016 with black anodized aluminum blades (standard finish).

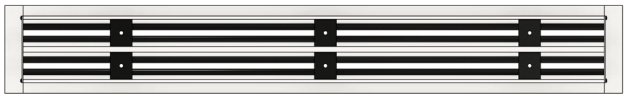
The following finishes are also available on request:

- EL - natural anodized aluminum (anodized) with anodized black blades
- LV - fully painted (including blades) in electrostatic field in any shade from the RAL palette

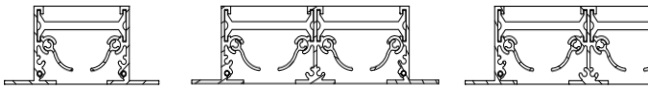
Technical drawing

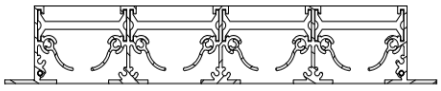
SL-25 - Linear

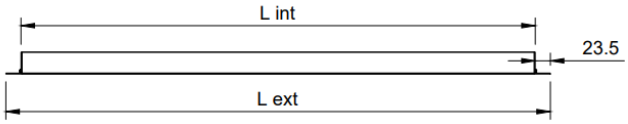


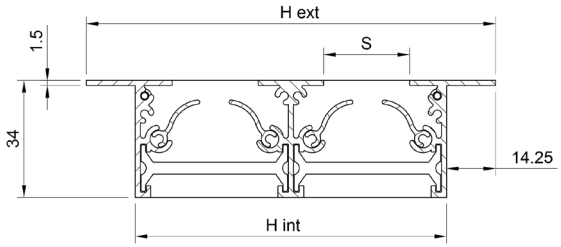


- SL-25-1 (1 slot)
- SL-25-2 (2 slots)
- SL-25-3 (3 slots)
- SL-25-4 (4 slots)

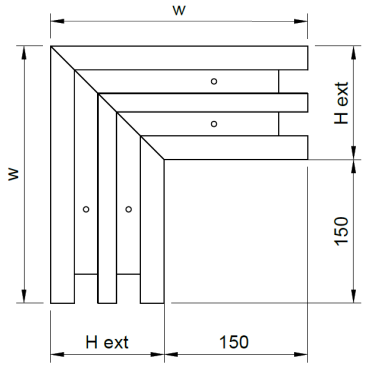


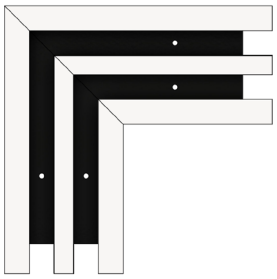






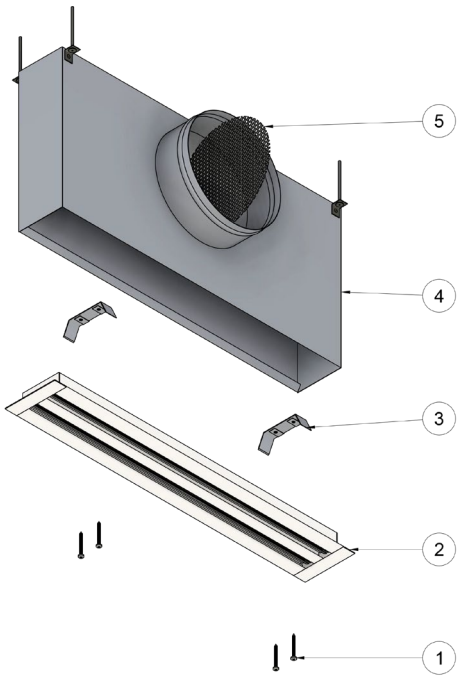
SL-25 – 90◦ angle





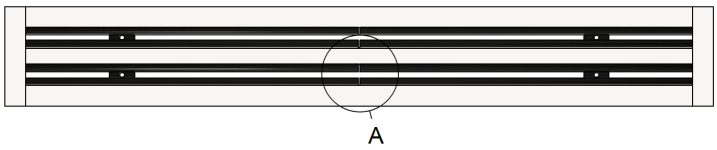
No. of slots	S [mm]	H int [mm]	H ext [mm]	W [mm]
1	25	47	75	225
2		92	120	270
3		137	165	315
4		182	210	360

Product specifications



1 - Fixing screw
2 - SL-25-2 slot diffuser
3 - Bracket (“U” type system)
4 - Plenum box (optional)
5 - Perforated damper (optional)

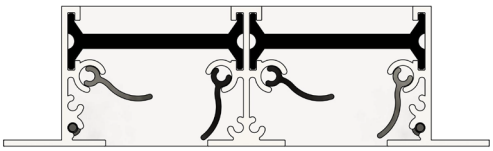
Long-length diffusers have segmented blades at a maximum size of 1500mm. This makes it easier to adjust the diffuser blades to achieve the desired adjustment.



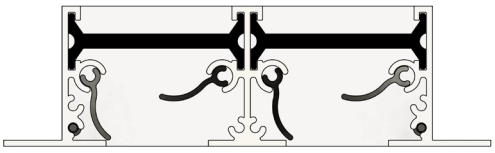


Positioning the blades

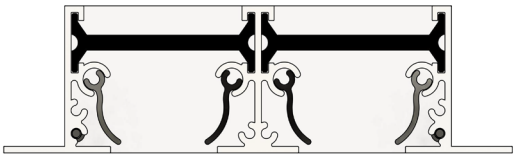
Direction of air jet to the left



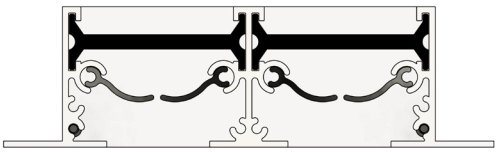
Direction of air jet to the right



Blades open

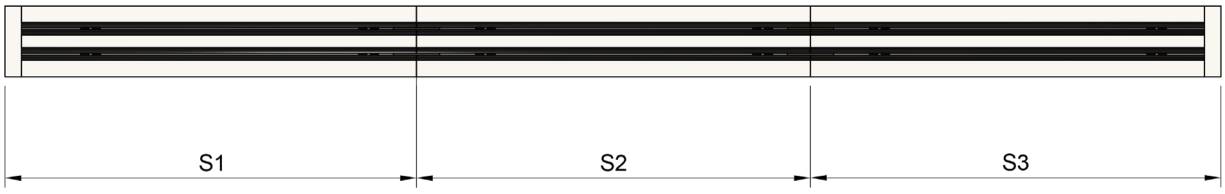


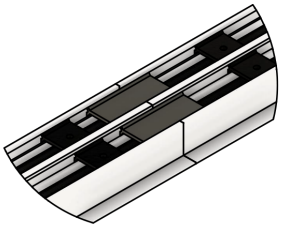
Blades closed



Section assembly

Long-length diffusers are made of modules with a maximum length of 3.1 m. In this case, the product is delivered with connecting elements between modules.





SL-25-2-S1



SL-25-2-S2



SL-25-2-S3



Accessories

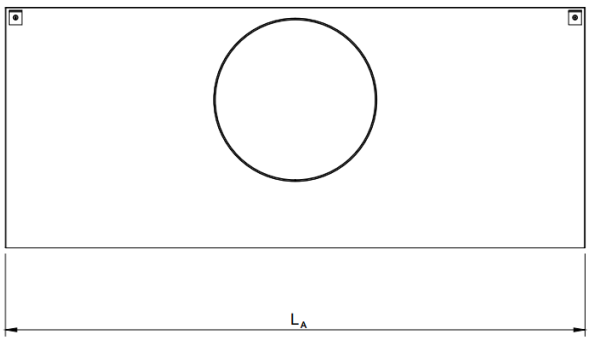
The diffuser can be supplied with a plenum connecting to a circular duct with horizontal connection.

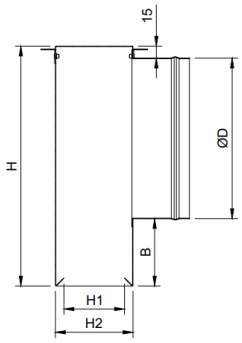
The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

The plenum is delivered insulated or uninsulated.

Optionally, a perforated damper can be mounted on the plenum connection to balance the air flow.

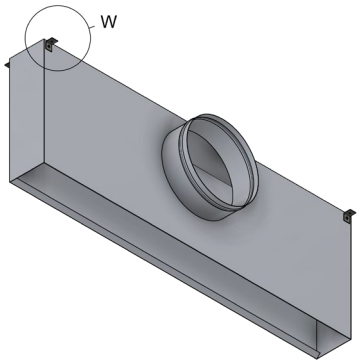
Adapter (plenum box)

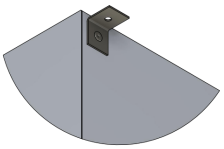




L_A = L int slot + 5 mm
B - 60 mm is recommended or depending on the request
H1 = H int slot + 2
H2 = H1 + 16
H - depending on ØD and request

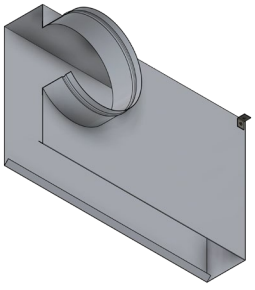
The adapter is made of Z140 galvanized steel sheet and is equipped with suspension lugs.



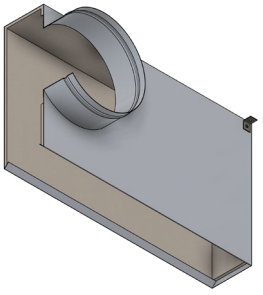


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.

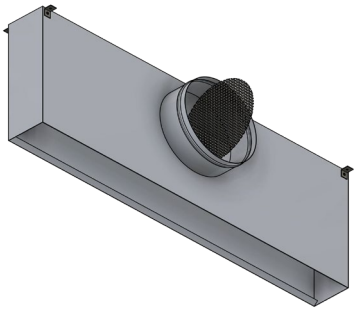


AN - Uninsulated adapter

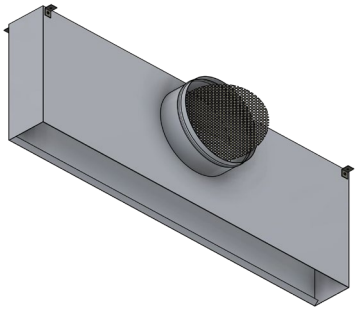


AIZ - Insulated adapter

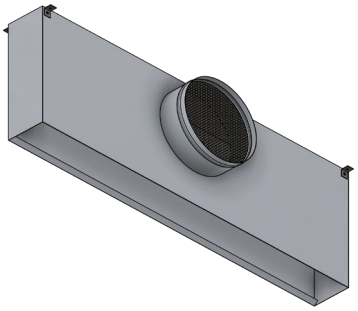
Perforated damper



Position 0°



Position 45°



Position 90°

The perforated damper is mounted on the adapter spigot and has the role of uniformizing and balancing the air flow.

Functional parameters

Air flow (m³/h)	No. of slots Ak(m²)	1 0.0245
Length = 1000 mm		
72	X [m]	0.30
	NR [dB(A)]	8.00
	△Pt [Pa]	6.00
108	X [m]	1.40
	NR [dB(A)]	15.00
	△Pt [Pa]	10.00
144	X [m]	2.50
	NR [dB(A)]	20.00
	△Pt [Pa]	18.00
180	X [m]	3.80
	NR [dB(A)]	27.00
	△Pt [Pa]	38.00
216	X [m]	4.80
	NR [dB(A)]	32.00
	△Pt [Pa]	40.00
252	X [m]	5.80
	NR [dB(A)]	35.00
	△Pt [Pa]	50.00
288	X [m]	6.70
	NR [dB(A)]	38.00
	△Pt [Pa]	60.00
324	X [m]	7.00
	NR [dB(A)]	40.00
	△Pt [Pa]	78.00
360	X [m]	8.00
	NR [dB(A)]	44.00
	△Pt [Pa]	95.00

Air flow (m³/h)	No. of slots Ak(m²)	2 0.049
Length = 1000 mm		
108	X [m]	0.70
	NR [dB(A)]	5.00
	△Pt [Pa]	3.00
144	X [m]	1.30
	NR [dB(A)]	12.00
	△Pt [Pa]	6.00
180	X [m]	2.00
	NR [dB(A)]	15.00
	△Pt [Pa]	8.00
216	X [m]	3.00
	NR [dB(A)]	18.00
	△Pt [Pa]	10.00
252	X [m]	4.00
	NR [dB(A)]	23.00
	△Pt [Pa]	15.00
288	X [m]	4.50
	NR [dB(A)]	25.00
	△Pt [Pa]	18.00
324	X [m]	5.20
	NR [dB(A)]	28.00
	△Pt [Pa]	20.00
360	X [m]	6.00
	NR [dB(A)]	32.00
	△Pt [Pa]	28.00
540	X [m]	9.00
	NR [dB(A)]	40.00
	△Pt [Pa]	57.00

Air flow (m³/h)	No. of slots Ak(m²)	3 0.074
Length = 1000 mm		
144	X [m]	0.90
	NR [dB(A)]	5.00
	△Pt [Pa]	4.00
180	X [m]	1.50
	NR [dB(A)]	10.00
	△Pt [Pa]	5.00
216	X [m]	2.20
	NR [dB(A)]	13.00
	△Pt [Pa]	7.00
252	X [m]	3.00
	NR [dB(A)]	15.00
	△Pt [Pa]	8.00
288	X [m]	3.80
	NR [dB(A)]	18.00
	△Pt [Pa]	9.00
324	X [m]	4.50
	NR [dB(A)]	20.00
	△Pt [Pa]	11.00
360	X [m]	5.00
	NR [dB(A)]	25.00
	△Pt [Pa]	13.00
540	X [m]	7.80
	NR [dB(A)]	33.00
	△Pt [Pa]	29.00
720	X [m]	10.00
	NR [dB(A)]	39.00
	△Pt [Pa]	45.00

Air flow (m³/h)	No. of slots Ak(m²)	4 0.099
Length = 1000 mm		
180	X [m]	1.00
	NR [dB(A)]	5.00
	△Pt [Pa]	2.00
216	X [m]	1.80
	NR [dB(A)]	9.00
	△Pt [Pa]	3.00
252	X [m]	2.50
	NR [dB(A)]	12.00
	△Pt [Pa]	5.00
288	X [m]	3.00
	NR [dB(A)]	14.00
	△Pt [Pa]	6.00
324	X [m]	3.70
	NR [dB(A)]	16.00
	△Pt [Pa]	7.00
360	X [m]	4.00
	NR [dB(A)]	18.00
	△Pt [Pa]	9.00
540	X [m]	6.90
	NR [dB(A)]	29.00
	△Pt [Pa]	17.00
720	X [m]	9.00
	NR [dB(A)]	34.00
	△Pt [Pa]	26.00
1080	X [m]	12.80
	NR [dB(A)]	43.00
	△Pt [Pa]	52.00

The legend
Ak [m²] - The free surface
X [m] - The length of the air jet at a speed of 0.25 m/s
NR [dB (A)] - Noise level for 8dB room attenuation
ΔPt [Pa] - Pressure loss
Veff [m/s] - Air speed in the diffuser

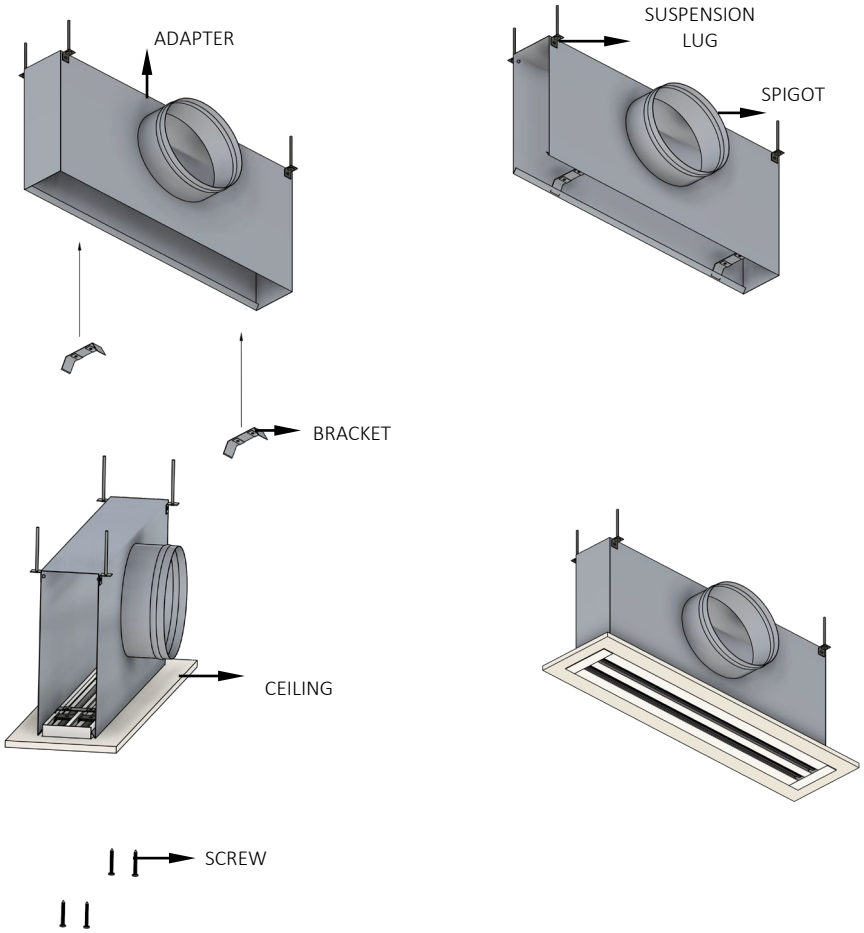
Note
Values are provided for a room height of 2.7m.
The length of the air jet is given for horizontal discharge.

Installation

The diffuser is mounted in a false continuous ceiling or on the wall.

The fixing of the plenum diffuser is done by means of “U” type mounting systems (bracket), positioned inside the plenum and the screws.

False continuous ceiling mounting



Order code

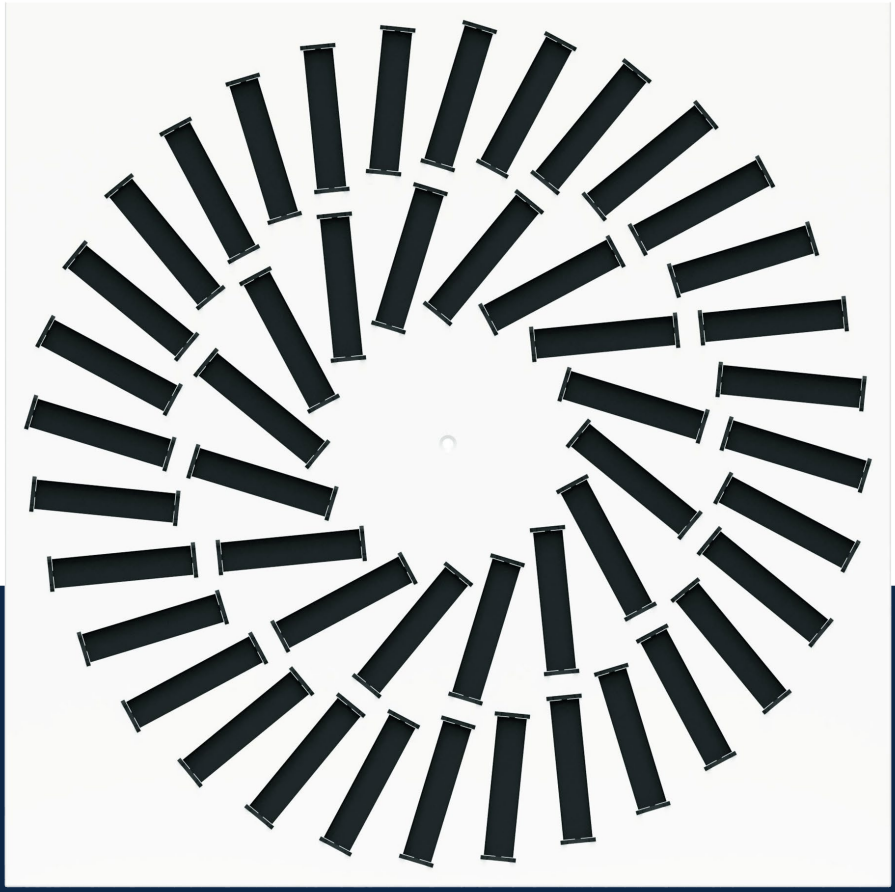
Example on how to place an order

Type	No. of slots	Length	Section	Accessories	Finish
SL-25					
	1, 2, 3 or 4 slots				
		300 ... 3100 mm			
			S1 - Left end section S2 - Middle section S3 - Right end section		
				AIZ - Insulated adapter **AN** - Uninsulated adapter Perforated damper (plenum box) **OBD** - Control damper	
					LN - RAL9016 with black blades (standard) **LV** - Fully painted (including blades) in RAL on request **EL** - Anodized aluminum, natural gray frame with black blades.

Air through perfection

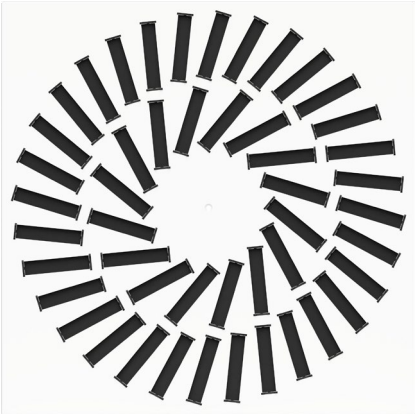
Swirl diffuser

SW-R



ACP
Swirl diffusers

Swirl diffuser
SW-R



Description

SW-R is a swirl diffuser with a square front plate, used to introduce or exhaust air.

The diffuser is recommended for rooms with heights between 2.6 and 4 m.

The design of the blades, their radial arrangement and the swirl action determine a high level of induction rate.

The diffuser can be used for installations with constant or variable air flow.

Technical specifications

Characteristics

The diffuser has external dimensions 595x595 mm and can be made with 24 or 48 slots.

The diffuser is provided with individually adjustable black aluminum blades.

Air induction occurs rapidly due to the swirl action, resulting in a rapid change in temperature.

The product is delivered with the following elements: mounting bracket, fixing screw, screw cover cap and sealing gasket.

Materials

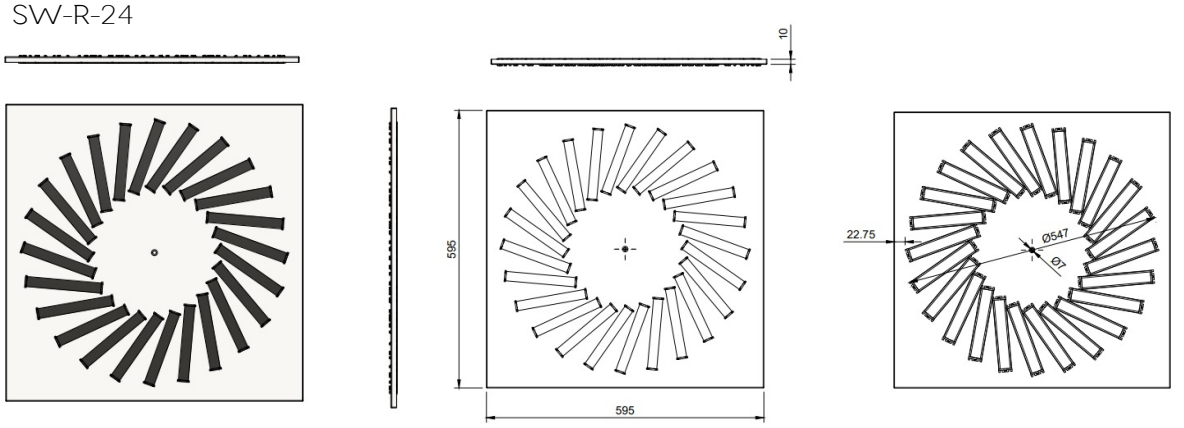
The product is made of galvanized steel sheet and is electrostatic field painted in glossy white RAL9016.

Other RAL colours are available on request.

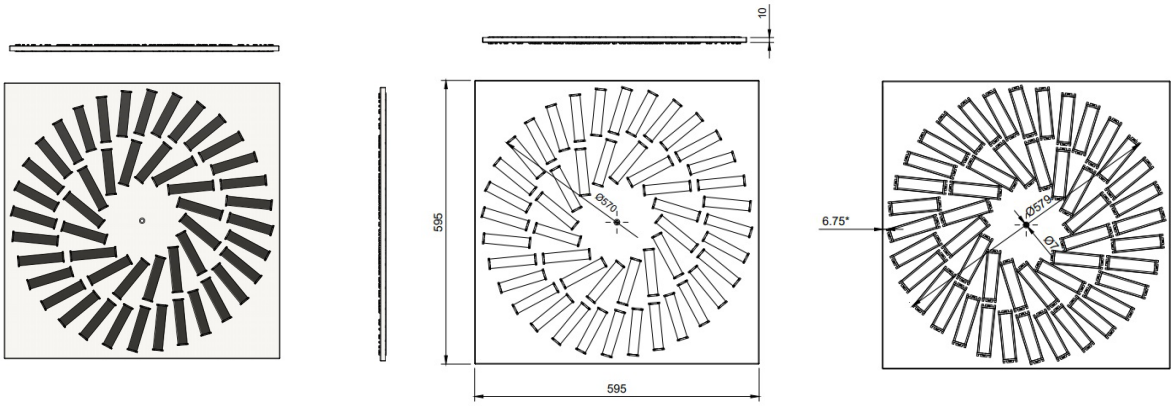
The diffuser blades are made of black anodized aluminum.

Technical drawing

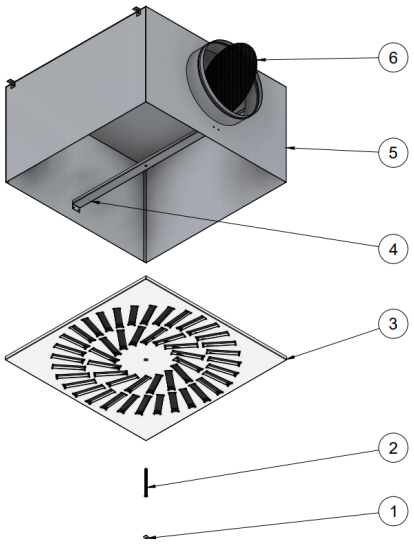
SW-R-24



SW-R-48



Product specifications



1 - Masking cap
2 - Fixing screw
3 - SW-R-48 diffuser
4 - Bracket (mounting crossbar)
5 - Plenum box (optional)
6 - Perforated damper (optional)

Accessories

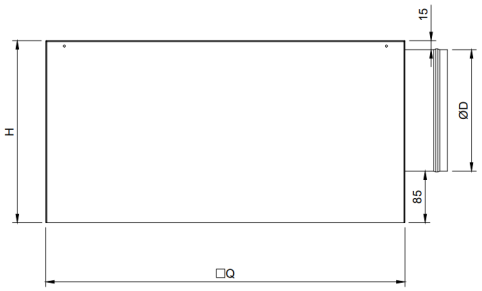
The diffuser can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

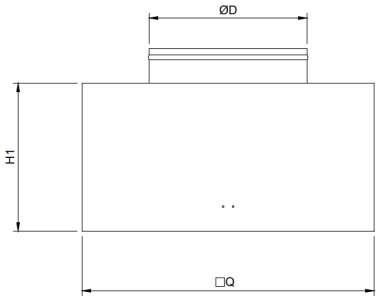
Optionally, a perforated damper can be mounted on the plenum connection to balance the air flow.

Adapter (plenum box)

Horizontal connection
(side/lateral exit)

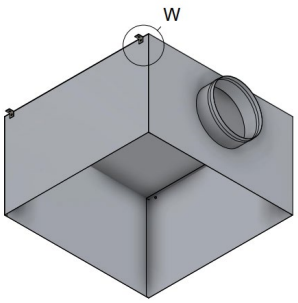


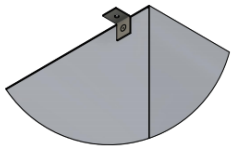
Vertical connection
(opposite exit)



□Q: 590 x 590 mm
H – depending on ØD
H1 - on request

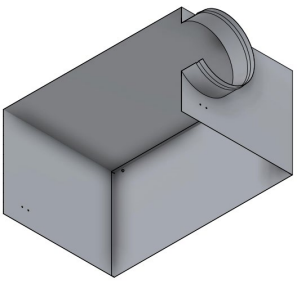
The adapter is made of Z140 galvanized steel sheet and has 4 suspension lugs.



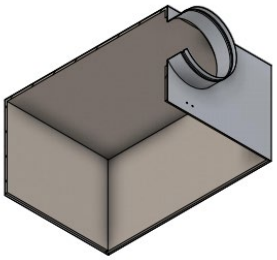


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.

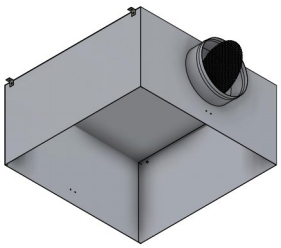


AN - Uninsulated adapter

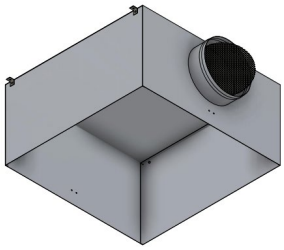


AIZ - Insulated adapter

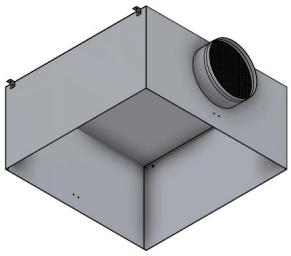
Perforated damper



Position 0°



Position 45°



Position 90°

The perforated damper is mounted on the adapter spigot and has the role of balancing the air flow.

Functional parameters

SW-R-24

Air flow [m³/h]	L x H [mm]	595 x 595	
	Ak [m²]	0.0295	
	Role	Extraction	Supply
250	Veff[m/s]	2.35	2.4
	NR [dB(A)]	16.0	13.0
	△Pt [Pa]	4.0	3.0
400	Veff[m/s]	3.77	3.8
	NR [dB(A)]	24.0	16.0
	△Pt [Pa]	12.0	4.0
500	Veff[m/s]	4.71	4.7
	NR [dB(A)]	30.0	18.0
	△Pt [Pa]	15.0	6.0
600	Veff[m/s]	5.65	5.6
	NR [dB(A)]	33.0	20.0
	△Pt [Pa]	20.0	8.0
700	Veff[m/s]	6.59	6.6
	NR [dB(A)]	36.0	23.0
	△Pt [Pa]	25.0	9.0
800	Veff[m/s]	7.53	7.5
	NR [dB(A)]	43.0	30.0
	△Pt [Pa]	35.0	15.0
1000	Veff[m/s]		9.4
	NR [dB(A)]		35.0
	△Pt [Pa]		20.0
1200	Veff[m/s]		11.3
	NR [dB(A)]		40.0
	△Pt [Pa]		30.0

SW-R-48

Air flow [m³/h]	L x H [mm]	595 x 595	
	Ak [m²]	0.0390	
	Role	Extraction	Supply
350	Veff[m/s]	2.49	2.5
	NR [dB(A)]	20.0	15.0
	△Pt [Pa]	6.0	3.0
400	Veff[m/s]	2.85	2.8
	NR [dB(A)]	23.0	16.0
	△Pt [Pa]	12.0	4.0
500	Veff[m/s]	3.56	3.6
	NR [dB(A)]	27.0	18.0
	△Pt [Pa]	14.0	5.0
600	Veff[m/s]	4.27	4.3
	NR [dB(A)]	30.0	20.0
	△Pt [Pa]	17.0	6.0
700	Veff[m/s]	4.99	5.0
	NR [dB(A)]	33.0	23.0
	△Pt [Pa]	20.0	7.5
800	Veff[m/s]	5.70	5.7
	NR [dB(A)]	36.0	25.0
	△Pt [Pa]	28.0	8.0
1000	Veff[m/s]	7.12	7.1
	NR [dB(A)]	43.0	35.0
	△Pt [Pa]	45.0	15.0
1400	Veff[m/s]		10.0
	NR [dB(A)]		45.0
	△Pt [Pa]		30.0

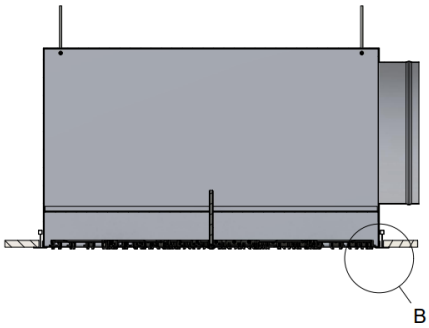
The legend
Ak [m²] - The free surface
Veff [m/s] – The effective air velocity
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

Installation

The diffuser can be mounted in 600 x 600 mm T-bar false ceiling, continuous ceiling or suspended.

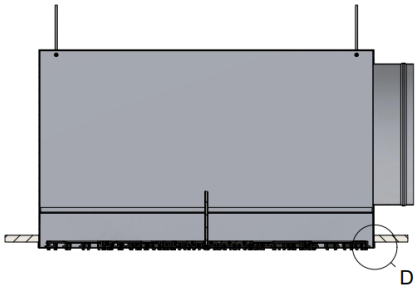
The fixing of the plenum diffuser is done by using a central screw screwed into the mounting bracket, positioned inside of the plenum box.

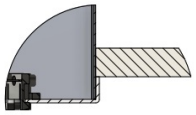
Installation in T-bar suspended ceiling



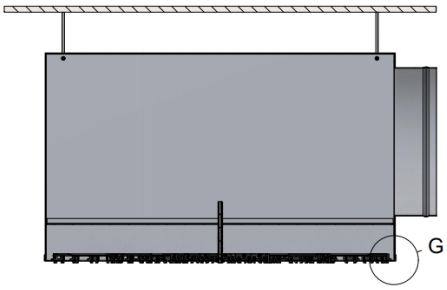


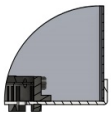
Installation in continuous ceiling





Suspended in the ceiling





Order code

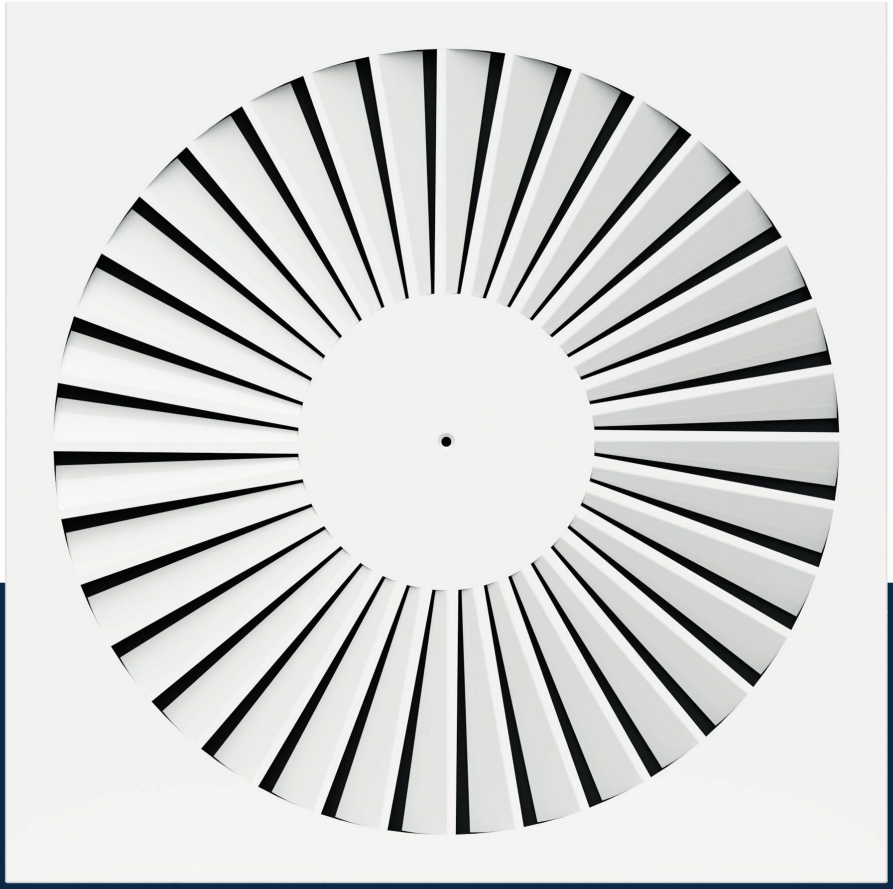
Example on how to place an order

Type	Slot number	Dimensions	Accessories	Finish
SW-R				
	24, 48 slots			
		595 x 595		
		AIZ - Insulated adapter		
		AN - Uninsulated adapter		
			Perforated damper (plenum box)	
			RAL9016 (black blades)	
				RAL.. - Other RAL colors on request (black blades)

Air through perfection

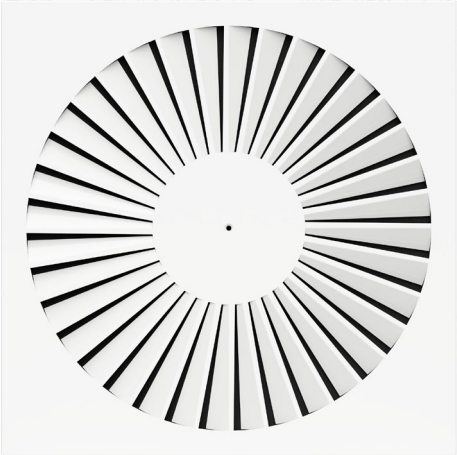
Swirl diffuser

ST



ACP
Swirl diffusers

Swirl diffuser
ST



Description

ST is a square swirl diffuser used for introducing or evacuating the air.

The diffuser is recommended for rooms up to 4m high.

The design of the blades, their radial arrangement and the swirl action determine a high level of induction rate.

The diffuser can be used for installations with constant or variable air flow.

Technical specifications

Characteristics

The diffuser blades are fixed and arranged radially at the front plate.

Air induction occurs rapidly due to the swirl action, resulting in a rapid change of temperature.

The diffuser has the external dimensions 595x595 mm.

Diffuser installation is easy.

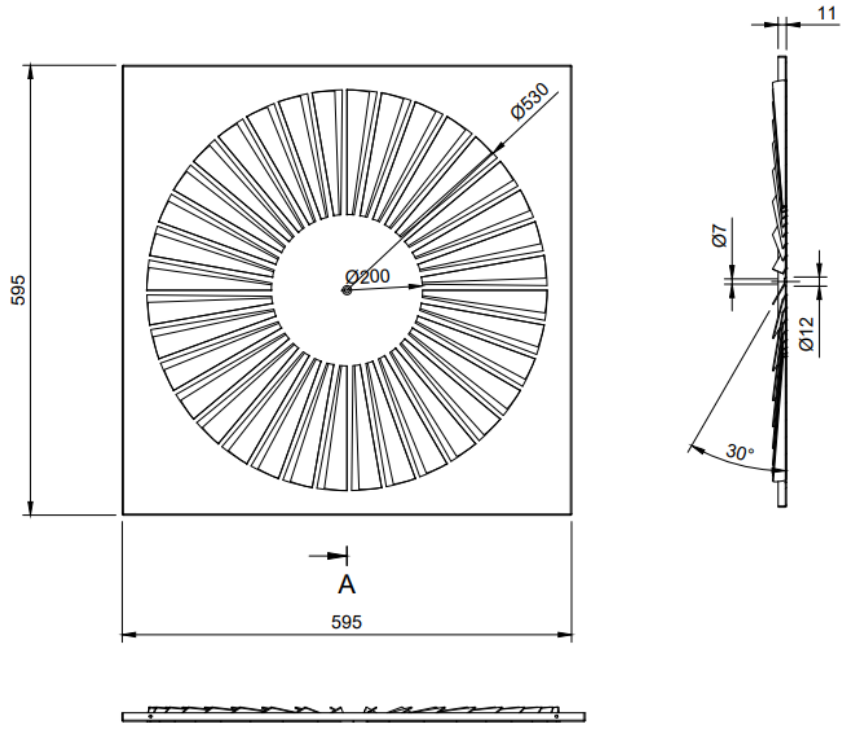
The product is delivered with the following elements: mounting bracket, fixing screw, screw cover cap and sealing gasket.

Materials

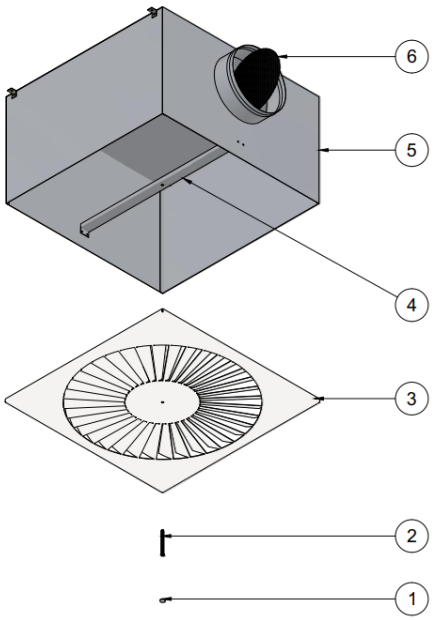
The diffuser is made of galvanized steel sheet and is electrostatic field painted in glossy white RAL 9016.

Other RAL colours are available on request.

Technical drawing



Product specifications



1 - Masking cap
2 - Fixing screw
3 - ST diffuser
4 - Bracket (mounting crossbar)
5 - Plenum box (optional)
6 - Perforated damper (optional)

Accessories

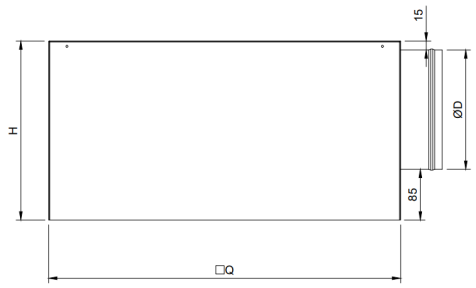
The diffuser can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

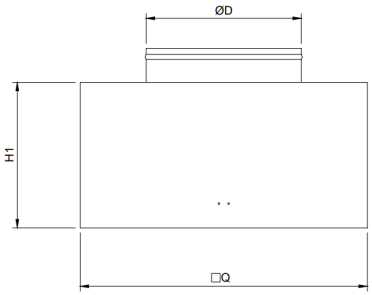
Optionally, a perforated damper can be mounted on the plenum connection to balance the air flow.

Adapter (plenum box)

Horizontal connection
(side/lateral exit)

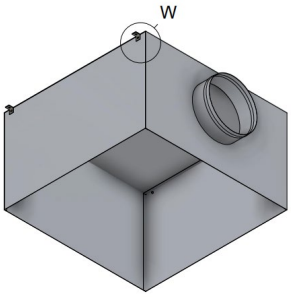


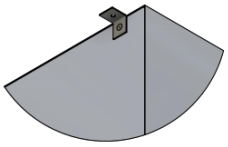
Vertical connection
(opposite exit)



□Q: 590 x 590 mm – for mounting in 600x600 mm T-bar ceiling and suspended
565 x 565 mm – for continuous ceiling mounting
H – depending on ØD
H1 – on request

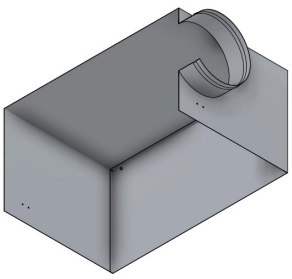
The adapter is made of Z140 galvanized steel sheet and has 4 suspension lugs.



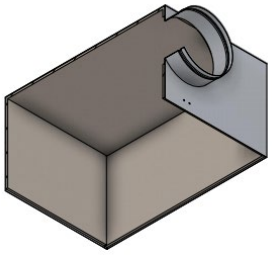


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.

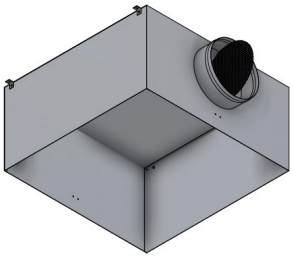


AN - Uninsulated adapter

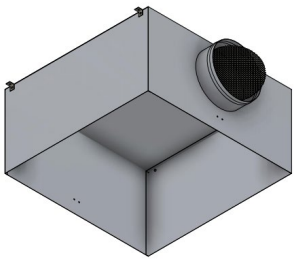


AIZ - Insulated adapter

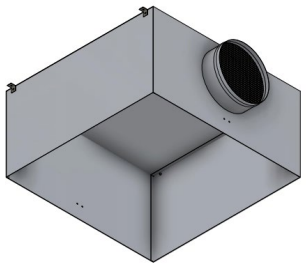
Perforated damper



Position 0°



Position 45°



Position 90°

The perforated damper is mounted on the adapter spigot and has the role of balancing the air flow.

Functional parameters

Air flow (m³/h)	Dimension [mm]	595 x 595
	Ak [m²]	0.0295
100	ΔPt [Pa]	1.0
	X [m]	0.9
	NR [dB(A)]	5.0
250	ΔPt [Pa]	5.0
	X [m]	2.3
	NR [dB(A)]	12.0
350	ΔPt [Pa]	10.0
	X [m]	3.2
	NR [dB(A)]	24.0
450	ΔPt [Pa]	17.0
	X [m]	4.0
	NR [dB(A)]	32.0
600	ΔPt [Pa]	30.0
	X [m]	5.2
	NR [dB(A)]	41.0
800	ΔPt [Pa]	54.0
	X [m]	6.7
	NR [dB(A)]	50.0

Note
The above values are given for a temperature difference of -6K and for horizontal connection to the duct.

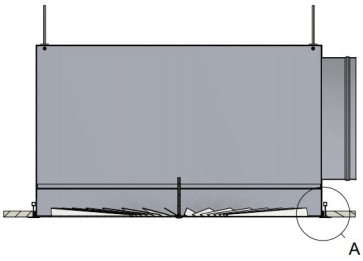
The legend
Ak [m²] - The free surface
ΔPt [Pa] - Pressure loss
X [m] - The length of the air jet at a speed of 0.25 m/s
NR [dB (A)] - Noise level without room attenuation

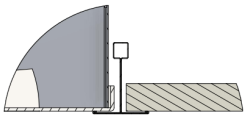
Installation

The diffuser can be mounted in 600 x 600 mm T-bar false ceiling, continuous ceiling or suspended.

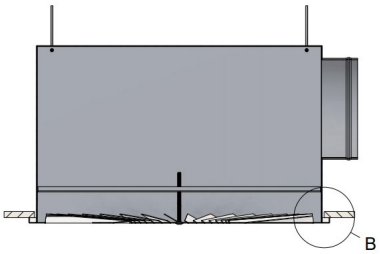
The fixing of the plenum diffuser is done by using a central screw screwed into the mounting bracket, positioned inside of the plenum box.

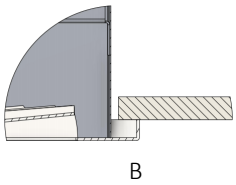
Installation in T-bar suspended ceiling



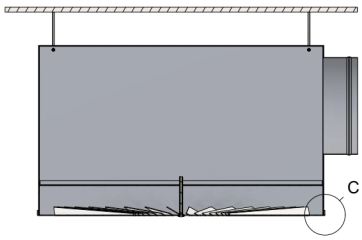


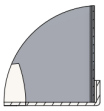
Installation in continuous ceiling





Suspended in the ceiling





Order code

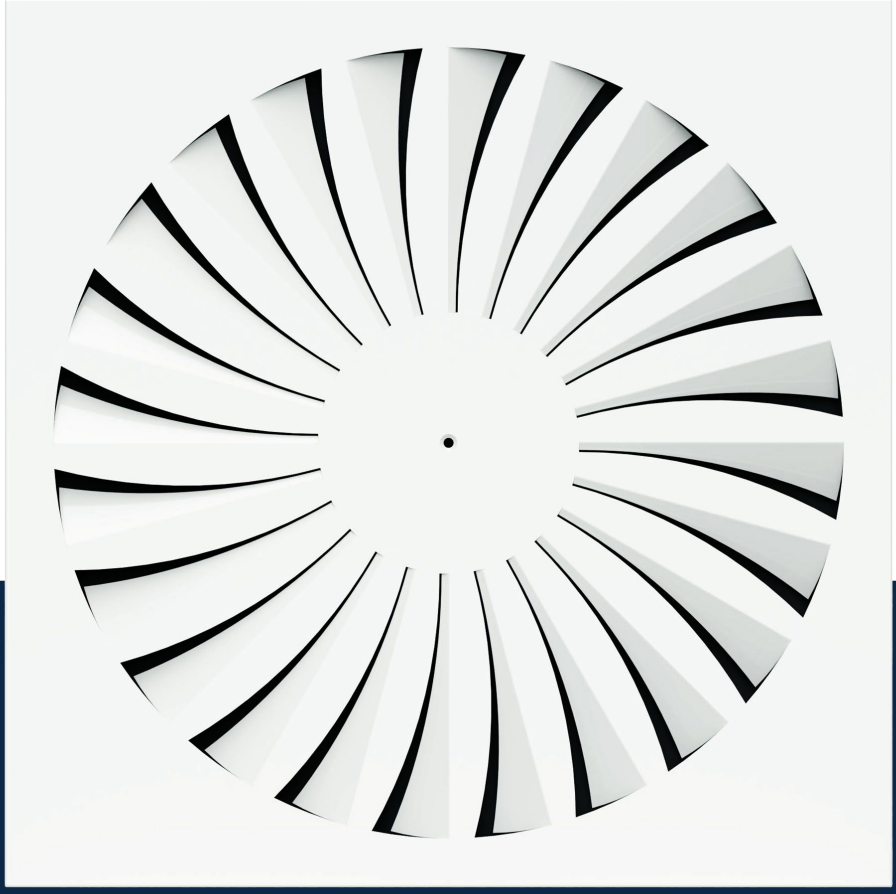
Example on how to place an order

Type	Dimensions	Accessories	Finish
ST			
	595 x 595 mm		
		AIZ - Insulated adapter	
		AN - Uninsulated adapter	
		Perforated damper (plenum box)	
			RAL 9016
			RAL.. - Other RAL colors on request

Air through perfection

Swirl diffuser

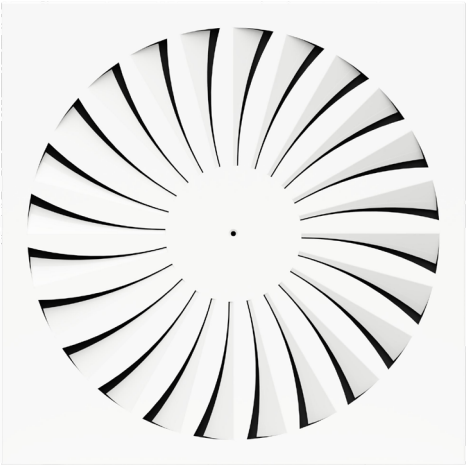
STH



ACP
Swirl diffusers

www.acp.ro

Swirl diffuser
ST-I



Description

ST-1 is a square swirl diffuser used to introduce or evacuate air.

The diffuser is recommended for rooms up to 4m high.

The design of the blades, their radial arrangement and the swirl action determine a high level of induction rate.

The diffuser can be used for installations with constant or variable air flow.

Technical specifications

Characteristics

The diffuser blades are fixed and arranged radially at the front plate.

Air induction occurs rapidly due to the swirl action, resulting in a rapid change of temperature.

The diffuser has the external dimensions 595x595 mm.

Diffuser installation is easy.

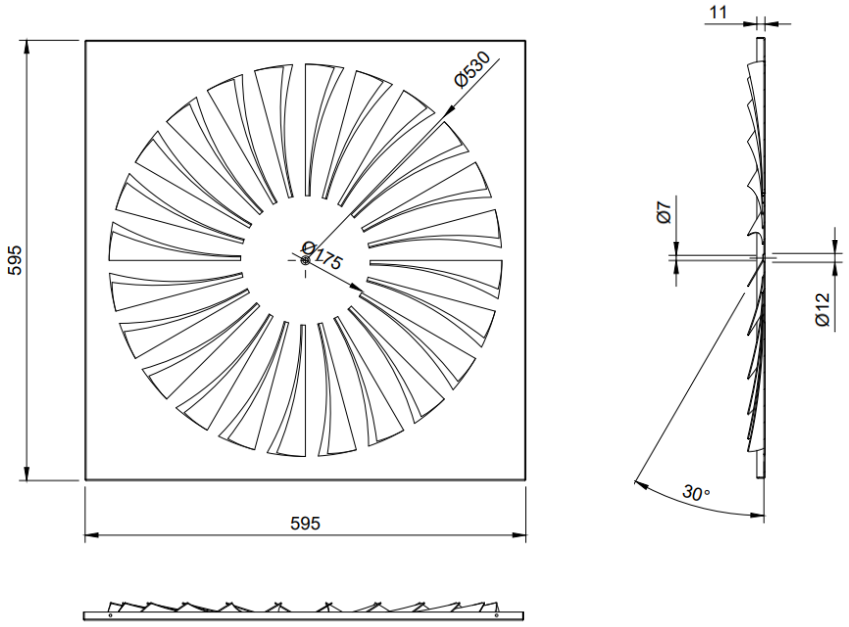
The product is delivered with the following elements: mounting bracket, fixing screw, screw cover cap and sealing gasket.

Materials

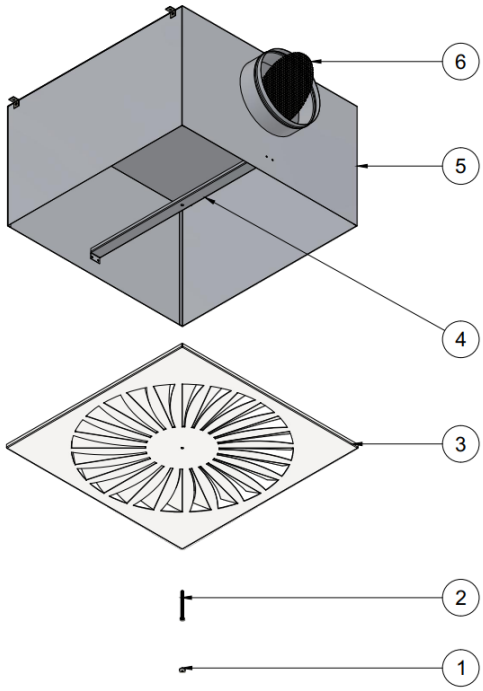
The diffuser is made of galvanized steel sheet and is electrostatic field painted in glossy white RAL 9016.

Other RAL colours are available on request.

Technical drawing



Product specifications



1 - Masking cap
2 - Fixing screw
3 - ST-1 diffuser
4 - Bracket (mounting crossbar)
5 - Plenum box (optional)
6 - Perforated damper (optional)

Accessories

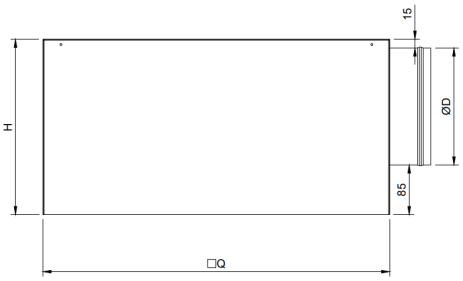
The diffuser can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

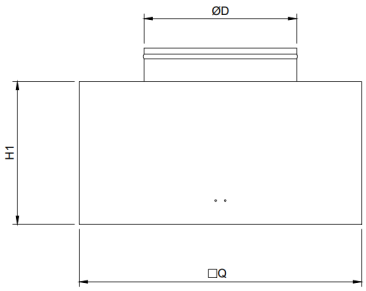
Optionally, a perforated damper can be mounted on the plenum connection to balance the air flow.

Adapter (plenum box)

Horizontal connection
(side/lateral exit)

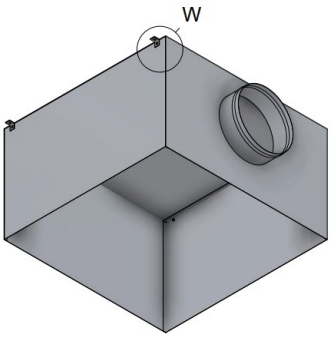


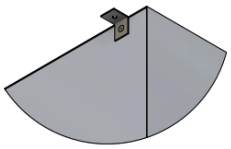
Vertical connection
(opposite exit)



□Q: 590 x 590 mm – for mounting in 600x600 mm T-bar ceiling and suspended
565 x 565 mm – for continuous ceiling mounting
H – depending on ØD
H1 – on request

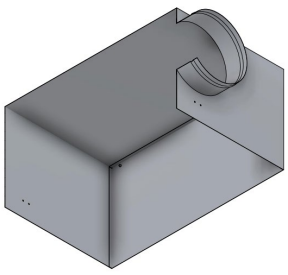
The adapter is made of Z140 galvanized steel sheet and has 4 suspension lugs.



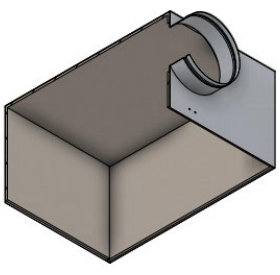


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.

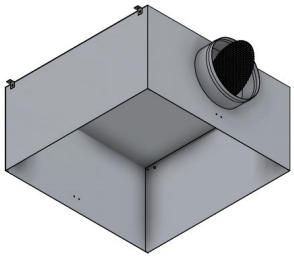


AN - Uninsulated adapter

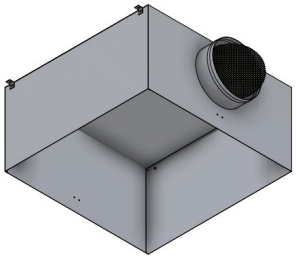


AIZ - Insulated adapter

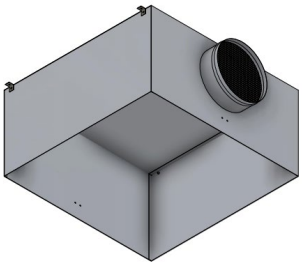
Perforated damper



Position 0°



Position 45°



Position 90°

The perforated damper is mounted on the adapter spigot and has the role of balancing the air flow.

Functional parameters

Air flow (m^3/h)	Dimension [mm]	595 x 595
	Ak [m^2]	0.04
150	ΔPt [Pa]	1.0
	X [m]	1.2
	NR [dB(A)]	9.0
250	ΔPt [Pa]	4.0
	X [m]	2.0
	NR [dB(A)]	11.0
350	ΔPt [Pa]	9.0
	X [m]	2.7
	NR [dB(A)]	18.0
450	ΔPt [Pa]	14.0
	X [m]	3.4
	NR [dB(A)]	26.0
600	ΔPt [Pa]	26.0
	X [m]	4.4
	NR [dB(A)]	35.0
800	ΔPt [Pa]	46.0
	X [m]	5.8
	NR [dB(A)]	44.0

Note
The above values are given for a temperature difference of -6K and for horizontal connection to the duct.

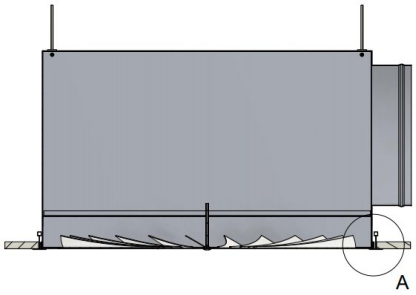
The legend
Ak [m^2] - The free surface
ΔPt [Pa] - Pressure loss
X [m] - The length of the air jet at a speed of 0.25 m/s
NR [dB (A)] - Noise level without room attenuation

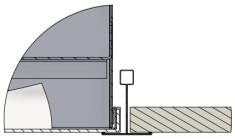
Installation

The diffuser can be mounted in 600 x 600 mm T-bar false ceiling, continuous ceiling or suspended.

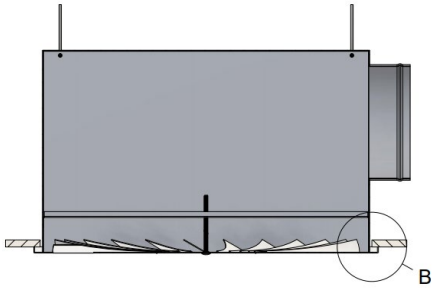
The fixing of the plenum diffuser is done by using a central screw screwed into the mounting bracket, positioned inside of the plenum box.

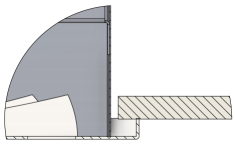
Installation in T-bar suspended ceiling



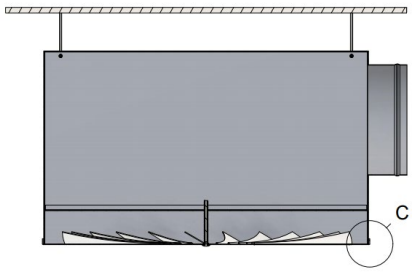


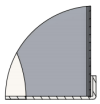
Installation in continuous ceiling





Suspended in the ceiling





Order code

Example on how to place an order

Type	Dimensions	Accessories	Finish
ST-1			
	595 x 595 mm		
		AIZ - Insulated adapter	
		AN - Uninsulated adapter	
		Perforated damper (plenum box)	
			RAL 9016
			RAL.. - Other RAL colors on request

Air through perfection

Circular swirl diffuser

VSR



ACP
Swirl diffusers

Circular swirl diffuser
VSR



Description

VSR is a swirl air diffuser with radially adjustable blades.

The diffuser is recommended for installations with constant or variable air flow and is intended for spaces with heights between 4 and 10m.

It is used for introduction of air.

Technical specifications

Characteristics

The design of the blades, their radial arrangement and the swirl action determine a high level of induction rate.

The diffuser is equipped with a perforated plate positioned on the diffuser connection.

VSR is available in 3 configurations:

- VSR - manual operation
- VSR-S - electric operation via servomotor
- VSR-T - thermal operation (thermal element)

The VSR-S is equipped with a Belimo servomotor. The servomotor is selected according to the diffuser size, supply voltage, safety function and other technical specifications mentioned in the project.

Dimensional range: Ø250, Ø315, Ø400, Ø500, Ø630.

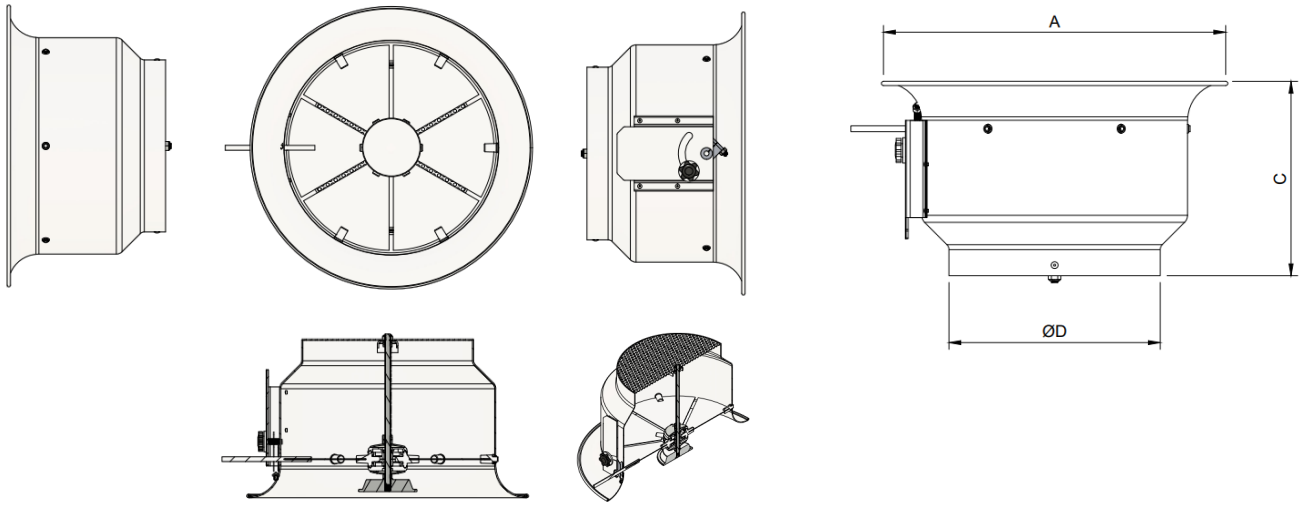
Materials

The diffuser is made of steel electrostatic field painted in glossy white RAL9016.

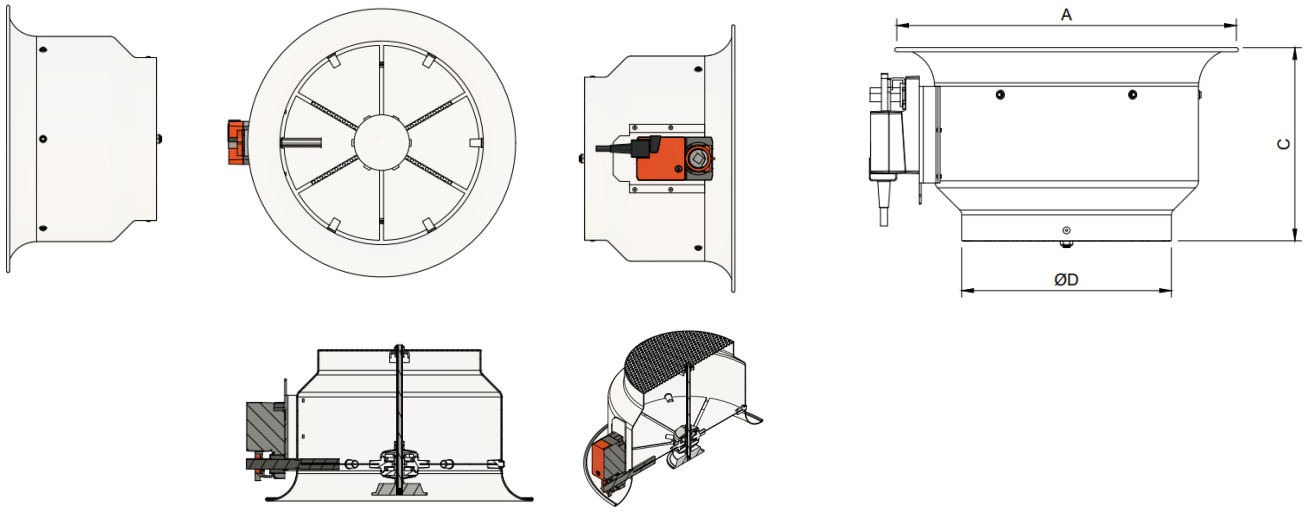
Other RAL colours are available on request.

Technical drawing

VSR

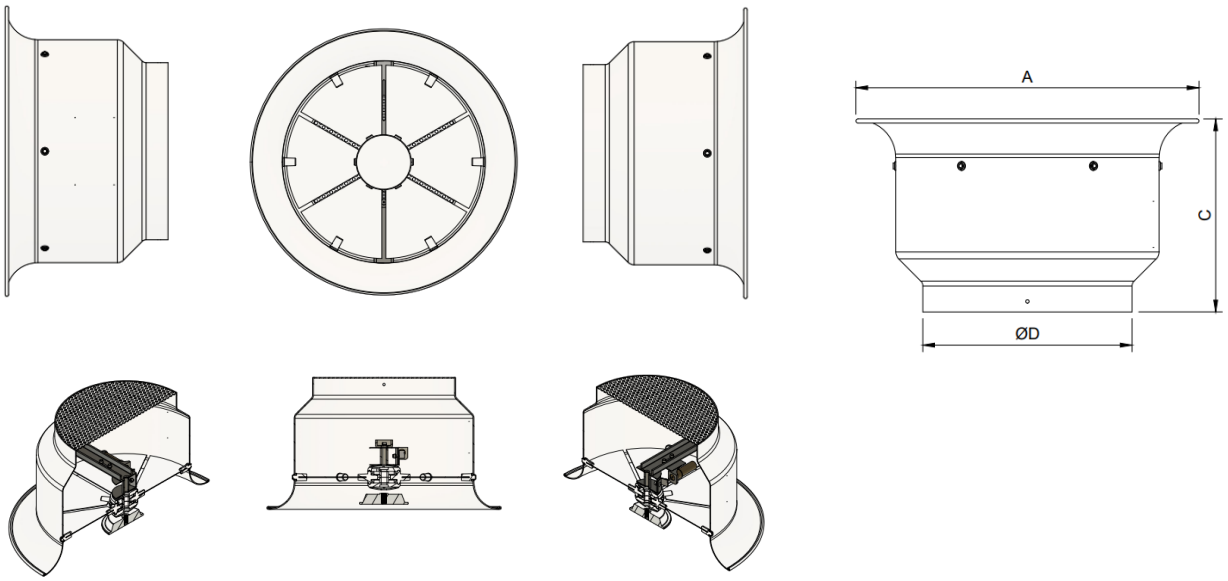


VSR-S

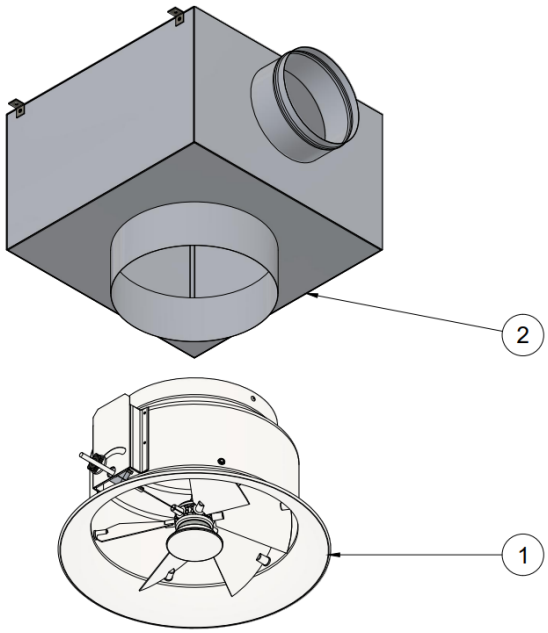


	ØD	ØA	C
250	248	417	230
315	313	491	250
400	398	615	265
500	498	796	320
630	628	935	370

VSR-T

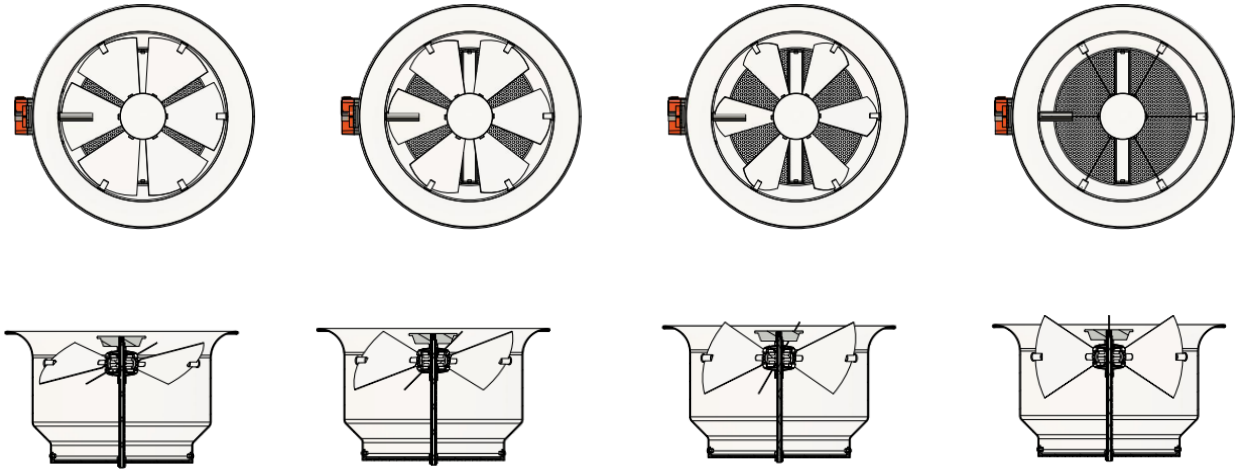


Product specifications



1- VSR diffuser
2- Plenum box (optional)

Positioning the blades



30˚ 45˚ 60˚ 90˚

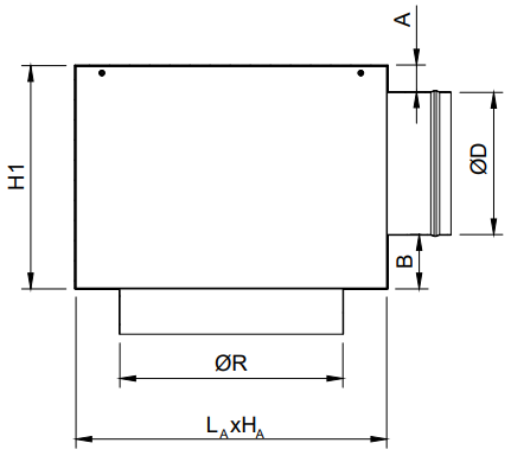
Accessories

The diffuser can be delivered with a connecting plenum to the circular duct, with horizontal connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

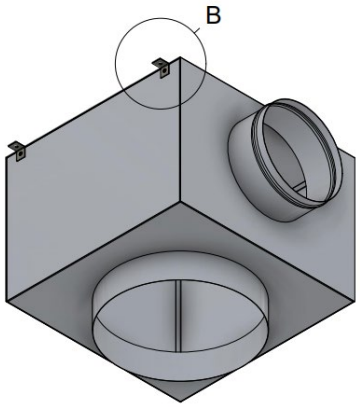
The plenum is delivered insulated or uninsulated.

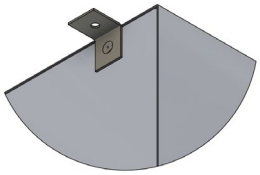
Adapter (plenum box)



L_A X H_A – depending on ØR
A, B, H1 – depending on request and ØD
ØR – connection diameter VSR + 4 mm

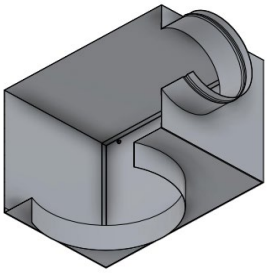
The adapter is made of galvanized steel sheet Z140 and is equipped with 4 lugs for suspension.



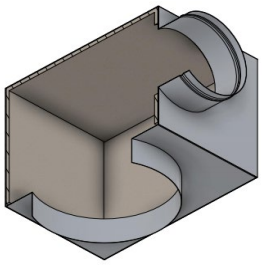


B - Suspension lug

On request, the plenum can be insulated inside with 6 mm thick elastomeric rubber.



AN - Uninsulated adapter



AIZ - Insulated adapter

Functional parameters

Ø D250								
Ak [m²]	Air flow [m³/h]	250	300	350	400	500	600	700
0.05	Veff [m/s]	1.4	1.7	1.9	2.2	2.8	3.3	3.9
	NR [dB(A)]	<20	<20	22.0	26.0	33.0	38.0	44.0
	X [m]	1.2	1.5	1.6	1.8	2.8	3.6	4.6
	ΔPt [Pa]	10.0	15.0	20.0	28.0	45.0	70.0	91.0

Ø D315								
Ak [m²]	Air flow [m³/h]	500	600	700	800	900	1000	1100
0.078	Veff [m/s]	1.8	2.1	2.5	2.8	3.2	3.6	3.9
	NR [dB(A)]	<20	24.0	27.0	33.0	38.0	43.0	46.0
	X [m]	1.6	2.0	2.6	3.0	3.8	4.2	5.0
	ΔPt [Pa]	17.0	23.0	31.0	41.0	51.0	69.0	77.0

Ø D400								
Ak [m²]	Air flow [m³/h]	900	1000	1100	1200	1400	1500	1600
0.125	Veff [m/s]	2.0	2.2	2.4	2.7	3.1	3.3	3.6
	NR [dB(A)]	<20	23.0	26.0	28.0	32.0	35.0	38.0
	X [m]	1.8	2.1	2.5	3.0	3.8	4.0	4.5
	ΔPt [Pa]	13.0	17.0	21.0	25.0	33.0	38.0	44.0

Ø D500								
Ak [m²]	Air flow [m³/h]	1200	1400	1600	1800	2000	2250	2500
0.195	Veff [m/s]	1.7	2.0	2.3	2.6	2.8	3.2	3.6
	NR [dB(A)]	30.0	33.0	36.0	38.0	41.5	44.0	47.0
	X [m]	1.8	2.5	3.0	3.5	4.0	4.5	5.2
	ΔPt [Pa]	17.0	22.0	28.0	35.0	42.0	51.0	70.0

Ø D630								
Ak [m²]	Air flow [m³/h]	2100	2500	3000	3500	4000	4500	5000
0.31	Veff [m/s]	1.9	2.2	2.7	3.1	3.6	4.0	4.5
	NR [dB(A)]	25.0	28.0	35.0	40.0	44.0	47.0	50.0
	X [m]	3.5	3.8	4.8	5.0	5.5	6.0	7.0
	ΔPt [Pa]	18.0	31.0	38.0	53.0	72.0	86.0	110.0

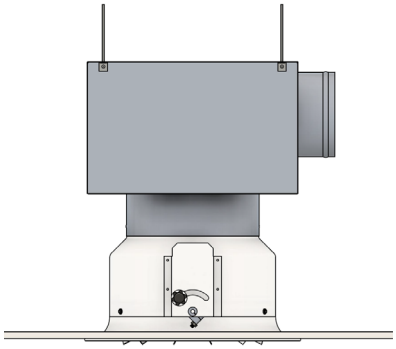
Note: The values in the table are given for blades tilted at 45 ° and for a temperature difference of 5 degrees.

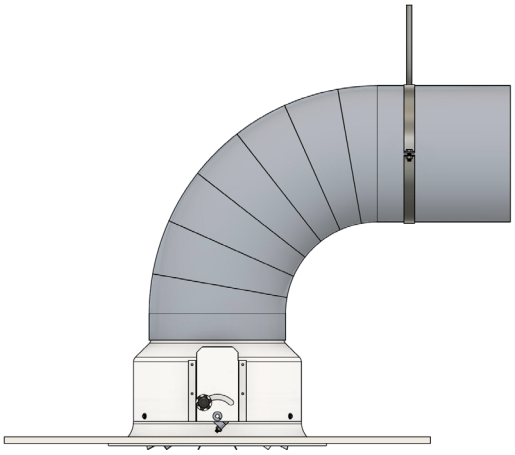
The legend
Ak [m²] - The free surface
X [m] - The length of the air jet
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss
Veff [m/s] -The effective air velocity

Installation

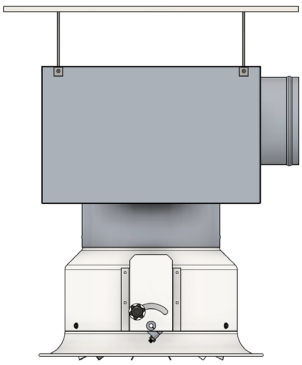
The diffuser is mounted in a continuous ceiling or suspended. Fastening is done with screws.

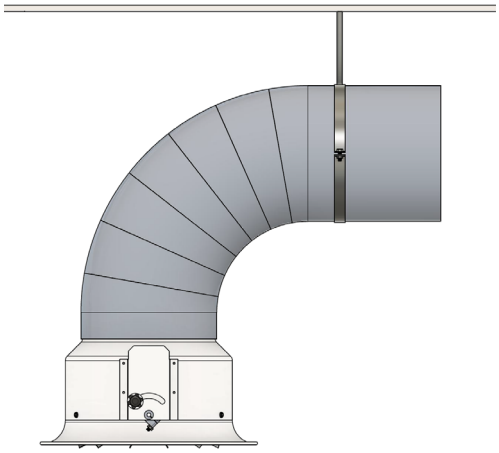
Installation in continuous ceiling





Suspended in the ceiling





Order code

Example on how to place an order

Type	Dimensions	Accessories	Finish
VSR - manual	Ø250 ... Ø630 mm	**AIZ** - Insulated adapter	**RAL 9016**
VSR-S - servomotor		**AN** - Uninsulated adapter	**RAL..** - Other RAL colors on request
VSR-T - thermal			

Air through perfection

Circular swirl diffuser

VS



ACP
Swirl diffusers

Circular swirl diffuser
VS



Description

VS is a diffuser with fixed radially arranged blades and a swirl air jet, used to introduce air.

The diffuser is recommended for installations with constant or variable air flow and is intended for spaces with heights between 2.6 and 4 m.

Technical specifications

Characteristics

The design of the blades, their radial arrangement and the swirl action determine a high level of induction rate.

The product is delivered with fixing screw and masking cap.

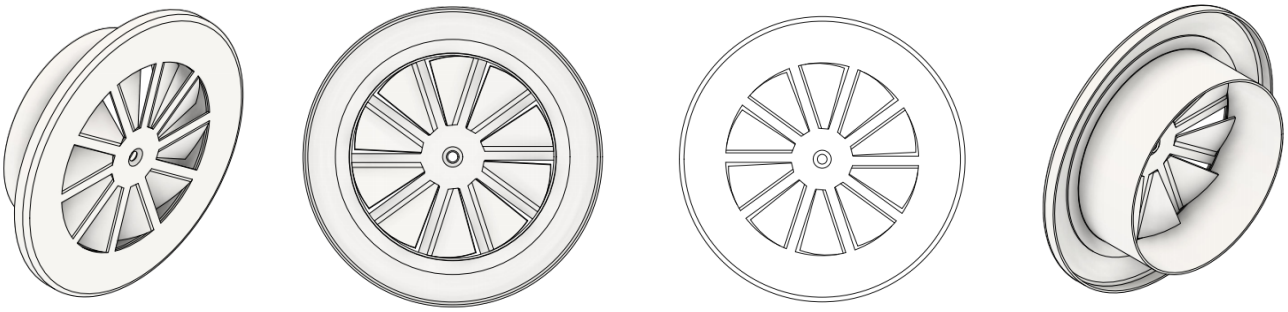
Dimensional range: Ø125, Ø160, Ø200, Ø250, Ø315, Ø400.

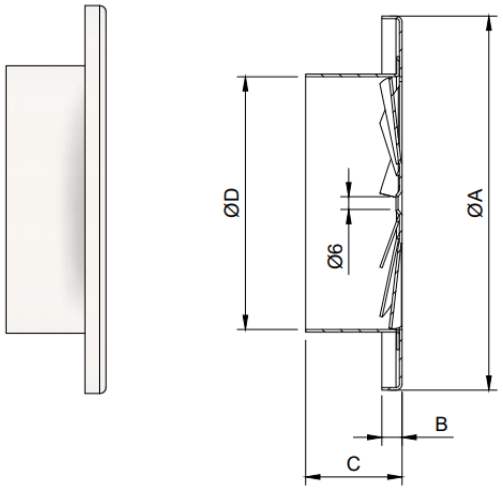
Materials

The diffuser is made of galvanized steel electrostatic field painted in glossy white RAL9016.

Other RAL colours are available on request.

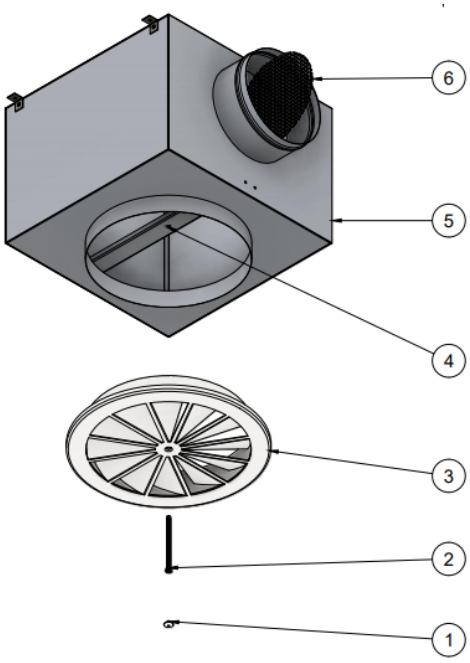
Technical drawing





VS	ØD [mm]	ØA [mm]	C [mm]	B [mm]
125	123	178	44	8
160	158	195	44	8
200	198	248	44	8
250	248	296	44	8
315	313	363	44	8
400	398	600	44	8

Product specifications



1 - Masking cap
2 - Fixing screw
3 - VS diffuser
4 - Bracket (optional)
5 - Plenum box (optional)
6 - Perforated damper (optional)

Accessories

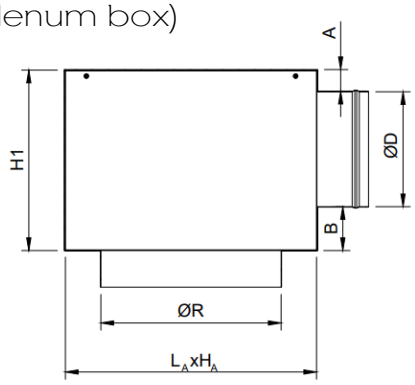
The diffuser can be delivered with a connecting plenum to the circular duct, with horizontal connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

The plenum is delivered insulated or uninsulated.

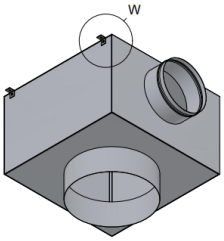
Optionally, a perforated damper can be mounted on the plenum connection to balance the air flow.

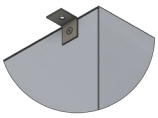
Adapter (plenum box)



L_A X H_A – depending on ØR
A, B, H1 – depending on request and ØD
ØR – connection diameter VS + 4 mm

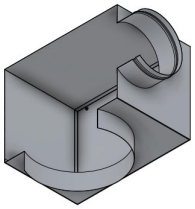
The adapter is made of galvanized steel sheet Z140 and is equipped with 4 lugs for suspension.



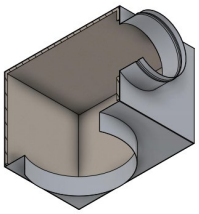


W - Suspension lug

On request, the plenum can be insulated inside with 6 mm thick elastomeric rubber.

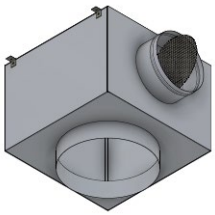


AN - Uninsulated adapter

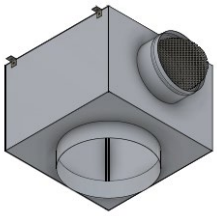


AIZ - Insulated adapter

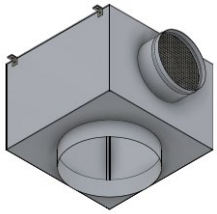
Perforated damper



Position 0°



Position 45°



Position 90°

The perforated damper is mounted on the adapter spigot and has the role of balancing the air flow.

Bracket ("U" system)

The bracket is used for mounting/fixing the plenum diffusor.



Functional parameters

Air flow	Ø [mm]	125
[m³/h]	Ak [m²]	0.003
35	Veff [m/s]	3.9
	NR [dB(A)]	17.0
	△Pt [Pa]	8.2
43	Veff [m/s]	4.8
	NR [dB(A)]	22.0
	△Pt [Pa]	13.5
50	Veff [m/s]	5.6
	NR [dB(A)]	27.0
	△Pt [Pa]	18.0
61	Veff [m/s]	6.8
	NR [dB(A)]	32.0
	△Pt [Pa]	28.0
76	Veff [m/s]	8.4
	NR [dB(A)]	37.0
	△Pt [Pa]	39.0
96	Veff [m/s]	10.7
	NR [dB(A)]	42.0
	△Pt [Pa]	60.0

Air flow	Ø [mm]	160
[m³/h]	Ak [m²]	0.004
43	Veff [m/s]	3.0
	NR [dB(A)]	17.0
	△Pt [Pa]	7.5
52	Veff [m/s]	3.6
	NR [dB(A)]	22.0
	△Pt [Pa]	9.0
65	Veff [m/s]	4.5
	NR [dB(A)]	27.0
	△Pt [Pa]	15.0
81	Veff [m/s]	5.6
	NR [dB(A)]	32.0
	△Pt [Pa]	23.0
100	Veff [m/s]	6.9
	NR [dB(A)]	37.0
	△Pt [Pa]	35.0
120	Veff [m/s]	8.3
	NR [dB(A)]	42.0
	△Pt [Pa]	50.0

Air flow	Ø [mm]	200
[m³/h]	Ak [m²]	0.007
90	Veff [m/s]	3.6
	NR [dB(A)]	17.0
	△Pt [Pa]	12.0
120	Veff [m/s]	4.8
	NR [dB(A)]	22.0
	△Pt [Pa]	18.0
140	Veff [m/s]	5.6
	NR [dB(A)]	27.0
	△Pt [Pa]	25.0
160	Veff [m/s]	6.3
	NR [dB(A)]	32.0
	△Pt [Pa]	35.0
185	Veff [m/s]	7.3
	NR [dB(A)]	37.0
	△Pt [Pa]	48.0
230	Veff [m/s]	9.1
	NR [dB(A)]	42.0
	△Pt [Pa]	70.0

Air flow	Ø [mm]	250
[m³/h]	Ak [m²]	0.011
190	Veff [m/s]	4.8
	NR [dB(A)]	17.0
	△Pt [Pa]	15.0
240	Veff [m/s]	6.1
	NR [dB(A)]	22.0
	△Pt [Pa]	20.0
280	Veff [m/s]	7.1
	NR [dB(A)]	27.0
	△Pt [Pa]	30.0
320	Veff [m/s]	8.1
	NR [dB(A)]	32.0
	△Pt [Pa]	40.0
410	Veff [m/s]	10.4
	NR [dB(A)]	37.0
	△Pt [Pa]	58.0
520	Veff [m/s]	13.1
	NR [dB(A)]	42.0
	△Pt [Pa]	60.0

Air flow	Ø [mm]	315
[m³/h]	Ak [m²]	0.021
240	Veff [m/s]	3.2
	NR [dB(A)]	17.0
	△Pt [Pa]	9.0
270	Veff [m/s]	3.6
	NR [dB(A)]	22.0
	△Pt [Pa]	13.5
320	Veff [m/s]	4.2
	NR [dB(A)]	27.0
	△Pt [Pa]	18.0
380	Veff [m/s]	5.0
	NR [dB(A)]	32.0
	△Pt [Pa]	25.0
470	Veff [m/s]	6.2
	NR [dB(A)]	37.0
	△Pt [Pa]	35.0
530	Veff [m/s]	7.0
	NR [dB(A)]	42.0
	△Pt [Pa]	48.0

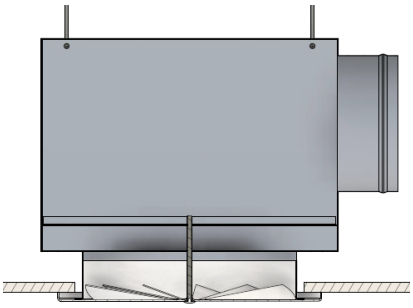
Air flow	Ø [mm]	400
[m³/h]	Ak [m²]	0.028
290	Veff [m/s]	2.9
	NR [dB(A)]	17.0
	△Pt [Pa]	10.0
330	Veff [m/s]	3.3
	NR [dB(A)]	22.0
	△Pt [Pa]	15.0
350	Veff [m/s]	3.5
	NR [dB(A)]	27.0
	△Pt [Pa]	20.0
500	Veff [m/s]	5.0
	NR [dB(A)]	32.0
	△Pt [Pa]	30.0
600	Veff [m/s]	6.0
	NR [dB(A)]	37.0
	△Pt [Pa]	42.0
720	Veff [m/s]	7.1
	NR [dB(A)]	42.0
	△Pt [Pa]	65.0

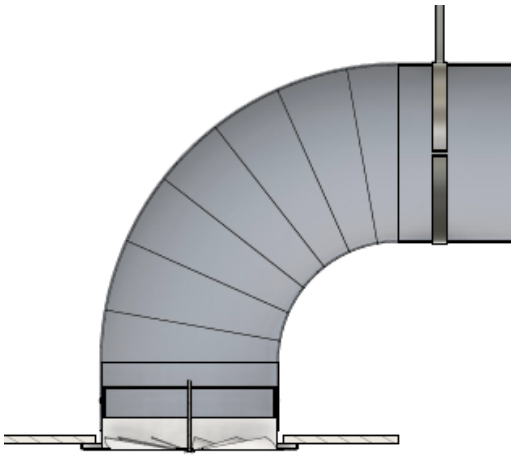
The legend
Ak [m²] - The free surface
Veff [m/s] – The effective air velocity
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

Installation

The diffuser is mounted in a continuous false ceiling. The fixing of the plenum diffuser is done by means of a central screw.

Installation in continuous ceiling





Order code

Example on how to place an order

Type	Dimensions	Accessories	Finish
VS			
	Ø125 ... Ø400 mm		
		AIZ - Insulated adapter	
		AN - Uninsulated adapter	
		Perforated damper (plenum box)	
		Bracket	
			RAL 9016
			RAL.. - Other RAL colors on request

Air through perfection

Jet diffuser

JD



ACP
Jet diffusers

Jet diffuser
JD



Description

JD is an adjustable nozzle jet diffuser that allows air to be introduced at a long jet length.

Suitable for heating or cooling in spaces with long distances between the diffuser and the occupied area, concert halls, museums, etc.

JD can be mounted on a wall, ceiling or duct.

The diffuser is recommended in various ventilation applications for the introduction of air.

Technical specifications

Characteristics

The diffuser allows the supply air with a long throw distance.

The diffuser consists of a spherical nozzle, a circular connection and a decorative ring.

The constructive form and design of the product offer an unlimited number of air jet direction settings.

The spherical nozzle can be adjusted manually which allows the air jet to be directed to the desired area.

The decorative ring masks the fastening/fixing mode.

Allows high airflow with low noise levels.

The discharge angle is adjustable ± 30°.

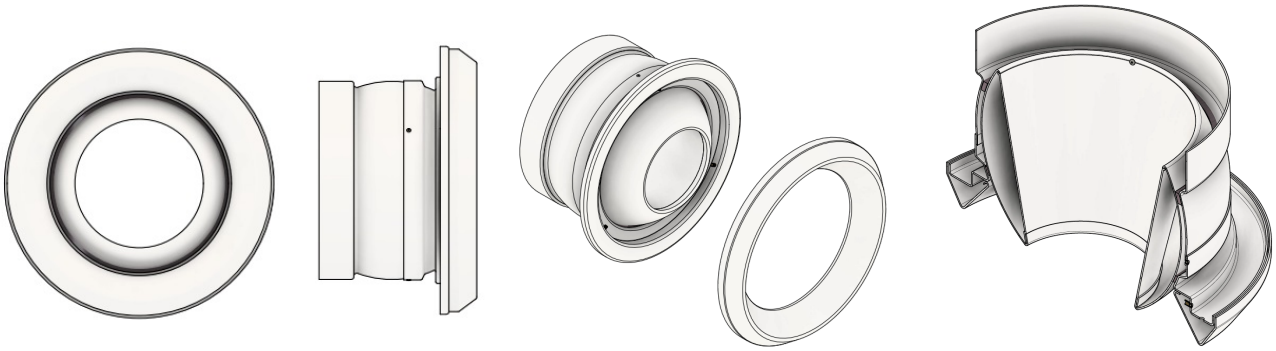
Available diameters: 100, 125, 150, 160, 200, 250, 315, 350, 400 and 450 mm.

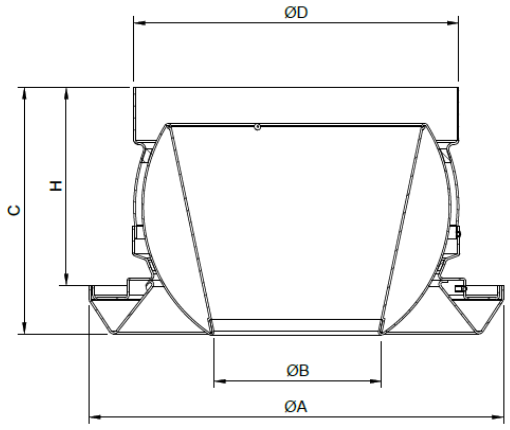
Materials

The nozzle and the decorative ring are made of aluminum, electrostatic field painted in glossy white RAL 9016.

Other RAL colours are available on request.

Technical drawing





JD	ØD	ØA	ØB	C	H
100	98	139	45	83	63
125	122	172	61	96	72
150	147	200	75	113	83
160	157	210	80	120	91
200	197	265	105	142	107
250	247	314	128	179	135
315	312	390	165	230	174
350	347	433	185	251	186
400	397	495	210	285	218
450	447	559	235	316	235

Directing the air jet

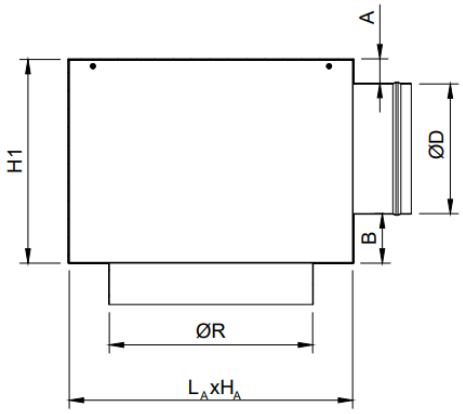


Accessories

The diffuser can be supplied with a plenum connecting to a circular duct with horizontal connection.

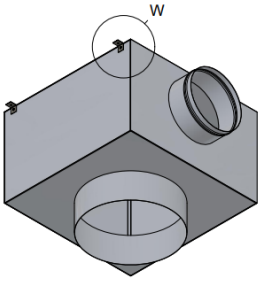
The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

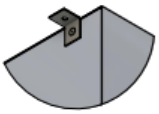
Adapter (plenum box)



L_A X H_A – depending on ØR
A, B, H1 – depending on demand and ØD
ØR = connection diameter JD + 4 mm

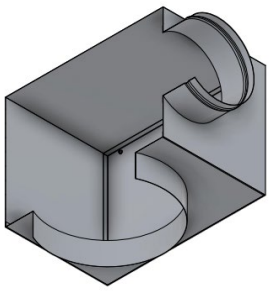
The adapter is made of galvanized steel sheet Z140 and is equipped with 4 lugs for suspension.



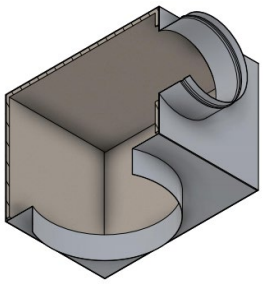


W - Suspension lug

On request, the plenum can be insulated inside with 6 mm thick elastomeric rubber.



AN - Uninsulated adapter



AIZ - Insulated adapter

Functional parameters

Air flow [m³/h]	Ø [mm] / Ak[m²]	100 / 0.0018	125 / 0.0032	160 / 0.0050	200 / 0.00850	250 / 0.0132	315 / 0.02140
50	Veff [m/s]	7.7					
	NR [dB(A)]	16					
	X [m]	5.6					
	ΔPt [Pa]	26					
60	Veff [m/s]	9.3	5.2				
	NR [dB(A)]	17	8.0				
	X [m]	7	5.1				
	ΔPt [Pa]	40	18.0				
70	Veff [m/s]	10.8	6.0	3.9			
	NR [dB(A)]	22	10	4			
	X [m]	7.8	5.7	3.8			
	ΔPt [Pa]	50	25	10			
80	Veff [m/s]	12.3	6.9	4.4			
	NR [dB(A)]	24	12	5			
	X [m]	8.1	6	5			
	ΔPt [Pa]	69	30	14			
90	Veff [m/s]	13.9	7.8	5.0			
	NR [dB(A)]	27	17	12			
	X [m]	9.2	7.5	5.2			
	ΔPt [Pa]	85	40	17			
100	Veff [m/s]	15.4	8.6	5.6			
	NR [dB(A)]	30	18	13			
	X [m]	10	8.1	5.9			
	ΔPt [Pa]	100	47	19			
125	Veff [m/s]	19.3	10.8	6.9	4.1		
	NR [dB(A)]	35	25	15	5		
	X [m]	11.8	9.2	7.2	5.5		
	ΔPt [Pa]	140	70	30	10		
150	Veff [m/s]	23.1	13.0	8.3	4.9		
	NR [dB(A)]	42	28	22	12		
	X [m]	14	10.5	8.1	6.5		
	ΔPt [Pa]	210	100	42	16		
200	Veff [m/s]		17.3	11.1	6.5	4.2	
	NR [dB(A)]		38	28	16	8	
	X [m]		15	11.6	8.5	7	
	ΔPt [Pa]		170	75	26	11	
250	Veff [m/s]			13.9	8.2	5.3	
	NR [dB(A)]			35	23	10	
	X [m]			15	12	8.7	
	ΔPt [Pa]			110	40	16	
300	Veff [m/s]			16.7	9.8	6.3	
	NR [dB(A)]			40	27	18	
	X [m]			18	14	10.5	
	ΔPt [Pa]			160	60	25	
350	Veff [m/s]			19.4	11.4	7.4	4.5
	NR [dB(A)]			45	31	23	10
	X [m]			22	17	12.5	10
	ΔPt [Pa]			220	80	33	12
400	Veff [m/s]			22.2	13.1	8.4	5.2
	NR [dB(A)]			48	36	27	12
	X [m]			23	18	15	11
	ΔPt [Pa]			280	105	42	15

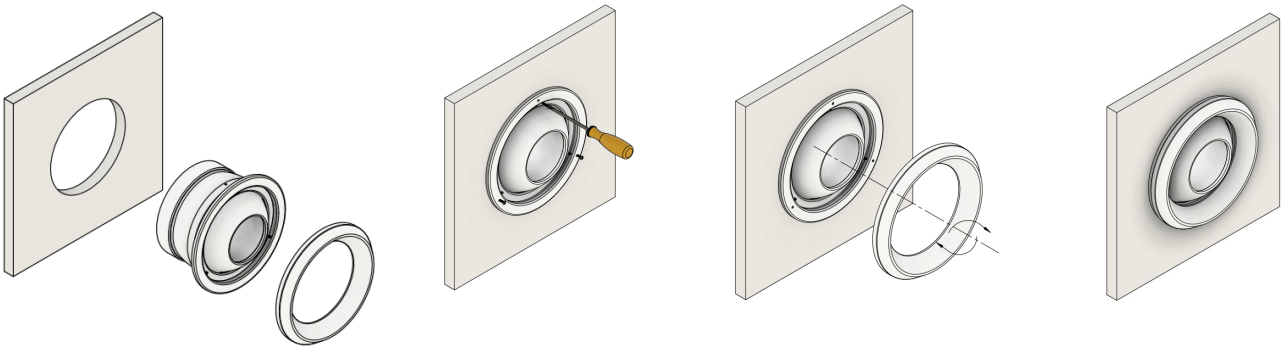
Air flow	Ø [mm]	100	125	160	200	250	315	400
[m³/h]	Ak[m²]	0.0018	0.0032	0.0050	0.00850	0.0132	0.02140	0.0380
450	Veff [m/s]				14.7	9.5	5.8	3.3
	NR [dB(A)]				37	28	15	1
	X [m]				20	17	12	8.5
	ΔPt [Pa]				120	58	19	1
500	Veff [m/s]				16.3	10.5	6.5	3.7
	NR [dB(A)]				43	32	18	2
	X [m]				22	18	14	10
	ΔPt [Pa]				150	67	24	2
600	Veff [m/s]				19.6	12.6	7.8	4.4
	NR [dB(A)]				48	37	23	5
	X [m]				28	22	17	13
	ΔPt [Pa]				225	90	32	11
700	Veff [m/s]				22.9	14.7	9.1	5.1
	NR [dB(A)]				52	42	28	15
	X [m]				30	24	19	14.8
	ΔPt [Pa]				270	130	45	16
800	Veff [m/s]					16.8	10.4	5.8
	NR [dB(A)]					46	31	20
	X [m]					28	22	18
	ΔPt [Pa]					140	57	20
900	Veff [m/s]					18.9	11.7	6.6
	NR [dB(A)]					48	34	23
	X [m]					31	25	20
	ΔPt [Pa]					200	70	25
1000	Veff [m/s]					21.0	13.0	7.3
	NR [dB(A)]					53	37	26
	X [m]					32.5	26	22
	ΔPt [Pa]					240	80	30
1250	Veff [m/s]						16.2	9.1
	NR [dB(A)]						43	32
	X [m]						32	26
	ΔPt [Pa]						120	43
1500	Veff [m/s]						19.5	11.0
	NR [dB(A)]						50	38
	X [m]						35	31
	ΔPt [Pa]						195	68
2000	Veff [m/s]							14.6
	NR [dB(A)]							47
	X [m]							36
	ΔPt [Pa]							110
3000	Veff [m/s]							21.9
	NR [dB(A)]							65
	X [m]							42
	ΔPt [Pa]							250

The legend
Ak [m²] - The free surface
Veff [m/s] - Air velocity in the diffuser
NR [dB (A)] - Noise level without room attenuation
X [m] - The length of the air jet at a speed of 0.5 m/s
ΔPt [Pa] - Pressure loss

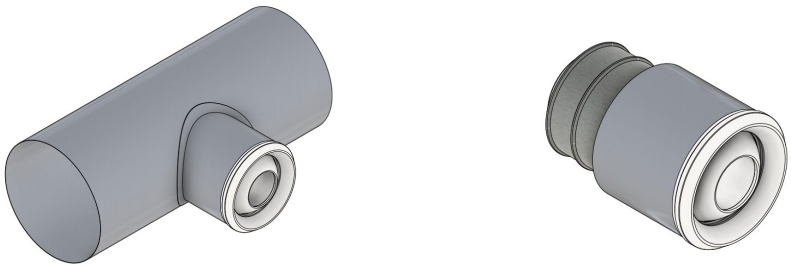
Installation

The diffuser can be mounted on a wall, ceiling or duct. Fastening is done with screws.

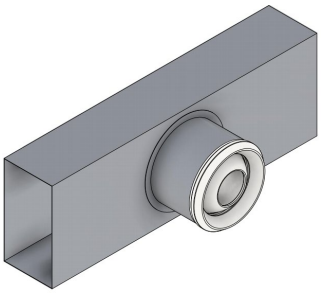
Ceiling/wall installation



Circular duct installation



Rectangular duct installation with circular connection



Order code

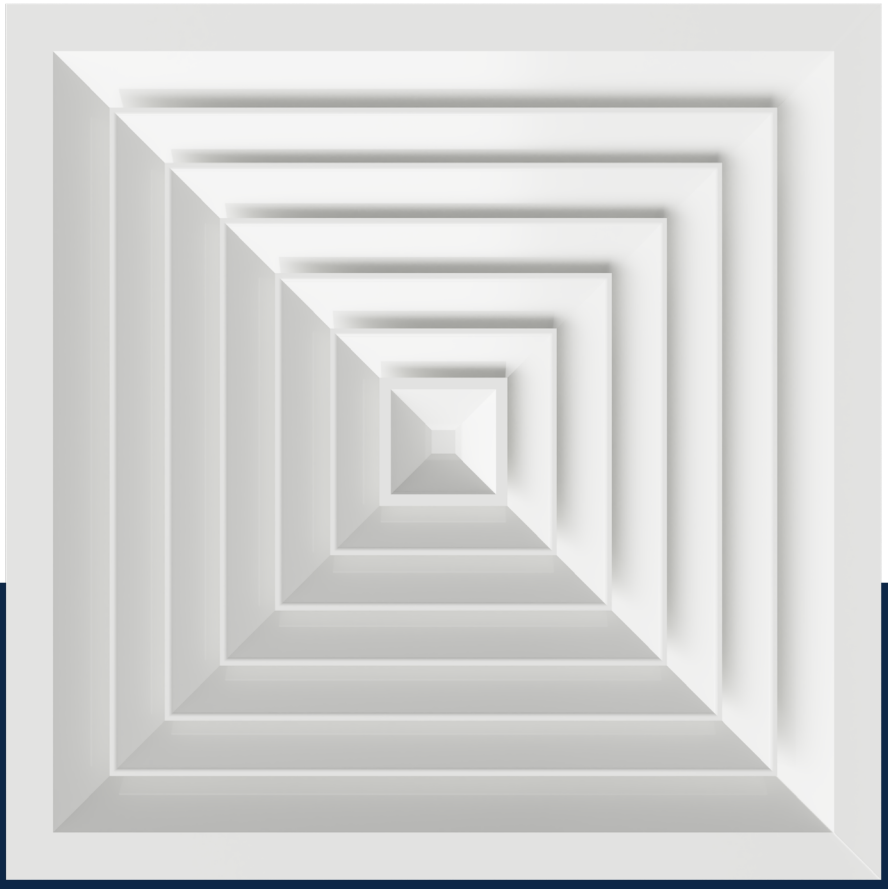
Example on how to place an order

Type	Dimensions	Accessories	Finish
JD			
	according to the table (D100 ÷ D450)		
		AIZ - Insulated adapter	
		AN - Uninsulated adapter	
			RAL9016
			RAL.. - Other RAL colors on request

Air through perfection

Ceiling diffuser

CD-4



ACP
Ceiling diffusers

Ceiling diffuser
CD-4



Description

Square ceiling diffuser with blades positioned in 4 directions, made of aluminum, used for air supply or evacuation.
The ceiling diffuser can be used in installations with constant or variable air flow and is intended for spaces with a height <4m.
Used for ceiling mounting.

Technical specifications

Characteristics

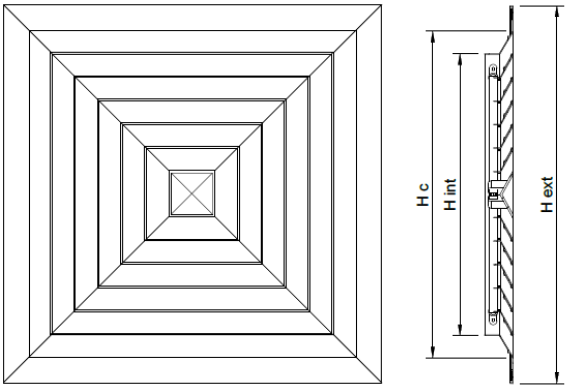
Allows the air to discharge horizontally at the ceiling level.
The central part is removable which facilitates mounting.
Airflow adjustment can be achieved by mounting an opposed blade damper (OBD) on the diffuser connection.
Diffuser installation is easy.

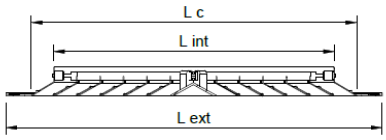
Materials

The diffuser is made of aluminum and is electrostatic field painted in glossy white RAL9016.
Other RAL colours are available on request.

Technical drawing

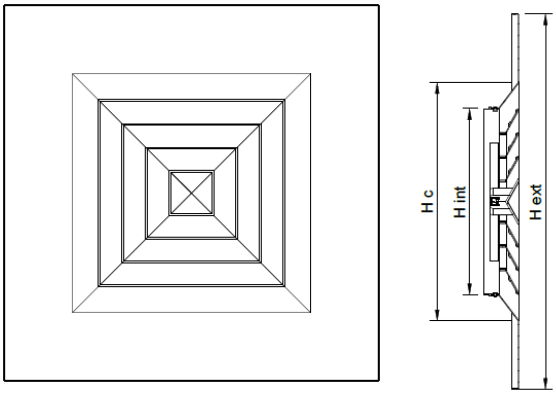
Narrow frame ceiling diffuser

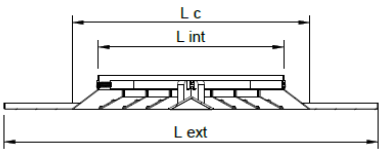




Int / Ext [mm]	Lint x Hint [mm]	Lext x Hext [mm]	Lc x Hc [mm]
150/290	145 x 145	295 x 295	218 x 218
225/370	220 x 220	370 x 370	293 x 293
300/445	295 x 295	445 x 445	368 x 368
375/520	370 x 370	520 x 520	443 x 443
445/595	445 x 445	595 x 595	518 x 518

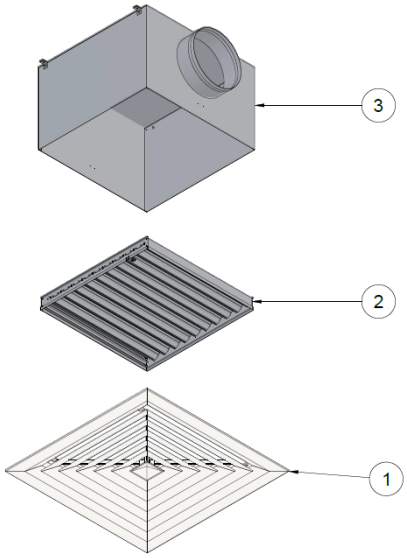
Wide frame ceiling diffuser





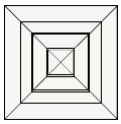
Int / Ext [mm]	Lint x Hint [mm]	Lext x Hext [mm]	Lc x Hc [mm]
150/595	145 x 145	595 x 595	227 x 227
225/595	223 x 223	595 x 595	302 x 302
300/595	295 x 295	595 x 595	377 x 377
375/595	370 x 370	595 x 595	452 x 452

Product specifications

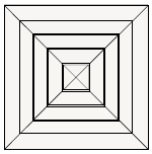


1- CD-4 Ceiling diffuser
2- OBD opposed blade damper (optional)
3- Plenum box (optional)

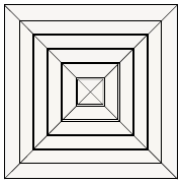
Narrow frame ceiling diffuser



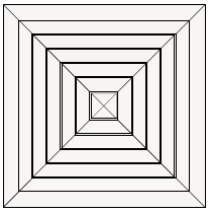
CD-4-150/290



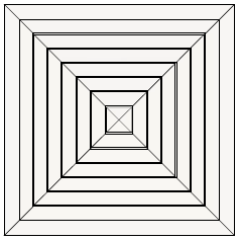
CD-4-225/370



CD-4-300/445

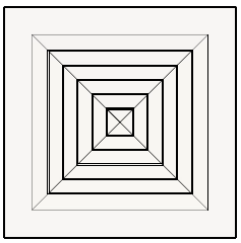


CD-4-375/520

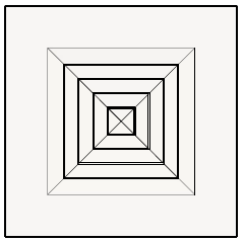


CD-4-445/595

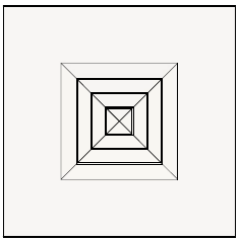
Wide frame ceiling diffuser



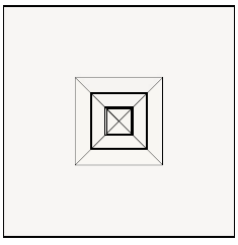
CD-4-375/595



CD-4-300/595



CD-4-225/595



CD-4-150/595

Accessories

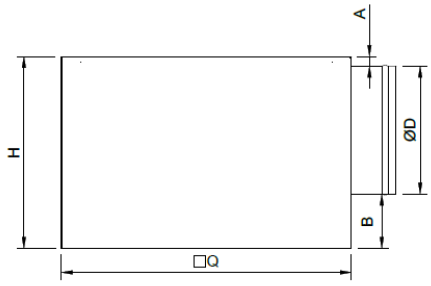
The diffuser can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

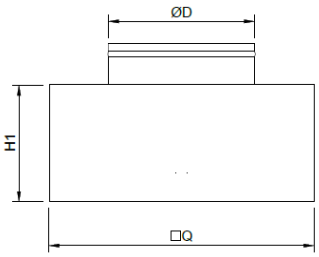
The product can be accessorized with opposed blade damper or G4 air filter.

Adapter (plenum box)

Horizontal connection
(side/lateral exit)

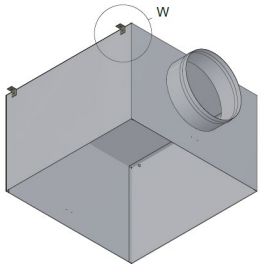


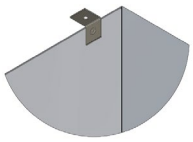
Vertical connection
(opposite exit)



□Q – depending on the size of the ceiling diffuser Lint x Hint
A, B, H1, ØD – on request
H – depending on A, B and ØD

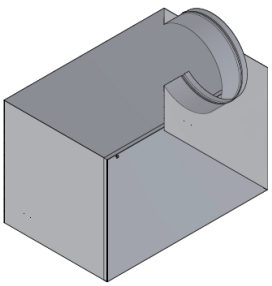
The adapter is made of Z140 galvanized steel sheet and has 4 suspension lugs.



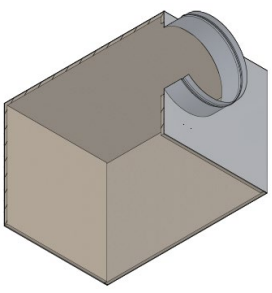


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.

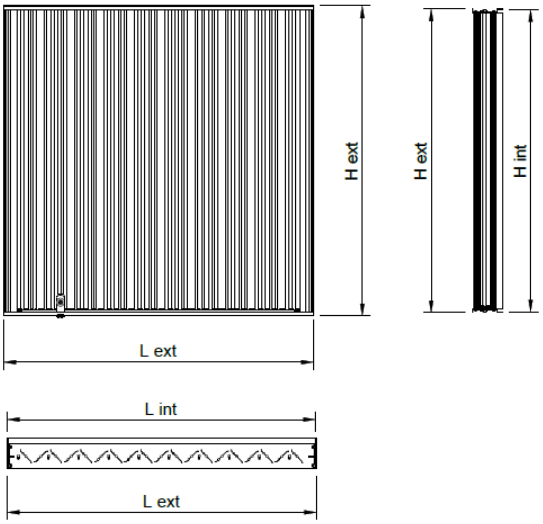


AN - Uninsulated adapter



AIZ - Insulated adapter

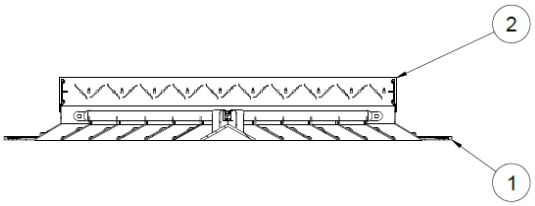
Opposed blade damper (OBD)



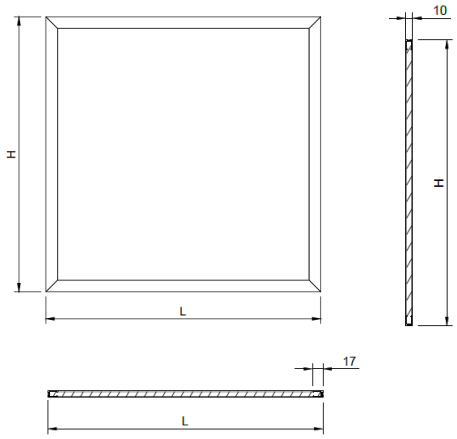
The damper is equipped with opposable blades and is mounted on the ceiling diffuser connection for adjusting the air flow.

Example: CD-4 + OBD

1- Ceiling diffuser CD-4
2- Opposed blade damper OBD



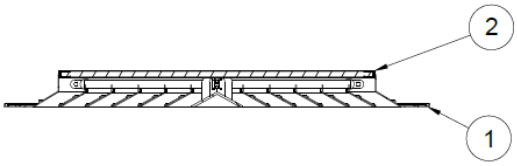
Air filter G4 (F-R)



G4 air filter with frame, made of aluminum, used for air filtration and mounting on the ceiling diffuser connection.

Example: CD-4 + F-R

1- Ceiling diffuser CD-4
2- Air filter F-R



Functional parameters

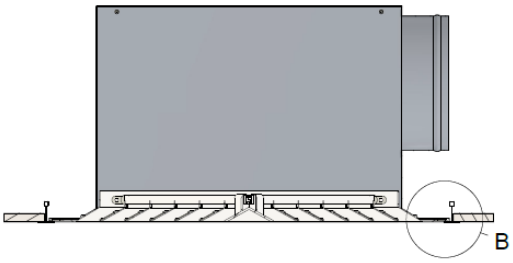
Air flow [m3 / h]	LXH int Ak [m²]	150x150 0.0108	225x225 0.0245	300x300 0.0436	375x375 0.0680	445x445 0.0978
160	Veff [m/s]	4.1				
	X [m]	1.0				
	NR [dB(A)]	29.0				
	ΔPt [Pa]	12.0				
200	Veff [m/s]	5.1	2.3			
	X [m]	1.2	0.8			
	NR [dB(A)]	35.0	18.0			
	ΔPt [Pa]	18.0	4.0			
300	Veff [m/s]	7.7	3.4			
	X [m]	1.9	1.3			
	NR [dB(A)]	45.0	28.0			
	ΔPt [Pa]	41.0	8.0			
400	Veff [m/s]		4.5	2.5		
	X [m]		1.7	1.3		
	NR [dB(A)]		35.0	24.0		
	ΔPt [Pa]		15.0	5.0		
600	Veff [m/s]		6.8	3.8	2.5	
	X [m]		2.5	1.9	1.5	
	NR [dB(A)]		45.0	34.0	25.0	
	ΔPt [Pa]		33.0	10.0	4.0	
800	Veff [m/s]		9.1	5.1	3.3	2.3
	X [m]		3.3	2.5	2.0	1.7
	NR [dB(A)]		53.0	41.0	32.0	24.0
	ΔPt [Pa]		58.0	18.0	7.0	4.0
1000	Veff [m/s]			6.4	4.1	2.8
	X [m]			3.1	2.5	2.1
	NR [dB(A)]			46.0	37.0	30.0
	ΔPt [Pa]			29.0	12.0	6.0
1200	Veff [m/s]			7.7	4.9	3.4
	X [m]			3.8	3.0	2.5
	NR [dB(A)]			51.0	42.0	34.0
	ΔPt [Pa]			41.0	17.0	8.0
1600	Veff [m/s]				6.6	4.5
	X [m]				4.0	3.3
	NR [dB(A)]				49.0	41.0
	ΔPt [Pa]				30.0	14.0
2000	Veff [m/s]				8.2	5.7
	X [m]				5.0	4.2
	NR [dB(A)]				54.0	47.0
	ΔPt [Pa]				47.0	23.0
3000	Veff [m/s]					8.5
	X [m]					6.3
	NR [dB(A)]					57.0
	ΔPt [Pa]					51.0

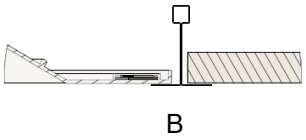
The legend
Ak [m²] - The free surface
Veff [m/s] – Air velocity in diffuser
X [m] - The length of the air jet at a speed of 0.25 m/s
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

Installation

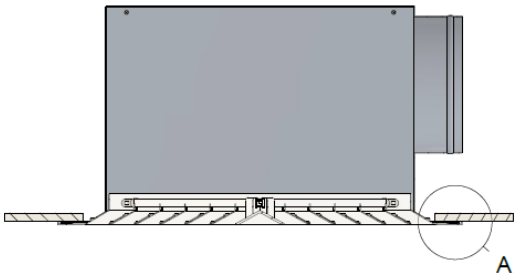
The ceiling diffuser can be mounted in a false suspended ceiling or a continuous ceiling.

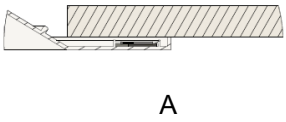
Installation in T-bar suspended ceiling





Installation in continuous ceiling





Order code

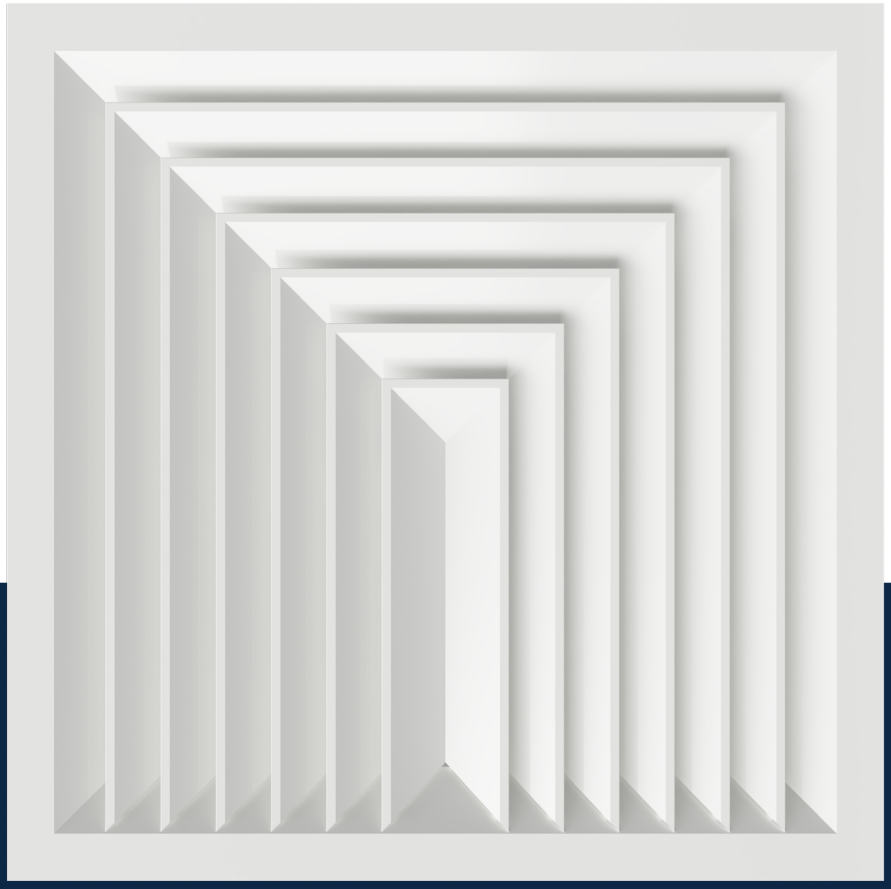
Example on how to place an order

Type	Dimensions	Accessories	Finish
CD-4			
	According to the size table		
		OBD - Control damper	
		F-R - Air filter G4	
		AIZ - Insulated adapter	
		AN - Uninsulated adapter	
			RAL9016
			RAL.. - Other RAL colors on request

Air through perfection

Ceiling diffuser 3-way

CD-3



ACP
Ceiling diffusers

Ceiling diffuser 3-way
CD-3

Description

Square ceiling diffuser with blades positioned in 3 directions, made of aluminum, used for air supply or evacuation.

The ceiling diffuser can be used in installations with constant or variable air flow and is intended for spaces with a height <4m.

Used for ceiling mounting.

Technical specifications

Characteristics

Allows the air to discharge horizontally at the ceiling level.

The central part is removable which facilitates mounting.

Airflow adjustment can be achieved by mounting an opposed control damper (OBD) on the diffuser connection.

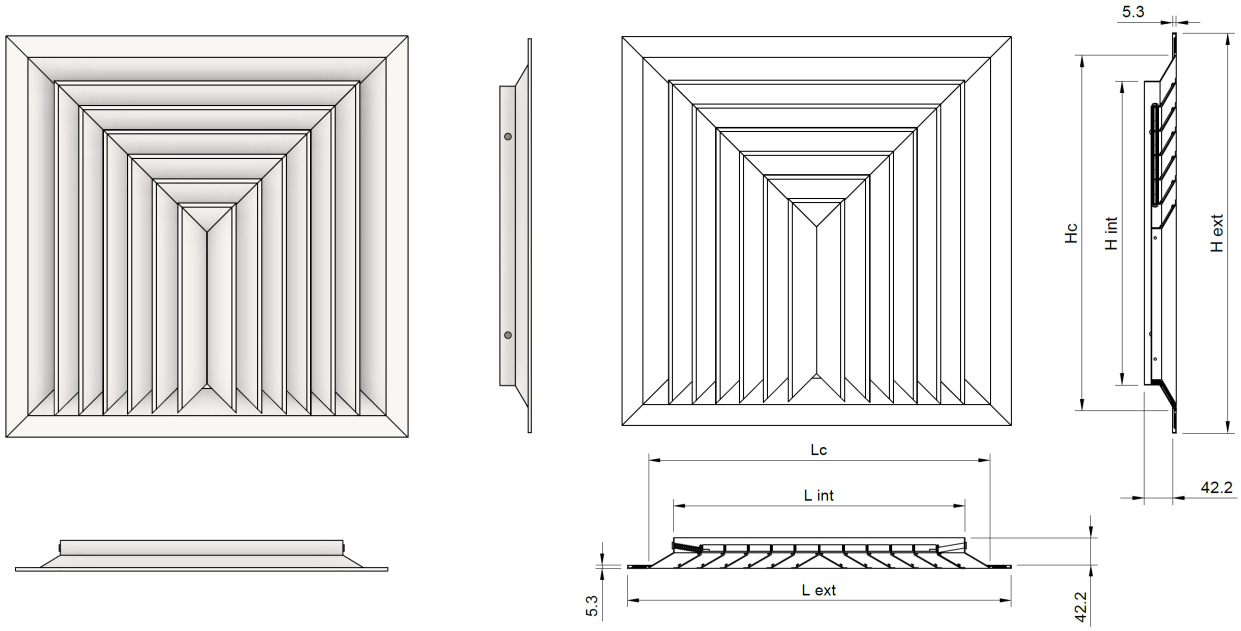
Diffuser installation is easy.

Materials

The diffuser is made of aluminum and is electrostatic field painted in glossy white RAL9016.

Other RAL colours are available on request.

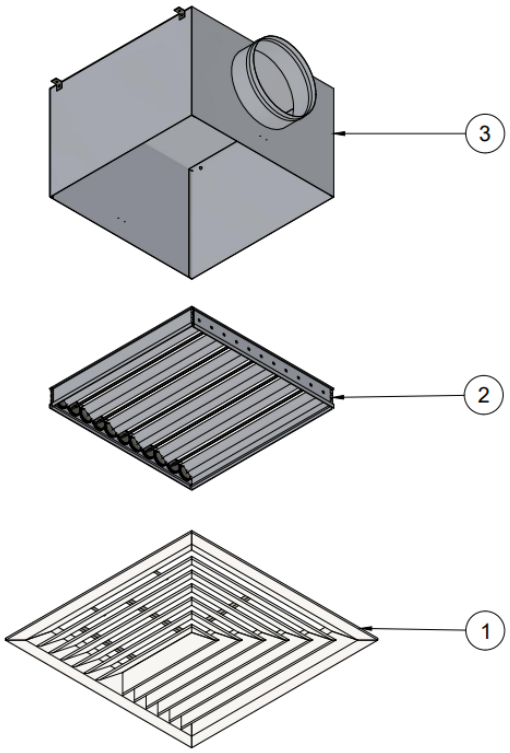
Technical drawing



Ceiling diffuser dimensions

Int / Ext [mm]	Lint x Hint [mm]	Lext x Hext [mm]	Lc x Hc [mm]
453/595	453 x 453	595 x 595	517 x 517

Product specifications



1- CD-3 Ceiling diffuser
2- OBD opposed blade damper (optional)
3- Plenum box (optional)

Accessories

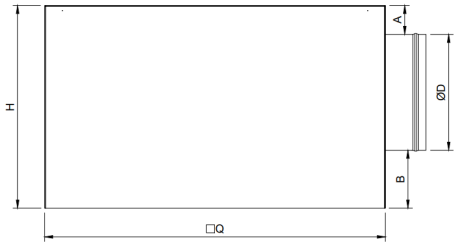
The diffuser can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

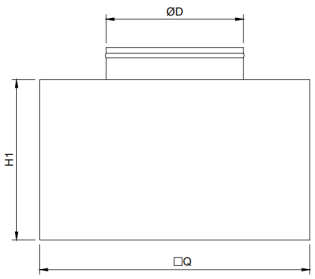
The product can be accessorized with an opposed blade damper or G4 air filter.

Adapter (plenum box)

Horizontal connection
(side/lateral exit)

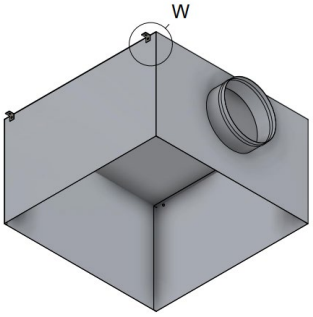


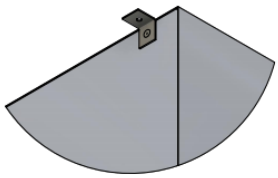
Vertical connection
(opposite exit)



□Q – depending on the size of the ceiling diffuser Lint x Hint
A, B, H1, ØD – on request
H – depending on A, B and ØD

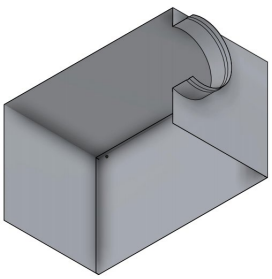
The adapter is made of Z140 galvanized steel sheet and has 4 suspension lugs.



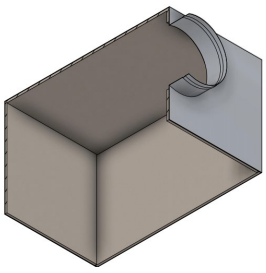


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.

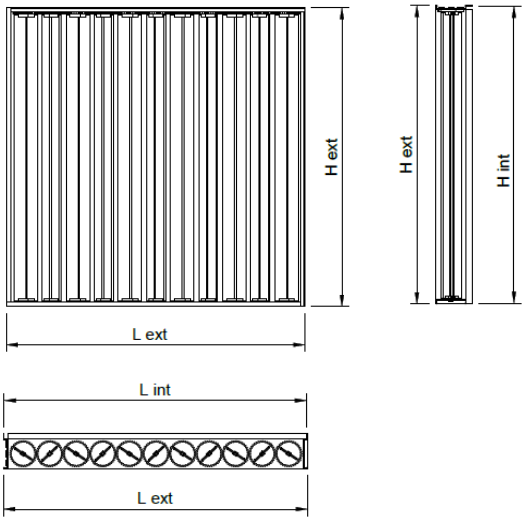


AN - Uninsulated adapter



AIZ - Insulated adapter

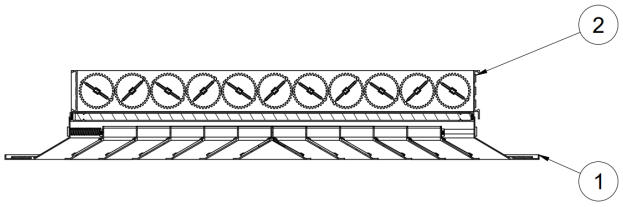
Opposed blade damper (OBD)



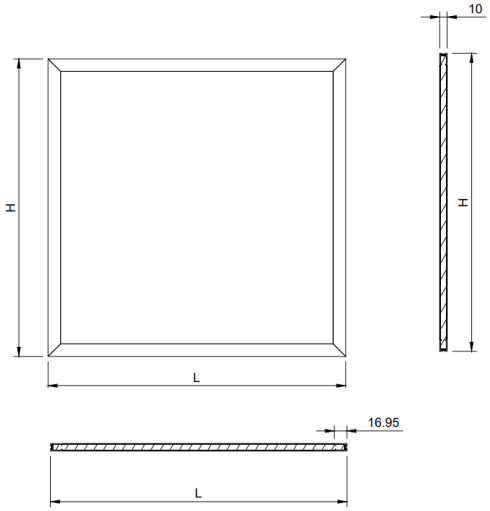
The damper is equipped with opposable blades and is mounted on the ceiling diffuser connection for adjusting the air flow.

Example : CD-3 + OBD

1- Ceiling diffuser CD-3
2- Opposed blade damper OBD



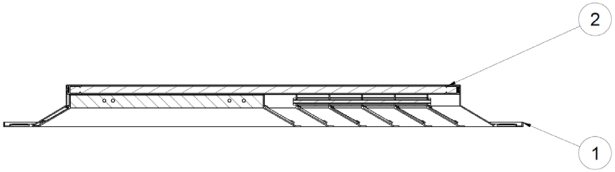
Air filter G4 (F-R)



G4 air filter with frame, made of aluminum, used for air filtration and mounting on the ceiling diffuser connection.

Example : CD-3 + F-R

1- Ceiling diffuser CD-3
2- Air filter F-R



Functional parameters

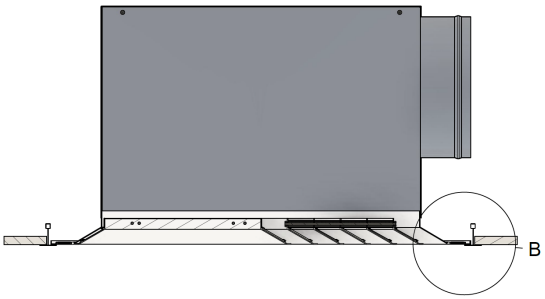
LXH int [mm]	Ak [m²]	Air flow [mc/h]	800	1000	1200	1600	2000
453x453	0.0798	Veff [m/s]	3.0	4.0	5.0	6.0	8.0
		X [m]	1.8	2.4	3	3.6	4.8
		NR [dB(A)]	24	31	37	41	48
		ΔPt [Pa]	8	14	22	32	56

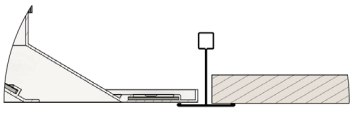
The legend
Ak [m²] - The free surface
Veff [m/s] – The effective air velocity
X [m] - The length of the air jet at a speed of 0.25 m/s
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

Installation

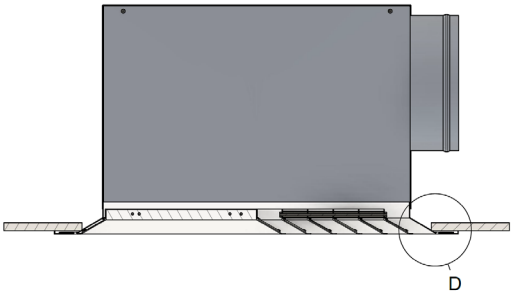
The ceiling diffuser can be mounted in a false suspended ceiling or a continuous ceiling.

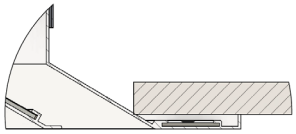
Installation in T-bar suspended ceiling





Installation in continuous ceiling





Order code

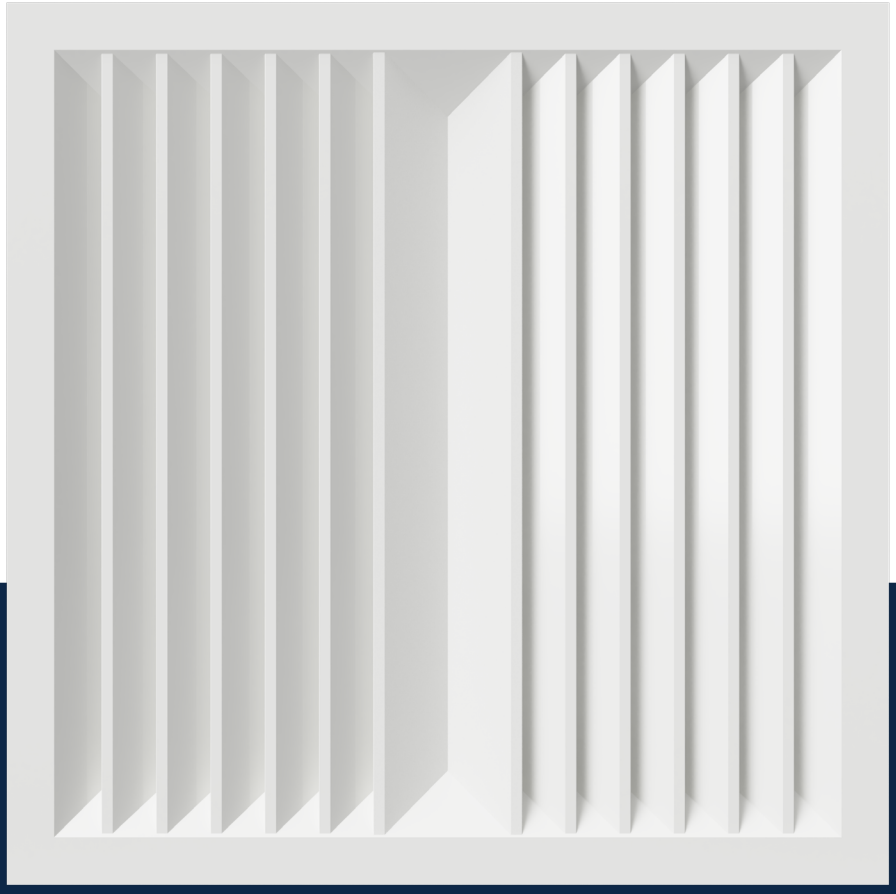
Example on how to place an order

Type	Dimensions	Accessories	Finish
CD-3			
	453/595		
		OBD - Control damper	
		F-R - Air filter G4	
		AIZ - Insulated adapter	
		AN - Uninsulated adapter	
			RAL9016
			RAL.. - Other RAL colors on request

Air through perfection

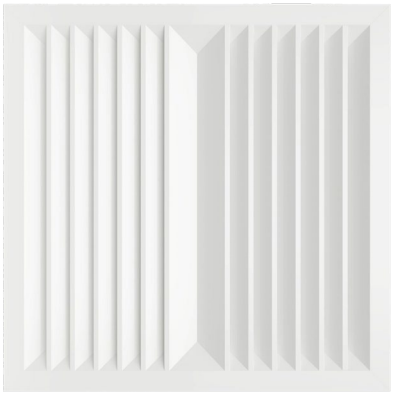
Ceiling diffuser 2-way

CD-2



ACP
Ceiling diffusers

Ceiling diffuser 2-way
CD-2



Description

Square ceiling diffuser with blades positioned in 2 directions, made of aluminum, used for air supply or evacuation.

The ceiling diffuser can be used in installations with constant or variable air flow and is intended for spaces with a height <4m.

Used for ceiling mounting.

Technical specifications

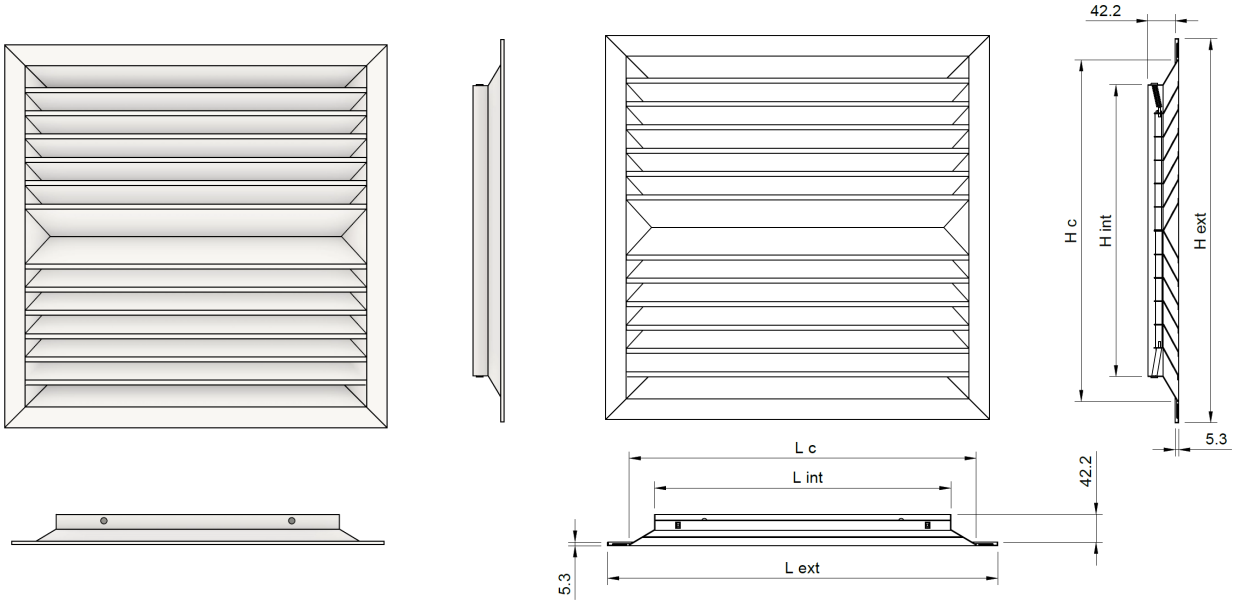
Characteristics

Allows the air to discharge horizontally at the ceiling level.
The central part is removable which facilitates mounting.
Airflow adjustment can be achieved by mounting an opposed blade damper (OBD) on the diffuser connection.
Diffuser installation is easy.

Materials

The diffuser is made of aluminum and is electrostatic field painted in glossy white RAL9016.
Other RAL colours are available on request.

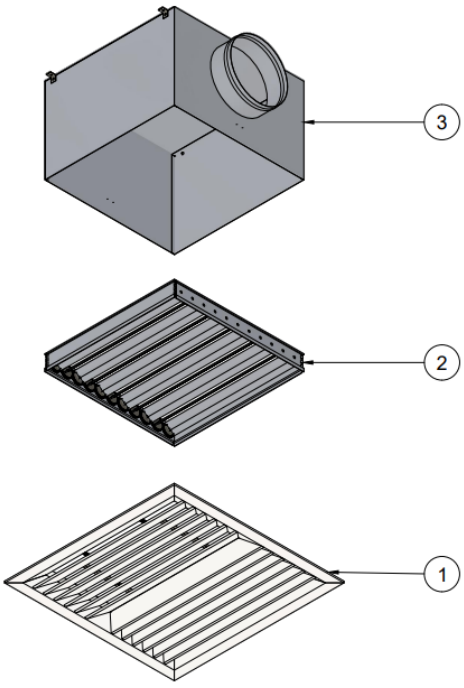
Technical drawing



Ceiling diffuser dimensions

Int / Ext [mm]	Lint x Hint [mm]	Lext x Hext [mm]	Lc x Hc [mm]
453/595	453 x 453	595 x 595	517 x 517

Product specifications



1- CD-2 Ceiling diffuser
2- OBD Opposed blade damper (optional)
3- Plenum box (optional)

Accessories

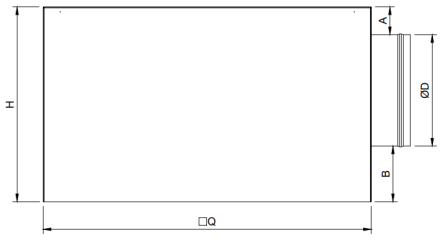
The diffuser can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

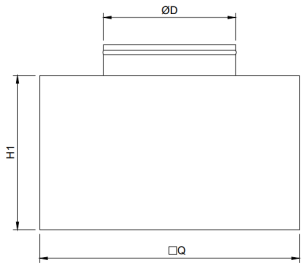
The product can be accessorized with opposed blade damper or G4 air filter.

Adapter (plenum box)

Horizontal connection
(side/lateral exit)

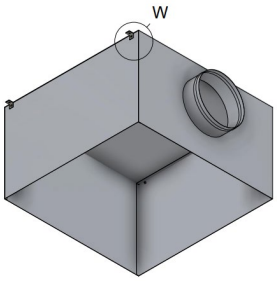


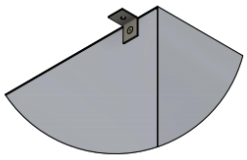
Vertical connection
(opposite exit)



□Q – depending on the size of the ceiling diffuser Lint x Hint
A, B, H1, ØD – on request
H – depending on A, B and ØD

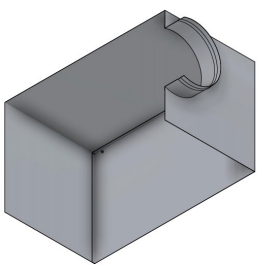
The adapter is made of Z140 galvanized steel sheet and has 4 suspension lugs.



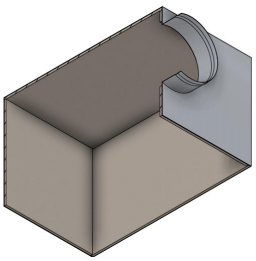


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.

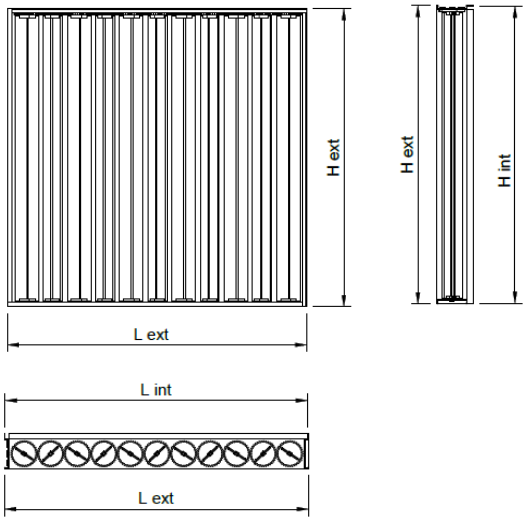


AN - Uninsulated adapter



AIZ - Insulated adapter

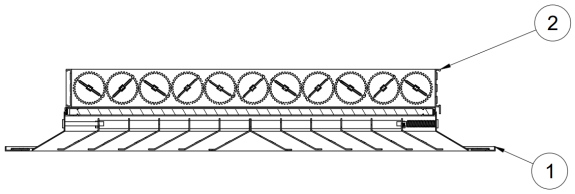
Opposed blade damper (OBD)



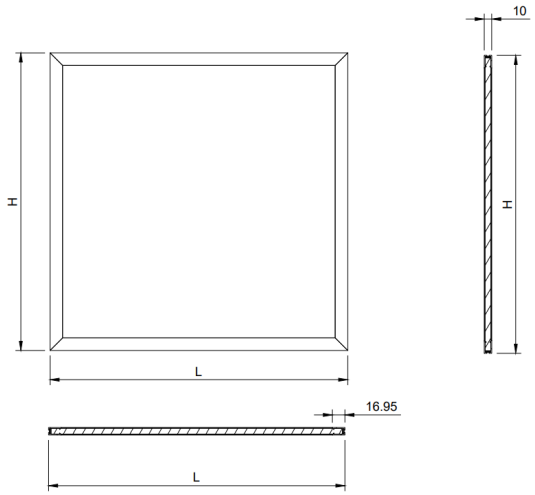
The damper is equipped with opposable blades and is mounted on the ceiling diffuser connection for adjusting the air flow.

Example: CD-2 + OBD

1- Ceiling diffuser CD-2
2- Opposed blade damper OBD



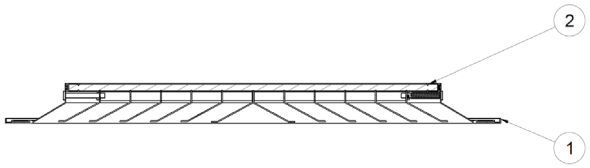
Air filter G4 (F-R)



G4 air filter with frame, made of aluminum, used for air filtration and mounting on the ceiling diffuser connection.

Example: CD-2 + F-R

1- Ceiling diffuser CD-2
2- Air filter F-R



Functional parameters

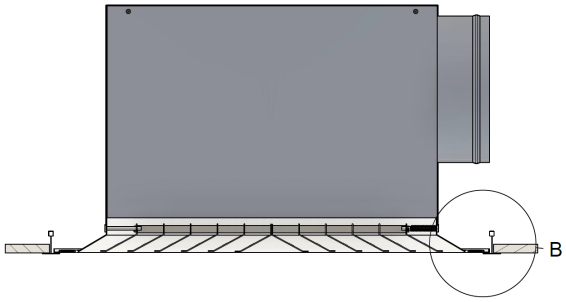
LXH int [mm]	Ak [m²]	Air flow [mc/h]	600	800	1000	1200	1600
453x453	0.0838	Veff [m/s]	2.0	2.7	3.3	4.0	5.3
		X [m]	1.5	2	2.5	3	4.1
		NR [dB(A)]	21	28	34	38	46
		ΔPt [Pa]	3	5.3	8.2	11.9	21.2

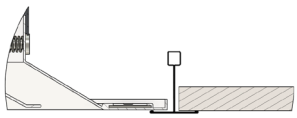
The legend
Ak [m²] - The free surface
Veff [m/s] - The effective air velocity
X [m] - The length of the air jet at a speed of 0.25 m/s
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

Installation

The ceiling diffuser can be mounted in a false suspended ceiling or a continuous ceiling.

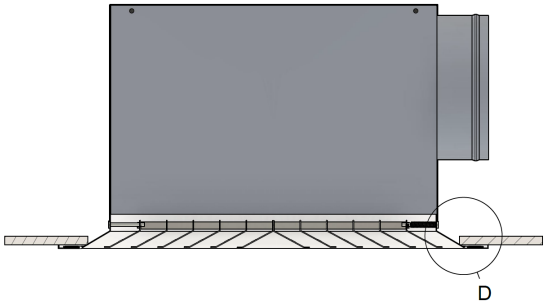
Installation in T-bar suspended ceiling

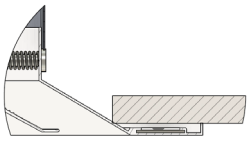




B

Installation in continuous ceiling





D

Order code

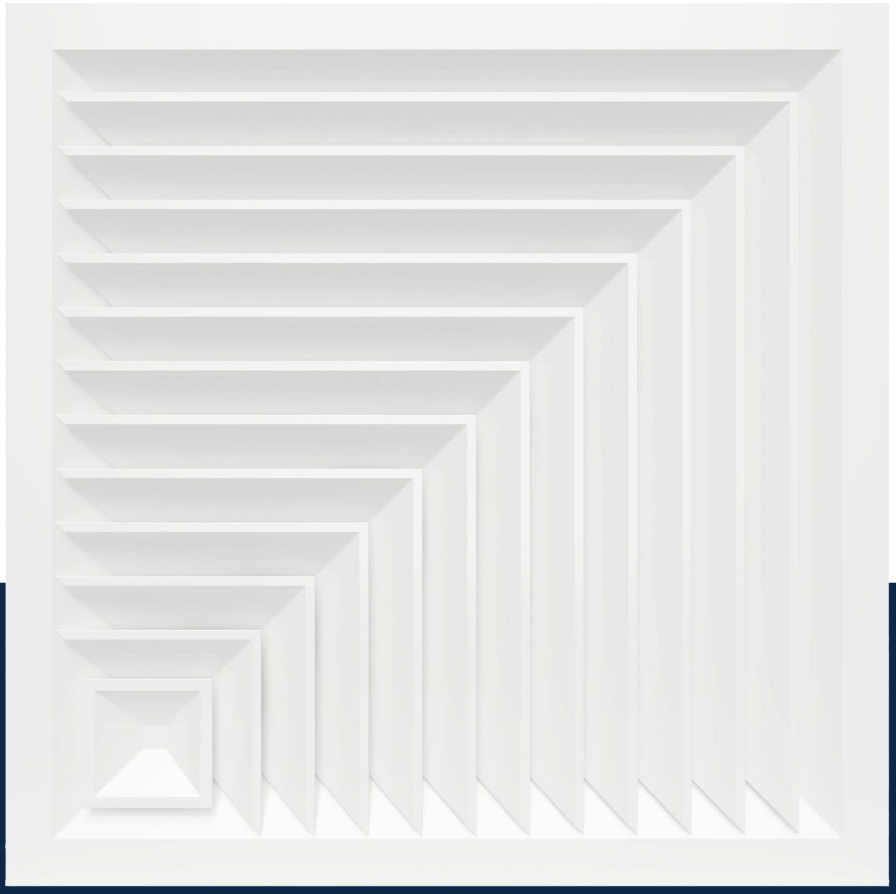
Example on how to place an order

Type	Dimensions	Accessories	Finish
CD-2			
	453/595		
		OBD - Control damper	
		F-R - Air filter G4	
		AIZ - Insulated adapter	
		AN - Uninsulated adapter	
			RAL9016
			RAL.. - Other RAL colors on request

Air through perfection

Ceiling diffuser 2-way

CD-2-90



ACP
Ceiling diffusers

Ceiling diffuser 2-way
CD-2-90

Description

Square ceiling diffuser with blades positioned in 2 directions at 90°, made of aluminum, used for air supply or evacuation.

The ceiling diffuser can be used in installations with constant or variable air flow and is intended for spaces with a height <4m.

Used for ceiling mounting.

Technical specifications

Characteristics

Allows the air to discharge horizontally at the ceiling level.

The central part is removable which facilitates mounting.

Airflow adjustment can be achieved by mounting an opposed blade damper (OBD) on the diffuser connection.

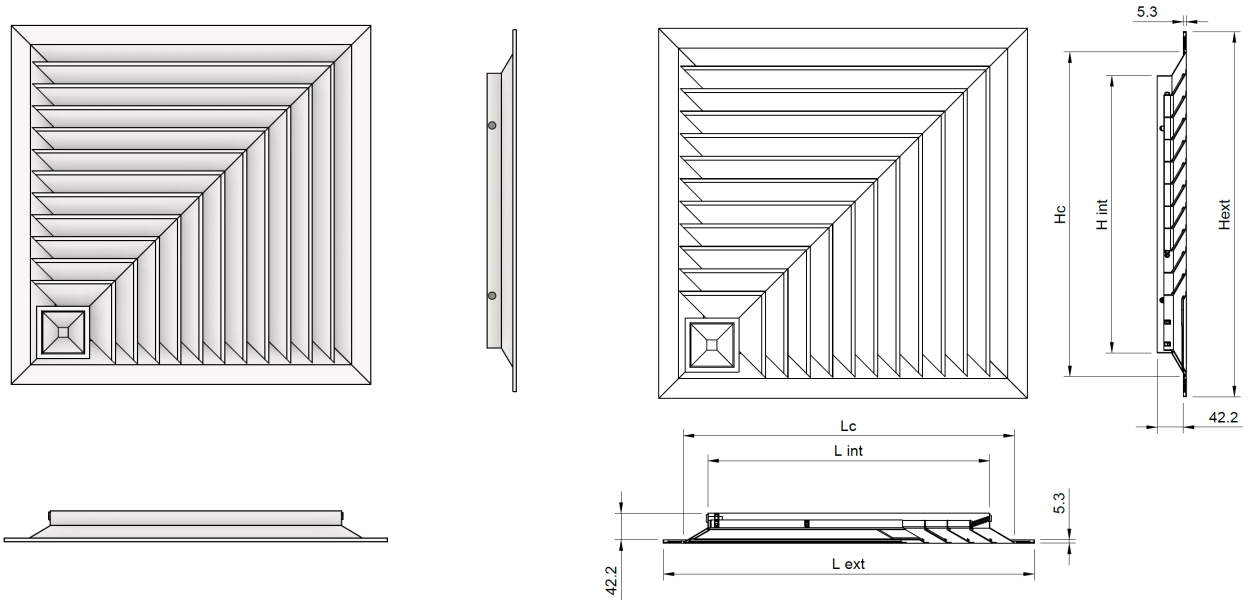
Diffuser installation is easy.

Materials

The diffuser is made of aluminum and is electrostatic field painted in glossy white RAL9016.

Other RAL colours are available on request.

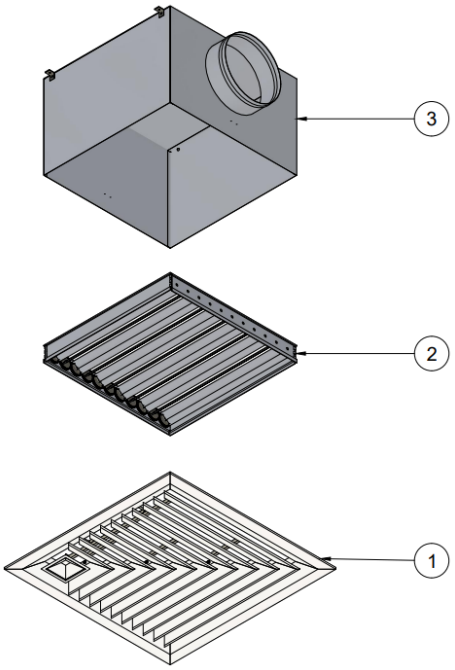
Technical drawing



Ceiling diffuser dimensions

Int / Ext [mm]	Lint x Hint [mm]	Lext x Hext [mm]	Lc x Hc [mm]
453/595	453 x 453	595 x 595	517 x 517

Product specifications



1- CD-2-90 Ceiling diffuser
2- OBD Opposed blade damper (optional)
3- Plenum box (optional)

Accessories

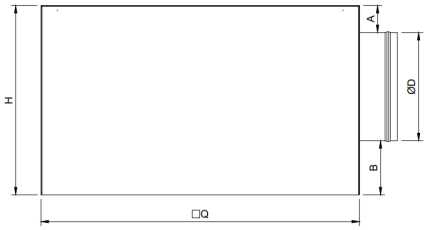
The diffuser can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

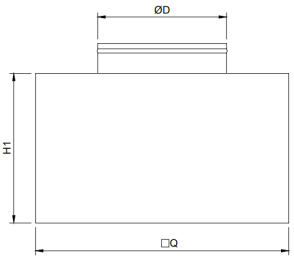
The product can be accessorized with an opposed blade damper or G4 air filter.

Adapter (plenum box)

Horizontal connection
(side/lateral exit)

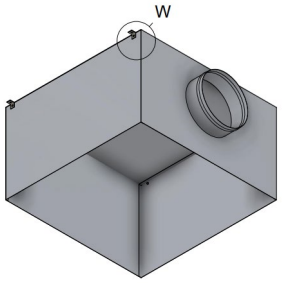


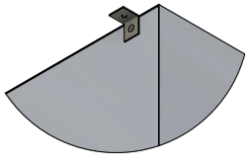
Vertical connection
(opposite exit)



□Q – depending on the size of the ceiling diffuser Lint x Hint
A, B, H1, ØD – on request
H – depending on A, B and ØD

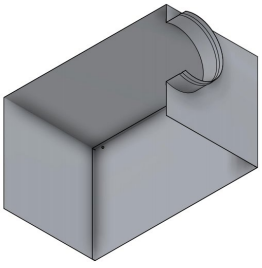
The adapter is made of Z140 galvanized steel sheet and has 4 suspension lugs.



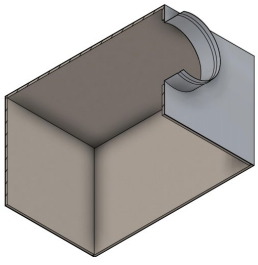


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.

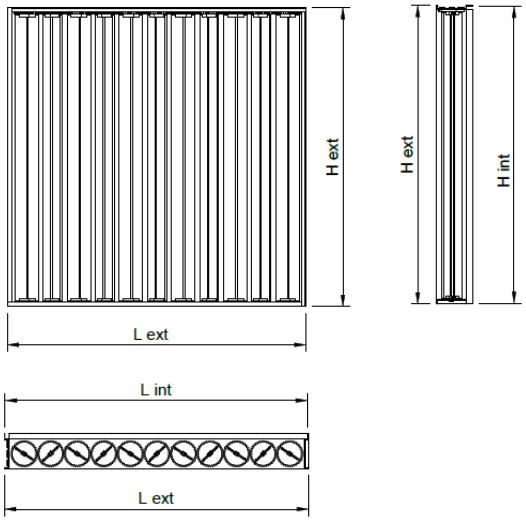


AN - Uninsulated adapter



AIZ - Insulated adapter

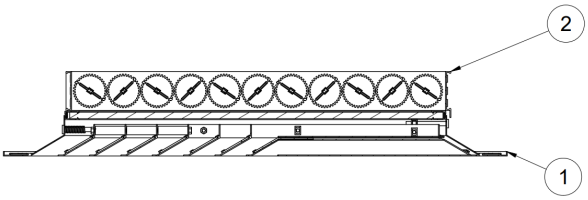
Opposed blade damper (OBD)



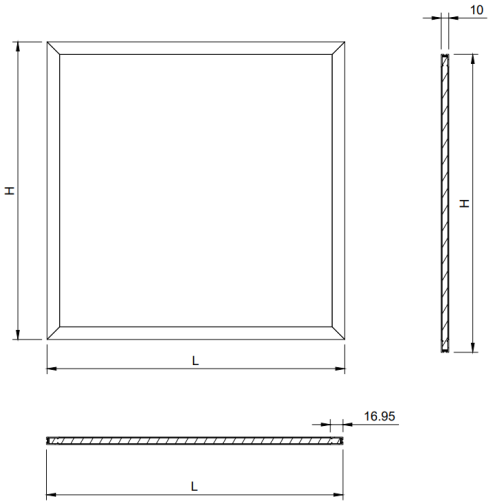
The damper is equipped with opposable blades and is mounted on the ceiling diffuser connection for adjusting the air flow.

Example : CD-2-90 + OBD

1- Ceiling diffuser CD-2-90
2- Opposed blade damper OBD



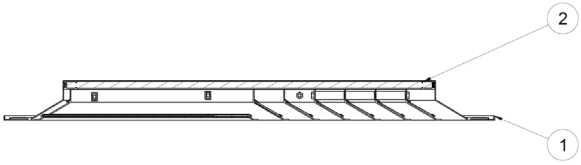
Air filter G4 (F-R)



G4 air filter with frame, made of aluminum, used for air filtration and mounting on the ceiling diffuser connection.

Example : CD-2-90 + F-R

1- C eilingdiffuser CD-2-90
2- Air filter F-R



Functional parameters

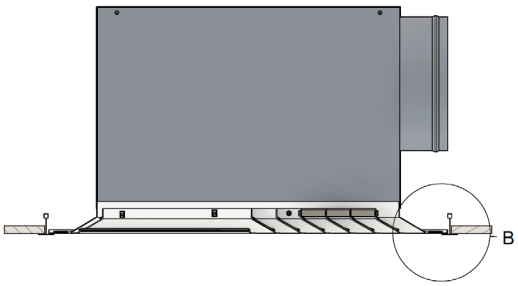
LXH int [mm]	Ak [m²]	Air flow [mc/h]	600	800	1000	1200	1600
453x453	0.0838	Veff [m/s]	2.0	2.7	3.3	4.0	5.3
		X [m]	1.5	2	2.5	3	4.1
		NR [dB(A)]	21	28	34	38	46
		ΔPt [Pa]	3	5.3	8.2	11.9	21.2

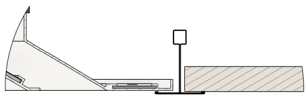
The legend
Ak [m²] - The free surface
Veff [m/s] - The effective air velocity
X [m] - The length of the air jet at a speed of 0.25 m/s
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

Installation

The ceiling diffuser can be mounted in a false suspended ceiling or a continuous ceiling.

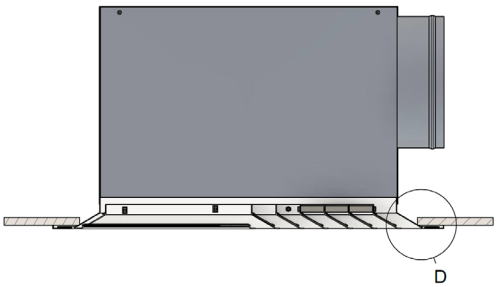
Installation in T-bar suspended ceiling

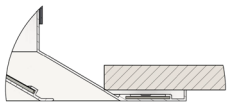




B

Installation in continuous ceiling





D

Order code

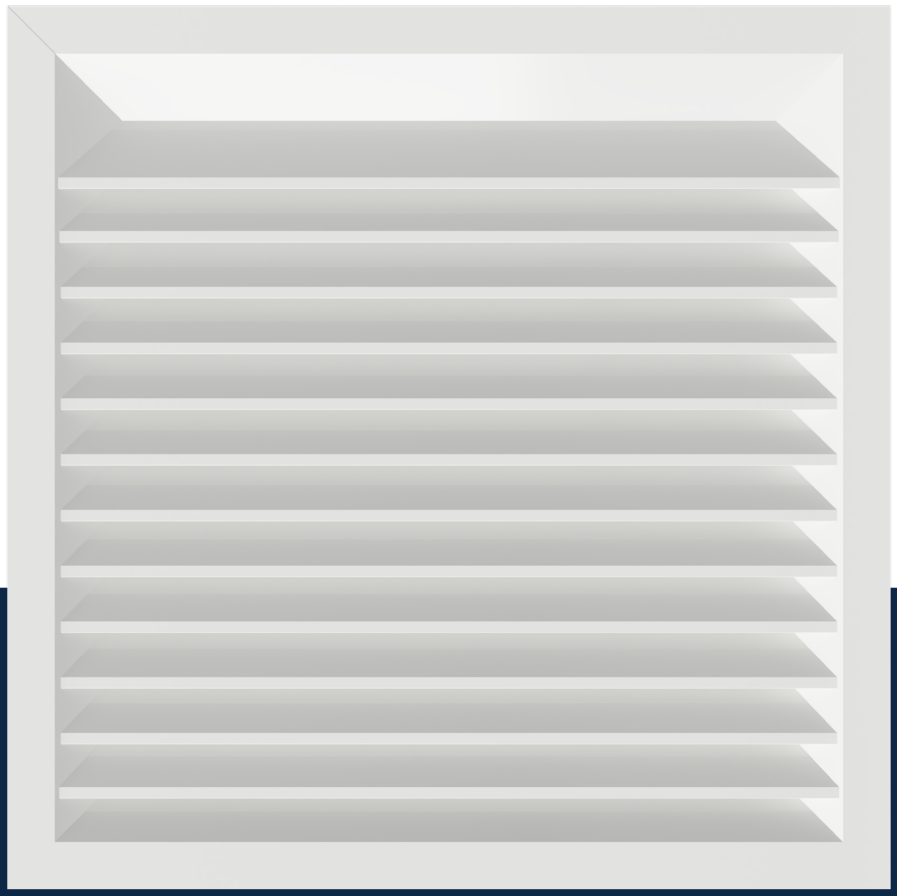
Example on how to place an order

Type	Dimensions	Accessories	Finish
CD-2-90			
	453/595		
		OBD - Control damper	
		F-R - Air filter G4	
		AIZ - Insulated adapter	
		AN - Uninsulated adapter	
			RAL9016
			RAL.. - Other RAL colors on request

Air through perfection

Ceiling diffuser 1-way

CD-1



ACP
Ceiling diffusers

Ceiling diffuser 1-way
CD-1



Description

Square ceiling diffuser with slides positioned in one direction, made of aluminum, used for air supply or evacuation.

The ceiling diffuser can be used in installations with constant or variable air flow and is intended for spaces with a height <4m.

Used for ceiling mounting.

Technical specifications

Characteristics

Allows the air to discharge horizontally at the ceiling level.

The central part is removable which facilitates mounting.

Airflow adjustment can be achieved by mounting an opposed blade damper (OBD) on the diffuser connection.

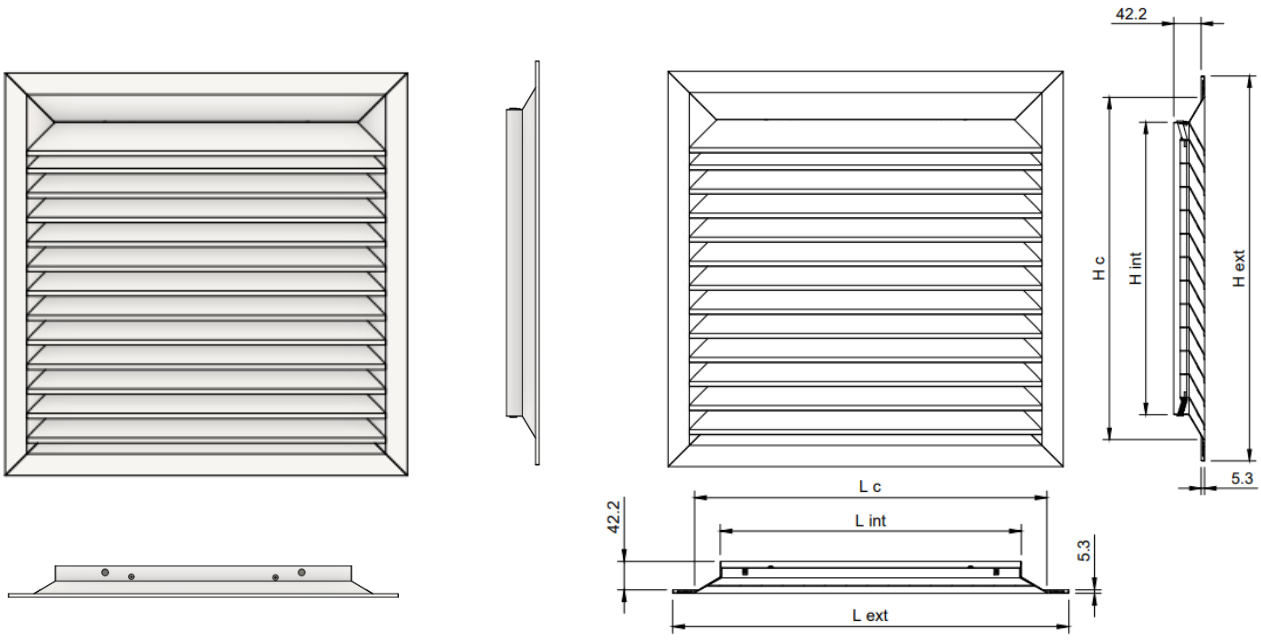
Diffuser installation is easy.

Materials

The diffuser is made of aluminum and is electrostatic field painted in glossy white RAL9016.

Other RAL colours are available on request.

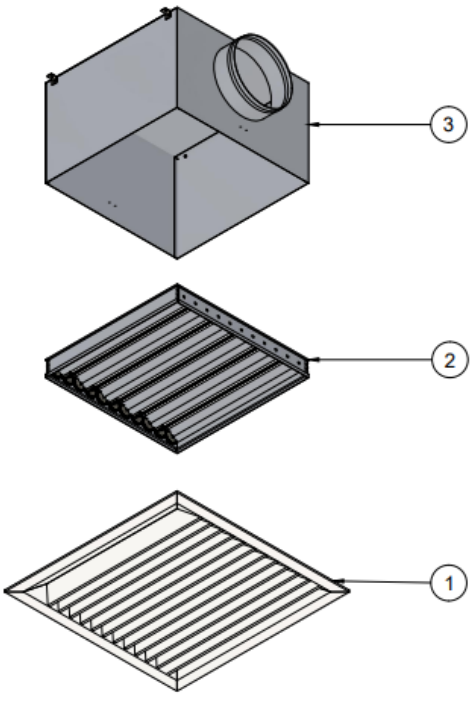
Technical drawing



Ceiling diffuser dimensions

Int / Ext [mm]	Lint x Hint [mm]	Lext x Hext [mm]	Lc x Hc [mm]
453/595	453 x 453	595 x 595	517 x 517

Product specifications



1- CD-1 Ceiling diffuser
2- OBD Opposed blade damper(optional)
3- Plenum box (optional)

Accessories

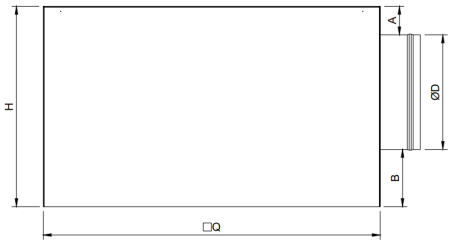
The diffuser can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

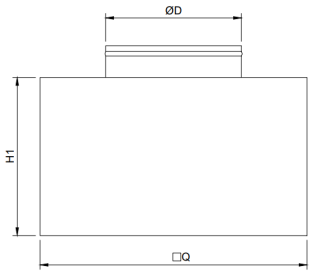
The product can be accessorized with opposed blade damper or G4 air filter.

Adapter (plenum box)

Horizontal connection
(side/lateral exit)

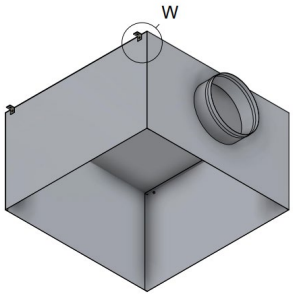


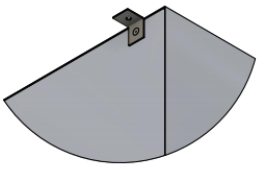
Vertical connection
(opposite exit)



□Q – depending on the size of the ceiling diffuser Lint x Hint
A, B, H1, ØD – on request
H – depending on A, B and ØD

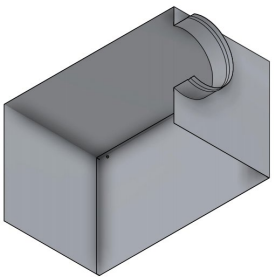
The adapter is made of Z140 galvanized steel sheet and has 4 suspension lugs.



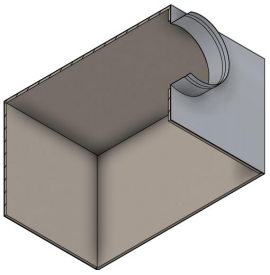


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.

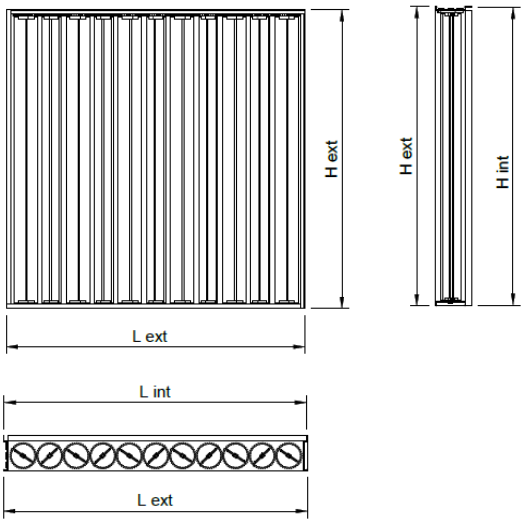


AN - Uninsulated adapter



AIZ - Insulated adapter

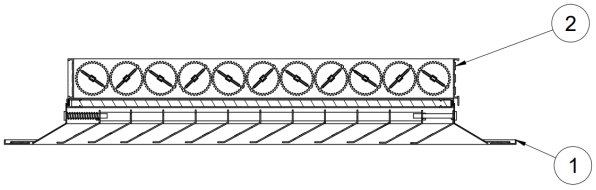
Opposed blade damper (OBD)



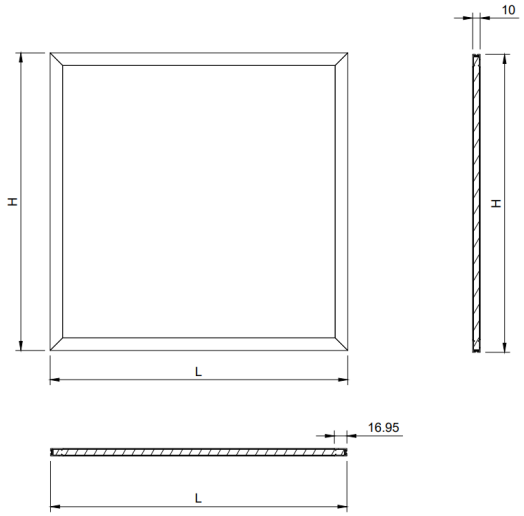
The damper is equipped with opposable blades and is mounted on the ceiling diffuser connection for adjusting the air flow.

Example: CD-1 + OBD

1- Ceiling diffuser CD-1
2- Opposed blade damper OBD



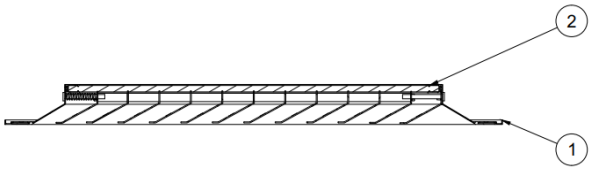
Air filter G4 (F-R)



G4 air filter with frame, made of aluminum, used for air filtration and mounting on the ceiling diffuser connection.

Example : CD-1 + F-R

1- Ceiling diffuser CD-1
2- Air filter F-R



Functional parameters

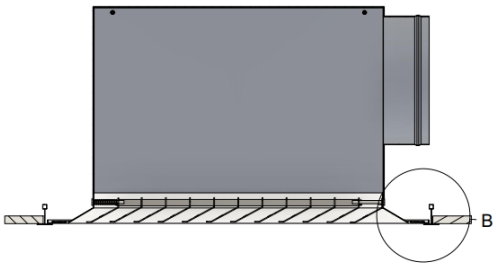
LXH int [mm]	Ak [m²]	Air flow [mc/h]	600	800	1000	1200	1600	2000
453x453	0.0863	Veff [m/s]	1.9	2.6	3.2	3.9	5.1	6.4
		X [m]	4.4	5.8	7.3	8.8	11.7	14.6
		NR [dB(A)]	20	27	33	37	44	50
		ΔPt [Pa]	2.6	4.6	7.3	10.4	18.6	29

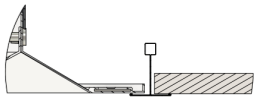
The legend
Ak [m²] - The fre surface
Veff [m/s] - The effective air velocity
X [m] - The length of the air jet at a speed of 0.25 m/s
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

Installation

The ceiling diffuser can be mounted in a false suspended ceiling or a continuous ceiling.

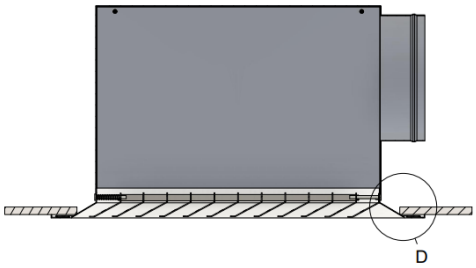
Installation in T-bar suspended ceiling

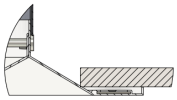




B

Installation in continuous ceiling





D

Order code

Example on how to place an order

Type	Dimensions	Accessories	Finish
CD-1			
	453/595		
		OBD - Control damper	
		F-R - Air filter G4	
		AIZ - Insulated adapter	
		AN - Uninsulated adapter	
			RAL9016
			RAL.. - Other RAL colors on request

Air through perfection

Circular ceiling diffuser

RCD-H-R



ACP
Ceiling diffusers

Circular ceiling diffuser
RCD-H-R



Description

Diffuser for high ceiling with square front panel and circular connection.

RCD-H-R is recommended for 600x600 mm false suspended ceiling.

The design of the product determines a high level of induction rate.

The ceiling diffuser can be used to introduce or evacuate air.

Installation height 2.7-6 m.

Technical specifications

Characteristics

The diffuser has a 595x595 mm square front plate and a circular connection.

The central cones are adjustable.

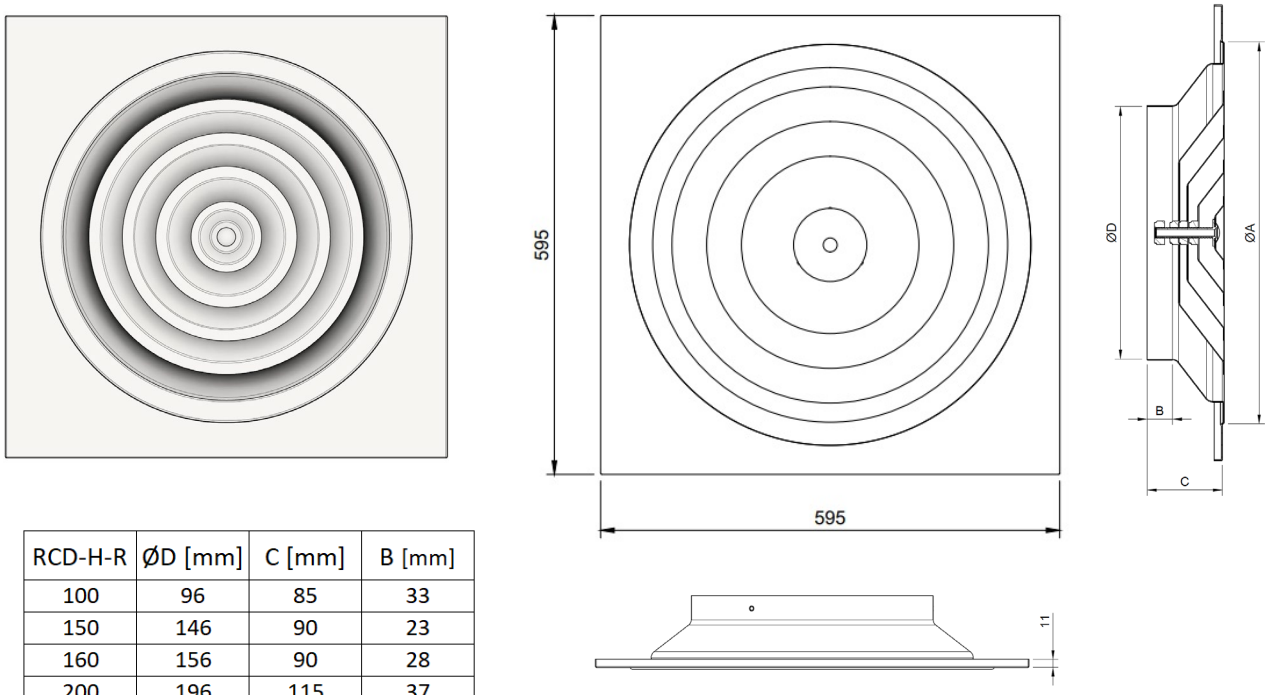
The ceiling diffuser is available with the following connection diameters: 100, 150, 160, 200, 250, 300 and 315 mm.

Materials

The ceiling diffuser is made of aluminum and steel, electrostatic field painted in glossy white RAL 9016.

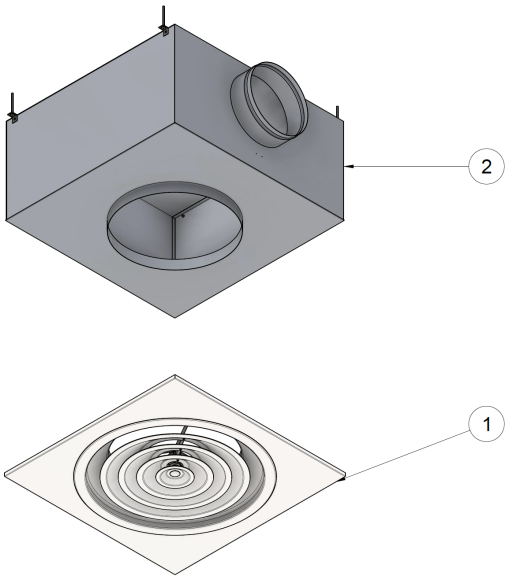
Other RAL colours are available on request.

Technical drawing



RCD-H-R	ØD [mm]	C [mm]	B [mm]
100	96	85	33
150	146	90	23
160	156	90	28
200	196	115	37
250	246	135	37
300	296	115	45
315	311	115	44

Product specifications



1 - RCD-H-R Ceiling diffuser
2 - Plenum box (optional)

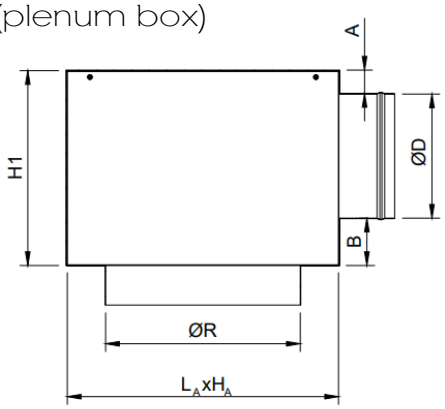
Accessories

RCD-H-R diffuser can be delivered with a connecting plenum to the circular duct, with a horizontal connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

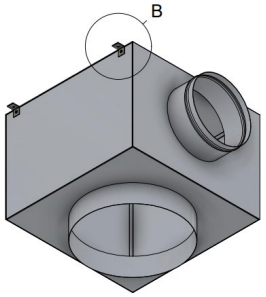
Optionally can be delivered with DAM-RCDH control damper .

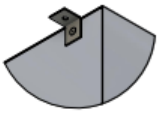
Adapter (plenum box)



L_A X H_A – depending on ØR
A, B, H1 – depending on demand and ØD
ØR – connection diameter RCD-H-R + 4 mm

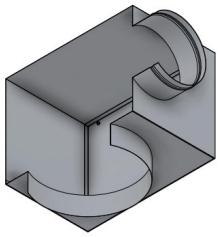
The adapter is made of galvanized steel sheet Z140 and is equipped with 4 lugs for suspension.



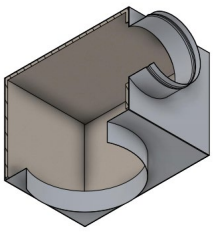


B - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.



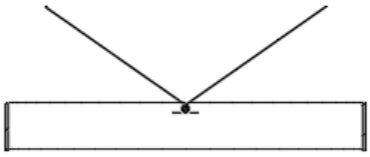
AN - Uninsulated adapter



AIZ - Insulated adapter

Control damper DAM-RCDH

DAM-RCDH can be used to adjust the air flow.



Functional parameters

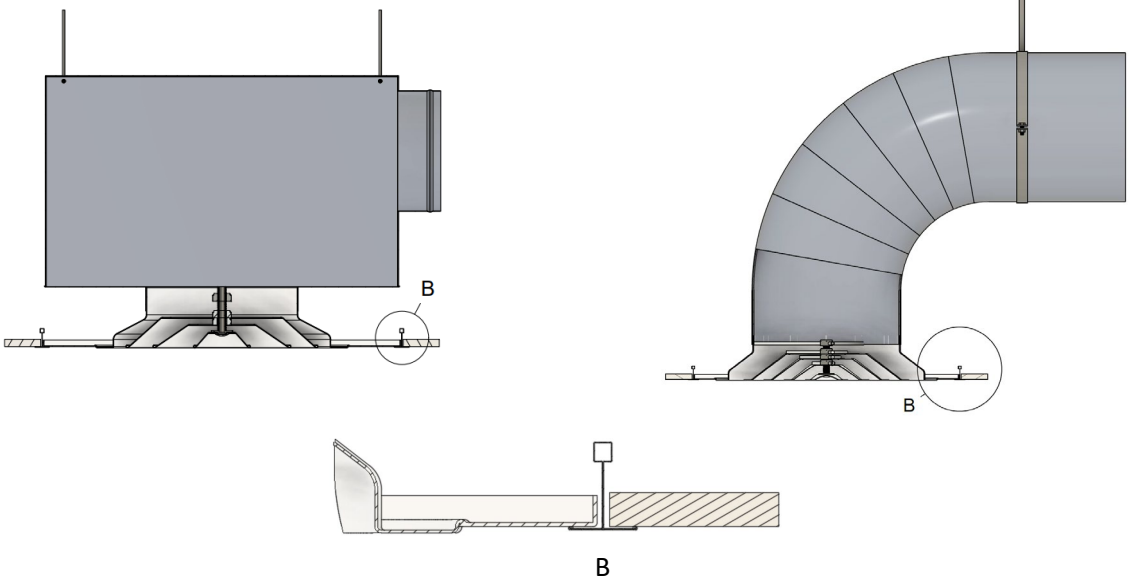
Air flow	Diameter	100	160	200	250	315
(m³/h)	Ak [m²]	0.0059	0.015	0.027	0.044	0.073
75	X [m]	0.7				
	NR [dB(A)]	27.0				
	Veff [m/s]	3.5				
	ΔPt [pa]	20.0				
100	X [m]	1.0				
	NR [dB(A)]	35.0				
	Veff [m/s]	4.7				
	ΔPt [pa]	47.0				
150	X [m]	1.4	1.0			
	NR [dB(A)]	45.0	21.0			
	Veff [m/s]	7.1	2.8			
	ΔPt [pa]	94.0	9.0			
200	X [m]		1.4			
	NR [dB(A)]		25.0			
	Veff [m/s]		3.7			
	ΔPt [pa]		14.0			
250	X [m]		1.7	1.3		
	NR [dB(A)]		30.0	18.0		
	Veff [m/s]		4.6	2.6		
	ΔPt [pa]		20.5	6.8		
300	X [m]		2.1	1.5	1.3	
	NR [dB(A)]		36.0	23.0	15.0	
	Veff [m/s]		5.6	3.1	1.9	
	ΔPt [pa]		33.5	10.5	4.3	
400	X [m]			2.1	1.7	1.6
	NR [dB(A)]			30.0	22.0	3.0
	Veff [m/s]			4.1	2.5	1.5
	ΔPt [pa]			17.5	7.7	4.2
500	X [m]			2.6	2.1	1.9
	NR [dB(A)]			36.0	27.0	20.0
	Veff [m/s]			5.1	3.2	1.9
	ΔPt [pa]			26.5	12.5	6.5
600	X [m]			3.3	2.6	2.3
	NR [dB(A)]			42.0	33.0	25.0
	Veff [m/s]			6.2	3.8	2.3
	ΔPt [pa]			38.0	17.0	10.0
800	X [m]				3.5	3.5
	NR [dB(A)]				41.0	34.0
	Veff [m/s]				5.1	3.1
	ΔPt [pa]				33.5	17.0
1000	X [m]				4.5	3.8
	NR [dB(A)]				50.0	40.0
	Veff [m/s]				6.3	3.8
	ΔPt [pa]				52.5	26.5
1250	X [m]					4.6
	NR [dB(A)]					47.0
	Veff [m/s]					4.8
	ΔPt [pa]					40.5

The legend
Ak [m²] - The free surface
X [m] - The length of the air jet at a speed of 0.25 m/s
Veff [m/s] – The effective air velocity
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

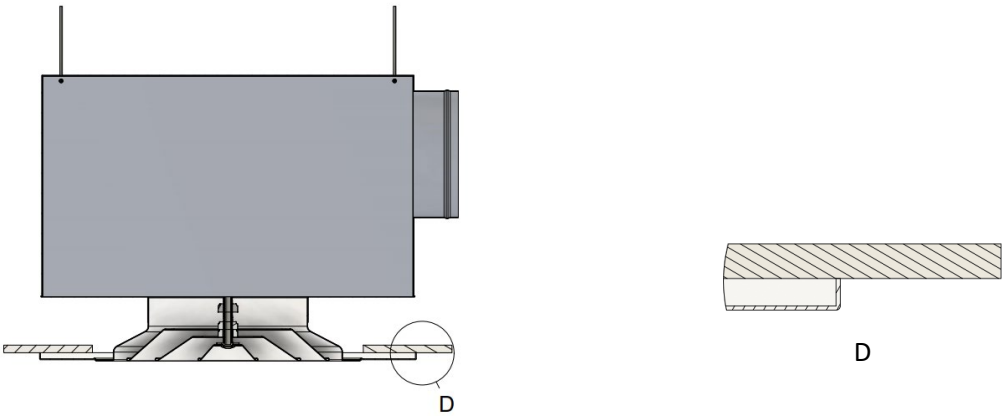
Installation

The diffuser can be mounted in a 600 x 600 mm T-bar ceiling, continuous ceiling or suspended.

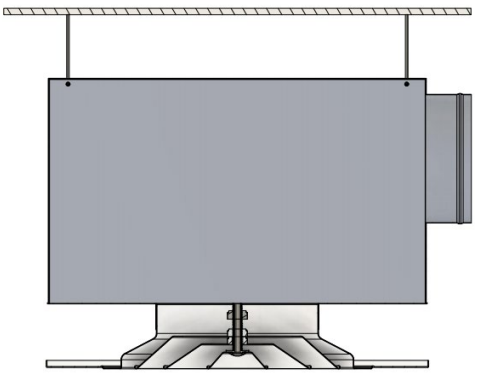
Installation in T-bar ceiling



Installation in continuous ceiling

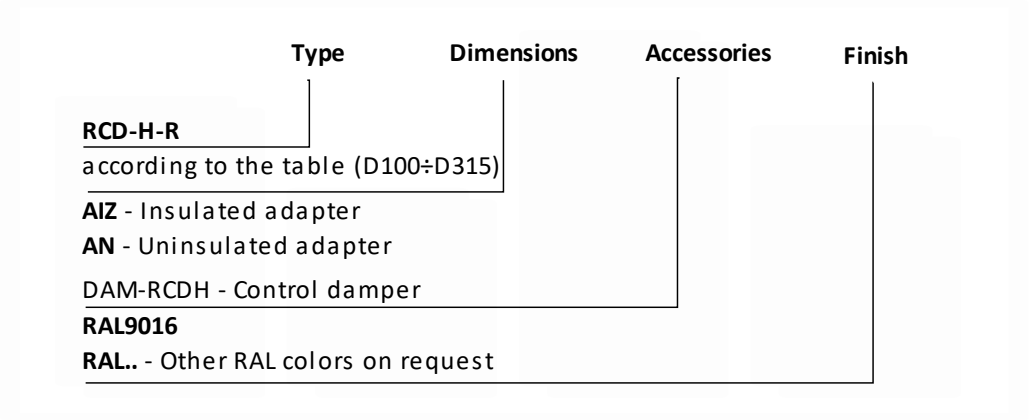


Suspended in the ceiling



Order code

Example on how to place an order



Air through perfection

Circular ceiling diffuser

RCD-H



ACP
Ceiling diffusers

Circular ceiling diffuser
RCD-H



Description

Circular diffuser for high ceiling with adjustable central cones.

The design of the product determines a high level of induction rate.

The ceiling diffuser can be used to introduce or evacuate air.

Installation height 2.7-6 m.

Technical specifications

Characteristics

The diffuser has adjustable cones.

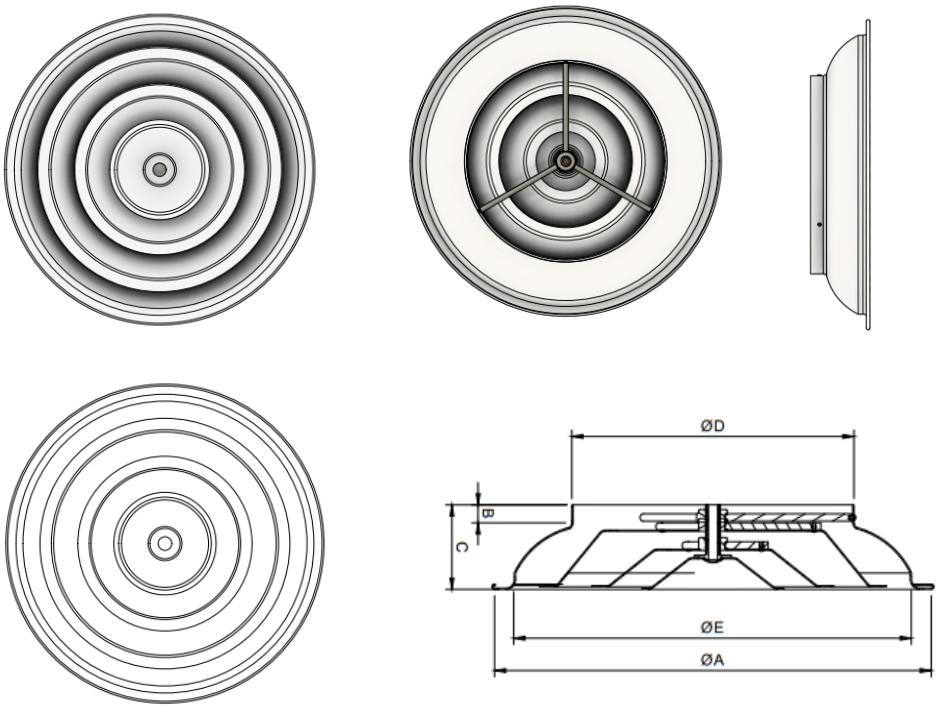
The ceiling diffuser is available in the following diameters: 100, 150, 160, 200, 250, 300, 315, 350, 400, 450, 500 and 630 mm.

Materials

The ceiling diffuser is made of aluminum and steel, electrostatic field painted in glossy white RAL 9016.

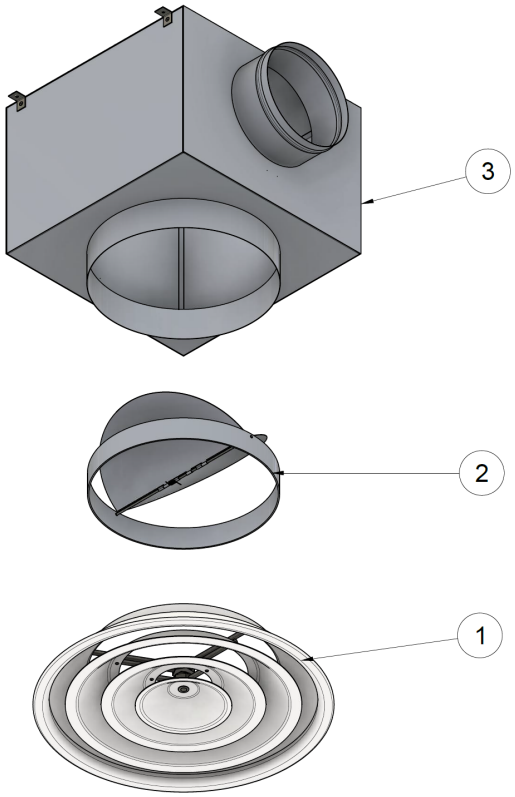
Other RAL colours are available on request.

Technical drawing



RCD-H	ØD [mm]	ØE [mm]	ØA [mm]	B [mm]	C [mm]
100	96	195	250	33	85
150	146	280	330	25	90
160	156	280	330	27	90
200	196	370	445	37	115
250	246	460	535	37	135
300	296	560	655	45	170
315	311	560	655	48	170
350	346	650	763	60	195
400	396	680	793	60	195
450	444	730	843	60	195
500	496	782	893	60	195
630	624	929	1045	55	210

Product specifications



1 - RCD-H Circular ceiling diffuser
2 - DAM-RCDH Control damper (optional)
3 - Plenum box (optional)

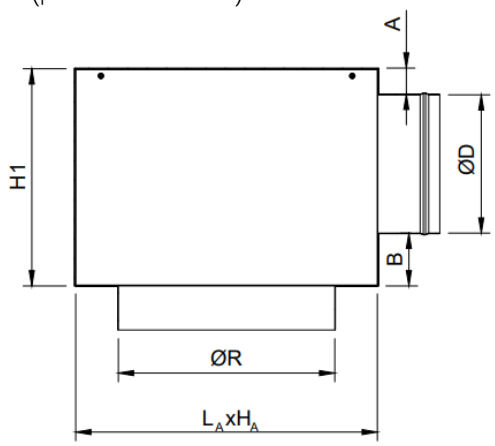
Accessories

RCD-H diffuser can be delivered with a connecting plenum to the circular duct, with a horizontal connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

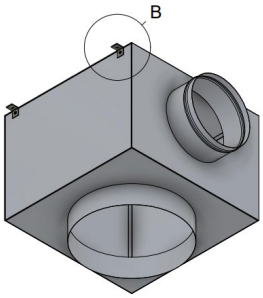
Optionally can be delivered with DAM-RCDH control damper .

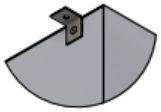
Adapter (plenum box)



L_A X H_A – depending on ØR
A, B, H1 – depending on demand and ØD
ØR – connection diameter RCD-H + 4 mm

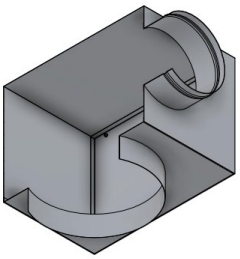
The adapter is made of galvanized steel sheet Z140 and is equipped with 4 lugs for suspension.



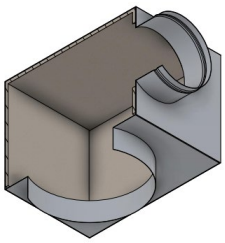


B - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.



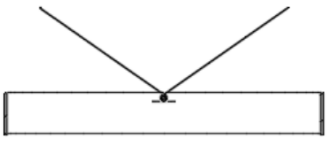
AN - Uninsulated adapter



AIZ - Insulated adapter

Control damper DAM-RCDH

DAM-RCDH can be used to adjust the air flow



Functional parameters

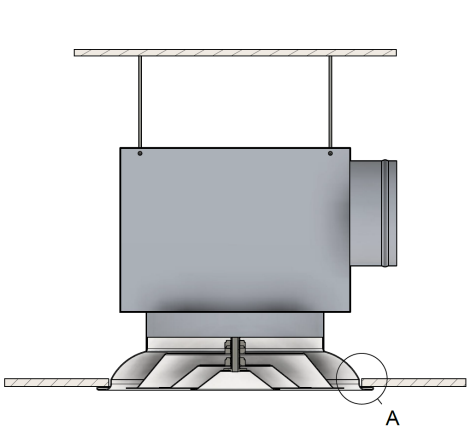
Air flow	Diameter	100	160	200	250	315	350	400	450	500	630
(m³/h)	Ak [m²]	0.0059	0.015	0.027	0.044	0.073	0.090	0.118	0.150	0.225	0.299
100	X [m]	1.0									
	NR [dB(A)]	35.0									
	Veff [m/s]	4.7									
	ΔPt [pa]	47.0									
150	X [m]	1.4									
	NR [dB(A)]	45.0									
	Veff [m/s]	7.1									
	ΔPt [pa]	94.0									
200	X [m]	1.9	1.4								
	NR [dB(A)]	58.0	25.0								
	Veff [m/s]	9.4	3.7								
	ΔPt [pa]	171.0	14.0								
250	X [m]		1.7	1.3							
	NR [dB(A)]		30.0	18.0							
	Veff [m/s]		4.6	2.6							
	ΔPt [pa]		20.5	6.8							
300	X [m]		2.1	1.5	1.3						
	NR [dB(A)]		36.0	23.0	15.0						
	Veff [m/s]		5.6	3.1	1.9						
	ΔPt [pa]		33.5	10.5	4.3						
400	X [m]		2.8	2.1	1.6	1.6					
	NR [dB(A)]		45.0	30.0	22.0	3.0					
	Veff [m/s]		7.4	4.1	2.5	1.5					
	ΔPt [pa]		55.0	17.5	7.7	4.2					
500	X [m]			2.6	2.1	1.9					
	NR [dB(A)]			36.0	27.0	20.0					
	Veff [m/s]			5.1	3.2	1.9					
	ΔPt [pa]			26.5	12.5	6.5					
600	X [m]			3.2	2.6	2.3	1.9				
	NR [dB(A)]			42.0	33.0	25.0	20.0				
	Veff [m/s]			6.2	3.8	2.3	1.9				
	ΔPt [pa]			38.0	17.0	10.0	5.5				
800	X [m]				3.5	3.5	2.6	2.3			
	NR [dB(A)]				41.0	34.0	25.0	20.0			
	Veff [m/s]				5.1	3.1	2.5	1.9			
	ΔPt [pa]				33.5	17.0	9.2	6.5			
1000	X [m]				4.5	3.8	3.4	3.0	2.7		
	NR [dB(A)]				50.0	40.0	34.0	28.0	22.0		
	Veff [m/s]				6.3	3.8	3.1	2.4	1.9		
	ΔPt [pa]				52.5	26.5	16.0	9.0	6.5		
1250	X [m]					4.6	4.1	3.8	3.3	3.1	
	NR [dB(A)]					47.0	42.0	35.0	26.0	24.0	
	Veff [m/s]					4.8	3.9	3.0	2.3	1.5	
	ΔPt [pa]					40.5	23.5	16.0	9.0	7.0	
1500	X [m]						5.2	4.5	4.0	3.6	
	NR [dB(A)]						47.0	41.0	35.0	29.0	
	Veff [m/s]						4.6	3.5	2.8	1.9	
	ΔPt [pa]						32.5	22.0	16.0	10.5	
1750	X [m]								4.8	4.2	3.5
	NR [dB(A)]								40.0	34.0	25.0
	Veff [m/s]								3.2	2.2	1.6
	ΔPt [pa]								20.0	14.5	7.0
2000	X [m]									4.8	4.1
	NR [dB(A)]									38.0	30.0
	Veff [m/s]									2.5	1.9
	ΔPt [pa]									19.5	8.5
2500	X [m]									5.8	5.1
	NR [dB(A)]									45.0	37.0
	Veff [m/s]									3.1	2.3
	ΔPt [pa]									29.5	14.5

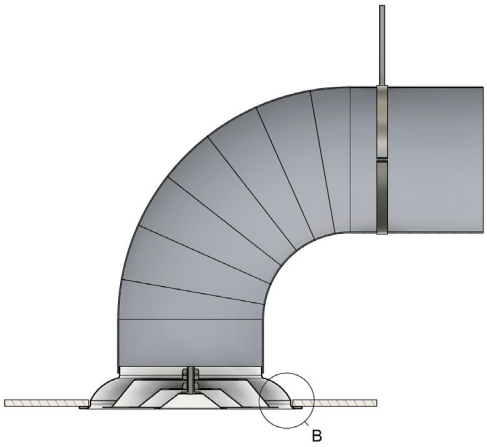
The legend
Ak [m²] - The free surface
X [m] - The length of the air jet at a speed of 0.25 m/s
Veff [m/s] - The effective air velocity
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

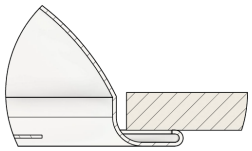
Installation

The diffuser can be installed suspended or in continuous ceiling. The fixing is done with screws in the diffuser connection.

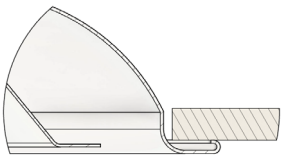
Installation in continuous ceiling





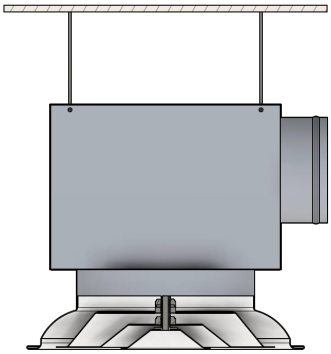


A



B

Suspended in the ceiling



Order code

Example on how to place an order

Type	Dimensions	Accessories	Finish
RCD-H			
	according to the table (D100÷D630)		
		AIZ - Insulated adapter	
		AN - Uninsulated adapter	
		DAM-RCDH - Control damper	
			RAL9016
			RAL.. - Other RAL colors on request

Air through perfection

Circular ceiling diffuser

RCD



ACP
Ceiling diffusers

www.acp.ro

Circular ceiling diffuser
RCD



Description

RCD is a circular ceiling diffuser with concentric rings used for introducing or evacuating the air.

The circular ceiling diffuser is used in installations with constant or variable air flow.

Technical specifications

Characteristics

The ceiling diffuser has a conical construction, a removable central core and is equipped with butterfly damper.

The ceiling diffuser is delivered with a bracket-type fastening system.

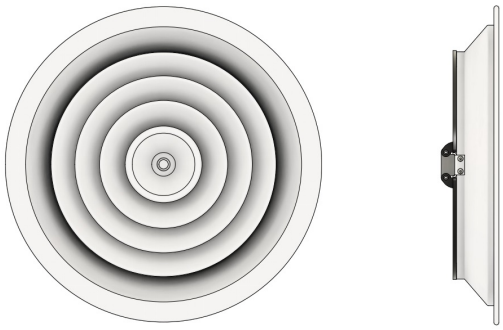
Dimensional range: Ø150, Ø200, Ø250, Ø300, Ø350.

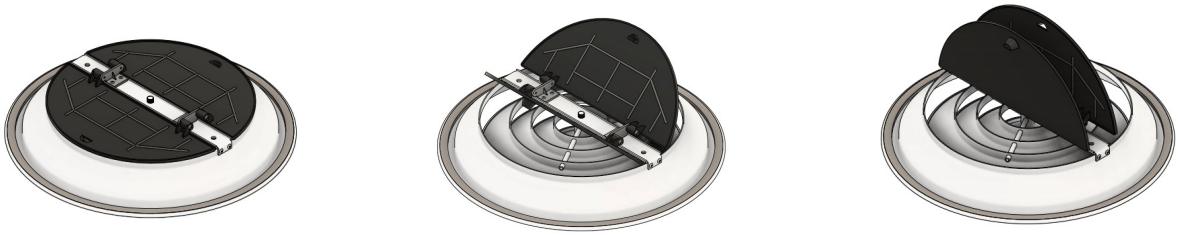
Materials

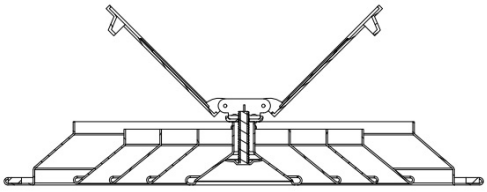
The product is made of aluminum with a glossy white RAL 9016 finish.

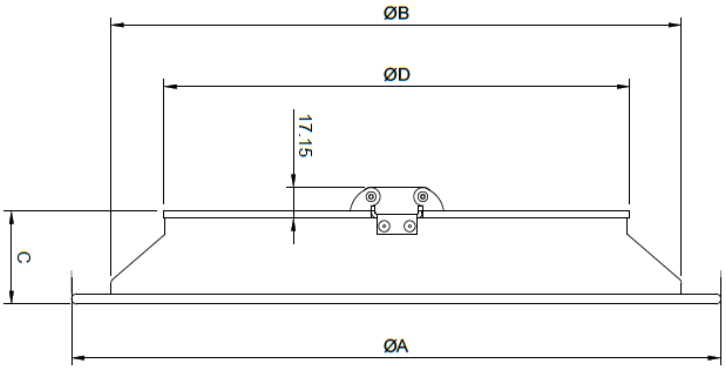
Other RAL colours are available on request.

Technical drawing



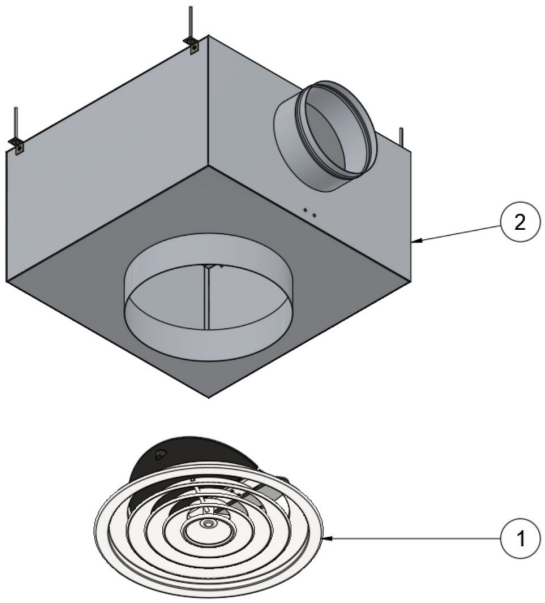






RCD	ØD	ØA	ØB	C
D150	147	257	214	54
D200	197	310	266	54
D250	246	357	317	54
D300	296	416	377	54
D350	347	470	427	54

Product specifications



1 - RCD Circular ceiling diffuser
2 - Plenum box (on request)

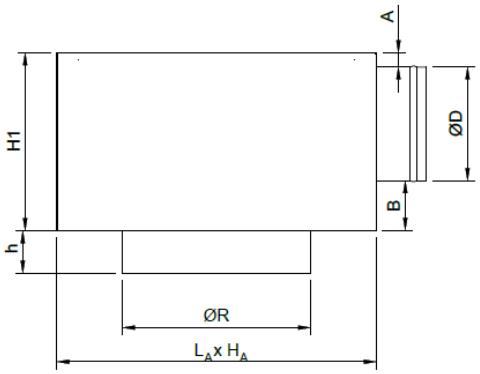
Accessories

The ceiling diffuser can be delivered with a connecting plenum to the circular duct, with a horizontal connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

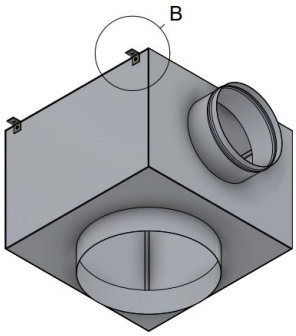
On request, the product can also be delivered with a connection (CR) for flexible duct.

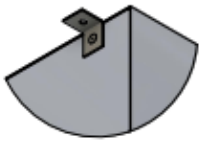
Adapter (plenum box)



L_A X H_A – depending on ØR
A, B, H1 – depending on request and ØD
ØR – connection diameter RCD + 10 mm
h = 40 mm

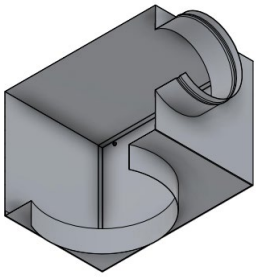
The adapter is made of galvanized steel sheet Z140 and is equipped with 4 lugs for suspension.



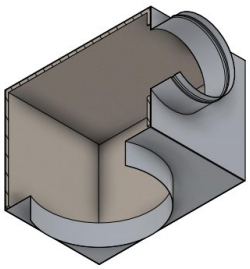


B - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.



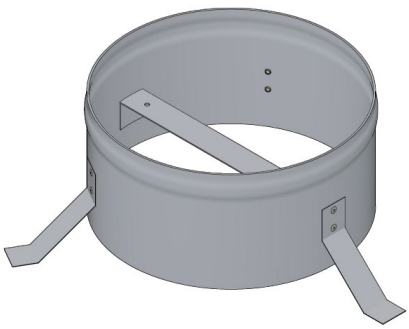
AN - Uninsulated adapter



AIZ - Insulated adapter

Connection for flexible duct (CR)

CR is made of galvanized steel sheet and is used as a connecting element between the circular ceiling diffuser and the flexible duct.



Functional parameters

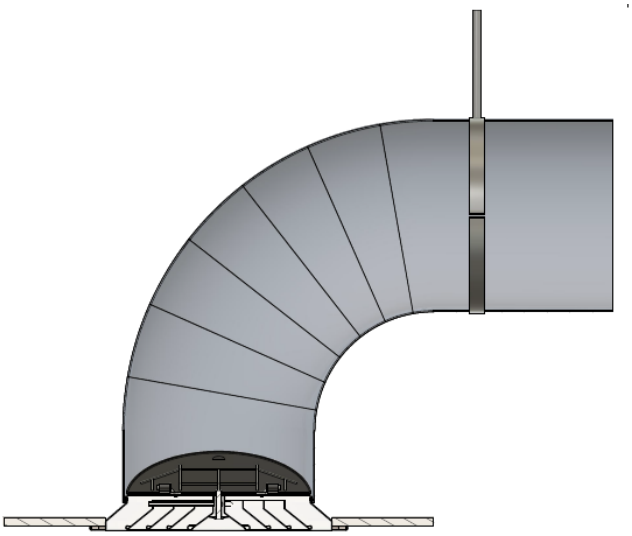
Air flow	Ø [mm]	150	200	250	300	350
(m³/h)	Ak [m²]	0.011	0.02	0.031	0.046	0.047
150	X [m]	1.8	1.3			
	NR [dB(A)]	22.0	8.0			
	Veff [m/s]	3.9	2.1			
	ΔPt [Pa]	1.0	6.0			
200	X [m]	2.3	1.8	1.4		
	NR [dB(A)]	27.0	14.0	7.0		
	Veff [m/s]	5.0	2.8	1.9		
	ΔPt [Pa]	22.0	7.8	5.0		
300	X [m]	3.4	2.6	2.1	1.7	
	NR [dB(A)]	41.0	23.0	13.0	8.0	
	Veff [m/s]	7.5	4.1	2.7	1.9	
	ΔPt [Pa]	50.0	15.0	7.2	4.3	
400	X [m]		3.4	2.7	2.3	1.9
	NR [dB(A)]		33.0	20.0	10.0	7.0
	Veff [m/s]		5.7	3.6	2.5	2.4
	ΔPt [Pa]		28.0	12.0	5.5	3.2
500	X [m]		4.3	3.5	2.8	2.0
	NR [dB(A)]		41.0	27.0	15.0	10.0
	Veff [m/s]		7.0	4.5	3.1	2.8
	ΔPt [Pa]		45.0	18.0	8.0	4.8
600	X [m]			4.1	3.3	2.8
	NR [dB(A)]			34.0	22.0	20.0
	Veff [m/s]			5.5	3.7	3.5
	ΔPt [Pa]			26.0	14.0	7.0
800	X [m]			5.5	4.6	3.5
	NR [dB(A)]			45.0	32.0	30.0
	Veff [m/s]			7.5	5.0	4.8
	ΔPt [Pa]			50.0	22.0	12.0
1000	X [m]				5.7	4.5
	NR [dB(A)]				40.0	37.0
	Veff [m/s]				6.2	6.0
	ΔPt [Pa]				35.0	20.0
1200	X [m]				6.7	5.4
	NR [dB(A)]				46.0	40.0
	Veff [m/s]				7.5	7.0
	ΔPt [Pa]				50.0	28.0
1400	X [m]					7.1
	NR [dB(A)]					50.0
	Veff [m/s]					10.2
	ΔPt [Pa]					39.2
1600	X [m]					7.8
	NR [dB(A)]					57.0
	Veff [m/s]					11.6
	ΔPt [Pa]					50.3

The legend
Ak [m²] - The free surface
X [m] - The length of the air jet at a speed of 0.25 m/s
NR [dB (A)] - Noise level without room attenuation
Veff [m/s] - The effective air velocity
ΔPt [Pa] - Pressure loss

Installation

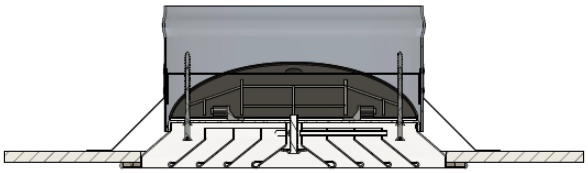
The ceiling diffuser is mounted in a false ceiling, at the end of the duct or suspended.

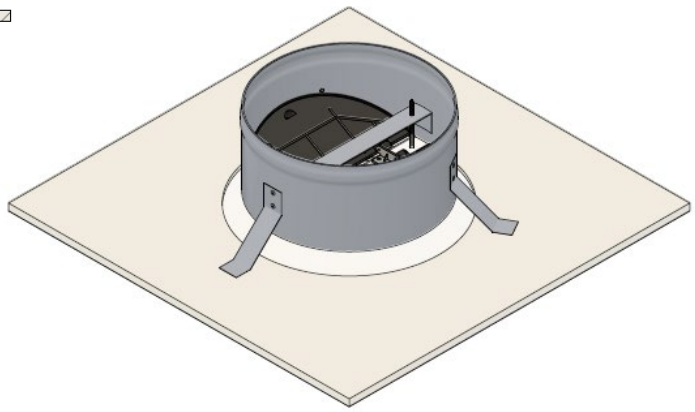
Rigid duct installation

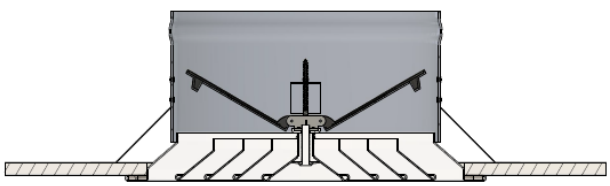


Flexible duct installation

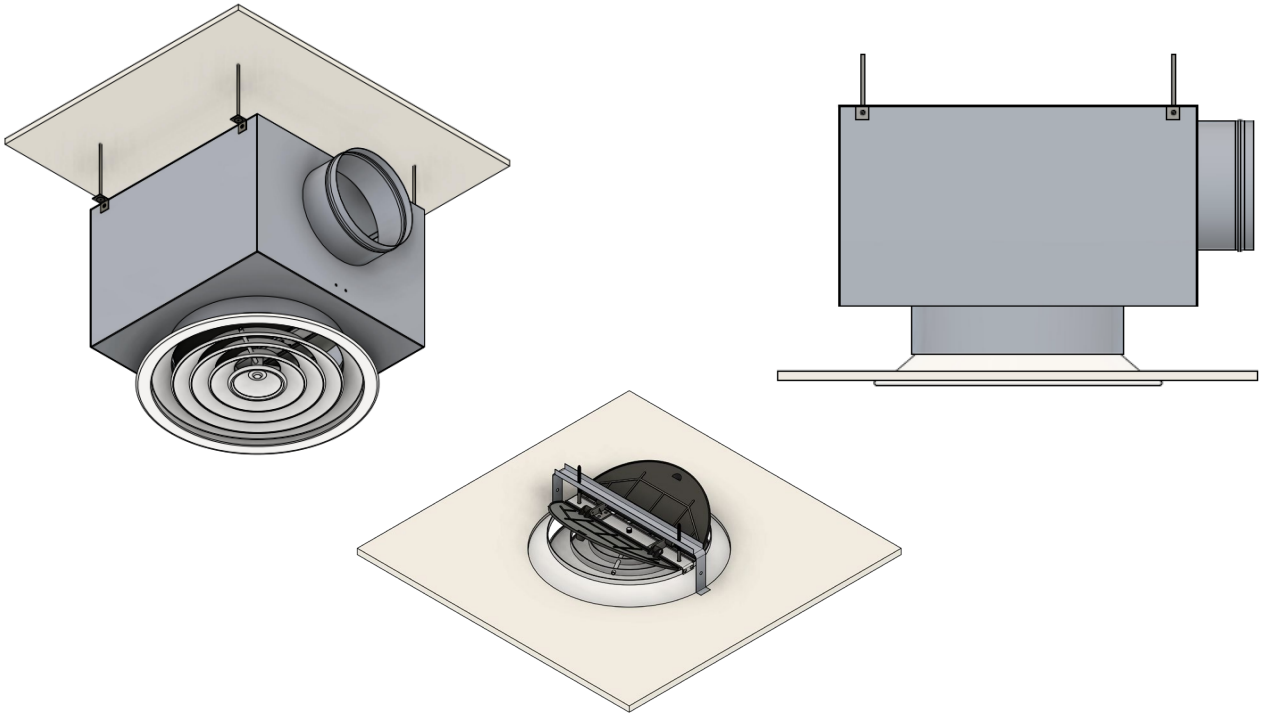
For installation in flexible duct, it is recommended to use a connection (CR) between the circular ceiling diffuser and the duct. The connection element is ordered separately.







Suspended in the ceiling



Order code

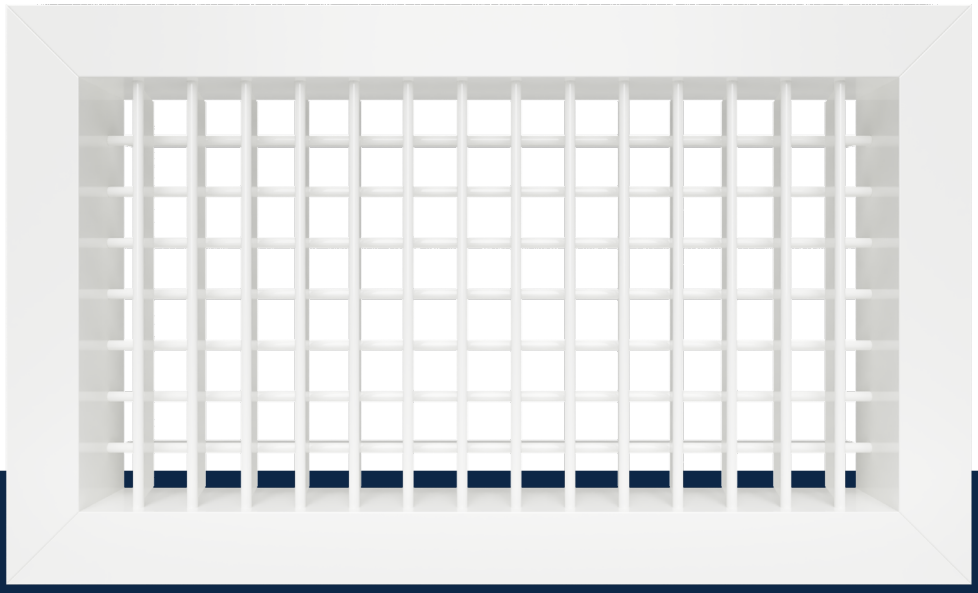
Example on how to place an order

Type	Dimensions	Accessories	Finish
RCD			
	Ø150 ... Ø350 mm		
		AIZ - Insulated adapter	
		AN - Uninsulated adapter	
		CR - Duct connection	
			RAL 9016
			RAL.. - Other RAL colors on request

Air through perfection

Double deflection grille

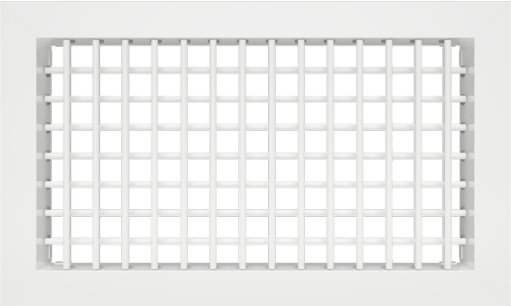
DD



ACP
Grilles

www.acp.ro

Double deflection grille
DD



Description

DD is an aluminum double deflection grille with two rows of individually adjustable blades.

The grille is used for introducing or evacuating air and is intended for mounting on a ceiling, wall or rectangular duct.

Technical specifications

Characteristics

The grille is provided with two rows of individually adjustable blades that allow the air jet to be directed in the desired direction.

The front blades are perpendicular to length and those in the background are parallel to the length of the grille.

The grille with dimensions ≥ 500 mm is provided with intermediate elements for stiffening.

As standard, the grille is manufactured with holes for screw mounting, except for the size 595x595 mm (external dimensions) for the false ceiling 600x600 mm.

The product is delivered with fixing screws.

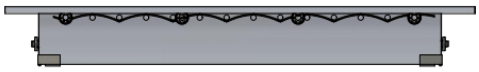
If, on request, a mounting frame is required, then the grille is accessorized with fixing clips.

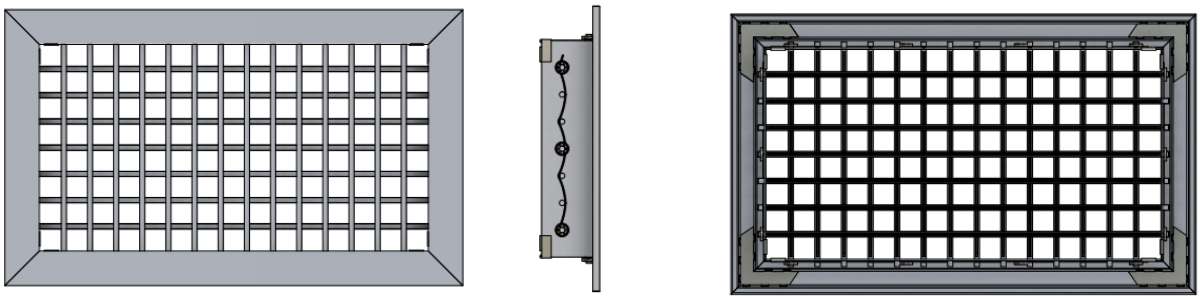
Materials

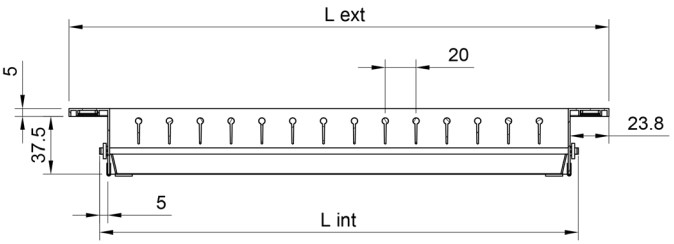
The grille is made of extruded aluminum electrostatic field painted in glossy white RAL 9016.

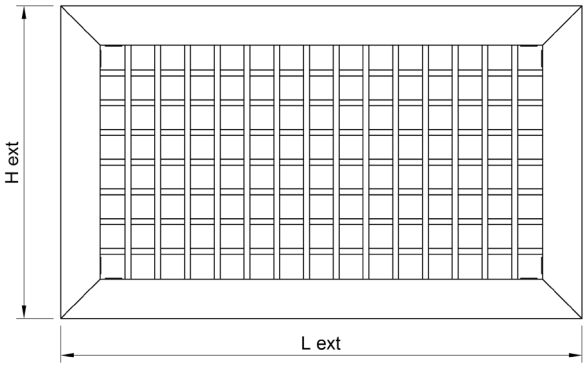
On request, the grille can be made of natural anodized aluminum profiles or can be painted in other shades from the RAL palette.

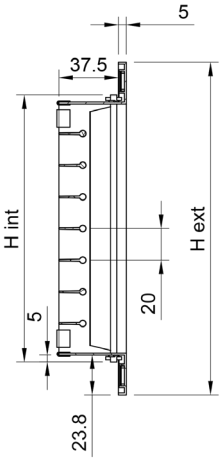
Technical drawing





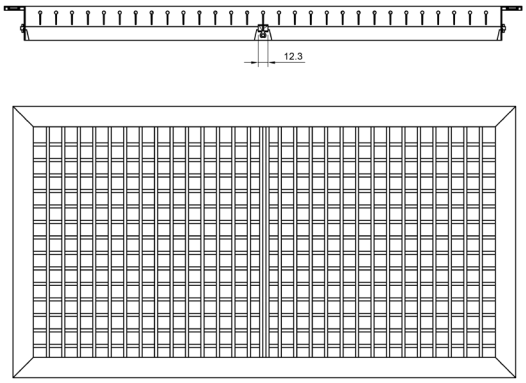




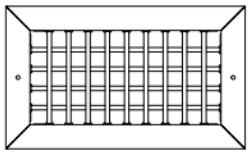


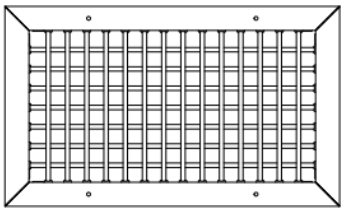
Product specifications

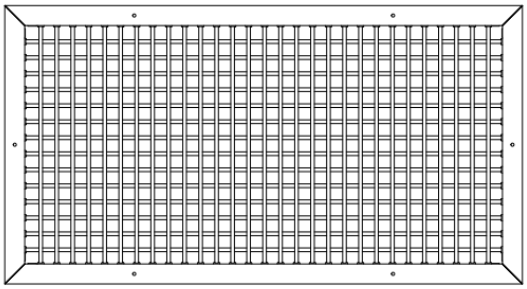
Grilles with dimensions ≥ 500 mm are made with intermediate elements for stiffening (blades are split in two or more segments).



The grille is made standard with mounting holes positioned on the product frame. The number of holes and their position are made according to the size of the product, according to the pictures and table.







L x H [mm]	Number of holes																			
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	2	2	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
100	2	2	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
150	-	2	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
200	-	2	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
300	-	-	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
400	-	-	-	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
500	-	-	-	-	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
600	-	-	-	-	-	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
700	-	-	-	-	-	-	4	4	4	4	4	8	8	8	8	8	8	10	10	10
800	-	-	-	-	-	-	-	6	6	6	6	8	8	8	8	8	8	10	10	10
900	-	-	-	-	-	-	-	-	6	6	6	8	8	8	8	8	8	10	10	10
1000	-	-	-	-	-	-	-	-	-	6	6	8	8	8	8	8	8	10	10	10
1100	-	-	-	-	-	-	-	-	-	-	8	8	8	8	8	8	8	10	10	10
1200	-	-	-	-	-	-	-	-	-	-	-	8	8	8	8	8	8	10	10	10
1300	-	-	-	-	-	-	-	-	-	-	-	-	8	8	8	8	8	10	10	10
1400	-	-	-	-	-	-	-	-	-	-	-	-	-	10	10	10	10	10	10	10
1500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	10	10	10	10	10
1600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	10	10	10	10
1700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	16	16	16
1800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	16	16
1900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	16
2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16

Accessories

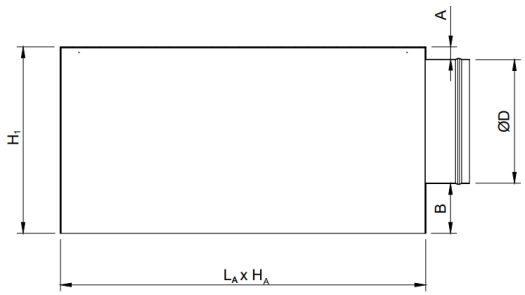
The grille can be accessorized with plenum box (adapter), flow control damper or mounting frame.

Adapter (plenum box)

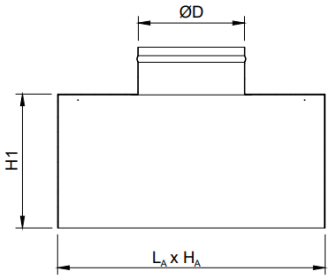
The grille can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

Horizontal connection
(side/lateral exit)



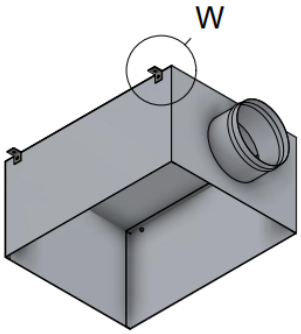
Vertical connection
(opposite exit)

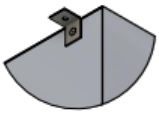


* For fixing with screws: L_A X H_A = Lint x Hint grille + 6 mm
* For fixing with mounting frame: L_A X H_A = Lc x Hc mounting frame + 4 mm

A, B, H1 – depending on demand and ØD

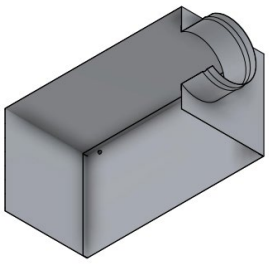
The adapter is made of Z140 galvanized steel sheet and is equipped with suspension lugs.



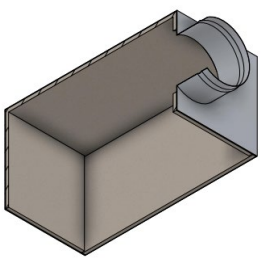


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.

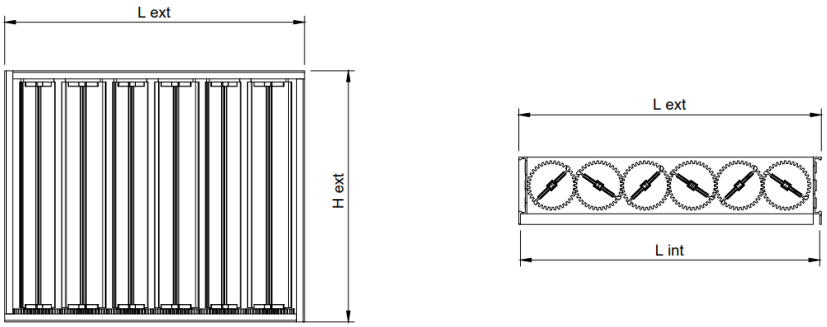


AN - Uninsulated adapter



AIZ - Insulated adapter

Opposed blade damper (OBD)

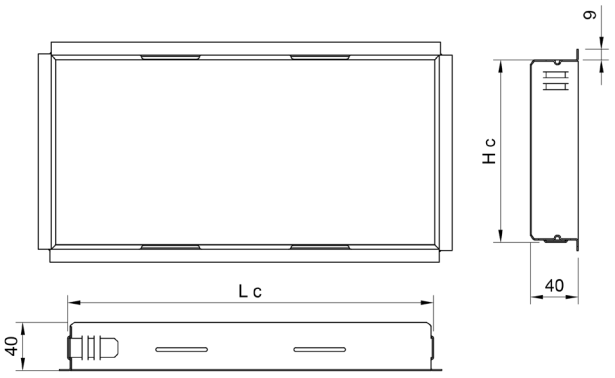


The damper is provided with opposable blades and gears, it is mounted on the grille connection for adjusting the air flow. The large dimensions are made in several pieces according to the table.

L x H [mm]	Opposed blade damper																			
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
100	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
150	-	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
200	-	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
300	-	-	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
400	-	-	-	1	1	1	2	2	2	2	2	2	3	3	3	3	3	3	4	4
500	-	-	-	-	1	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4
600	-	-	-	-	-	2	2	4	4	4	4	4	4	4	4	4	5	5	5	5

Mounting frame (CC)

The mounting frame is used when a hidden, easy and fast mounting of the grille is desired. Depending on the size required, it is made and delivered in one or more pieces.

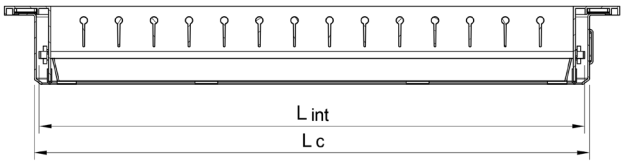


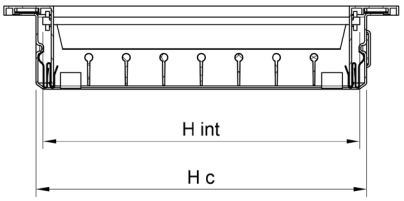
L x H [mm]	Mounting frame																			
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
100	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
150	-	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
200	-	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
300	-	-	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
400	-	-	-	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
500	-	-	-	-	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
600	-	-	-	-	-	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2

For installation with mounting frame, the grille is equipped with clips that allow quick and easy clamping. The number of clips with which the grille is equipped depends on the size of the product.

L x H	Number of mounting clips																			
[mm]	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	2	2	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8	8	8
100	2	2	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8	8	8
150	-	2	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8	8	8
200	-	2	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8	8	8
300	-	-	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8	8	8
400	-	-	-	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8	8	8
500	-	-	-	-	6	6	6	6	6	6	6	6	8	8	8	8	10	10	10	10
600	-	-	-	-	-	8	8	8	8	8	8	6	8	8	8	8	10	10	10	10

Example: DD + CC





Lc x Hc = Lint x Hint grille + 8 mm

Functional parameters

Air flow [m³/h]	L x H	200 x 100	250 x 100	300 x 100	250 x 150	400 x 100	300 x 150	500 x 100	400 x 150	500 x 150	400 x 200	600 x 150	500 x 200	600 x 200	800 x 200	600 x 300	800 x 300	1000 x 300
	Ak [m²]	0.0094	0.012	0.0147	0.0196	0.0198	0.024	0.025	0.0323	0.0407	0.0439	0.0494	0.0553	0.0671	0.0882	0.1053	0.1385	0.1749
160	Veff[m/s]	4.73	3.70	3.02	2.27													
	ΔPt [Pa]	18.00	12.00	7.50	4.50													
	X [m]	2.85	2.60	2.25	1.90													
	NR [dB(A)]	20.00	18.00	15.00	10.00													
200	Veffm/s]	5.91	4.63	3.78	2.83	2.81	2.31											
	ΔPt [Pa]	29.50	18.00	12.00	6.50	6.50	4.40											
	X [m]	3.50	3.10	2.80	2.40	2.42	2.25											
	NR [dB(A)]	24.00	20.00	18.00	14.00	14.00	12.00											
250	Veffm/s]	7.39	5.79	4.72	3.54	3.51	2.9											
	ΔPt [Pa]	44.00	27.00	19.00	11.00	11.00	8.0											
	X [m]	4.40	4.10	3.55	3.00	2.95	2.8											
	NR [dB(A)]	29.00	26.00	20.00	16.00	15.00	13.00											
300	Veffm/s]	8.87	6.94	5.67	4.25	4.21	3.47	3.33	2.58									
	ΔPt [Pa]	64.50	38.50	26.00	14.50	14.00	10.50	9.50	5.20									
	X [m]	5.25	4.70	4.40	3.75	3.72	3.40	3.35	2.85									
	NR [dB(A)]	38.00	25.00	23.00	19.00	18.00	16.00	15.00	10.00									
350	Veffm/s]	10.34	8.10	6.61	4.96	4.91	4.05	3.89	3.01	2.39								
	ΔPt [Pa]	86.00	53.00	35.50	20.00	20.00	14.00	12.50	7.50	5.50								
	X [m]	6.50	5.70	5.10	4.30	4.35	4.00	3.80	3.30	3.00								
	NR [dB(A)]	45.00	32.00	28.00	24.00	24.00	18.00	16.00	14.00	11.00								
400	Veffm/s]		9.26	7.56	5.67	5.61	4.63	4.44	3.44	2.73	2.53	2.25						
	ΔPt [Pa]		68.00	46.00	26.00	26.00	18.00	17.00	9.50	6.50	5.50	4.20						
	X [m]		6.30	5.70	4.90	5.00	4.45	4.40	3.80	3.50	3.35	3.20						
	NR [dB(A)]		37.00	32.00	26.00	25.00	20.00	19.00	16.00	13.00	12.00	11.00						
500	Veffm/s]			9.45	7.09	7.01	5.79	5.56	4.30	3.41	3.16	2.81	2.51					
	ΔPt [Pa]			72.00	41.00	39.50	28.00	25.00	15.50	9.50	8.50	6.50	5.20					
	X [m]			7.10	6.25	6.10	5.60	5.50	4.85	4.40	4.20	3.95	3.60					
	NR [dB(A)]			41.00	32.00	32.00	24.00	22.00	20.00	17.00	17.00	14.00	12.00					
600	Veffm/s]			11.34	8.50	8.42	6.94	6.67	5.16	4.10	3.80	3.37	3.01	2.48	1.89			
	ΔPt [Pa]			100.00	58.00	56.00	38.50	35.00	22.00	14.00	12.00	10.00	7.50	6.00	3.50			
	X [m]			8.60	7.50	7.50	6.70	6.65	5.80	5.10	4.90	4.60	4.50	4.00	3.55			
	NR [dB(A)]			46.00	39.00	38.00	31.00	30.00	24.00	20.00	18.00	16.00	14.00	12.00	8.00			
700	Veffm/s]					9.82	8.10	7.78	6.02	4.78	4.43	3.94	3.52	2.90	2.20	1.85		
	ΔPt [Pa]					77.00	53.00	49.00	30.00	19.00	15.50	12.00	11.00	8.00	4.20	4.00		
	X [m]					8.60	7.90	7.70	6.70	6.05	5.70	5.30	5.10	4.60	4.05	3.70		
	NR [dB(A)]					44.00	37.00	34.00	29.00	25.00	22.00	18.00	17.00	13.00	11.00	7.00		
800	Veffm/s]					11.22	9.26	8.89	6.88	5.46	5.06	4.50	4.02	3.31	2.52	2.11		
	ΔPt [Pa]					100.00	68.00	64.00	38.00	24.00	21.00	16.00	14.00	10.00	5.50	4.80		
	X [m]					9.80	9.00	8.80	7.70	7.00	6.60	6.20	6.00	5.30	4.60	4.30		
	NR [dB(A)]					49.00	42.00	39.00	34.00	29.00	25.00	22.00	18.00	15.00	12.00	9.00		
900	Veffm/s]						10.42	10.00	7.74	6.14	5.69	5.06	4.52	3.73	2.83	2.37	1.81	
	ΔPt [Pa]						87.00	80.00	47.00	31.00	28.00	20.00	18.00	11.00	6.00	5.00	3.50	
	X [m]						10.00	9.00	8.70	7.80	7.50	7.10	6.60	6.00	5.25	4.80	4.30	
	NR [dB(A)]						45.00	44.00	38.00	34.00	31.00	25.00	22.00	18.00	15.00	12.00	7.00	
1000	Veffm/s]							11.11	8.60	6.83	6.33	5.62	5.02	4.14	3.15	2.64	2.01	1.59
	ΔPt [Pa]							100.00	59.00	38.00	33.00	26.00	20.00	15.00	9.00	5.20	3.50	2.50
	X [m]							11.00	9.70	8.70	8.30	7.80	7.50	6.70	5.80	5.40	4.60	4.20
	NR [dB(A)]							47.00	42.00	38.00	34.00	30.00	26.00	20.00	17.00	15.00	12.00	6.00
1200	Veffm/s]								10.32	8.19	7.59	6.75	6.03	4.97	3.78	3.17	2.41	1.91
	ΔPt [Pa]								86.00	55.00	46.00	38.00	30.00	19.00	13.00	9.00	5.50	3.50
	X [m]								11.50	10.40	10.10	9.35	8.90	8.10	7.00	6.35	5.70	5.00
	NR [dB(A)]								48.00	44.00	41.00	36.00	32.00	22.00	19.00	17.00	13.00	8.00
1400	Veffm/s]									9.56	8.86	7.87	7.03	5.80	4.41	3.69	2.81	2.22
	ΔPt [Pa]									74.00	63.00	49.00	41.00	28.00	15.00	13.00	7.00	4.00
	X [m]									12.00	11.60	11.10	10.30	9.40	8.30	7.50	6.50	5.90
	NR [dB(A)]									50.00	47.00	42.00	37.00	27.00	23.00	19.00	15.00	12.00
1800	Veffm/s]											10.12	9.04	7.45	5.67	4.75	3.61	2.86
	ΔPt [Pa]											82.00	67.00	44.00	25.00	19.00	10.00	6.50
	X [m]											14.00	13.30	12.20	10.50	9.70	8.50	7.55
	NR [dB(A)]											52.00	48.00	36.00	31.00	26.00	19.00	15.00
2000	Veffm/s]												10.05	8.28	6.30	5.28	4.01	3.18
	ΔPt [Pa]												82.00	54.00	32.00	23.00	14.00	8.00
	X [m]												14.80	13.50	11.60	10.80	9.60	8.30
	NR [dB(A)]												52.00	40.00	33.00	24.00	23.00	18.00
2500	Veffm/s]													10.35	7.87	6.59	5.01	3.97
	ΔPt [Pa]													86.00	50.00	34.00	22.00	12.00
	X [m]													16.80	14.70	13.30	11.80	10.40
	NR [dB(A)]													48.00	40.00	33.00	28.00	27.00
3000	Veffm/s]														9.45	7.91	6.02	4.76
	ΔPt [Pa]														72.00	50.00	30.00	18.00
	X [m]														17.60	16.20	14.00	12.60
	NR [dB(A)]														47.00	40.00	30.00	28.00
3500	Veffm/s]															9.23	7.02	5.56
	ΔPt [Pa]															69.00	40.00	24.00
	X [m]															18.90	16.30	14.70
	NR [dB(A)]															47.00	34.00	30.00
4000	Veff[m/s]																8.02	6.35
	ΔPt [Pa]																52.00	34.00
	X [m]																18.70	16.80
	NR [dB(A)]																35.00	33.00

The legend
Ak [m²] - The free surface
Veff [m/s] - The effective velocity of air in the grille
ΔPt [Pa] - Pressure loss
X [m] - The length of the air jet at a speed of 0.25 m/s
NR [dB (A)] - Noise level without room attenuation
The data presented is for 100% open damper

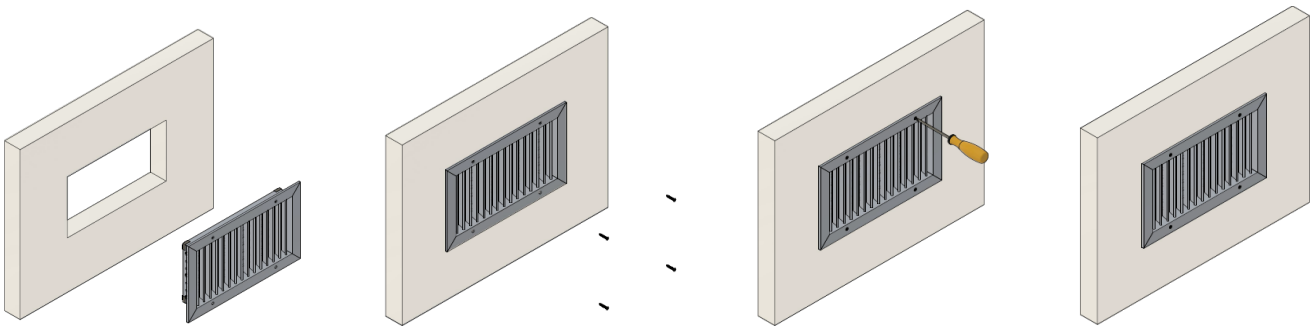
Installation

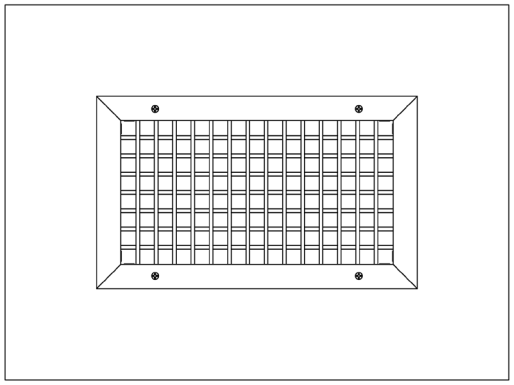
As standard the grille is mounted by means of screws.

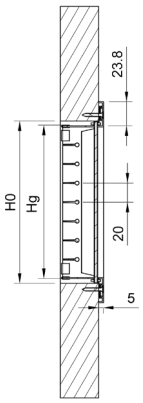
Optionally, for a hidden and easy assembly, a mounting frame can be used. The installation of the grille in the mounting frame is done by clamping.

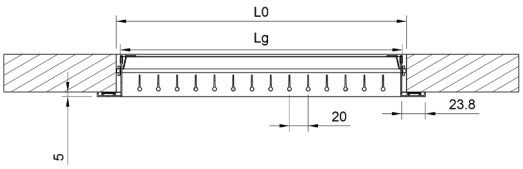
The grille with dimensions 595x595 mm (LxHext) is placed on the profile of the false suspended ceiling with size 600x600 mm (the product is made without holes).

Installation in wall or continuous ceiling with screws

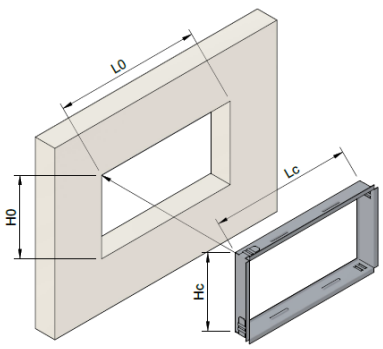


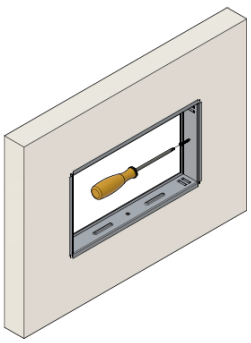


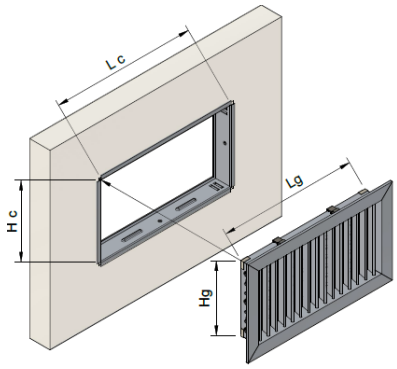


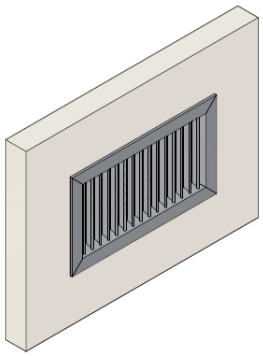


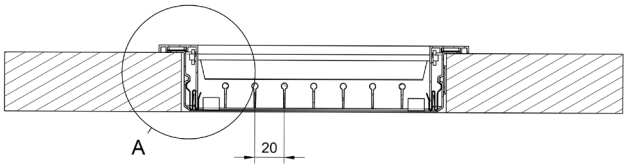
Installation in wall or continuous ceiling with mounting frame

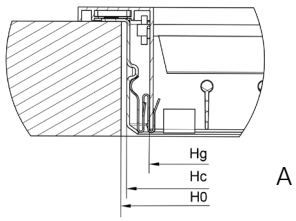






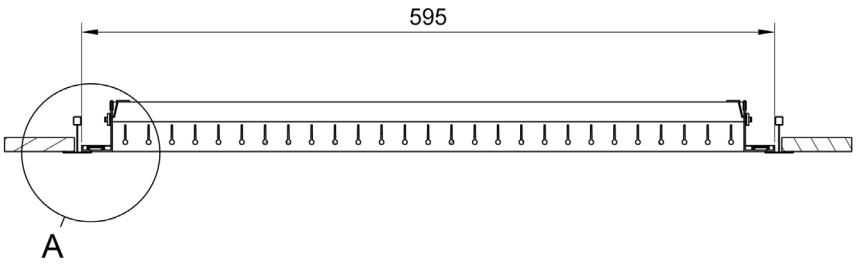


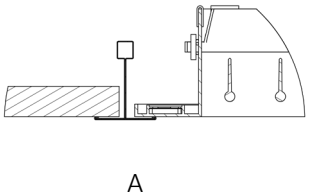




Installation in T-bar suspended ceiling

DD 595X595 mm (external size)





Order code

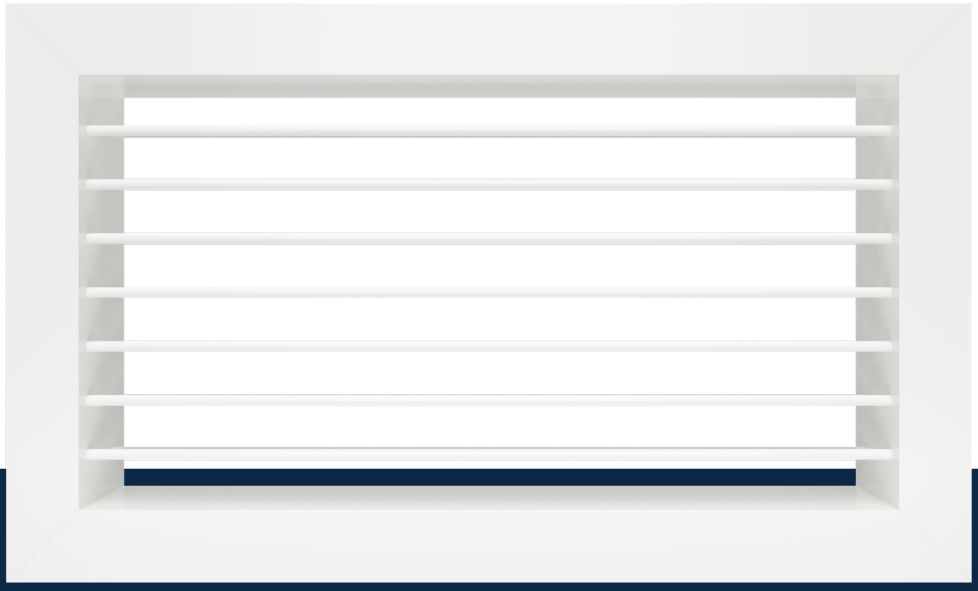
Example on how to place an order

Type	Dimensions	Accessories	Mounting	Finish
DD				
On request				
OBD - Control damper				
AIZ - Insulated adapter				
AN - Uninsulated adapter				
Screws (standard)				
CC - Mounting frame (optional)				
RAL9016				
RAL..- Other RAL colors on request				
EL - Natural anodized				

Air through perfection

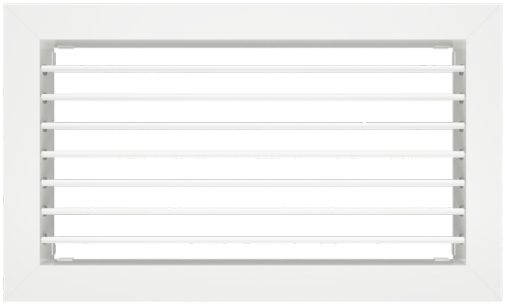
Return grille

DD-I



ACP
Grilles

Return grille
DD-1



Description

DD-1 is an aluminum grille with individually adjustable blades.

The DD-1 grille is designed for wall, ceiling or rectangular duct mounting and can be used for introduction or evacuation of air.

Technical specifications

Characteristics

The grille is provided with a row of individually adjustable blades, parallel to the "L" (length) that allow the direction of the air jet.

For lengths ≥ 500 mm, the grille is provided with intermediate elements for stiffening.

As standard, the grille is manufactured with holes for screw mounting, except for the size 595x595 mm (external dimensions) for the false ceiling 600x600 mm.

The product is delivered with fixing screws.

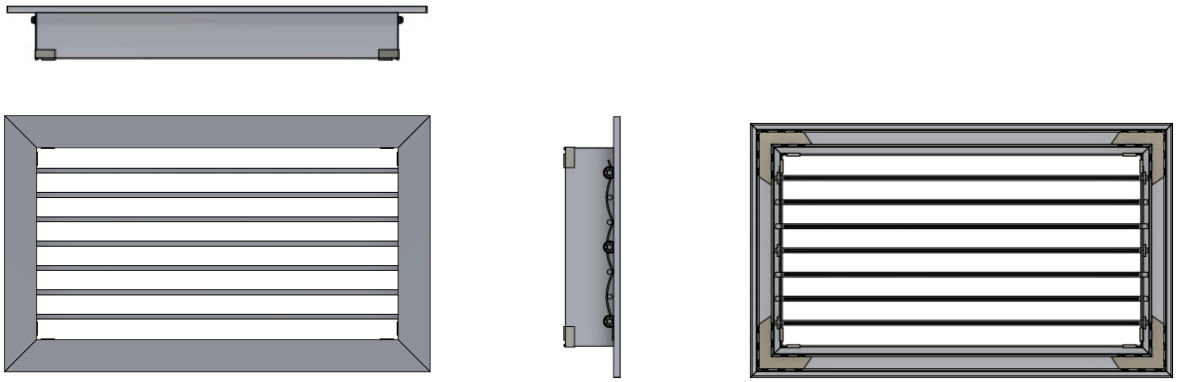
If, on request, a mounting frame is required, then the grille is accessorized with fixing clips.

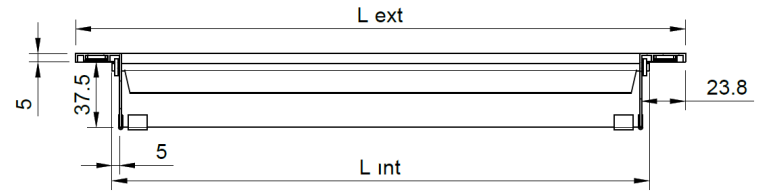
Materials

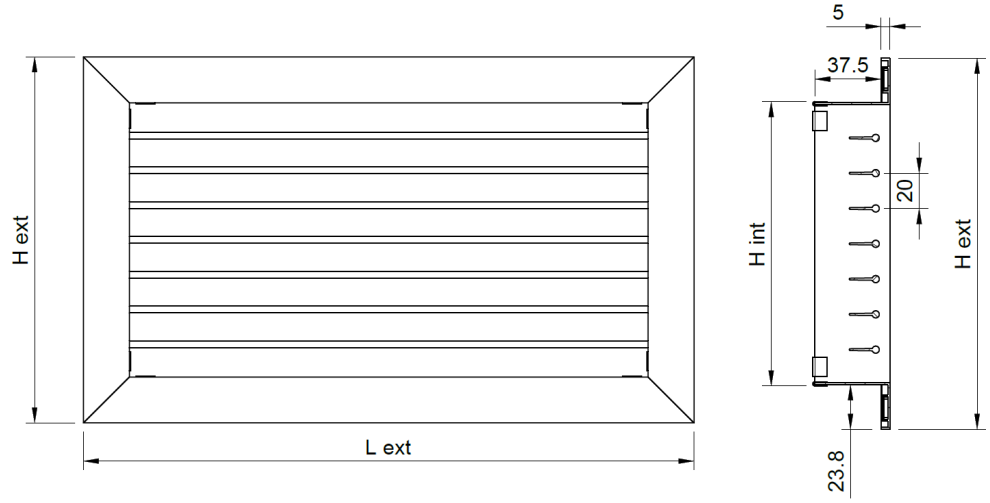
The grille is made of extruded aluminum electrostatic field painted in glossy white RAL 9016.

On request, the grille can be made of natural anodized aluminum profiles or can be painted in other shades from the RAL palette.

Technical drawing

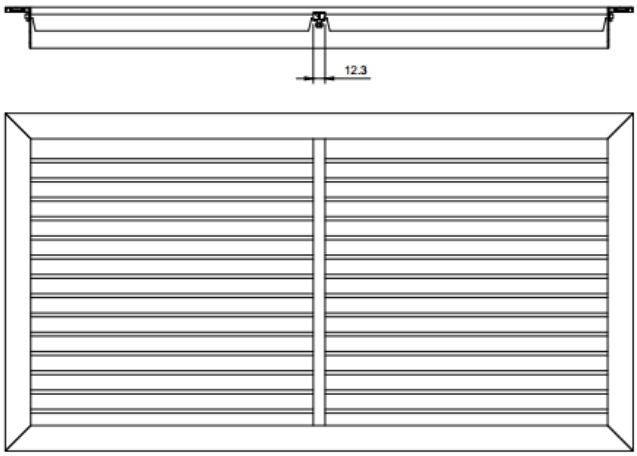




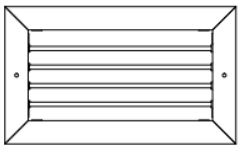


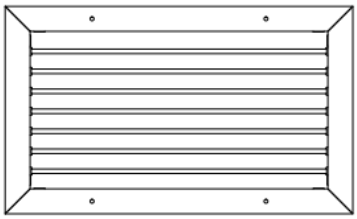
Product specifications

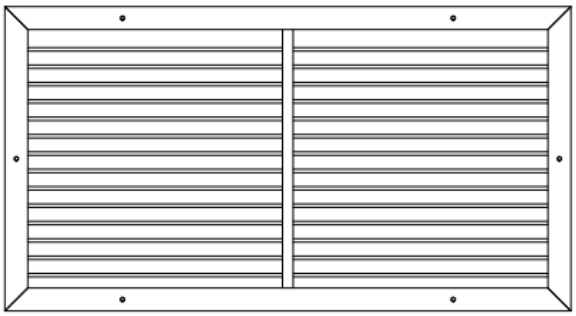
Grilles with dimensions ≥ 500 mm are made with intermediate elements for stiffening (blades are split in two or more segments).



The grille is made standard with mounting holes positioned on the product frame. The number of holes and their position are made according to the size of the product, according to the pictures and table.







L x H [mm]	Number of holes																			
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	2	2	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
100	2	2	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
150	-	2	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
200	-	2	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
300	-	-	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
400	-	-	-	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
500	-	-	-	-	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
600	-	-	-	-	-	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8

Accessories

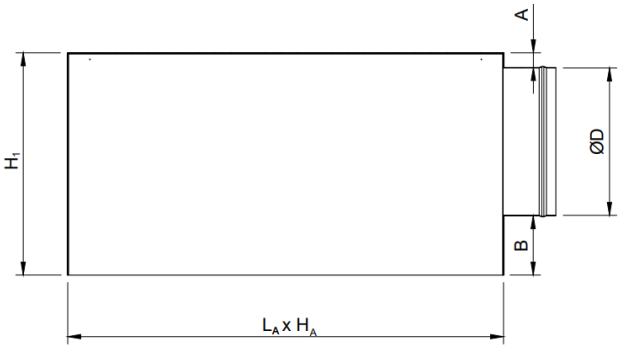
The grille can be accessorized with plenum box (adapter), opposed blade damper, mounting frame or G4 air filter.

Adapter (plenum box)

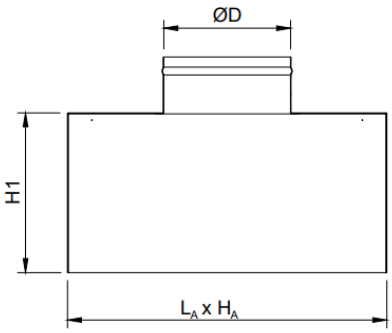
The grille can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

Horizontal connection
(side/lateral exit)

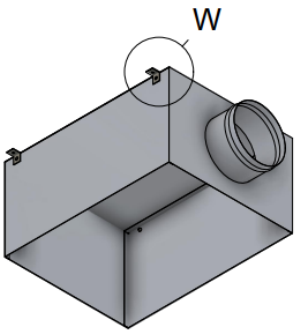


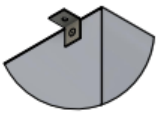
Vertical connection
(opposite exit)



* For fixing with screws: L_A X H_A = Lint x Hint grille + 6 mm
* For fixing with mounting frame: L_A X H_A = Lc x Hc mounting frame + 4 mm
A, B, H1 – depending on demand and ØD

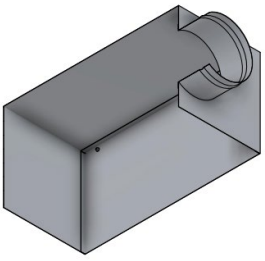
The adapter is made of Z140 galvanized steel sheet and is equipped with suspension lugs.



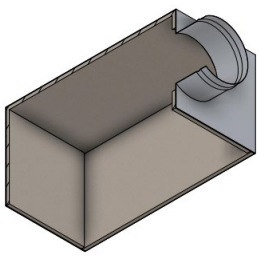


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.

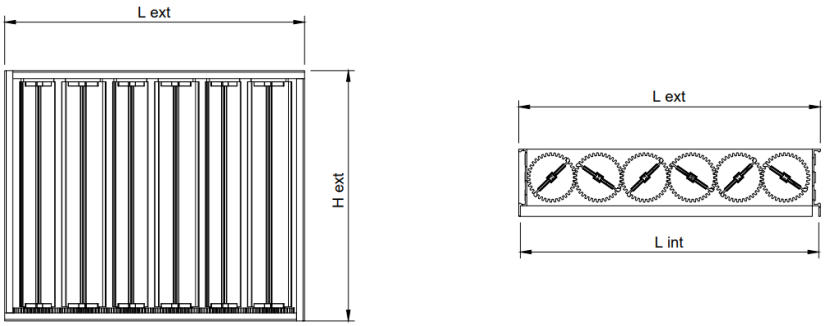


AN - Uninsulated adapter



AIZ - Insulated adapter

Opposed blade damper (OBD)

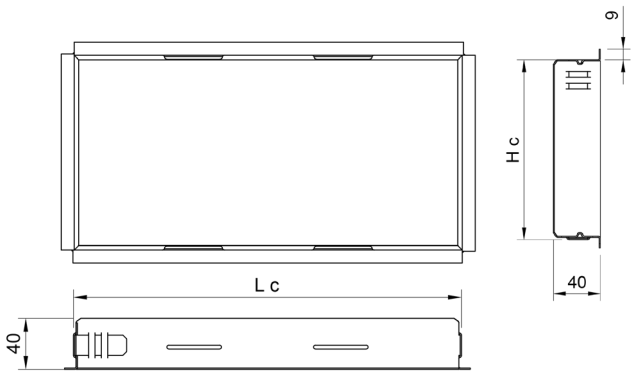


The damper is provided with opposable blades and gears, it is mounted on the grille connection for adjusting the air flow. The large dimensions are made in several pieces according to the table.

L x H	Opposed blade damper																			
[mm]	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
100	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
150	-	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
200	-	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
300	-	-	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
400	-	-	-	1	1	1	2	2	2	2	2	2	3	3	3	3	3	3	4	4
500	-	-	-	-	1	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4
600	-	-	-	-	-	2	2	4	4	4	4	4	4	4	4	4	5	5	5	5

Mounting frame (CC)

The mounting frame is used when a hidden, easy and fast installation of the grille is desired. Depending on the size required, it is made and delivered in one or more pieces.

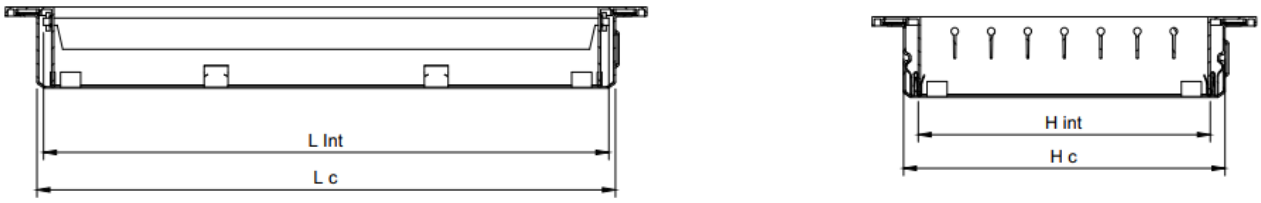


L x H	Mounting frame																			
[mm]	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
100	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
150	-	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
200	-	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
300	-	-	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
400	-	-	-	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
500	-	-	-	-	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
600	-	-	-	-	-	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2

For installation with mounting frame, the grille is equipped with clips that allow quick and easy clamping. The number of clips with which the grille is equipped depends on the size of the product.

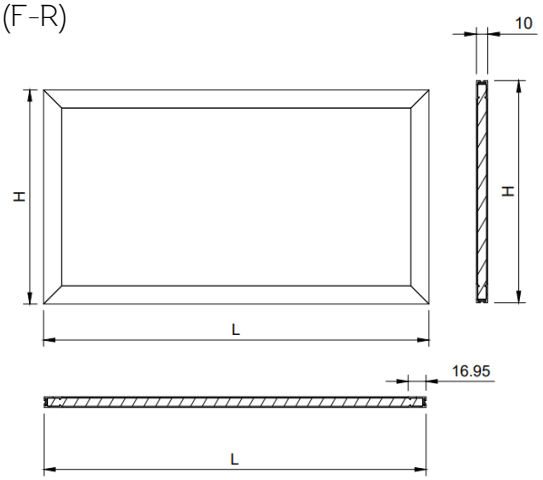
L x H [mm]	Number of mounting clips																			
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	2	2	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8	8	8
100	2	2	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8	8	8
150	-	2	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8	8	8
200	-	2	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8	8	8
300	-	-	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8	8	8
400	-	-	-	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8	8	8
500	-	-	-	-	6	6	6	6	6	6	6	6	8	8	8	8	10	10	10	10
600	-	-	-	-	-	8	8	8	8	8	8	6	8	8	8	8	10	10	10	10

Example : DD-1 + CC



Lc = Lint grille + 8 mm
Hc = Hint grille + 18 mm

Air filter G4 with frame (F-R)



G4 air filter with aluminum frame, used for air filtration and mounting on the grille connection. The large dimensions are made in several pieces.

L x H [mm]	Air filter																			
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
150	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
200	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
300	-	-	1	1	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3
400	-	-	-	1	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3
500	-	-	-	-	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3
600	-	-	-	-	-	1	2	2	2	2	2	2	2	3	2	3	3	3	3	4

Functional parameters

Air flow [m³/h]	L x H [mm]	200 x 100	250 x 100	300 x 100	250 x 150	400 x 100	300 x 150	500 x 100	400 x 150	500 x 150	400 x 200	600 x 150	500 x 200	600 x 200	800 x 200	600 x 300	800 x 300	1000 x 300
	Ak [m²]	0.0117	0.0149	0.0182	0.0243	0.0246	0.0298	0.0310	0.0401	0.0505	0.0544	0.0613	0.0686	0.0832	0.1094	0.1306	0.1717	0.2169
160	Veff[m/s]	3.81	2.99	2.44	1.83													
	ΔPt [Pa]	10.62	7.08	4.42	2.65													
	X [m]	2.56	2.34	2.02	1.71													
	NR [dB(A)]	16.20	14.58	12.15	8.10													
200	Veffm/s]	4.77	3.73	3.05	2.29	2.26	1.87											
	ΔPt [Pa]	17.40	10.62	7.08	3.83	3.83	2.60											
	X [m]	3.15	2.79	2.52	2.16	2.18	2.03											
	NR [dB(A)]	19.44	16.20	14.58	11.34	11.34	9.72											
250	Veffm/s]	5.96	4.67	3.81	2.86	2.83	2.3											
	ΔPt [Pa]	25.96	15.93	11.21	6.49	6.49	4.7											
	X [m]	3.96	3.69	3.19	2.70	2.66	2.5											
	NR [dB(A)]	23.49	21.06	16.20	12.96	12.15	10.53											
300	Veffm/s]	7.15	5.60	4.57	3.43	3.39	2.80	2.69	2.08									
	ΔPt [Pa]	38.05	22.71	15.34	8.55	8.26	6.20	5.60	3.07									
	X [m]	4.73	4.23	3.96	3.38	3.35	3.06	3.02	2.57									
	NR [dB(A)]	30.78	20.25	18.63	15.39	14.58	12.96	12.15	8.10									
350	Veffm/s]	8.34	6.53	5.33	4.00	3.96	3.27	3.14	2.43	1.93								
	ΔPt [Pa]	50.74	31.27	20.95	11.80	11.80	8.26	7.38	4.42	3.24								
	X [m]	5.85	5.13	4.59	3.87	3.91	3.60	3.42	2.97	2.70								
	NR [dB(A)]	36.45	25.92	22.68	19.44	19.44	14.58	12.96	11.34	8.91								
400	Veffm/s]		7.47	6.10	4.57	4.53	3.73	3.58	2.77	2.20	2.04	1.81						
	ΔPt [Pa]		40.12	27.14	15.34	15.34	10.62	10.03	5.60	3.84	3.24	2.48						
	X [m]		5.67	5.13	4.41	4.50	4.01	3.96	3.42	3.15	3.02	2.88						
	NR [dB(A)]		29.97	25.92	21.06	20.25	16.20	15.39	12.96	10.53	9.72	8.91						
500	Veffm/s]			7.62	5.71	5.66	4.67	4.48	3.47	2.75	2.55	2.27	2.03					
	ΔPt [Pa]			42.48	24.19	23.30	16.52	14.75	9.14	5.60	5.01	3.83	3.07					
	X [m]			6.39	5.62	5.49	5.04	4.95	4.37	3.96	3.78	3.56	3.24					
	NR [dB(A)]			33.21	25.92	25.92	19.44	17.82	16.20	13.77	13.77	11.34	9.72					
600	Veffm/s]			9.14	6.86	6.79	5.60	5.38	4.16	3.30	3.06	2.72	2.43	2.00	1.52			
	ΔPt [Pa]			59.00	34.22	33.04	22.71	20.65	12.98	8.26	7.08	5.90	4.42	3.54	2.06			
	X [m]			7.74	6.75	6.75	6.03	5.99	5.22	4.59	4.41	4.14	4.05	3.60	3.19			
	NR [dB(A)]			37.26	31.59	30.78	25.11	24.30	19.44	16.20	14.58	12.96	11.34	9.72	6.48			
700	Veffm/s]					7.92	6.53	6.27	4.85	3.85	3.57	3.17	2.84	2.34	1.78	1.49		
	ΔPt [Pa]					45.43	31.27	28.91	17.70	11.21	9.14	7.08	6.49	4.72	2.48	2.36		
	X [m]					7.74	7.11	6.93	6.03	5.45	5.13	4.77	4.59	4.14	3.65	3.33		
	NR [dB(A)]					35.64	29.97	27.54	23.49	20.25	17.82	14.58	13.77	10.53	8.91	5.67		
800	Veffm/s]					9.05	7.47	7.17	5.55	4.40	4.08	3.63	3.24	2.67	2.03	1.70		
	ΔPt [Pa]					59.00	40.12	37.76	22.42	14.16	12.39	9.44	8.26	5.90	3.54	2.95		
	X [m]					8.82	8.10	7.92	6.93	6.30	5.94	5.58	5.40	4.77	4.14	3.87		
	NR [dB(A)]					39.69	34.02	31.59	27.54	23.49	20.25	17.82	14.58	12.15	9.72	7.29		
900	Veffm/s]						8.40	8.06	6.24	4.95	4.59	4.08	3.65	3.00	2.29	1.91	1.46	
	ΔPt [Pa]						51.33	47.20	27.73	18.29	16.52	11.80	10.62	6.49	3.54	2.95	2.06	
	X [m]						9.00	8.10	7.83	7.02	6.75	6.39	5.94	5.40	4.73	4.32	3.87	
	NR [dB(A)]						36.45	35.64	30.78	27.54	25.11	20.25	17.82	14.58	12.15	9.72	5.67	
1000	Veffm/s]							8.96	6.94	5.50	5.10	4.53	4.05	3.34	2.54	2.13	1.62	1.28
	ΔPt [Pa]							59.00	34.81	22.42	19.47	15.34	11.80	8.85	5.31	2.95	2.06	1.47
	X [m]							9.90	8.73	7.83	7.47	7.02	6.75	6.03	5.22	4.86	4.14	3.78
	NR [dB(A)]							38.07	34.02	30.78	27.54	24.30	21.06	16.20	13.77	12.15	9.72	4.86
1200	Veffm/s]								8.32	6.60	6.12	5.44	4.86	4.01	3.05	2.55	1.94	1.54
	ΔPt [Pa]								50.74	32.45	27.14	22.42	17.70	11.21	7.67	5.31	3.24	2.06
	X [m]								10.35	9.36	9.09	8.41	8.01	7.29	6.30	5.71	5.13	4.50
	NR [dB(A)]								38.88	35.64	33.21	29.16	25.92	17.82	15.39	13.77	10.53	6.48
1400	Veffm/s]									7.71	7.14	6.35	5.67	4.67	3.56	2.98	2.26	1.79
	ΔPt [Pa]									43.66	37.17	28.91	24.19	16.52	8.85	7.67	4.13	2.36
	X [m]									10.80	10.44	9.99	9.27	8.46	7.47	6.75	5.85	5.31
	NR [dB(A)]									40.50	38.07	34.02	29.97	21.87	18.63	15.39	12.15	9.72
1800	Veffm/s]											8.16	7.29	6.01	4.57	3.83	2.91	2.31
	ΔPt [Pa]											48.38	39.53	25.96	14.75	11.21	5.90	3.83
	X [m]											12.60	11.97	10.98	9.45	8.73	7.65	6.79
	NR [dB(A)]											42.12	38.88	29.16	25.11	21.06	15.39	12.15
2000	Veffm/s]												8.10	6.68	5.08	4.25	3.23	2.56
	ΔPt [Pa]												48.38	31.86	18.88	13.57	8.26	4.72
	X [m]												13.32	12.15	10.44	9.72	8.64	7.47
	NR [dB(A)]												42.12	32.40	26.73	19.44	18.63	14.58
2500	Veffm/s]													8.35	6.35	5.32	4.04	3.20
	ΔPt [Pa]													50.74	29.50	20.06	12.98	7.08
	X [m]													15.12	13.23	11.97	10.62	9.36
	NR [dB(A)]													38.88	32.40	26.73	22.68	21.87
3000	Veffm/s]														7.62	6.38	4.85	3.84
	ΔPt [Pa]														42.48	29.50	17.70	10.62
	X [m]														15.84	14.58	12.60	11.34
	NR [dB(A)]														38.07	32.40	24.30	22.68
3500	Veffm/s]															7.45	5.66	4.48
	ΔPt [Pa]															40.71	23.60	14.16
	X [m]															17.01	14.67	13.23
	NR [dB(A)]															38.07	27.54	24.30
4000	Veffm/s]																6.47	5.12
	ΔPt [Pa]																30.68	20.06
	X [m]																16.83	15.12
	NR [dB(A)]																28.35	26.73

The legend
Ak [m²] - The free surface
Veff [m/s] - The effective velocity of air in the grille
ΔPt [Pa] - Pressure loss
X [m] - The length of the air jet at a speed of 0.25 m/s
NR [dB (A)] - Noise level without room attenuation
The data presented is for 100% open damper

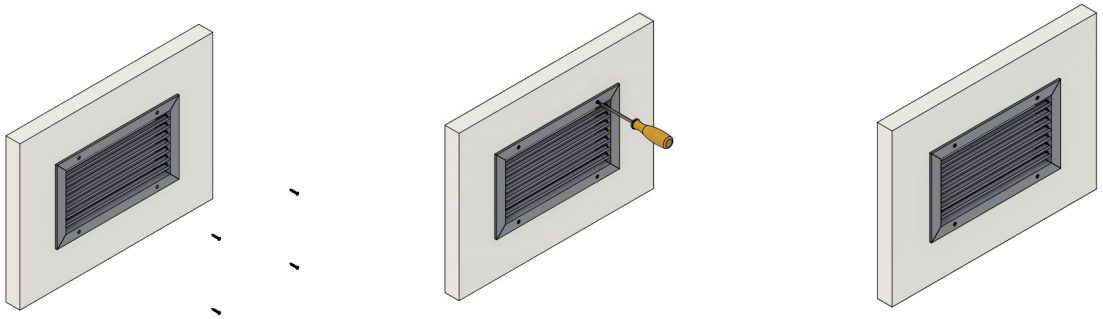
Installation

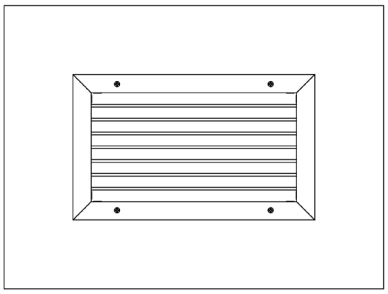
As standard the grille is mounted by means of screws.

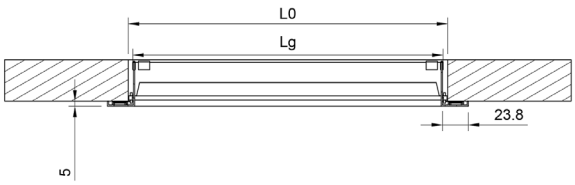
Optionally, for a hidden and easy assembly, a mounting frame can be used. The installation of the grille in the mounting frame is done by clamping.

The grille with dimensions 595x595 mm (LxHext) is placed on the profile of the false suspended ceiling with size 600x600 mm (the product is made without holes).

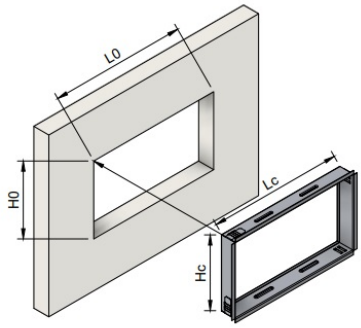
Installation in wall or continuous ceiling with screws

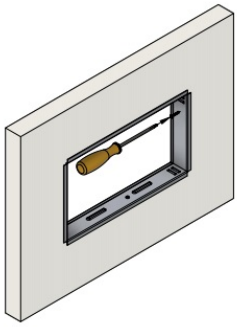


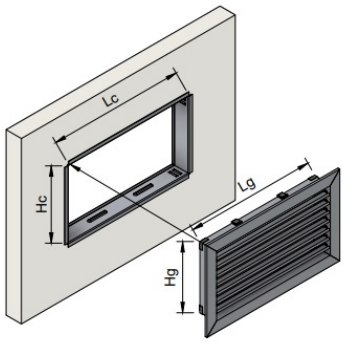


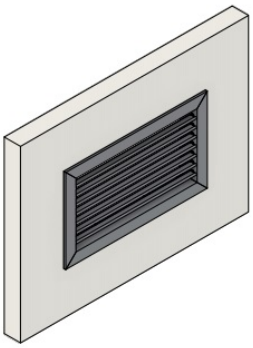


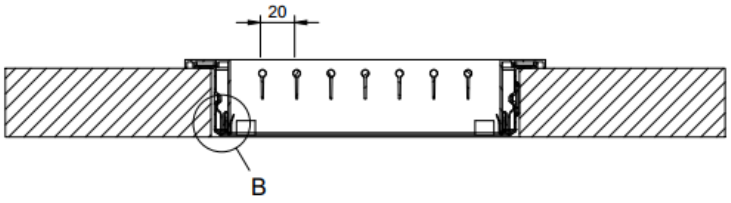
Installation in wall or continuous ceiling with mounting frame

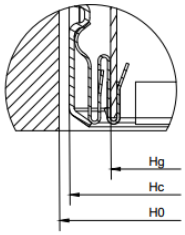








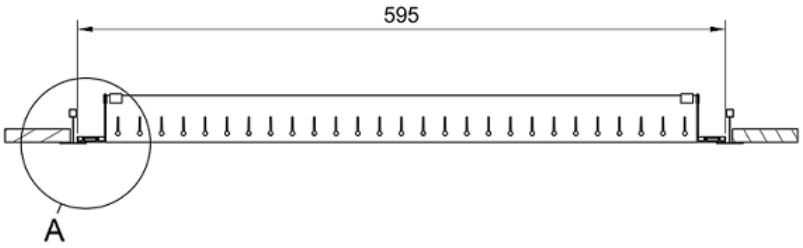


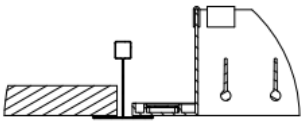


B

Installation in T-bar suspended ceiling

DD-I 595X595 mm (external size)





A

Order code

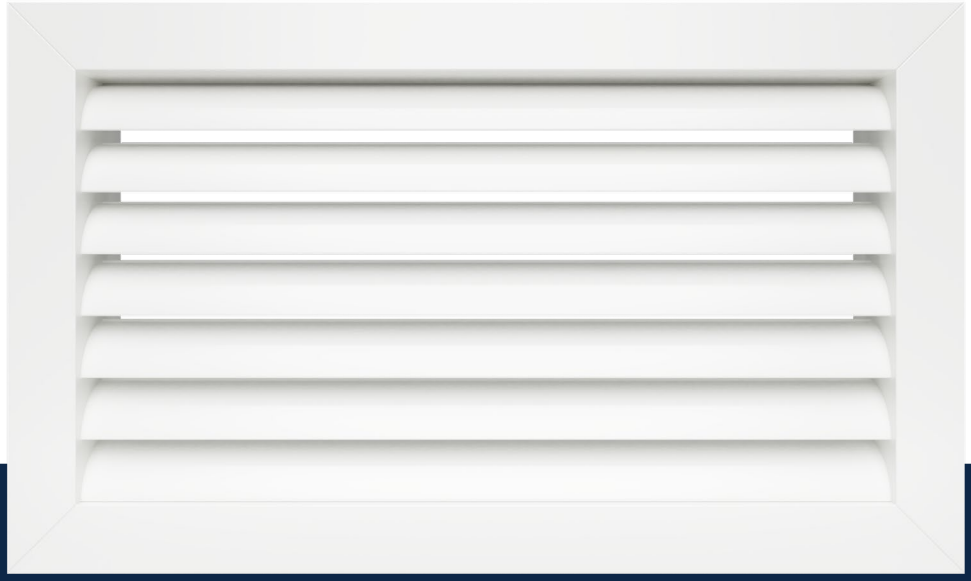
Example on how to place an order

Type	Dimensions	Accessories	Mounting	Finish
DD-1				
	On request			
		OBD - Control damper		
		F-R - Air filter G4		
		AIZ - Insulated adapter		
		AN - Uninsulated adapter		
			Screws (standard)	
			CC - Mounting frame (optional)	
				RAL9016
				RAL..- Other RAL colors on request
				EL - Natural anodized

Air through perfection

Return grille with fixed blades

SD



ACP
Grilles

www.acp.ro

Return grille with fixed blades
SD



Description

SD is a simple deflection grille, made of aluminum, with fixed blades inclined at 45 degrees.

The grille is used to evacuate or recirculate air.

Technical specifications

Characteristics

The grille is provided with fixed blades, positioned at 45°, parallel to the "L" (length).

As standard, the grille is manufactured with holes for screw mounting, except for the size 595x595 mm (external dimensions) for the false ceiling 600x600 mm.

The product is delivered with fixing screws.

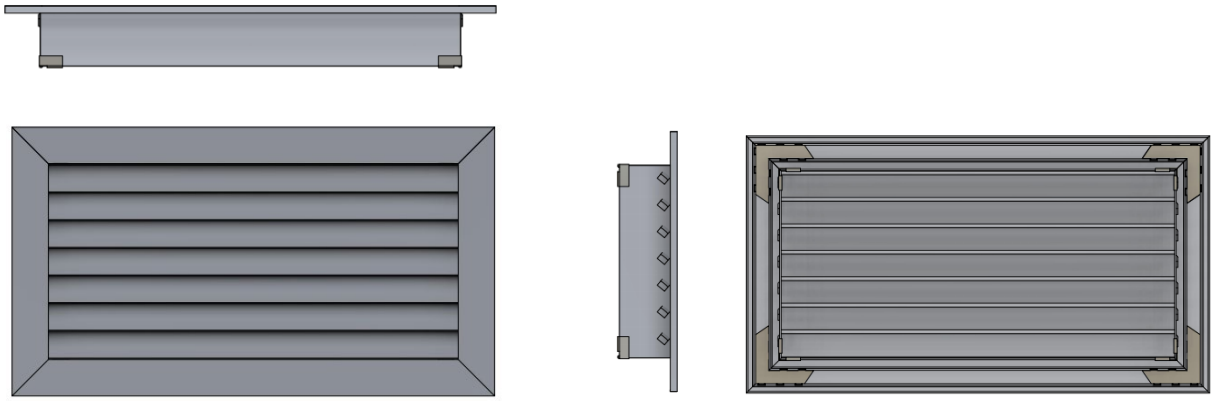
For installation with a mounting frame, the grille is accessorized with fixing clips.

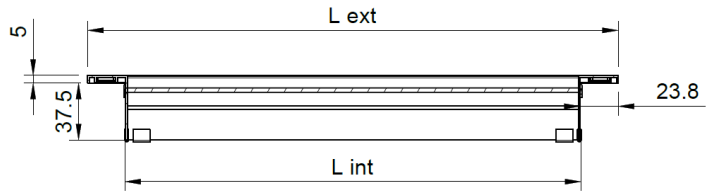
Materials

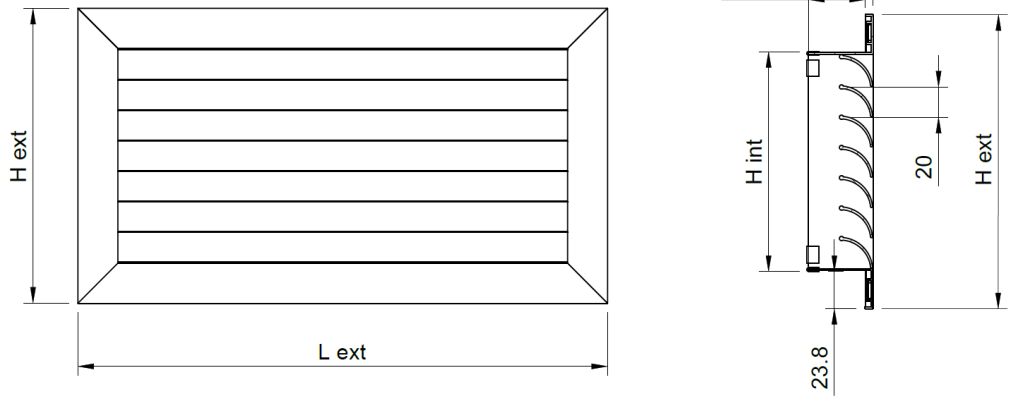
The grille is made of extruded aluminum electrostatic field painted in glossy white RAL 9016.

On request, the grille can be made of natural anodized aluminum profiles or can be painted in other shades from the RAL palette.

Technical drawing

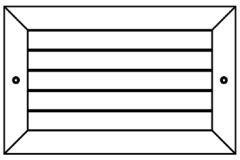


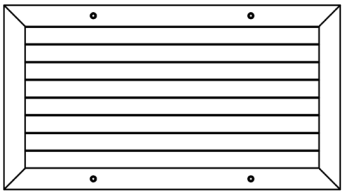


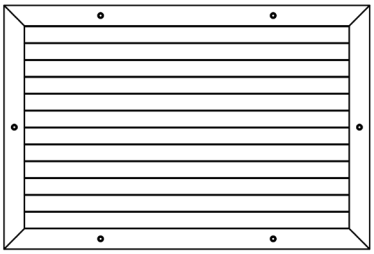


Product specifications

The grille is made standard with mounting holes positioned on the product frame. The number of holes and their position are made according to the size of the product, according to the pictures and table.







L x H	Number of holes																			
[mm]	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	2	2	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
100	2	2	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
150	-	2	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
200	-	2	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
300	-	-	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
400	-	-	-	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
500	-	-	-	-	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
600	-	-	-	-	-	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
700	-	-	-	-	-	-	4	4	4	4	4	8	8	8	8	8	8	10	10	10
800	-	-	-	-	-	-	-	6	6	6	6	8	8	8	8	8	8	10	10	10
900	-	-	-	-	-	-	-	-	6	6	6	8	8	8	8	8	8	10	10	10
1000	-	-	-	-	-	-	-	-	-	6	6	8	8	8	8	8	8	10	10	10
1100	-	-	-	-	-	-	-	-	-	-	8	8	8	8	8	8	8	10	10	10
1200	-	-	-	-	-	-	-	-	-	-	-	8	8	8	8	8	8	10	10	10
1300	-	-	-	-	-	-	-	-	-	-	-	-	8	8	8	8	8	10	10	10
1400	-	-	-	-	-	-	-	-	-	-	-	-	-	10	10	10	10	10	10	10
1500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	10	10	10	10	10
1600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	10	10	10	10
1700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	16	16	16
1800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	16	16
1900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	16
2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16

Accessories

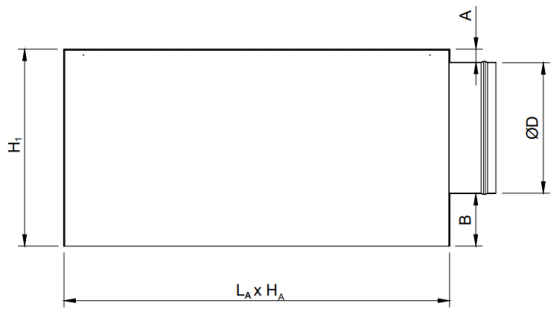
The grille can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

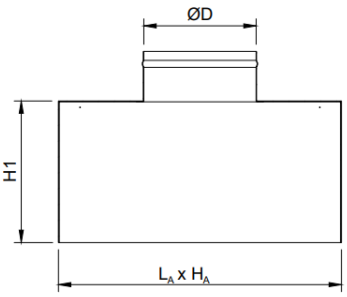
The product can be accessorized with opposed blade damper, G4 air filter or mounting frame.

Adapter (plenum box)

Horizontal connection
(side/lateral exit)

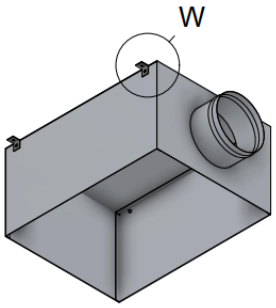


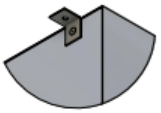
Vertical connection
(opposite exit)



* For fixing with screws: L_A X H_A = Lint x Hint grille + 7 mm
* For fixing with mounting frame: L_A X H_A = Lc x Hc mounting frame + 4 mm
A, B, H1 – depending on demand and ØD

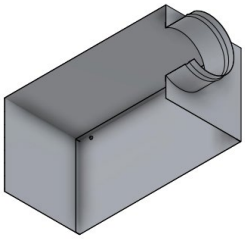
The adapter is made of Z140 galvanized steel sheet and is equipped with suspension lugs.



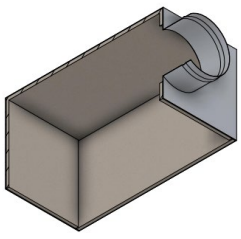


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.



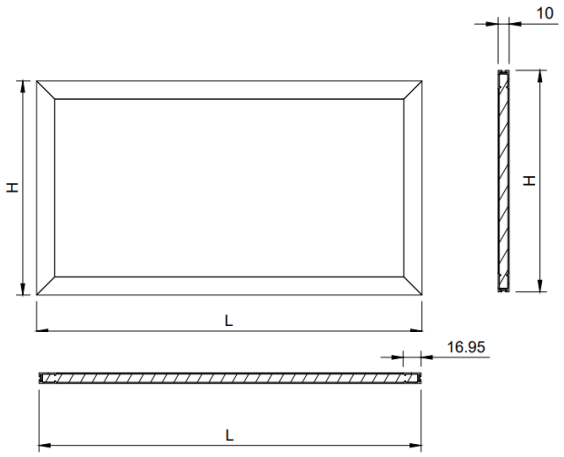
AN - Uninsulated adapter



AIZ - Insulated adapter

Air filter G4 with frame (F-R)

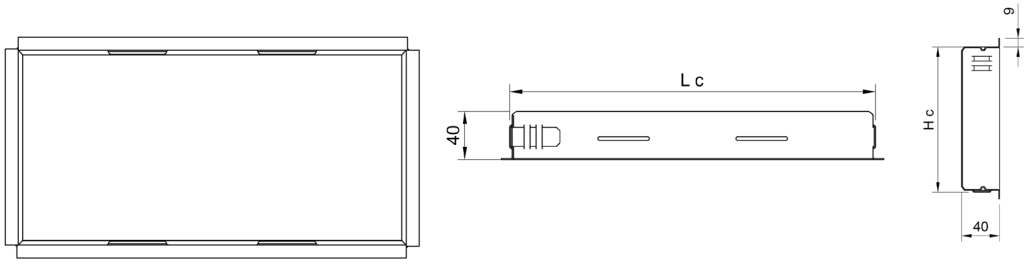
G4 air filter with aluminum frame, used for air filtration and is installed on the grille connection. The large dimensions are made in several pieces.



L x H	Air filter																			
[mm]	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
150	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
200	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
300	-	-	1	1	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3
400	-	-	-	1	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3
500	-	-	-	-	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3
600	-	-	-	-	-	1	2	2	2	2	2	2	2	3	2	3	3	3	3	4
700	-	-	-	-	-	-	2	2	2	2	3	3	3	3	3	3	3	4	4	4
800	-	-	-	-	-	-	-	2	2	2	3	3	3	3	3	3	3	4	4	5
900	-	-	-	-	-	-	-	-	3	3	3	3	3	3	3	3	3	4	4	5
1000	-	-	-	-	-	-	-	-	-	3	3	3	3	3	3	3	4	4	4	5

Mounting frame (CC)

The mounting frame is used when a hidden, easy and fast installing of the grille is desired. Depending on the size required, it is made and delivered in one or more pieces.

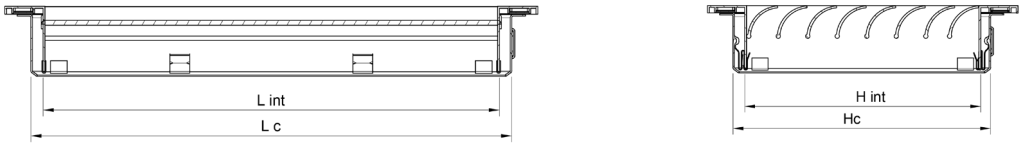


L x H	Mounting frame																			
[mm]	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
100	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
150	-	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
200	-	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
300	-	-	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
400	-	-	-	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
500	-	-	-	-	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
600	-	-	-	-	-	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
700	-	-	-	-	-	-	1	1	1	1	1	2	2	2	2	-	-	-	-	-
800	-	-	-	-	-	-	-	1	1	1	1	2	2	2	2	-	-	-	-	-
900	-	-	-	-	-	-	-	-	1	1	1	2	2	2	2	-	-	-	-	-
1000	-	-	-	-	-	-	-	-	-	1	1	2	2	2	2	-	-	-	-	-

For installation with mounting frame, the grille is equipped with clips that allow quick and easy clamping. The number of clips with which the grille is equipped depends on the size of the product.

L x H	Number of mounting clips																			
[mm]	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	2	2	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8	8	8
100	2	2	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8	8	8
150	-	2	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8	8	8
200	-	2	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8	8	8
300	-	-	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8	8	8
400	-	-	-	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8	8	8
500	-	-	-	-	6	6	6	6	6	6	6	6	8	8	8	8	10	10	10	10
600	-	-	-	-	-	8	8	8	8	8	8	6	8	8	8	8	10	10	10	10
700	-	-	-	-	-	-	8	8	8	8	8	10	10	10	10	-	-	-	-	-
800	-	-	-	-	-	-	-	8	8	8	8	10	10	10	10	-	-	-	-	-
900	-	-	-	-	-	-	-	-	8	8	8	12	12	12	12	-	-	-	-	-
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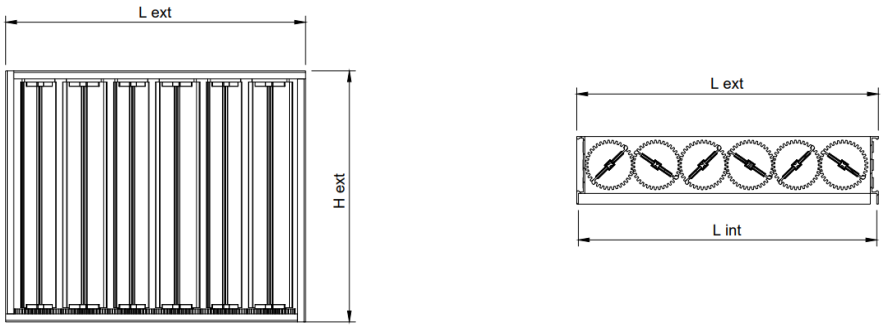
Example: SD + CC



Lc x Hc = Lint x Hint grille + 18 mm

Opposed blade damper (OBD)

The damper is provided with opposable blades and gears, it is mounted on the grille connection.



L x H	Opposed blade damper																			
[mm]	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
100	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
150	-	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
200	-	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
300	-	-	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
400	-	-	-	1	1	1	2	2	2	2	2	2	3	3	3	3	3	3	4	4
500	-	-	-	-	1	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4
600	-	-	-	-	-	2	2	4	4	4	4	4	4	4	4	4	5	5	5	5

Functional parameters

Air flow	L x H	200 x 100	300 x 150	400 x 200	300 x 300	500 x 300	600 x 300	800 x 300	600 x 600	1000 x 600
(m³/h)	Ak [m²]	0.0076	0.0189	0.0345	0.0416	0.0721	0.0915	0.1173	0.1759	0.2934
60	Veff[m/s]	2.2								
	ΔPt [Pa]	5.0								
	NR [dB(A)]	22.0								
80	Veff[m/s]	2.9								
	ΔPt [Pa]	9.0								
	NR [dB(A)]	29.0								
100	Veff[m/s]	3.7								
	ΔPt [Pa]	14.0								
	NR [dB(A)]	35.0								
140	Veff[m/s]	5.1	2.1							
	ΔPt [Pa]	27.0	2.0							
	NR [dB(A)]	44.0	16.0							
180	Veff[m/s]	6.6	2.6							
	ΔPt [Pa]	45.0	3.0							
	NR [dB(A)]	51.0	22.0							
200	Veff[m/s]	7.3	2.9	1.6						
	ΔPt [Pa]	56.0	4.0	3.0						
	NR [dB(A)]	53.0	25.0	22.0						
300	Veff[m/s]		4.4	2.4	2.0					
	ΔPt [Pa]		9.0	6.0	2.0					
	NR [dB(A)]		36.0	32.0	22.0					
400	Veff[m/s]		5.9	3.2	2.7					
	ΔPt [Pa]		16.0	12.0	4.0					
	NR [dB(A)]		43.0	40.0	30.0					
500	Veff[m/s]		7.3	4.0	3.3	1.9				
	ΔPt [Pa]		25.0	18.0	7.0	2.0				
	NR [dB(A)]		49.0	46.0	36.0	24.0				
600	Veff[m/s]				4.0	2.3	1.8	1.4		
	ΔPt [Pa]				11.0	3.0	2.0	1.0		
	NR [dB(A)]				41.0	29.0	24.0	18.0		
800	Veff[m/s]				5.3	3.1	2.4	1.9		
	ΔPt [Pa]				19.0	6.0	4.0	2.0		
	NR [dB(A)]				48.0	36.0	32.0	26.0		
1000	Veff[m/s]				6.7	3.9	3.0	2.4	1.6	
	ΔPt [Pa]				30.0	10.0	6.0	4.0	1.0	
	NR [dB(A)]				54.0	42.0	38.0	32.0	21.0	
1400	Veff[m/s]					5.4	4.3	3.3	2.2	
	ΔPt [Pa]					20.0	13.0	7.0	2.0	
	NR [dB(A)]					51.0	46.0	40.0	29.0	
1800	Veff[m/s]						5.5	4.3	2.8	
	ΔPt [Pa]						22.0	12.0	4.0	
	NR [dB(A)]						53.0	47.0	36.0	
2000	Veff[m/s]							4.7	3.2	
	ΔPt [Pa]							15.0	5.0	
	NR [dB(A)]							50.0	39.0	
3000	Veff[m/s]								4.7	2.8
	ΔPt [Pa]								13.0	1.0
	NR [dB(A)]								49.0	22.0
4000	Veff[m/s]									3.8
	ΔPt [Pa]									1.0
	NR [dB(A)]									30.0

The legend
Ak [m²] - The free surface
Veff [m/s] - The effective velocity of air in the grille
ΔPt [Pa] - Pressure loss
NR [dB (A)] - Noise level without room attenuation

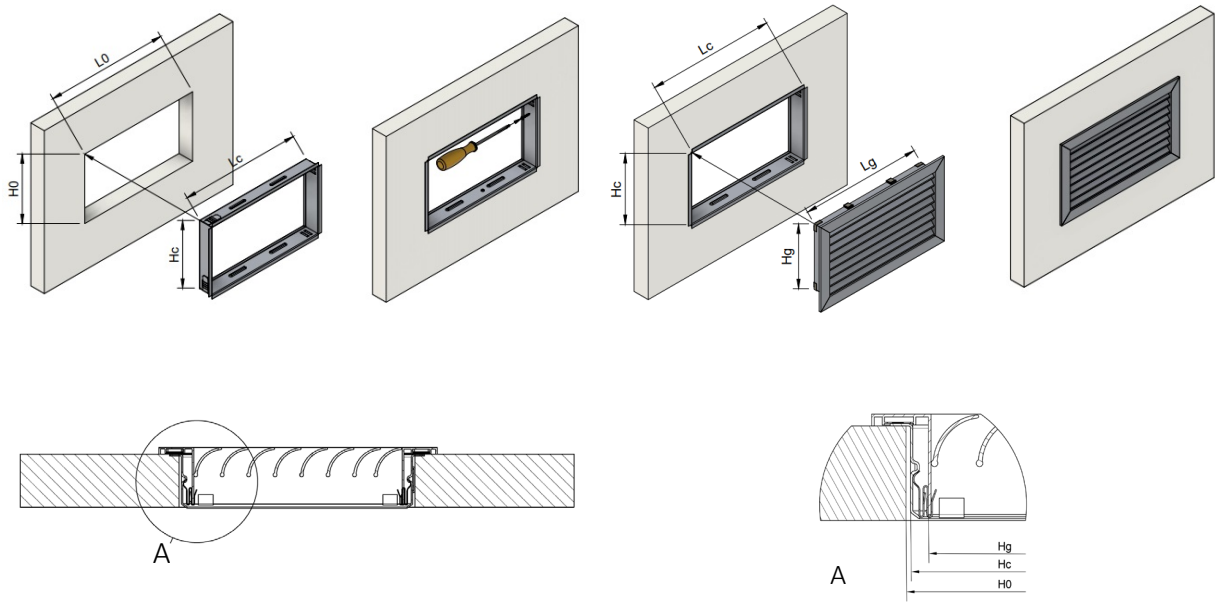
Installation

As standard the grille is mounted by means of screws.

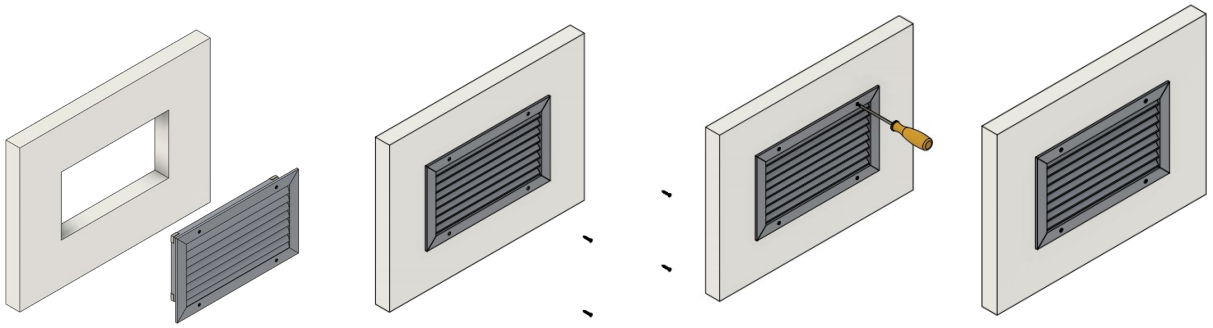
Optionally, for a hidden and easy assembly, a mounting frame can be used. The installation of the grille in the mounting frame is done by clamping.

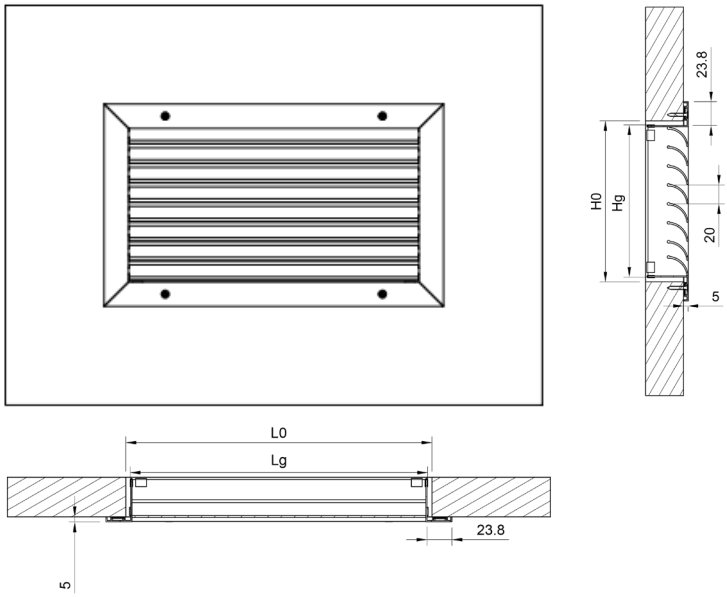
The grille with dimensions 595x595 mm (LxHext) is placed on the profile of the false suspended ceiling with size 600x600 mm (the product is made without holes).

Installation in wall or continuous ceiling with mounting frame



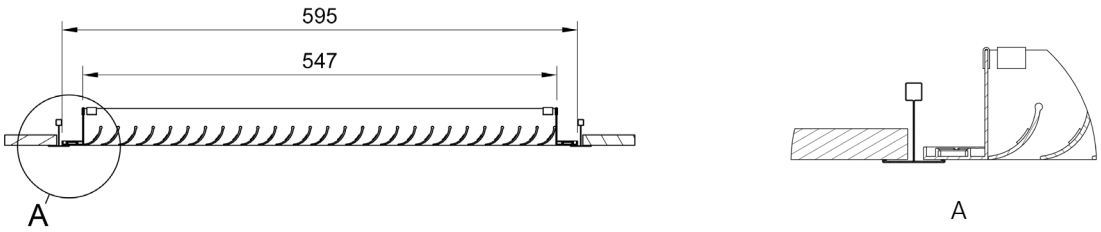
Installation in wall or continuous ceiling with screws





Installation in T-bar suspended ceiling

SD 595X595 mm (external size)



Order code

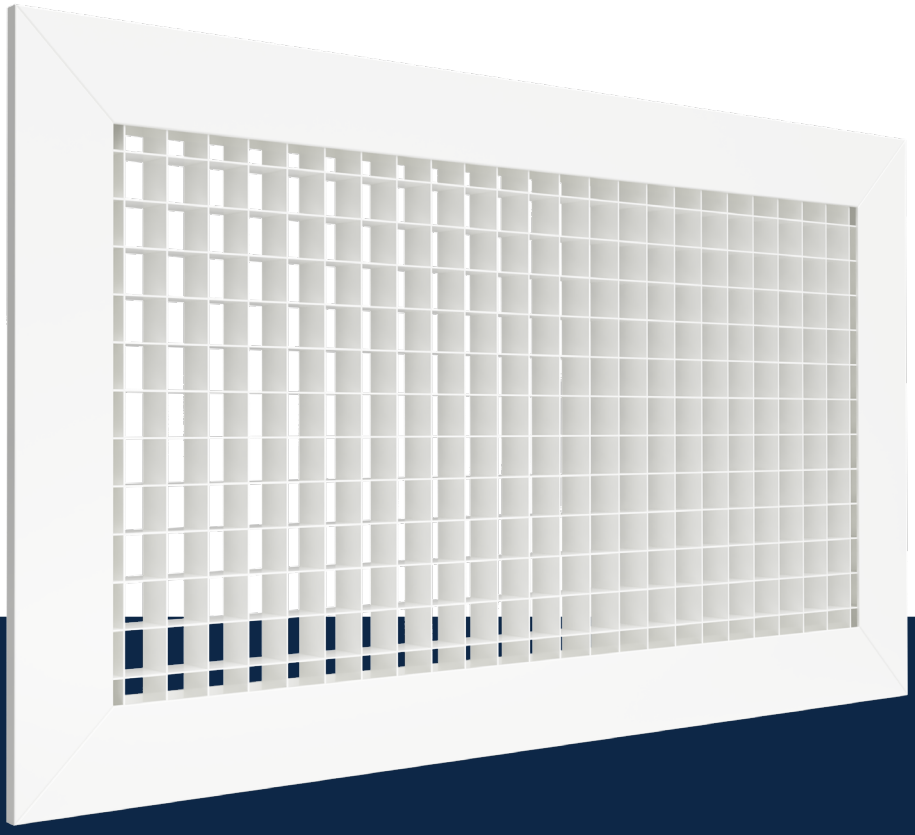
Example on how to place an order

Type	Dimensions	Accessories	Mounting	Finish
SD				
	On request			
		F-R - Air filter		
		OBD - Control damper		
		AIZ - Insulated adapter		
		AN - Uninsulated adapter		
			Screws (standard)	
			CC - Mounting frame (optional)	
				RAL9016
				RAL..- Other RAL colors on request
				EL - Natural anodized

Air through perfection

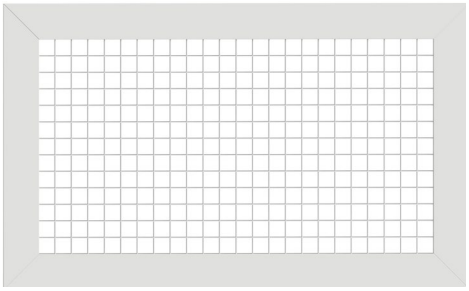
Egg crate grille

EG-O



ACP
Grilles

Egg crate grille
EG-0



Description

EG-0 is a return grille, made of aluminum with egg crate central part with 0° inclination.

This grille allows the evacuation of a high air flow with a minimum pressure loss.

Can be applied to wall, ceiling or rectangular duct.

Technical specifications

Characteristics

The central part is egg crate type with size 12.5 x 12.5 mm and 0 ° inclination.

As standard, the grille is manufactured with holes for screw mounting, except for the size 595x595 mm (external dimensions) for the false ceiling 600x600 mm.

The product is delivered with fixing screws.

If, on request, a mounting frame is required, then the grille is accessorized with fixing clips.

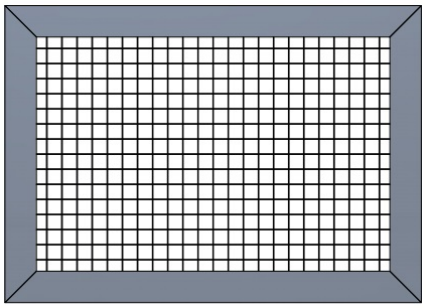
Materials

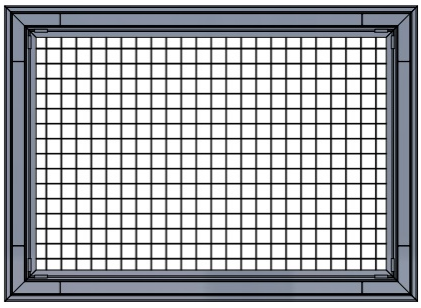
The grille is made of extruded aluminum electrostatic field painted in glossy white RAL 9016.
On request, the grille can be made of natural anodized aluminum profiles (frame only) or can be painted in other shades from the RAL palette.

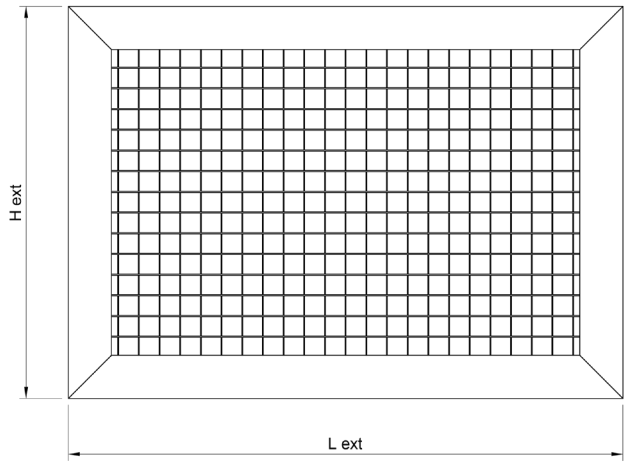
Maintenance

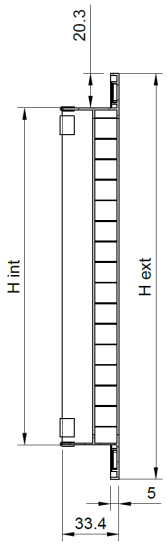
The product does not require maintenance and the materials used are not subject to wear and tear.

Technical drawing



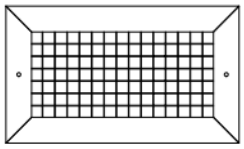


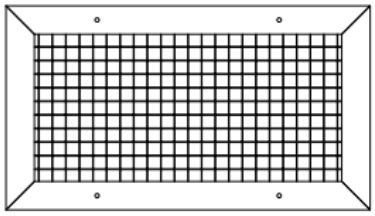


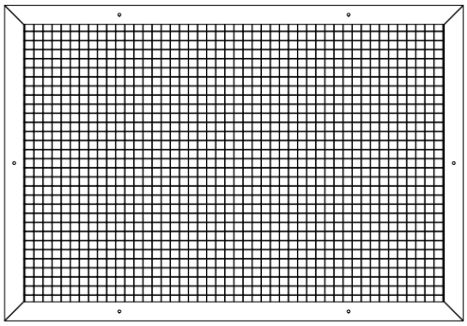


Product specifications

The grille is made standard with mounting holes positioned on the product frame. The number of holes and their position are made according to the size of the product, according to the pictures and table.

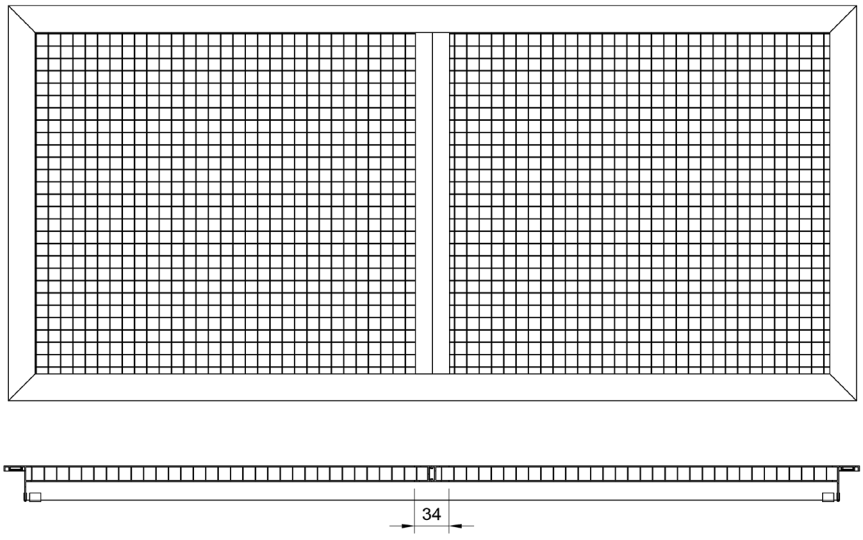






L x H [mm]	Number of holes																			
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	2	2	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
100	2	2	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
150	-	2	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
200	-	2	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
300	-	-	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
400	-	-	-	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
500	-	-	-	-	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
600	-	-	-	-	-	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
700	-	-	-	-	-	-	4	4	4	4	4	6	6	6	6	6	6	8	8	8
800	-	-	-	-	-	-	-	6	6	6	6	8	8	8	8	8	8	8	8	8
900	-	-	-	-	-	-	-	-	6	6	6	8	8	8	8	8	8	8	8	8
1000	-	-	-	-	-	-	-	-	-	6	6	8	8	8	8	8	8	8	8	8

Grilles with dimensions > 1000 mm are made with stiffening elements.



Accessories

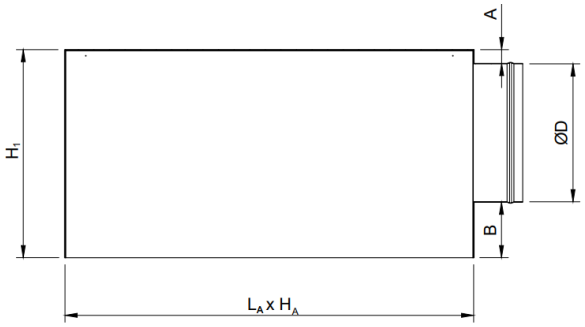
The grille can be accessorized with plenum box (adapter), G4 air filter, mounting frame or opposed blade damper.

Adapter (plenum box)

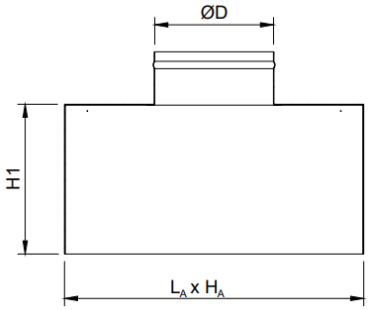
The grille can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

Horizontal connection
(side/lateral exit)

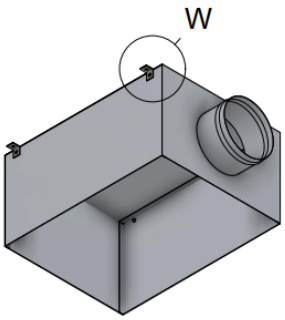


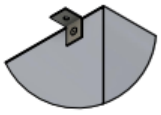
Vertical connection
(opposite exit)



* For fixing with screws: L_A X H_A = Lint x Hint grille + 7 mm
* For fixing with mounting frame: L_A X H_A = Lc x Hc mounting frame + 4 mm
A, B, H1 – depending on demand and ØD

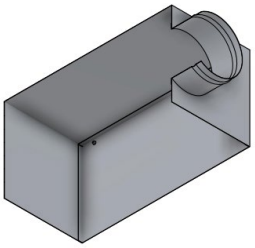
The adapter is made of Z140 galvanized steel sheet and is equipped with suspension lugs.



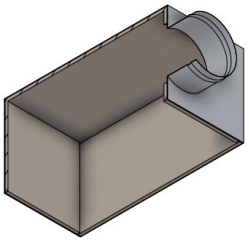


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.



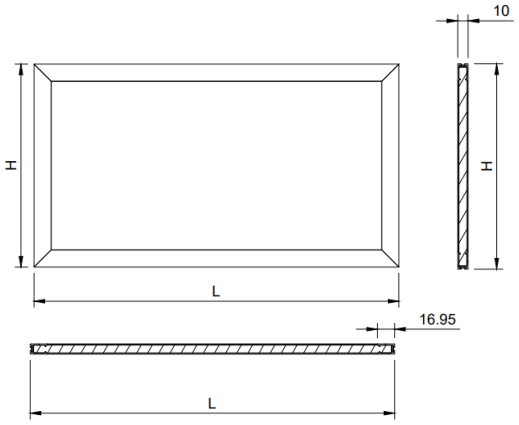
AN - Uninsulated adapter



AIZ - Insulated adapter

Air filter G4 with frame (F-R)

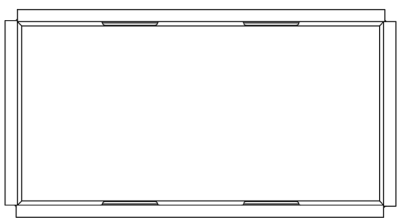
G4 air filter with aluminum frame, used for air filtration and mounting on the grille connection. The large dimensions are made in several pieces.

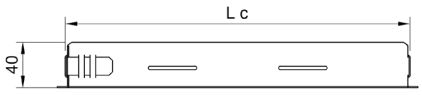


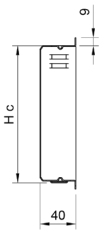
L x H [mm]	Air filter																			
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
150	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
200	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
300	-	-	1	1	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3
400	-	-	-	1	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3
500	-	-	-	-	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3
600	-	-	-	-	-	1	2	2	2	2	2	2	2	3	2	3	3	3	3	4
700	-	-	-	-	-	-	2	2	2	2	3	3	3	3	3	3	3	4	4	4
800	-	-	-	-	-	-	-	2	2	2	3	3	3	3	3	3	3	4	4	5
900	-	-	-	-	-	-	-	-	3	3	3	3	3	3	3	3	3	4	4	5
1000	-	-	-	-	-	-	-	-	-	3	3	3	3	3	3	3	4	4	4	5

Mounting frame (CC)

The mounting frame is used when a hidden, easy and fast installation of the grille is desired. Depending on the size required, it is made and delivered in one or more pieces.





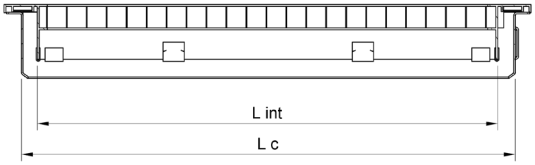


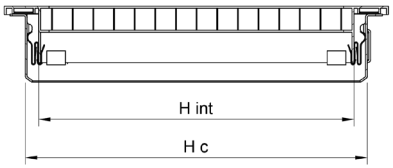
L x H [mm]	Mounting frame																			
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
100	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
150	-	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
200	-	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
300	-	-	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
400	-	-	-	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
500	-	-	-	-	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
600	-	-	-	-	-	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
700	-	-	-	-	-	-	1	1	1	1	1	2	2	2	2	2	2	2	2	2
800	-	-	-	-	-	-	-	1	1	1	1	2	2	2	2	2	2	2	2	2
900	-	-	-	-	-	-	-	-	1	1	1	2	2	2	2	2	2	2	2	2
1000	-	-	-	-	-	-	-	-	-	1	1	2	2	2	2	2	2	2	2	2

For installation with mounting frame, the grille is equipped with clips that allow quick and easy clamping. The number of clips with which the grille is equipped depends on the size of the product.

L x H [mm]	Number of mounting clips																			
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	2	2	4	4	4	4	4	4	4	4	6	6	6	6	6	8	8	8	8	8
100	2	2	4	4	4	4	4	4	4	4	6	6	6	6	6	8	8	8	8	8
150	-	2	4	4	4	4	4	4	4	4	6	6	6	6	6	8	8	8	8	8
200	-	2	4	4	4	4	4	4	4	4	6	6	6	6	6	8	8	8	8	8
300	-	-	4	4	4	4	4	4	4	4	6	6	6	6	6	8	8	8	8	8
400	-	-	-	4	4	4	4	4	4	4	6	6	6	6	6	8	8	8	8	8
500	-	-	-	-	4	4	4	4	4	4	6	6	6	6	6	8	8	8	8	8
600	-	-	-	-	-	6	6	6	6	6	6	6	6	6	6	10	10	10	10	10
700	-	-	-	-	-	-	6	6	6	6	10	10	10	10	10	10	10	10	10	10
800	-	-	-	-	-	-	-	8	8	8	10	10	10	10	10	10	10	10	10	10
900	-	-	-	-	-	-	-	-	8	8	10	10	10	10	10	14	14	14	14	14
1000	-	-	-	-	-	-	-	-	-	12	12	12	12	12	12	14	14	14	14	14

Example: EG-0 + CC

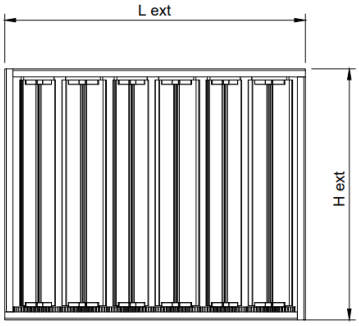


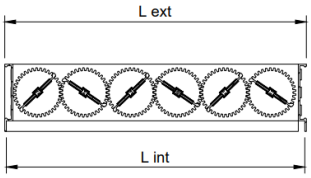


Lc x Hc = Lint x Hint grille + 18 mm

Opposed blade damper (OBD)

The damper is provided with opposable blades and gears, it is mounted on the grille connection.





L x H [mm]	Opposed blade damper																			
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
100	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
150	-	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
200	-	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
300	-	-	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
400	-	-	-	1	1	1	2	2	2	2	2	2	3	3	3	3	3	3	4	4
500	-	-	-	-	1	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4
600	-	-	-	-	-	2	2	4	4	4	4	4	4	4	4	4	5	5	5	5

Functional parameters

Air flow [m³/h]	L x H [mm]	200 x 100	300 x 150	400 x 200	300 x 300	500 x 300	600 x 300	800 x 300	600 x 600	1000 x 600
	Ak [m²]	0.0106	0.0290	0.0560	0.0650	0.1140	0.1390	0.1880	0.2920	0.5010
100	Veff [m/s]	2.6	1.0	0.5						
	NR [dB(A)]	22.0	11.0	5.0						
	△Pt [Pa]	12.8	1.6	0.4						
200	Veff [m/s]	5.2	1.9	1.0	0.9	0.5				
	NR [dB(A)]	37.0	19.0	12.0	9.0	4.0				
	△Pt [Pa]	51.0	6.5	1.7	1.4	0.4				
300	Veff [m/s]		2.9	1.5	1.3	0.7	0.6			
	NR [dB(A)]		24.0	16.0	13.0	8.0	5.0			
	△Pt [Pa]		15.0	4.2	2.8	1.1	0.6			
400	Veff [m/s]		3.8	2.0	1.7	1.0	0.8	0.6		
	NR [dB(A)]		29.0	18.0	17.0	9.0	8.0	4.0		
	△Pt [Pa]		26.5	7.0	5.1	1.8	1.2	0.6		
500	Veff [m/s]		4.8	2.5	2.1	1.2	1.0	0.7		
	NR [dB(A)]		35.0	21.0	21.0	11.0	10.0	6.0		
	△Pt [Pa]		41.0	11. 0	8.2	2.5	1.8	1.0		
600	Veff [m/s]		5.7	3.0	2.6	1.5	1.2	0.9	0.6	
	NR [dB(A)]		39.0	25.0	24.0	16.0	11.0	8.0	5.0	
	△Pt [Pa]		60.5	16.0	11.5	4.0	2.6	1.4	0.7	
700	Veff [m/s]			3.5	3.0	1.7	1.4	1.0	0.7	
	NR [dB(A)]			29.0	26.0	17.0	13.0	10.0	6.0	
	△Pt [Pa]			21.0	16.0	5.4	3.5	2.1	0.8	
800	Veff [m/s]			4.0	3.4	1.9	1.6	1.2	0.8	
	NR [dB(A)]			32.0	30.0	19.0	14.0	11.0	8.0	
	△Pt [Pa]			29.0	20.5	6.5	4.6	2.7	1.0	
900	Veff [m/s]			4.5	3.8	2.2	1.8	1.3	0.9	0.5
	NR [dB(A)]			34.0	31.0	21.0	16.0	12.0	9.0	3.0
	△Pt [Pa]			36.0	27.0	8.5	5.8	3.4	1.2	0.5
1000	Veff [m/s]				4.3	2.4	2.0	1.5	1.0	0.6
	NR [dB(A)]				33.0	21.0	18.0	16.0	12.0	6.0
	△Pt [Pa]				34.0	10.5	7.5	3.6	1.5	0.5
1500	Veff [m/s]				6.4	3.7	3.0	2.2	1.4	0.8
	NR [dB(A)]				44.0	30.0	24.0	21.0	17.0	11.0
	△Pt [Pa]				73.0	24.0	16.0	8.8	3.8	1.2
2000	Veff [m/s]					4.9	4.0	3.0	1.9	1.1
	NR [dB(A)]					35.0	31.0	26.0	19.0	16.0
	△Pt [Pa]					42.0	28.5	16.5	7.0	2.3
3000	Veff [m/s]					7.3	6.0	4.4	2.9	1.7
	NR [dB(A)]					47.5	42.0	31.0	25.0	18.0
	△Pt [Pa]					74.0	67.0	35.0	14.2	4.8
4000	Veff [m/s]							5.9	3.8	2.2
	NR [dB(A)]							42.0	29.0	20.0
	△Pt [Pa]							64.0	25.0	8.5
5000	Veff [m/s]								4.8	2.8
	NR [dB(A)]								33.0	23.0
	△Pt [Pa]								40.0	14.0
6000	Veff [m/s]								5.7	3.3
	NR [dB(A)]								39.0	28.0
	△Pt [Pa]								61.0	21.0
7000	Veff [m/s]								6.7	3.9
	NR [dB(A)]								55.0	29.0
	△Pt [Pa]								80.0	26.0
8000	Veff [m/s]									4.4
	NR [dB(A)]									34.0
	△Pt [Pa]									36.0
9000	Veff [m/s]									5.0
	NR [dB(A)]									36.0
	△Pt [Pa]									46.0

The legend
Ak [m²] - The free surface
Veff [m/s] - The effective velocity of air in the grille
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

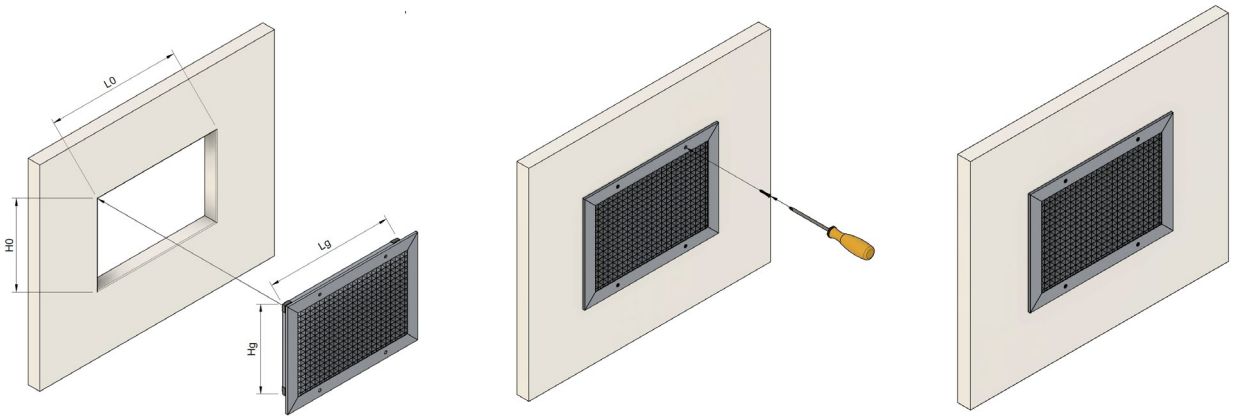
Installation

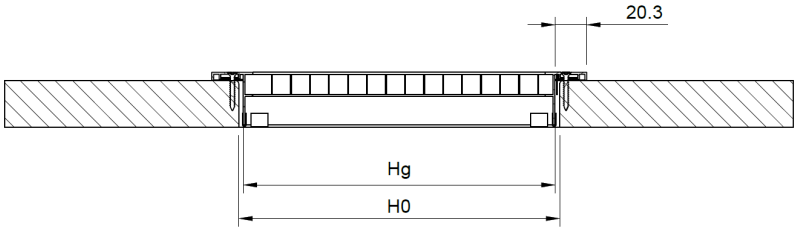
As standard the grille is mounted by means of screws.

Optionally, for a hidden and easy assembly, a mounting frame can be used. The installation of the grille in the mounting frame is done by clamping.

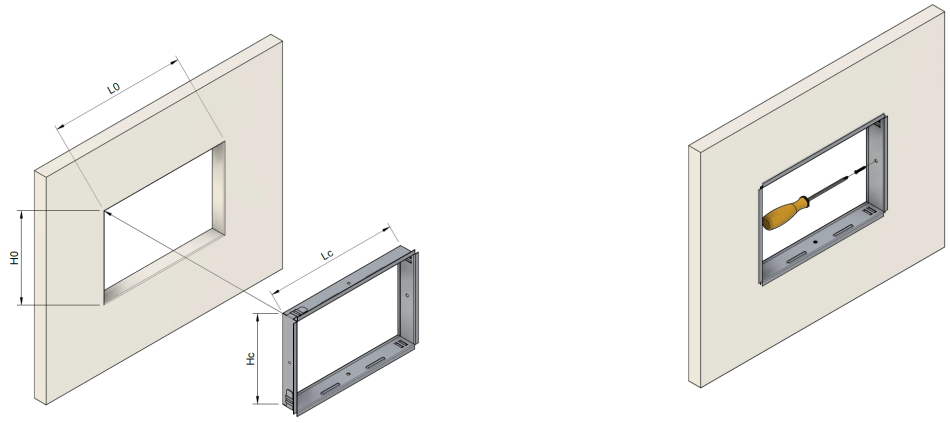
The grille with dimensions 595x595 mm (LxHext) is placed on the profile of the false suspended ceiling with size 600x600 mm (the product is made without holes).

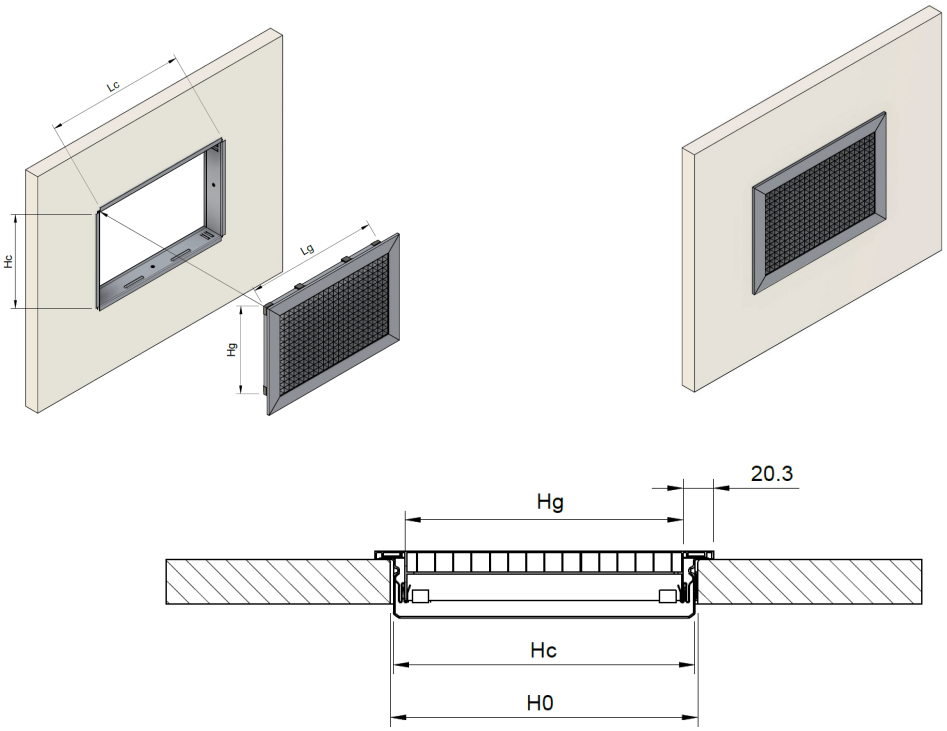
Installation in wall or continuous ceiling with screws





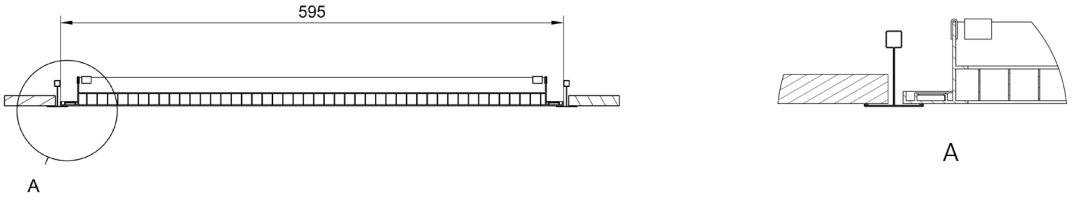
Installation in wall or continuous ceiling with mounting frame





Installation in T-bar suspended ceiling

EG-0 595X595 mm (external size)



Order code

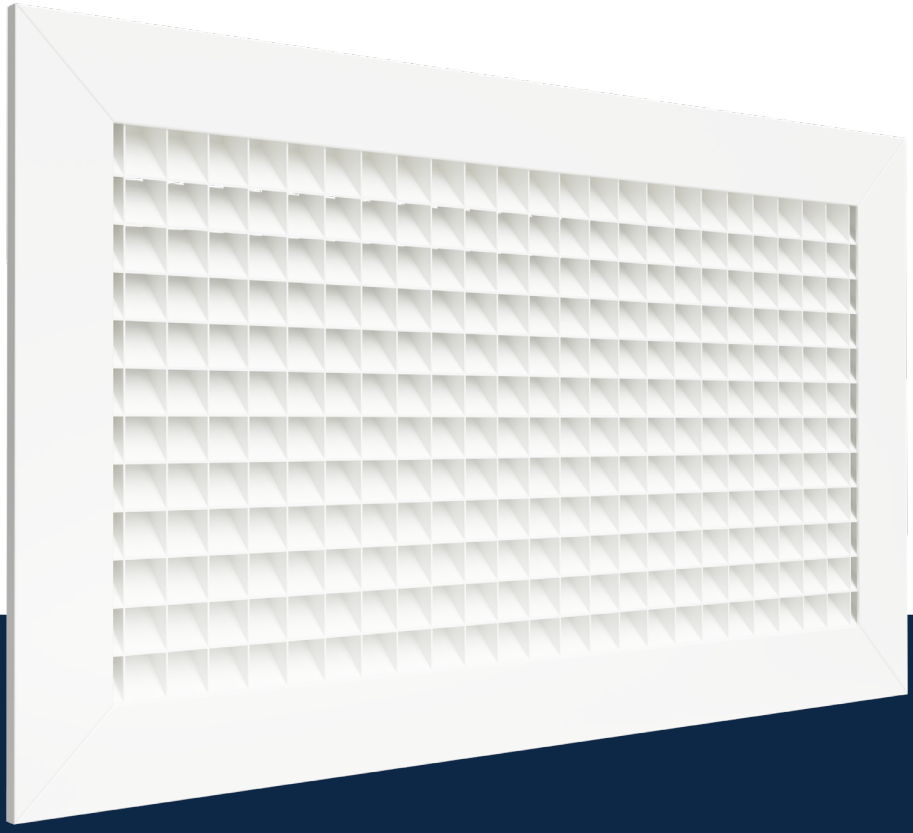
Example on how to place an order

Type	Dimensions	Accessories	Mounting	Finish
EG-0	On request	**F-R** - Air filter **AIZ** -Insulated adapter **AN** - Uninsulated adapter **OBD** - Control damper	Screws (standard) **CC** - Mounting frame (optional)	**RAL9016** **RAL..** - Other RAL colors on request **EL** - Natural anodized

Air through perfection

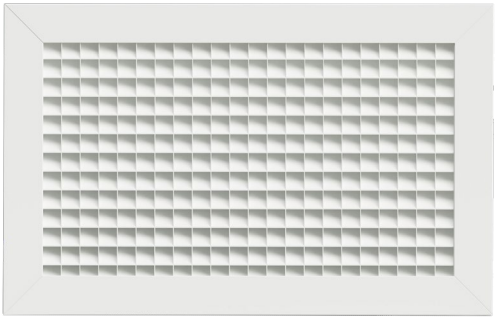
Egg crate grille

EG-45



ACP
Grilles

Egg crate grille
EG-45



Description

EG-45 is a return grille, made of aluminum with egg crate central part with 45° inclination.

This grille allows the evacuation of a high air flow with a minimum pressure loss.

Can be applied to wall, ceiling or rectangular duct.

Technical specifications

Characteristics

The central part is egg crate type with size 12.5 x 12.5 mm and 45° inclination.

As standard, the grille is manufactured with holes for screw mounting, except for the size 595x595 mm (external dimensions) for the false ceiling 600x600 mm.

The product is delivered with fixing screws.

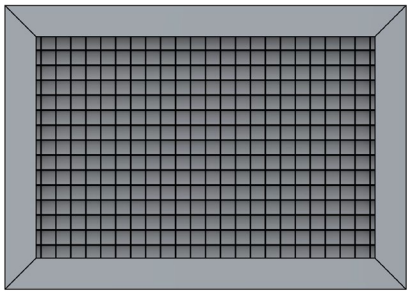
If, on request, a mounting frame is required, then the grille is accessorized with fixing clips.

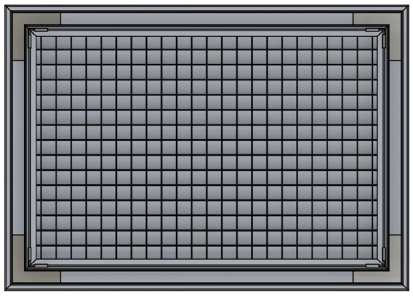
Materials

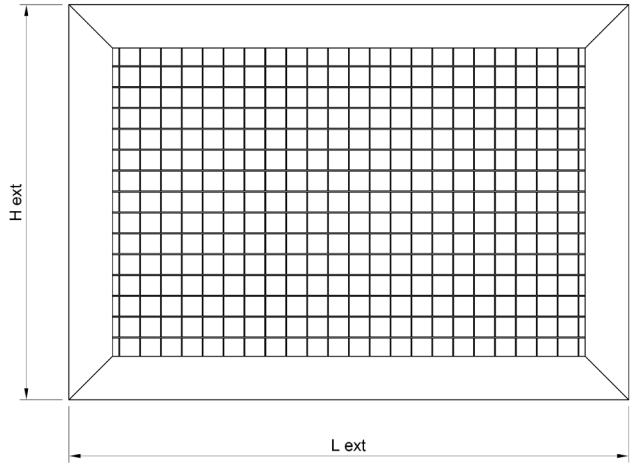
The grille is made of extruded aluminum electrostatic field painted in glossy white RAL 9016.

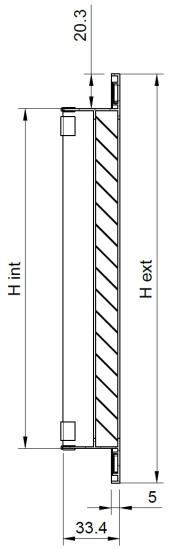
On request, the grille can be made of natural anodized aluminum profiles (frame only) or can be painted in other shades from the RAL palette.

Technical drawing



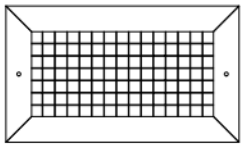


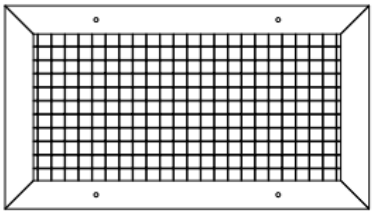


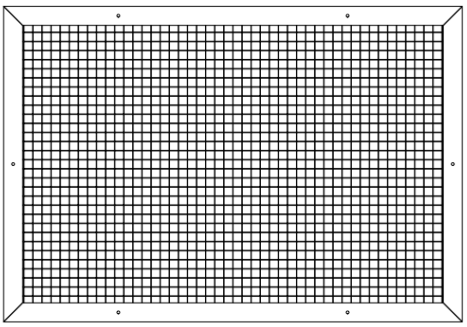


Product specifications

The grille is made standard with mounting holes positioned on the product frame. The number of holes and their position are made according to the size of the product, according to the pictures and table.

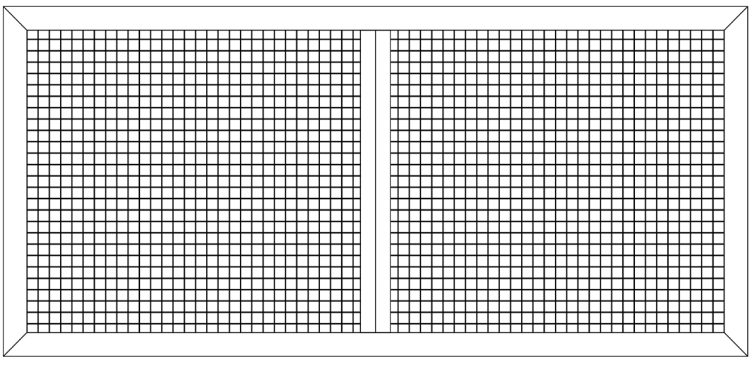






L x H [mm]	Number of holes																			
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	2	2	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
100	2	2	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
150	-	2	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
200	-	2	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
300	-	-	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
400	-	-	-	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
500	-	-	-	-	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
600	-	-	-	-	-	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8
700	-	-	-	-	-	-	4	4	4	4	4	6	6	6	6	6	6	8	8	8
800	-	-	-	-	-	-	-	6	6	6	6	8	8	8	8	8	8	8	8	8
900	-	-	-	-	-	-	-	-	6	6	6	8	8	8	8	8	8	8	8	8
1000	-	-	-	-	-	-	-	-	-	6	6	8	8	8	8	8	8	8	8	8

Grilles with dimensions > 1000 mm are made with stiffening elements.



Accessories

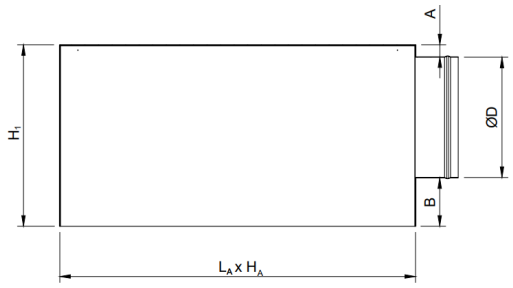
The grille can be accessorized with plenum box (adapter), G4 air filter, mounting frame or opposed blade damper.

Adapter (plenum box)

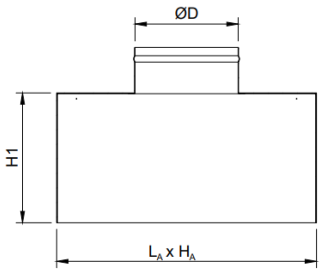
The grille can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

Horizontal connection
(side/lateral exit)

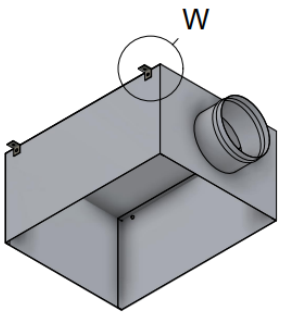


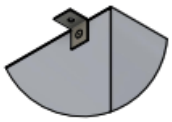
Vertical connection
(opposite exit)



* For fixing with screws: L_A X H_A = Lint x Hint grille + 7 mm
* For fixing with mounting frame: L_A X H_A = Lc x Hc mounting frame + 4 mm
A, B, H1 – depending on demand and ØD

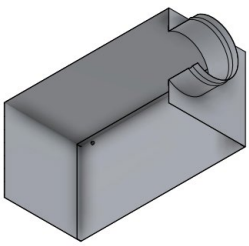
The adapter is made of Z140 galvanized steel sheet and is equipped with suspension lugs.



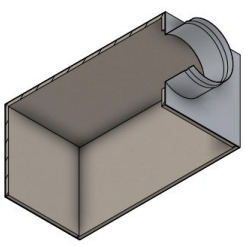


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.



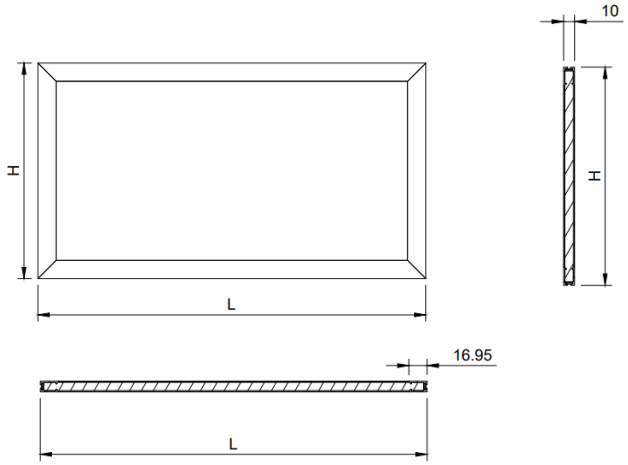
AN - Uninsulated adapter



AIZ - Insulated adapter

Air filter G4 with frame (F-R)

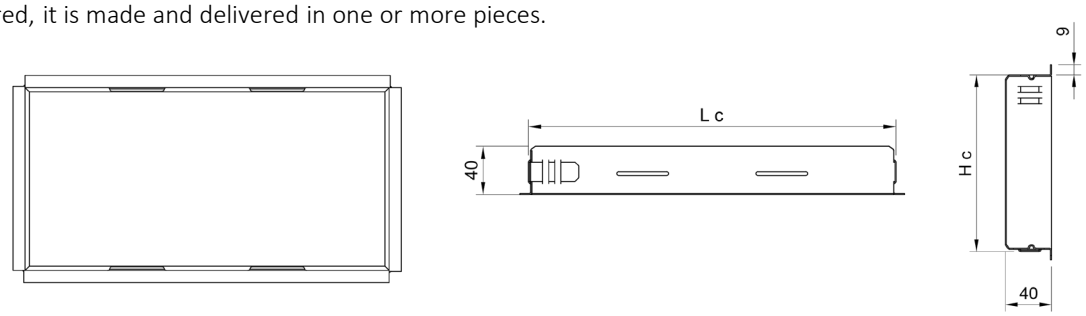
G4 air filter with aluminum frame, used for air filtration and is installed on the grille connection. The large dimensions are made in several pieces.



L x H	Air filter																			
[mm]	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
150	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
200	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
300	-	-	1	1	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3
400	-	-	-	1	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3
500	-	-	-	-	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3
600	-	-	-	-	-	1	2	2	2	2	2	2	2	3	2	3	3	3	3	4
700	-	-	-	-	-	-	2	2	2	2	3	3	3	3	3	3	3	4	4	4
800	-	-	-	-	-	-	-	2	2	2	3	3	3	3	3	3	3	4	4	5
900	-	-	-	-	-	-	-	-	3	3	3	3	3	3	3	3	3	4	4	5
1000	-	-	-	-	-	-	-	-	-	3	3	3	3	3	3	3	4	4	4	5

Mounting frame (CC)

The mounting frame is used when a hidden, easy and fast installation of the grille is desired. Depending on the size required, it is made and delivered in one or more pieces.

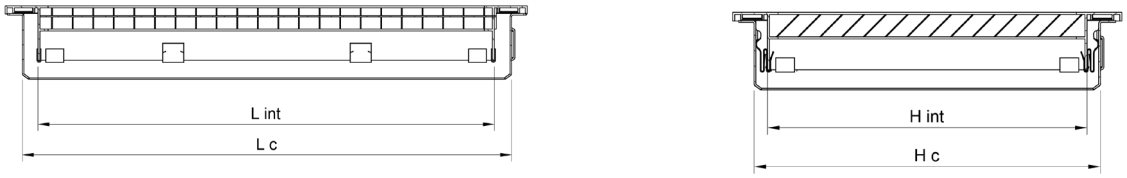


L x H	Mounting frame																			
[mm]	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
100	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
150	-	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
200	-	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
300	-	-	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
400	-	-	-	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
500	-	-	-	-	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
600	-	-	-	-	-	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
700	-	-	-	-	-	-	1	1	1	1	1	2	2	2	2	2	2	2	2	2
800	-	-	-	-	-	-	-	1	1	1	1	2	2	2	2	2	2	2	2	2
900	-	-	-	-	-	-	-	-	1	1	1	2	2	2	2	2	2	2	2	2
1000	-	-	-	-	-	-	-	-	-	1	1	2	2	2	2	2	2	2	2	2

For installation with mounting frame, the grille is equipped with clips that allow quick and easy clamping. The number of clips with which the grille is equipped depends on the size of the product.

L x H	Number of mounting clips																			
[mm]	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	2	2	4	4	4	4	4	4	4	4	6	6	6	6	6	8	8	8	8	8
100	2	2	4	4	4	4	4	4	4	4	6	6	6	6	6	8	8	8	8	8
150	-	2	4	4	4	4	4	4	4	4	6	6	6	6	6	8	8	8	8	8
200	-	2	4	4	4	4	4	4	4	4	6	6	6	6	6	8	8	8	8	8
300	-	-	4	4	4	4	4	4	4	4	6	6	6	6	6	8	8	8	8	8
400	-	-	-	4	4	4	4	4	4	4	6	6	6	6	6	8	8	8	8	8
500	-	-	-	-	4	4	4	4	4	4	6	6	6	6	6	8	8	8	8	8
600	-	-	-	-	-	6	6	6	6	6	6	6	6	6	6	10	10	10	10	10
700	-	-	-	-	-	-	6	6	6	6	10	10	10	10	10	10	10	10	10	10
800	-	-	-	-	-	-	-	8	8	8	10	10	10	10	10	10	10	10	10	10
900	-	-	-	-	-	-	-	-	8	8	10	10	10	10	10	14	14	14	14	14
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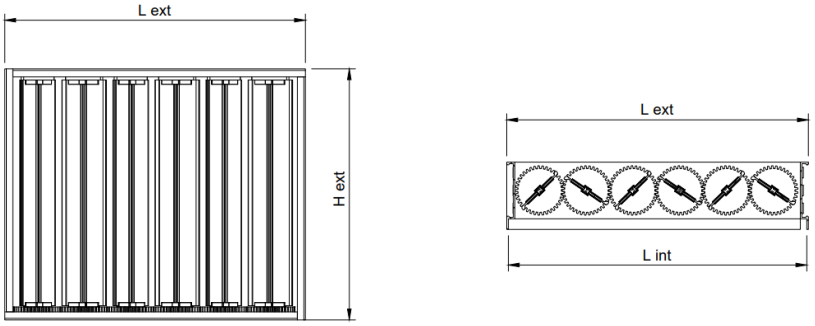
Example: EG-45 + CC



Lc x Hc = Lint x Hint grille + 18 mm

Opposed blade damper (OBD)

The damper is provided with opposable blades and gears, it is mounted on the grille connection.



L x H	Opposed blade damper																			
[mm]	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
100	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
150	-	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
200	-	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
300	-	-	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
400	-	-	-	1	1	1	2	2	2	2	2	2	3	3	3	3	3	3	4	4
500	-	-	-	-	1	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4
600	-	-	-	-	-	2	2	4	4	4	4	4	4	4	4	4	5	5	5	5

Functional parameters

Air flow (m³/h)	LxH Ak [m²]	200 x 100 0.0101	300 x 150 0.0276	400 x 200 0.0532	300 x 300 0.0618	500 x 300 0.1083	600 x 300 0.1321	800 x 300 0.1786	600 x 600 0.2774	1000 x 600 0.4760
100	Veff	2.8	1.0	0.5						
	NR [dB(A)]	24.0	12.5	6.5						
	△Pt [pa]	13.8	2.6	1.4						
200	Veff	5.5	2.0	1.0	0.9	0.5				
	NR [dB(A)]	38.0	20.0	13.5	10.5	5.5				
	△Pt [pa]	53.0	8.5	2.7	2.4	1.4				
300	Veff		3.0	1.6	1.3	0.8	0.6			
	NR [dB(A)]		25.5	17.0	14.0	9.0	6.0			
	△Pt [pa]		17.0	6.2	3.8	2.1	1.6			
400	Veff		4.0	2.1	1.8	1.0	0.8	0.6		
	NR [dB(A)]		31.0	19.0	18.0	10.0	9.0	5.0		
	△Pt [pa]		28.5	9.0	6.1	2.8	2.2	1.6		
500	Veff		5.0	2.6	2.2	1.3	1.1	0.8		
	NR [dB(A)]		37.0	24.0	22.0	13.0	12.0	8.0		
	△Pt [pa]		43.0	13.0	9.2	3.5	2.8	2.0		
600	Veff		6.0	3.1	2.7	1.5	1.3	0.9	0.6	
	NR [dB(A)]		41.0	27.0	25.0	18.0	13.0	10.0	6.0	
	△Pt [pa]		62.5	18.0	13.5	5.0	3.6	2.4	1.7	
700	Veff			3.7	3.1	1.8	1.5	1.1	0.7	
	NR [dB(A)]			30.0	28.0	19.0	15.0	12.0	8.0	
	△Pt [pa]			23.0	17.0	6.4	5.5	3.1	2.3	
800	Veff			4.2	3.6	2.1	1.7	1.2	0.8	
	NR [dB(A)]			34.0	32.0	21.0	16.0	13.0	10.0	
	△Pt [pa]			31.0	22.5	8.5	6.1	3.7	2.5	
900	Veff			4.7	4.0	2.3	1.9	1.4	0.9	0.5
	NR [dB(A)]			36.0	33.0	23.0	18.0	14.0	11.0	5.0
	△Pt [pa]			38.0	29.0	10.0	7.3	4.9	2.7	2.0
1000	Veff				4.5	2.6	2.1	1.6	1.0	0.6
	NR [dB(A)]				35.0	24.0	20.0	18.0	14.0	8.0
	△Pt [pa]				36.0	12.5	9.5	5.6	3.5	2.5
1500	Veff				6.7	3.8	3.2	2.3	1.5	0.9
	NR [dB(A)]				46.0	32.0	26.0	23.0	19.0	13.0
	△Pt [pa]				75.0	26.0	18.0	9.8	5.8	3.2
2000	Veff					5.1	4.2	3.1	2.0	1.2
	NR [dB(A)]					37.0	33.0	28.0	21.0	18.0
	△Pt [pa]					44.0	30.5	18.5	9.0	4.3
3000	Veff					7.7	6.3	4.7	3.0	1.8
	NR [dB(A)]					49.5	44.0	33.0	27.0	20.0
	△Pt [pa]					76.5	69.0	36.0	15.7	6.8
4000	Veff							6.2	4.0	2.3
	NR [dB(A)]							44.0	31.0	22.0
	△Pt [pa]							66.0	26.5	10.5
5000	Veff								5.0	2.9
	NR [dB(A)]								35.0	25.0
	△Pt [pa]								41.0	15.5
6000	Veff								6.0	3.5
	NR [dB(A)]								41.0	30.0
	△Pt [pa]								62.5	22.5
7000	Veff								7.0	4.1
	NR [dB(A)]								57.0	31.0
	△Pt [pa]								81.0	28.0
8000	Veff									4.7
	NR [dB(A)]									36.0
	△Pt [pa]									37.5
9000	Veff									5.3
	NR [dB(A)]									38.0
	△Pt [pa]									48.0

The legend
Ak [m²] - The free surface
Veff [m/s] - The effective velocity of air in the grille
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

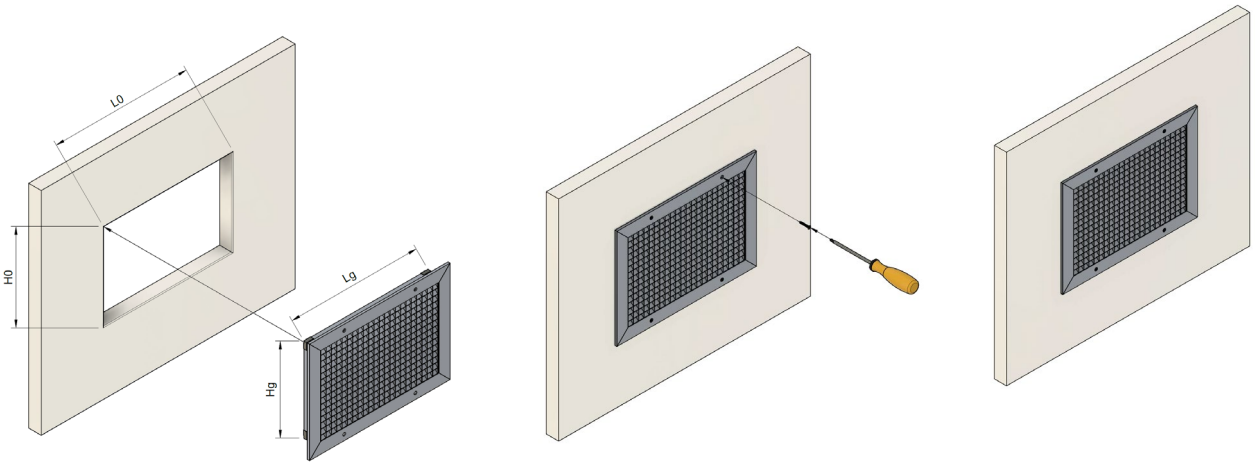
Installation

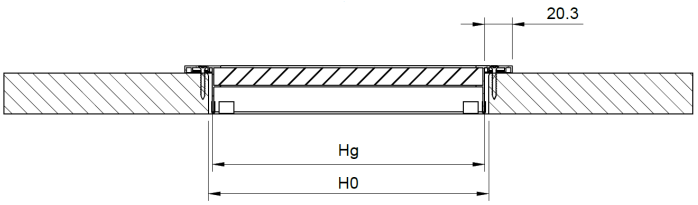
As standard the grille is mounted by means of screws.

Optionally, for a hidden and easy assembly, a mounting frame can be used. The installation of the grille in the mounting frame is done by clamping.

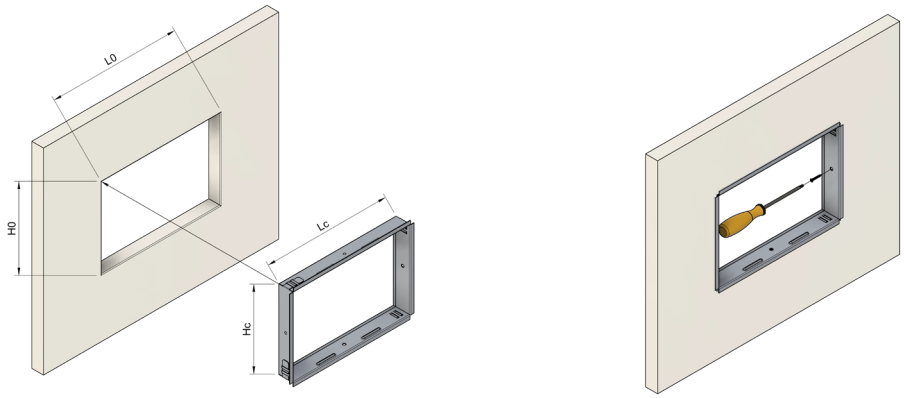
The grille with dimensions 595x595 mm (LxHext) is placed on the profile of the false suspended ceiling with size 600x600 mm (the product is made without holes).

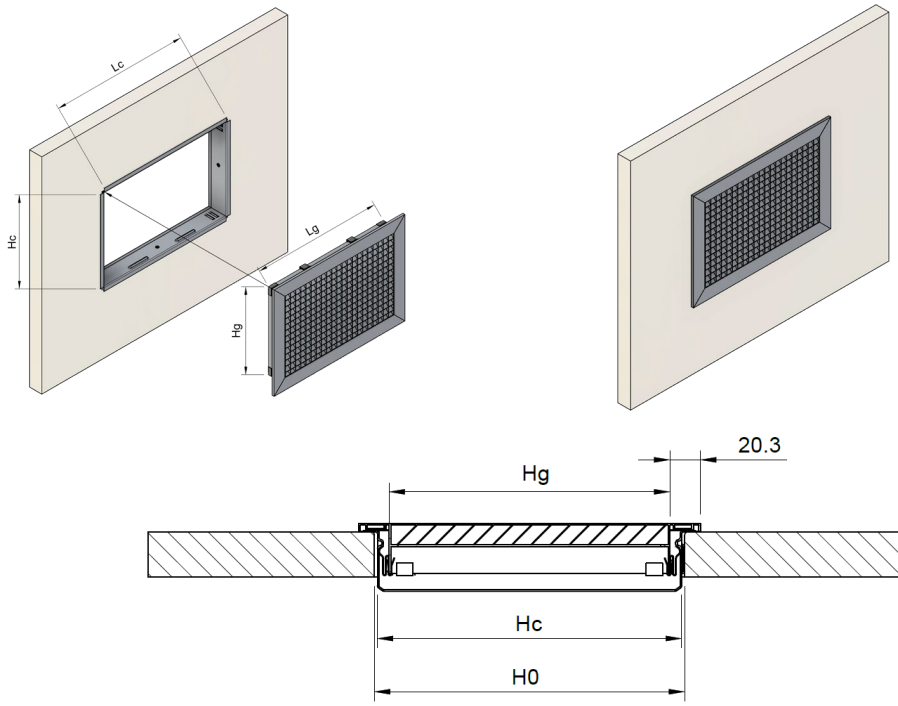
Installation in wall or continuous ceiling with screws





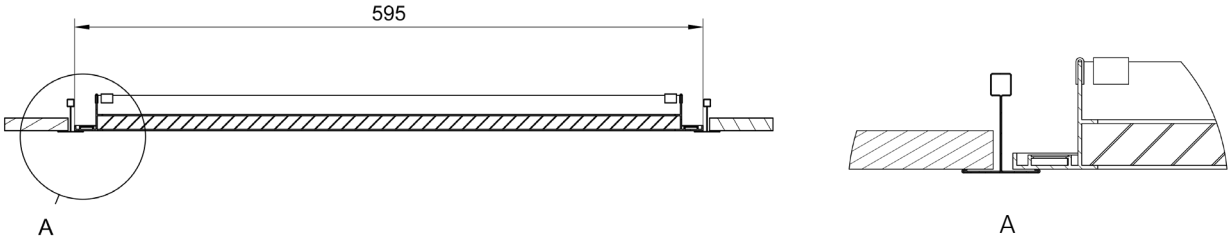
Installation in wall or continuous ceiling with mounting frame





Installation in T-bar suspended ceiling

EG-45 595X595 mm (external size)



Order code

Example on how to place an order

Type	Dimensions	Accessories	Mounting	Finish
EG-45				
	On request			
		F-R - Air filter		
		AIZ - Insulated adapter		
		AN - Uninsulated adapter		
		OBD - Control damper		
			Screws (standard)	
			CC - Mounting frame (optional)	
				RAL9016
				RAL.. - Other RAL colors on request
				EL - Natural anodized

Air through perfection

Transfer grille

TG



ACP
Grilles

Transfer grille
TG



Description

The transfer grille, made of aluminum, is used to equalize the pressure between two rooms.

The grille is mounted in the door and is designed to allow air transfer.

Technical specifications

Characteristics

The grille is provided with "V" -shaped blades, parallel to the length ("L").

The shape of the blades and their arrangement determine the lack of visibility on the opposite side.

TG is used for door thicknesses between 40 and 50 mm.

As standard, the grille is manufactured with holes for screw mounting.

The grille is delivered with screws painted in the shade of the product.

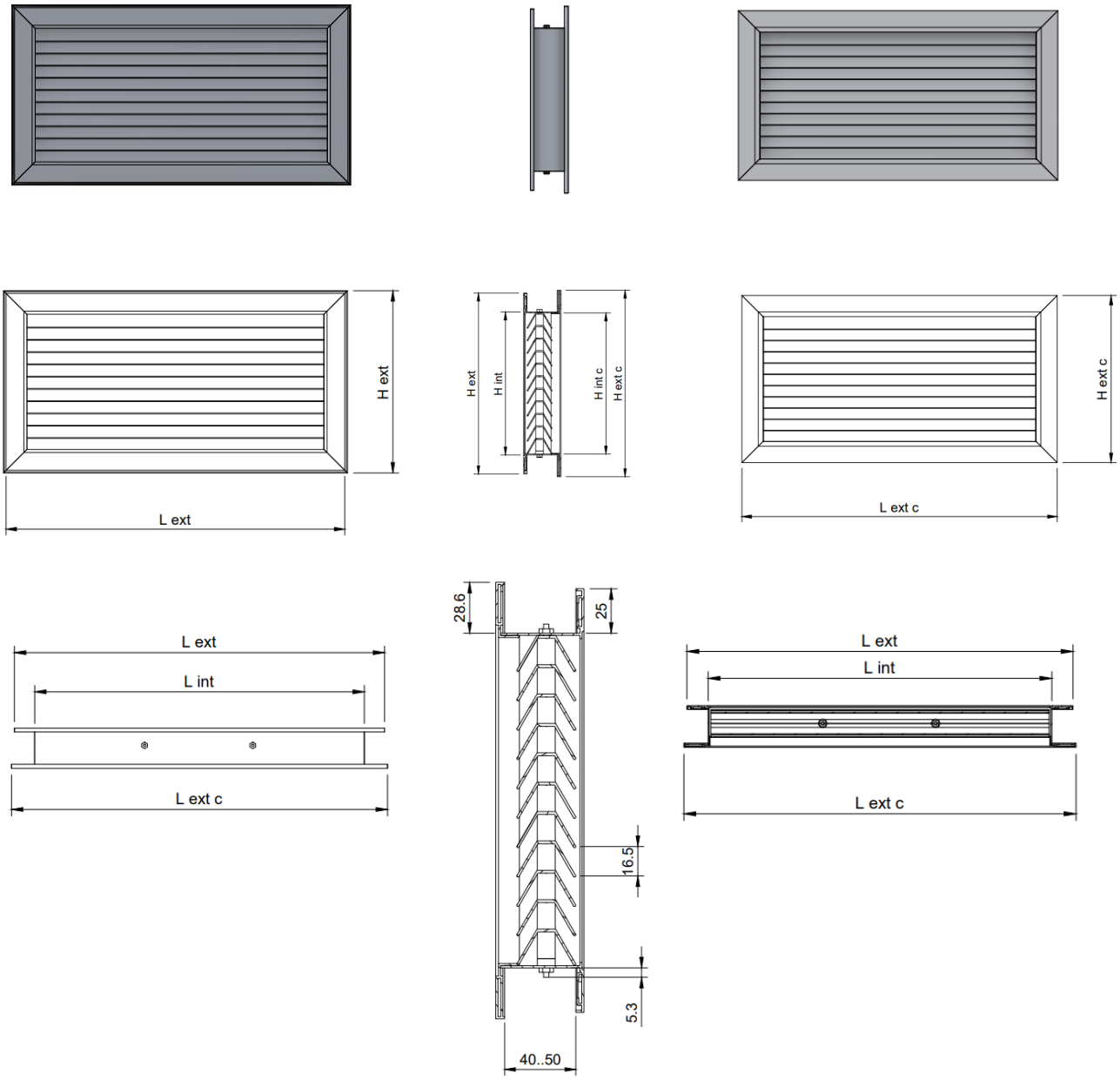
Materials

The grille is made of extruded aluminum electrostatic field painted din glossy white RAL9016.

On request, the grille can be delivered in other shades from the RAL palette.

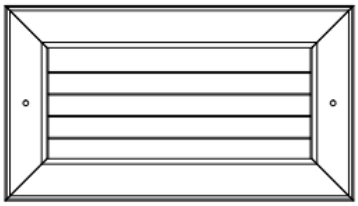
The TG product can be made, on request, from natural anodized aluminum profiles.

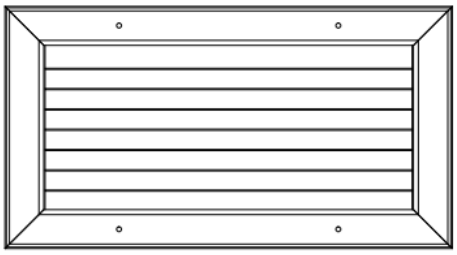
Technical drawing



Product specifications

The grille is made standard with mounting holes positioned on the product frame. The number of holes and their position are made according to the size of the product, according to the pictures and table.





L x H [mm]	Number of holes									
	100	200	300	400	500	600	700	800	900	1000
100	2	2	4	4	4	4	4	4	4	4
150	2	2	4	4	4	4	4	4	4	4
200	2	2	4	4	4	4	4	4	4	4
300	4	4	4	4	4	4	4	4	4	4
400	4	4	4	4	4	4	4	4	4	-
500	4	4	4	4	4	4	4	-	-	-
600	4	4	4	4	4	4	-	-	-	-
700	4	4	4	4	4	-	-	-	-	-
800	4	4	4	4	-	-	-	-	-	-
900	4	4	4	4	-	-	-	-	-	-
1000	4	4	4	-	-	-	-	-	-	-

Functional parameters

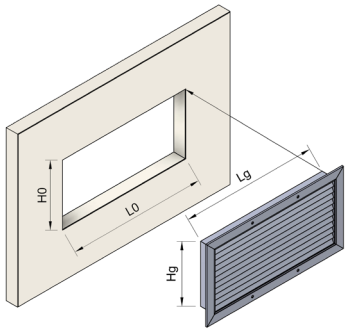
Air flow	L x H	200 X 100	300 X 150	400 X 200	600 X 200	300 X 300	400 X 300	500 X 300	600 X 300	600 X 400
(m³/h)	Ak [m²]	0,00996	0,025	0,0449	0,0682	0,0510	0,06815	0,0857	0,1031	0,1382
50	Veff[m/s]	1.39								
	NR [dB(A)]	30.50								
	ΔPt [Pa]	10.20								
60	Veff[m/s]	1.67	0.67							
	NR [dB(A)]	35.40	14.00							
	ΔPt [Pa]	14.20	2.50							
70	Veff[m/s]	1.95	0.78							
	NR [dB(A)]	40.00	16.00							
	ΔPt [Pa]	19.00	3.80							
80	Veff[m/s]	2.23	0.89							
	NR [dB(A)]	42.20	20.00							
	ΔPt [Pa]	24.00	4.00							
90	Veff[m/s]	2.51	1.00	0.56						
	NR [dB(A)]	45.50	23.50	8.00						
	ΔPt [Pa]	31.50	5.00	2.00						
100	Veff[m/s]	2.79	0.00	0.62						
	NR [dB(A)]	48.00	25.50	10.00						
	ΔPt [Pa]	38.50	6.50	2.50						
125	Veff[m/s]	3.49	1.39	0.77		0.68				
	NR [dB(A)]	52.00	30.50	15.00		12.00				
	ΔPt [Pa]	55.00	9.50	3.00		2.00				
150	Veff[m/s]		1.67	0.93		0.82				
	NR [dB(A)]		34.50	19.50		16.00				
	ΔPt [Pa]		13.00	4.00		3.20				
175	Veff[m/s]		1.94	1.08	0.71	0.95	0.71			
	NR [dB(A)]		38.00	23.00	14.00	20.00	13.00			
	ΔPt [Pa]		18.00	5.50	2.50	4.50	2.00			
200	Veff[m/s]		2.22	1.24	0.81	1.09	0.82	0.65		
	NR [dB(A)]		42.00	26.50	14.00	25.00	15.00	9.00		
	ΔPt [Pa]		24.50	7.50	3.20	5.50	3.00	2.00		
250	Veff[m/s]		2.78	1.55	1.02	1.36	1.02	0.81	0.67	
	NR [dB(A)]		48.50	33.00	23.50	30.50	23.00	17.00	13.00	
	ΔPt [Pa]		39.50	11.50	5.00	10.00	5.20	3.00	2.00	
300	Veff[m/s]		3.33	1.86	1.22	1.63	1.22	0.97	0.81	
	NR [dB(A)]		53.00	38.50	27.50	35.50	27.50	22.50	17.00	
	ΔPt [Pa]		57.00	17.50	7.00	13.00	6.50	5.00	3.50	
350	Veff[m/s]			2.17	1.43	1.91	1.43	1.13	0.94	0.70
	NR [dB(A)]			42.50	31.50	38.50	31.00	26.00	21.00	14.00
	ΔPt [Pa]			23.00	10.00	17.50	10.00	6.50	4.00	2.50
400	Veff[m/s]			2.47	1.63	2.18	1.63	1.30	1.08	0.80
	NR [dB(A)]			45.00	34.00	42.50	34.00	29.00	24.00	17.00
	ΔPt [Pa]			30.00	13.50	24.00	13.50	8.50	6.00	3.00
500	Veff[m/s]			3.09	2.04	2.72	2.04	1.62	1.35	1.00
	NR [dB(A)]			50.00	41.00	47.50	41.00	34.50	30.50	23.50
	ΔPt [Pa]			47.50	20.00	37.00	20.00	13.00	9.00	5.00
600	Veff[m/s]				2.44	3.27	2.45	1.94	1.62	1.21
	NR [dB(A)]				45.00	52.50	45.50	39.50	34.50	27.00
	ΔPt [Pa]				29.00	53.00	29.50	19.00	13.00	7.50
700	Veff[m/s]				2.85		2.85	2.27	1.89	1.41
	NR [dB(A)]				48.50		48.00	43.00	38.50	31.00
	ΔPt [Pa]				42.50		42.00	25.50	17.00	10.00
800	Veff[m/s]						3.26	2.59	2.16	1.61
	NR [dB(A)]						52.00	46.00	41.00	34.50
	ΔPt [Pa]						52.50	33.50	23.50	13.00
900	Veff[m/s]							2.92	2.42	1.81
	NR [dB(A)]							49.00	44.00	37.50
	ΔPt [Pa]							42.50	29.50	16.50
1000	Veff[m/s]							3.24	2.69	2.01
	NR [dB(A)]							52.00	47.00	41.00
	ΔPt [Pa]							52.50	36.50	20.00
1200	Veff[m/s]								3.23	2.41
	NR [dB(A)]								52.50	44.00
	ΔPt [Pa]								51.00	29.50
1400	Veff[m/s]									2.81
	NR [dB(A)]									48.50
	ΔPt [Pa]									39.00
1600	Veff[m/s]									3.22
	NR [dB(A)]									51.00
	ΔPt [Pa]									51.00

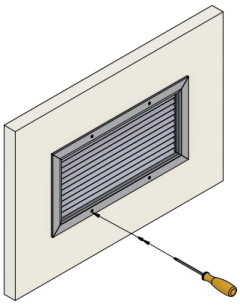
The legend
Ak [m²] - The free surface of the grille
Veff [m/s] – Air velocity in the grille
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

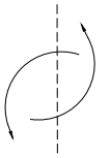
Installation

The product is fixed with mounting screws.

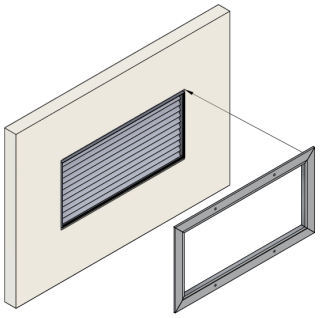
Face 1

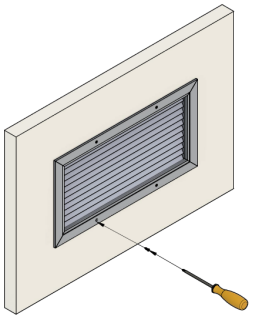


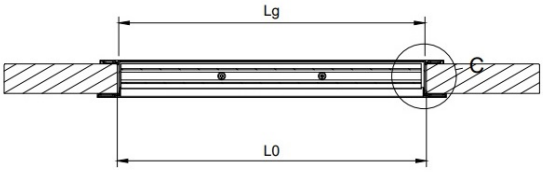


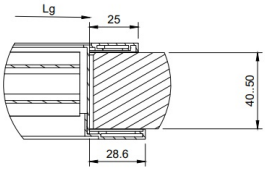


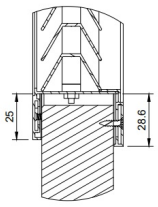
Face 2











Order code

Example on how to place an order

Type	Dimensions	Finish
TG		
	On request	
		RAL 9016
		RAL..- Other RAL colors on request
		EL - Natural anodized on request

Air through perfection

Transfer grille

TG-S



ACP
Grilles

Transfer grille
TG-S



Description

The transfer grille, made of aluminum, is used to equalize the pressure between two rooms.

The grille is mounted in the door and is designed to allow air transfer.

Technical specifications

Characteristics

The grille is provided with "V" -shaped blades, parallel to the length ("L").

The shape of the blades and their arrangement determine the lack of visibility on the opposite side.

TG-S is used for doors with a thickness of 20 mm.

As standard, the grille is manufactured with holes for screw mounting.

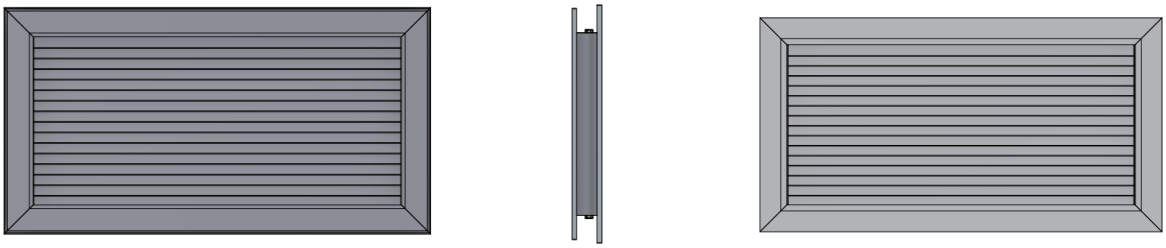
The grille is delivered with screws painted in the shade of the product.

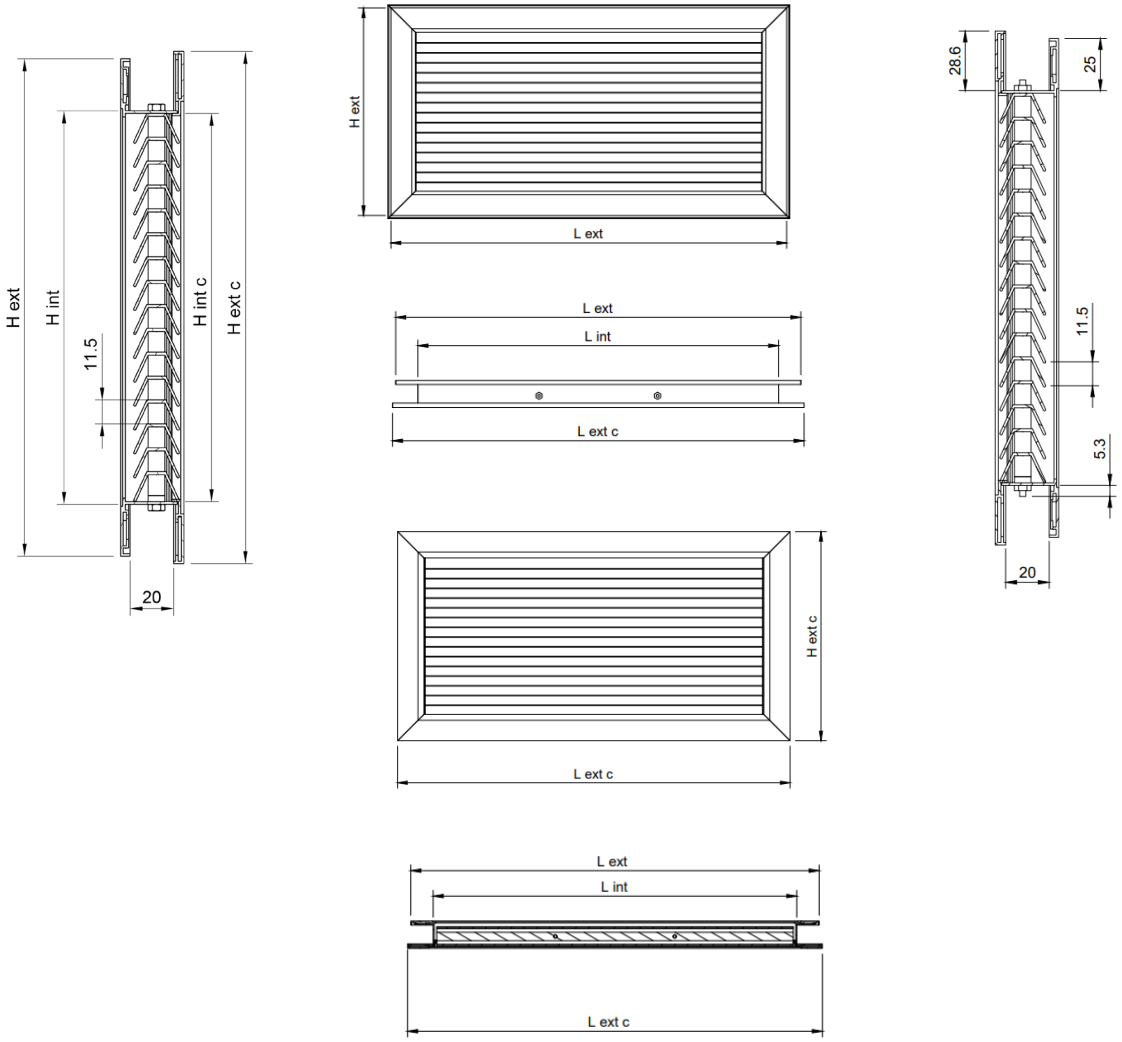
Materials

The grille is made of extruded aluminum electrostatic field painted din glossy white RAL9016.

On request, the grille can be delivered in other shades from the RAL palette.

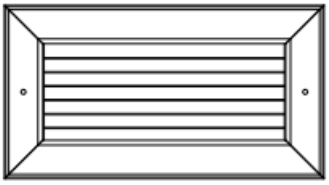
Technical drawing

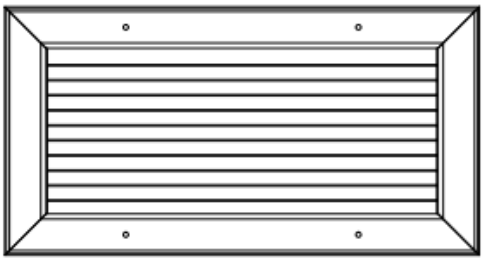




Product specifications

The grille is made standard with mounting holes positioned on the product frame. The number of holes and their position are made according to the size of the product, according to the pictures and table.





L x H [mm]	Number of holes									
	100	200	300	400	500	600	700	800	900	1000
100	2	2	4	4	4	4	4	4	4	4
150	2	2	4	4	4	4	4	4	4	4
200	2	2	4	4	4	4	4	4	4	4
300	4	4	4	4	4	4	4	4	4	4
400	4	4	4	4	4	4	4	4	4	-
500	4	4	4	4	4	4	4	-	-	-
600	4	4	4	4	4	4	-	-	-	-
700	4	4	4	4	4	-	-	-	-	-
800	4	4	4	4	-	-	-	-	-	-
900	4	4	4	4	-	-	-	-	-	-
1000	4	4	4	-	-	-	-	-	-	-

Functional parameters

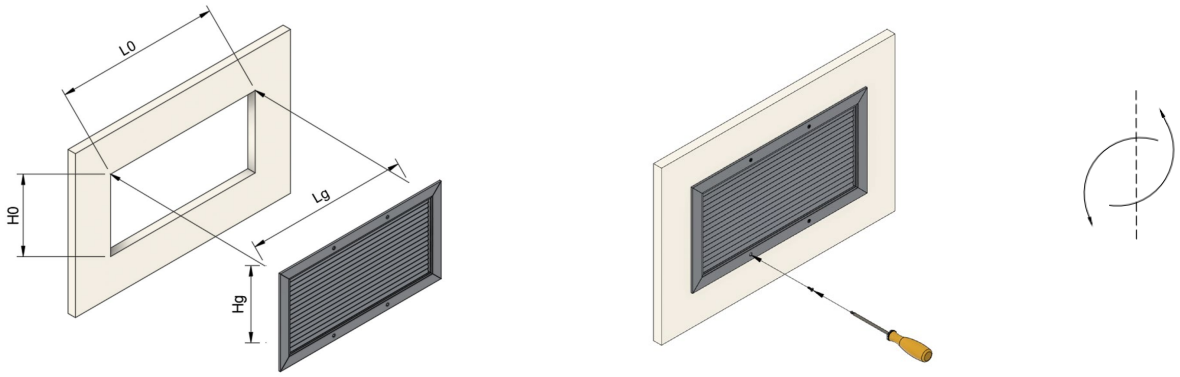
Debit	L x H	200 X 100	300 X 150	400 X 200	600 X 200	300 X 300	400 X 300	500 X 300	600 X 300	600 X 400
(m³/h)	Ak [m²]	0,00996	0,025	0,0449	0,0682	0,0510	0,06815	0,0857	0,1031	0,1382
50	Veff[m/s]	1.39								
	NR [dB(A)]	30.50								
	ΔPt [Pa]	10.20								
60	Veff[m/s]	1.67	0.67							
	NR [dB(A)]	35.40	14.00							
	ΔPt [Pa]	14.20	2.50							
70	Veff[m/s]	1.95	0.78							
	NR [dB(A)]	40.00	16.00							
	ΔPt [Pa]	19.00	3.80							
80	Veff[m/s]	2.23	0.89							
	NR [dB(A)]	42.20	20.00							
	ΔPt [Pa]	24.00	4.00							
90	Veff[m/s]	2.51	1.00	0.56						
	NR [dB(A)]	45.50	23.50	8.00						
	ΔPt [Pa]	31.50	5.00	2.00						
100	Veff[m/s]	2.79	0.00	0.62						
	NR [dB(A)]	48.00	25.50	10.00						
	ΔPt [Pa]	38.50	6.50	2.50						
125	Veff[m/s]	3.49	1.39	0.77		0.68				
	NR [dB(A)]	52.00	30.50	15.00		12.00				
	ΔPt [Pa]	55.00	9.50	3.00		2.00				
150	Veff[m/s]		1.67	0.93		0.82				
	NR [dB(A)]		34.50	19.50		16.00				
	ΔPt [Pa]		13.00	4.00		3.20				
175	Veff[m/s]		1.94	1.08	0.71	0.95	0.71			
	NR [dB(A)]		38.00	23.00	14.00	20.00	13.00			
	ΔPt [Pa]		18.00	5.50	2.50	4.50	2.00			
200	Veff[m/s]		2.22	1.24	0.81	1.09	0.82	0.65		
	NR [dB(A)]		42.00	26.50	14.00	25.00	15.00	9.00		
	ΔPt [Pa]		24.50	7.50	3.20	5.50	3.00	2.00		
250	Veff[m/s]		2.78	1.55	1.02	1.36	1.02	0.81	0.67	
	NR [dB(A)]		48.50	33.00	23.50	30.50	23.00	17.00	13.00	
	ΔPt [Pa]		39.50	11.50	5.00	10.00	5.20	3.00	2.00	
300	Veff[m/s]		3.33	1.86	1.22	1.63	1.22	0.97	0.81	
	NR [dB(A)]		53.00	38.50	27.50	35.50	27.50	22.50	17.00	
	ΔPt [Pa]		57.00	17.50	7.00	13.00	6.50	5.00	3.50	
350	Veff[m/s]			2.17	1.43	1.91	1.43	1.13	0.94	0.70
	NR [dB(A)]			42.50	31.50	38.50	31.00	26.00	21.00	14.00
	ΔPt [Pa]			23.00	10.00	17.50	10.00	6.50	4.00	2.50
400	Veff[m/s]			2.47	1.63	2.18	1.63	1.30	1.08	0.80
	NR [dB(A)]			45.00	34.00	42.50	34.00	29.00	24.00	17.00
	ΔPt [Pa]			30.00	13.50	24.00	13.50	8.50	6.00	3.00
500	Veff[m/s]			3.09	2.04	2.72	2.04	1.62	1.35	1.00
	NR [dB(A)]			50.00	41.00	47.50	41.00	34.50	30.50	23.50
	ΔPt [Pa]			47.50	20.00	37.00	20.00	13.00	9.00	5.00
600	Veff[m/s]				2.44	3.27	2.45	1.94	1.62	1.21
	NR [dB(A)]				45.00	52.50	45.50	39.50	34.50	27.00
	ΔPt [Pa]				29.00	53.00	29.50	19.00	13.00	7.50
700	Veff[m/s]				2.85		2.85	2.27	1.89	1.41
	NR [dB(A)]				48.50		48.00	43.00	38.50	31.00
	ΔPt [Pa]				42.50		42.00	25.50	17.00	10.00
800	Veff[m/s]						3.26	2.59	2.16	1.61
	NR [dB(A)]						52.00	46.00	41.00	34.50
	ΔPt [Pa]						52.50	33.50	23.50	13.00
900	Veff[m/s]							2.92	2.42	1.81
	NR [dB(A)]							49.00	44.00	37.50
	ΔPt [Pa]							42.50	29.50	16.50
1000	Veff[m/s]							3.24	2.69	2.01
	NR [dB(A)]							52.00	47.00	41.00
	ΔPt [Pa]							52.50	36.50	20.00
1200	Veff[m/s]								3.23	2.41
	NR [dB(A)]								52.50	44.00
	ΔPt [Pa]								51.00	29.50
1400	Veff[m/s]									2.81
	NR [dB(A)]									48.50
	ΔPt [Pa]									39.00
1600	Veff[m/s]									3.22
	NR [dB(A)]									51.00
	ΔPt [Pa]									51.00

The legend
Ak [m²] - The free surface of the grille
Veff [m/s] – Air velocity in the grille
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

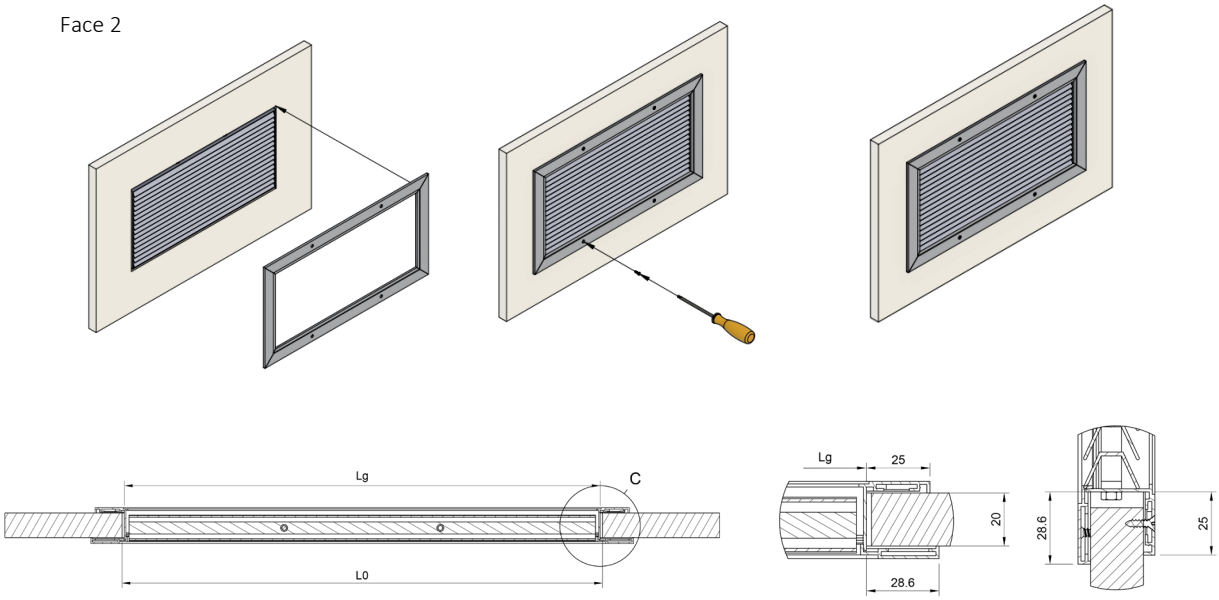
Installation

The product is fixed with mounting screws.

Face 1



Face 2



Order code

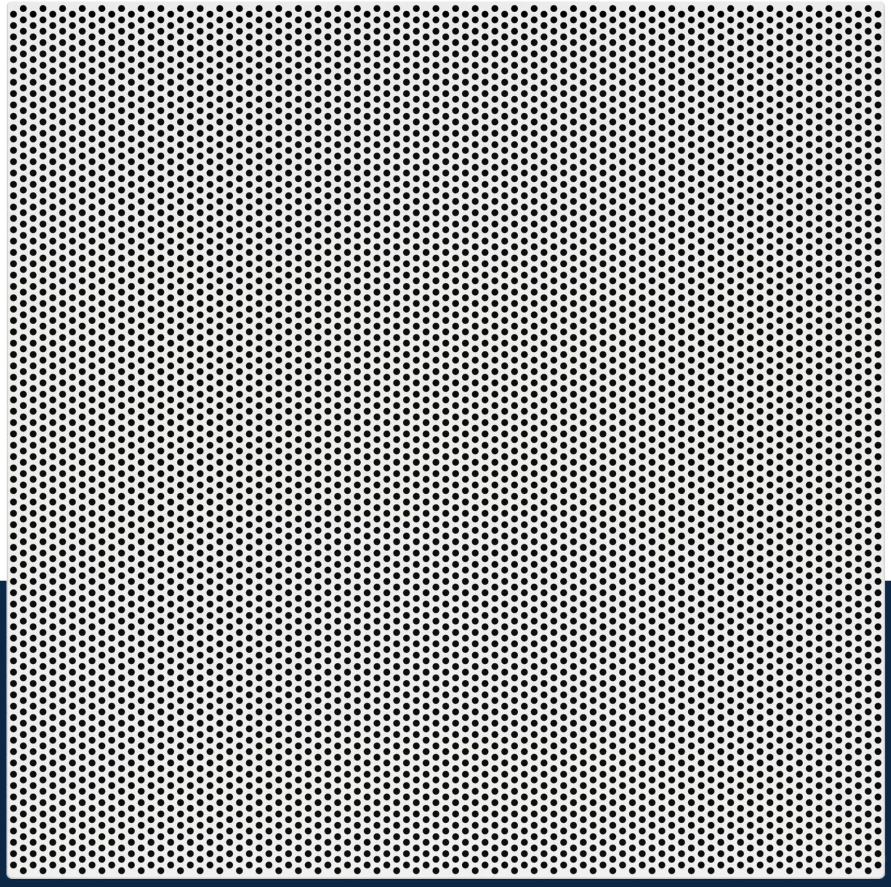
Example on how to place an order

Type	Dimensions	Finish
TG-S		
	On request	
		RAL 9016
		RAL..- Other RAL colors on request

Air through perfection

Perforated grille

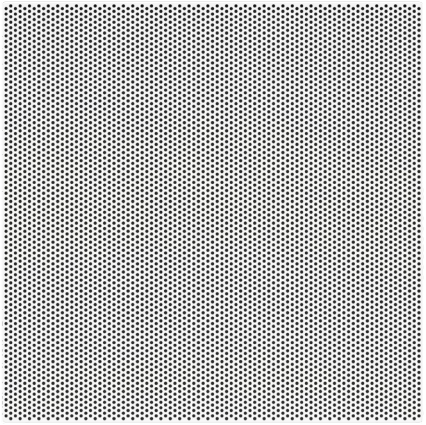
PF



ACP
Grilles

www.acp.ro

Perforated grille
PF



Description

The perforated grille with circular holes is used to introduce or evacuate air.

The diffuser is used for mounting in a false suspended ceiling with dimensions of 600x600 mm.

It is recommended for installations with constant or variable air flow.

Technical specifications

Characteristics

The external dimensions of the diffuser are 595x595 mm.

The circular perforations have a diameter of 5 mm.

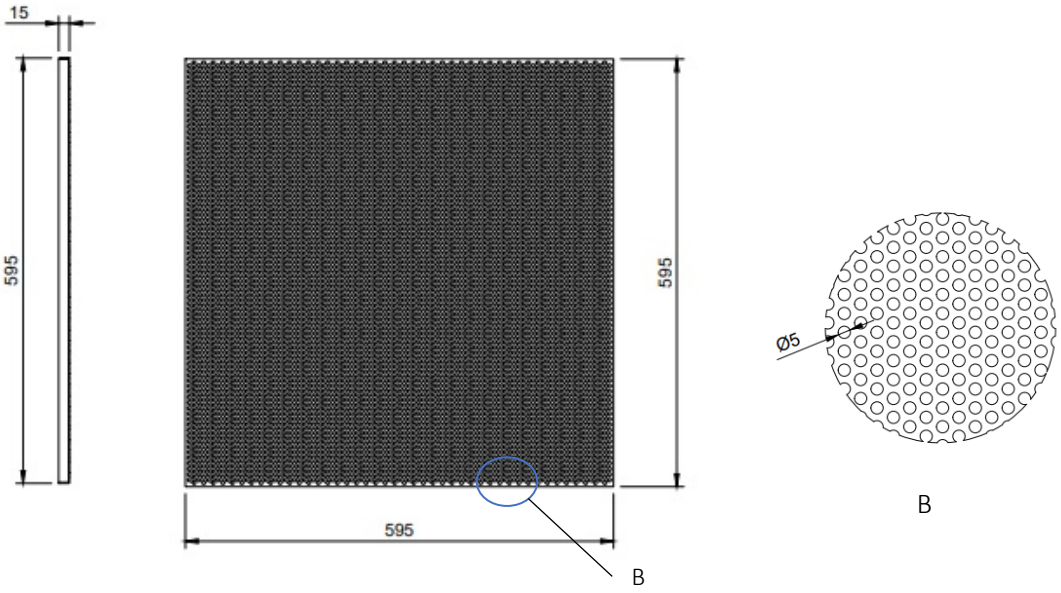
The grille is connected to the ducting system via the plenum box.

Materials

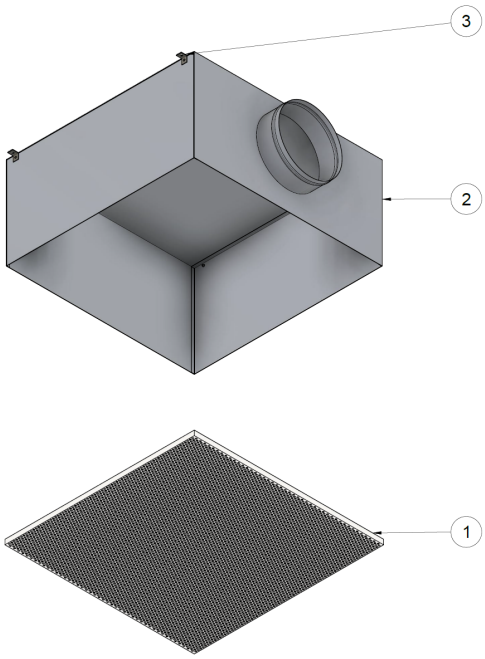
The grille is made of galvanized steel sheet and is electrostatic field painted in glossy white RAL 9016.

Other RAL colours are available on request.

Technical drawing



Product specifications



1- Perforated grille PF
2- Plenum box (optional)
3- Suspension element (lug)

Accessories

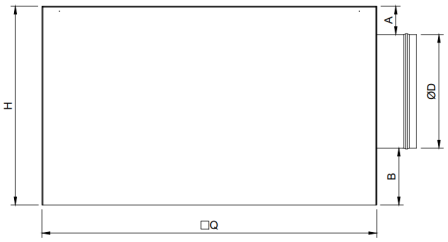
The grille can be delivered with a connecting plenum box to the circular duct, with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

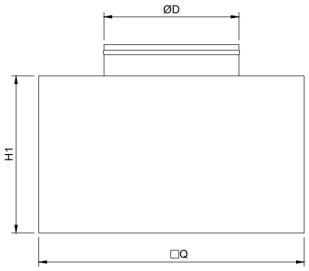
Optionally, a perforated damper can be mounted on the plenum connection to balance the air flow.

Adapter (plenum box)

Horizontal connection
(side/lateral exit)

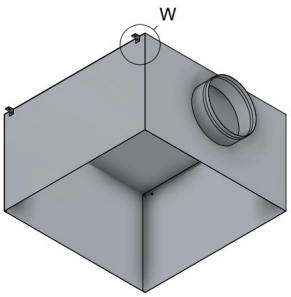


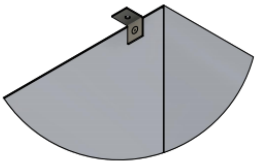
Vertical connection
(opposite exit)



□Q: 590 x 590 mm – for mounting in false suspended ceiling 600x600 mm
A, B, H1 – on request
H - depending on ØD, A and B

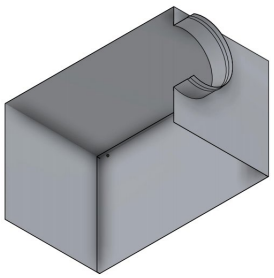
The adapter is made of Z140 galvanized steel sheet and has 4 suspension lugs.



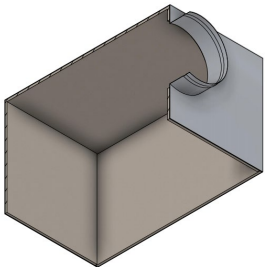


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.

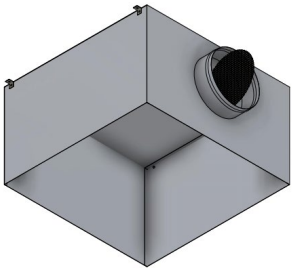


AN - Uninsulated adapter

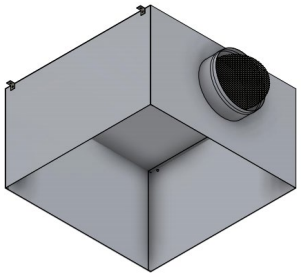


AIZ - Insulated adapter

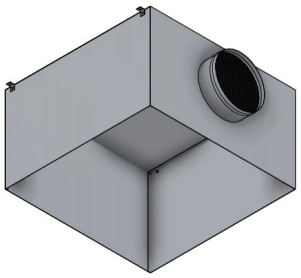
Perforated damper



Position 0°



Position 45°



Position 90°

The perforated damper is mounted on the adapter spigot and has the role of balancing the air flow.

Functional parameters

Supply

Air flow [m³/h]	LxH	595x595
	Ak [m²]	0.150
700	Veff [m/s]	1.3
	X [m]	1.8
	NR [dB(A)]	27.0
	ΔPt [Pa]	7.0
1000	Veff[m/s]	1.9
	X [m]	2.6
	NR [dB(A)]	39.0
	ΔPt [Pa]	15.0
1600	Veff [m/s]	3.0
	X [m]	3.1
	NR [dB(A)]	54.0
	ΔPt [Pa]	36.0

Exhaust

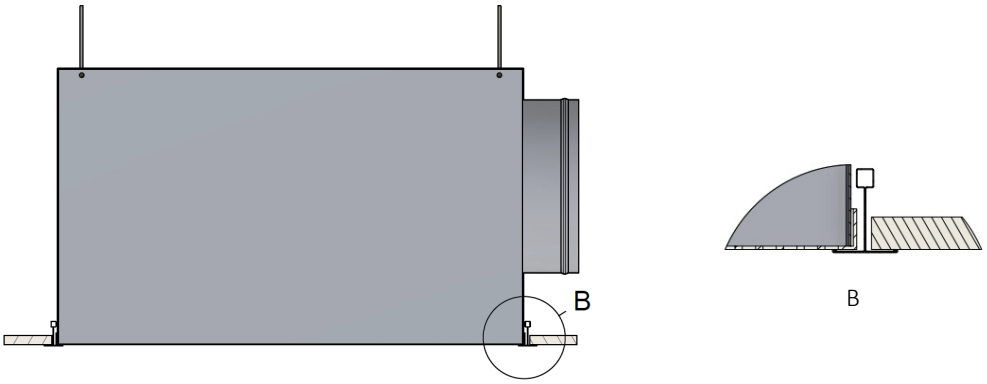
Air flow [m³/h]	LxH	595x595
	Ak [m²]	0.150
700	Veff [m/s]	1.30
	NR [dB(A)]	14
	ΔPt [Pa]	23
1000	Veff [m/s]	1.9
	NR [dB(A)]	20.0
	ΔPt [Pa]	33.0
1600	Veff [m/s]	3.0
	NR [dB(A)]	36.0
	ΔPt [Pa]	85.0

The legend
Ak [m²] - The free surface
Veff [m/s] – Air velocity in the grille
NR [dB (A)] - Noise level without room attenuation
X [m] - The length of the air jet at a speed of 0.2 m/s
ΔPt [Pa] - Pressure loss

Installation

The diffuser is recommended for mounting in 600 x 600 mm false suspended ceiling.

Installation in T-bar suspended ceiling



Order code

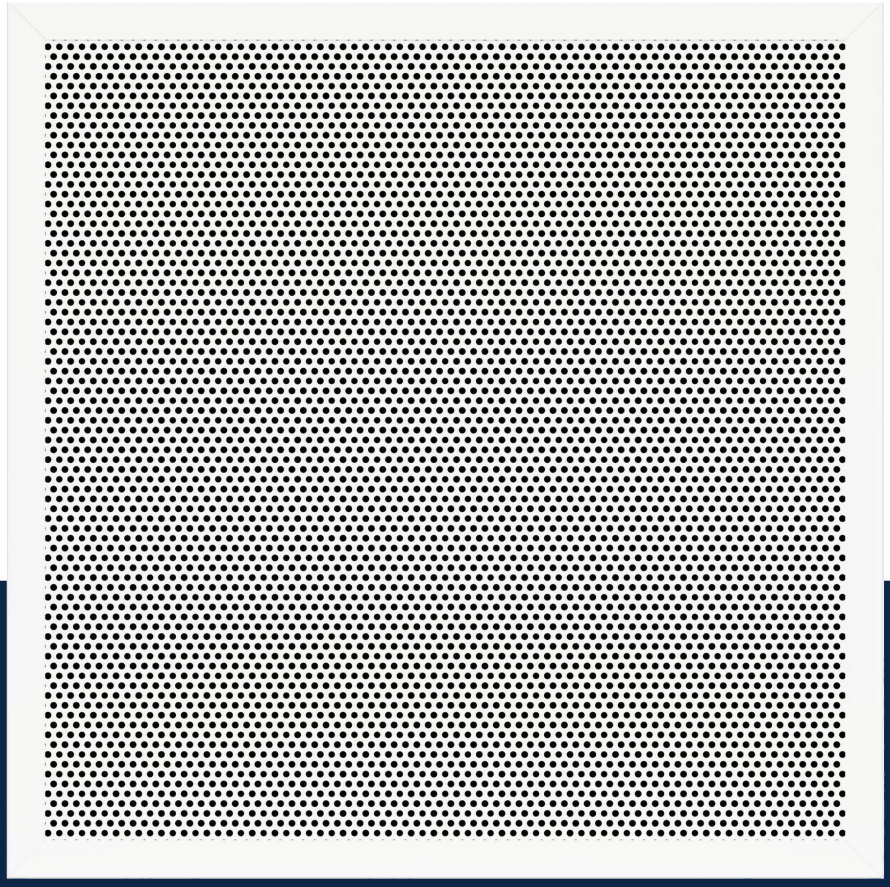
Example on how to place an order

Type	Dimensions	Accessories	Finish
PF			
	595 x 595 mm		
		AIZ - Insulated adapter	
		AN - Uninsulated adapter	
		Perforated damper (plenum box)	
			RAL9016
			RAL.. - Other RAL colors on request

Air through perfection

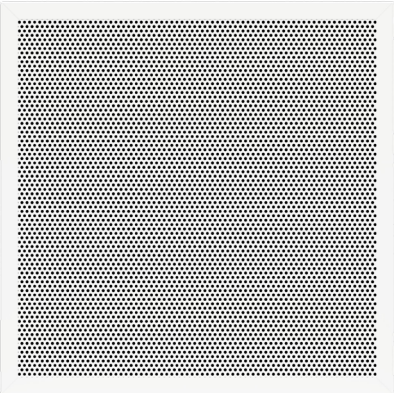
Perforated grille

PF-F



ACP
Grilles

Perforated grille
PF-F



Description

Rectangular grille with circular perforations, used for introducing or evacuating air.

Perforated grille can be used in installations with constant or variable air flow with ceiling or wall mounting.

Technical specifications

Characteristics

The grille is provided with circular perforations with a diameter of 5 mm.

As standard, the grille is manufactured with holes for screw mounting, except for the size 595x595 mm (external dimensions) for the false ceiling 600x600 mm.

The product is delivered with fixing screws.

For installation with a mounting frame, the grille is accessorized with fixing clips.

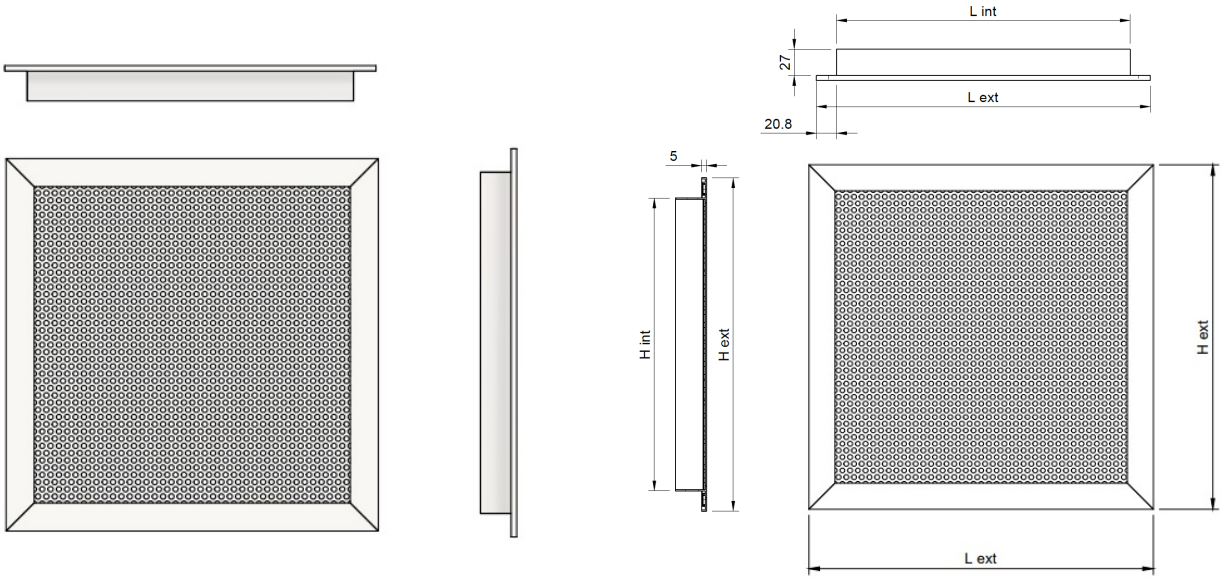
Materials

The grille is made of extruded aluminum profiles (frame) with the central part of galvanized steel sheet provided with circular perforations.

Standard grille is electrostatic field painted in glossy white RAL9016.

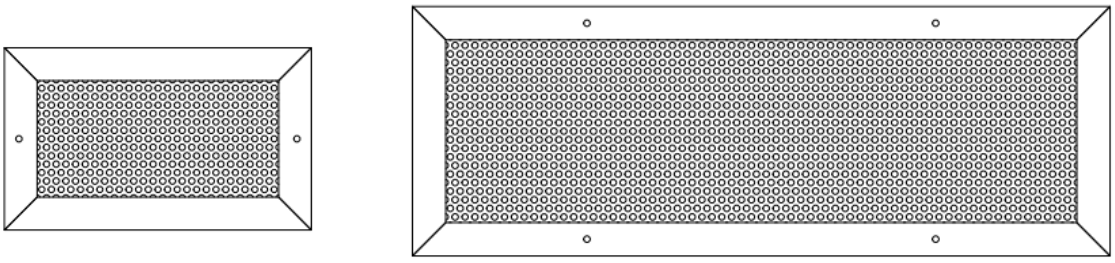
Other RAL colours are available on request.

Technical drawing



Product specifications

The grille is made standard with mounting holes positioned on the product frame. The number of holes and their position are made according to the size of the product, according to the pictures and table.



L x H [mm]	Number of holes												
	100	200	300	400	500	600	800	900	1000	1100	1200	1400	1500
75	2	2	4	4	4	4	4	4	4	6	6	6	6
100	2	2	4	4	4	4	4	4	4	6	6	6	6
200	-	2	4	4	4	4	4	4	4	6	6	6	6
300	-	-	4	4	4	4	4	4	4	6	6	6	6
400	-	-	-	6	6	6	6	6	6	6	6	6	6
500	-	-	-	-	6	6	6	6	6	6	6	6	6
600	-	-	-	-	-	6	6	6	6	6	6	6	6

Accessories

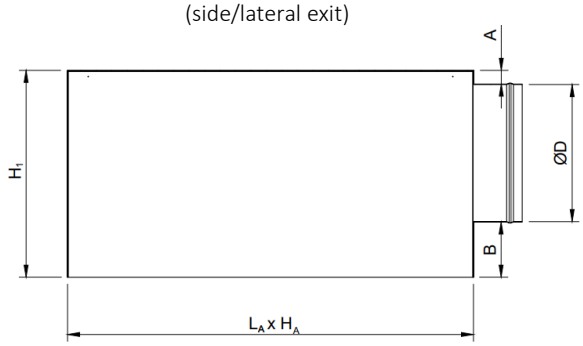
The grille can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

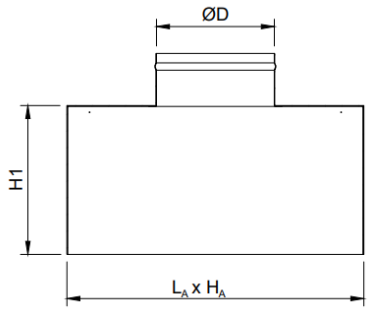
The product can be accessorized with G4 air filter, opposed blade damper or mounting frame.

Adapter (plenum box)

Horizontal connection
(side/lateral exit)

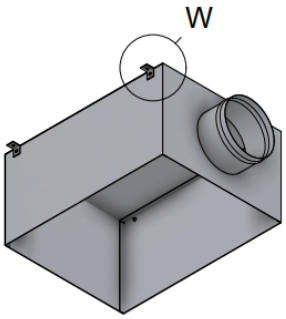


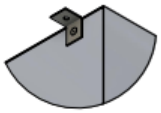
Vertical connection
(opposite exit)



* For fixing with screws: L_A X H_A = Lint x Hint grille + 7 mm
* For fixing with mounting frame: L_A X H_A = Lc x Hc mounting frame + 4 mm
A, B, H1 – depending on demand and ØD

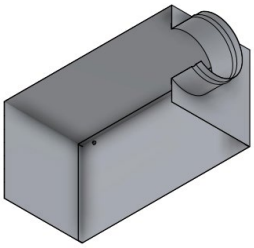
The adapter is made of Z140 galvanized steel sheet and is equipped with suspension lugs.



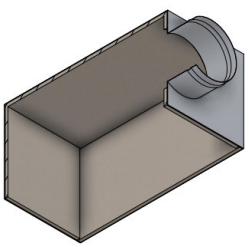


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.



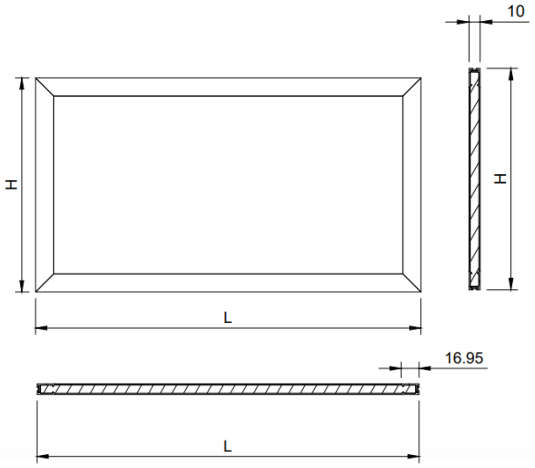
AN - Uninsulated adapter



AIZ - Insulated adapter

Air filter G4 with frame (F-R)

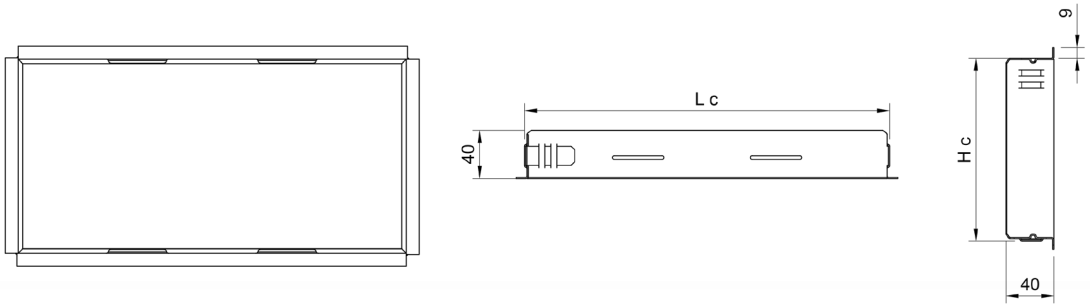
G4 air filter with aluminum frame, used for air filtration and is mounted on the grille connection. The large dimensions are made in several pieces.



L x H [mm]	Air filter													
	100	200	300	400	500	600	800	900	1000	1100	1200	1300	1400	1500
75	1	1	1	1	1	1	1	1	1	1	1	2	2	2
100	1	1	1	1	1	1	1	1	1	1	1	2	2	2
200	-	1	1	1	1	1	1	1	1	1	1	2	2	2
300	-	-	1	1	1	1	1	1	1	1	1	2	2	2
400	-	-	-	1	1	1	1	1	1	1	1	2	2	2
500	-	-	-	-	2	2	2	2	2	2	2	2	2	2
600	-	-	-	-	-	2	2	2	2	2	2	2	2	2

Mounting frame (CC)

The mounting frame is used when a hidden, easy and fast installation of the grille is desired. Depending on the size required, it is made and delivered in one or more pieces.

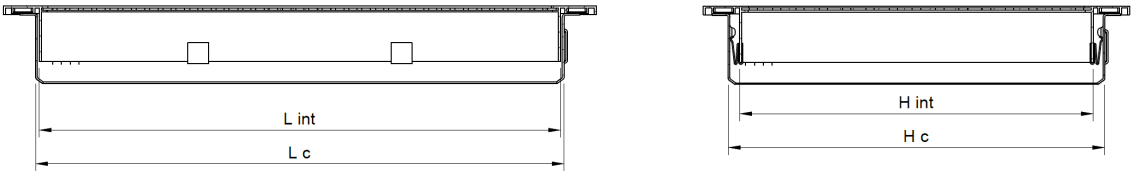


L x H [mm]	Mounting frame													
	100	200	300	400	500	600	800	900	1000	1100	1200	1300	1400	1500
75	1	1	1	1	1	1	1	1	1	1	2	2	2	2
100	1	1	1	1	1	1	1	1	1	1	2	2	2	2
200	-	1	1	1	1	1	1	1	1	1	2	2	2	2
300	-	-	1	1	1	1	1	1	1	1	2	2	2	2
400	-	-	-	1	1	1	1	1	1	1	2	2	2	2
500	-	-	-	-	1	1	1	1	1	1	2	2	2	2
600	-	-	-	-	-	1	1	1	1	1	2	2	2	2

For installation with mounting frame, the grille is equipped with clips that allow quick and easy clamping. The number of clips with which the grille is equipped depends on the size of the product.

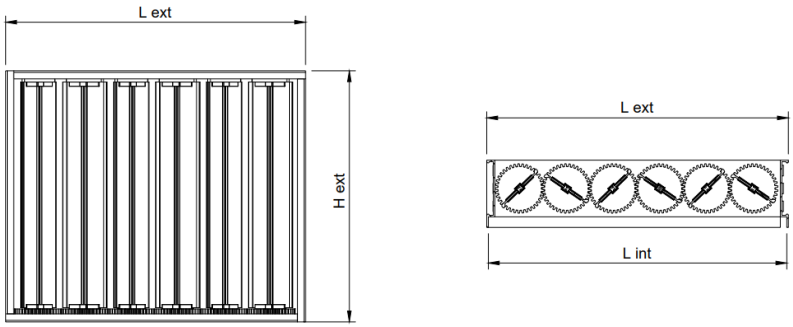
L x H [mm]	Number of mounting clips														
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500
75	2	2	4	4	4	4	4	4	4	6	6	6	6	6	6
100	2	2	4	4	4	4	4	4	4	6	6	6	6	6	6
200	-	2	4	4	4	4	4	4	4	6	6	6	6	6	6
300	-	-	4	4	4	4	4	4	4	6	6	6	6	6	6
400	-	-	-	4	4	4	4	4	4	6	6	6	6	6	6
500	-	-	-	-	6	6	6	6	6	6	6	6	6	6	6
600	-	-	-	-	-	6	6	6	6	6	6	6	6	6	6

Example : PF-F + CC



Lc x Hc = Lint x Hint grille + 18 mm

Opposed blade damper (OBD)



The damper is used to adjust the air flow. It is equipped with opposable blades and gears, mounted on the grille connection. The large dimensions are made in several pieces.

L x H [mm]	Opposed blade damper														
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500
75	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3
100	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3
200	-	1	1	1	1	1	2	2	2	2	2	2	3	3	3
300	-	-	1	1	1	1	2	2	2	2	2	2	3	3	3
400	-	-	-	1	1	1	2	2	2	2	2	2	3	3	3
500	-	-	-	-	2	2	2	2	3	3	3	3	3	3	4
600	-	-	-	-	-	2	2	2	3	3	3	3	3	3	4

Functional parameters

Supply

Air flow [m³/h]	LxH	300x300	400x400	500x500	600x600
	Ak [m²]	0.030	0.056	0.088	0.132
160	Veff [m/s]	1.5			
	X [m]	0.9			
	NR [dB(A)]	22.0			
	ΔPt [Pa]	9.0			
200	Veff [m/s]	1.8	1.0		
	X [m]	1.1	0.8		
	NR [dB(A)]	31.0	< 20		
	ΔPt [Pa]	14.0	4.0		
300	Veff [m/s]	2.8	1.5		
	X [m]	1.7	1.2		
	NR [dB(A)]	44.0	25.0		
	ΔPt [Pa]	31.0	8.0		
400	Veff [m/s]	3.7	2.0	1.3	
	X [m]	2.1	1.6	1.3	
	NR [dB(A)]	53.0	35.0	20.0	
	ΔPt [Pa]	53.0	15.0	5.0	
500	Veff [m/s]	4.6	2.5	1.6	
	X [m]	2.5	2.0	1.6	
	NR [dB(A)]	61.0	42.0	27.0	
	ΔPt [Pa]	81.0	23.0	8.0	
700	Veff [m/s]		3.5	2.2	1.5
	X [m]		2.2	2.2	1.8
	NR [dB(A)]		52.0	39.0	27.0
	ΔPt [Pa]		45.0	16.0	7.0
1000	Veff [m/s]		5.0	3.2	2.1
	X [m]		3.1	2.4	2.6
	NR [dB(A)]		63.0	51.0	39.0
	ΔPt [Pa]		90.0	30.0	15.0
1600	Veff [m/s]				3.4
	X [m]				3.1
	NR [dB(A)]				54.0
	ΔPt [Pa]				36.0

Extraction

Air flow [m³/h]	LxH	300x300	400x400	500x500	600x600
	Ak [m²]	0.030	0.056	0.088	0.132
160	Veff [m/s]	1.5			
	NR [dB(A)]	19.0			
	ΔPt [Pa]	20.0			
200	Veff [m/s]	1.8			
	NR [dB(A)]	20.0			
	ΔPt [Pa]	31.0			
300	Veff [m/s]	2.8			
	NR [dB(A)]	26.0			
	ΔPt [Pa]	76.0			
400	Veff [m/s]	3.7	2.0		
	NR [dB(A)]	35.0	<20		
	ΔPt [Pa]	125.0	33.0		
500	Veff [m/s]	4.6	2.5		
	NR [dB(A)]	42.0	23.0		
	ΔPt [Pa]	185.0	47.0		
700	Veff [m/s]		3.5	2.2	
	NR [dB(A)]		34.0	20.0	
	ΔPt [Pa]		95.0	37.0	
1000	Veff [m/s]			3.2	2.1
	NR [dB(A)]			31.0	20.0
	ΔPt [Pa]			73.0	33.0
1600	Veff [m/s]				3.4
	NR [dB(A)]				36.0
	ΔPt [Pa]				85.0

The legend
Ak [m²] - The free surface
Veff [m/s] - The effective velocity of air in the grille
NR [dB (A)] - Noise level without room attenuation
X [m] - The length of the air jet at a speed of 0.2 m/s
ΔPt [Pa] - Pressure loss

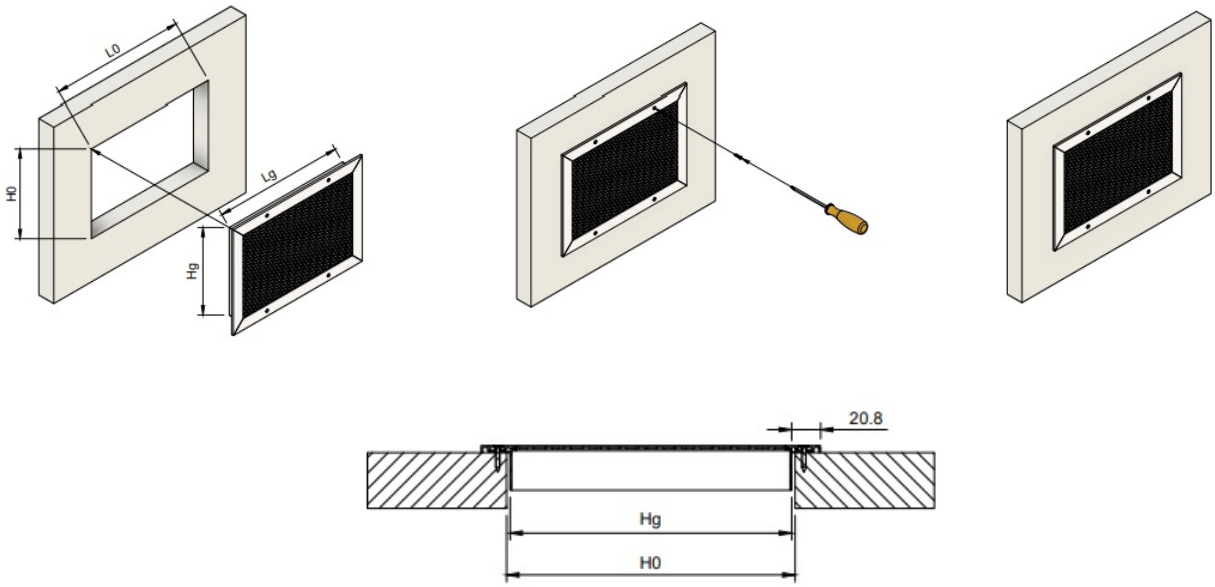
Installation

As standard the grille is mounted by means of screws.

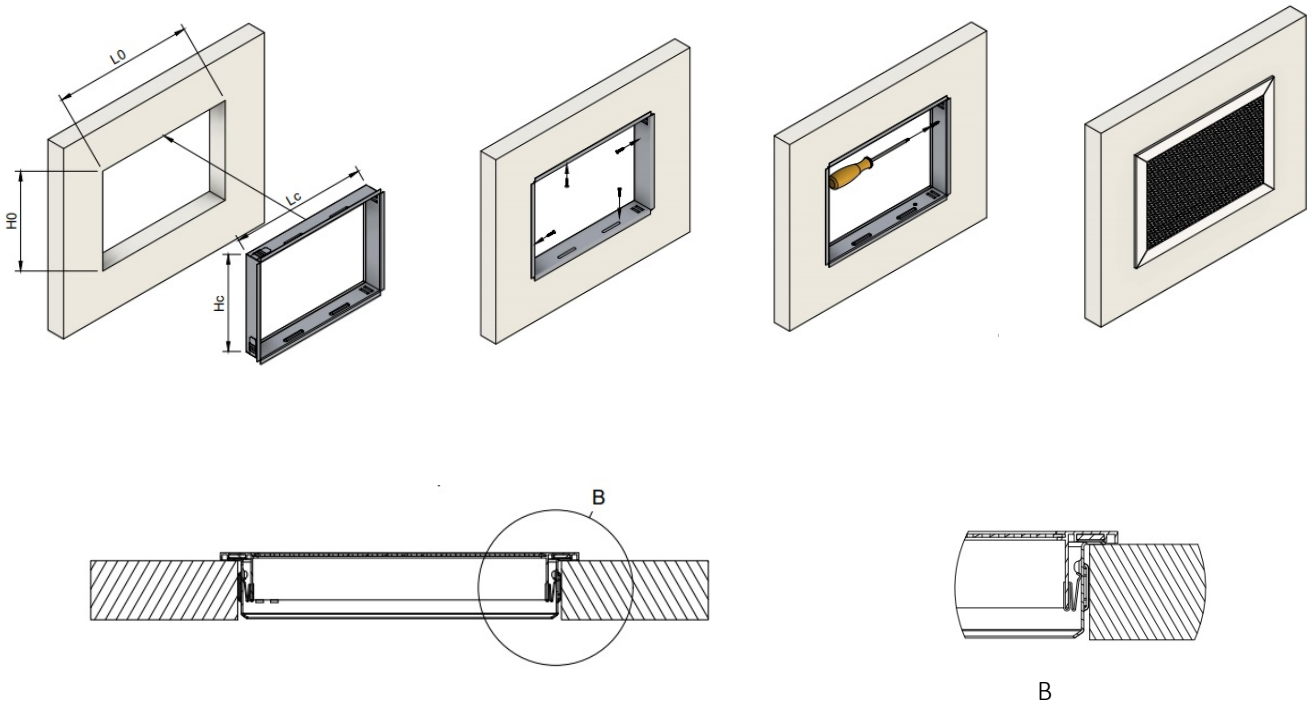
Optionally, for a hidden and easy assembly, a mounting frame can be used. The installation of the grille in the mounting frame is done by clamping.

The grille with dimensions 595x595 mm (LxHext) is placed on the profile of the false suspended ceiling with size 600x600 mm (the product is made without holes).

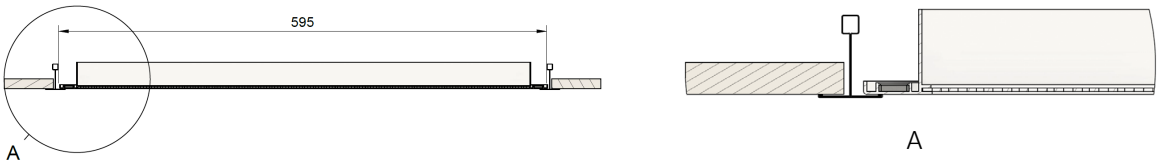
Installation with screws



Installation with mounting frame



Installation in T-bar suspended ceiling
PF-F 595x595 mm (external size)



Order code

Example on how to place an order

Type	Dimensions	Accessories	Mounting	Finish
PF-F				
	On request			
		F-R - Air filter G4		
		OBD - Control damper		
		AIZ - Insulated adapter		
		AN - Uninsulated adapter		
			Screws (standard)	
			CC - Mounting frame (optional)	
				RAL9016
				RAL..- Other RAL colors on request

Air through perfection

Gravitational grille

NRD



ACP
Grilles

Gravitational grille
NRD



Description

NRD is a gravitational aluminum grille for overpressure with normally closed movable blades.

The grille is recommended for wall or end mounting of rectangular duct.

The product can be used for introducing or evacuating air.

Technical specifications

Characteristics

The grille has movable blades parallel to the "L" (length) and mounting holes.

The opening direction of the blades is towards the outside of the frame according to the image.

On request, the blades can be positioned in the opposite direction.

The grille blades open at overpressure.

For lengths > 500 mm, the grille is provided with elements for stiffening.

The grille contains load-bearing sections made of anti-friction plastic and a gasket positioned along the length of the blades.

The product is delivered with fixing screws.

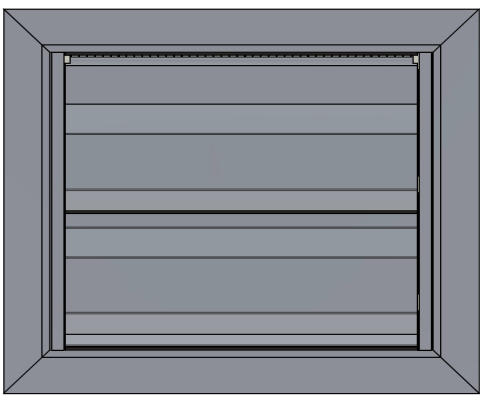
Dimensional limits: minimum dimensions 200x200 mm, the maximum built surface is 1 sqm with the condition H max = 1 m.

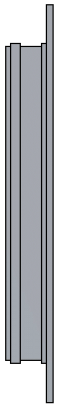
Materials

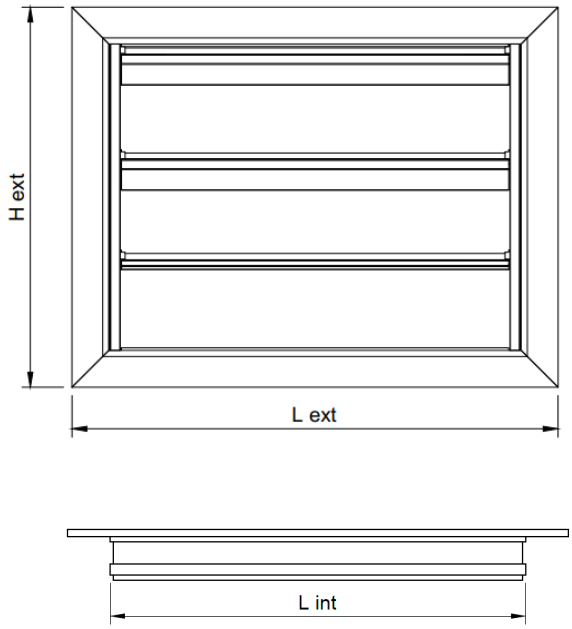
The grille is made of extruded aluminum profiles. The frame is made of anodized aluminum and the blades are made of natural aluminum.

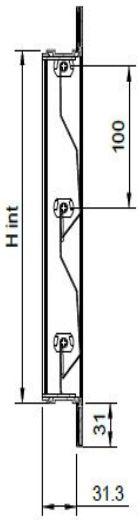
Plastic load-bearing sections.

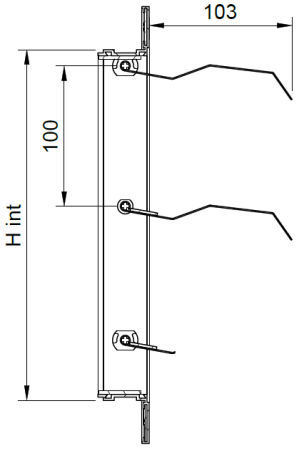
Technical drawing





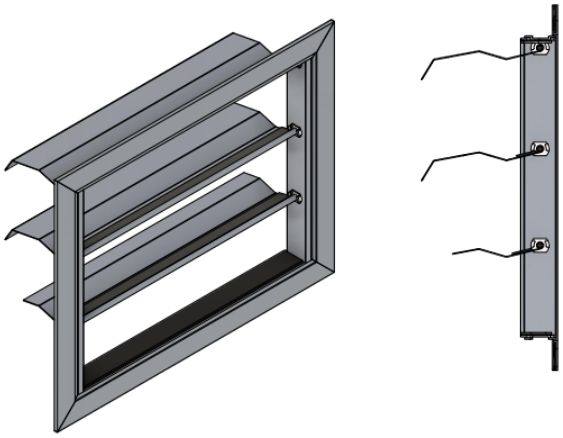






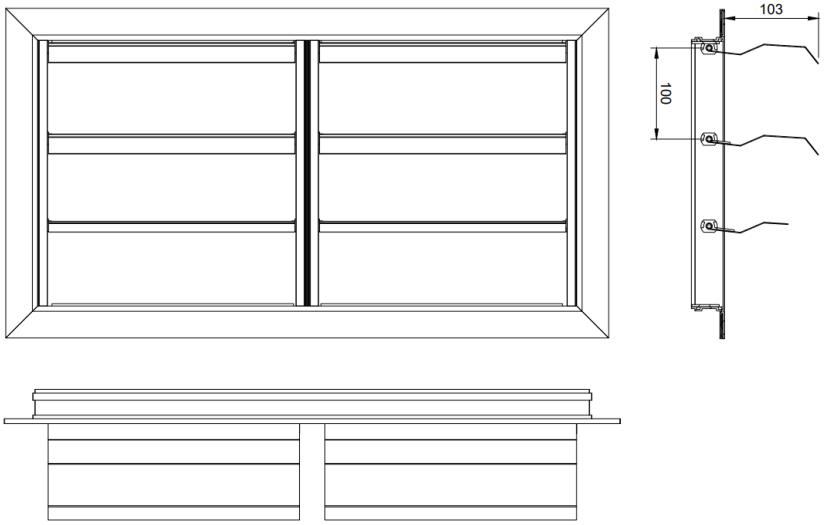
On request, the blades can be positioned in the opposite direction according to the picture.

NRD-I



Product specifications

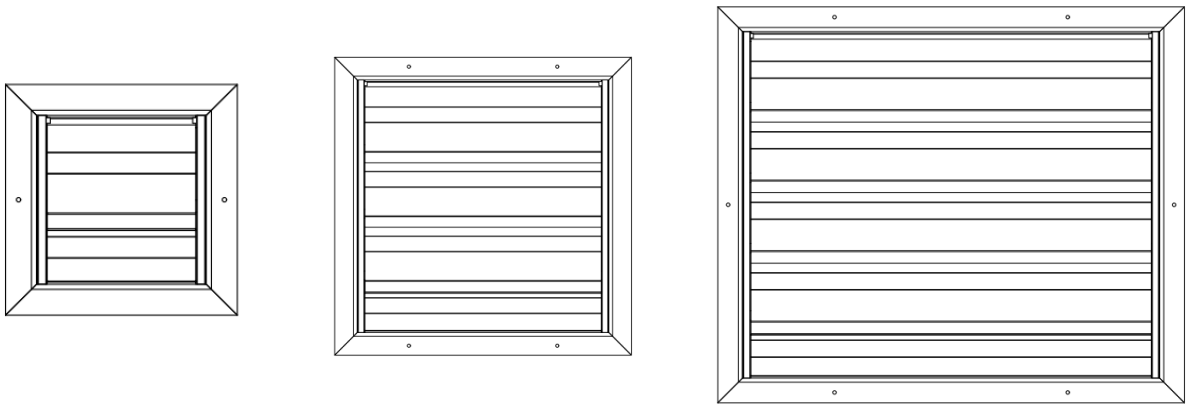
Products with a length > 500 mm will be made with stiffeners.



The grille is made standard with mounting holes positioned on the product frame. The number of holes and their position are made according to the size of the product, according to the pictures and table.

L x H	Number of holes								
[mm]	200	300	400	500	600	700	800	900	1000
200	2	4	4	4	4	4	4	4	4
300	4	4	4	4	4	4	4	4	4
400	4	4	4	4	4	4	4	4	4
500	4	4	4	4	4	4	4	4	4
600	4	4	4	4	4	4	4	4	4
700	4	4	4	4	4	6	6	6	6
800	4	4	4	4	4	6	6	6	6
900	4	4	4	4	4	6	6	6	6
1000	4	4	4	4	4	6	6	6	6

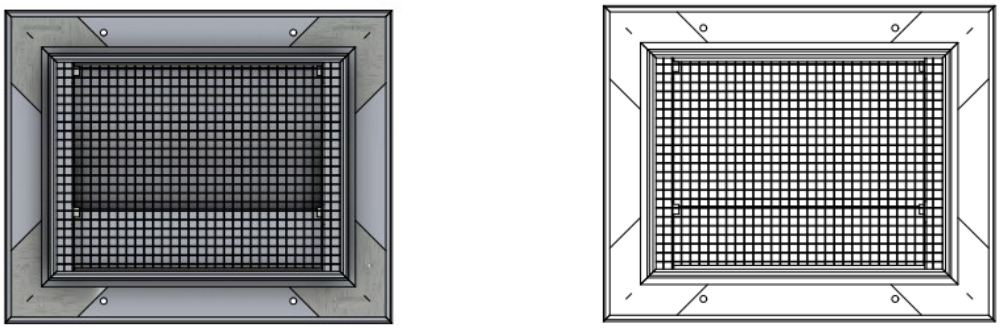
Example of positioning mounting holes on the product frame

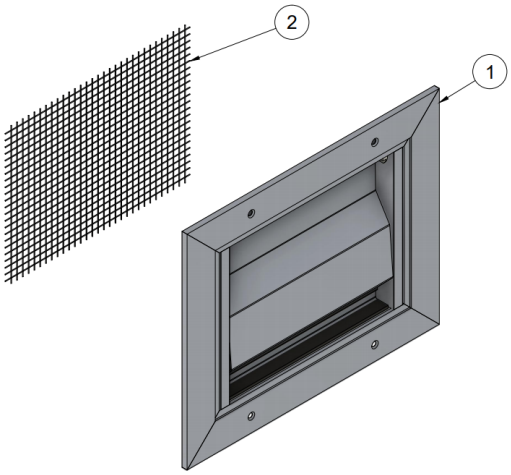


Accessories

Wire mesh (PS)

The grille can be equipped with a wire mesh with a mesh size of 10x10 mm





1 - NRD
2 - Wire mesh (optional)

Functional parameters

Ak [m²]									
Height [mm]	Length [mm]								
	200	300	400	500	600	700	800	900	1000
200	0.03	0.05	0.07	0.08	0.10	0.12	0.14	0.15	0.17
300	0.05	0.08	0.10	0.13	0.16	0.19	0.21	0.24	0.27
400	0.07	0.10	0.14	0.18	0.22	0.25	0.29	0.33	0.37
500	0.08	0.13	0.18	0.23	0.27	0.32	0.37	0.42	0.46
600	0.10	0.16	0.22	0.27	0.33	0.39	0.45	0.50	0.56
700	0.12	0.19	0.25	0.32	0.39	0.46	0.52	0.59	0.66
800	0.14	0.21	0.29	0.37	0.45	0.52	0.60	0.68	0.76
900	0.15	0.24	0.33	0.42	0.50	0.59	0.68	0.77	0.85
1000	0.17	0.27	0.37	0.46	0.56	0.66	0.76	0.85	0.95

Flow selection table for speed of 3m/s

Air flow [m³/h]									
Height [mm]	Length [mm]								
	200	300	400	500	600	700	800	900	1000
200	324	540	756	864	1080	1296	1512	1620	1836
300	540	864	1080	1404	1728	2052	2268	2592	2916
400	756	1080	1512	1944	2376	2700	3132	3564	3996
500	864	1404	1944	2484	2916	3456	3996	4536	4968
600	1080	1728	2376	2916	3564	4212	4860	5400	6048
700	1296	2052	2700	3456	4212	4968	5616	6372	7128
800	1512	2268	3132	3996	4860	5616	6480	7344	8208
900	1620	2592	3564	4536	5400	6372	7344	8316	9180
1000	1836	2916	3996	4968	6048	7128	8208	9180	10260

Veff [m/s]	1	2	3	4	5	6	7
ΔPt [Pa]	10	18	25	29	37	48	63

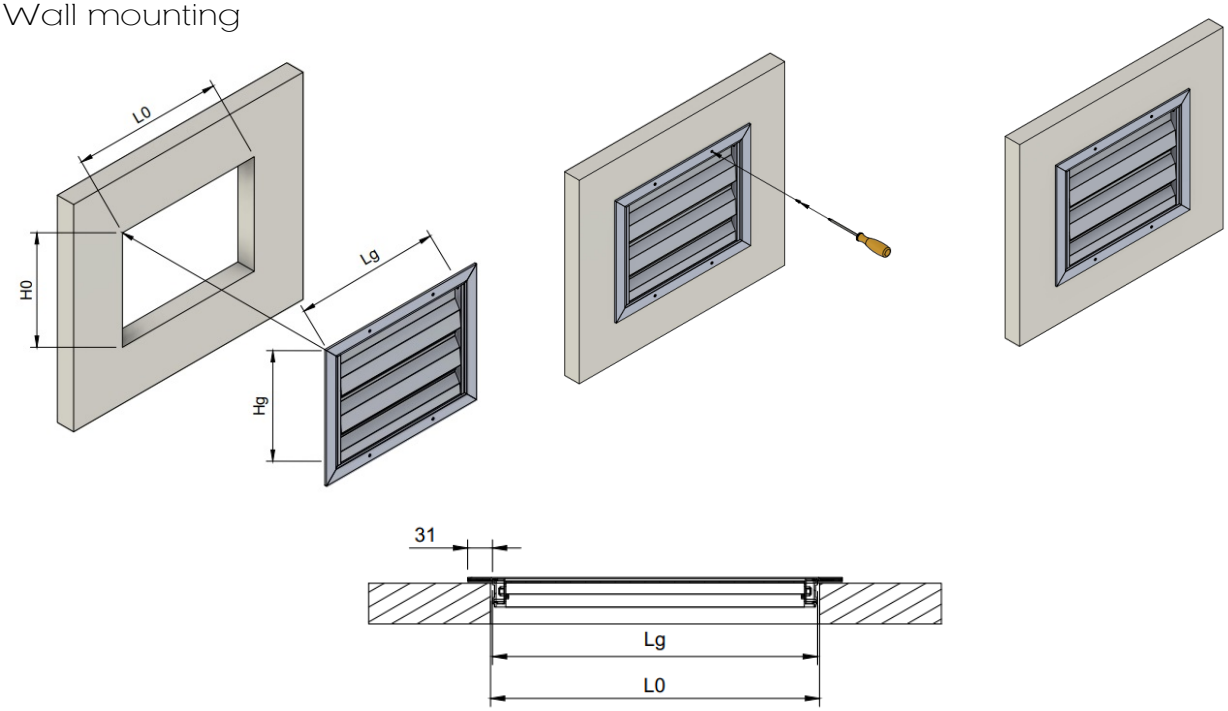
Note
The optimal speed for choosing the grille size is between 2 and 4 m/s.
The grille dimensions are determined by applying the formula Ak [m²] = Flow [mc/h]/3600 [s]/Veff [m/s] and the selection table.

The legend
Ak [m²] - The free surface of the grille
Veff [m/s] - The effective flow rate of air in the grille
ΔPt [Pa] - Pressure loss

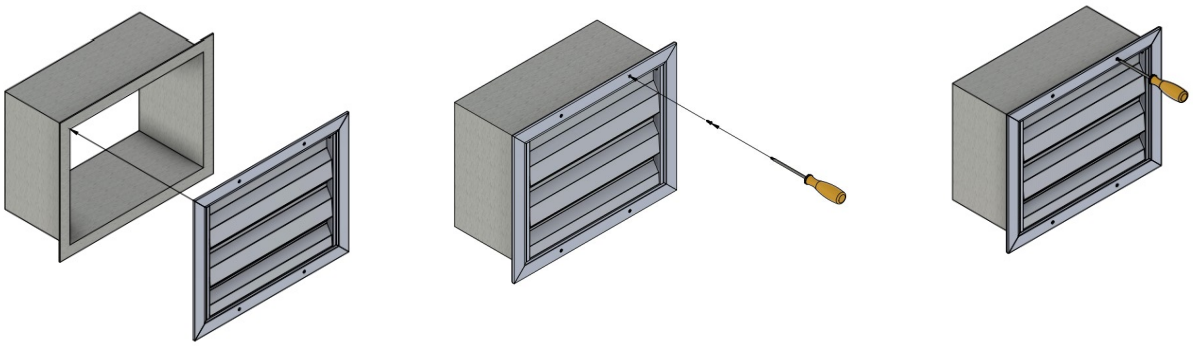
Installation

The grille is mounted with screws.

Wall mounting



Rectangular duct end assembly



Order code

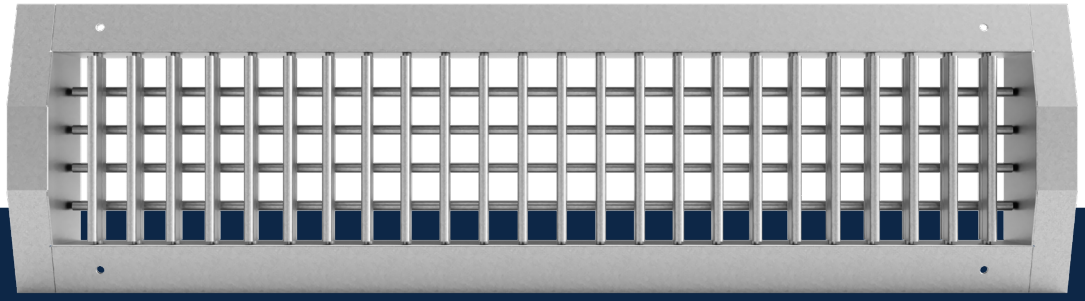
Example on how to place an order

Type	Dimensions	Accessories
NRD		
On request		
PS-10 - Wire mesh		

Air through perfection

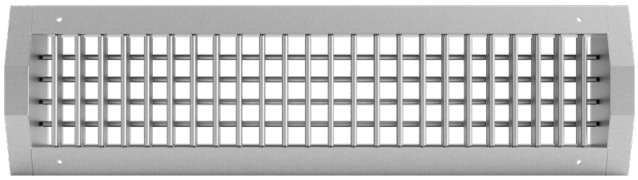
Double deflection grille for circular ducts

RA



ACP
Grilles

Double deflection grille for circular ducts RA



Description

RA is a rectangular grille, made of galvanized steel, with two rows of adjustable blades.

The grille is recommended for longitudinal mounting on rigid circular duct.

It is used for introduction and evacuation of air in ventilation and air conditioning systems.

Technical specifications

Characteristics

The grille is equipped with two rows of individually adjustable blades that allow the directing of the air jet.

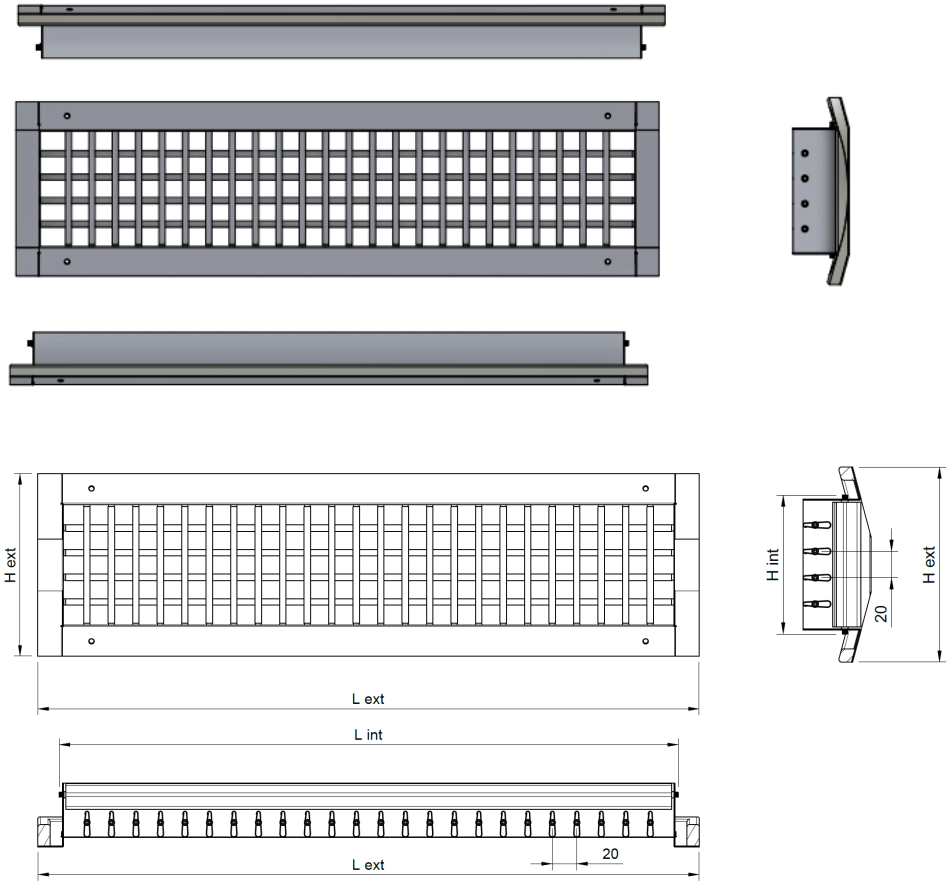
The front blades are parallel to the height and the ones positioned in the background are parallel to the length of the grille.

The product is delivered with a sealing gasket positioned on the frame, mounting holes and fixing screws.

Materials

The grille is made of galvanized steel with natural galvanized finish (unpainted).

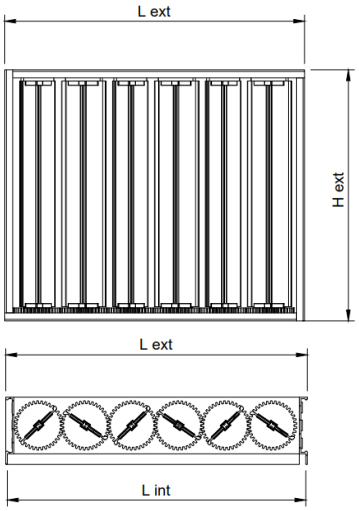
Technical drawing



RA	L x H int	L x H ext	Duct diameter [mm]	
			minimum	maximum
325 x 75	310 x 60	348 x 105	160	400
425 x 75	410 x 60	448 x 105	160	400
525 x 75	510 x 60	548 x 105	160	400
625 x 75	610 x 60	648 x 105	160	400
825 x 75	810 x 60	848 x 105	160	400
325 x 125	310 x 110	348 x 155	250	900
425 x 125	410 x 110	448 x 155	250	900
525 x 125	510 x 110	548 x 155	250	900
625 x 125	610 x 110	648 x 155	250	900
825 x 125	810 x 110	848 x 155	250	900
325 x 225	310 x 210	348 x 255	500	1400
425 x 225	410 x 210	448 x 255	500	1400
525 x 225	510 x 210	548 x 255	500	1400
625 x 225	610 x 210	648 x 255	500	1400
825 x 225	810 x 210	848 x 255	500	1400

Accessories

Opposed blade damper (OBD)



The damper is provided with opposable blades and gears, it is mounted on the grille connection.

Functional parameters

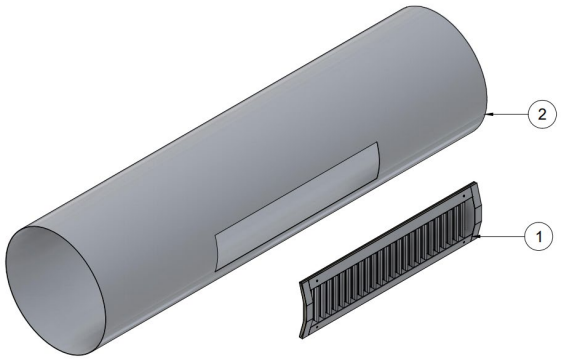
Air flow	LxH	425 x 75	525 x 75	625 x 75	425 x 125	525 x 125	625 x 125	425 x 225	525 x 225	625 x 225	825 x 225
(m³/h)	Ak [m²]	0.0091	0.0122	0.0137	0.0190	0.0236	0.0274	0.0372	0.0464	0.0555	0.0737
100	X [m]	3.2									
	NR [dB(A)]	20.0									
	Veff(m/s)	3.0									
	△Pt [pa]	10.0									
200	X [m]	5.8	5.3	5.0							
	NR [dB(A)]	29.0	25.0	20.0							
	Veff(m/s)	6.1	4.6	4.1							
	△Pt [pa]	17.9	11.0	6.0							
250	X [m]	7.4	6.4	6.1	5.1						
	NR [dB(A)]	34.0	30.0	27.0	20.0						
	Veff(m/s)	7.6	5.7	5.1	3.7						
	△Pt [pa]	26.1	16.5	12.4	5.0						
300	X [m]	8.7	8.1	7.2	6.3	5.4					
	NR [dB(A)]	38.0	34.0	31.0	26.0	21.0					
	Veff(m/s)	9.1	6.9	6.1	4.4	3.5					
	△Pt [pa]	37.1	24.8	17.9	9.6	4.0					
350	X [m]	10.4	9.2	8.5	7.5	6.7	5.3				
	NR [dB(A)]	42.0	38.0	35.0	29.0	25.0	20.0				
	Veff(m/s)	10.7	8.0	7.1	5.1	4.1	3.6				
	△Pt [pa]	50.9	33.0	23.4	13.8	8.3	5.5				
400	X [m]	11.7	10.7	9.7	8.4	7.6	6.9	5.0			
	NR [dB(A)]	45.0	41.0	38.0	33.0	28.0	25.0	19.0			
	Veff(m/s)	12.2	9.1	8.1	5.8	4.7	4.1	3.0			
	△Pt [pa]	64.6	44.0	33.0	17.9	11.0	8.3	3.8			
450	X [m]	13.2	11.5	10.9	9.5	8.5	7.8	6.3			
	NR [dB(A)]	48.0	44.0	41.0	36.0	32.0	28.0	21.0			
	Veff(m/s)	13.7	10.3	9.1	6.6	5.3	4.6	3.4			
	△Pt [pa]	83.9	55.0	41.3	23.4	15.1	11.0	5.0			
500	X [m]		13.2	12.1	10.6	9.4	8.7	7.6	5.7		
	NR [dB(A)]		47.0	43.0	38.0	34.0	30.0	25.0	20.0		
	Veff(m/s)		11.4	10.2	7.3	5.9	5.1	3.7	3.0		
	△Pt [pa]		68.8	48.1	27.5	17.9	12.4	6.9	4.0		
600	X [m]			14.5	12.7	11.5	10.5	9.1	8.2	6.9	
	NR [dB(A)]			48.0	43.0	38.0	35.0	29.0	25.0	21.0	
	Veff(m/s)			12.2	8.8	7.1	6.1	4.5	3.6	3.0	
	△Pt [pa]			70.1	39.9	26.1	17.9	12.4	6.9	4.3	
700	X [m]				14.8	13.2	12.2	10.6	9.4	8.6	5.1
	NR [dB(A)]				46.0	42.0	39.0	33.0	29.0	25.0	19.0
	Veff(m/s)				10.2	8.3	7.1	5.2	4.2	3.5	2.6
	△Pt [pa]				55.0	35.8	24.8	13.8	9.6	6.9	3.0
800	X [m]				16.9	15.2	13.9	12.1	10.8	9.9	6.5
	NR [dB(A)]				50.0	45.0	42.0	36.0	32.0	29.0	22.0
	Veff(m/s)				11.7	9.4	8.1	6.0	4.8	4.0	3.0
	△Pt [pa]				71.5	46.8	33.0	19.3	12.4	8.3	4.2
900	X [m]					17.0	15.5	13.6	12.2	11.2	9.7
	NR [dB(A)]					48.0	45.0	39.0	35.0	31.0	26.0
	Veff(m/s)					10.6	9.1	6.7	5.4	4.5	3.4
	△Pt [pa]					59.1	41.3	23.4	15.1	11.0	5.1
1000	X [m]						17.4	15.2	13.6	12.4	10.7
	NR [dB(A)]						48.0	43.0	39.0	34.0	28.0
	Veff(m/s)						10.2	7.5	6.0	5.0	3.8
	△Pt [pa]						52.3	30.3	19.3	13.8	6.9
1200	X [m]							18.1	16.1	14.8	12.9
	NR [dB(A)]							46.0	42.0	38.0	33.0
	Veff(m/s)							9.0	7.2	6.0	4.5
	△Pt [pa]							44.0	27.5	19.3	11.0
1400	X [m]							21.2	19.0	17.4	15.1
	NR [dB(A)]							50.0	46.0	42.0	37.0
	Veff(m/s)							10.4	8.4	7.0	5.3
	△Pt [pa]							59.1	37.1	26.1	15.1
1600	X [m]								21.6	19.8	17.1
	NR [dB(A)]								49.0	45.0	40.0
	Veff(m/s)								9.6	8.0	6.0
	△Pt [pa]								48.1	33.0	19.3
1800	X [m]									22.3	19.3
	NR [dB(A)]									48.0	43.0
	Veff(m/s)									9.0	6.8
	△Pt [pa]									42.6	24.8
2000	X [m]										21.5
	NR [dB(A)]										45.0
	Veff(m/s)										7.5
	△Pt [pa]										30.3

The legend
Ak [m²] - The free surface
X [m] - The length of the air jet at a speed of 0.25 m/s
NR [dB (A)] - Noise level without room attenuation
Veff [m/s] - The effective velocity of air in the grille
ΔPt [Pa] - Pressure loss

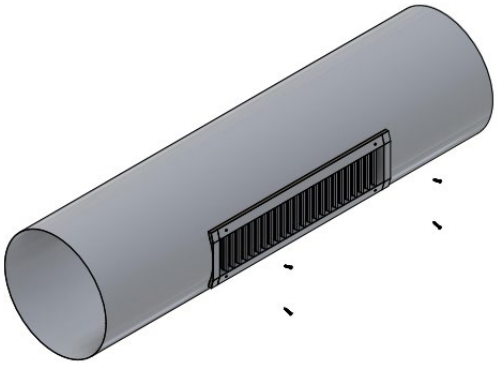
Installation

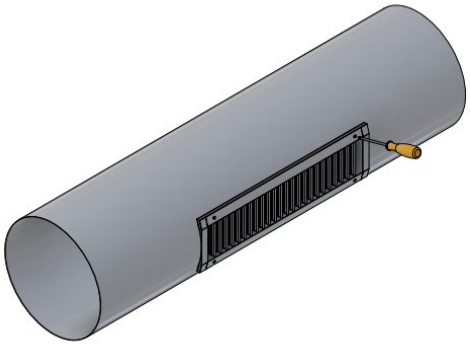
Longitudinal installation on rigid circular duct. Fixing the grille is done with screws.

Installation on circular duct



1 - Grille RA
2 - Rigid circular duct





Order code

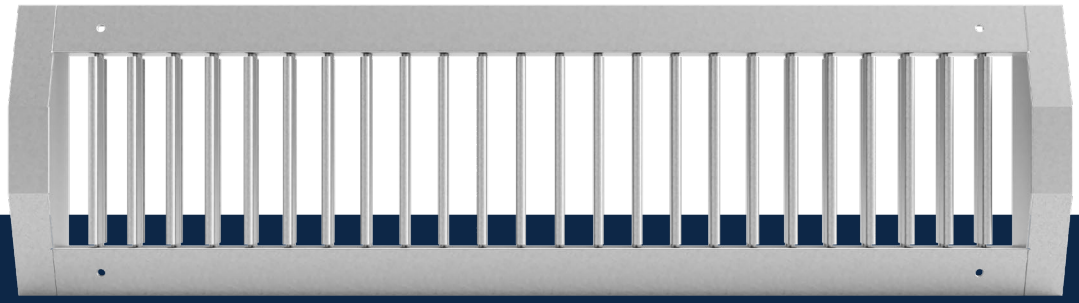
Example on how to place an order

Type	Dimensions	Accessories
RA		
On request		
(according to the table)		
OBD - Control damper		

Air through perfection

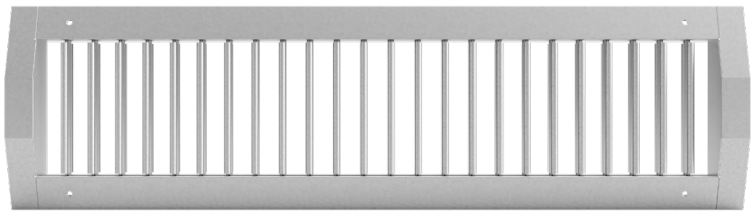
Single deflection grille for circular ducts

RA-I



ACP
Grilles

Single deflection grille for circular ducts RA-1



Description

RA-1 is a rectangular grille, made of galvanized steel, with a row of adjustable blades.

The grille is recommended for longitudinal mounting on rigid circular duct.

It is used for introduction and evacuation of air in ventilation and air conditioning systems.

Technical specifications

Characteristics

The grille is equipped with a row of individually adjustable blades that allow the direction of the air jet.

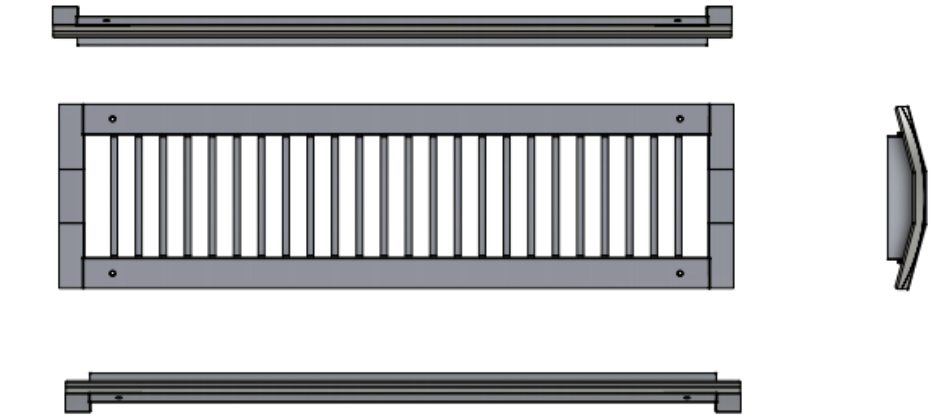
The blades are parallel to the height and easy to adjust.

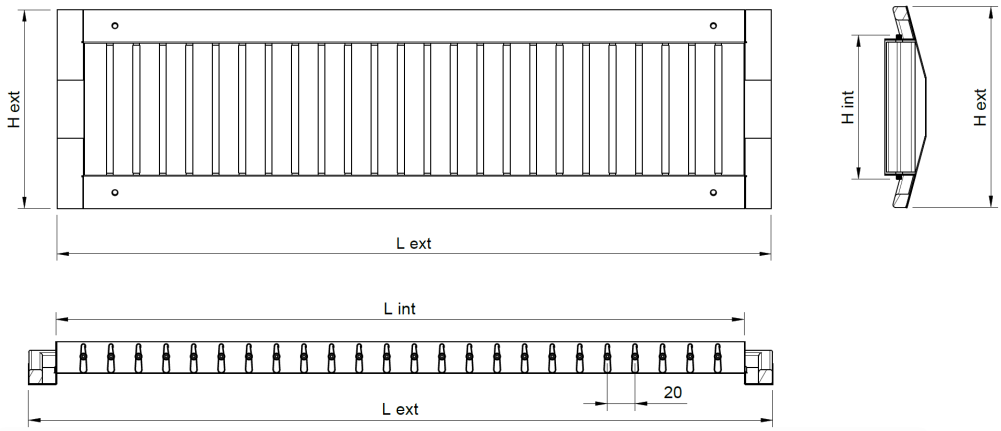
The product is delivered with a sealing gasket positioned on the frame, mounting holes and fixing screws.

Materials

The grille is made of galvanized steel with natural galvanized finish (unpainted).

Technical drawing

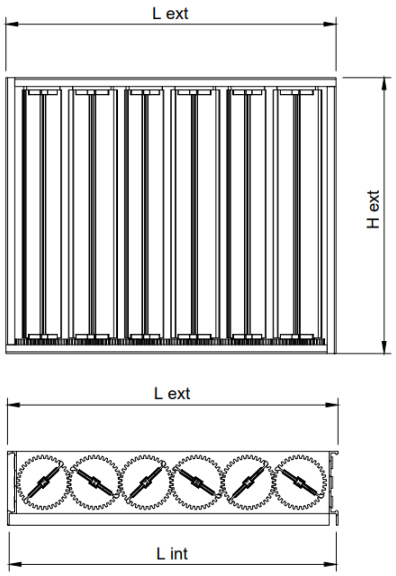




RA-1	L x H int	L x H ext	Duct diameter [mm]	
			minimum	maximum
325 x 75	308 x 60	348 x 105	160	400
425 x 75	408 x 60	448 x 105	160	400
525 x 75	508 x 60	548 x 105	160	400
625 x 75	608 x 60	648 x 105	160	400
825 x 75	808 x 60	848 x 105	160	400
325 x 125	308 x 110	348 x 155	250	900
425 x 125	408 x 110	448 x 155	250	900
525 x 125	508 x 110	548 x 155	250	900
625 x 125	608 x 110	648 x 155	250	900
825 x 125	808 x 110	848 x 155	250	900
325 x 225	308 x 210	348 x 255	500	1400
425 x 225	408 x 210	448 x 255	500	1400
525 x 225	508 x 210	548 x 255	500	1400
625 x 225	608 x 210	648 x 255	500	1400
825 x 225	808 x 210	848 x 255	500	1400

Accessories

Opposed blade damper (OBD)



The damper is provided with opposable blades and gears, it is mounted on the grille connection.

Functional parameters

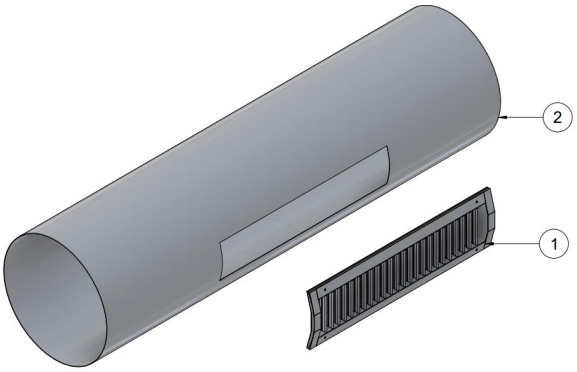
Air flow	LxH	425 x 75	525 x 75	625 x 75	425 x 125	525 x 125	625 x 125	425 x 225	525 x 225	625 x 225	825 x 225
(m³/h)	Ak [m²]	0.012	0.016	0.018	0.025	0.031	0.036	0.049	0.061	0.073	0.097
200	X [m]	5.0	4.6								
	NR [dB(A)]	24.0	20.0								
	Veff (m/s)	4.63	3.47								
	△Pt [pa]	13.0	8.0								
250	X [m]	6.4	5.6	5.3							
	NR [dB(A)]	29.0	25.0	22.0							
	Veff (m/s)	5.79	4.34	3.86							
	△Pt [pa]	19.0	12.0	9.0							
300	X [m]	7.6	7.0	6.3	5.5						
	NR [dB(A)]	33.0	29.0	26.0	21.0						
	Veff (m/s)	6.94	5.21	4.63	3.33						
	△Pt [pa]	27.0	18.0	13.0	7.0						
350	X [m]	9.0	8.0	7.4	6.5	5.8					
	NR [dB(A)]	37.0	33.0	30.0	24.0	20.0					
	Veff (m/s)	8.1	6.1	5.4	3.9	3.1					
	△Pt [pa]	37.0	24.0	17.0	10.0	6.0					
400	X [m]	10.2	9.3	8.4	7.3	6.6	6.0				
	NR [dB(A)]	40.0	36.0	33.0	28.0	23.0	20.0				
	Veff (m/s)	9.3	6.9	6.2	4.4	3.6	3.1				
	△Pt [pa]	47.0	32.0	24.0	13.0	8.0	6.0				
450	X [m]	11.5	10.0	9.5	8.3	7.4	6.8				
	NR [dB(A)]	43.0	39.0	36.0	31.0	27.0	23.0				
	Veff (m/s)	10.4	7.8	6.9	5.0	4.0	3.5				
	△Pt [pa]	61.0	40.0	30.0	17.0	11.0	8.0				
500	X [m]		11.5	10.5	9.2	8.2	7.6	6.6			
	NR [dB(A)]		42.0	38.0	33.0	29.0	25.0	20.0			
	Veff (m/s)		8.7	7.7	5.6	4.5	3.9	2.8			
	△Pt [pa]		50.0	35.0	20.0	13.0	9.0	5.0			
600	X [m]			12.6	11.0	10.0	9.1	7.9	7.1		
	NR [dB(A)]			43.0	38.0	33.0	30.0	24.0	20.0		
	Veff (m/s)			9.3	6.7	5.4	4.6	3.4	2.7		
	△Pt [pa]			51.0	29.0	19.0	13.0	9.0	5.0		
700	X [m]				12.9	11.5	10.6	9.2	8.2	7.5	
	NR [dB(A)]				41.0	37.0	34.0	28.0	24.0	20.0	
	Veff (m/s)				7.8	6.3	5.4	4.0	3.2	2.7	
	△Pt [pa]				40.0	26.0	18.0	10.0	7.0	5.0	
800	X [m]				14.7	13.2	12.1	10.5	9.4	8.6	
	NR [dB(A)]				45.0	40.0	37.0	31.0	27.0	24.0	
	Veff (m/s)				8.9	7.2	6.2	4.5	3.6	3.0	
	△Pt [pa]				52.0	34.0	24.0	14.0	9.0	6.0	
900	X [m]					14.8	13.5	11.8	10.6	9.7	8.4
	NR [dB(A)]					43.0	40.0	34.0	30.0	26.0	21.0
	Veff (m/s)					8.1	6.9	5.1	4.1	3.4	2.6
	△Pt [pa]					43.0	30.0	17.0	11.0	8.0	3.0
1000	X [m]						15.1	13.2	11.8	10.8	9.3
	NR [dB(A)]						43.0	38.0	34.0	29.0	23.0
	Veff (m/s)						7.7	5.7	4.6	3.8	2.9
	△Pt [pa]						38.0	22.0	14.0	10.0	5.0
1200	X [m]							15.7	14.0	12.9	11.2
	NR [dB(A)]							41.0	37.0	33.0	28.0
	Veff (m/s)							6.8	5.5	4.6	3.4
	△Pt [pa]							32.0	20.0	14.0	8.0
1400	X [m]							18.4	16.5	15.1	13.1
	NR [dB(A)]							45.0	41.0	37.0	32.0
	Veff (m/s)							7.9	6.4	5.3	4.0
	△Pt [pa]							43.0	27.0	19.0	11.0
1600	X [m]								18.8	17.2	14.9
	NR [dB(A)]								44.0	40.0	35.0
	Veff (m/s)								7.3	6.1	4.6
	△Pt [pa]								35.0	24.0	14.0
1800	X [m]									19.4	16.8
	NR [dB(A)]									43.0	38.0
	Veff (m/s)									6.8	5.2
	△Pt [pa]									31.0	18.0
2000	X [m]										18.7
	NR [dB(A)]										40.0
	Veff (m/s)										5.7
	△Pt [pa]										22.0

The legend
Ak [m²] - The free surface
X [m] - The length of the air jet at a speed of 0.25 m/s
NR [dB (A)] - Noise level without room attenuation
Veff [m/s] - The effective air speed in the grille
ΔPt [Pa] - Pressure loss

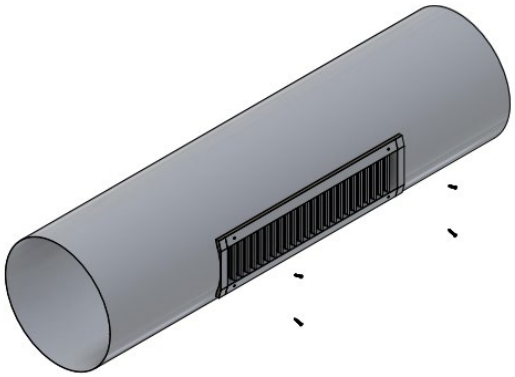
Installation

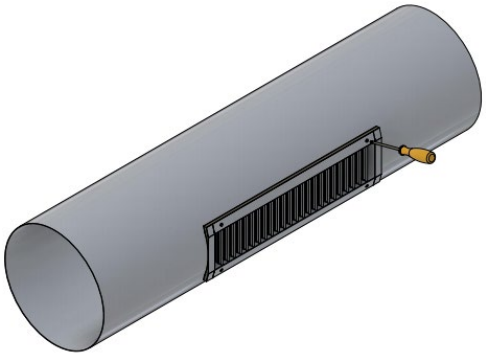
Longitudinal installation on rigid circular duct. Fixing the grille is done with screws.

Installation on circular duct



1 - Grille RA-1
2 - Rigid circular duct





Order code

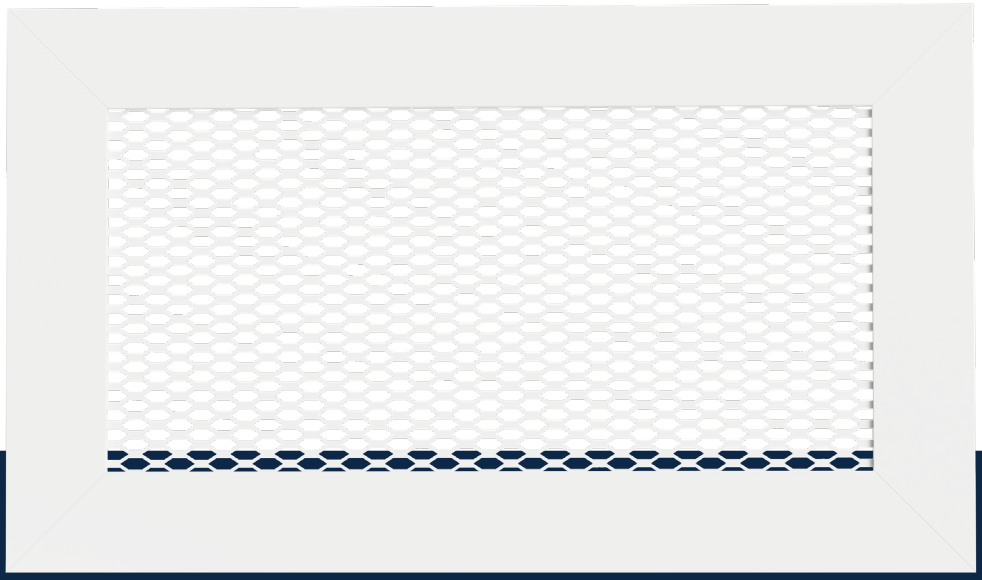
Example on how to place an order

Type	Dimensions	Accessories
RA-1		
On request	(according to the table)	
		OBD - Control damper

Air through perfection

Expanded mesh grille

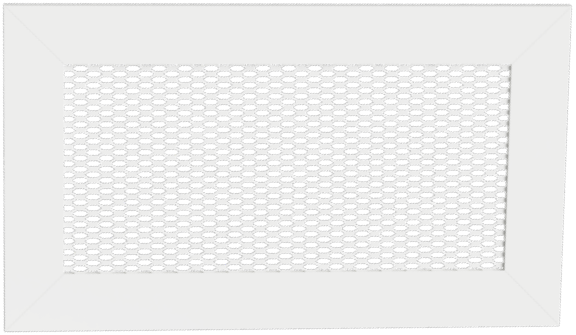
RP



ACP
Grilles

www.acp.ro

Expanded mesh grille
RP



Description

RP is an expanded metal sheet frame, without connection, used in ventilation and air conditioning systems for air transfer or masking.

It can be applied on the wall, ceiling, rectangular ducts, dampers or smoke dampers.

Technical specifications

Characteristics

The expanded metal sheet has 12x5 mm hexagonal mesh.

The product is manufactured with holes for screw mounting.

RP has no terminal connection, it is easy to apply on the ceiling, wall or other equipment.

The maximum construction dimension of the product is 2000 x 1000 mm.

The product is delivered with fixing screws.

Materials

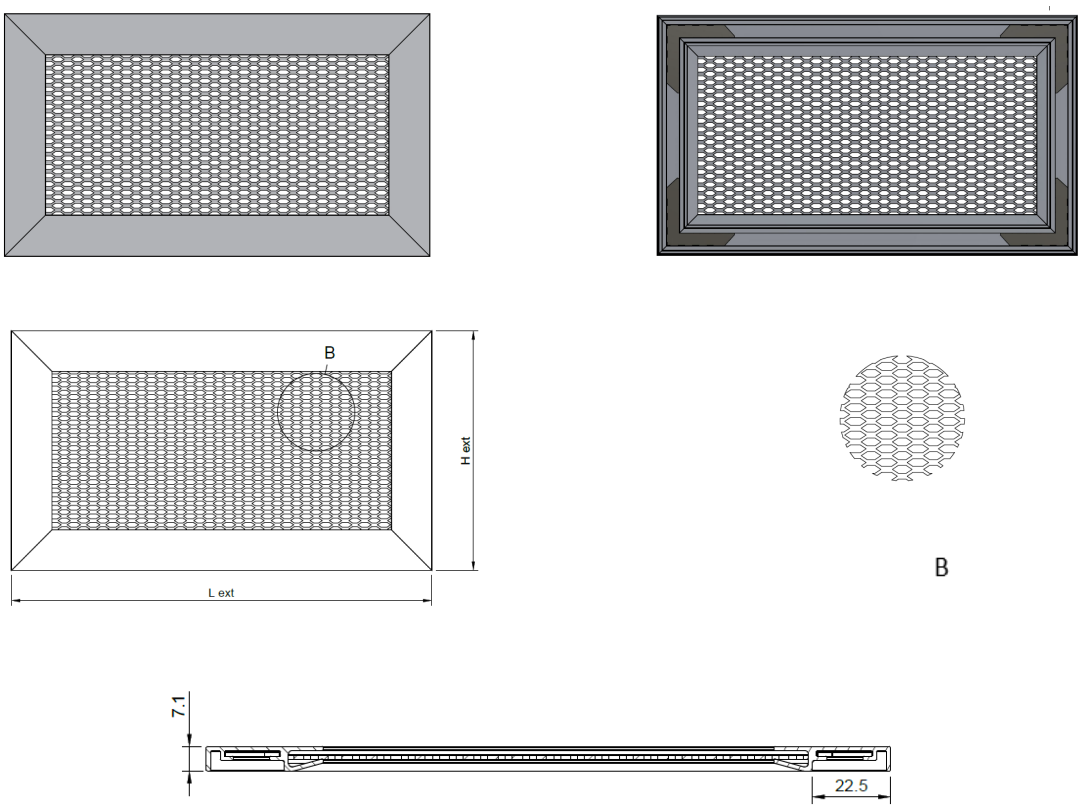
The materials used are extruded aluminum frame and expanded galvanized steel sheet.

The expanded sheet complies with the standards for thermal galvanizing ISO 1461/2002.

The product is electrostatic field painted in glossy white RAL9016.

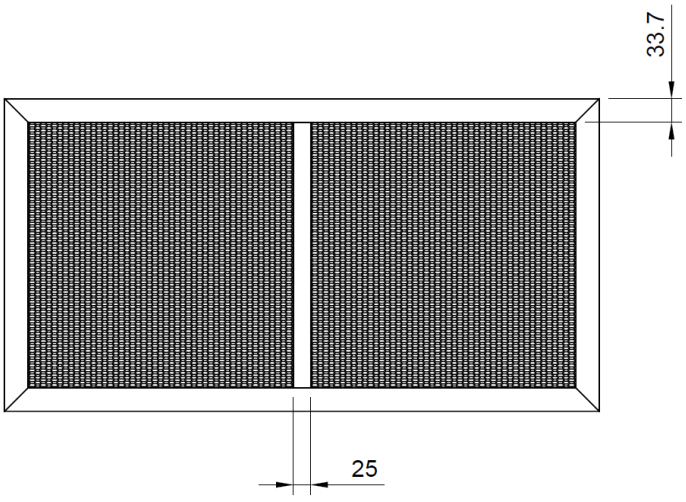
Other RAL colours are available on request.

Technical drawing

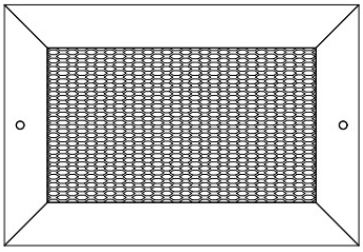


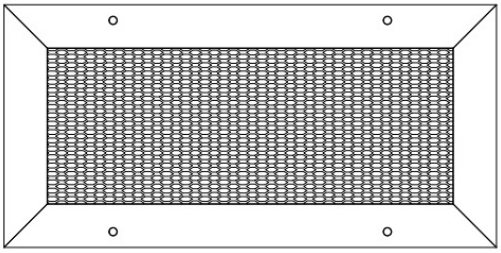
Product specifications

Products with dimensions > 1000 mm are made with stiffening elements.



The grille is made standard with mounting holes positioned on the product frame. The number of holes and their position are made according to the size of the product.





L x H ext [mm]	Number of holes																			
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
100	2	2	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8
200	2	2	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8
300	4	4	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8
400	4	4	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8
500	4	4	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8
600	4	4	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8
700	4	4	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	10	10
800	4	4	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	10	10
900	4	4	4	4	4	4	4	4	6	6	6	6	8	8	8	8	8	8	10	10
1000	4	4	4	4	4	4	4	4	6	6	6	6	8	8	8	8	8	8	10	10

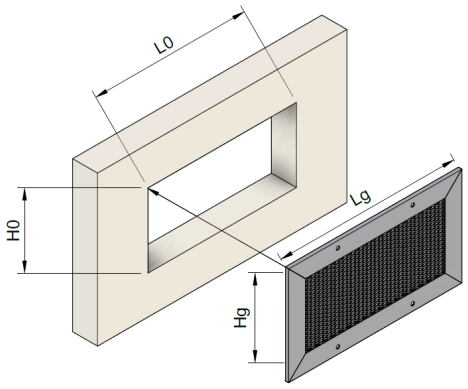
Functional parameters

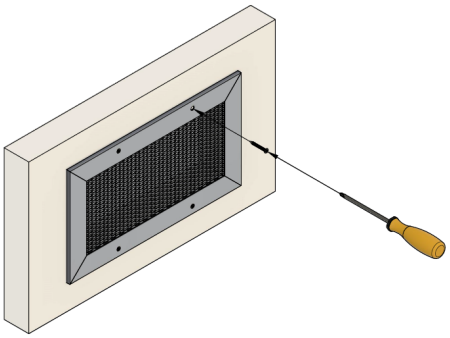
L x H ext [mm]	Discharge area Ak [m^2]									
	100	200	300	400	500	600	700	800	900	1000
100	-	0.0024	0.0042	0.0060	0.0078	0.0095	0.0113	0.0131	0.0149	0.0167
200	0.0024	0.0097	0.0170	0.0243	0.0315	0.0388	0.0461	0.0534	0.0607	0.0680
300	0.0042	0.0170	0.0298	0.0425	0.0553	0.0681	0.0809	0.0937	0.1065	0.1193
400	0.0060	0.0243	0.0425	0.0608	0.0791	0.0974	0.1157	0.1340	0.1523	0.1706
500	0.0078	0.0315	0.0553	0.0791	0.1029	0.1267	0.1505	0.1743	0.1981	0.2219
600	0.0095	0.0388	0.0681	0.0974	0.1267	0.1560	0.1853	0.2146	0.2439	0.2732
700	0.0113	0.0461	0.0809	0.1157	0.1505	0.1853	0.2201	0.2549	0.2897	0.3245
800	0.0131	0.0534	0.0937	0.1340	0.1743	0.2146	0.2549	0.2952	0.3355	0.3758
900	0.0149	0.0607	0.1065	0.1523	0.1981	0.2439	0.2897	0.3355	0.3813	0.4271
1000	0.0167	0.0680	0.1193	0.1706	0.2219	0.2732	0.3245	0.3758	0.4271	0.4784

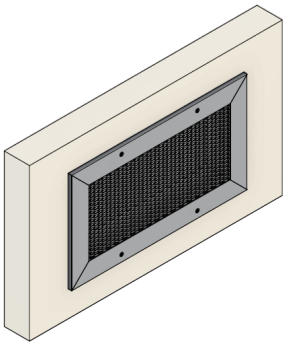
Installation

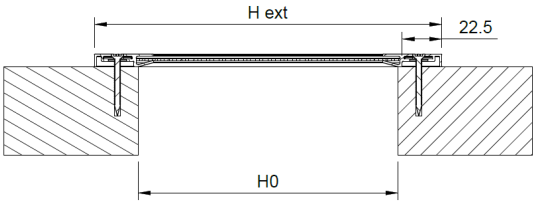
The product can be applied to the ceiling, wall, rectangular duct or dampers.

Installation in wall/ceiling with screws









Order code

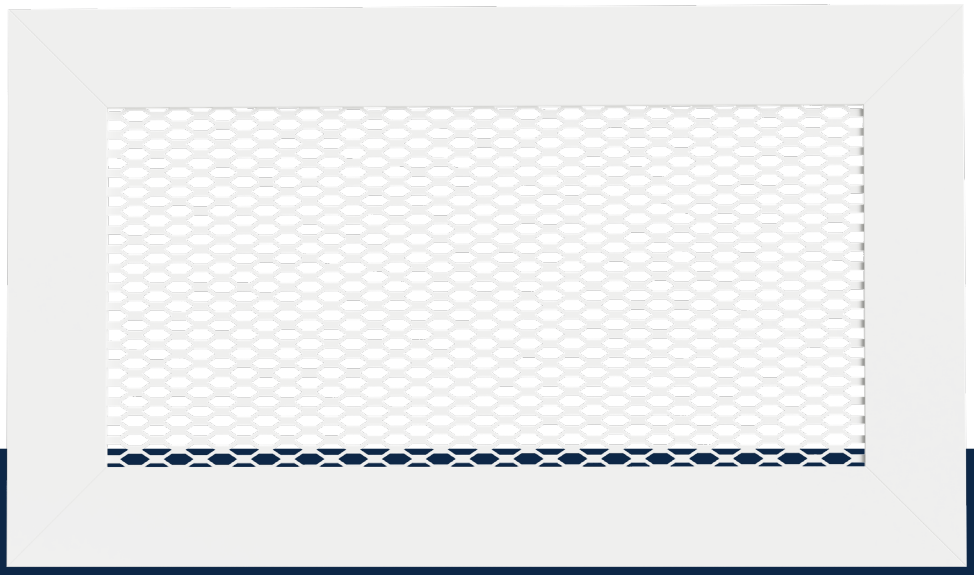
Example on how to place an order

Type	Dimensions	Finish
RP		
	On request	
		RAL9016
		RAL..- Other RAL colors on request

Air through perfection

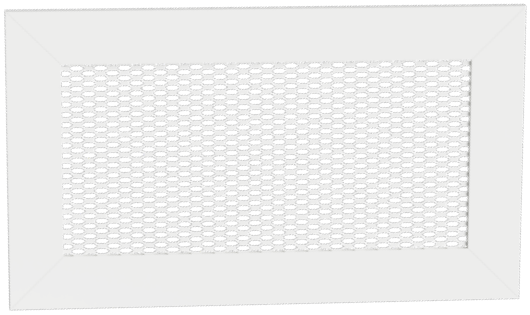
Expanded mesh grille

RP-R



ACP
Grilles

Expanded mesh grille
RP-R



Description

RP-R is an expanded metal sheet frame used in ventilation and air conditioning systems for air transfer or masking.

Can be applied to wall, ceiling or rectangular duct.

Technical specifications

Characteristics

The expanded metal sheet has 12x5 mm hexagonal mesh.

The product is manufactured with holes for screw mounting.

RP-R has a terminal connection and can be accessorized with mounting frame and plenum.

The maximum construction dimension of the product is 2000 x 1000 mm.

The product is delivered with fixing screws.

Materials

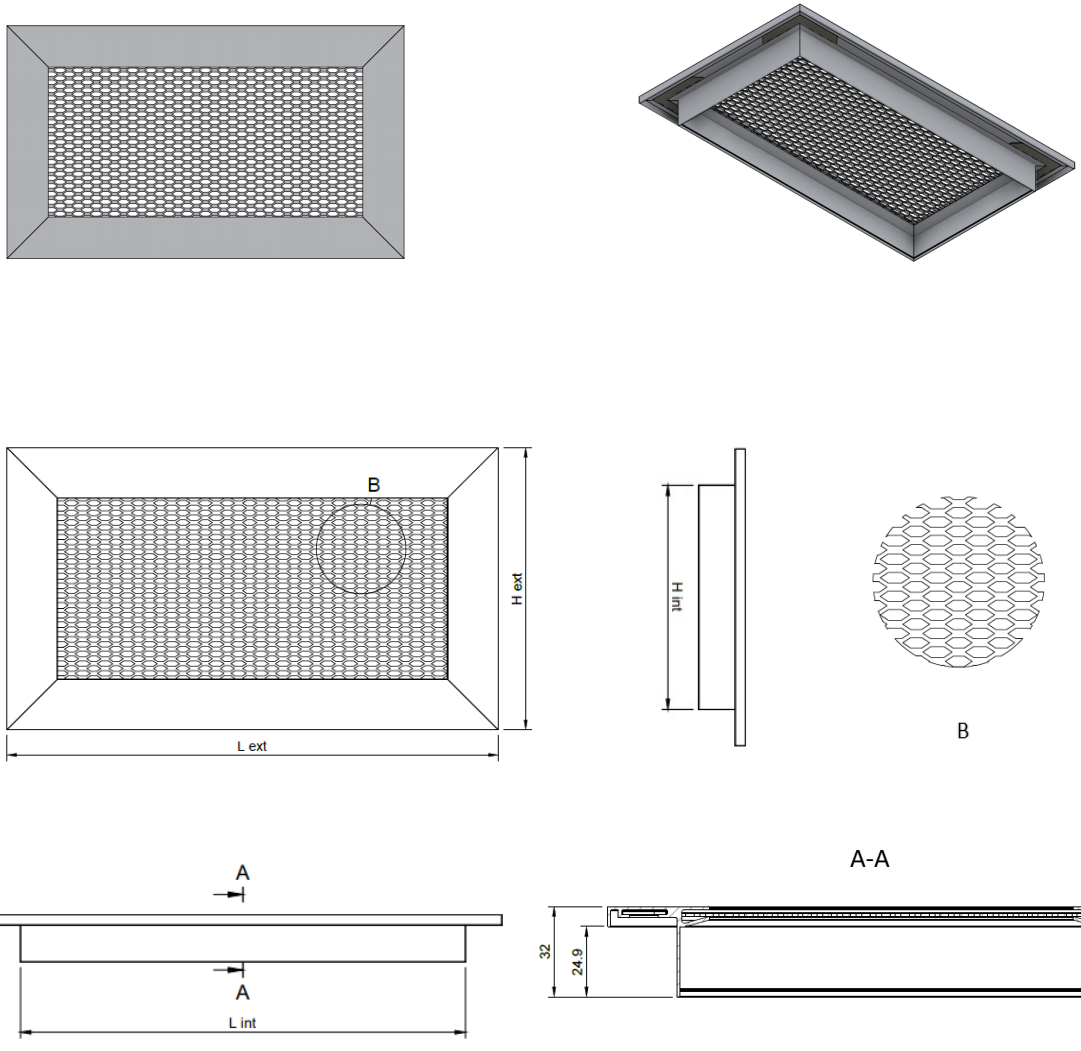
The materials used are extruded aluminum frame and expanded galvanized steel sheet.

The expanded sheet complies with the standards for thermal galvanizing ISO 1461/2002.

The product is electrostatic field painted in glossy white RAL9016.

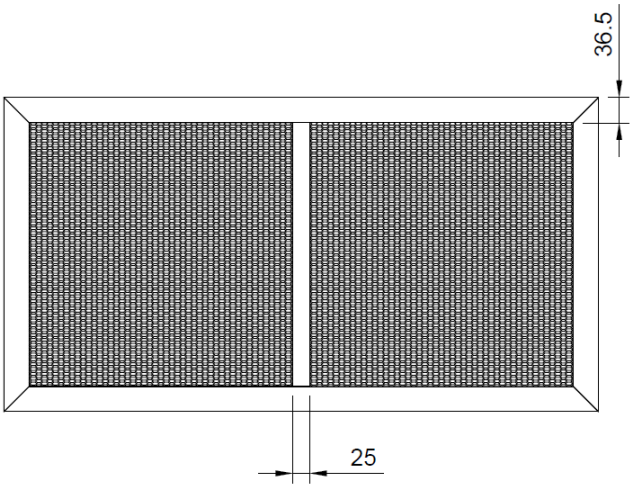
Other RAL colours are available on request.

Technical drawing

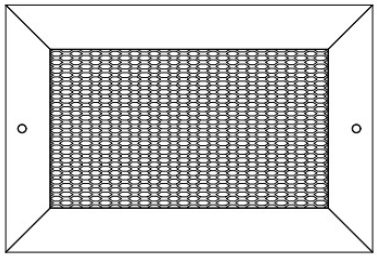


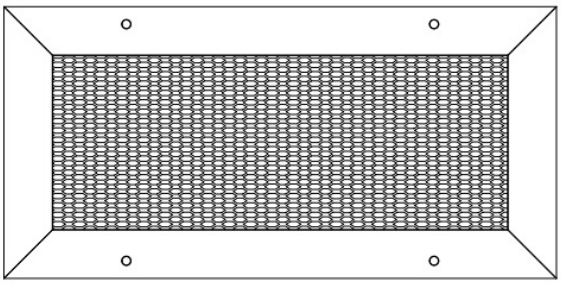
Product specifications

Products with dimensions > 1000 mm are made with stiffening elements.



The grille is made standard with mounting holes positioned on the product frame. The number of holes and their position are made according to the size of the product.





L x H int [mm]	Number of holes																			
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
100	2	2	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8
200	2	2	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8
300	4	4	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8
400	4	4	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8
500	4	4	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8
600	4	4	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	8	8
700	4	4	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	10	10
800	4	4	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	10	10
900	4	4	4	4	4	4	4	4	6	6	6	6	8	8	8	8	8	8	10	10
1000	4	4	4	4	4	4	4	4	6	6	6	6	8	8	8	8	8	8	10	10

Accessories

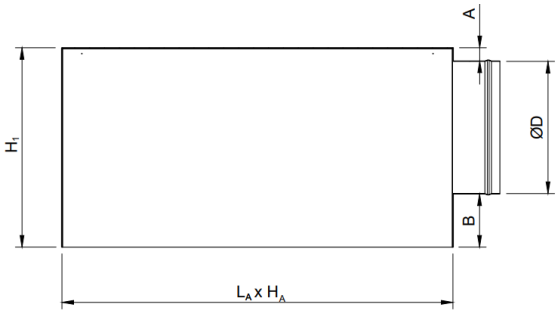
The product can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

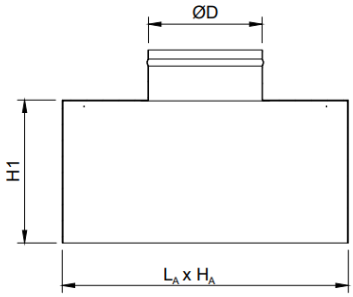
The product can be delivered with a mounting frame.

Adapter (plenum box)

Horizontal connection
(side/lateral exit)

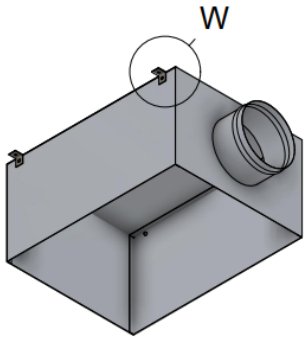


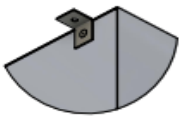
Vertical connection
(opposite exit)



* For fixing with screws: L_A X H_A = Lint x Hint grille + 5 mm
* For fixing with mounting frame: L_A X H_A = Lc x Hc mounting frame + 3 mm
A, B, H1 – depending on demand and ØD

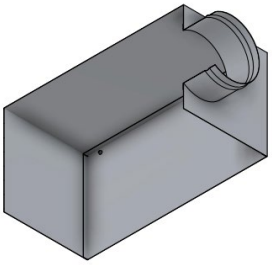
The adapter is made of Z140 galvanized steel sheet and is equipped with suspension lugs.



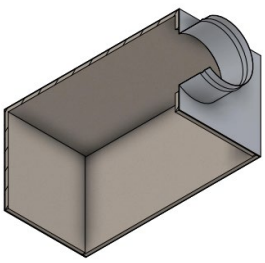


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.



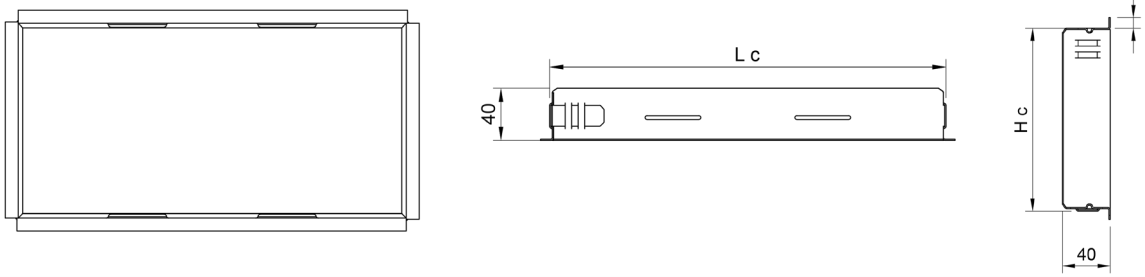
AN - Uninsulated adapter



AIZ - Insulated adapter

Mounting frame (CC)

The mounting frame is used when a hidden, easy and fast mounting of the grille is desired. Depending on the size required, it is made and delivered in one or more pieces.

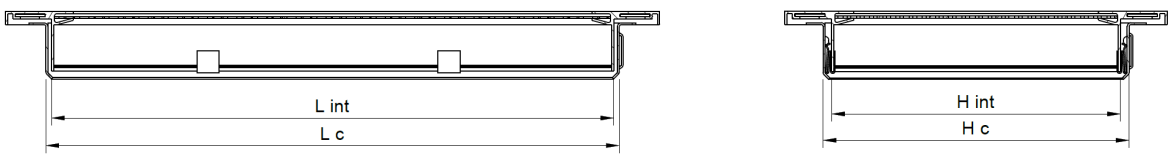


L x H [mm]	Mounting frame													
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1400	1500
85	1	1	1	1	1	1	1	1	1	1	1	2	2	2
100	1	1	1	1	1	1	1	1	1	1	1	2	2	2
150	-	1	1	1	1	1	1	1	1	1	1	2	2	2
200	-	1	1	1	1	1	1	1	1	1	1	2	2	2
300	-	-	1	1	1	1	1	1	1	1	1	2	2	2
400	-	-	-	1	1	1	1	1	1	1	1	2	2	2
500	-	-	-	-	1	1	1	1	1	1	1	2	2	2
600	-	-	-	-	-	1	1	1	1	1	1	2	2	2

For installation with mounting frame, the grille is equipped with clips that allow quick and easy clamping. The number of clips with which the grille is equipped depends on the size of the product.

L x H int [mm]	Number of mounting clips									
	100	200	300	400	500	600	700	800	900	1000
100	2	2	4	4	4	4	4	4	4	4
200	2	2	4	4	4	4	4	4	4	4
300	4	4	4	4	4	4	4	4	4	4
400	4	4	4	4	4	4	4	4	4	4
500	4	4	4	4	4	4	4	4	4	6
600	4	4	4	4	4	4	4	4	4	6
700	4	4	4	4	4	4	4	4	8	8
800	4	4	4	4	4	4	4	6	8	8
900	4	4	4	4	4	4	8	8	12	12
1000	4	4	4	4	6	6	8	8	12	12

Example : RP-R + CC



Lc x Hc = Lint x Hint grille + 18 mm

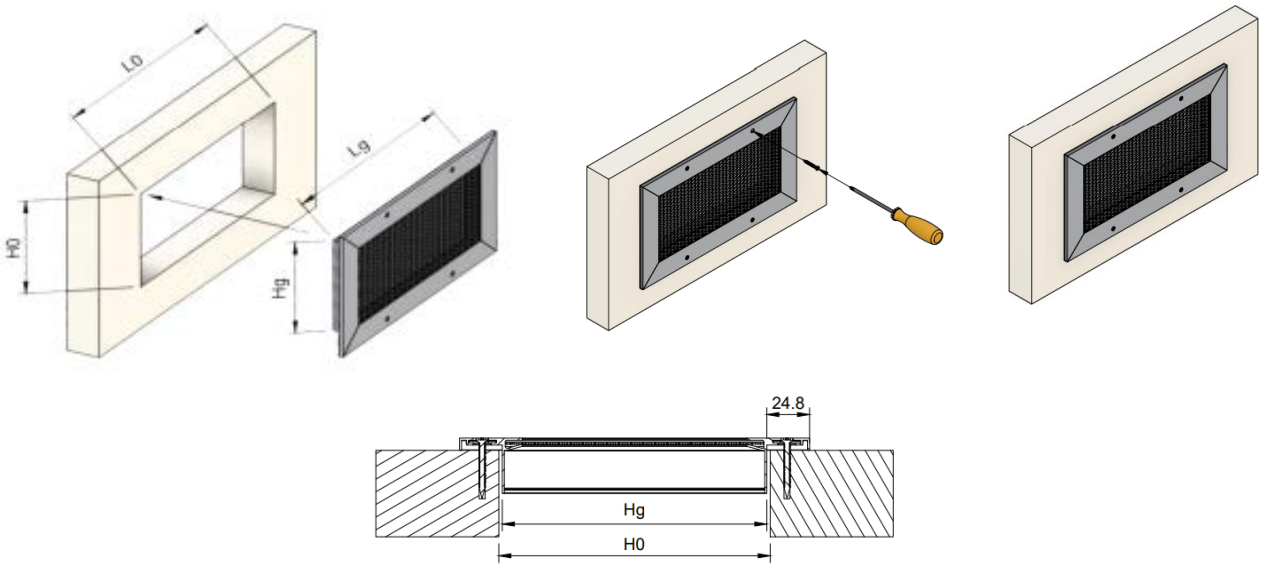
Functional parameters

L x H int [mm]	Discharge area Ak [m^2]									
	100	200	300	400	500	600	700	800	900	1000
100	0.0055	0.0110	0.0165	0.0220	0.0275	0.0330	0.0385	0.0440	0.0495	0.0550
200	0.0110	0.0220	0.0330	0.0440	0.0550	0.0660	0.0770	0.0880	0.0990	0.1100
300	0.0165	0.0330	0.0495	0.0660	0.0825	0.0990	0.1155	0.1320	0.1485	0.1650
400	0.0220	0.0440	0.0660	0.0880	0.1100	0.1320	0.1540	0.1760	0.1980	0.2200
500	0.0275	0.0550	0.0825	0.1100	0.1375	0.1650	0.1925	0.2200	0.2475	0.2750
600	0.0330	0.0660	0.0990	0.1320	0.1650	0.1980	0.2310	0.2640	0.2970	0.3300
700	0.0385	0.0770	0.1155	0.1540	0.1925	0.2310	0.2695	0.3080	0.3465	0.3850
800	0.0440	0.0880	0.1320	0.1760	0.2200	0.2640	0.3080	0.3520	0.3960	0.4400
900	0.0495	0.0990	0.1485	0.1980	0.2475	0.2970	0.3465	0.3960	0.4455	0.4950
1000	0.0550	0.1100	0.1650	0.2200	0.2750	0.3300	0.3850	0.4400	0.4950	0.5500

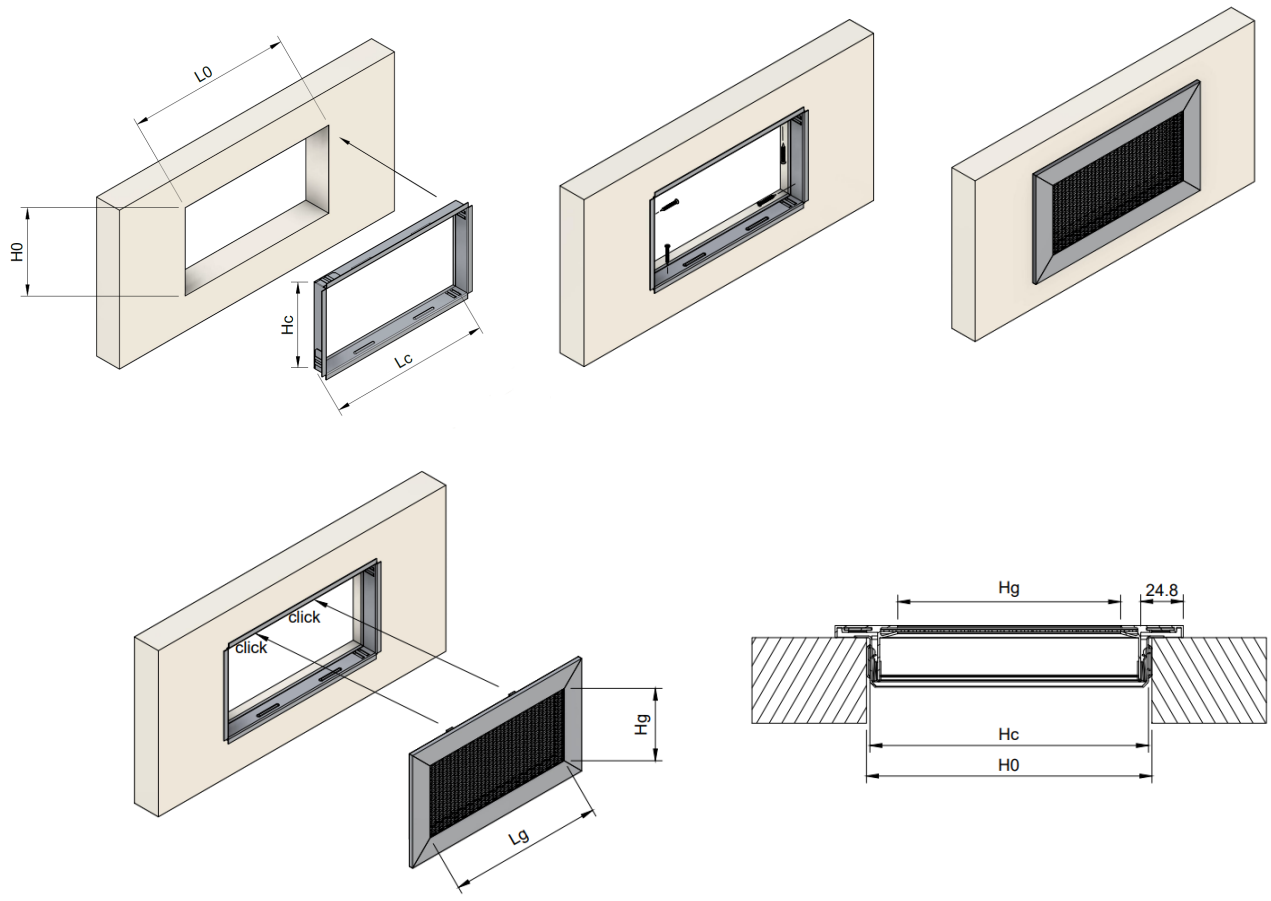
Installation

The product can be mounted on a ceiling, wall or rectangular duct.

Installation in wall/ceiling with screws



Installation in wall/ceiling with mounting frame



Order code

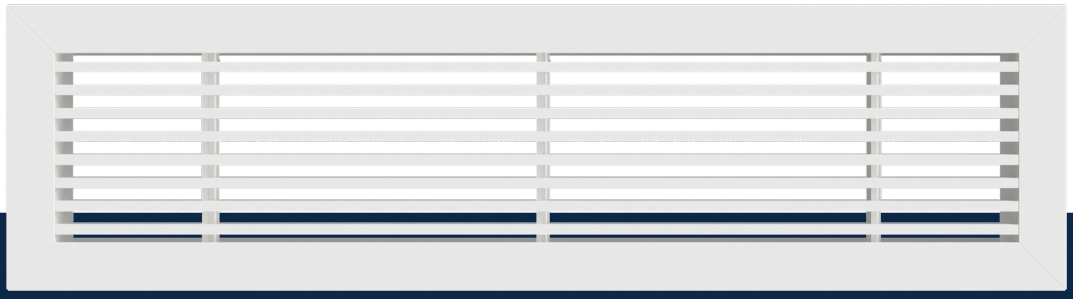
Example on how to place an order

Type	Dimensions	Accessories	Mounting	Finish
RP-R				
	On request			
		AIZ - Insulated adapter		
		AN - Uninsulated adapter		
			Screws (standard)	
			CC - Mounting frame (optional)	
				RAL9016
				RAL..- Other RAL colors on request

Air through perfection

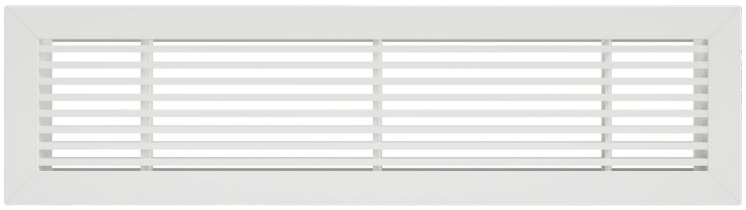
Decorative grille

LB



ACP
Decorative linear grilles

Decorative grille
LB



Description

LB is a decorative linear aluminum grille used for introducing or evacuating air.

The grille is recommended for installations with constant or variable air flow.

LB can be applied to the ceiling or wall.

Technical specifications

Characteristics

The grille is available in two constructive variants:

- LB-0 - with fixed blades at 0°
- LB-15 - with fixed blades at 15°

The grille blades are fixed and parallel to the "L" (length).

For grilles with a length > 3m, the execution is modular, and the product is delivered together with the necessary connecting elements.

Depending on the overall position, the modular parts are built without termination elements or with a single element - see assembly sections.

As standard, the grille is manufactured with holes for screw mounting.

The product is delivered with fixing screws painted in the shade of the product.

Optionally, a mounting frame can be used for concealed mounting.

For installation with a mounting frame, the grille is accessorized with fixing clips.

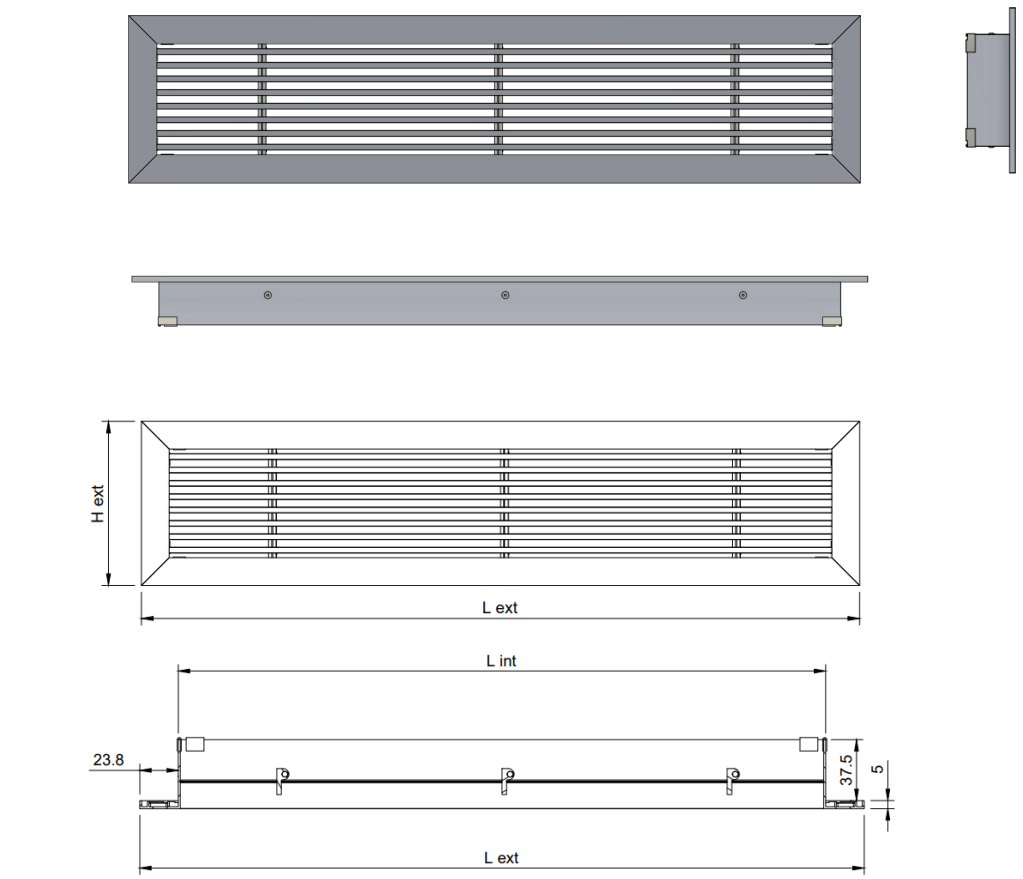
Dimensional limits: Lint > 3m modular design, Hint max = 350 mm (standard).

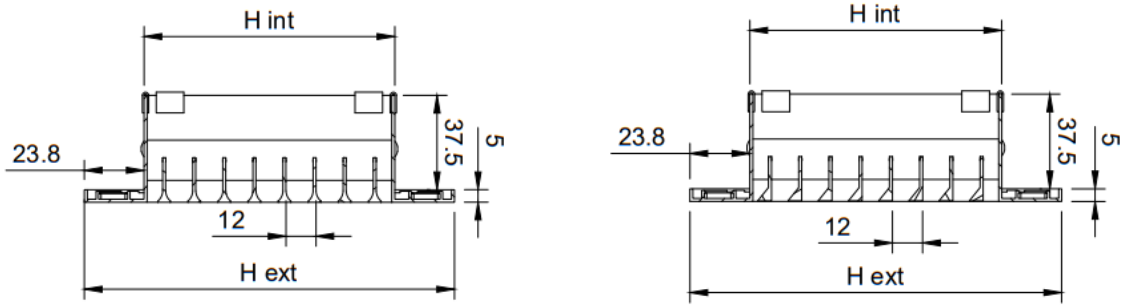
Materials

The grille is made of extruded aluminum electrostatic field painted in glossy white RAL 9016.

On request, the grille can be made of natural anodized aluminum profiles or can be painted in other shades from the RAL palette.

Technical drawing



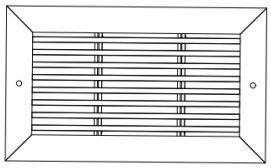


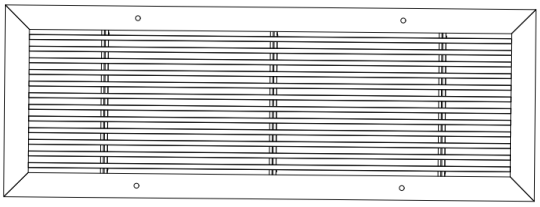
LB-0

LB-I5

Product specifications

The grille is made standard with mounting holes positioned on the product frame. The number of holes and their position are made according to the size of the product, according to the pictures and table.

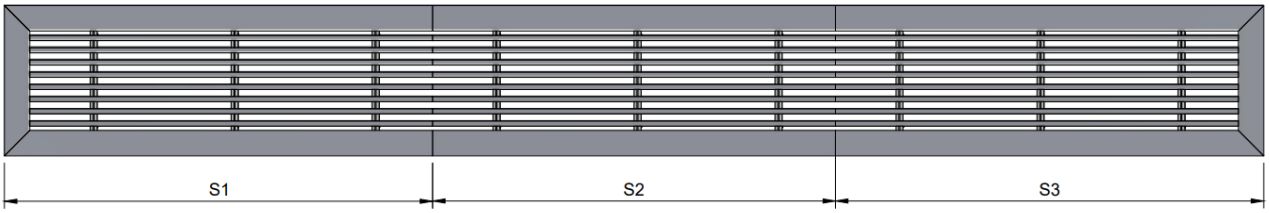


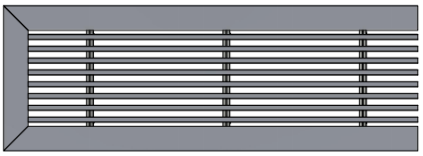


L x H [mm]	Number of holes													
	100	200	300	400	500	1000	1100	1200	1500	1600	2000	2100	2500	3000
85	2	2	4	4	4	4	4	6	6	6	8	8	8	8
100	2	2	4	4	4	4	4	6	6	6	8	8	8	8
150	2	2	4	4	4	4	4	6	6	6	8	8	8	8
200	2	2	4	4	4	4	4	6	6	6	8	8	8	8
300	4	4	4	4	4	4	4	6	6	6	6	8	8	8
350	4	4	4	4	4	4	4	6	6	6	6	8	8	8

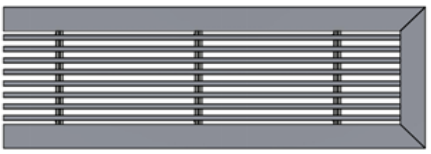
Section assembly

Large length grilles are made of modules with a maximum length of 3 m. In this case the product is delivered with connecting elements between modules.

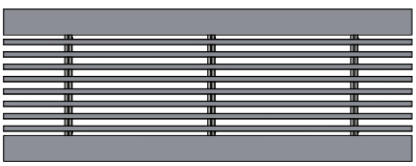




S1



S3



S2

Accessories

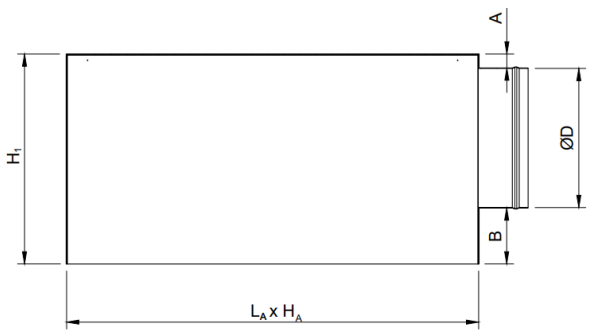
The grille can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

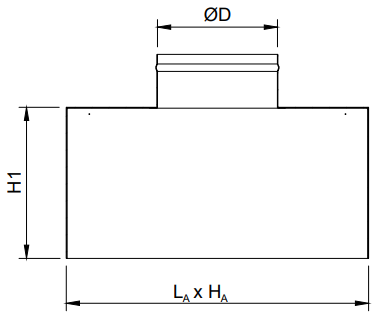
The product can also be accessorized with opposed blade damper, G4 air filter or mounting frame.

Adapter (plenum box)

Horizontal connection
(side/lateral exit)

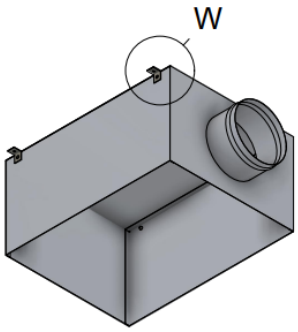


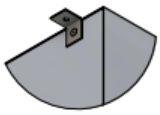
Vertical connection
(opposite exit)



* For fixing with screws: L_A X H_A = Lint x Hint grille + 7 mm
* For fixing with mounting frame: L_A X H_A = Lc x Hc mounting frame + 4 mm
A, B, H1 – depending on demand and ØD

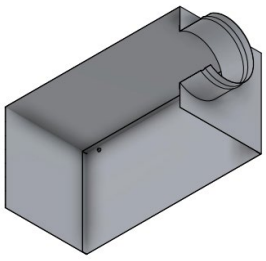
The adapter is made of Z140 galvanized steel sheet and is equipped with suspension lugs.



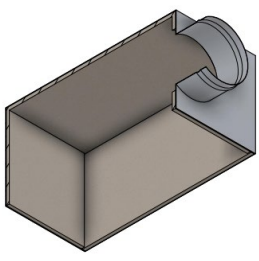


W - Suspension lug

The plenum is available in two options, uninsulated or insulated with 6 mm thick elastomeric rubber.



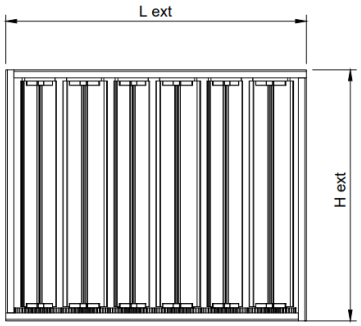
AN - Uninsulated adapter

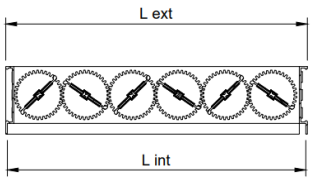


AIZ - Insulated adapter

Opposed blade damper (OBD)

The damper is provided with opposable blades and gears, it is mounted on the grille connection.



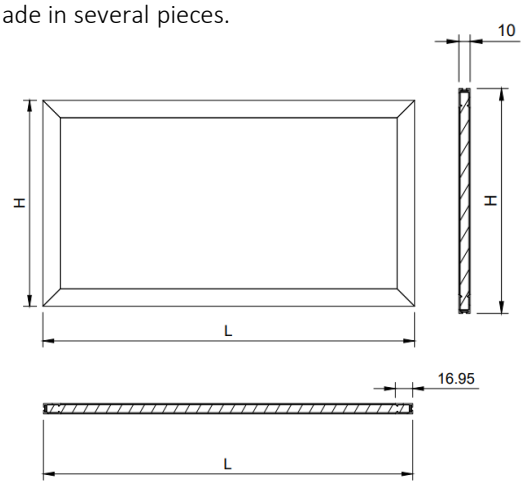


L x H [mm]	Opposed blade damper											
	100	500	600	700	1000	1200	1300	1800	1900	2400	2500	3000
85	1	1	1	2	2	2	3	3	4	4	5	5
100	1	1	1	2	2	2	3	3	4	4	5	5
150	1	1	1	2	2	2	3	3	4	4	5	5
200	1	1	1	2	2	2	3	3	4	4	5	5
300	1	1	1	2	2	2	3	3	4	4	5	5
350	1	1	1	2	2	2	3	3	4	4	5	5

Air filter G4 (F-R)

G4 air filter with aluminum frame is used for air filtration and is mounted on the grille connection.

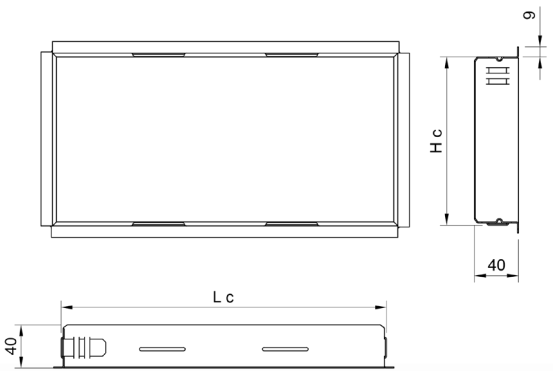
The large dimensions are made in several pieces.



L x H [mm]	Air filter									
	100	500	1000	1100	1200	1500	2000	2100	2500	3000
85	1	1	1	1	2	2	2	3	3	3
100	1	1	1	1	2	2	2	3	3	3
150	1	1	1	1	2	2	2	3	3	3
200	1	1	1	1	2	2	2	3	3	3
300	1	1	1	1	2	2	2	3	3	3
350	1	1	1	1	2	2	2	3	3	3

Mounting frame (CC)

The mounting frame is used when a hidden, easy and fast mounting of the grille is desired. Depending on the size required, it is made and delivered in one or more pieces.



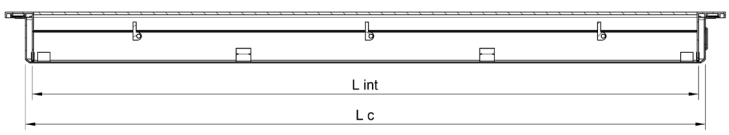
L x H [mm]	Mounting frame									
	100	500	1000	1100	1200	1500	2000	2100	2500	3000
85	1	1	1	1	2	2	2	3	3	3
100	1	1	1	1	2	2	2	3	3	3
150	1	1	1	1	2	2	2	3	3	3
200	1	1	1	1	2	2	2	3	3	3
300	1	1	1	1	2	2	2	3	3	3
350	1	1	1	1	2	2	2	3	3	3

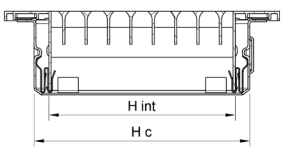
For installation with mounting frame, the grille is equipped with clips that allow quick and easy clamping.

The number of mounting clips that the grille is equipped depends on the size of the product.

L x H [mm]	Number of mounting clips													
	100	200	300	400	500	1000	1100	1200	1500	1600	2000	2100	2500	3000
85	2	2	4	4	4	4	6	6	6	8	8	10	10	10
100	2	2	4	4	4	4	6	6	6	8	8	10	10	10
150	2	2	4	4	4	4	6	6	6	8	8	10	10	10
200	2	2	4	4	4	4	6	6	6	8	8	10	10	10
300	6	6	6	6	6	6	6	6	6	8	8	12	12	12
350	6	6	6	6	6	6	6	6	6	8	8	12	12	12

Example: LB-0 + CC





Lc x Hc = Lint x Hint grille + 18 mm

Functional parameters

Air flow [m³/h]	L x H [mm]	250x100	300x100	400x100	500x100	600x100	800x100	1000x100	1500x100	400x150	600x150	1000x150	600x200	800x200	1000x200
	Ak [m²]	0.011	0.013	0.019	0.024	0.029	0.041	0.05	0.075	0.033	0.045	0.081	0.064	0.085	0.12
140	X [m]	3.0													
	NR [dB(A)]	<20													
	△Pt [Pa]	6.0													
	Veff [m/s]	3.2													
200	X [m]	4.2	3.8	3.2											
	NR [dB(A)]	25.0	21.0	<20											
	△Pt [Pa]	10.0	10.0	5.0											
	Veff [m/s]	4.6	4.0	2.8											
300	X [m]	6.3	5.8	5.0	4.3										
	NR [dB(A)]	35.0	30.0	24.0	18.0										
	△Pt [Pa]	30.0	18.0	10.0	7.0										
	Veff [m/s]	6.9	6.0	4.2	3.3										
400	X [m]	8.5	7.8	6.5	5.8	5.3	4.6			5.1					
	NR [dB(A)]	43.0	38.0	32.0	25.0	22.0	<20			25					
	△Pt [Pa]	50.0	35.0	18.0	10.0	9.0	5			8					
	Veff [m/s]	9.3	7.9	5.6	4.4	3.8	2.6			3.4					
600	X [m]	12.0	11.5	10.0	8.7	6.0	7	6		8	6.3				
	NR [dB(A)]	53.0	48.0	42.0	35.0	33.0	26	25		35	25				
	△Pt [Pa]	118.0	80.0	40.0	30.0	20.0	12	7		16	8				
	Veff [m/s]	13.9	11.9	8.3	6.7	5.7	4.0	3.1		5.1	3.7				
800	X [m]			15.0	12.0	10.5	9.3	8.5	6.5	11	8.5	6.8	7		
	NR [dB(A)]			51.0	45.0	45.0	33	32	20	42	30	21	25		
	△Pt [Pa]			75.0	48.0	35.0	20	15	6	32	15	5	8		
	Veff [m/s]			11.1	8.9	7.7	5.3	4.2	3.2	6.7	4.9	2.7	3.5		
1000	X [m]					13.0	11	10.2	8.3	13	11	8	9	7.8	7
	NR [dB(A)]					45.0	42	37	28	46	38	27	30	25	<20
	△Pt [Pa]					55.0	30	20	9	48	22	8	12	8	3
	Veff [m/s]					9.6	6.6	5.2	4.0	8.4	6.2	3.3	4.3	3.3	2.3
1400	X [m]						16.5	14	12		15	12	12	11	11
	NR [dB(A)]						50	45	37		48	35	40	33	33
	△Pt [Pa]						55	37	18		40	15	22	12	12
	Veff [m/s]						9.3	7.3	5.6		8.6	4.7	6.1	4.6	3.2
2000	X [m]											16	18	15	14
	NR [dB(A)]											45	50	43	35
	△Pt [Pa]											30	42	25	17
	Veff [m/s]											6.7	8.7	6.5	4.6
2500	X [m]											21		20	18
	NR [dB(A)]											50		48	45
	△Pt [Pa]											45		37	25
	Veff [m/s]											8.4		8.2	5.8
3000	X [m]														21
	NR [dB(A)]														48
	△Pt [Pa]														35
	Veff [m/s]														6.9

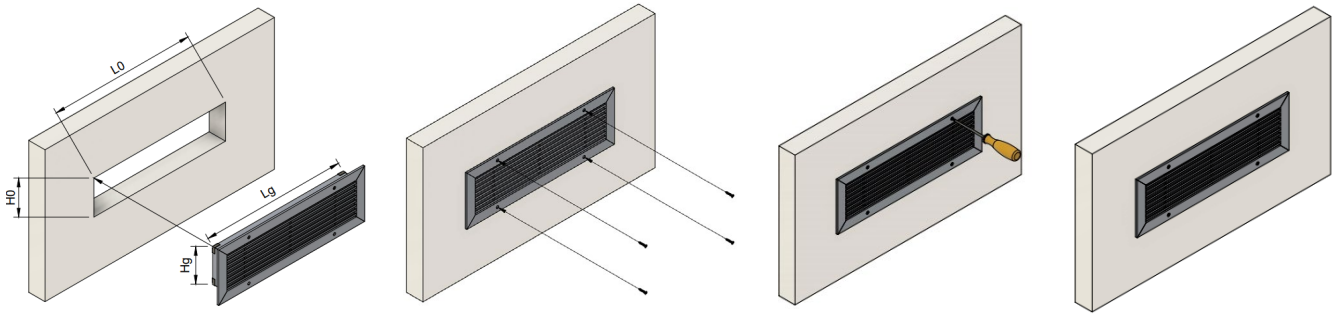
The legend
Ak [m²] - The free surface
X [m] - The length of the air jet at a speed of 0.2 m/s
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss
Veff [m/s] – Air velocity in the grille

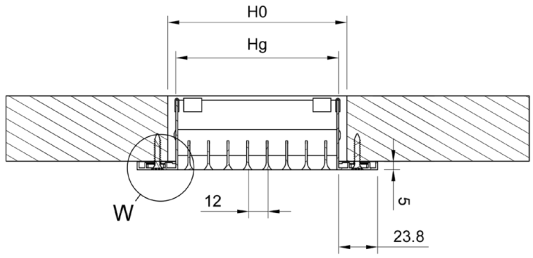
Installation

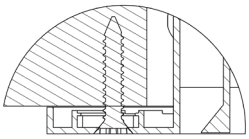
As standard, the grille is mounted by screws.

Optionally, for a hidden and easy assembly, a mounting frame can be used. The installation of the grille in the mounting frame is done by clamping.

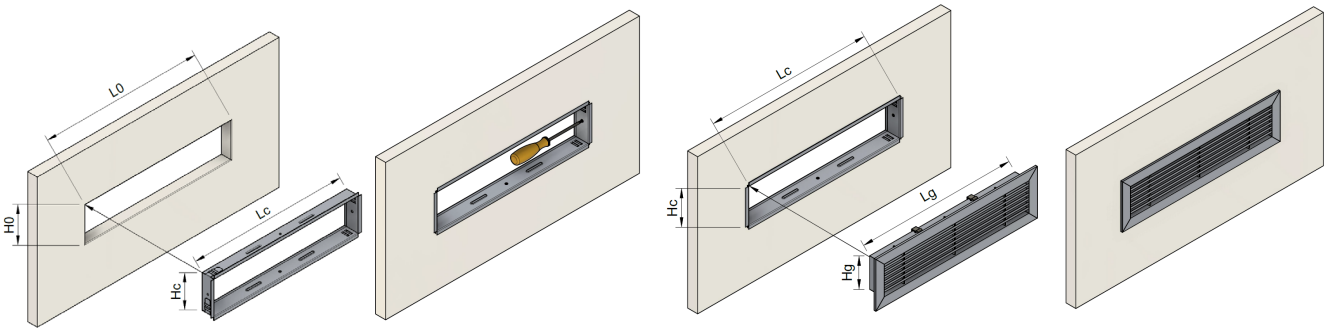
Wall/ceiling mounting with screws

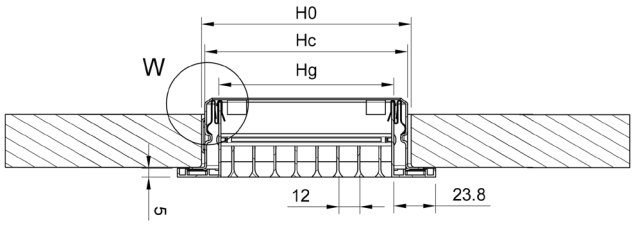


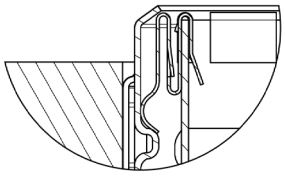




Wall/ceiling installation with mounting frame

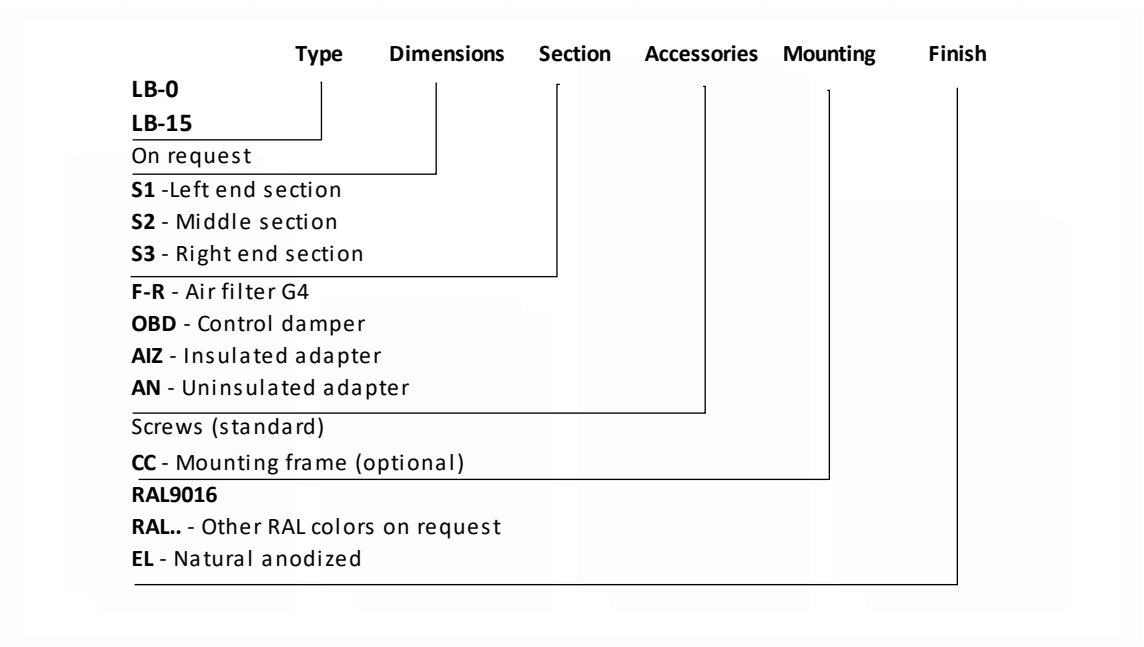






Order code

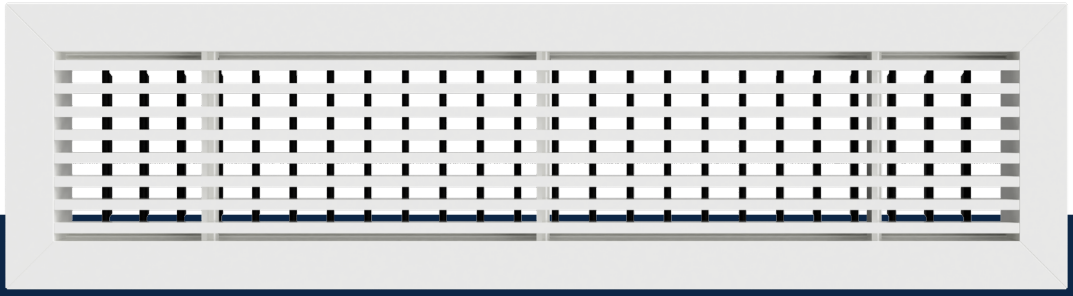
Example on how to place an order



Air through perfection

Decorative grille

LBD



ACP
Decorative linear grilles

Decorative grille
LBD



Description

LBD is a decorative linear aluminum grille with two rows of blades.

The grille is recommended for installations with constant or variable air flow.

LBD can be applied to the ceiling or wall and is used to introduce air.

Technical specifications

Characteristics

The grille is provided with two rows of blades.

Fixed front blades parallel to the length. They are inclined at 0° or 15°.

LBD-0 - blades with 0° inclination

LBD-15 - blades with 15° inclination

Adjustable blades positioned in the background. They are arranged perpendicular to the length and allow the direction of the air jet.

For grilles with a length > 3m, the execution is modular, and the product is delivered together with the necessary connecting elements.

Depending on the overall position, the modular parts are built without termination elements or with a single element.

As standard, the grille is manufactured with holes for screw mounting.

The product is delivered with fixing screws painted in the shade of the product.

Optionally, a mounting frame can be used for concealed mounting.

For installation with a mounting frame, the grille is accessorized with fixing clips.

Dimensional limits: Lint > 3m modular design, Hint max = 350 mm (standard).

Materials

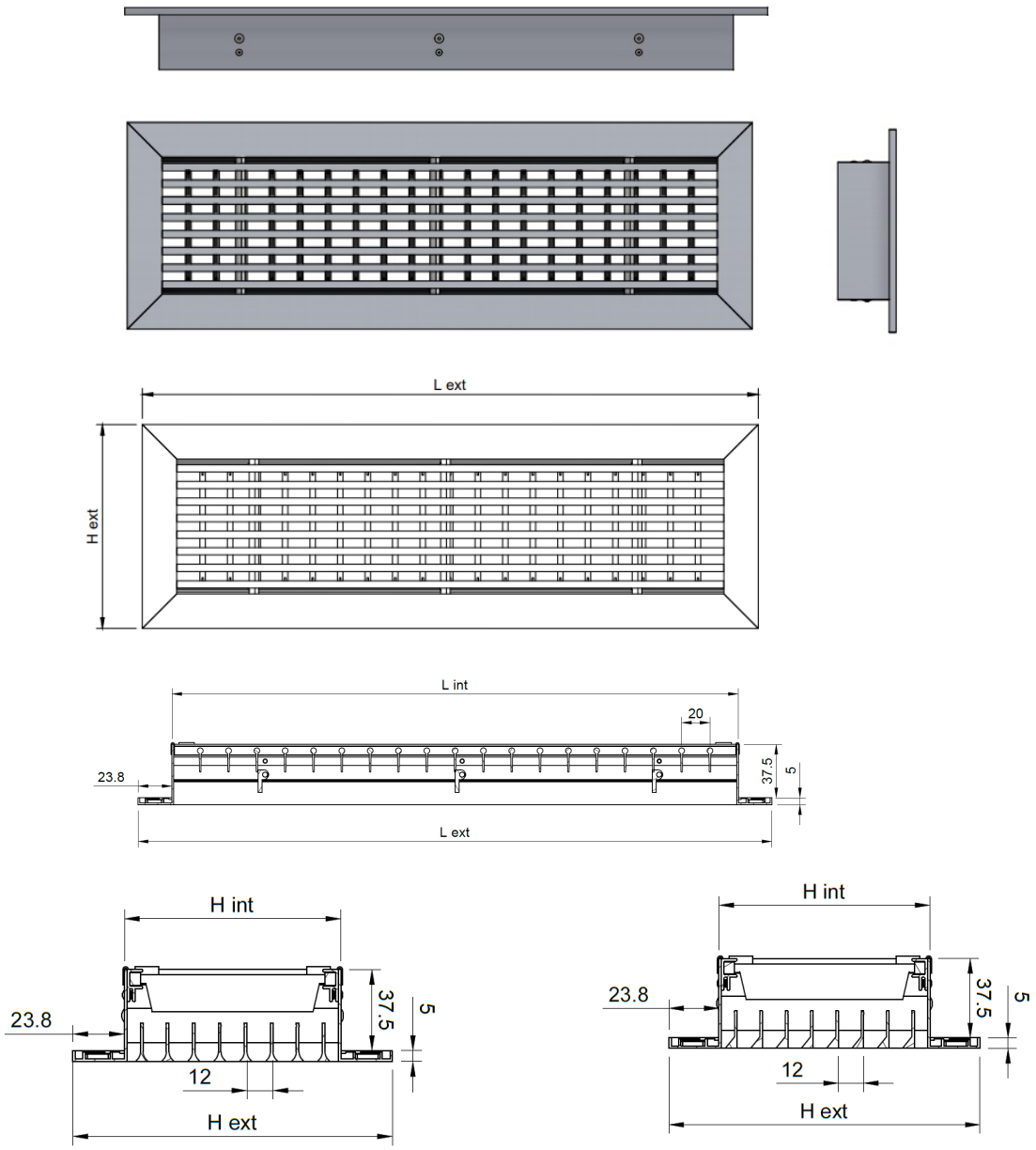
The grille is made of extruded aluminum, the frame and front blades are painted in glossy white RAL9016 and the adjustable blades are made of black anodized aluminum (standard finish).

The following finishes are also available on request:

-EL - natural anodized aluminum with black anodized adjustable blades

-RAL... - fully painted (including adjustable blades) in any shade from the RAL palette.

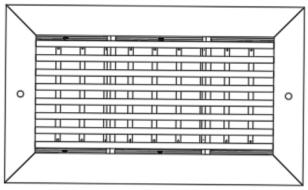
Technical drawing

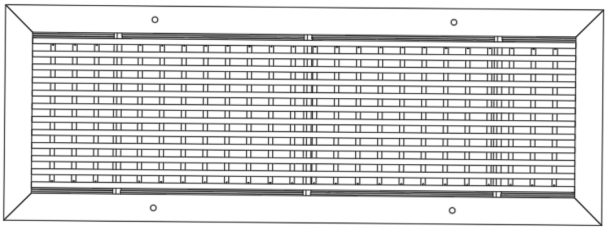


LBD-0 LBD-15

Product specifications

The grille is made standard with mounting holes positioned on the product frame. The number of holes and their position are made according to the size of the product, according to the pictures and table.

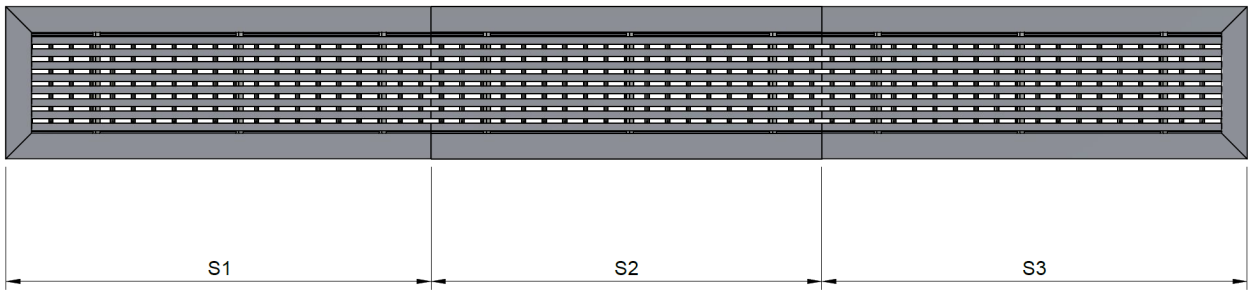


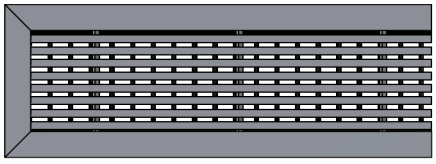


L x H [mm]	Number of holes													
	100	200	300	400	500	1000	1100	1200	1500	1600	2000	2100	2500	3000
85	2	2	4	4	4	4	4	6	6	6	8	8	8	8
100	2	2	4	4	4	4	4	6	6	6	8	8	8	8
150	2	2	4	4	4	4	4	6	6	6	8	8	8	8
200	2	2	4	4	4	4	4	6	6	6	8	8	8	8
300	4	4	4	4	4	4	4	6	6	6	6	8	8	8
350	4	4	4	4	4	4	4	6	6	6	6	8	8	8

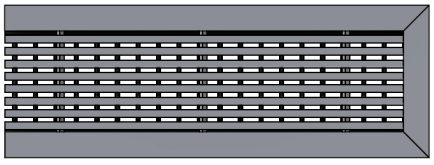
Section assembly

Large length grilles are made of modules with a maximum length of 3 m. In this case the product is delivered with connecting elements between modules.

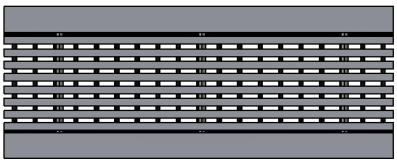




S1



S3



S2

Accessories

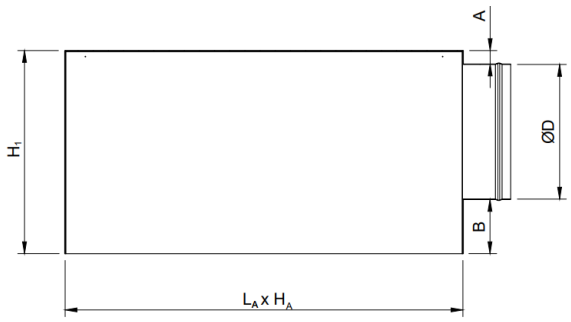
The grille can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

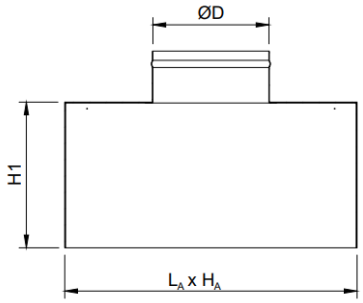
For hidden mounting the grille can be equipped with a mounting frame (CC).

Adapter (plenum box)

Horizontal connection
(side/lateral exit)



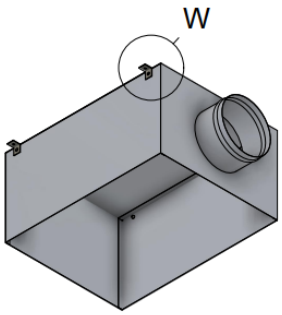
Vertical connection
(opposite exit)

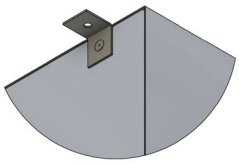


* For fixing with screws: L_A X H_A = Lint x Hint grille + 6 mm
* For fixing with mounting frame: L_A X H_A = Lc x Hc mounting frame + 3 mm

A, B, H1 – depending on demand and ØD

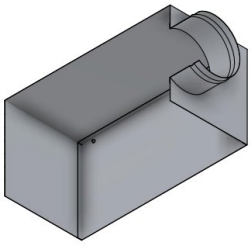
The adapter is made of Z140 galvanized steel sheet and is equipped with suspension lugs.



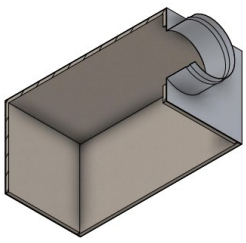


W - Suspension lug

The plenum is available in two options, uninsulated or insulated with 6 mm thick elastomeric rubber.



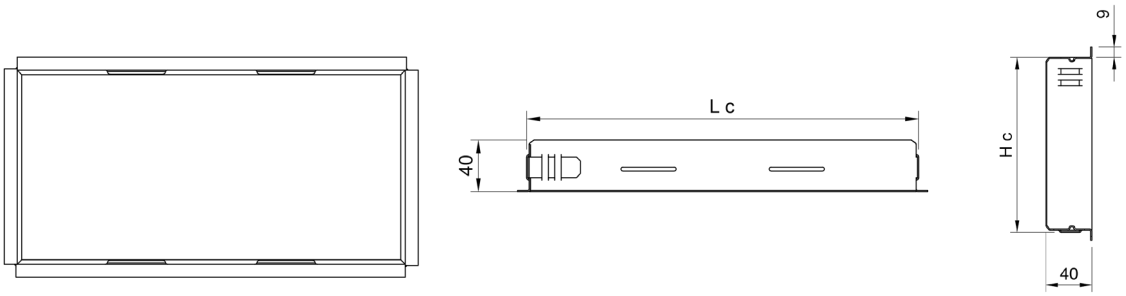
AN - Uninsulated adapter



AIZ - Insulated adapter

Mounting frame (CC)

The mounting frame is used when a hidden, easy and fast installation of the grille is desired. Depending on the size required, it is made and delivered in one or more pieces.

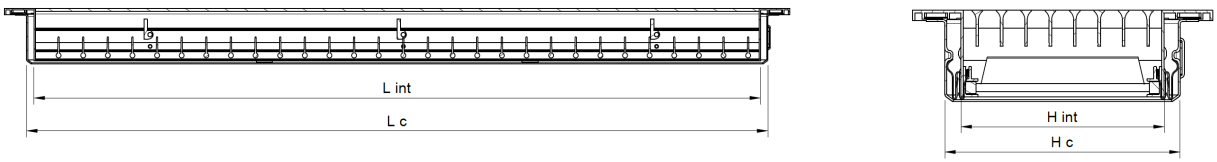


L x H [mm]	Mounting frame									
	100	500	1000	1100	1200	1500	2000	2100	2500	3000
85	1	1	1	1	2	2	2	3	3	3
100	1	1	1	1	2	2	2	3	3	3
150	1	1	1	1	2	2	2	3	3	3
200	1	1	1	1	2	2	2	3	3	3
300	1	1	1	1	2	2	2	3	3	3
350	1	1	1	1	2	2	2	3	3	3

For installation with mounting frame, the grille is equipped with clips that allow quick and easy clamping. The number of mounting clips that the grille is equipped depends on the size of the product.

L x H [mm]	Number of mounting clips													
	100	200	300	400	500	1000	1100	1200	1500	1600	2000	2100	2500	3000
85	2	2	4	4	4	4	6	6	6	8	8	10	10	10
100	2	2	4	4	4	4	6	6	6	8	8	10	10	10
150	2	2	4	4	4	4	6	6	6	8	8	10	10	10
200	2	2	4	4	4	4	6	6	6	8	8	10	10	10
300	6	6	6	6	6	6	6	6	6	8	8	12	12	12
350	6	6	6	6	6	6	6	6	6	8	8	12	12	12

Example : LBD-0 + CC



Lc x Hc = Lint x Hint grille + 18 mm

Functional parameters

Air flow	L x H [mm]	250x100	300x100	400x100	500x100	600x100	800x100	1000x100	600x150	1000x150	600x200	800x200	1000x200
[m³/h]	Ak [m²]	0.009	0.010	0.015	0.019	0.023	0.033	0.04	0.036	0.0648	0.0512	0.068	0.096
100	X [m]	2.7											
	NR [dB(A)]	22.0											
	ΔPt [Pa]	6.0											
	Veff [m/s]	3.2											
140	X [m]	3.3	2.8										
	NR [dB(A)]	25.0	21.0										
	ΔPt [Pa]	8.6	7.0										
	Veff [m/s]	4.4	3.7										
200	X [m]	4.7	4.2	3.6	3.0								
	NR [dB(A)]	31.3	26.3	24.0	19.0								
	ΔPt [Pa]	19.0	14.3	7.1	5.0								
	Veff [m/s]	6.3	5.3	3.7	2.9								
300	X [m]	7.0	6.4	5.6	4.8	3.1	2						
	NR [dB(A)]	43.8	37.5	30.0	22.5	20.0	17						
	ΔPt [Pa]	42.9	25.7	14.3	10.0	9.0	6						
	Veff [m/s]	9.5	8.0	5.5	4.3	3.6	2.5						
400	X [m]	9.4	8.7	7.2	6.4	5.9	5.1	4.2	4	2.3			
	NR [dB(A)]	53.8	47.5	40.0	31.3	27.5	25	20	20	18			
	ΔPt [Pa]	71.4	50.0	25.7	16.0	12.9	7.1	6	6	4			
	Veff [m/s]	12.6	10.7	7.3	5.8	4.8	3.4	2.8	3.1	1.7			
600	X [m]		12.8	11.1	9.7	8.2	7.8	6.7	7	5	4	3	
	NR [dB(A)]		60.0	52.5	43.8	40.0	32.5	32	31.3	23	25	20	
	ΔPt [Pa]		114.3	57.1	42.9	28.6	17.1	10	11.4	6	9	7	
	Veff [m/s]		16.0	11.0	8.7	7.2	5.1	4.2	4.6	2.6	3.3	2.5	
800	X [m]				13.3	11.7	10.3	9.4	9.4	7.6	7.8	6.5	3
	NR [dB(A)]				56.3	50.0	42.0	39	37.5	26.3	31.3	26	20
	ΔPt [Pa]				68.6	51.0	31.0	22.0	21.4	7.1	11.4	10	7
	Veff [m/s]				11.6	9.6	6.8	5.6	6.2	3.4	4.3	3.3	2.3
1000	X [m]						12.2	11.3	12.2	8.9	10	8.7	5.0
	NR [dB(A)]						52.5	46.3	47.5	32.0	37.5	31.3	25
	ΔPt [Pa]						42.9	28.6	31.4	16.0	17.1	11.4	9.0
	Veff [m/s]						8.5	6.9	7.7	4.3	5.4	4.1	2.9
1400	X [m]								16.7	10.8	13.3	12	8.0
	NR [dB(A)]								60	43.8	50	41.3	35
	ΔPt [Pa]								57.1	35.0	31.4	22.0	17.1
	Veff [m/s]								10.8	6.0	7.6	5.7	4.1

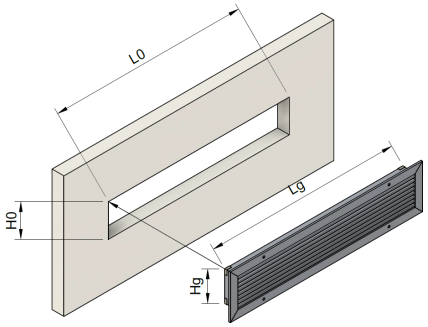
The legend
Ak [m²] - The free surface
X [m] - The length of the air jet at a speed of 0.2 m/s
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss
Veff [m/s] – Air velocity in the grille

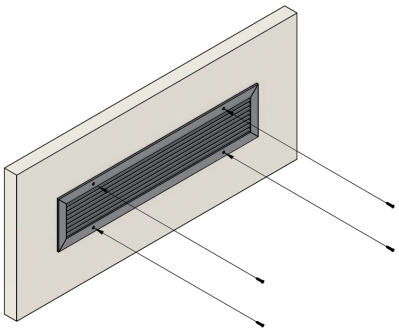
Installation

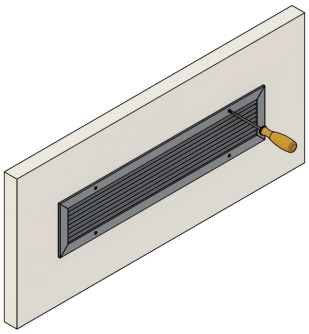
As standard, the grille is mounted by screws.

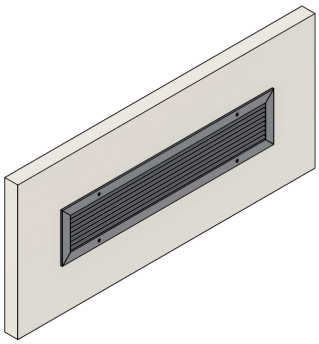
Optionally, for a hidden and easy assembly, a mounting frame can be used. The installation of the grille in the mounting frame is done by clamping.

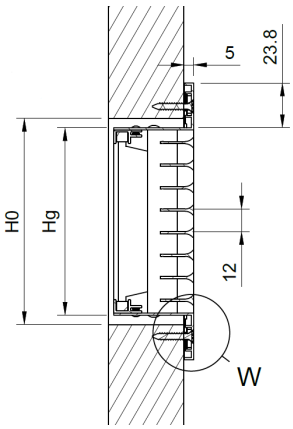
Wall/ceiling mounting with screws



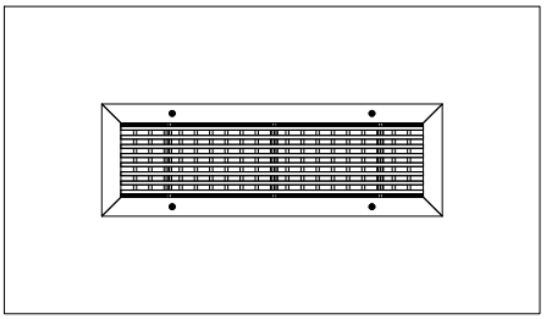


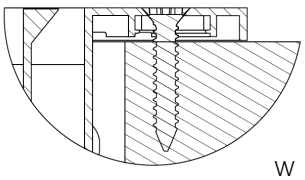


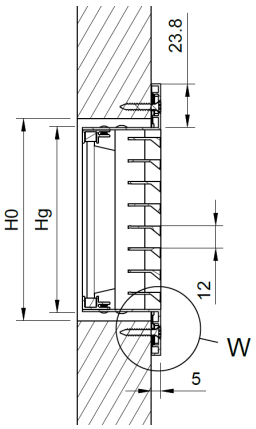




LBD-0

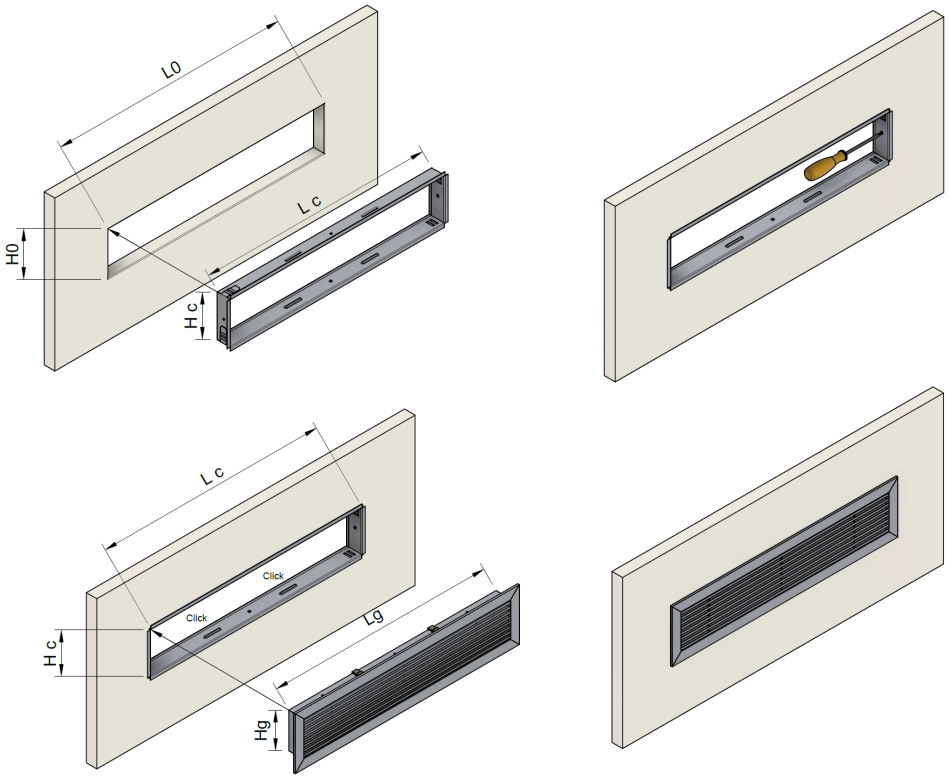


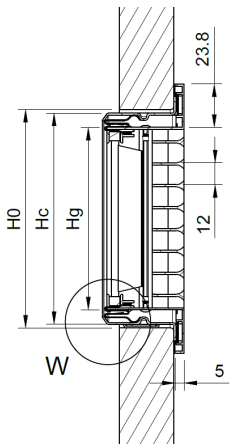




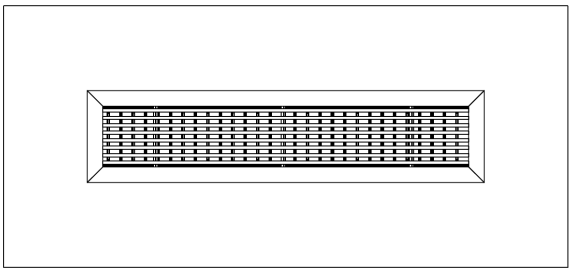
LBD-I5

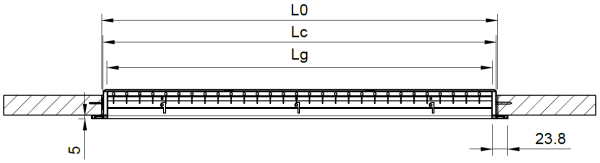
Wall/ceiling installation with mounting frame

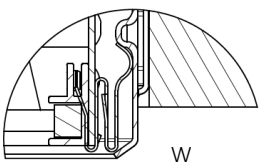


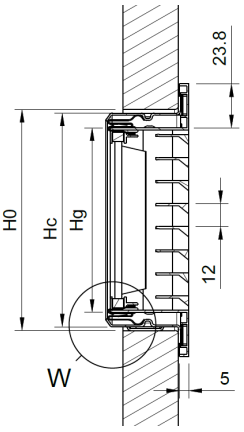


LBD-0





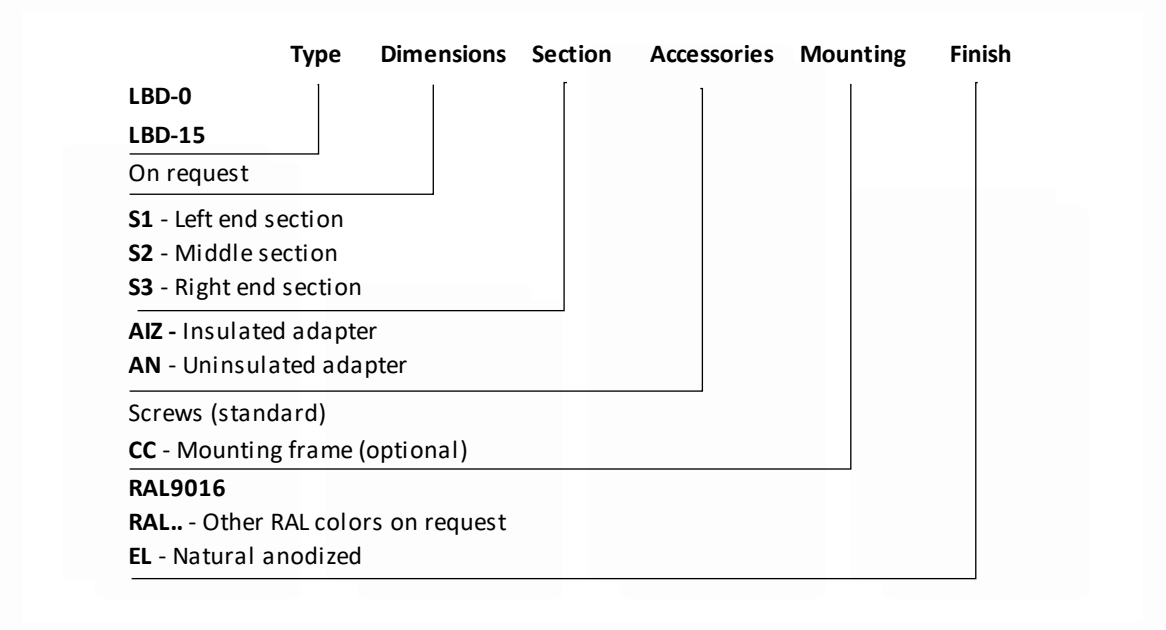




LBD-I5

Order code

Example on how to place an order



Note: For RAL9016 and EL finishes the adjustable blades are made of black anodized aluminum

Air through perfection

Exterior grille

WPL



ACP
Exterior grilles

Exterior grille
WPL



Description

WPL grille is a rectangular ventilation grille, weather resistant and is used for introduction or evacuation of air.

It is intended for installation on the exterior walls of buildings.

Technical specifications

Characteristics

The grille is provided with fixed anti-rain blades, positioned at 45°, parallel to the “L” (length).

WPL is equipped with galvanized steel wire mesh with 10x10 mm mesh.

The product is made standard with mounting holes for fixing with screws.

Special outdoor paint with high weather resistance is used to paint the grille.

The grille is supplied with fixing screws painted in the color of the product.

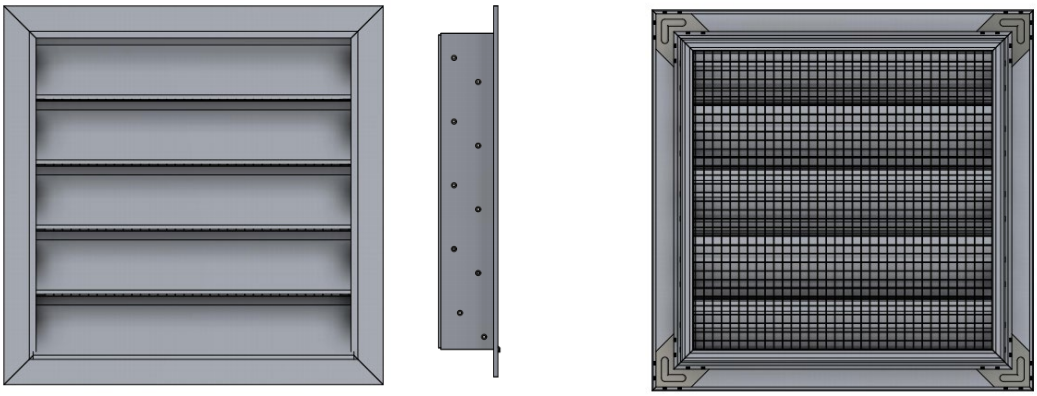
Materials

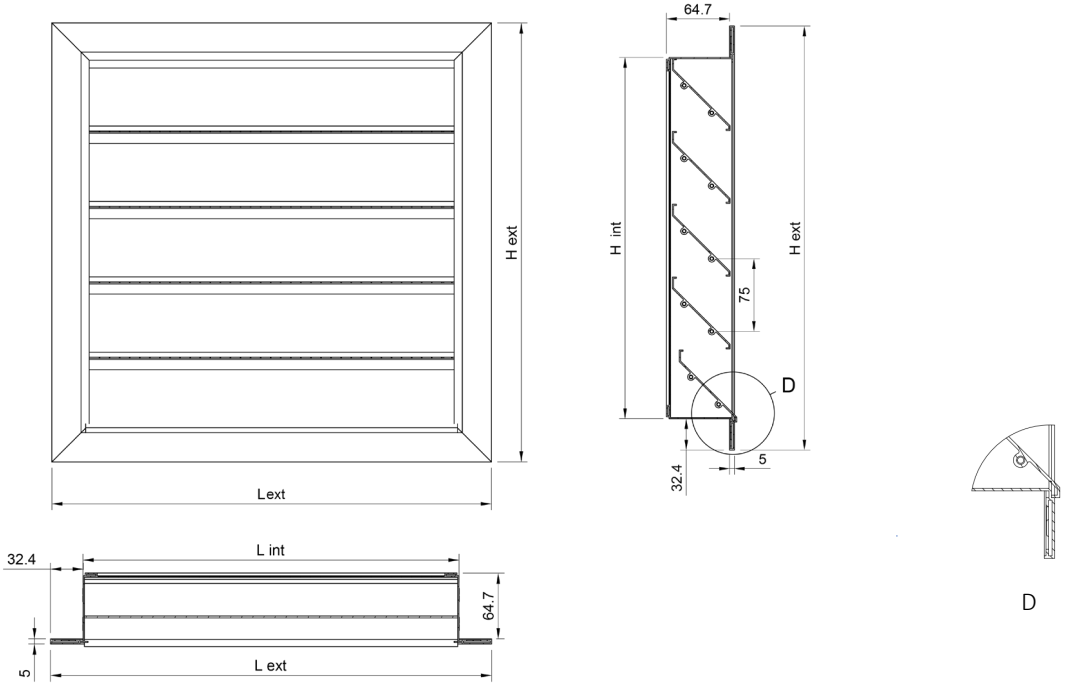
The grille is made of extruded aluminum electrostatic field painted in glossy white RAL 9016.

Other colors from the RAL palette are available on request or can be made from natural anodized aluminum profiles.

The wire mesh is made of galvanized steel with a mesh size of 10x10 mm.

Technical drawing





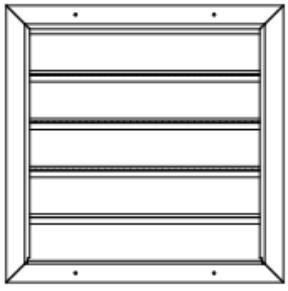
Product specifications

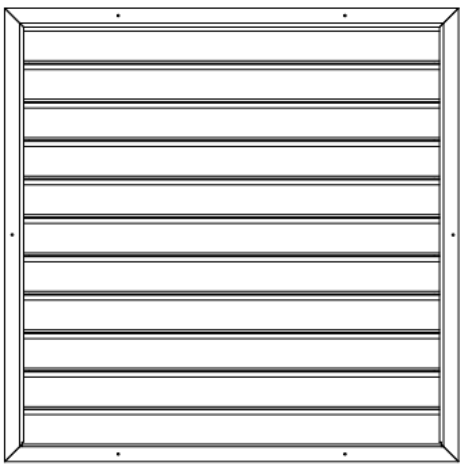
The grille is made standard with mounting holes positioned on the product frame.

The grilles with small dimensions are provided with 4 holes positioned on L, and those with larger dimensions with 6..16 holes arranged on both L and H according to the table below.

L x H [mm] / Nr.gauri	Number of holes																
	400/2	500/2	600/2	800/2	1000/3	1200/3	1400/3	1500/3	1600/3	1800/3	2000/4	2200/4	2400/4	2500/5	2600/5	2800/5	3000/5
400/0	4	4	4	4	6	6	6	6	6	6	8	8	8	10	10	10	10
500/0	4	4	4	4	6	6	6	6	6	6	8	8	8	10	10	10	10
600/0	4	4	4	4	6	6	6	6	6	6	8	8	8	10	10	10	10
800/0	4	4	4	4	6	6	6	6	6	6	8	8	8	10	10	10	10
1000/1	6	6	6	6	8	8	8	8	8	8	10	10	10	12	12	12	12
1200/1	6	6	6	6	8	8	8	8	8	8	10	10	10	12	12	12	12
1400/1	6	6	6	6	8	8	8	8	8	8	10	10	10	12	12	12	12
1500/1	6	6	6	6	8	8	8	8	8	8	10	10	10	12	12	12	12
1600/1	6	6	6	6	8	8	8	8	8	8	10	10	10	12	12	12	12
1800/1	6	6	6	6	8	8	8	8	8	8	10	10	10	12	12	12	12
2000/2	8	8	8	8	10	10	10	10	10	10	12	12	12	14	14	14	14
2200/2	8	8	8	8	10	10	10	10	10	10	12	12	12	14	14	14	14
2400/2	8	8	8	8	10	10	10	10	10	10	12	12	12	14	14	14	14
2500/2	8	8	8	8	10	10	10	10	10	10	12	12	12	14	14	14	14
2600/2	8	8	8	8	10	10	10	10	10	10	12	12	12	14	14	14	14
2800/3	10	10	10	10	12	12	12	12	12	12	14	14	14	16	16	16	16
3000/3	10	10	10	10	12	12	12	12	12	12	14	14	14	16	16	16	16

Only for products made of anodized aluminum profile (anodized)



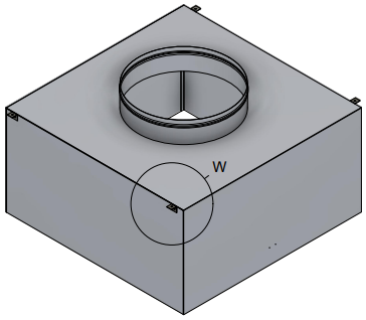


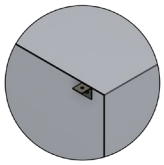
Accessories

The grille can be delivered with a connecting plenum to the circular duct.

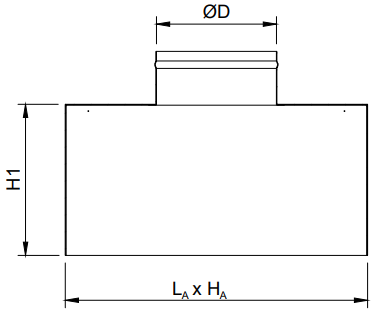
Adapter (plenum box)

Vertical connection
(opposite exit)





W



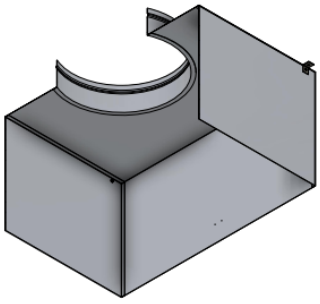
L_A X H_A = Lint x Hint grille + 5 mm

H1 and ØD - depending on demand

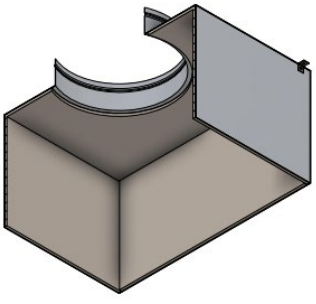
The adapter is made of Z140 galvanized sheet metal and is equipped with lugs for mounting.

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.

The insulation is arranged as standard on the inside of the plenum. On request, the insulation can be positioned on the outside.



AN - Uninsulated adapter



AIZ - Insulated adapter

Functional parameters

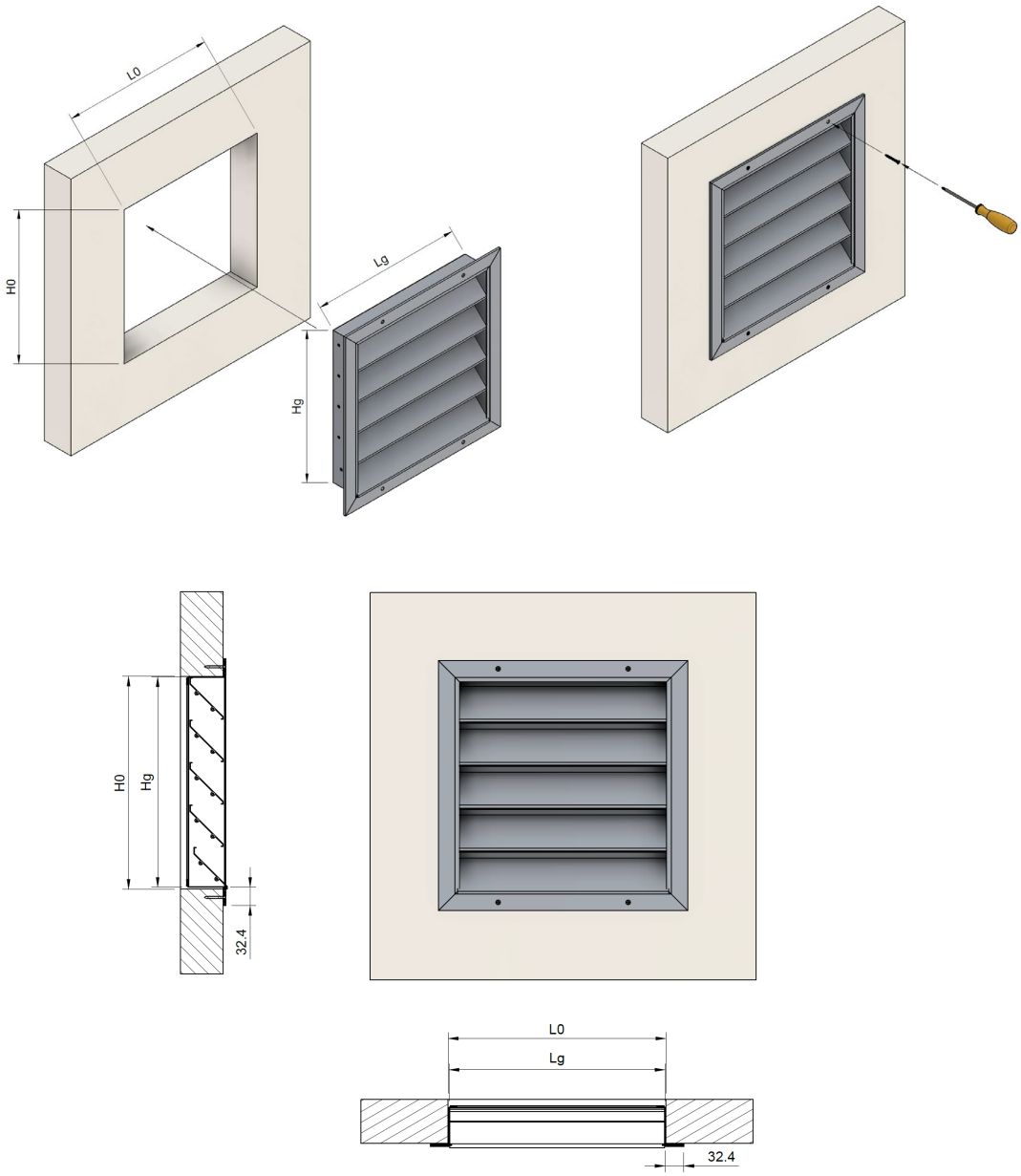
L x H [mm]	Discharge area Ak [m²]															
	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
500	0.12	0.14	0.17	0.20	0.22	0.25	0.27	0.30	0.33	0.35	0.38	0.40	0.43	0.46	0.48	0.51
600	0.15	0.18	0.21	0.25	0.28	0.31	0.34	0.38	0.41	0.44	0.47	0.51	0.54	0.57	0.61	0.64
700	0.18	0.22	0.26	0.30	0.34	0.38	0.42	0.46	0.50	0.54	0.59	0.63	0.67	0.71	0.75	0.79
800	0.21	0.26	0.31	0.36	0.40	0.45	0.50	0.55	0.59	0.64	0.69	0.74	0.78	0.83	0.88	0.93
900	0.24	0.29	0.35	0.40	0.45	0.51	0.56	0.61	0.67	0.72	0.77	0.83	0.88	0.93	0.99	1.04
1000	0.27	0.33	0.39	0.45	0.51	0.57	0.63	0.69	0.75	0.81	0.88	0.94	1.00	1.06	1.12	1.18
1100	0.30	0.37	0.44	0.51	0.57	0.64	0.71	0.78	0.84	0.91	0.98	1.05	1.11	1.08	1.25	1.32
1200	0.33	0.40	0.48	0.55	0.62	0.70	0.77	0.84	0.92	0.99	1.06	1.14	1.21	1.28	1.36	1.43
1300	0.36	0.44	0.52	0.60	0.68	0.76	0.84	0.92	1.00	1.08	1.17	1.25	1.33	1.41	1.49	1.57
1400	0.39	0.48	0.57	0.66	0.74	0.83	0.92	1.01	1.09	1.18	1.27	1.36	1.44	1.53	1.62	1.71
1500	0.42	0.51	0.61	0.70	0.79	0.89	0.98	1.70	1.17	1.26	1.35	1.45	1.54	1.63	1.73	1.82
1600	0.45	0.55	0.65	0.75	0.85	0.95	1.05	1.15	1.25	1.36	1.46	1.56	1.66	1.76	1.86	1.96
1700	0.48	0.59	0.70	0.81	0.91	1.02	1.13	1.24	1.34	1.45	1.56	1.67	1.77	1.88	1.99	2.10
1800	0.51	0.62	0.73	0.85	0.96	1.08	1.19	1.30	1.42	1.53	1.64	1.76	1.87	1.98	2.10	2.21
1900	0.54	0.66	0.78	0.90	1.02	1.14	1.26	1.38	1.50	1.63	1.75	1.87	1.99	2.11	2.23	2.35
2000	0.57	0.70	0.83	0.95	1.08	1.21	1.34	1.47	1.59	1.72	1.85	1.98	2.10	2.23	2.36	2.49

Air flow [m³/h]	Ak [m²]	0.1	0.15	0.2	0.25	0.3	0.4	0.5	0.6	0.8	1	1.5	2	2.5
1000	Veff [m/s]	2.6												
	△Pt asp [Pa]	28.0												
	△Pt ref [Pa]	23.0												
2000	Veff [m/s]	5.2	3.6	2.7	2.2									
	△Pt asp [Pa]	100.0	48.0	32.0	18.0									
	△Pt ref [Pa]	80.0	40.0	23.0	12.0									
3000	Veff [m/s]	8.2	5.3	4.2	3.4	2.8	2.2							
	△Pt asp [Pa]	190.0	110.0	65.0	45.0	32.0	17.0							
	△Pt ref [Pa]	160.0	85.0	55.0	35.0	23.0	8.0							
4000	Veff [m/s]		7.1	5.6	4.6	3.8	2.8	2.3						
	△Pt asp [Pa]		170.0	120.0	78.0	60.0	35.0	22.0						
	△Pt ref [Pa]		140.0	90.0	63.0	45.0	22.0	14.0						
5000	Veff [m/s]			7.0	5.6	4.7	3.6	2.8	2.5					
	△Pt asp [Pa]			165.0	118.0	82.0	49.0	35.0	26.0					
	△Pt ref [Pa]			135.0	86.0	68.0	41.0	23.0	17.0					
6000	Veff [m/s]			8.0	6.5	5.7	4.2	3.3	3.0	2.2				
	△Pt asp [Pa]			190.0	150.0	120.0	70.0	45.0	38.0	16.0				
	△Pt ref [Pa]			150.0	125.0	90.0	55.0	35.0	28.0	8.0				
7000	Veff [m/s]			9.2	7.4	6.3	4.7	3.8	3.3	2.3				
	△Pt asp [Pa]			220.0	180.0	150.0	85.0	52.0	42.0	22.0				
	△Pt ref [Pa]			200.0	145.0	125.0	65.0	43.0	35.0	18.0				
8000	Veff [m/s]				8.5	7.3	5.6	4.4	3.8	2.6	2.1			
	△Pt asp [Pa]				220.0	180.0	125.0	78.0	55.0	28.0	18.0			
	△Pt ref [Pa]				200.0	145.0	92.0	60.0	45.0	22.0	8.0			
9000	Veff [m/s]					8.6	6.2	4.8	4.2	2.9	2.4			
	△Pt asp [Pa]					220.0	140.0	90.0	65.0	38.0	23.0			
	△Pt ref [Pa]					180.0	120.0	75.0	55.0	26.0	15.0			
10000	Veff [m/s]						7.1	5.7	4.8	3.6	2.6			
	△Pt asp [Pa]						175.0	125.0	85.0	45.0	32.0			
	△Pt ref [Pa]						140.0	95.0	70.0	38.0	22.0			
12000	Veff [m/s]						8.6	6.8	5.8	4.1	3.3	2.2		
	△Pt asp [Pa]						210.0	160.0	128.0	65.0	41.0	18.0		
	△Pt ref [Pa]						170.0	135.0	95.0	53.0	28.0	13.0		
16000	Veff [m/s]								7.8	5.7	4.5	3.1	2.2	
	△Pt asp [Pa]								200.0	130.0	75.0	38.0	20.0	
	△Pt ref [Pa]								160.0	100.0	60.0	28.0	13.0	
20000	Veff [m/s]									7.1	5.8	3.8	2.8	2.3
	△Pt asp [Pa]									170.0	130.0	65.0	35.0	22.0
	△Pt ref [Pa]									140.0	100.0	48.0	25.0	13.0
25000	Veff [m/s]										7.2	5.1	3.7	3.1
	△Pt asp [Pa]										170.0	100.0	52.0	38.0
	△Pt ref [Pa]										140.0	78.0	43.0	27.0
30000	Veff [m/s]										8.6	5.8	4.3	3.6
	△Pt asp [Pa]										200.0	130.0	67.0	50.0
	△Pt ref [Pa]										160.0	100.0	58.0	43.0
40000	Veff [m/s]											7.8	5.5	4.4
	△Pt asp [Pa]											180.0	110.0	70.0
	△Pt ref [Pa]											145.0	85.0	60.0
50000	Veff [m/s]												6.8	5.5
	△Pt asp [Pa]												165.0	120.0
	△Pt ref [Pa]												135.0	90.0

The legend
Veff [m/s] - The speed of air in the grille
ΔPt asp [Pa] - Pressure loss at extraction
ΔPt ref [Pa] - Pressure loss at discharge
Ak [m²] - The free surface

Installation

Fixing the grille is done through of mounting screws.



Order code

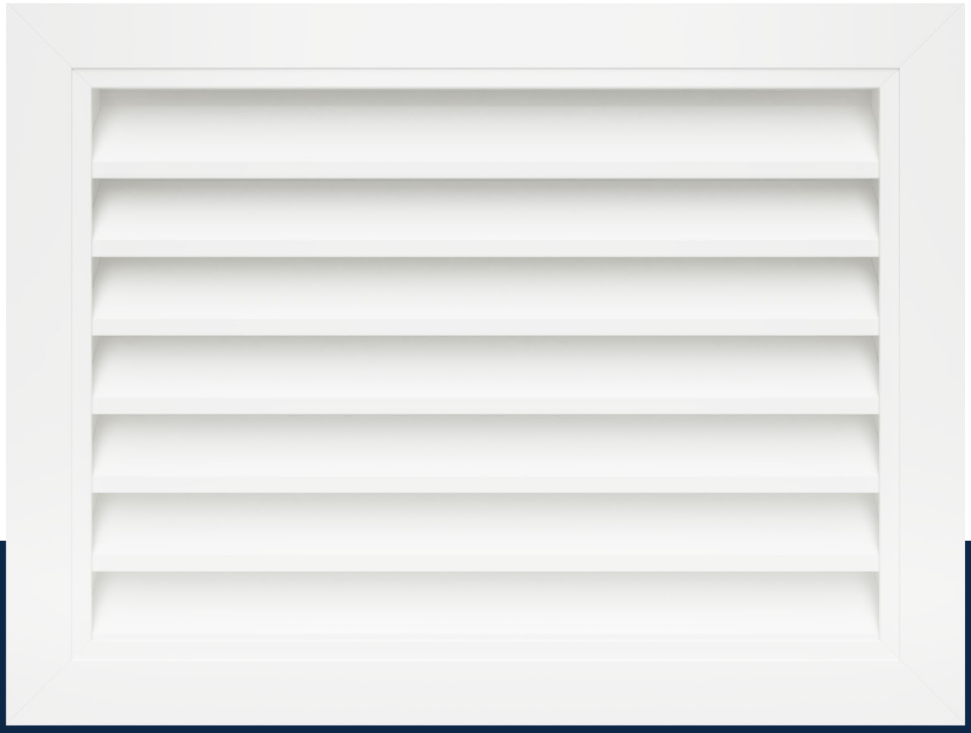
Example on how to place an order

Type	Dimensions	Accessories	Finish
WPL			
On request			
AIZ - Insulated adaptor			
AN - Uninsulated adapter			
RAL9016			
RAL.. - Other RAL colors on request			
EL - Natural anodized			

Air through perfection

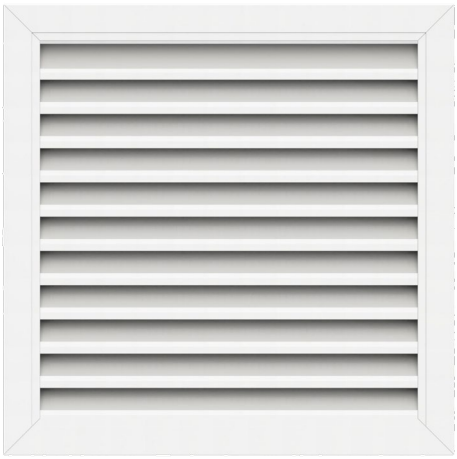
Exterior grille

WPL-S



ACP
Exterior grilles

Exterior grille
WPL-S



Description

WPL-S grille is a rectangular ventilation grille, weather resistant and is used for introduction or evacuation of air.
It is intended for installation on the exterior walls of buildings.

Technical specifications

Characteristics

The grille is provided with fixed anti-rain blades, positioned at 45°, parallel to the “L” (length).
WPL-S has a galvanized steel wire mesh with 6.3 x 6.3 mm mesh.
The product is made standard with mounting holes for fixing with screws.
The grille is painted with special exterior paint with high weather resistance.
The grille is supplied with fixing screws painted in the color of the product.

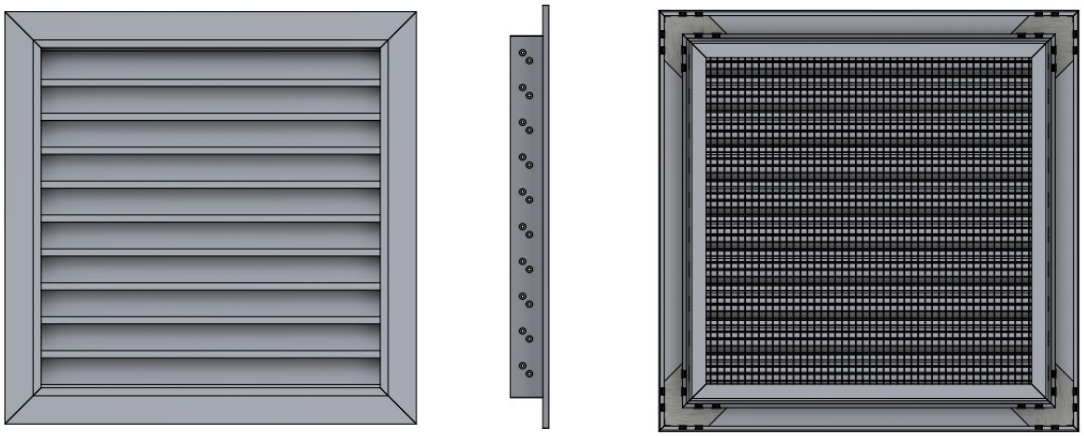
Materials

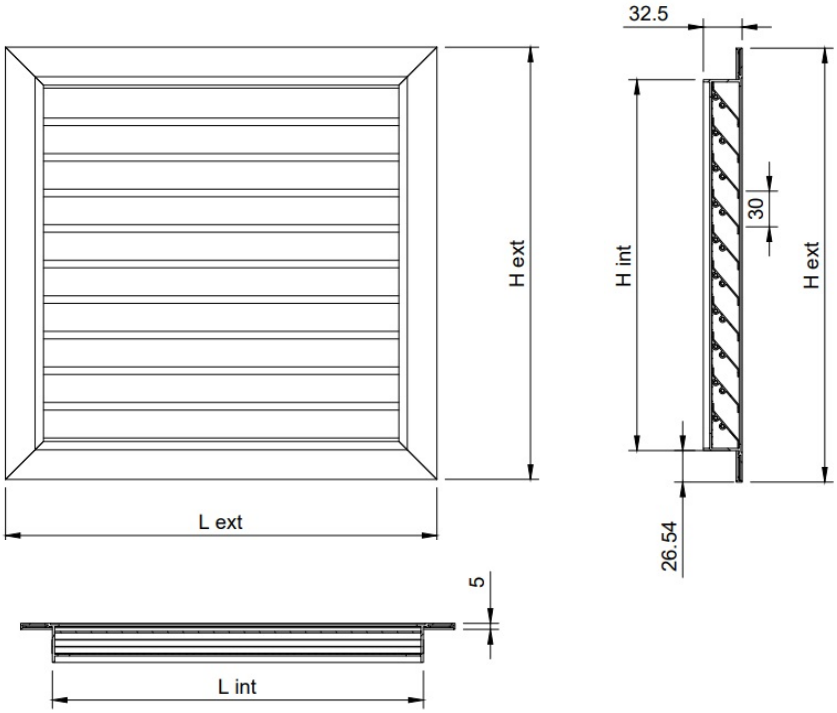
The grille is made of extruded aluminum electrostatic field painted in glossy white RAL 9016.

Other colors from the RAL palette are available on request or can be made from natural anodized aluminum profiles.

The wire mesh is made of galvanized steel with a mesh size of 6.3x6.3 mm.

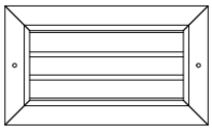
Technical drawing

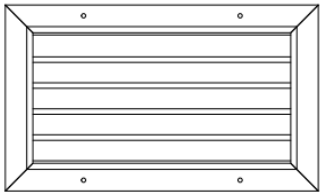




Product specifications

The grille is made standard with mounting holes positioned on the product frame. The number of holes and their position are made according to the size of the product, according to the pictures and table.







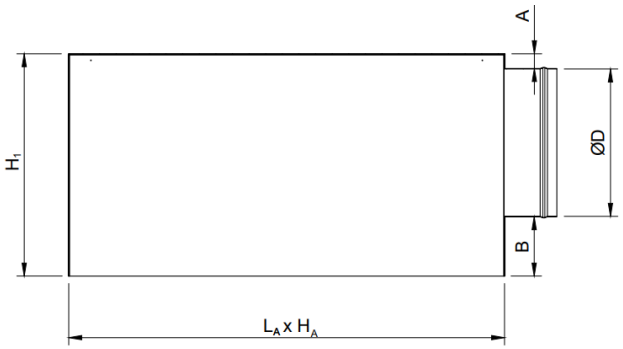
L x H [mm]	Number of holes							
	100	200	300	400	500	600	700	800
85	2	2	4	4	4	4	4	4
100	2	2	4	4	4	4	4	4
150	2	2	4	4	4	4	4	4
200	2	2	4	4	4	4	4	4
300	4	4	4	4	4	4	4	4
400	4	4	4	4	4	4	4	4
500	4	4	4	4	4	4	4	4
600	4	4	4	4	4	4	4	4
700	4	4	4	4	4	4	6	6
800	4	4	4	4	4	4	6	6

Accessories

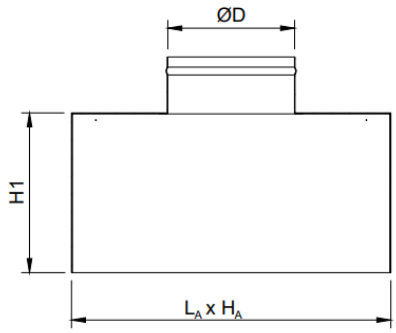
The grille can be delivered with a connecting plenum to the circular duct.

Adapter (plenum box)

Horizontal connection
(side/lateral exit)

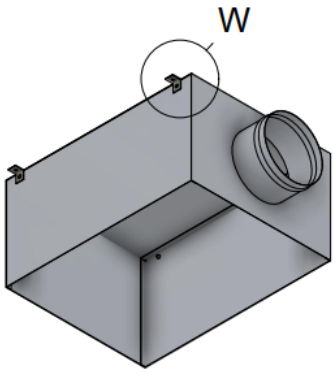


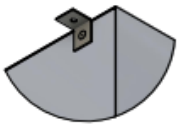
Vertical connection
(opposite exit)



L_A X H_A = Lint x Hint grille + 5 mm
A, B, H1 – depending on demand and ØD

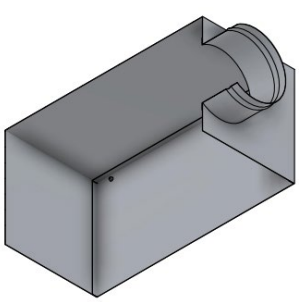
The adapter is made of Z140 galvanized sheet metal and is equipped with lugs for mounting.



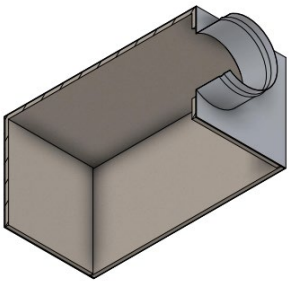


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.



AN - Uninsulated adapter



AIZ - Insulated adapter

Functional parameters

Air flow (m^3/h)	Ak [m^2]	0.01	0.02	0.03	0.04	0.05	0.06	0.08	0.10	0.15	0.20	0.25	0.30	0.40
200	Veff [m/s]	5.6	2.8											
	ΔPt [Pa]	50	8.0											
300	Veff [m/s]		4.2	2.8										
	ΔPt [Pa]		28.0	8.0										
400	Veff [m/s]		5.6	3.9	2.8	2.3								
	ΔPt [Pa]		50.0	26.0	8.0	3.0								
500	Veff [m/s]			4.8	3.6	2.8	2.3							
	ΔPt [Pa]			38.0	20.0	8	3.0							
600	Veff [m/s]			5.8	4.3	3.4	3.0	2.2						
	ΔPt [Pa]			53.0	29.0	18.0	14.0	2						
700	Veff [m/s]				5	4.0	3.4	2.5	2.2					
	ΔPt [Pa]				40	25.0	18.0	7.0	2					
800	Veff [m/s]				5.8	4.7	3.8	2.8	2.4					
	ΔPt [Pa]				53.0	35.0	25	8	4.0					
1000	Veff [m/s]					5.5	4.8	3.5	2.8					
	ΔPt [Pa]					50	38.0	18.0	8.0					
2000	Veff [m/s]								5.8	3.8	2.8	2.4		
	ΔPt [Pa]								53.0	25.0	8.0	4.0		
3000	Veff [m/s]									5.8	4.4	3.5	2.8	2.2
	ΔPt [Pa]									53.0	30	19.0	8.0	2.0
4000	Veff [m/s]										5.6	4.6	3.8	2.8
	ΔPt [Pa]										51.0	32.0	25	8.0
5000	Veff [m/s]											5.5	4.8	3.5
	ΔPt [Pa]											50.0	37.0	18.0

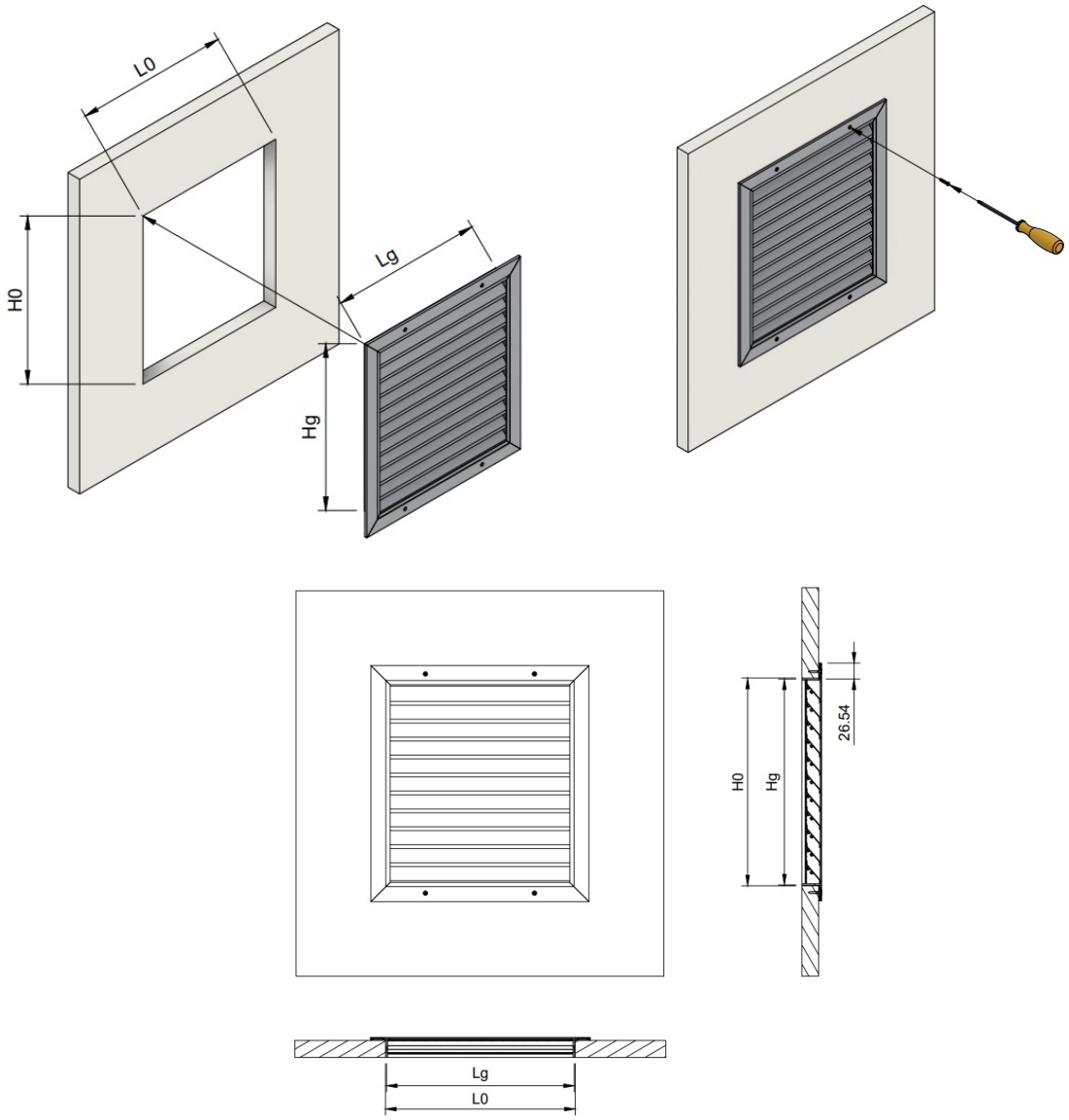
Discharge area Ak [m^2]								
Height	Length [mm]							
[mm]	150	200	300	400	500	600	700	800
100	0.001	0.008	0.012	0.017	0.024	0.028	0.040	0.050
150	0.013	0.017	0.025	0.030	0.040	0.050	0.060	0.070
200	0.018	0.020	0.030	0.040	0.060	0.070	0.080	0.090
300	0.027	0.035	0.050	0.070	0.090	0.100	0.120	0.140
400	0.036	0.045	0.070	0.090	0.120	0.140	0.170	0.190
500	0.045	0.060	0.090	0.120	0.150	0.180	0.210	0.240
600	0.050	0.070	0.100	0.130	0.180	0.210	0.250	0.290
700	0.060	0.080	0.110	0.160	0.210	0.250	0.300	0.330
800	0.070	0.090	0.130	0.180	0.240	0.300	0.340	0.400

Note: For discharge areas other than those listed in the tables, the velocity and pressure drop values will be result by interpolation.

The legend
Ak [m^2] - The free surface of the grille
Veff [m/s] - Effective air speed in grille
ΔPt [Pa] - Pressure loss

Installation

The mounting/fixing of the grille is done with screws.



Order code

Example on how to place an order

Type	Dimensions	Accessories	Finish
WPL-S			
On request			
AIZ - Insulated adaptor			
AN - Uninsulated adapter			
RAL9016			
RAL.. - Other RAL colors on request			
EL - Natural anodized			

Air through perfection

Circular exterior grille

WPL-R



ACP
Exterior grilles

Circular exterior grille
WPL-R



Description

WPL-R circular ventilation grille is used in ventilation and air conditioning systems for the introduction or evacuation of air.

Technical specifications

Characteristics

The grille is provided with fixed blades and a metal mesh.

The wire mesh used is made of galvanized steel with a mesh size of 2x2 mm.

When installing the grille on the exterior walls it is recommended to protect the product against the weather by covering it with special exterior paint in the shade of the facade.

The grille is made with mounting holes, can be delivered without holes on request.

Dimensional range: Ø100, Ø125, Ø150, Ø160, Ø200, Ø250, Ø315, Ø400.

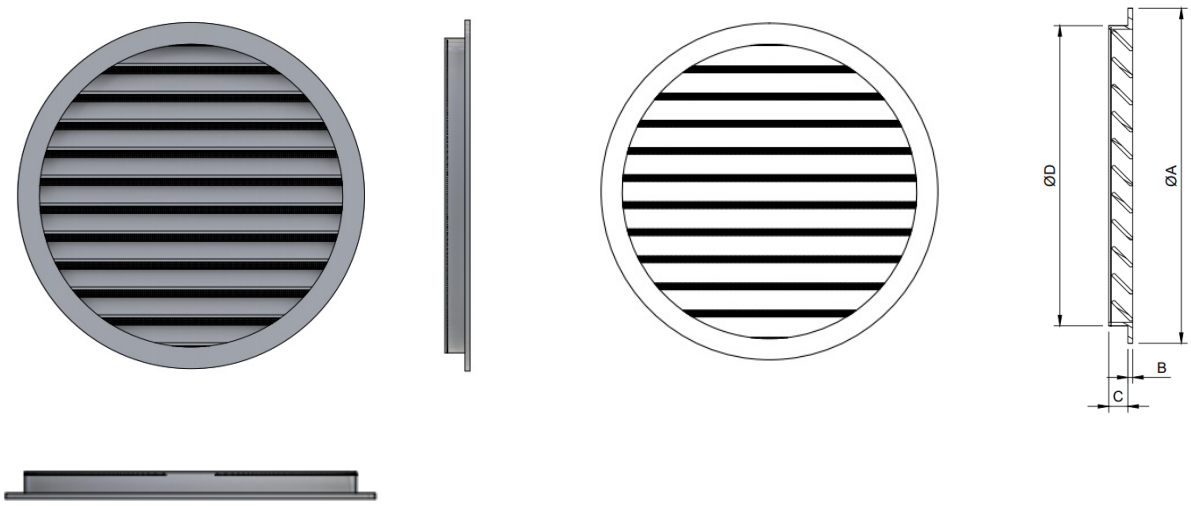
Materials

The grille is made of aluminum with a natural finish.

On request, the product can be painted in any shade from the RAL palette.

Technical drawing

WPL-R	ØD [mm]	ØA [mm]	B [mm]	C [mm]
D100	99	124	2.7	16.3
D125	124	150	2.7	16.3
D150	149	179	2.7	14.3
D160	159	181	3.2	14.8
D200	199	223	3.8	16.2
D250	249	275	5	15
D315	314	345	6.5	14.5
D400	399	439	6	35



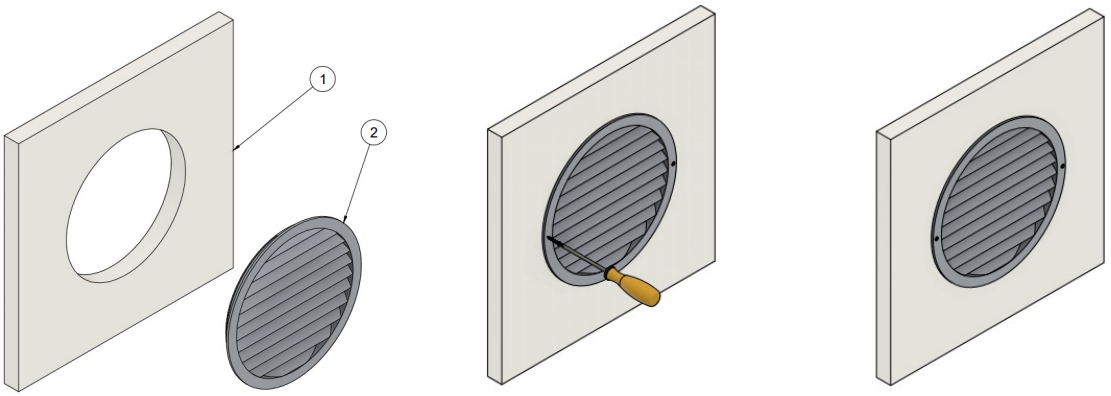
Functional parameters

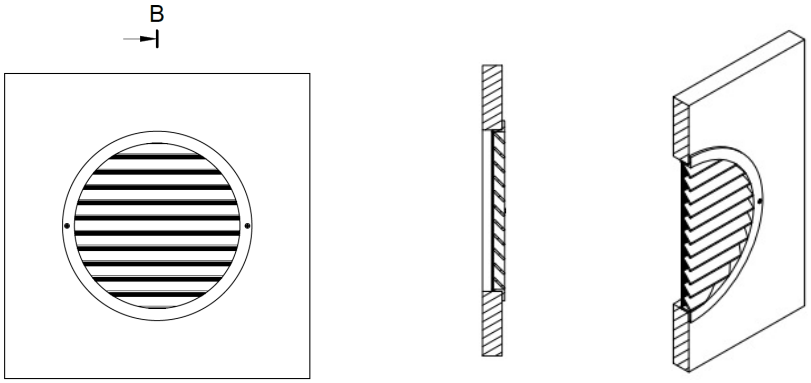
Air flow [m³/h]	Diameter [mm]	100	125	150	160	200	250	315	400
	Ak [m²]	0.0044	0.0068	0.0098	0.0120	0.0200	0.0310	0.0470	0.0750
40	NR [dB(A)]	12							
	ΔPt [Pa]	10							
60	NR [dB(A)]	23	14						
	ΔPt [Pa]	22	9						
100	NR [dB(A)]	33	27	21	16				
	ΔPt [Pa]	60	25	13	10				
150	NR [dB(A)]		37	31	28	14			
	ΔPt [Pa]		55	30	23	9			
200	NR [dB(A)]		44	38	35	28	10		
	ΔPt [Pa]		105	50	40	17	6		
300	NR [dB(A)]			50	47	38	31		
	ΔPt [Pa]			120	88	35	14		
400	NR [dB(A)]				56	46	40	31	
	ΔPt [Pa]				159	65	26	11	
700	NR [dB(A)]						61	47	
	ΔPt [Pa]						75	32	
800	NR [dB(A)]							50	
	ΔPt [Pa]							39	
1000	NR [dB(A)]							58	30
	ΔPt [Pa]							70	8
1500	NR [dB(A)]								40
	ΔPt [Pa]								17
2000	NR [dB(A)]								47
	ΔPt [Pa]								32
2500	NR [dB(A)]								52
	ΔPt [Pa]								48
4000	NR [dB(A)]								63
	ΔPt [Pa]								110

The legend
Ak [m²] - The free surface
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

Installation

The grille is mounted with screws.





B-B

Order code

Example on how to place an order

Type	Dimensions	Finish
WPL-R		
	Ø100 ... Ø400	
		Natural aluminium (standard)
		RAL... - RAL colors on request

Air through perfection

Return grille with access and filter

SD-D



ACP
Access grilles

Return grille with access and filter
SD-D



Description

The simple deflection grille with access door has fixed blades, positioned at 45° and G4 air filter.

SD-D is used for evacuation of air and is intended for wall or false ceiling mounting.

Technical specifications

Characteristics

The grille is equipped with fixed blades, parallel to the "L" (length), access door and G4 air filter.

The opening system is click type (opening/closing by pressing) which facilitates access.

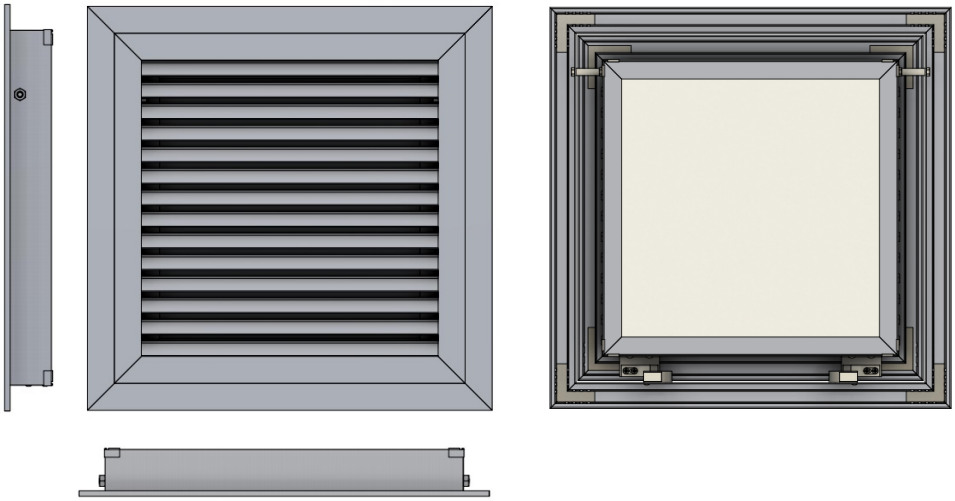
The grille is produced as standard without mounting holes. Optionally, mounting holes can be requested on the visible grille frame.

Materials

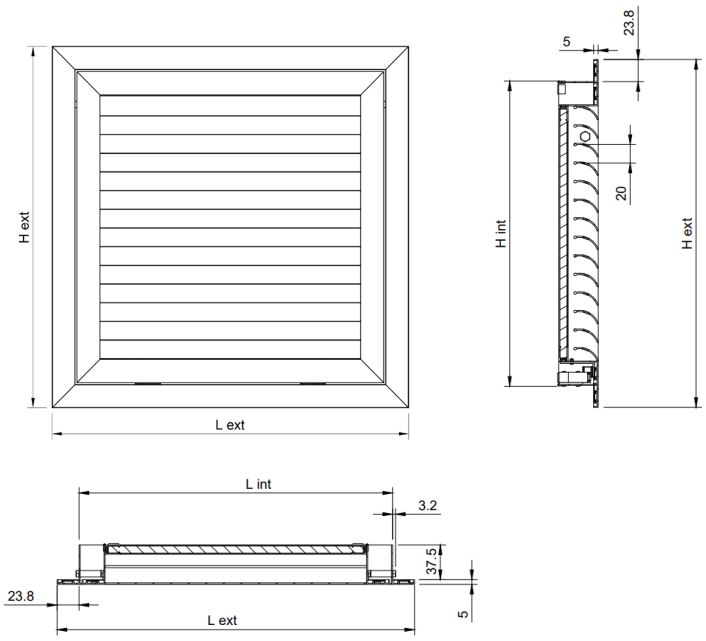
The grille is made of extruded aluminum electrostatic field painted in glossy white RAL 9016.

On request, the grille can be made of natural anodized aluminum profiles or can be painted in other RAL colours.

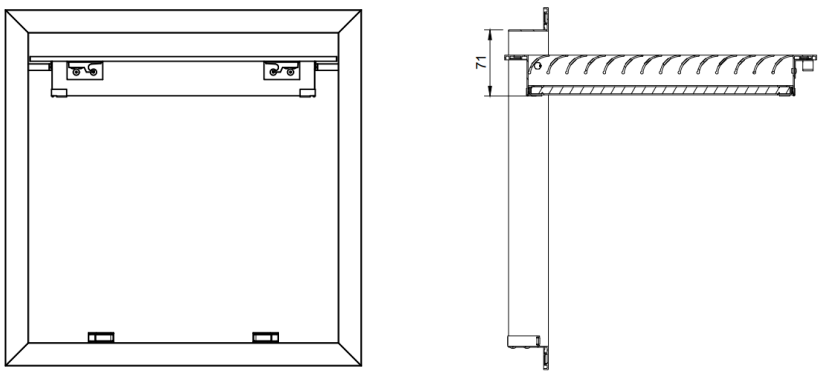
Technical drawing



Grille in closed position



Grille in open position



Accessories

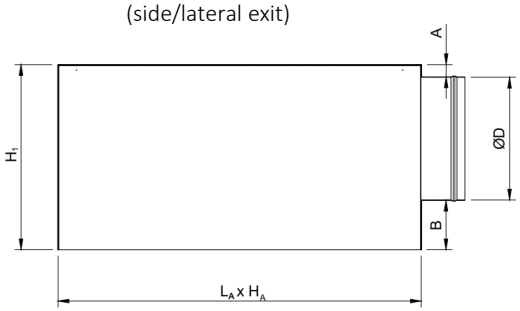
The grille can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

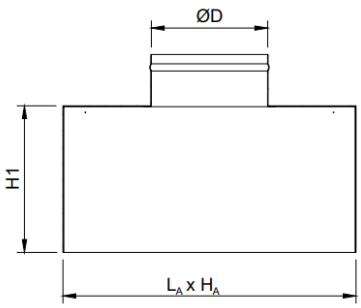
On request, the product can be delivered with a washable FL-R filter.

Adapter (plenum box)

Horizontal connection
(side/lateral exit)

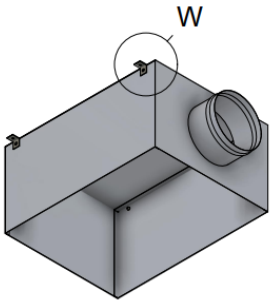


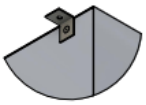
Vertical connection
(opposite exit)



L_A X H_A = Lint x Hint grille + 5 mm
A, B, H1 - depending on demand and ØD

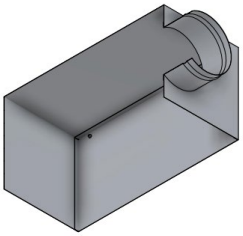
The adapter is made of Z140 galvanized sheet metal and is equipped with lugs for mounting.



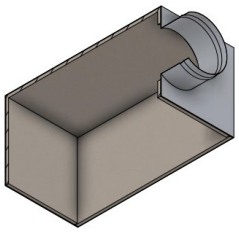


W - Suspension lug

The plenum is available in two options, uninsulated or insulated with 6 mm thick elastomeric rubber.



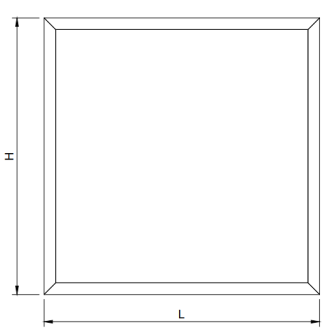
AN - Uninsulated adapter

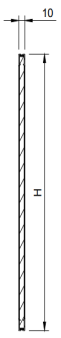


AIZ - Insulated adapter

Washable air filter (FL-R)

Washable air filter with aluminum frame, used for air filtration and mounting on the grille connection.





Functional parameters

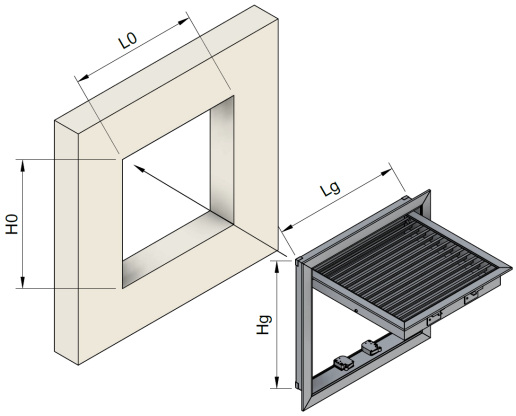
Air flow (m³/h)	L x H Ak [m²]	200 x 200 0.0076	300 x 250 0.0189	400 x 300 0.0345	450 x 300 0.0416	500 x 400 0.0721	600 x 400 0.0915	800 x 400 0.1173	700 x 600 0.1759	1000 x 700 0.2934
60	Veff[m/s]	2.2								
	ΔPt [Pa]	5.0								
	NR [dB(A)]	22.0								
80	Veff[m/s]	2.9								
	ΔPt [Pa]	9.0								
	NR [dB(A)]	29.0								
100	Veff[m/s]	3.7								
	ΔPt [Pa]	14.0								
	NR [dB(A)]	35.0								
140	Veff[m/s]	5.1	2.1							
	ΔPt [Pa]	27.0	2.0							
	NR [dB(A)]	44.0	16.0							
180	Veff[m/s]	6.6	2.6							
	ΔPt [Pa]	45.0	3.0							
	NR [dB(A)]	51.0	22.0							
200	Veff[m/s]	7.3	2.9	1.6						
	ΔPt [Pa]	56.0	4.0	3.0						
	NR [dB(A)]	53.0	25.0	22.0						
300	Veff[m/s]		4.4	2.4	2.0					
	ΔPt [Pa]		9.0	6.0	2.0					
	NR [dB(A)]		36.0	32.0	22.0					
400	Veff[m/s]		5.9	3.2	2.7					
	ΔPt [Pa]		16.0	12.0	4.0					
	NR [dB(A)]		43.0	40.0	30.0					
500	Veff[m/s]		7.3	4.0	3.3	1.9				
	ΔPt [Pa]		25.0	18.0	7.0	2.0				
	NR [dB(A)]		49.0	46.0	36.0	24.0				
600	Veff[m/s]				4.0	2.3	1.8	1.4		
	ΔPt [Pa]				11.0	3.0	2.0	1.0		
	NR [dB(A)]				41.0	29.0	24.0	18.0		
800	Veff[m/s]				5.3	3.1	2.4	1.9		
	ΔPt [Pa]				19.0	6.0	4.0	2.0		
	NR [dB(A)]				48.0	36.0	32.0	26.0		
1000	Veff[m/s]				6.7	3.9	3.0	2.4	1.6	
	ΔPt [Pa]				30.0	10.0	6.0	4.0	1.0	
	NR [dB(A)]				54.0	42.0	38.0	32.0	21.0	
1400	Veff[m/s]					5.4	4.3	3.3	2.2	
	ΔPt [Pa]					20.0	13.0	7.0	2.0	
	NR [dB(A)]					51.0	46.0	40.0	29.0	
1800	Veff[m/s]						5.5	4.3	2.8	
	ΔPt [Pa]						22.0	12.0	4.0	
	NR [dB(A)]						53.0	47.0	36.0	
2000	Veff[m/s]							4.7	3.2	
	ΔPt [Pa]							15.0	5.0	
	NR [dB(A)]							50.0	39.0	
3000	Veff[m/s]								4.7	2.8
	ΔPt [Pa]								13.0	1.0
	NR [dB(A)]								49.0	22.0
4000	Veff[m/s]									3.8
	ΔPt [Pa]									1.0
	NR [dB(A)]									30.0

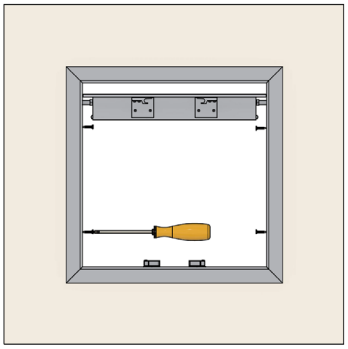
The legend
Ak [m²] - The free surface
Veff [m/s] – Air velocity in the grille
ΔPt [Pa] - Pressure loss
NR [dB (A)] - Noise level without room attenuation

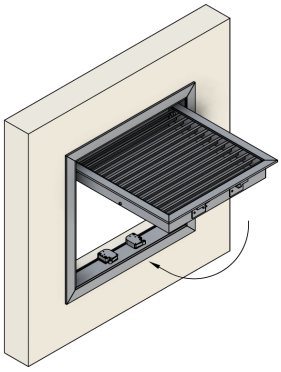
Installation

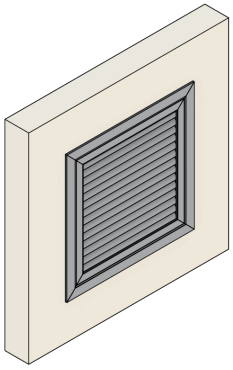
The grille can be mounted on the wall or in the false ceiling.

Installation in wall or continuous ceiling

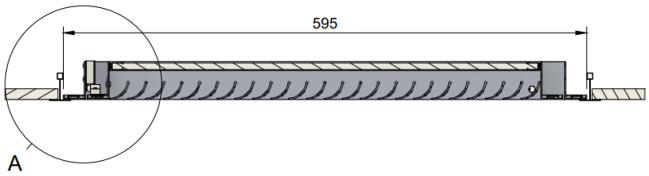


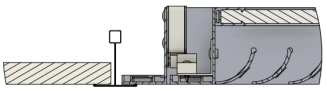






Installation in T-bar suspended ceiling





Order code

Example on how to place an order

Type	Dimensions	Accessories	Finish
SD-D			
On request			
		FL-R - Washable air filter	
		AIZ - Insulated adaptor	
		AN - Uninsulated adapter	
			RAL9016
			RAL.. - Other RAL colors on request
			EL - Natural anodized

Air through perfection

Egg crate grille with access

EGD-O



ACP
Access grilles

Egg crate grille with access
EGD-0



Description

EGD-0 is a return grille with access door and egg crate central part with 0 ° inclination.

The grille allows the evacuation of a high air flow with a minimum pressure loss.

Can be applied on the wall or false ceiling.

Technical specifications

Characteristics

The central part is egg crate type with size 12.5 x 12.5 mm and 0 ° inclination.

The opening system is click type (opening/closing by pressing) which facilitates access.

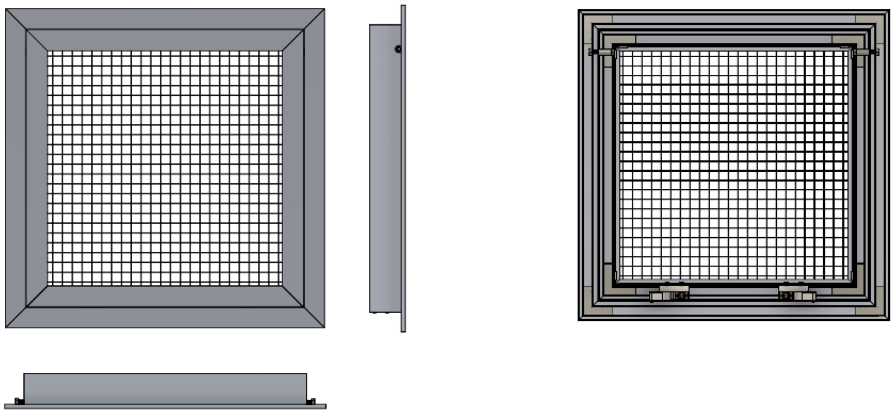
The grille is produced as standard without mounting holes. Optionally, mounting holes can be requested on the visible grille frame.

Materials

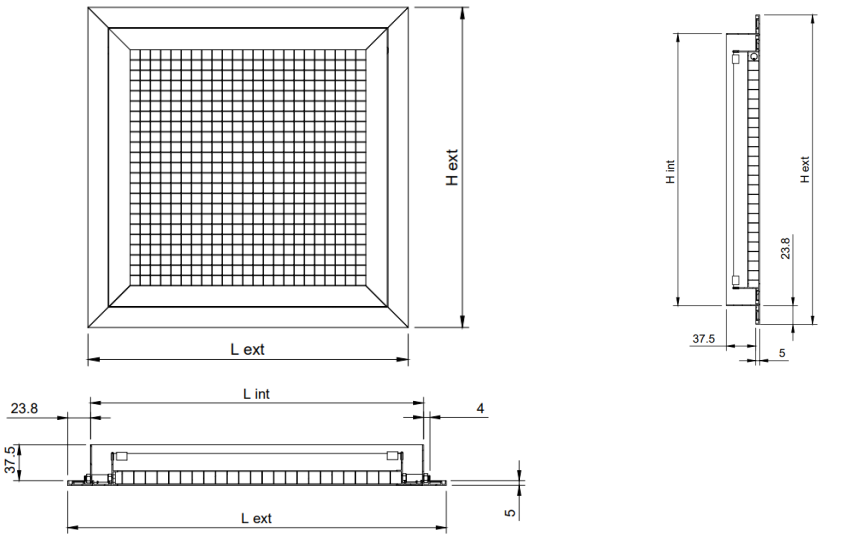
The grille is made of extruded aluminum electrostatic field painted in glossy white RAL 9016.

On request, the grille can be painted in other RAL colours.

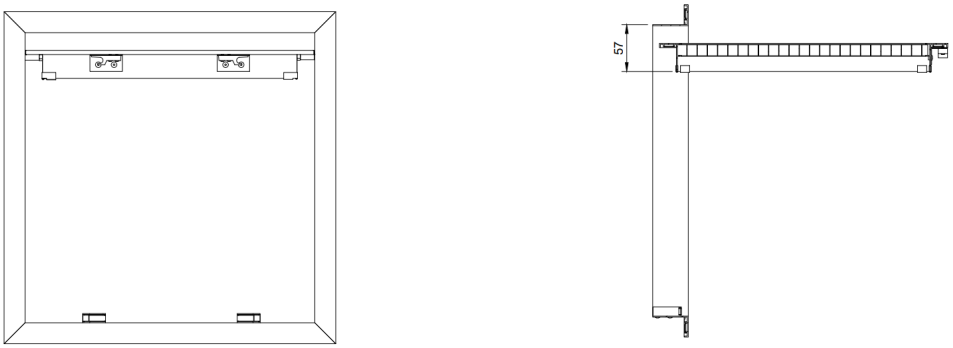
Technical drawing



Grille in closed position



Grille in open position



Accessories

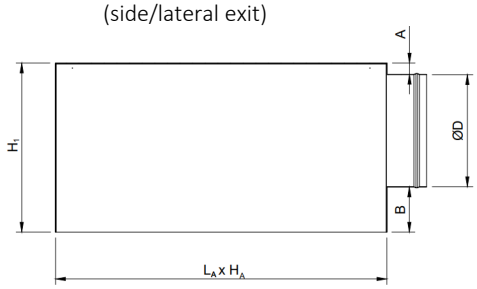
The grille can be equipped with plenum box (adapter) or G4 air filter.

Adapter (plenum box)

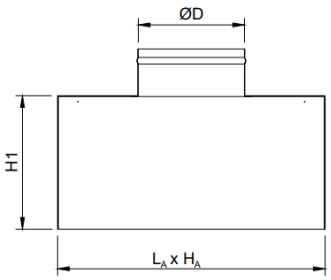
The plenum connection to the circular duct can be with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

Horizontal connection
(side/lateral exit)

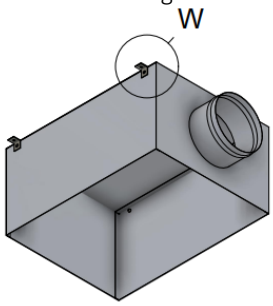


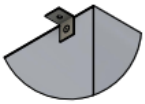
Vertical connection
(opposite exit)



L_A X H_A = Lint x Hint grille + 5 mm
A, B, H1 - depending on demand and ØD

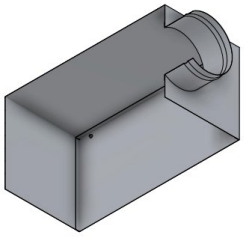
The adapter is made of Z140 galvanized sheet metal and is equipped with lugs for mounting.



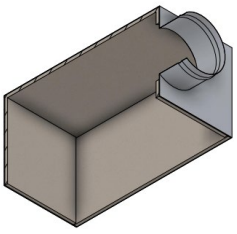


W - Suspension lug

The plenum is available in two options, uninsulated or insulated with 6 mm thick elastomeric rubber.



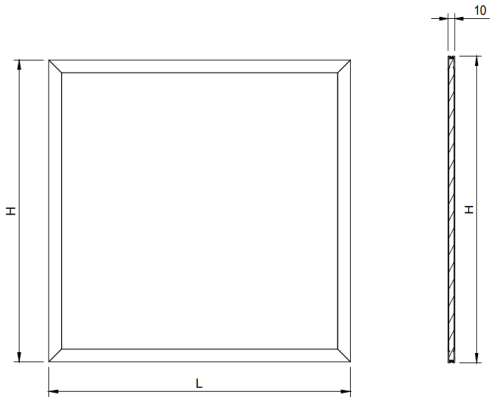
AN - Uninsulated adapter



AIZ - Insulated adapter

G4 air filter with frame (F-R)

G4 air filter with aluminum frame is used for air filtration and is mounted on the grille connection.



Functional parameters

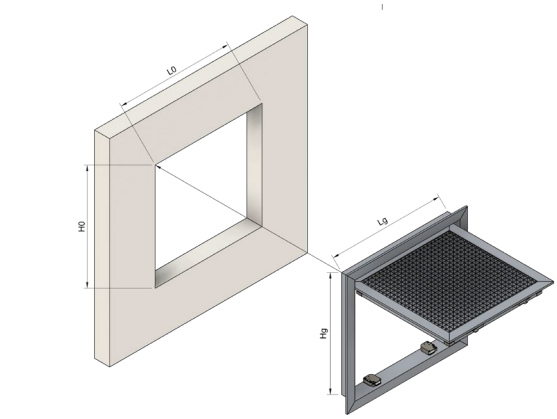
Air flow	LxH	250x150	350x200	450x250	500x250	550x350	550x400	600x500	650x650	1000x700
(m³/h)	Ak [m²]	0.0106	0.0290	0.0560	0.0650	0.1140	0.1390	0.1880	0.2920	0.5010
100	Veff	2.6	1.0	0.5						
	NR [dB(A)]	22.0	11.0	5.0						
	ΔPt [pa]	12.8	1.6	0.4						
200	Veff	5.2	1.9	1.0	0.9	0.5				
	NR [dB(A)]	37.0	19.0	12.0	9.0	4.0				
	ΔPt [pa]	51.0	6.5	1.7	1.4	0.4				
300	Veff		2.9	1.5	1.3	0.7	0.6			
	NR [dB(A)]		24.0	16.0	13.0	8.0	5.0			
	ΔPt [pa]		15.0	4.2	2.8	1.1	0.6			
400	Veff		3.8	2.0	1.7	1.0	0.8	0.6		
	NR [dB(A)]		29.0	18.0	17.0	9.0	8.0	4.0		
	ΔPt [pa]		26.5	7.0	5.1	1.8	1.2	0.6		
500	Veff		4.8	2.5	2.1	1.2	1.0	0.7		
	NR [dB(A)]		35.0	21.0	21.0	11.0	10.0	6.0		
	ΔPt [pa]		41.0	11. 0	8.2	2.5	1.8	1.0		
600	Veff		5.7	3.0	2.6	1.5	1.2	0.9	0.6	
	NR [dB(A)]		39.0	25.0	24.0	16.0	11.0	8.0	5.0	
	ΔPt [pa]		60.5	16.0	11.5	4.0	2.6	1.4	0.7	
700	Veff			3.5	3.0	1.7	1.4	1.0	0.7	
	NR [dB(A)]			29.0	26.0	17.0	13.0	10.0	6.0	
	ΔPt [pa]			21.0	16.0	5.4	3.5	2.1	0.8	
800	Veff			4.0	3.4	1.9	1.6	1.2	0.8	
	NR [dB(A)]			32.0	30.0	19.0	14.0	11.0	8.0	
	ΔPt [pa]			29.0	20.5	6.5	4.6	2.7	1.0	
900	Veff			4.5	3.8	2.2	1.8	1.3	0.9	0.5
	NR [dB(A)]			34.0	31.0	21.0	16.0	12.0	9.0	3.0
	ΔPt [pa]			36.0	27.0	8.5	5.8	3.4	1.2	0.5
1000	Veff				4.3	2.4	2.0	1.5	1.0	0.6
	NR [dB(A)]				33.0	21.0	18.0	16.0	12.0	6.0
	ΔPt [pa]				34.0	10.5	7.5	3.6	1.5	0.5
1500	Veff				6.4	3.7	3.0	2.2	1.4	0.8
	NR [dB(A)]				44.0	30.0	24.0	21.0	17.0	11.0
	ΔPt [pa]				73.0	24.0	16.0	8.8	3.8	1.2
2000	Veff					4.9	4.0	3.0	1.9	1.1
	NR [dB(A)]					35.0	31.0	26.0	19.0	16.0
	ΔPt [pa]					42.0	28.5	16.5	7.0	2.3
3000	Veff					7.3	6.0	4.4	2.9	1.7
	NR [dB(A)]					47.5	42.0	31.0	25.0	18.0
	ΔPt [pa]					74.0	67.0	35.0	14.2	4.8
4000	Veff							5.9	3.8	2.2
	NR [dB(A)]							42.0	29.0	20.0
	ΔPt [pa]							64.0	25.0	8.5
5000	Veff								4.8	2.8
	NR [dB(A)]								33.0	23.0
	ΔPt [pa]								40.0	14.0
6000	Veff								5.7	3.3
	NR [dB(A)]								39.0	28.0
	ΔPt [pa]								61.0	21.0
7000	Veff								6.7	3.9
	NR [dB(A)]								55.0	29.0
	ΔPt [pa]								80.0	26.0
8000	Veff									4.4
	NR [dB(A)]									34.0
	ΔPt [pa]									36.0
9000	Veff									5.0
	NR [dB(A)]									36.0
	ΔPt [pa]									46.0

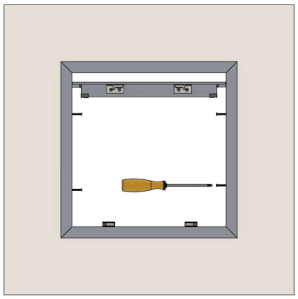
The legend
Ak [m²] - The free surface
Veff [m/s] - Air velocity in the grille
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

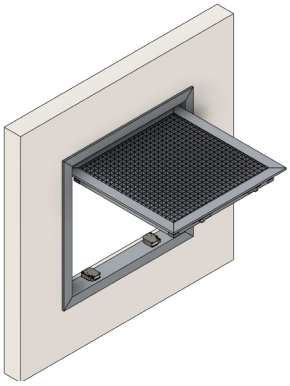
Installation

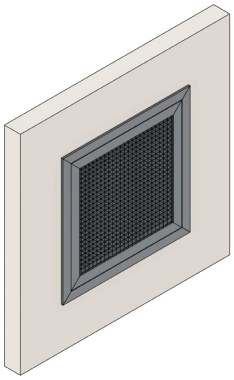
The grille can be mounted on the wall or in the false ceiling.

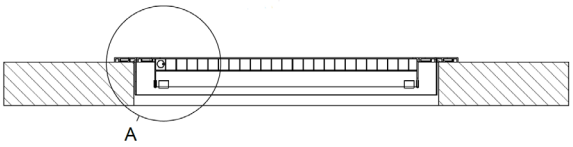
Installation in wall or continuous ceiling

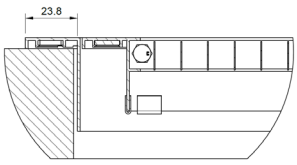






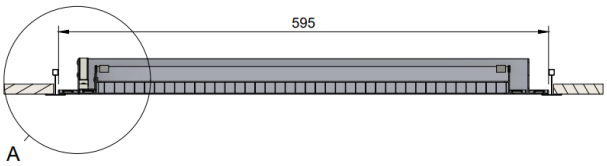


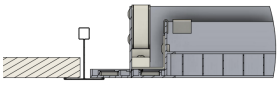




Installation in T-bar suspended ceiling

A





A

Order code

Example on how to place an order

Type	Accessories	Finish
EGD-0		
	F-R - Air filter G4	
	AN - Uninsulated adapter	
	AIZ - Insulated adapter	
		RAL9016
		RAL.. - Other RAL colors on request

Air through perfection

Egg crate grille with access

EGD-45



ACP
Access grilles

Egg crate grille with access
EGD-45



Description

EGD-45 is a return grille with access door and egg crate central part with 45 ° inclination.

The grille allows the evacuation of a high air flow with a minimum pressure loss.

Can be applied on the wall or false ceiling.

Technical specifications

Characteristics

The central part is egg crate type with size 12.5 x 12.5 mm and 45° inclination.

The opening system is click type (opening/closing by pressing) which facilitates access.

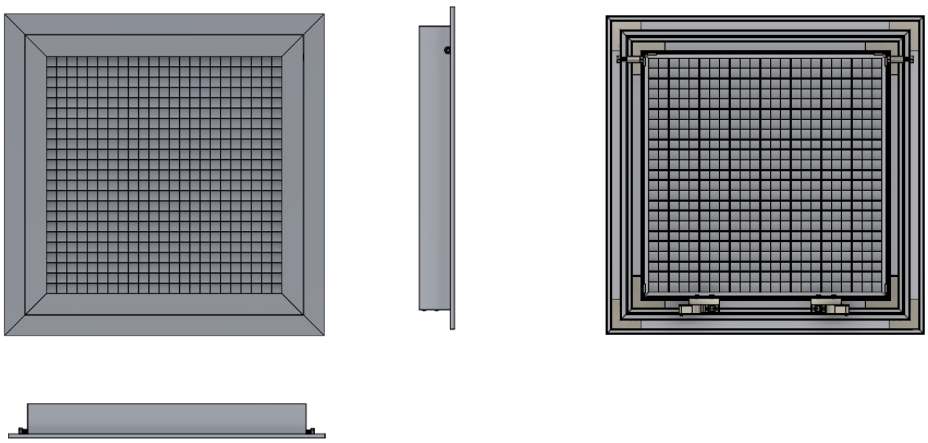
The grille is produced as standard without mounting holes. Optionally, mounting holes can be requested on the visible grille frame.

Materials

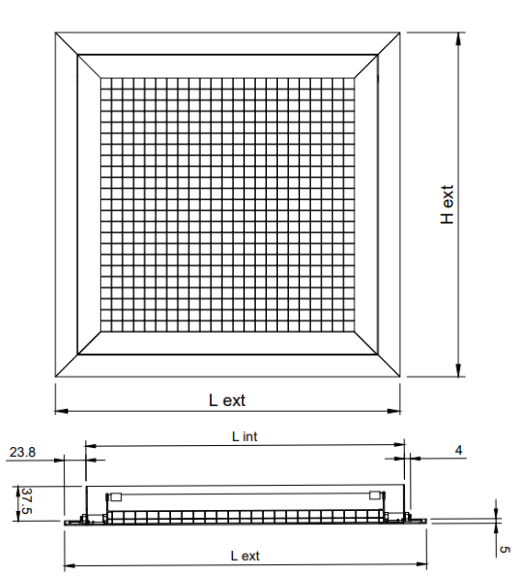
The grille is made of extruded aluminum electrostatic field painted in glossy white RAL 9016.

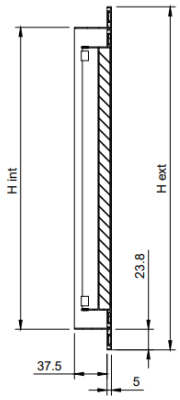
On request, the grille can be painted in other RAL colours.

Technical drawing

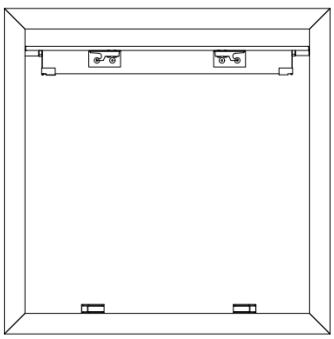


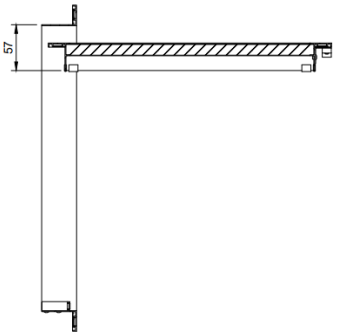
Grille in closed position





Grille in open position





Accessories

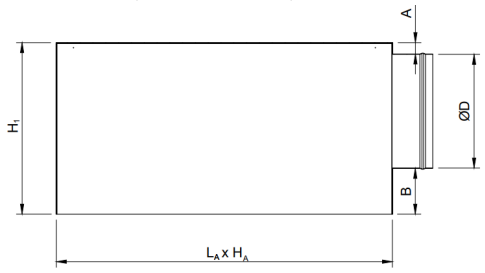
The grille can be equipped with plenum (adapter) or G4 air filter.

Adapter (plenum box)

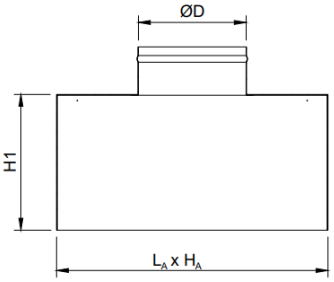
The plenum connection to the circular duct can be with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

Horizontal connection
(side/lateral exit)

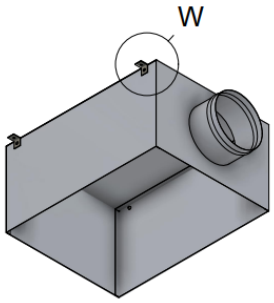


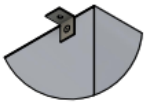
Vertical connection
(opposite exit)



L_A X H_A = Lint x Hint grille + 5 mm
A, B, H1 - depending on demand and ØD

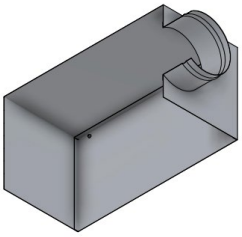
The adapter is made of Z140 galvanized sheet metal and is equipped with lugs for mounting.



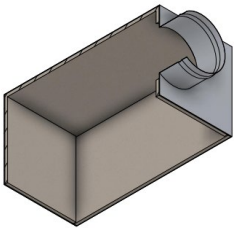


W - Suspension lug

The plenum is available in two options, uninsulated or insulated with 6 mm thick elastomeric rubber.



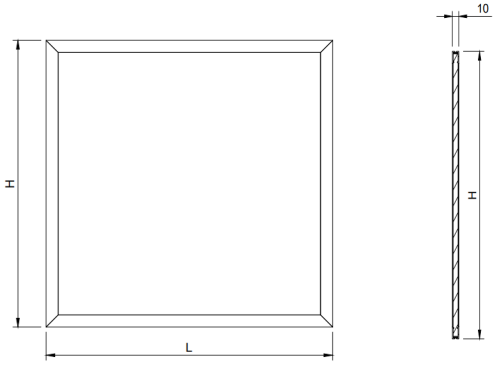
AN - Uninsulated adapter



AIZ - Insulated adapter

G4 air filter with frame (F-R)

G4 air filter with aluminum frame is used for air filtration and is mounted on the grille connection.



Functional parameters

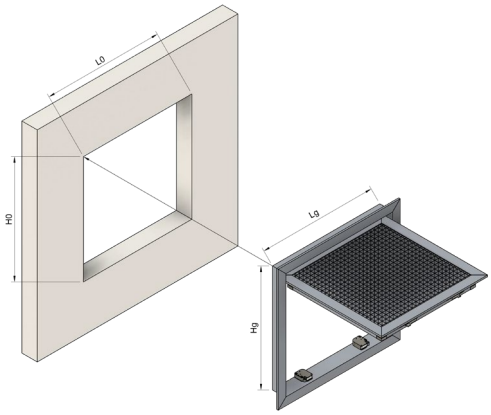
Air flow	LxH	250x150	350x200	450x250	500x250	550x350	550x400	600x500	650x650	1000x700
(m³/h)	Ak [m²]	0.0101	0.0276	0.0532	0.0618	0.1083	0.1321	0.1786	0.2774	0.4760
100	Veff	2.8	1.0	0.5						
	NR [dB(A)]	24.0	12.5	6.5						
	ΔPt [pa]	13.8	2.6	1.4						
200	Veff	5.5	2.0	1.0	0.9	0.5				
	NR [dB(A)]	38.0	20.0	13.5	10.5	5.5				
	ΔPt [pa]	53.0	8.5	2.7	2.4	1.4				
300	Veff		3.0	1.6	1.3	0.8	0.6			
	NR [dB(A)]		25.5	17.0	14.0	9.0	6.0			
	ΔPt [pa]		17.0	6.2	3.8	2.1	1.6			
400	Veff		4.0	2.1	1.8	1.0	0.8	0.6		
	NR [dB(A)]		31.0	19.0	18.0	10.0	9.0	5.0		
	ΔPt [pa]		28.5	9.0	6.1	2.8	2.2	1.6		
500	Veff		5.0	2.6	2.2	1.3	1.1	0.8		
	NR [dB(A)]		37.0	24.0	22.0	13.0	12.0	8.0		
	ΔPt [pa]		43.0	13.0	9.2	3.5	2.8	2.0		
600	Veff		6.0	3.1	2.7	1.5	1.3	0.9	0.6	
	NR [dB(A)]		41.0	27.0	25.0	18.0	13.0	10.0	6.0	
	ΔPt [pa]		62.5	18.0	13.5	5.0	3.6	2.4	1.7	
700	Veff			3.7	3.1	1.8	1.5	1.1	0.7	
	NR [dB(A)]			30.0	28.0	19.0	15.0	12.0	8.0	
	ΔPt [pa]			23.0	17.0	6.4	5.5	3.1	2.3	
800	Veff			4.2	3.6	2.1	1.7	1.2	0.8	
	NR [dB(A)]			34.0	32.0	21.0	16.0	13.0	10.0	
	ΔPt [pa]			31.0	22.5	8.5	6.1	3.7	2.5	
900	Veff			4.7	4.0	2.3	1.9	1.4	0.9	0.5
	NR [dB(A)]			36.0	33.0	23.0	18.0	14.0	11.0	5.0
	ΔPt [pa]			38.0	29.0	10.0	7.3	4.9	2.7	2.0
1000	Veff				4.5	2.6	2.1	1.6	1.0	0.6
	NR [dB(A)]				35.0	24.0	20.0	18.0	14.0	8.0
	ΔPt [pa]				36.0	12.5	9.5	5.6	3.5	2.5
1500	Veff				6.7	3.8	3.2	2.3	1.5	0.9
	NR [dB(A)]				46.0	32.0	26.0	23.0	19.0	13.0
	ΔPt [pa]				75.0	26.0	18.0	9.8	5.8	3.2
2000	Veff					5.1	4.2	3.1	2.0	1.2
	NR [dB(A)]					37.0	33.0	28.0	21.0	18.0
	ΔPt [pa]					44.0	30.5	18.5	9.0	4.3
3000	Veff					7.7	6.3	4.7	3.0	1.8
	NR [dB(A)]					49.5	44.0	33.0	27.0	20.0
	ΔPt [pa]					76.5	69.0	36.0	15.7	6.8
4000	Veff							6.2	4.0	2.3
	NR [dB(A)]							44.0	31.0	22.0
	ΔPt [pa]							66.0	26.5	10.5
5000	Veff								5.0	2.9
	NR [dB(A)]								35.0	25.0
	ΔPt [pa]								41.0	15.5
6000	Veff								6.0	3.5
	NR [dB(A)]								41.0	30.0
	ΔPt [pa]								62.5	22.5
7000	Veff								7.0	4.1
	NR [dB(A)]								57.0	31.0
	ΔPt [pa]								81.0	28.0
8000	Veff									4.7
	NR [dB(A)]									36.0
	ΔPt [pa]									37.5
9000	Veff									5.3
	NR [dB(A)]									38.0
	ΔPt [pa]									48.0

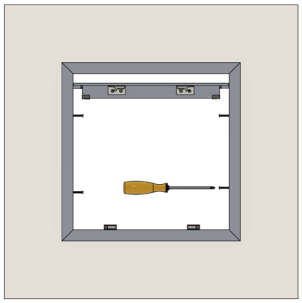
The legend
Ak [m²] - The free surface
Veff [m/s] - Air velocity in the grille
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

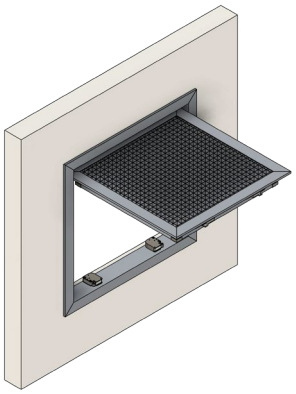
Installation

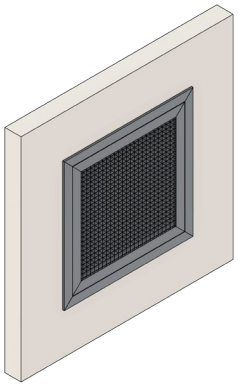
The grille can be mounted on the wall or in the false ceiling.

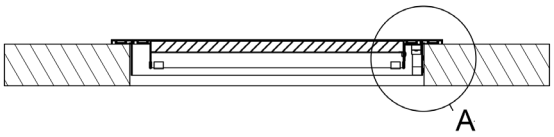
Installation in wall or continuous ceiling

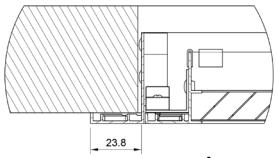




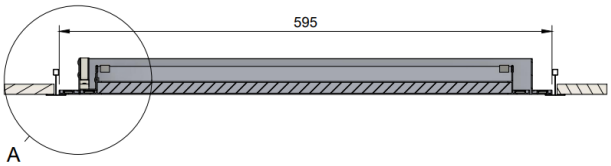


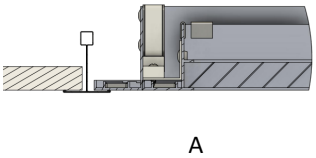






Installation in T-bar suspended ceiling





Order code

Example on how to place an order

Type	Accessories	Finish
EGD-45		
	F-R - Air filter G4	
	AN - Uninsulated adapter	
	AIZ - Insulated adapter	
		RAL9016
		RAL.. - Other RAL colors on request

Air through perfection

Perforated grille with access

PF-D



ACP
Access grilles

www.acp.ro

Perforated grille with access
PF-D



Description

Perforated grille with access door, used for introducing or evacuating air.

The PF-D grille is intended for wall or false ceiling mounting.

Technical specifications

Characteristics

The opening system is click type (opening/closing by pressing) which facilitates access.

The central part of the grille is provided with circular perforations with a diameter of 5 mm.

The grille is produced as standard without mounting holes. Optionally, mounting holes can be requested on the visible grille frame.

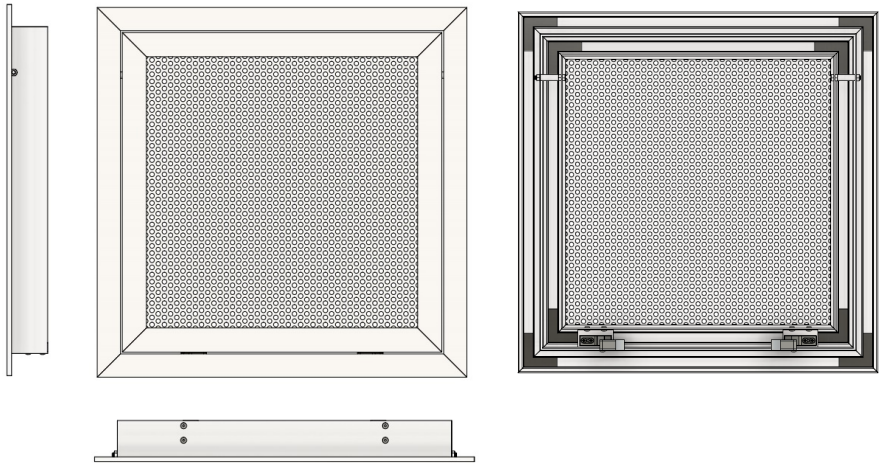
Materials

The grille is made of extruded aluminum profiles (frame) with the perforated central part in galvanized steel sheet.

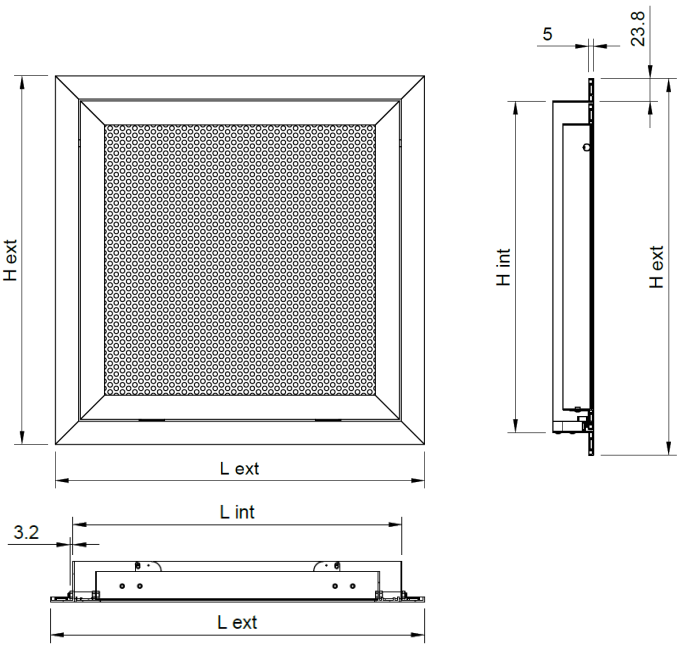
Standard grille is electrostatic field painted in glossy white RAL9016.

Other RAL colours are available on request.

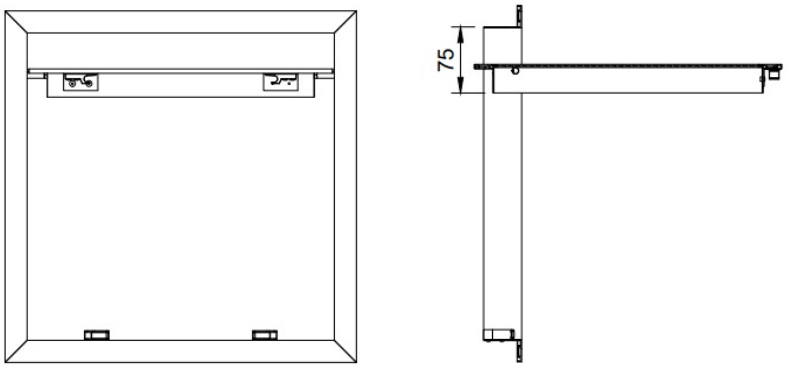
Technical drawing



Grille in closed position



Grille in open position



Accessories

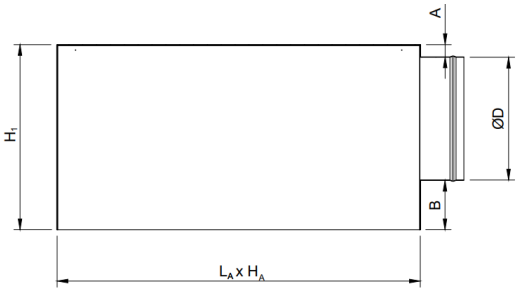
The grille can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

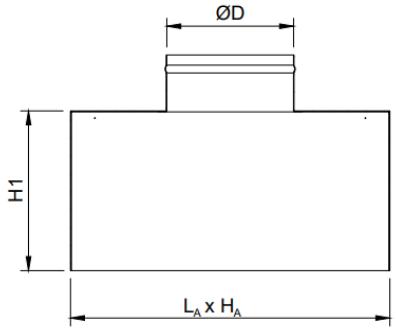
On request, the product can be delivered with G4 air filter or adjustment damper.

Adapter (plenum box)

Horizontal connection
(side/lateral exit)

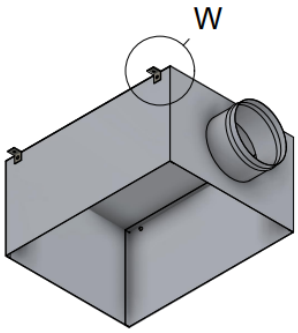


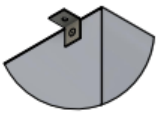
Vertical connection
(opposite exit)



L_A X H_A = Lint x Hint grille + 7 mm
A, B, H1 - depending on demand and ØD

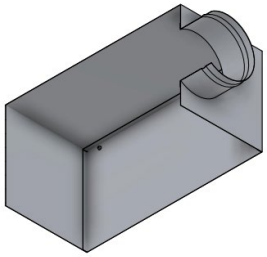
The adapter is made of Z140 galvanized sheet metal and is equipped with lugs for mounting.



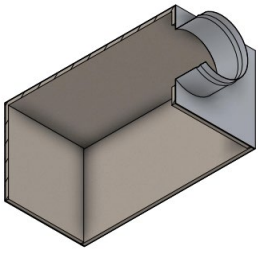


W - Suspension lug

The plenum is available in two options, uninsulated or insulated with 6 mm thick elastomeric rubber.



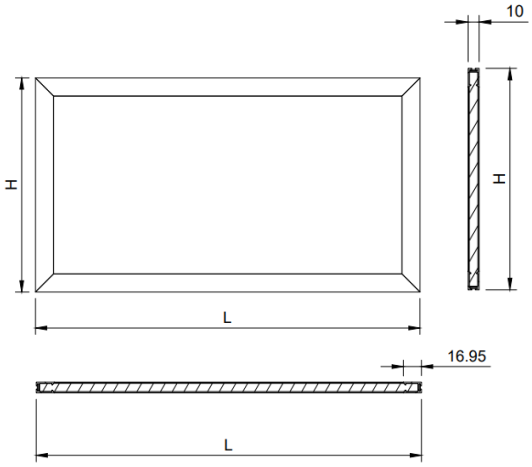
AN - Uninsulated adapter



AIZ - Insulated adapter

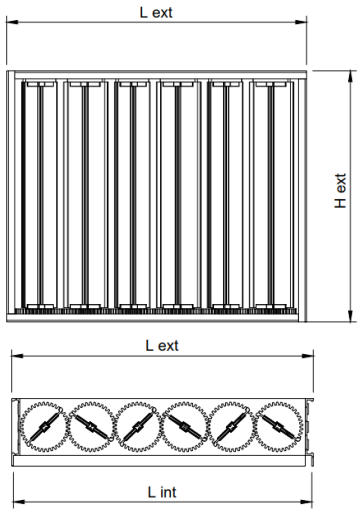
G4 air filter with frame (F-R)

G4 air filter with frame, made of aluminum, used for air filtration with mounting on the grille.



Opposed blade damper (OBD)

The control damper is provided with opposable blades and gears, it is mounted on the grille connection.



Functional parameters

Supply

Air flow [m³/h]	LxH	350X350	450X450	550X550	650X650
	Ak [m²]	0.030	0.056	0.088	0.132
160	Veff [m/s]	1.5			
	X [m]	0.9			
	NR [dB(A)]	22.0			
	ΔPt [Pa]	9.0			
200	Veff [m/s]	1.8	1.0		
	X [m]	1.1	0.8		
	NR [dB(A)]	31.0	< 20		
	ΔPt [Pa]	14.0	4.0		
300	Veff [m/s]	2.8	1.5		
	X [m]	1.7	1.2		
	NR [dB(A)]	44.0	25.0		
	ΔPt [Pa]	31.0	8.0		
400	Veff [m/s]	3.7	2.0	1.3	
	X [m]	2.1	1.6	1.3	
	NR [dB(A)]	53.0	35.0	20.0	
	ΔPt [Pa]	53.0	15.0	5.0	
500	Veff [m/s]	4.6	2.5	1.6	
	X [m]	2.5	2.0	1.6	
	NR [dB(A)]	61.0	42.0	27.0	
	ΔPt [Pa]	81.0	23.0	8.0	
700	Veff [m/s]		3.5	2.2	1.5
	X [m]		2.2	2.2	1.8
	NR [dB(A)]		52.0	39.0	27.0
	ΔPt [Pa]		45.0	16.0	7.0
1000	Veff [m/s]		5.0	3.2	2.1
	X [m]		3.1	2.4	2.6
	NR [dB(A)]		63.0	51.0	39.0
	ΔPt [Pa]		90.0	30.0	15.0
1600	Veff [m/s]				3.4
	X [m]				3.1
	NR [dB(A)]				54.0
	ΔPt [Pa]				36.0

Extraction

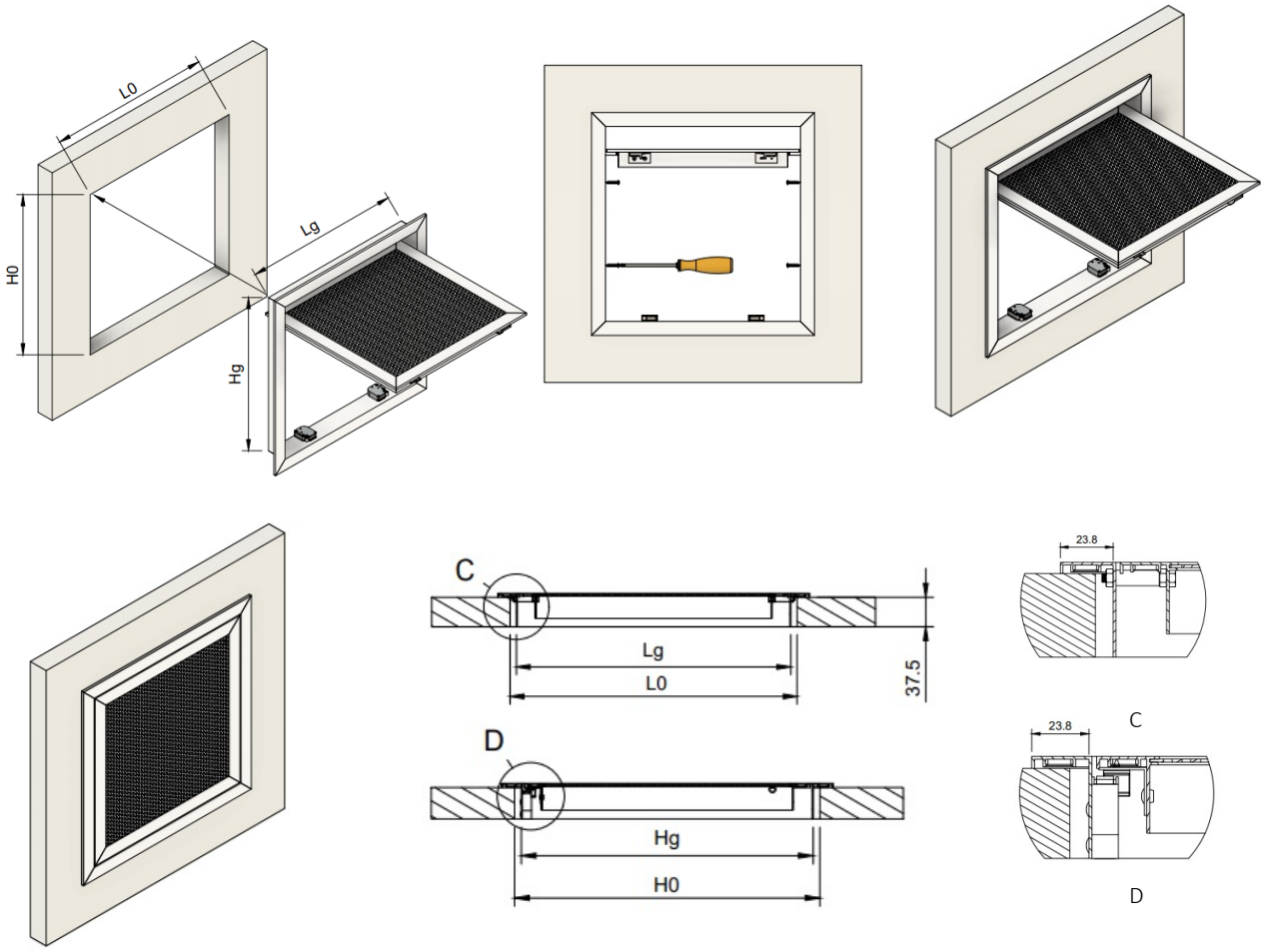
Air flow [m³/h]	LxH	350X350	450X450	550X550	650X650
	Ak [m²]	0.030	0.056	0.088	0.132
160	Veff [m/s]	1.5			
	NR [dB(A)]	19.0			
	ΔPt [Pa]	20.0			
200	Veff [m/s]	1.8			
	NR [dB(A)]	20.0			
	ΔPt [Pa]	31.0			
300	Veff [m/s]	2.8			
	NR [dB(A)]	26.0			
	ΔPt [Pa]	76.0			
400	Veff [m/s]	3.7	2.0		
	NR [dB(A)]	35.0	<20		
	ΔPt [Pa]	125.0	33.0		
500	Veff [m/s]	4.6	2.5		
	NR [dB(A)]	42.0	23.0		
	ΔPt [Pa]	185.0	47.0		
700	Veff [m/s]		3.5	2.2	
	NR [dB(A)]		34.0	20.0	
	ΔPt [Pa]		95.0	37.0	
1000	Veff [m/s]			3.2	2.1
	NR [dB(A)]			31.0	20.0
	ΔPt [Pa]			73.0	33.0
1600	Veff [m/s]				3.4
	NR [dB(A)]				36.0
	ΔPt [Pa]				85.0

The legend
Ak [m²] - The free surface
Veff [m/s] - Air velocity in the grille
NR [dB (A)] - Noise level without room attenuation
X [m] - The length of the air jet at a speed of 0.2 m/s
ΔPt [Pa] - Pressure loss

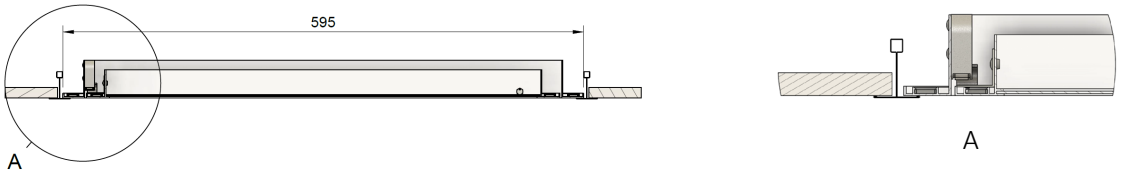
Installation

The grille can be mounted on the wall or in the false ceiling.

Installation in wall or continuous ceiling



Installation in T-bar suspended ceiling



Order code

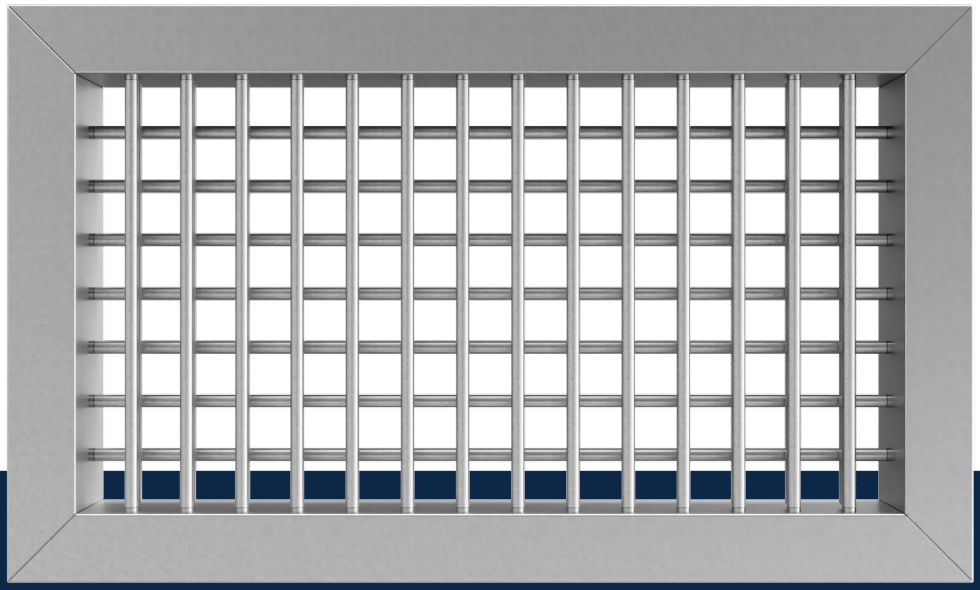
Example on how to place an order

Type	Dimensions	Accessories	Finish
PF-D			
On request			
F-R - Air filter G4			
OBD - Control damper			
AIZ - Insulated adapter			
AN - Uninsulated adapter			
RAL9016			
RAL.. - Other RAL colors on request			

Air through perfection

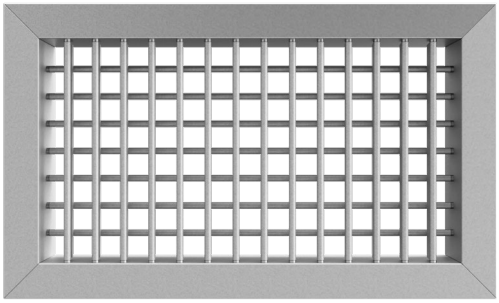
Double deflection grille

DD-T



ACP
Smoke evacuation grilles

Double deflection grille
DD-T



Description

DD-T is a double deflection grille, made of galvanized steel, with individually adjustable blades.

The grille is used for introducing or evacuating air and is intended for mounting on a ceiling, wall or rectangular duct.

Technical specifications

Characteristics

The grille is equipped with two rows of individually adjustable blades that allow the directing of the air jet.

The front blades are perpendicular to the length.

Grilles with dimensions > 625 mm are built with intermediate crossbar for stiffening. Large products can have multiple crossbars.

The grille is made with mounting holes.

The standard finish is natural galvanized steel.

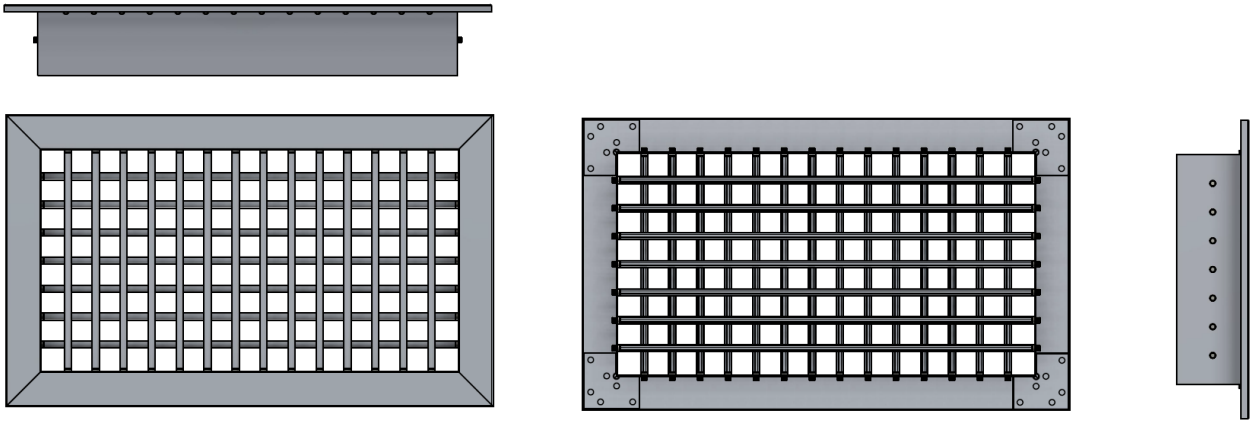
Dimensional limits: minimum 100 x 50 and maximum 1600 x 1600 mm.

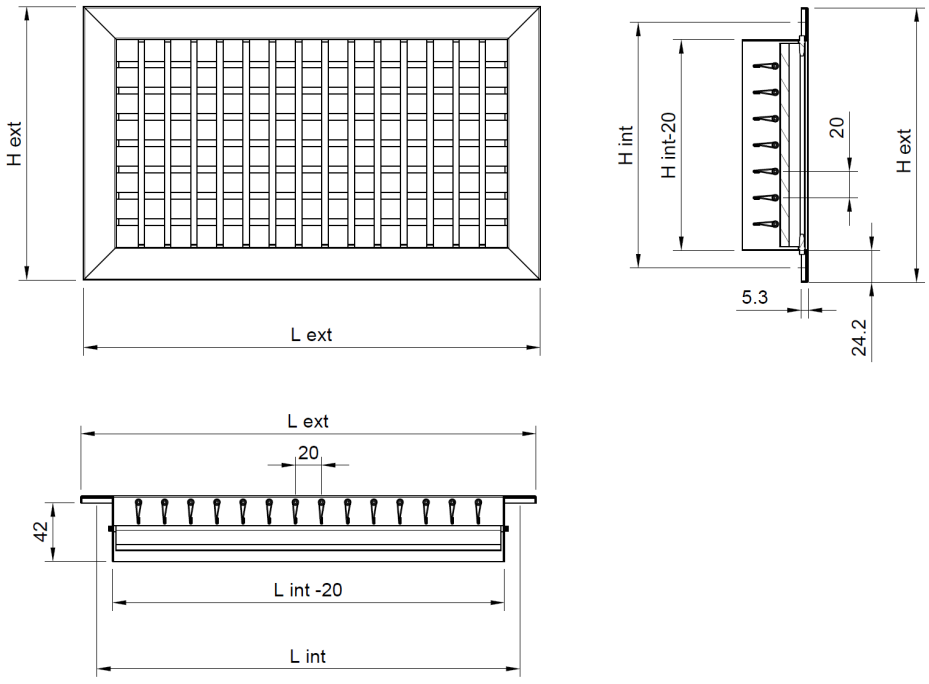
Materials

The grille is made of galvanized steel with natural finishing.

On request, the product can be painted in electrostatic field in any shade from the RAL palette.

Technical drawing





Accessories

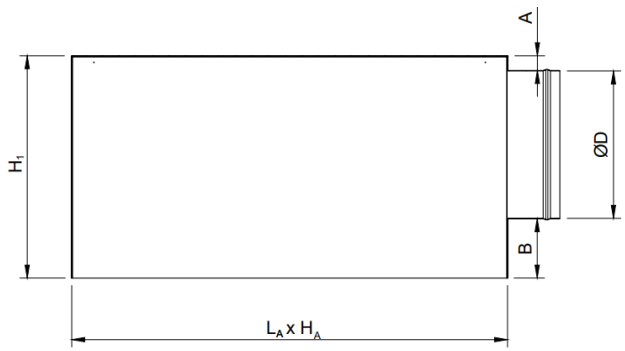
The grille can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

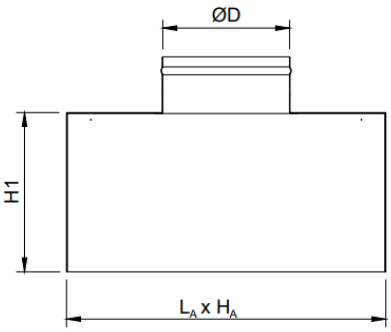
The air flow control can be adjusted by mounting an OBD control damper on the grille connection.

Adapter (plenum box)

Horizontal connection
(side/lateral exit)

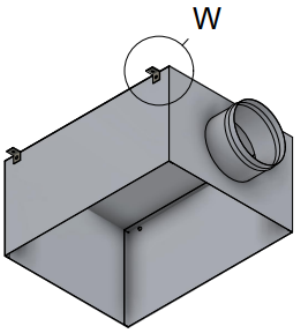


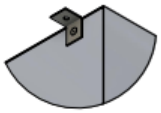
Vertical connection
(opposite exit)



L_A X H_A – depending on L x H grille
A, B, H1 - depending on demand and ØD

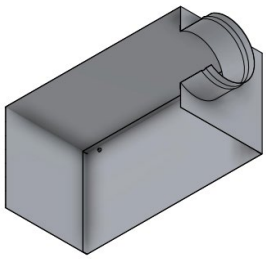
The adapter is made of Z140 galvanized steel sheet and is equipped with suspension lugs.



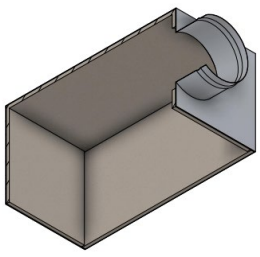


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.

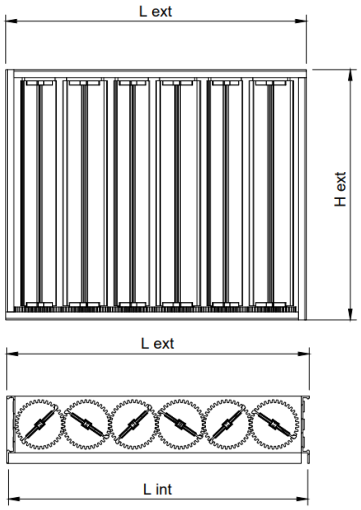


AN - Uninsulated adapter



AIZ - Insulated adapter

Opposed blade damper OBD



The damper is provided with opposable blades and gears, it is mounted on the grille connection. Depending on the size required, it is made and delivered in one or more pieces.

L x H [mm]	Opposed blade damper																			
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
100	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
150	-	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
200	-	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
300	-	-	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
400	-	-	-	1	1	1	2	2	2	2	2	2	3	3	3	3	3	3	4	4
500	-	-	-	-	1	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4
600	-	-	-	-	-	2	2	4	4	4	4	4	4	4	4	4	5	5	5	5

Functional parameters

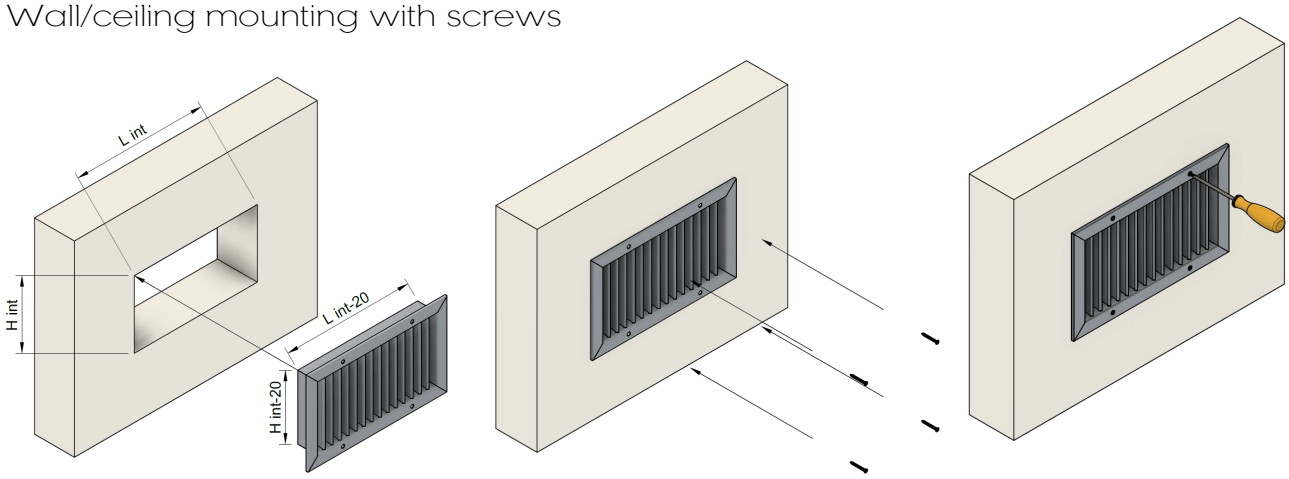
Air flow [m³/h]	L x H [mm]	200 x 100	250 x 100	300 x 100	250 x 150	400 x 100	300 x 150	500 x 100	400 x 150	500 x 150	400 x 200	600 x 150	500 x 200	600 x 200	800 x 200	600 x 300	800 x 300	1000 x 300
	Ak [m²]	0.0094	0.012	0.0147	0.0196	0.0198	0.024	0.025	0.0323	0.0407	0.0439	0.0494	0.0553	0.0671	0.0882	0.1053	0.1385	0.1749
160	Veff [m/s]	4.73	3.70	3.02	2.27													
	ΔPt [Pa]	18.00	12.00	7.50	4.50													
	X [m]	2.85	2.60	2.25	1.90													
	NR [dB(A)]	20.00	18.00	15.00	10.00													
200	Veff [m/s]	5.91	4.63	3.78	2.83	2.81	2.31											
	ΔPt [Pa]	29.50	18.00	12.00	6.50	6.50	4.40											
	X [m]	3.50	3.10	2.80	2.40	2.42	2.25											
	NR [dB(A)]	24.00	20.00	18.00	14.00	14.00	12.00											
250	Veff [m/s]	7.39	5.79	4.72	3.54	3.51	2.9											
	ΔPt [Pa]	44.00	27.00	19.00	11.00	11.00	8.0											
	X [m]	4.40	4.10	3.55	3.00	2.95	2.8											
	NR [dB(A)]	29.00	26.00	20.00	16.00	15.00	13.00											
300	Veff [m/s]	8.87	6.94	5.67	4.25	4.21	3.47	3.33	2.58									
	ΔPt [Pa]	64.50	38.50	26.00	14.50	14.00	10.50	9.50	5.20									
	X [m]	5.25	4.70	4.40	3.75	3.72	3.40	3.35	2.85									
	NR [dB(A)]	38.00	25.00	23.00	19.00	18.00	16.00	15.00	10.00									
350	Veff [m/s]	10.34	8.10	6.61	4.96	4.91	4.05	3.89	3.01	2.39								
	ΔPt [Pa]	86.00	53.00	35.50	20.00	20.00	14.00	12.50	7.50	5.50								
	X [m]	6.50	5.70	5.10	4.30	4.35	4.00	3.80	3.30	3.00								
	NR [dB(A)]	45.00	32.00	28.00	24.00	24.00	18.00	16.00	14.00	11.00								
400	Veff [m/s]		9.26	7.56	5.67	5.61	4.63	4.44	3.44	2.73	2.53	2.25						
	ΔPt [Pa]		68.00	46.00	26.00	26.00	18.00	17.00	9.50	6.50	5.50	4.20						
	X [m]		6.30	5.70	4.90	5.00	4.45	4.40	3.80	3.50	3.35	3.20						
	NR [dB(A)]		37.00	32.00	26.00	25.00	20.00	19.00	16.00	13.00	12.00	11.00						
500	Veff [m/s]			9.45	7.09	7.01	5.79	5.56	4.30	3.41	3.16	2.81	2.51					
	ΔPt [Pa]			72.00	41.00	39.50	28.00	25.00	15.50	9.50	8.50	6.50	5.20					
	X [m]			7.10	6.25	6.10	5.60	5.50	4.85	4.40	4.20	3.95	3.60					
	NR [dB(A)]			41.00	32.00	32.00	24.00	22.00	20.00	17.00	17.00	14.00	12.00					
600	Veff [m/s]			11.34	8.50	8.42	6.94	6.67	5.16	4.10	3.80	3.37	3.01	2.48	1.89			
	ΔPt [Pa]			100.00	58.00	56.00	38.50	35.00	22.00	14.00	12.00	10.00	7.50	6.00	3.50			
	X [m]			8.60	7.50	7.50	6.70	6.65	5.80	5.10	4.90	4.60	4.50	4.00	3.55			
	NR [dB(A)]			46.00	39.00	38.00	31.00	30.00	24.00	20.00	18.00	16.00	14.00	12.00	8.00			
700	Veff [m/s]					9.82	8.10	7.78	6.02	4.78	4.43	3.94	3.52	2.90	2.20	1.85		
	ΔPt [Pa]					77.00	53.00	49.00	30.00	19.00	15.50	12.00	11.00	8.00	4.20	4.00		
	X [m]					8.60	7.90	7.70	6.70	6.05	5.70	5.30	5.10	4.60	4.05	3.70		
	NR [dB(A)]					44.00	37.00	34.00	29.00	25.00	22.00	18.00	17.00	13.00	11.00	7.00		
800	Veff [m/s]					11.22	9.26	8.89	6.88	5.46	5.06	4.50	4.02	3.31	2.52	2.11		
	ΔPt [Pa]					100.00	68.00	64.00	38.00	24.00	21.00	16.00	14.00	10.00	5.50	4.80		
	X [m]					9.80	9.00	8.80	7.70	7.00	6.60	6.20	6.00	5.30	4.60	4.30		
	NR [dB(A)]					49.00	42.00	39.00	34.00	29.00	25.00	22.00	18.00	15.00	12.00	9.00		
900	Veff [m/s]						10.42	10.00	7.74	6.14	5.69	5.06	4.52	3.73	2.83	2.37	1.81	
	ΔPt [Pa]						87.00	80.00	47.00	31.00	28.00	20.00	18.00	11.00	6.00	5.00	3.50	
	X [m]						10.00	9.00	8.70	7.80	7.50	7.10	6.60	6.00	5.25	4.80	4.30	
	NR [dB(A)]						45.00	44.00	38.00	34.00	31.00	25.00	22.00	18.00	15.00	12.00	7.00	
1000	Veff [m/s]							11.11	8.60	6.83	6.33	5.62	5.02	4.14	3.15	2.64	2.01	1.59
	ΔPt [Pa]							100.00	59.00	38.00	33.00	26.00	20.00	15.00	9.00	5.20	3.50	2.50
	X [m]							11.00	9.70	8.70	8.30	7.80	7.50	6.70	5.80	5.40	4.60	4.20
	NR [dB(A)]							47.00	42.00	38.00	34.00	30.00	26.00	20.00	17.00	15.00	12.00	6.00
1200	Veff [m/s]								10.32	8.19	7.59	6.75	6.03	4.97	3.78	3.17	2.41	1.91
	ΔPt [Pa]								86.00	55.00	46.00	38.00	30.00	19.00	13.00	9.00	5.50	3.50
	X [m]								11.50	10.40	10.10	9.35	8.90	8.10	7.00	6.35	5.70	5.00
	NR [dB(A)]								48.00	44.00	41.00	36.00	32.00	22.00	19.00	17.00	13.00	8.00
1400	Veff [m/s]									9.56	8.86	7.87	7.03	5.80	4.41	3.69	2.81	2.22
	ΔPt [Pa]									74.00	63.00	49.00	41.00	28.00	15.00	13.00	7.00	4.00
	X [m]									12.00	11.60	11.10	10.30	9.40	8.30	7.50	6.50	5.90
	NR [dB(A)]									50.00	47.00	42.00	37.00	27.00	23.00	19.00	15.00	12.00
1800	Veff [m/s]											10.12	9.04	7.45	5.67	4.75	3.61	2.86
	ΔPt [Pa]											82.00	67.00	44.00	25.00	19.00	10.00	6.50
	X [m]											14.00	13.30	12.20	10.50	9.70	8.50	7.55
	NR [dB(A)]											52.00	48.00	36.00	31.00	26.00	19.00	15.00
2000	Veff [m/s]												10.05	8.28	6.30	5.28	4.01	3.18
	ΔPt [Pa]												82.00	54.00	32.00	23.00	14.00	8.00
	X [m]												14.80	13.50	11.60	10.80	9.60	8.30
	NR [dB(A)]												52.00	40.00	33.00	24.00	23.00	18.00
2500	Veff [m/s]													10.35	7.87	6.59	5.01	3.97
	ΔPt [Pa]													86.00	50.00	34.00	22.00	12.00
	X [m]													16.80	14.70	13.30	11.80	10.40
	NR [dB(A)]													48.00	40.00	33.00	28.00	27.00
3000	Veff [m/s]														9.45	7.91	6.02	4.76
	ΔPt [Pa]														72.00	50.00	30.00	18.00
	X [m]														17.60	16.20	14.00	12.60
	NR [dB(A)]														47.00	40.00	30.00	28.00
3500	Veff [m/s]															9.23	7.02	5.56
	ΔPt [Pa]															69.00	40.00	24.00
	X [m]															18.90	16.30	14.70
	NR [dB(A)]															47.00	34.00	30.00
4000	Veff [m/s]																8.02	6.35
	ΔPt [Pa]																52.00	34.00
	X [m]																18.70	16.80
	NR [dB(A)]																35.00	33.00

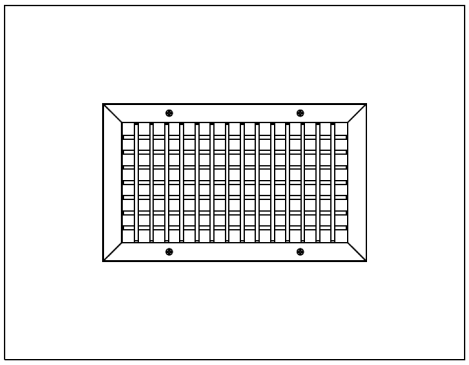
The legend
Ak [m²] - The free surface
Veff [m/s] - The effective air speed in the grille
ΔPt [Pa] - Pressure loss
X [m] - The length of the air jet at a speed of 0.25 m/s
NR [dB (A)] - Noise level without room attenuation
The data presented is for 100% open damper

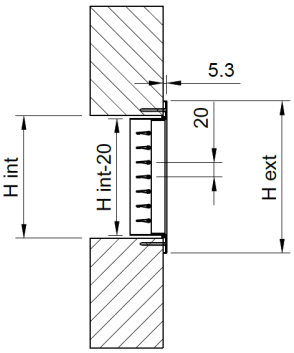
Installation

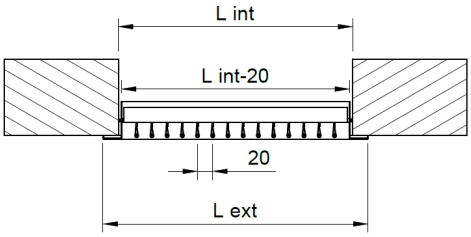
The mounting/fixing of the grille is done with screws.

Wall/ceiling mounting with screws









Order code

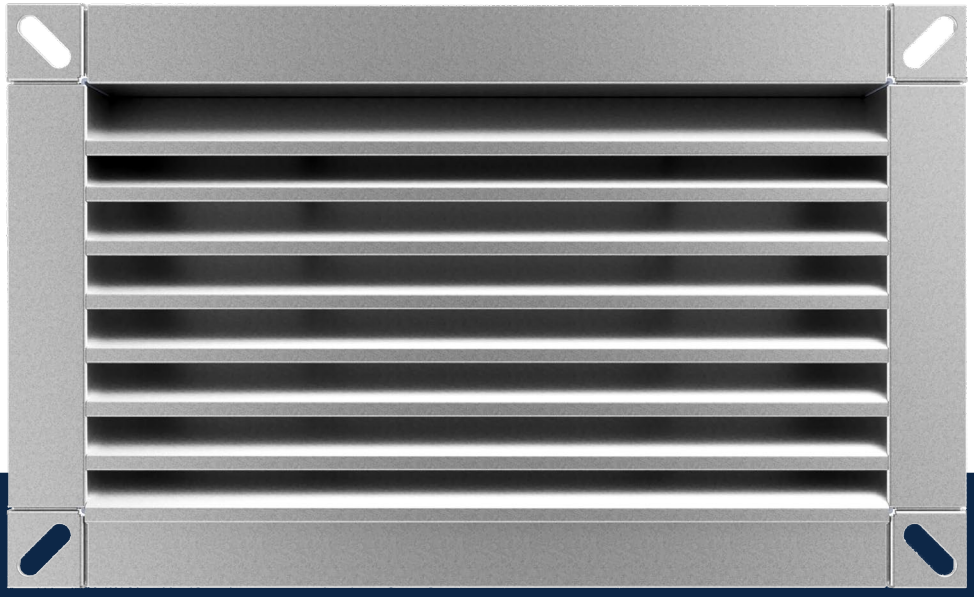
Example on how to place an order

Type	Dimensions	Accessories	Finish
DD-T			
On request			
AIZ - Insulated adapter			
AN - Uninsulated adapter			
OBD - Control damper			
Natural (galvanized steel)			
RAL..- Other RAL colors on request			

Air through perfection

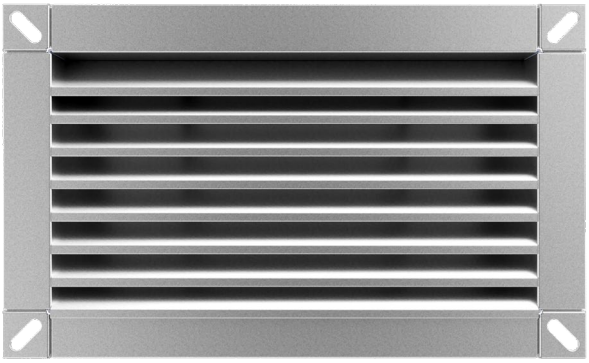
Return grille

SD-T



ACP
Smoke evacuation grilles

Return grille
SD-T



Description

SD-T is a galvanized steel exhaust grille with fixed blades at 45° inclination.

The grille is used to evacuate or recirculate air.

Technical specifications

Characteristics

The grille is provided with fixed blades, positioned at 45°, parallel to the "L" (length).

The product is made standard with oval holes for fixing with screws.

Grilles with dimensions > 600 mm are made with an intermediate stiffening crossbeam.

The standard finish is natural galvanized steel.

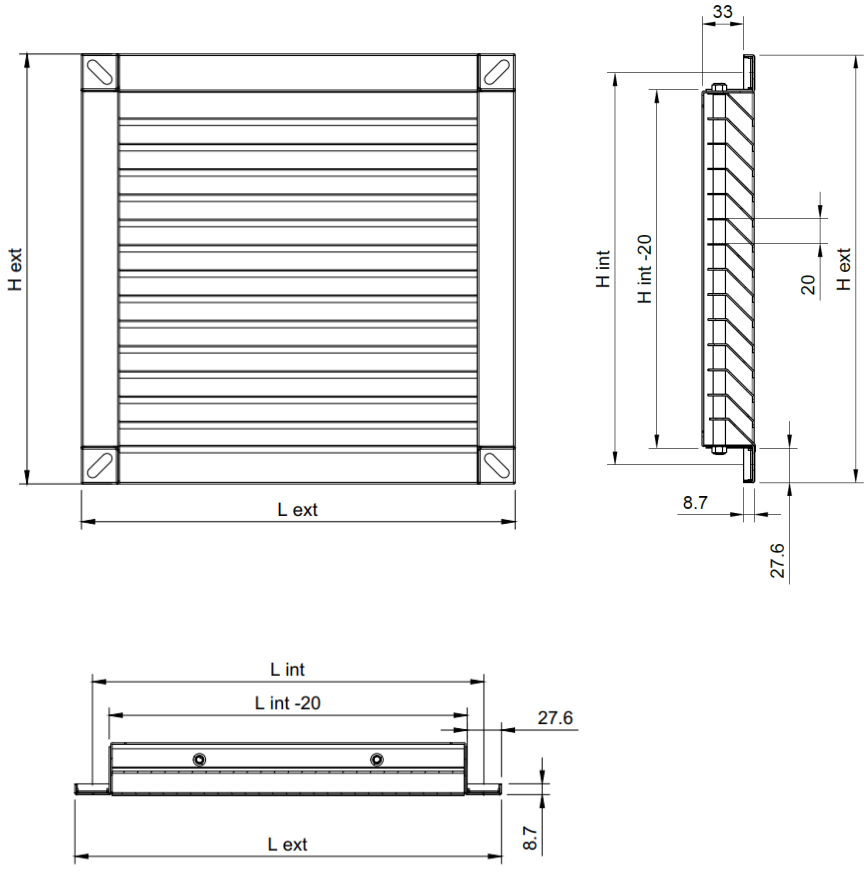
Dimensional limits: minimum 100 x 100 and maximum 2000 x 2000 mm.

Materials

The grille is made of galvanized steel and has natural finishing.

On request, the product can be painted in electrostatic field in any shade from the RAL palette.

Technical drawing



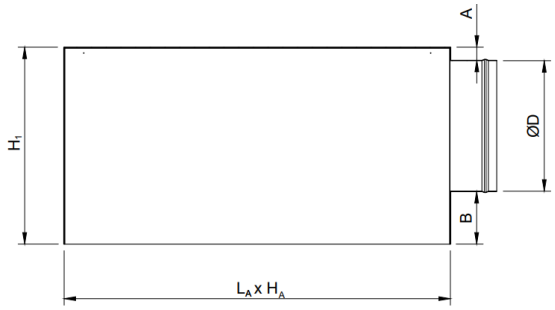
Accessories

The grille can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection.

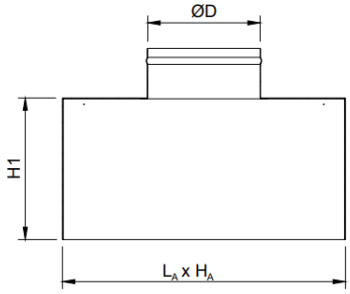
The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

Adapter (plenum box)

Horizontal connection
(side/lateral exit)

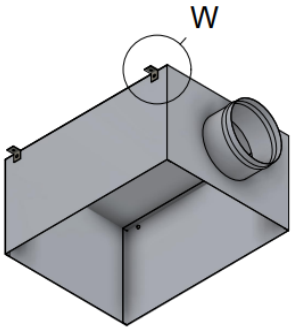


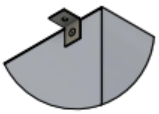
Vertical connection
(opposite exit)



L_A X H_A – depending on L x H grille
A, B, H1 – depending on demand and ØD

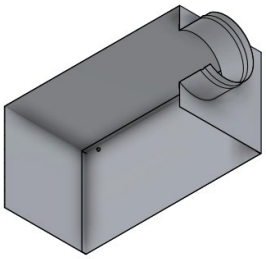
The adapter is made of Z140 galvanized steel sheet and is equipped with suspension lugs.



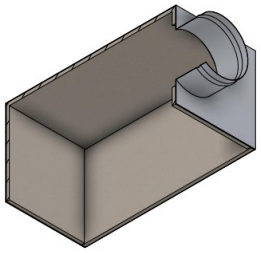


W - Suspension lug

On request, the plenum can be insulated with 6 mm thick elastomeric rubber.



AN - Uninsulated adapter



AIZ - Insulated adapter

Functional parameters

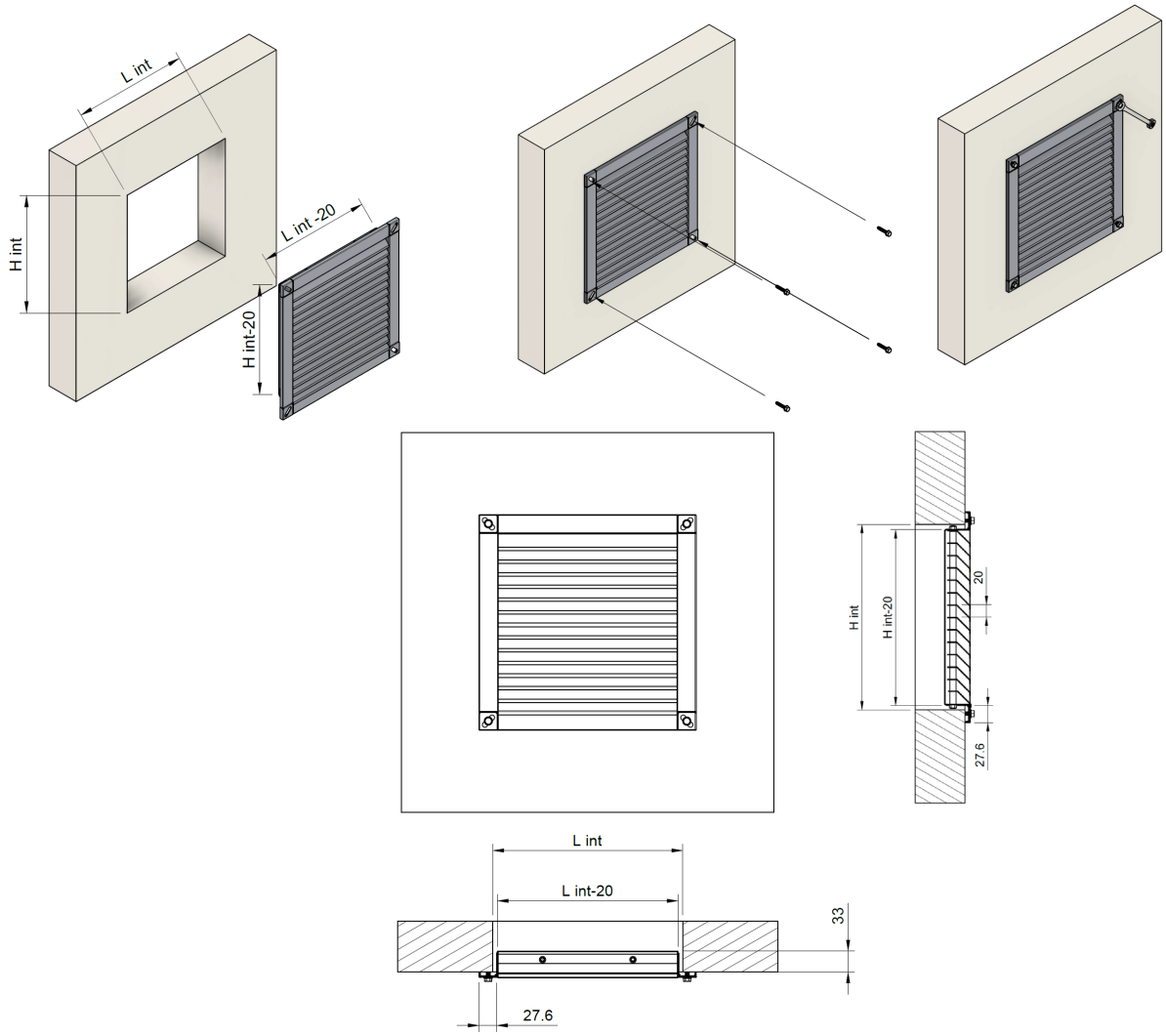
Air flow	L x H	200 x 100	300 x 150	400 x 200	300 x 300	500 x 300	600 x 300	800 x 300	600 x 600	1000 x 600
(m³/h)	Ak [m²]	0.0076	0.0189	0.0345	0.0416	0.0721	0.0915	0.1173	0.1759	0.2934
60	Veff[m/s]	2.2								
	ΔPt [Pa]	5.0								
	NR [dB(A)]	22.0								
80	Veff[m/s]	2.9								
	ΔPt [Pa]	9.0								
	NR [dB(A)]	29.0								
100	Veff[m/s]	3.7								
	ΔPt [Pa]	14.0								
	NR [dB(A)]	35.0								
140	Veff[m/s]	5.1	2.1							
	ΔPt [Pa]	27.0	2.0							
	NR [dB(A)]	44.0	16.0							
180	Veff[m/s]	6.6	2.6							
	ΔPt [Pa]	45.0	3.0							
	NR [dB(A)]	51.0	22.0							
200	Veff[m/s]	7.3	2.9	1.6						
	ΔPt [Pa]	56.0	4.0	3.0						
	NR [dB(A)]	53.0	25.0	22.0						
300	Veff[m/s]		4.4	2.4	2.0					
	ΔPt [Pa]		9.0	6.0	2.0					
	NR [dB(A)]		36.0	32.0	22.0					
400	Veff[m/s]		5.9	3.2	2.7					
	ΔPt [Pa]		16.0	12.0	4.0					
	NR [dB(A)]		43.0	40.0	30.0					
500	Veff[m/s]		7.3	4.0	3.3	1.9				
	ΔPt [Pa]		25.0	18.0	7.0	2.0				
	NR [dB(A)]		49.0	46.0	36.0	24.0				
600	Veff[m/s]				4.0	2.3	1.8	1.4		
	ΔPt [Pa]				11.0	3.0	2.0	1.0		
	NR [dB(A)]				41.0	29.0	24.0	18.0		
800	Veff[m/s]				5.3	3.1	2.4	1.9		
	ΔPt [Pa]				19.0	6.0	4.0	2.0		
	NR [dB(A)]				48.0	36.0	32.0	26.0		
1000	Veff[m/s]				6.7	3.9	3.0	2.4	1.6	
	ΔPt [Pa]				30.0	10.0	6.0	4.0	1.0	
	NR [dB(A)]				54.0	42.0	38.0	32.0	21.0	
1400	Veff[m/s]					5.4	4.3	3.3	2.2	
	ΔPt [Pa]					20.0	13.0	7.0	2.0	
	NR [dB(A)]					51.0	46.0	40.0	29.0	
1800	Veff[m/s]						5.5	4.3	2.8	
	ΔPt [Pa]						22.0	12.0	4.0	
	NR [dB(A)]						53.0	47.0	36.0	
2000	Veff[m/s]							4.7	3.2	
	ΔPt [Pa]							15.0	5.0	
	NR [dB(A)]							50.0	39.0	
3000	Veff[m/s]								4.7	2.8
	ΔPt [Pa]								13.0	1.0
	NR [dB(A)]								49.0	22.0
4000	Veff[m/s]									3.8
	ΔPt [Pa]									1.0
	NR [dB(A)]									30.0

The legend
Ak [m²] - The free surface
Veff [m/s] - The effective air speed in the grille
ΔPt [Pa] - Pressure loss
NR [dB (A)] - Noise level without room attenuation

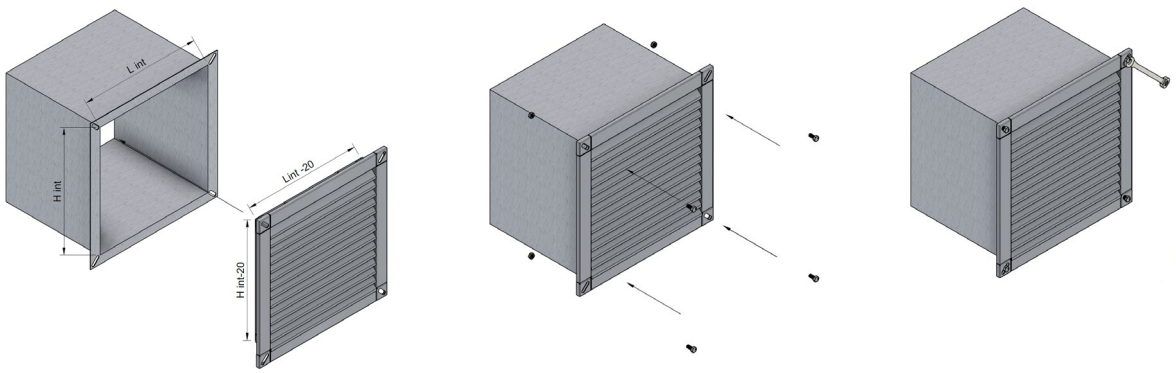
Installation

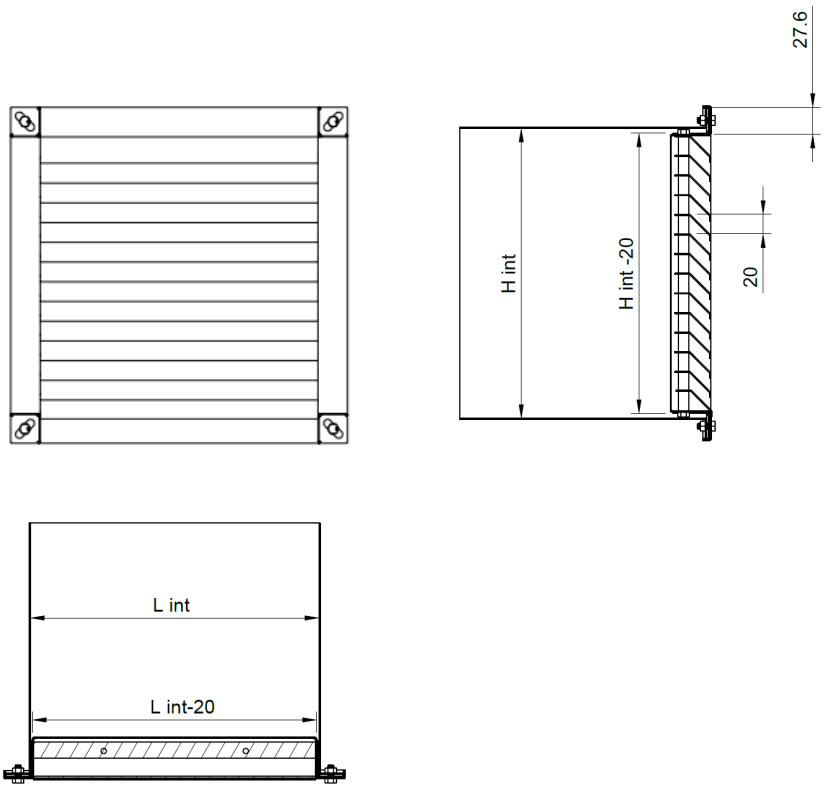
The mounting/fixing of the grille is done with screws.

Wall/ceiling mounting



Rectangular duct mounting





Order code

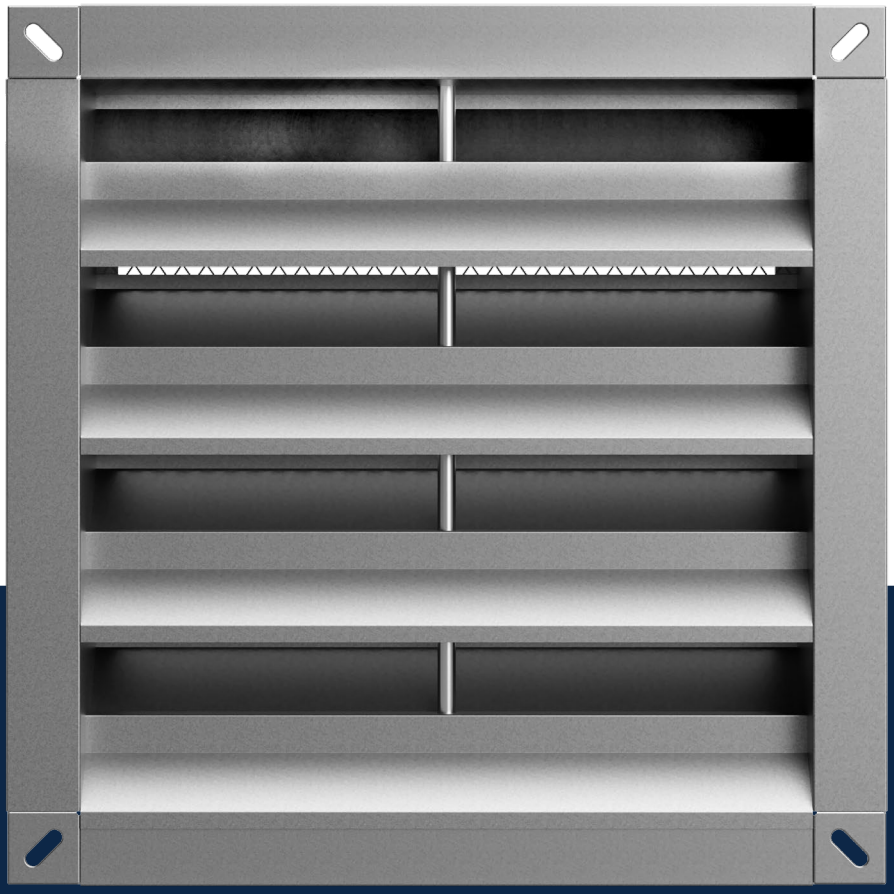
Example on how to place an order

Type	Dimensions	Accessories	Finish
SD-T			
On request			
AIZ - Insulated adapter			
AN - Uninsulated adapter			
Natural (galvanized steel)			
RAL..- Other RAL colors on request			

Air through perfection

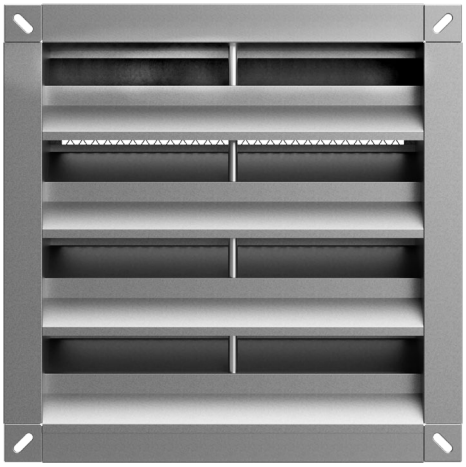
Exterior grille

WPL-T



ACP
Smoke evacuation grilles

Exterior grille
WPL-T



Description

The WPL-T exterior grille, made of galvanized steel is used to introduce or evacuate air.

The outdoor grille is weather resistant and is intended for mounting on the exterior walls of buildings.

Technical specifications

Characteristics

The grille is provided with fixed anti-rain blades, positioned at 45°, parallel to the “L” (length).

WPL-T has a wire mesh with 10x10 mm.

The product is made standard with oval holes for fixing with screws.

The standard finish is natural galvanized steel.

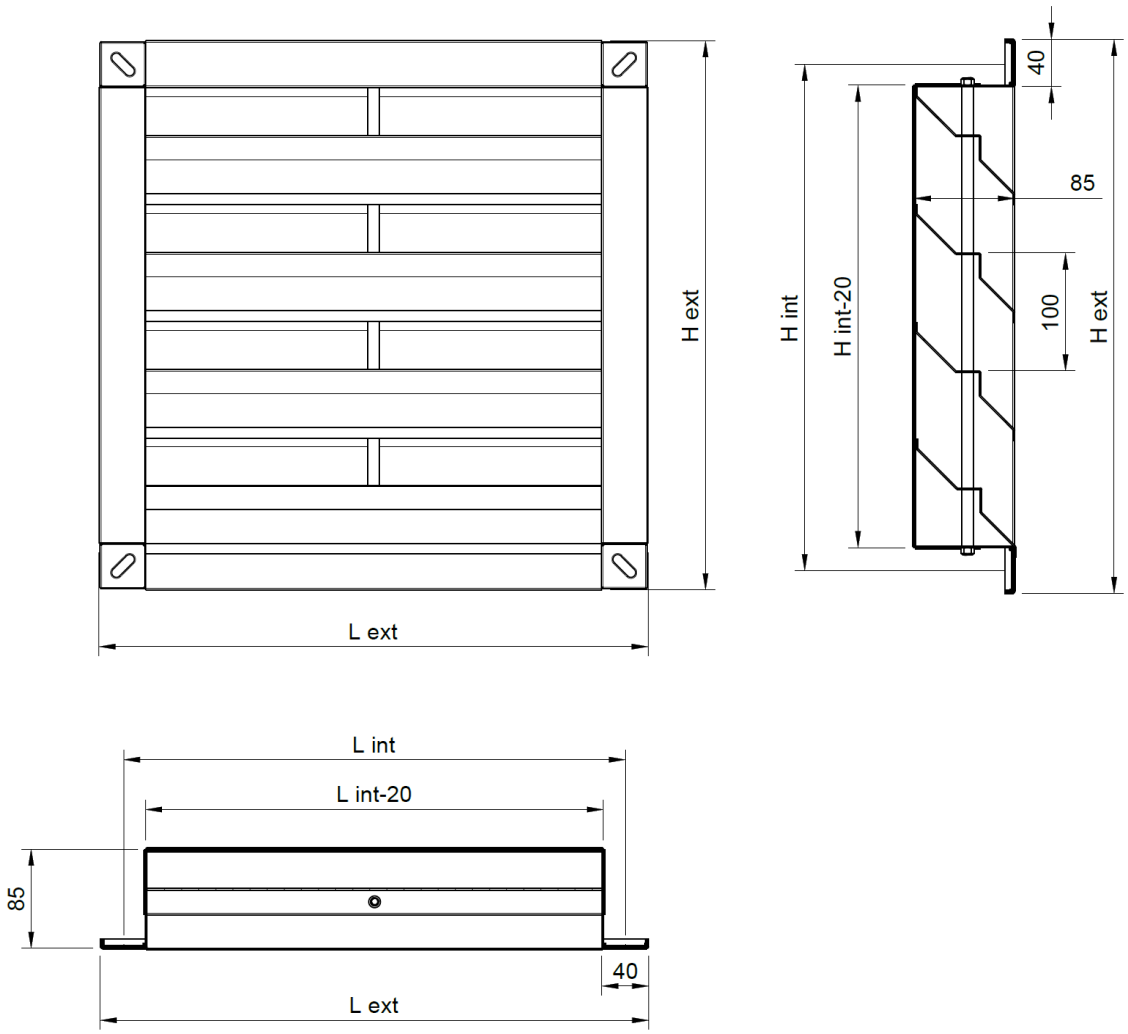
Dimensional limits: minimum 200 x 200 and maximum 2000 x 2000 mm.

Materials

The grille is made of galvanized steel with natural finishing.

On request, the product can be painted in electrostatic field in any shade from the RAL palette.

Technical drawing



Functional parameters

L x H [mm]	Discharge area Ak [m²]															
	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
500	0.12	0.14	0.17	0.20	0.22	0.25	0.27	0.30	0.33	0.35	0.38	0.40	0.43	0.46	0.48	0.51
600	0.15	0.18	0.21	0.25	0.28	0.31	0.34	0.38	0.41	0.44	0.47	0.51	0.54	0.57	0.61	0.64
700	0.18	0.22	0.26	0.30	0.34	0.38	0.42	0.46	0.50	0.54	0.59	0.63	0.67	0.71	0.75	0.79
800	0.21	0.26	0.31	0.36	0.40	0.45	0.50	0.55	0.59	0.64	0.69	0.74	0.78	0.83	0.88	0.93
900	0.24	0.29	0.35	0.40	0.45	0.51	0.56	0.61	0.67	0.72	0.77	0.83	0.88	0.93	0.99	1.04
1000	0.27	0.33	0.39	0.45	0.51	0.57	0.63	0.69	0.75	0.81	0.88	0.94	1.00	1.06	1.12	1.18
1100	0.30	0.37	0.44	0.51	0.57	0.64	0.71	0.78	0.84	0.91	0.98	1.05	1.11	1.08	1.25	1.32
1200	0.33	0.40	0.48	0.55	0.62	0.70	0.77	0.84	0.92	0.99	1.06	1.14	1.21	1.28	1.36	1.43
1300	0.36	0.44	0.52	0.60	0.68	0.76	0.84	0.92	1.00	1.08	1.17	1.25	1.33	1.41	1.49	1.57
1400	0.39	0.48	0.57	0.66	0.74	0.83	0.92	1.01	1.09	1.18	1.27	1.36	1.44	1.53	1.62	1.71
1500	0.42	0.51	0.61	0.70	0.79	0.89	0.98	1.70	1.17	1.26	1.35	1.45	1.54	1.63	1.73	1.82
1600	0.45	0.55	0.65	0.75	0.85	0.95	1.05	1.15	1.25	1.36	1.46	1.56	1.66	1.76	1.86	1.96
1700	0.48	0.59	0.70	0.81	0.91	1.02	1.13	1.24	1.34	1.45	1.56	1.67	1.77	1.88	1.99	2.10
1800	0.51	0.62	0.73	0.85	0.96	1.08	1.19	1.30	1.42	1.53	1.64	1.76	1.87	1.98	2.10	2.21
1900	0.54	0.66	0.78	0.90	1.02	1.14	1.26	1.38	1.50	1.63	1.75	1.87	1.99	2.11	2.23	2.35
2000	0.57	0.70	0.83	0.95	1.08	1.21	1.34	1.47	1.59	1.72	1.85	1.98	2.10	2.23	2.36	2.49

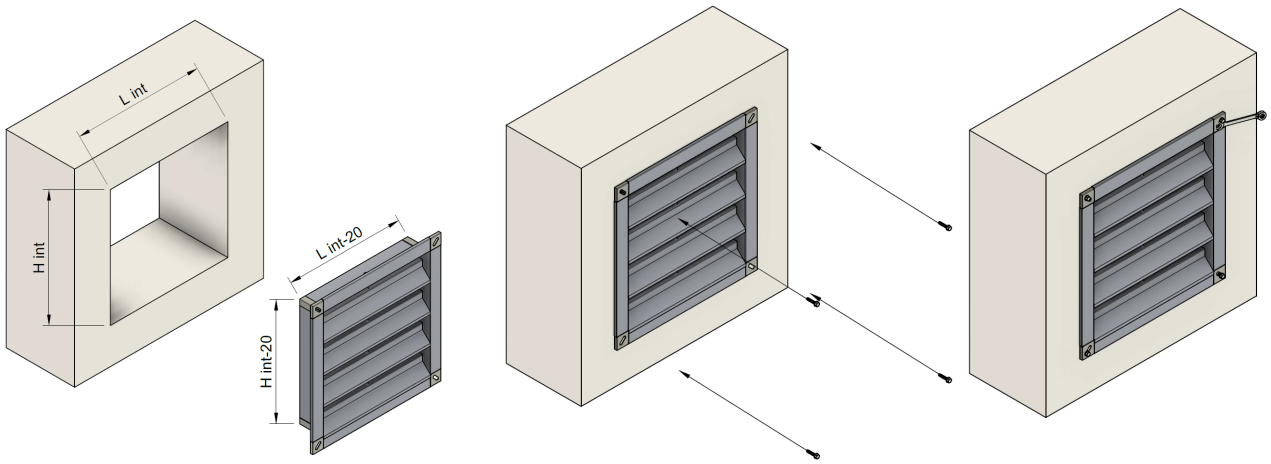
Air flow [m³/h]	Ak [m²]	0.1	0.15	0.2	0.25	0.3	0.4	0.5	0.6	0.8	1	1.5	2	2.5
1000	Veff [m/s]	2.6												
	△Pt asp [Pa]	28.0												
	△Pt ref [Pa]	23.0												
2000	Veff [m/s]	5.2	3.6	2.7	2.2									
	△Pt asp [Pa]	100.0	48.0	32.0	18.0									
	△Pt ref [Pa]	80.0	40.0	23.0	12.0									
3000	Veff [m/s]	8.2	5.3	4.2	3.4	2.8	2.2							
	△Pt asp [Pa]	190.0	110.0	65.0	45.0	32.0	17.0							
	△Pt ref [Pa]	160.0	85.0	55.0	35.0	23.0	8.0							
4000	Veff [m/s]		7.1	5.6	4.6	3.8	2.8	2.3						
	△Pt asp [Pa]		170.0	120.0	78.0	60.0	35.0	22.0						
	△Pt ref [Pa]		140.0	90.0	63.0	45.0	22.0	14.0						
5000	Veff [m/s]			7.0	5.6	4.7	3.6	2.8	2.5					
	△Pt asp [Pa]			165.0	118.0	82.0	49.0	35.0	26.0					
	△Pt ref [Pa]			135.0	86.0	68.0	41.0	23.0	17.0					
6000	Veff [m/s]			8.0	6.5	5.7	4.2	3.3	3.0	2.2				
	△Pt asp [Pa]			190.0	150.0	120.0	70.0	45.0	38.0	16.0				
	△Pt ref [Pa]			150.0	125.0	90.0	55.0	35.0	28.0	8.0				
7000	Veff [m/s]			9.2	7.4	6.3	4.7	3.8	3.3	2.3				
	△Pt asp [Pa]			220.0	180.0	150.0	85.0	52.0	42.0	22.0				
	△Pt ref [Pa]			200.0	145.0	125.0	65.0	43.0	35.0	18.0				
8000	Veff [m/s]				8.5	7.3	5.6	4.4	3.8	2.6	2.1			
	△Pt asp [Pa]				220.0	180.0	125.0	78.0	55.0	28.0	18.0			
	△Pt ref [Pa]				200.0	145.0	92.0	60.0	45.0	22.0	8.0			
9000	Veff [m/s]					8.6	6.2	4.8	4.2	2.9	2.4			
	△Pt asp [Pa]					220.0	140.0	90.0	65.0	38.0	23.0			
	△Pt ref [Pa]					180.0	120.0	75.0	55.0	26.0	15.0			
10000	Veff [m/s]						7.1	5.7	4.8	3.6	2.6			
	△Pt asp [Pa]						175.0	125.0	85.0	45.0	32.0			
	△Pt ref [Pa]						140.0	95.0	70.0	38.0	22.0			
12000	Veff [m/s]						8.6	6.8	5.8	4.1	3.3	2.2		
	△Pt asp [Pa]						210.0	160.0	128.0	65.0	41.0	18.0		
	△Pt ref [Pa]						170.0	135.0	95.0	53.0	28.0	13.0		
16000	Veff [m/s]								7.8	5.7	4.5	3.1	2.2	
	△Pt asp [Pa]								200.0	130.0	75.0	38.0	20.0	
	△Pt ref [Pa]								160.0	100.0	60.0	28.0	13.0	
20000	Veff [m/s]									7.1	5.8	3.8	2.8	2.3
	△Pt asp [Pa]									170.0	130.0	65.0	35.0	22.0
	△Pt ref [Pa]									140.0	100.0	48.0	25.0	13.0
25000	Veff [m/s]										7.2	5.1	3.7	3.1
	△Pt asp [Pa]										170.0	100.0	52.0	38.0
	△Pt ref [Pa]										140.0	78.0	43.0	27.0
30000	Veff [m/s]										8.6	5.8	4.3	3.6
	△Pt asp [Pa]										200.0	130.0	67.0	50.0
	△Pt ref [Pa]										160.0	100.0	58.0	43.0
40000	Veff [m/s]											7.8	5.5	4.4
	△Pt asp [Pa]											180.0	110.0	70.0
	△Pt ref [Pa]											145.0	85.0	60.0
50000	Veff [m/s]												6.8	5.5
	△Pt asp [Pa]												165.0	120.0
	△Pt ref [Pa]												135.0	90.0

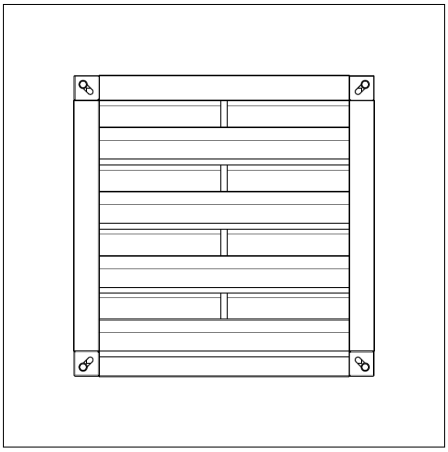
The legend
Ak [m²] - The free surface
Veff [m/s] - The speed of air in the grille
ΔPt asp [Pa] - Pressure loss at extraction
ΔPt ref [Pa] - Pressure loss at discharge

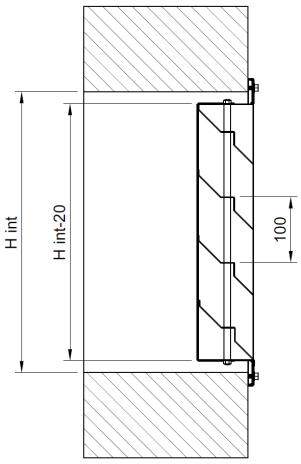
Installation

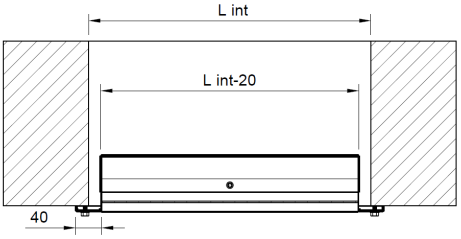
The mounting/fixing of the grille is done with screws.

Wall mounting

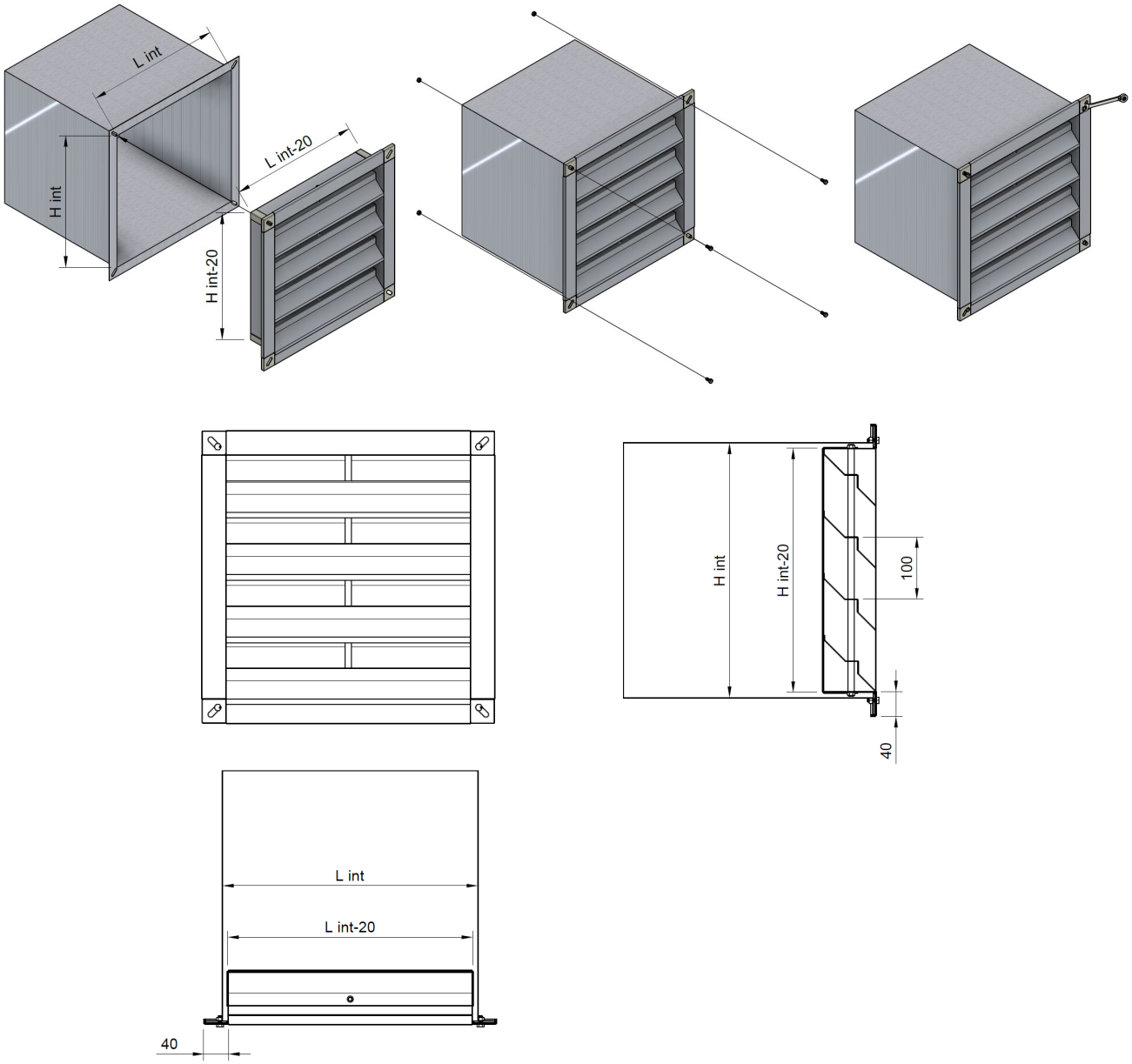








Rectangular duct mounting



Order code

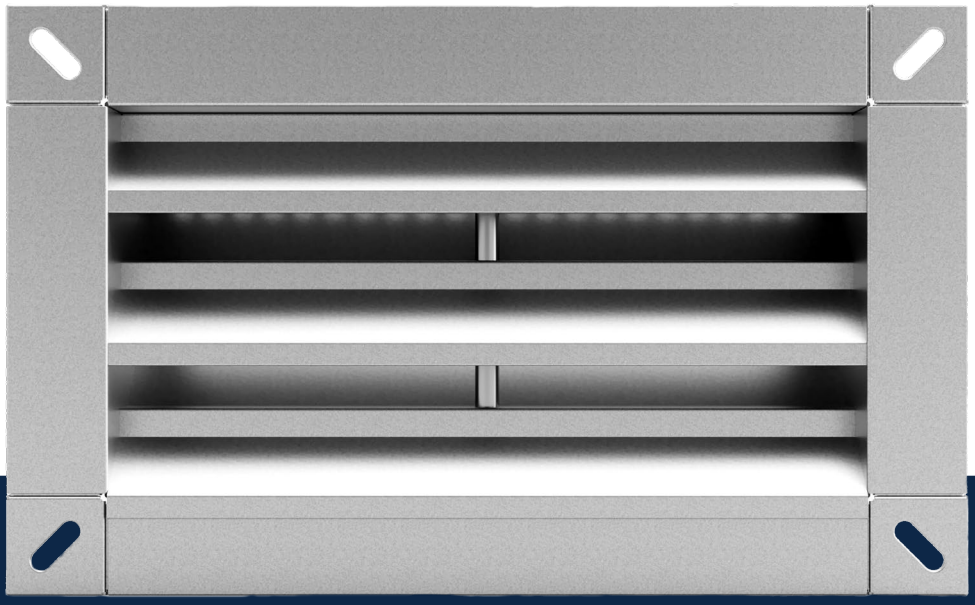
Example on how to place an order

Type	Dimensions	Finish
WPL-T		
	On request	
		Natural (galvanized steel)
		RAL..- Other RAL colors on request

Air through perfection

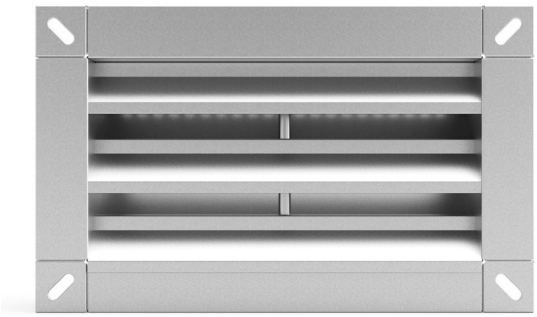
Exterior grille

WPL-S-T



ACP
Smoke evacuation grilles

Exterior grille
WPL-S-T



Description

WPL-S-T is a rectangular ventilation grille used for the introduction or evacuation of air.

The WPL-S-T grille is weather resistant and is intended for mounting on the exterior walls of buildings.

Technical specifications

Characteristics

The grille is provided with fixed anti-rain blades, positioned at 45°, parallel to the “L” (length).

WPL-S-T has a galvanized steel wire mesh with 10x10 mm.

The product is made standard with oval holes for fixing with screws.

The standard finish is natural galvanized steel.

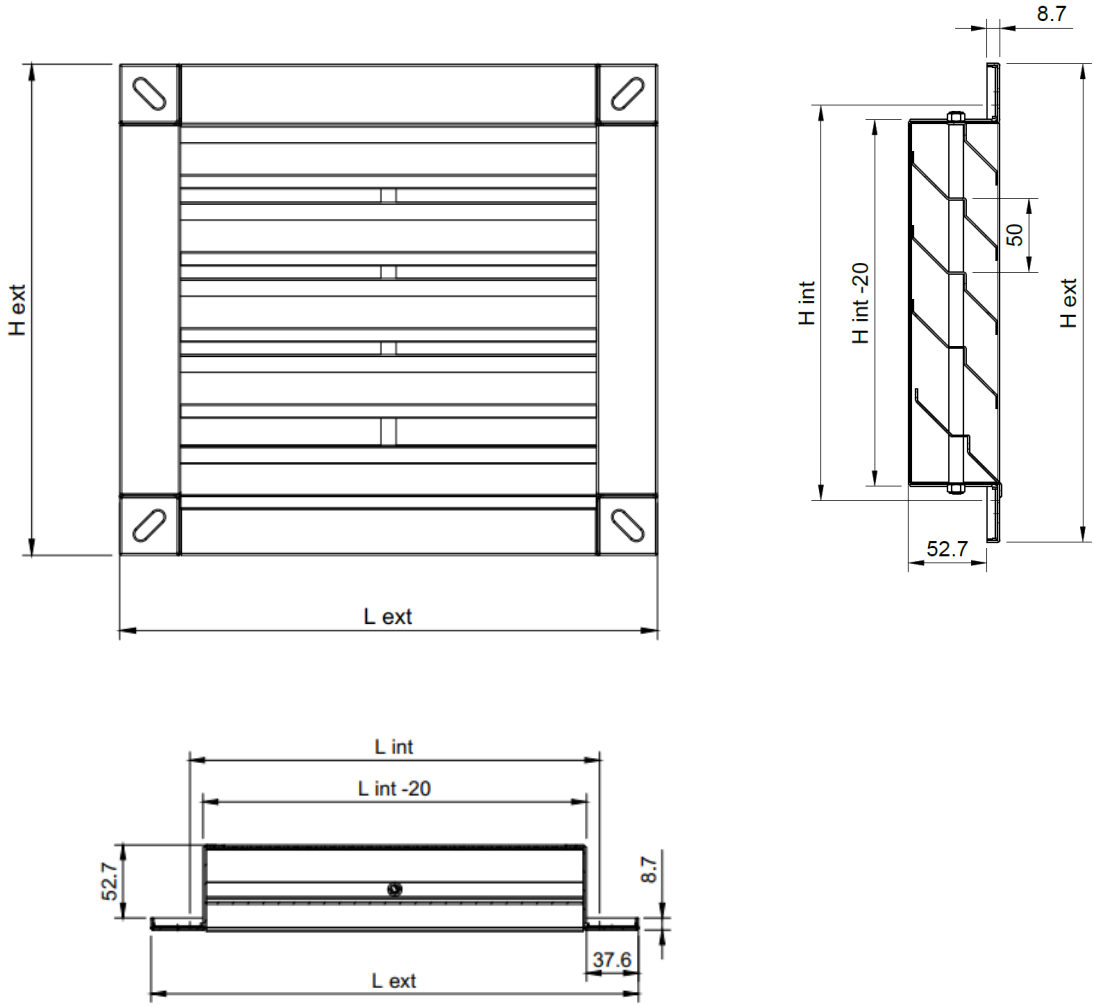
Dimensional limits: minimum 100 x 100 and maximum 2000 x 2000 mm.

Materials

The grille is made of galvanized steel with natural finishing.

On request, the product can be painted in electrostatic field in any shade from the RAL palette.

Technical drawing



Functional parameters

Air flow [m³/h]	Ak [m²]	0.01	0.02	0.03	0.04	0.05	0.06	0.08	0.10	0.15	0.20	0.25	0.30	0.40
200	Veff [m/s]	5.6	2.8											
	ΔPt [Pa]	50	8.0											
300	Veff [m/s]		4.2	2.8										
	ΔPt [Pa]		28.0	8.0										
400	Veff [m/s]		5.6	3.9	2.8	2.3								
	ΔPt [Pa]		50.0	26.0	8.0	3.0								
500	Veff [m/s]			4.8	3.6	2.8	2.3							
	ΔPt [Pa]			38.0	20.0	8	3.0							
600	Veff [m/s]			5.8	4.3	3.4	3.0	2.2						
	ΔPt [Pa]			53.0	29.0	18.0	14.0	2						
700	Veff [m/s]				5	4.0	3.4	2.5	2.2					
	ΔPt [Pa]				40	25.0	18.0	7.0	2					
800	Veff [m/s]				5.8	4.7	3.8	2.8	2.4					
	ΔPt [Pa]				53.0	35.0	25	8	4.0					
1000	Veff [m/s]					5.5	4.8	3.5	2.8					
	ΔPt [Pa]					50	38.0	18.0	8.0					
2000	Veff [m/s]								5.8	3.8	2.8	2.4		
	ΔPt [Pa]								53.0	25.0	8.0	4.0		
3000	Veff [m/s]									5.8	4.4	3.5	2.8	2.2
	ΔPt [Pa]									53.0	30	19.0	8.0	2.0
4000	Veff [m/s]										5.6	4.6	3.8	2.8
	ΔPt [Pa]										51.0	32.0	25	8.0
5000	Veff [m/s]											5.5	4.8	3.5
	ΔPt [Pa]											50.0	37.0	18.0

Discharge area Ak [m²]								
Height [mm]	Length [mm]							
	150	200	300	400	500	600	700	800
100	0.001	0.008	0.012	0.017	0.024	0.028	0.040	0.050
150	0.013	0.017	0.025	0.030	0.040	0.050	0.060	0.070
200	0.018	0.020	0.030	0.040	0.060	0.070	0.080	0.090
300	0.027	0.035	0.050	0.070	0.090	0.100	0.120	0.140
400	0.036	0.045	0.070	0.090	0.120	0.140	0.170	0.190
500	0.045	0.060	0.090	0.120	0.150	0.180	0.210	0.240
600	0.050	0.070	0.100	0.130	0.180	0.210	0.250	0.290
700	0.060	0.080	0.110	0.160	0.210	0.250	0.300	0.330
800	0.070	0.090	0.130	0.180	0.240	0.300	0.340	0.400

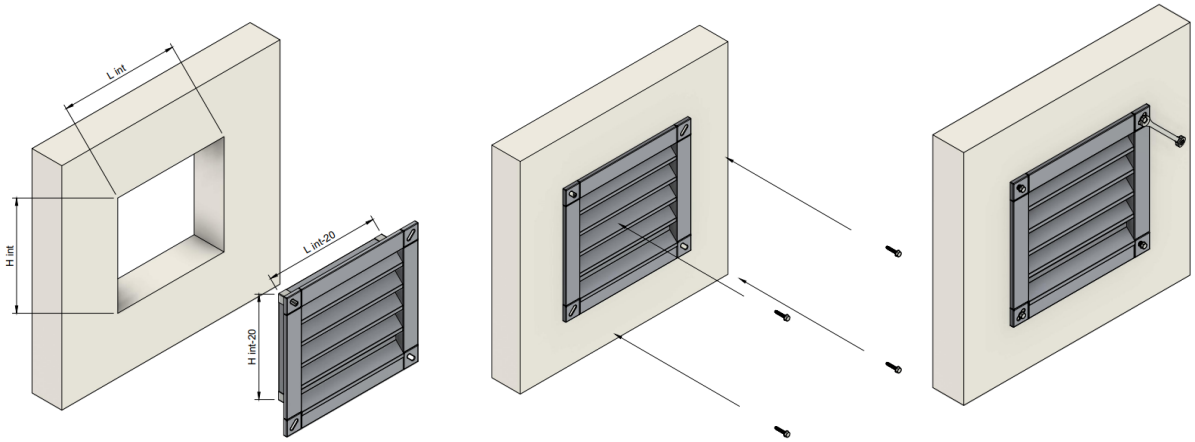
Note: For different discharge areas than those listed in the tables, the velocity and pressure drop values will be result by interpolation.

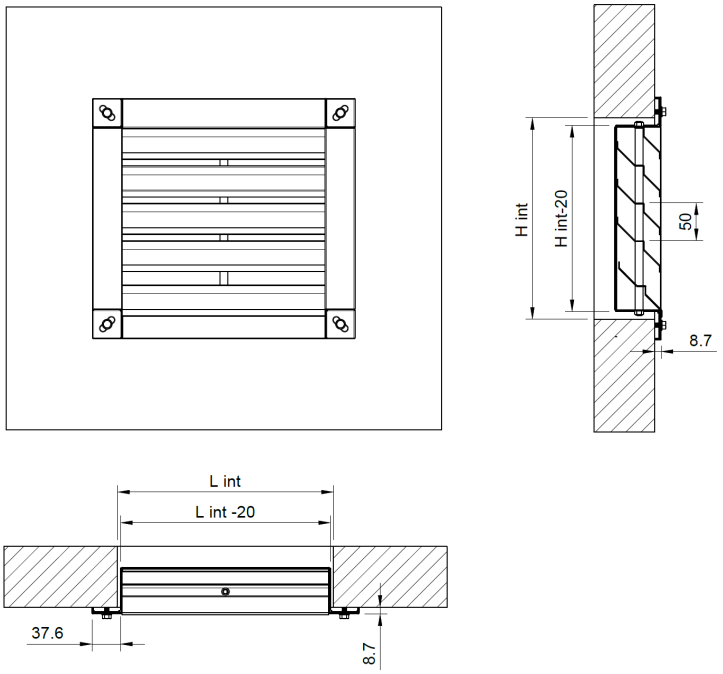
The legend
Ak [m²] - The free surface
Veff [m/s] – Air velocity in the grille
ΔPt [Pa] - Pressure loss

Installation

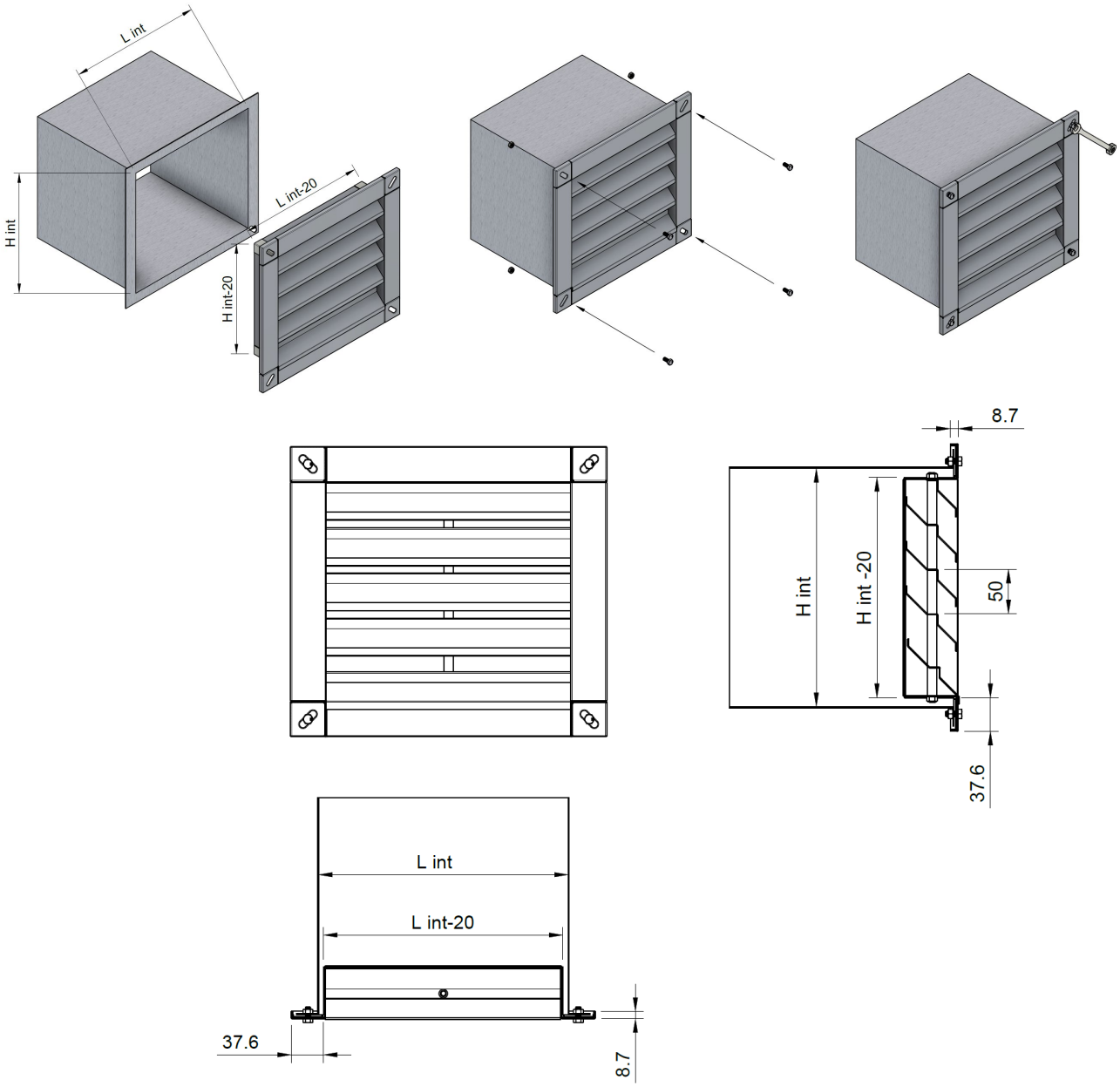
The mounting/fixing of the grille is done with screws.

Wall mounting





Rectangular duct mounting



Order code

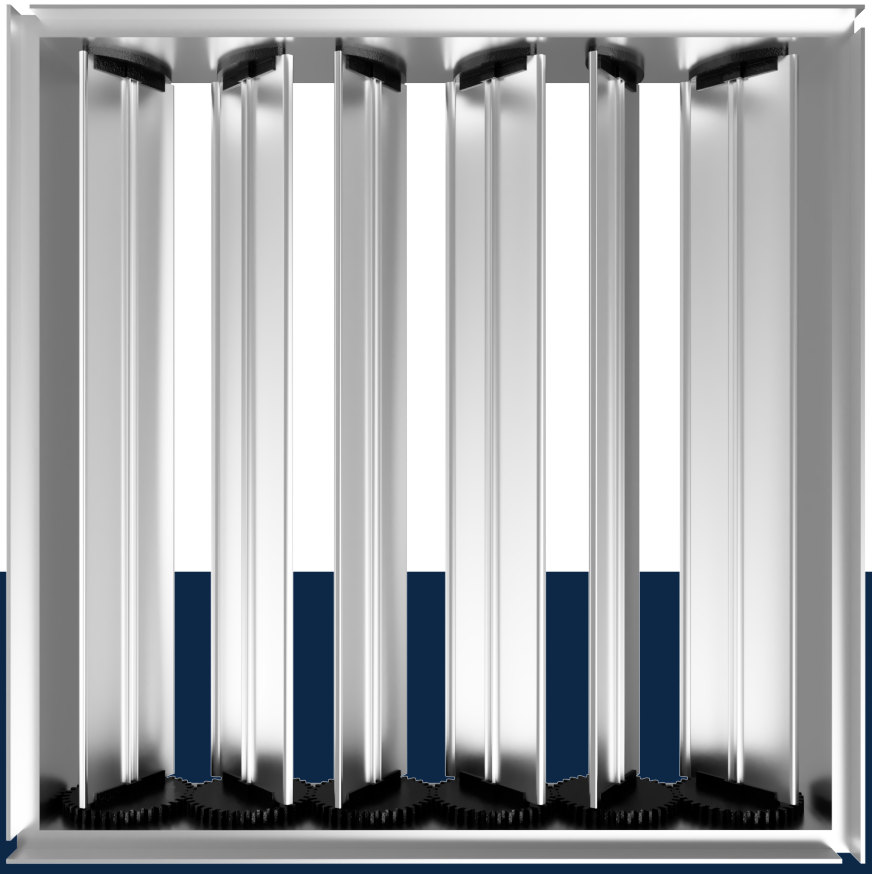
Example on how to place an order

Type	Dimensions	Finish
WPL-S-T		
	On request	
		Natural
		RAL..- Other RAL colors on request

Air through perfection

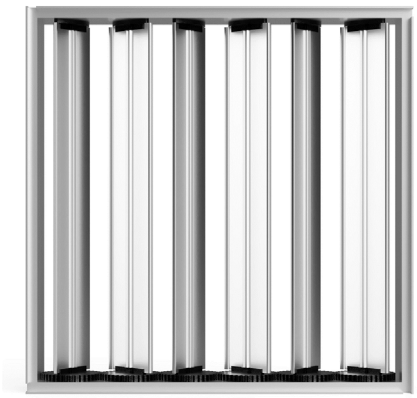
Opposed blade damper

OBD



ACP
Airflow regulation dampers

Opposed blade damper
OBD



Description

The aluminum opposed blade damper is used to adjust the air flow and is mounted on the grille or diffuser connection.

Technical specifications

Characteristics

The register is provided with opposable blades and gears.

The register is operated manually.

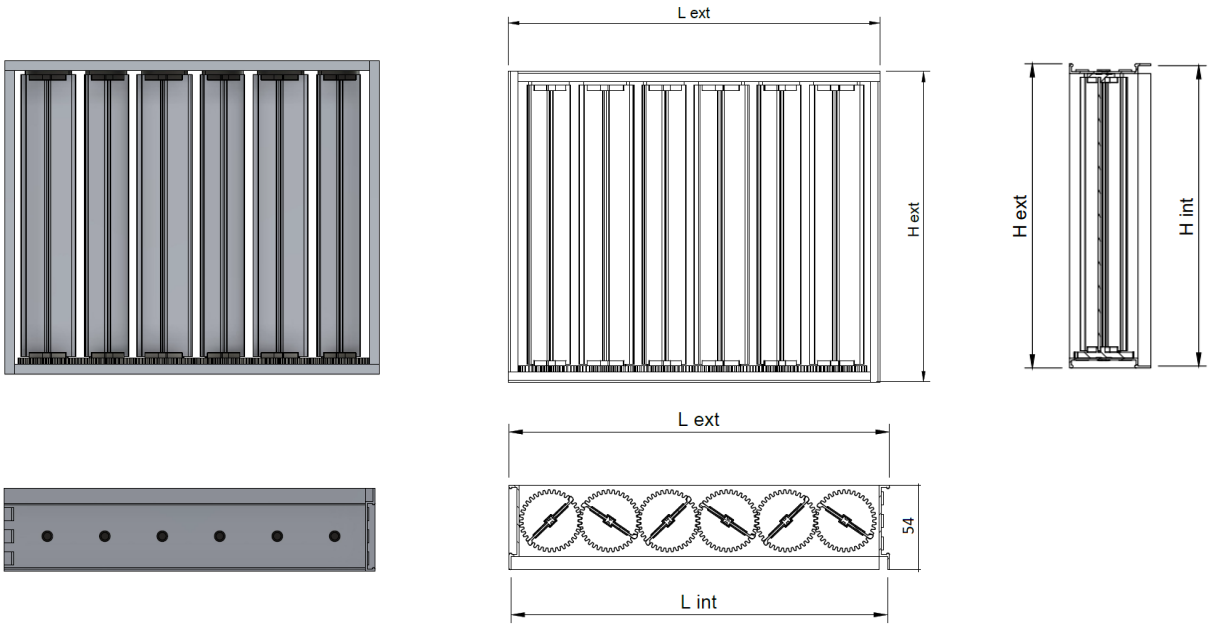
Depending on the size, the register is made in one or more pieces.

Materials

The frame and blades are made of extruded aluminum with a natural finish.

Polypropylene gears.

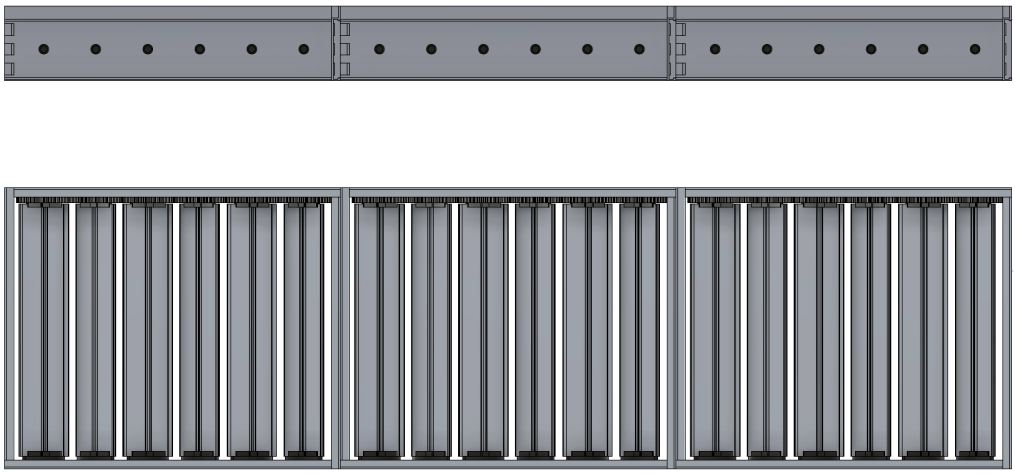
Technical drawing



Depending on the required size, the adjustment damper is made in one or more independent pieces.

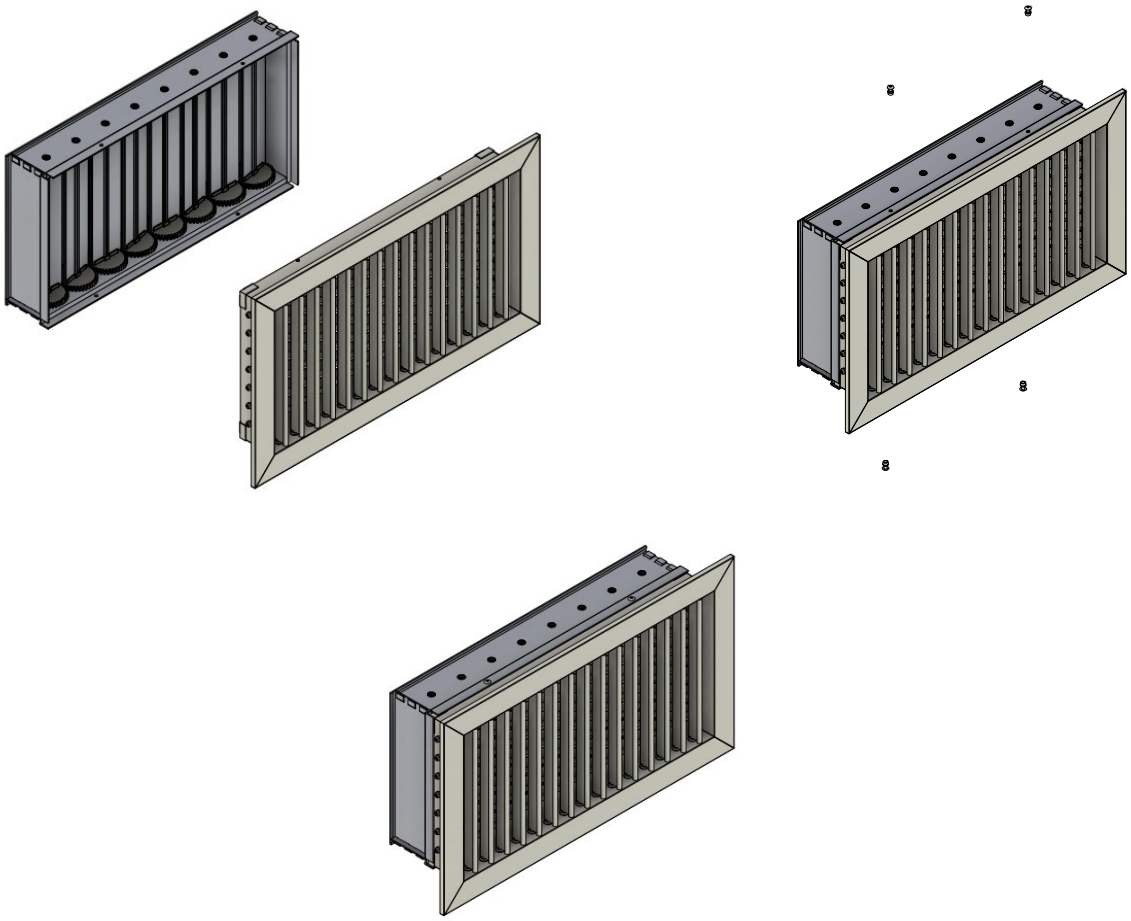
L x H	Opposed blade damper																			
[mm]	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
100	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
150	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
200	-	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
300	-	-	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
400	-	-	-	1	1	1	2	2	2	2	2	2	3	3	3	3	3	3	4	4
500	-	-	-	-	1	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4
600	-	-	-	-	-	2	2	4	4	4	4	4	4	4	4	4	5	5	5	5

Example: OBD-1400x300 mm



Installation

Pop-rivets mounting on the grille connection.



Order code

Example on how to place an order

	Type	Dimension
OBD		
On request		

Air through perfection

Volume control damper

VCD



ACP
Airflow regulation dampers

Volume control damper
VCD



Description

VCD is a rectangular aluminum damper with opposable blades.

The rectangular damper is mounted on the sections of rectangular duct or wall.

Technical specifications

Characteristics

The damper is made by manual or electric drive.

According to EN 1751 the damper is class 2 sealing.

The width of the blade is 100 mm and is not adjustable.

The blades are parallel to the length.

The product is provided with a sealing gasket positioned on the frame and blades.

The manual operation system has a locking element.

The operating handle/servomotor operates the opening/closing of the blades by means of a 12 x 12 mm shaft.

Mounting the servomotor on the support plate is easy.

Dimensional limits: LxH int = min 200x110 mm and max 2800x2010 mm (with stiffening)

Materials

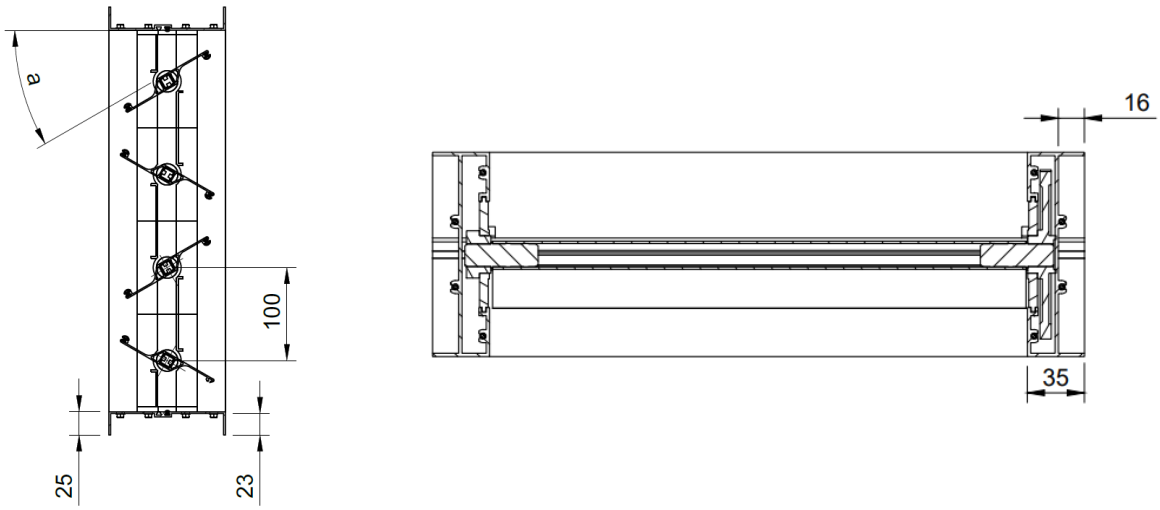
The product is made of natural extruded aluminum profiles (frame, drive mechanism and blade) with gears and polypropylene accessories.

The gasket is made of TPE and PP.

Maintenance

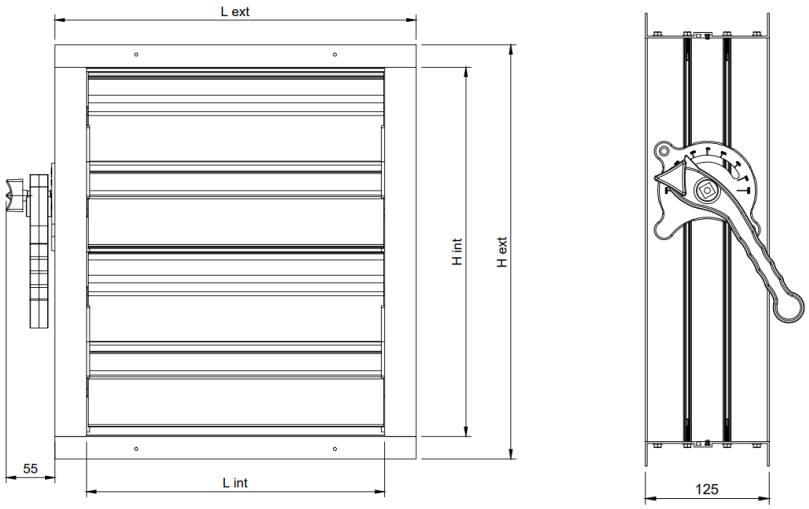
The damper does not require maintenance. The operating system must be checked in the open/closed positions at least once a year.

Technical drawing

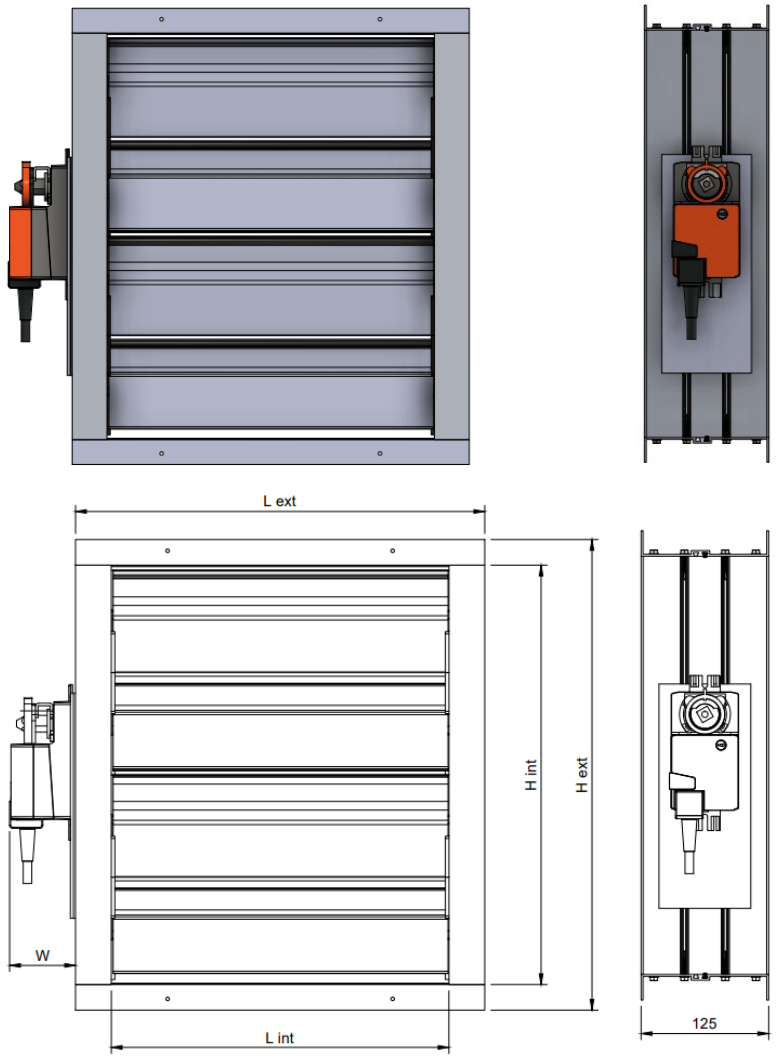


Manually operated damper (VCD)





Electrically operated damper (VCD-S)



The servomotor mounted on the VCD-S is ordered separately.

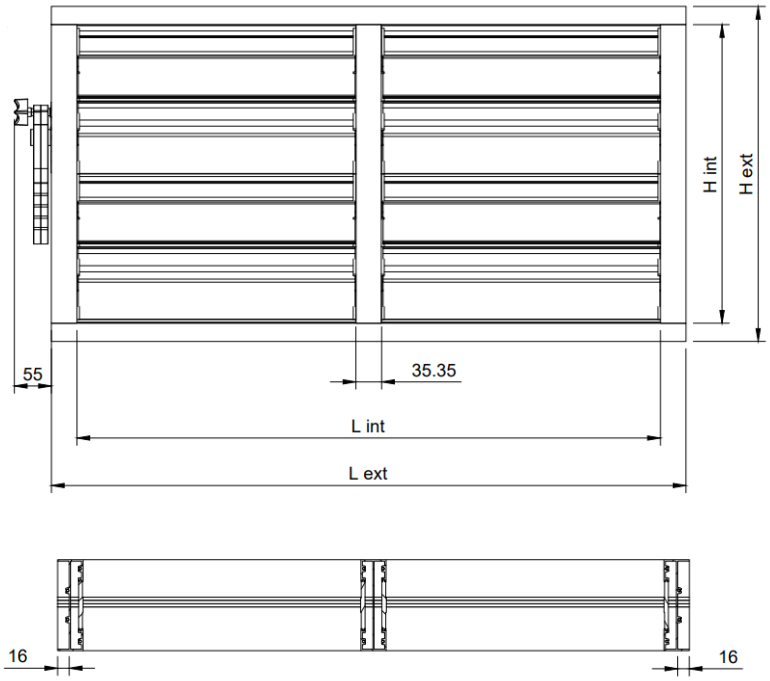
The W dimension is given by the servomotor.

Product specifications

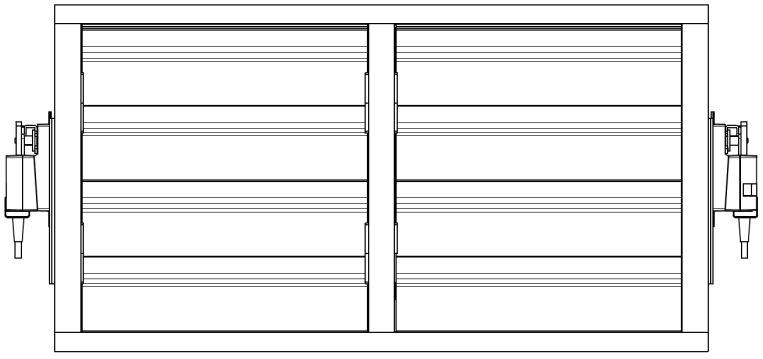
Dimensional limits of execution

Dimensional limits: LxH int = min 200x110 mm and max 2800x2010 mm (with stiffening).

Regardless of the type of drive (manual or electric), the dampers with L int> 1400 mm are made with a stiffening system according to the drawing below.



Electrically operated dampers with an area ≥ 4 sqm require 2 servomotors according to the drawing.



Accessories

The product can be delivered with Belimo servomotor. The servomotor is selected according to the damper size, supply voltage, safety function and other technical specifications mentioned in the project.

Belimo servomotor



Dampers [m²]	Actuator type	Supply voltage AC/DC 24V	Torque	Running time 90°
up to 1 m²	Belimo LM 230A	230 V	5 Nm	150 s
	Belimo LM 230A-S			
	Belimo LM 230A-SR			
	Belimo LM 24A	24 V		
	Belimo LM 24A-S			
	Belimo LM 24A-SR			
up to 2 m²	Belimo NM 230A	230 V	10 Nm	150 s
	Belimo NM 230A-S			
	Belimo NM 230A-SR			
	Belimo NM 24A	24 V		
	Belimo NM 24A-S			
	Belimo NM 24A-SR			
up to 4 m²	Belimo SM 230A	230 V	20 Nm	150 s
	Belimo SM 230A-S			
	Belimo SM 230A-SR			
	Belimo SM 24A	24 V		
	Belimo SM 24A-S			
	Belimo SM 24A-SR			

The required torque depending on the size of the damper is given in the table below. Dampers with H int >> L int requires a servomotor with higher torque.

Torque [Nm]											
H int [mm]	L int [mm]										
	200	300	400	500	600	700	800	900	1000	1100	1400
110	5 Nm										
210											
310											
410											
510											
610											
710	10 Nm										
810											
910											
1010											

Functional parameters

Discharge area Ak [m²]											
H int [mm]	**L int [mm]**										
	200	**300**	**400**	**500**	**600**	**700**	**800**	**900**	**1000**	**1100**	**1400**
110	0.016	0.024	0.036	0.047	0.056	0.067	0.073	0.085	0.095	0.104	0.129
210	0.030	0.050	0.067	0.087	0.101	0.121	0.138	0.159	0.178	0.197	0.251
310	0.047	0.079	0.105	0.134	0.159	0.184	0.210	0.238	0.263	0.290	0.371
410	0.062	0.104	0.141	0.173	0.210	0.245	0.279	0.315	0.351	0.386	0.492
510	0.079	0.130	0.173	0.216	0.261	0.301	0.350	0.393	0.435	0.480	0.610
610	0.099	0.155	0.209	0.260	0.311	0.359	0.415	0.470	0.521	0.575	0.729
710	0.110	0.180	0.242	0.300	0.361	0.424	0.483	0.539	0.607	0.668	0.849
810	0.128	0.205	0.269	0.341	0.416	0.484	0.552	0.619	0.693	0.761	0.969
910	0.134	0.219	0.312	0.386	0.466	0.543	0.621	0.700	0.778	0.856	1.080
1010	0.159	0.255	0.335	0.431	0.518	0.604	0.690	0.777	0.864	0.949	1.215

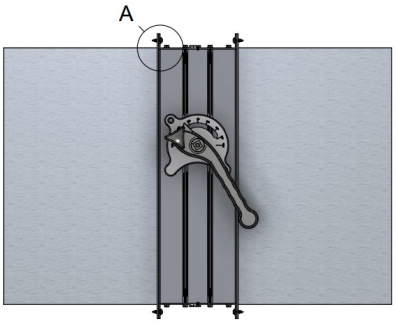
a	**V [m/s]**	1	2	3	4
0°	NR [dB(A)]	<30	<30	38	43
	ΔPt [Pa]	<5	<5	<5	<5
40°	NR [dB(A)]	39	54	60	69
	ΔPt [Pa]	18	65	102	175

The legend
Ak [m²] - The free surface
ΔPt [Pa] - Pressure loss
NR [dB (A)] - Noise level without room attenuation
a - The angle of the blade

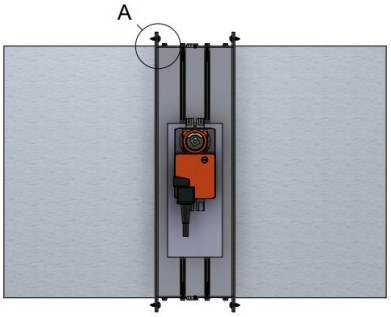
Installation

The damper can be mounted at the end of rectangular ducts, between two sections of rectangular ducts or on the wall. Fastening is done with screws.

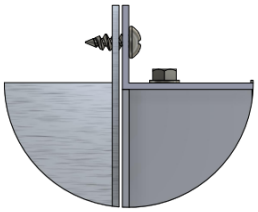
Installation between duct flanges



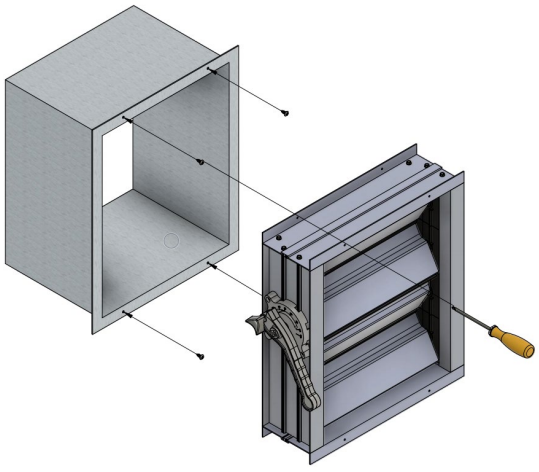
VCD



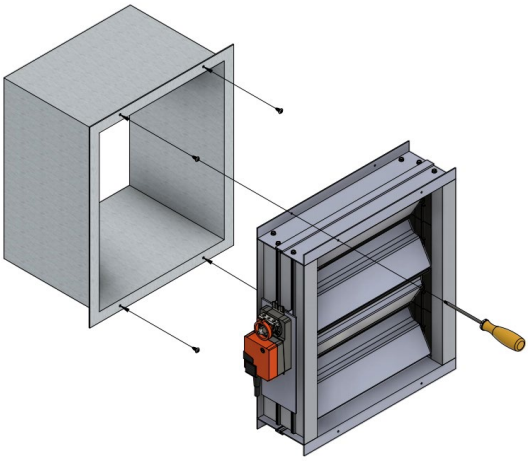
VCD-S



Rectangular duct end assembly



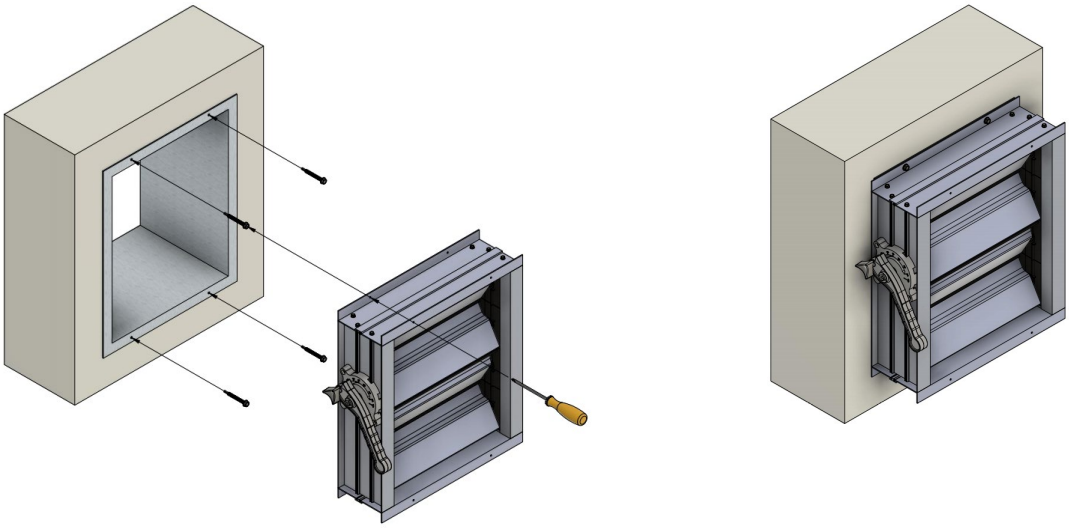
VCD



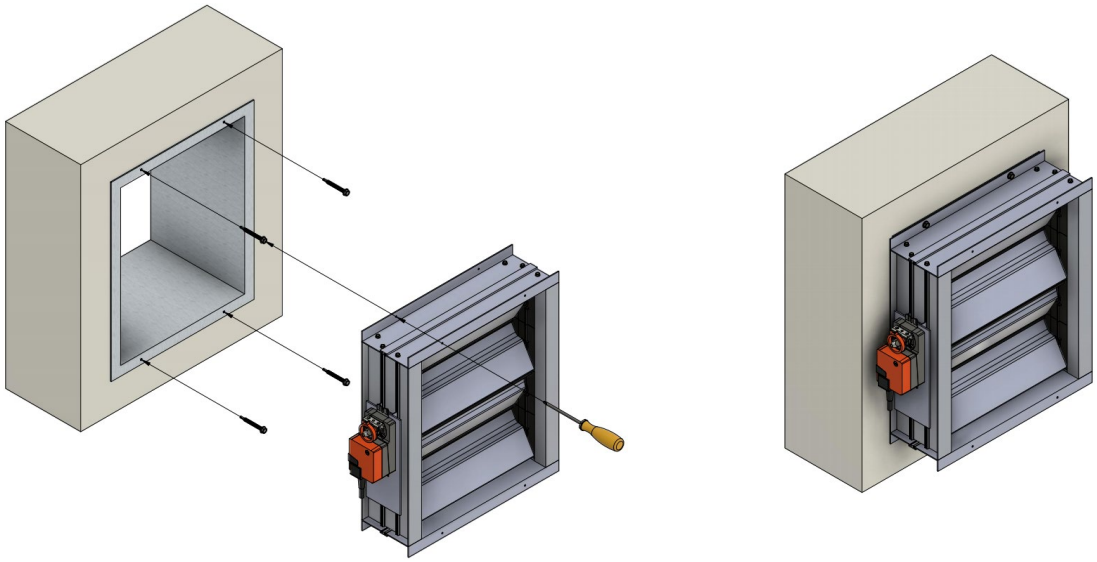
VCD-S

Wall mounting

VCD



VCD-S



Order code

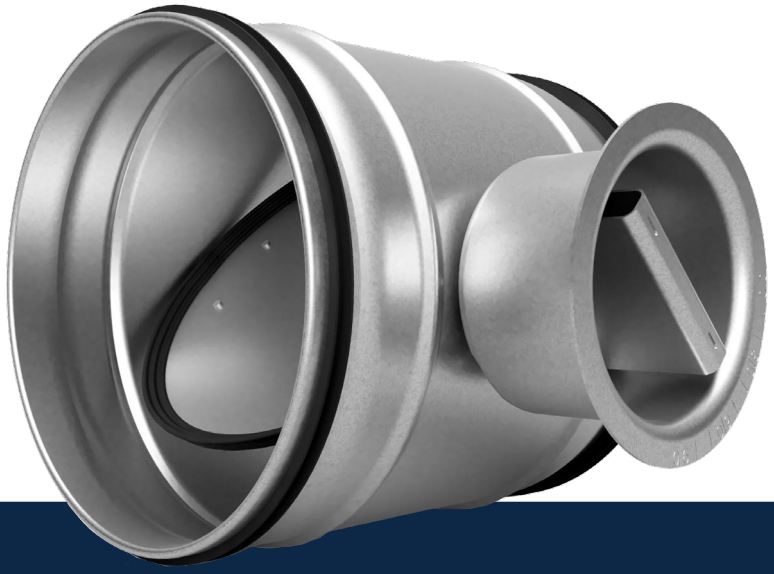
Example on how to place an order

Type	Dimensions	Accessories
VCD		
VCD-S		
On request		
Servomotor		

Air through perfection

Shut-off damper

RD-G



ACP
Airflow regulation dampers

Shut-off damper
RD-G



Description

RD-G is a circular control damper with manual operation and sealing gasket.

The circular damper is used to regulate the air flow on the branches of ventilation and air conditioning systems.

Technical specifications

Characteristics

The adjusting damper is equipped with an inner blade, an operating mechanism and a locking screw.

The position of the blade is visible on the drive/adjustment system, from 0 to 90 degrees.

The damper is equipped with a sealing gasket at both ends and on the inner blade.

It is easy to operate the damper and it is done manually.

Dimensional range: Ø100, Ø125, Ø150, Ø160, Ø200, Ø250, Ø300, Ø315, Ø355, Ø400, Ø450, Ø500, Ø560, Ø600, Ø630.

Materials

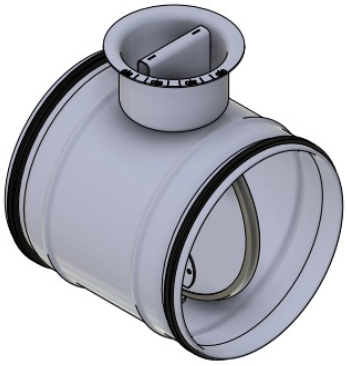
The product is made of galvanized steel sheet (housing, mechanism and blade) and rubber gasket.

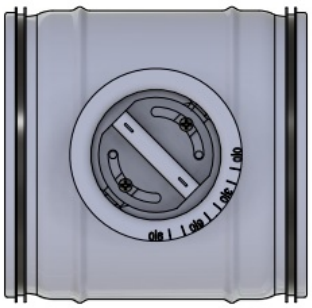
Technical drawing



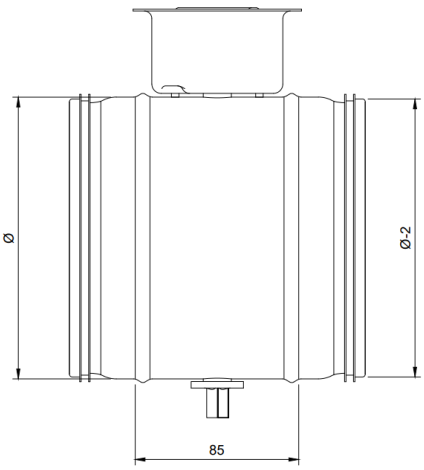


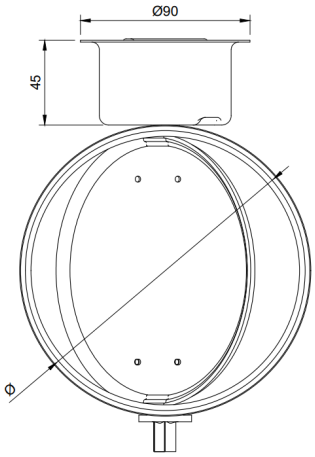




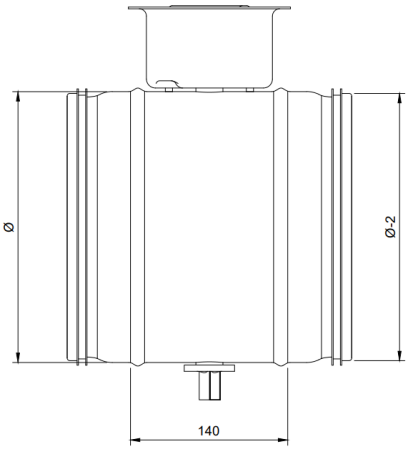


Ø < 355 mm





Ø ≥ 355 mm



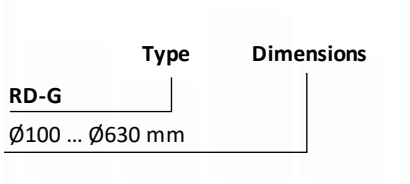
Functional parameters

Ø [mm]	Air flow [m³/h]	Veff [m/s]	α = 15°		α = 30°		α = 45°		α = 60°	
			ΔPt [Pa]	NR [db(A)]	ΔPt [Pa]	NR [db(A)]	ΔPt [Pa]	NR [db(A)]	ΔPt [Pa]	NR [db(A)]
100	53	2	3	6	8	14	36	25	194	41
	105	4	12	25	34	33	145	44	774	59
	158	6	26	36	76	39	327	55	1742	62
	211	8	46	43	136	52	581	63	3098	78
	263	10	73	49	212	58	908	69	4840	84
	316	12	105	54	305	63	1307	73	6970	88
125	83	2	3	7	8	16	36	27	194	42
	167	4	12	26	34	35	145	46	774	61
	250	6	26	37	76	46	327	57	1742	72
	334	8	46	45	136	46	581	64	3098	72
	417	10	73	51	212	60	908	71	4840	85
	501	12	105	56	305	65	1307	75	6970	90
160	139	2	3	9	8	18	36	29	194	44
	277	4	12	28	34	37	145	48	774	63
	416	6	26	39	76	48	327	59	1742	74
	554	8	46	47	136	56	581	66	3098	82
	693	10	73	53	212	62	908	72	4840	88
	831	12	105	58	305	67	1307	77	6970	92
200	218	2	3	11	8	19	36	31	194	46
	436	4	12	30	34	38	145	50	774	65
	654	6	26	41	76	50	327	60	1742	76
	872	8	46	49	136	57	581	68	3098	84
	1091	10	73	55	212	63	908	74	4840	89
	1309	12	105	60	305	68	1307	79	6970	94
250	342	2	3	12	8	21	36	32	194	48
	684	4	12	31	34	40	145	51	774	66
	1027	6	26	43	76	51	327	62	1742	78
	1369	8	46	50	136	59	581	70	3098	85
	1711	10	73	57	212	65	908	76	4840	91
	2053	12	105	61	305	70	1307	81	6970	96
315	546	2	3	14	8	23	36	34	194	49
	1092	4	12	33	34	42	145	53	774	68
	1639	6	26	44	76	53	327	64	1742	79
	2185	8	46	52	136	61	581	72	3098	87
	2731	10	73	58	212	67	908	78	4840	93
	3277	12	105	63	305	72	1307	83	6970	98

The legend
Veff [m/s] - The speed of the air through the damper
α [°] - The opening angle of the damper
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

Order code

Example on how to place an order



Air through perfection

Shut-off damper for actuator

RD-S



ACP
Airflow regulation dampers

Shut-off damper for actuator
RD-S



Description

RD-S is a circular adjusting damper with sealing gasket and mechanism for actuator.

The circular damper is used to regulate the air flow on the branches of ventilation and air conditioning systems.

Technical specifications

Characteristics

The damper is equipped with an inner blade, a sealing gasket and a mechanism for connecting the servomotor.

For a good seal the damper is equipped with a rubber gasket at both ends and on the inner blade.

The positioning of the servomotor on the damper body is longitudinal.

Mounting the servomotor on the support plate is easy.

When the air pressure exceeds 2000Pa the damper closure can be deflected by up to 2cm.

For outdoor installations, the servomotor must be protected from UV light and weather.

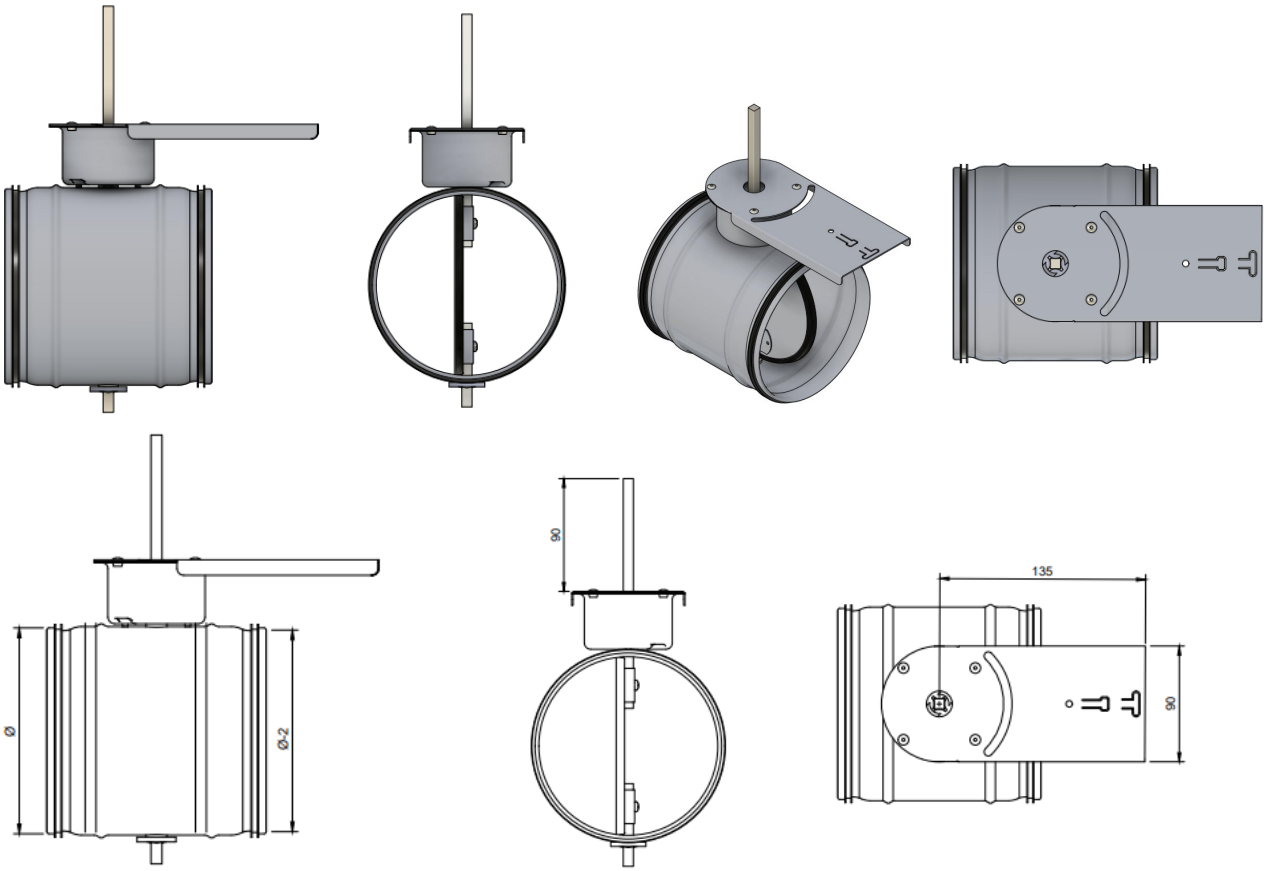
The actuator mounted on the damper allows the application of insulation with thickness of up to 50 mm.

Dimensional range: Ø100, Ø125, Ø160, Ø200, Ø250, Ø315, Ø355, Ø400, Ø450, Ø500, Ø560, Ø630.

Materials

The product is made of galvanized steel sheet (housing, mechanism and blade) and rubber gasket.

Technical drawing



Belimo servomotor

The product can be delivered with Belimo servomotor. The servomotor is selected according to the damper size, supply voltage, safety function and other technical specifications mentioned in the project.



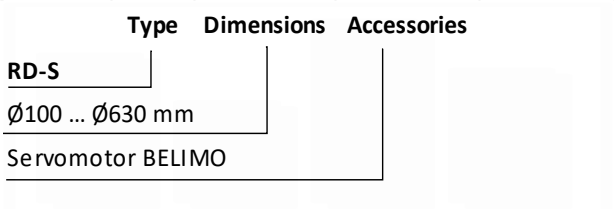
Functional parameters

Ø [mm]	Air flow [m³/h]	Veff [m/s]	α = 15°		α = 30°		α = 45°		α = 60°	
			ΔPt [Pa]	NR [db(A)]	ΔPt [Pa]	NR [db(A)]	ΔPt [Pa]	NR [db(A)]	ΔPt [Pa]	NR [db(A)]
100	53	2	3	6	8	14	36	25	194	41
	105	4	12	25	34	33	145	44	774	59
	158	6	26	36	76	39	327	55	1742	62
	211	8	46	43	136	52	581	63	3098	78
	263	10	73	49	212	58	908	69	4840	84
	316	12	105	54	305	63	1307	73	6970	88
125	83	2	3	7	8	16	36	27	194	42
	167	4	12	26	34	35	145	46	774	61
	250	6	26	37	76	46	327	57	1742	72
	334	8	46	45	136	46	581	64	3098	72
	417	10	73	51	212	60	908	71	4840	85
	501	12	105	56	305	65	1307	75	6970	90
160	139	2	3	9	8	18	36	29	194	44
	277	4	12	28	34	37	145	48	774	63
	416	6	26	39	76	48	327	59	1742	74
	554	8	46	47	136	56	581	66	3098	82
	693	10	73	53	212	62	908	72	4840	88
	831	12	105	58	305	67	1307	77	6970	92
200	218	2	3	11	8	19	36	31	194	46
	436	4	12	30	34	38	145	50	774	65
	654	6	26	41	76	50	327	60	1742	76
	872	8	46	49	136	57	581	68	3098	84
	1091	10	73	55	212	63	908	74	4840	89
	1309	12	105	60	305	68	1307	79	6970	94
250	342	2	3	12	8	21	36	32	194	48
	684	4	12	31	34	40	145	51	774	66
	1027	6	26	43	76	51	327	62	1742	78
	1369	8	46	50	136	59	581	70	3098	85
	1711	10	73	57	212	65	908	76	4840	91
	2053	12	105	61	305	70	1307	81	6970	96
315	546	2	3	14	8	23	36	34	194	49
	1092	4	12	33	34	42	145	53	774	68
	1639	6	26	44	76	53	327	64	1742	79
	2185	8	46	52	136	61	581	72	3098	87
	2731	10	73	58	212	67	908	78	4840	93
	3277	12	105	63	305	72	1307	83	6970	98
400	884	2	3	16	8	24	36	36	194	51
	1768	4	12	35	34	44	145	55	774	70
	2652	6	26	46	76	55	327	66	1742	81
	3536	8	46	54	136	63	581	74	3098	89
	4420	10	73	60	212	69	908	80	4840	95
	5305	12	105	65	305	74	1307	85	6970	100

The legend
Veff [m/s] - The speed of the air through the damper
α [◦] - The opening angle of the damper
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

Order code

Example on how to place an order



Air through perfection

Round non-return damper

RS-G



ACP
Airflow regulation dampers

Round non-return damper
RS-G



Description

RS-G is a circular non-return (backdraft) damper, used between circular duct sections and allowing a single direction of air flow.

The RS-G damper is designed for ventilation duct systems that require a class D seal according to EN 12237.

The circular non-return damper is mounted between the ventilation ducts and allows a single direction of air flow.

This damper is often installed upstream of an introduction or evacuation of air unit to prevent the air backflow.

Technical specifications

Characteristics

The damper blades open when overpressure/airflow acts on them.

The damper is provided with a sealing gasket, butterfly blades and a return spring that closes the blades when the pressure drops.

Closing the blades prevents the return of air to the duct.

The damper closure has an approximate class 2 tightness according to EN1751: 2002.

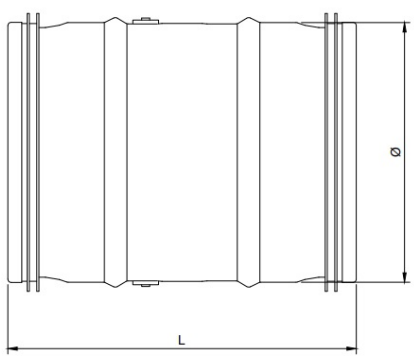
Dimensional range: Ø100, Ø125, Ø150, Ø160, Ø200, Ø250, Ø300, Ø315, Ø355, Ø400, Ø450, Ø500.

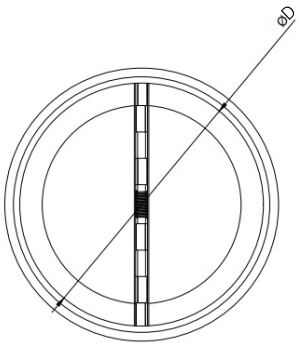
Materials

The cylinder is made of galvanized steel sheet. The blades are made of aluminum sheet.

Technical drawing







ØD [mm]	L [mm]
100	130
125	130
150	130
160	130
200	130
250	190
300	190
315	190
355	270
400	270
450	270
500	270

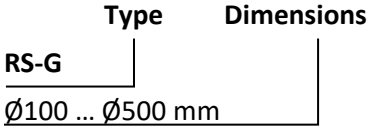
Functional parameters

Air flow [m^3/h]	Ø [mm]	100	125	160	200	250	315
75	ΔPt [Pa]	55					
100	ΔPt [Pa]	53	26				
125	ΔPt [Pa]	65	32	14			
200	ΔPt [Pa]	85	35	18			
250	ΔPt [Pa]	98	37	15	15		
300	ΔPt [Pa]	140	43	18	18		
400	ΔPt [Pa]	200	58	23	21	21	
500	ΔPt [Pa]	248	71	24	23	23	
625	ΔPt [Pa]		95	27	23	23	
750	ΔPt [Pa]			32	26	24	23
875	ΔPt [Pa]			40	28	24.5	24
1000	ΔPt [Pa]			54	32	25	25
1125	ΔPt [Pa]			65	37	25	25
1250	ΔPt [Pa]				41	25.5	25
1375	ΔPt [Pa]				47	25.5	25
1500	ΔPt [Pa]				51	25.5	25
1625	ΔPt [Pa]					25.5	25
1750	ΔPt [Pa]					26	25
1875	ΔPt [Pa]					25.5	25
2000	ΔPt [Pa]					25.5	24.5
2125	ΔPt [Pa]					25.5	24
2250	ΔPt [Pa]					26	23
2375	ΔPt [Pa]						22
2500	ΔPt [Pa]						21
2750	ΔPt [Pa]						21
3000	ΔPt [Pa]						22
3250	ΔPt [Pa]						24
3500	ΔPt [Pa]						25
3750	ΔPt [Pa]						30

The legend
ΔPt [Pa] - Pressure loss

Order code

Example on how to place an order



Air through perfection

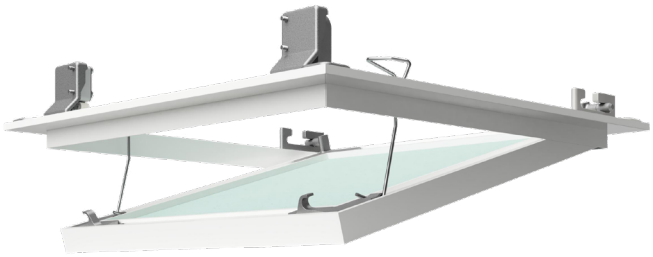
Access panel

AG



ACP
Access hatch

Access panel
AG



Description

The access panel is recommended for use in areas that require regular access.

The access panel facilitates the verification of ventilation and air conditioning works and installations.

The product is intended for mounting on a wall or ceiling with a thickness of 12.5 mm.

Technical specifications

Characteristics

The product consists of a fixed outer frame, a mobile inner frame and a plasterboard front panel.

Opening/closing the hatch is easy and is done through a click system.

The center piece is removable which allows easy access.

The access panel is available in standard sizes: 150 × 150, 200 × 200, 250 × 250, 300 × 300, 400 × 400, 500 × 500 and 600 × 600 mm.

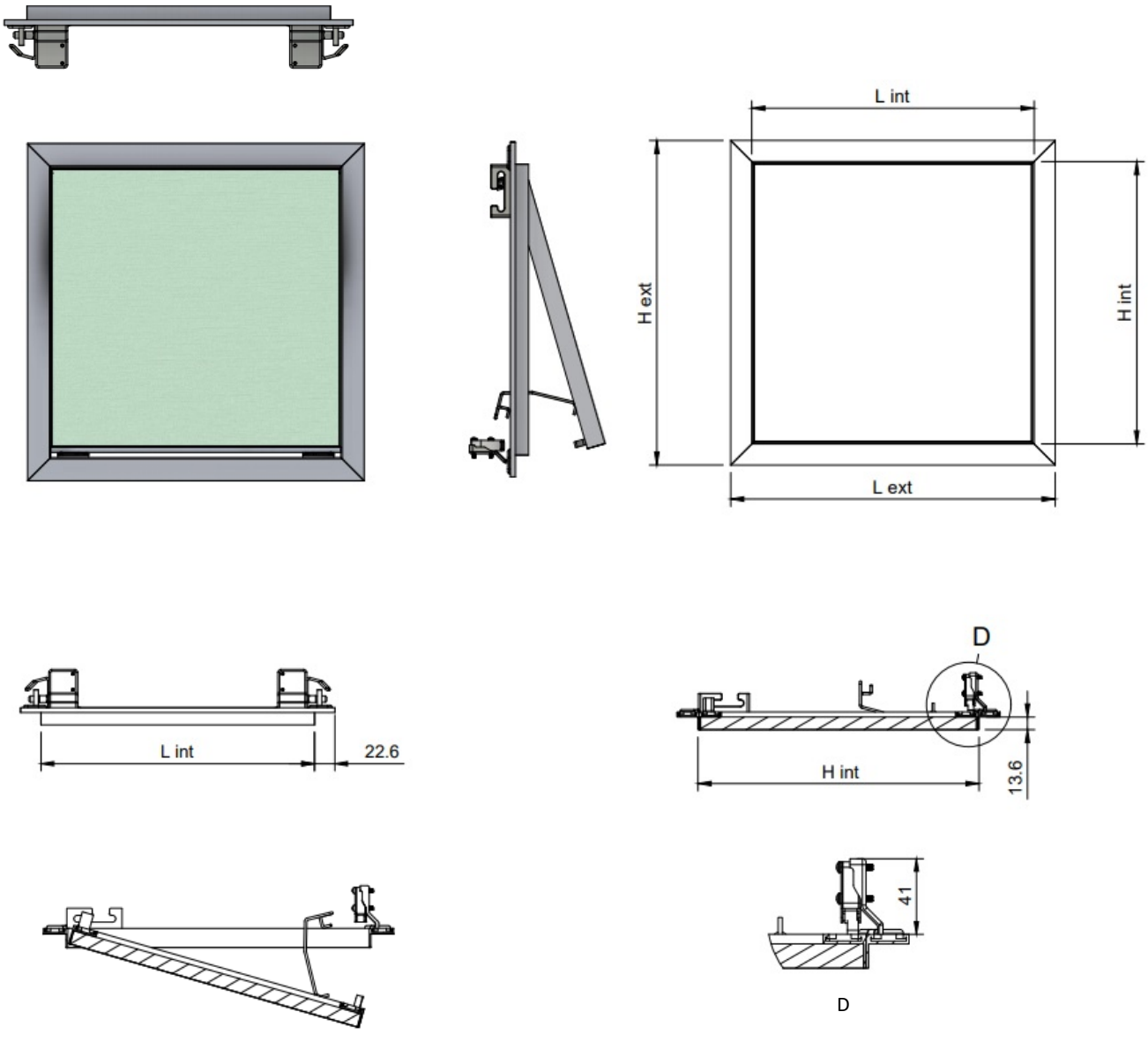
Other sizes are available on request.

Optionally the product can also be executed with 2, 3 or 4 openings (depending on the size).

Materials

The product frames (outer + inner) are made of aluminum, 1.2 mm thick, electrostatic field painted in white RAL9016.
The safety spring is made of steel (B Class 17723) with galvanized finish, the connecting elements are made of ZL-5 with galvanized finish.
The plate is made of 12.5 mm plasterboard.

Technical drawing



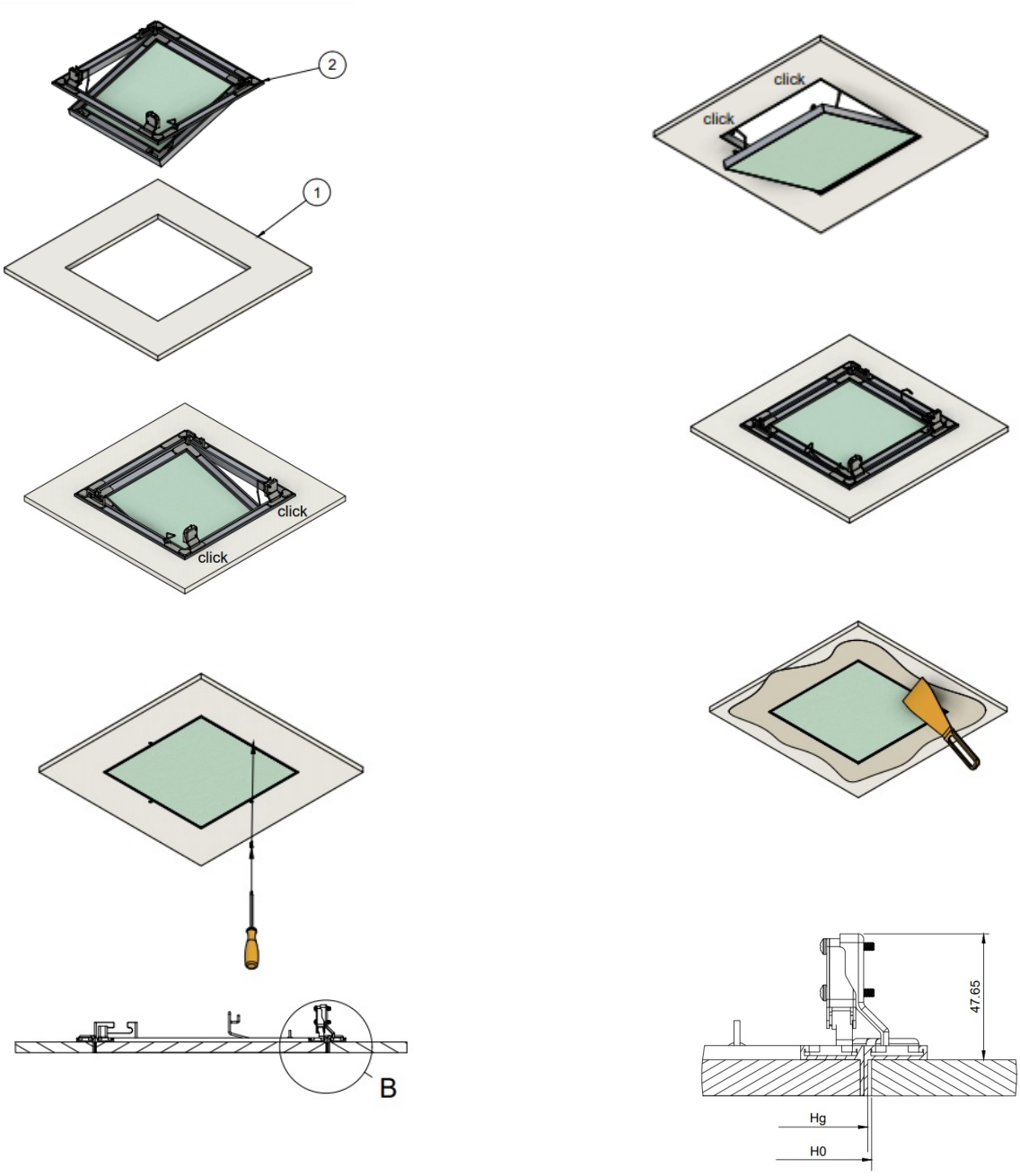
Installation

The outer frame is fixed to the ceiling/wall with screws for plasterboard.

The finishing (plaster, washable paint) of the mounted outer frame and the central part is done separately.

The cutout in the wall/ceiling must be 2 mm larger than the size of the hatch.

Example: for AG-500x500 the cutout is 502x502 mm.



Order code

Example on how to place an order

Type	Dimensions
AG	
On request	

Air through perfection

Access door

AD



ACP
Access hatch

Access door
AD



Description

The access door is recommended for use in areas that require regular access.

The access door makes it easier to check the air conditioning works and installations.

Can be used for wall or ceiling mounting.

Technical specifications

Characteristics

Opening/closing the door is easy.

The door has a click opening system (opens/closes by pressing).

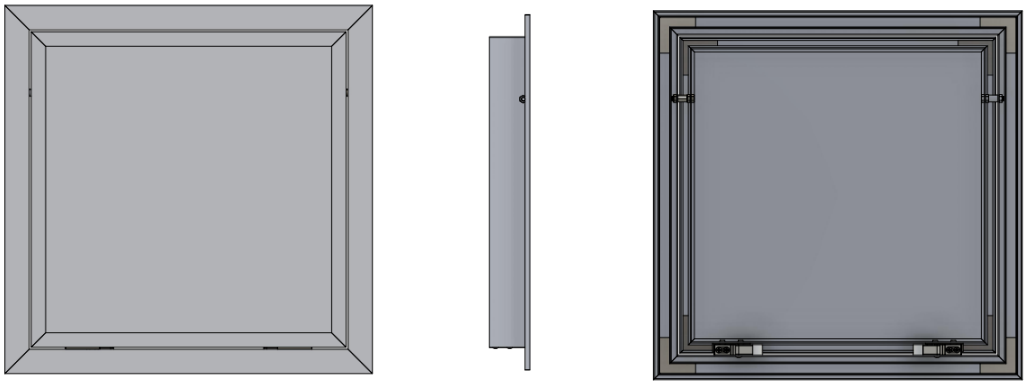
Dimensions limits: minimum 200 x 200 mm, maximum 1200 x 600 mm.

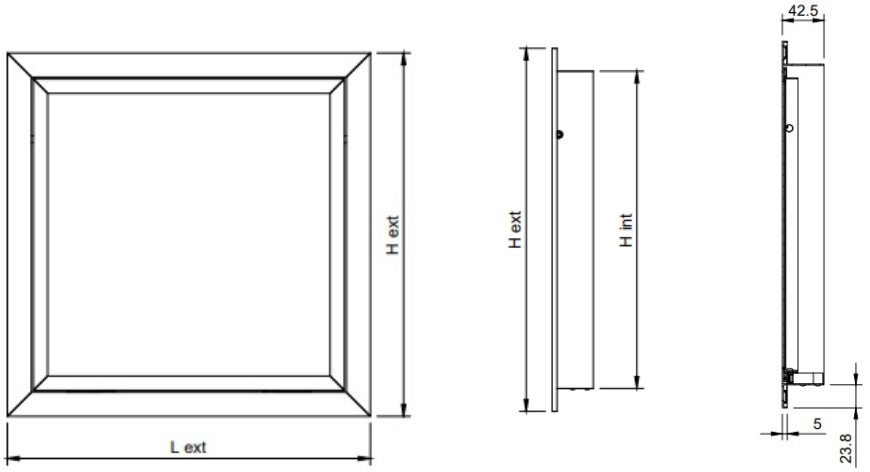
Materials

The product is made of extruded aluminum electrostatic field painted in glossy white RAL9016.

Other RAL colours are available on request.

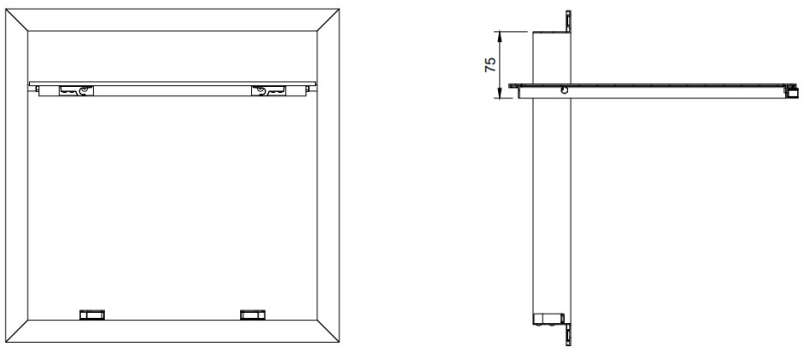
Technical drawing







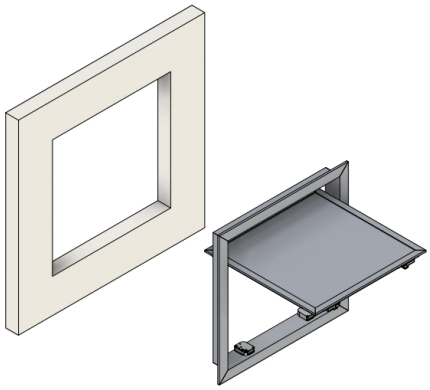
Access door open at 90°

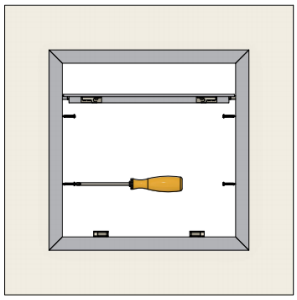


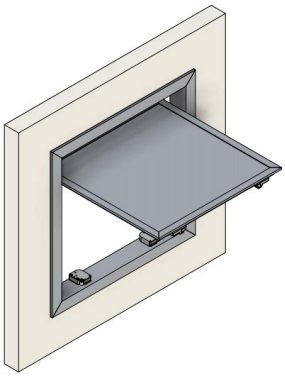
Installation

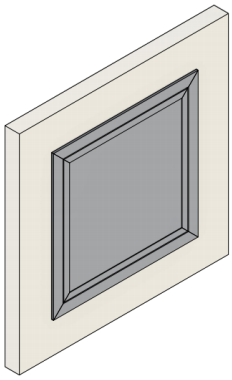
The door is fixed to the wall or ceiling with screws. For this, on the fixed frame, mounting holes are made at the construction site according to the picture.

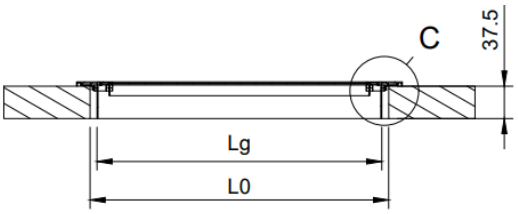
On request, the mounting holes can be made during production.

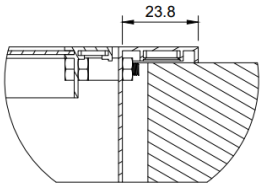












C

Order code

Example on how to place an order

Type	Dimensions	Finish
AD		
	On request	
		RAL 9016
		RAL - Other RAL colours

Air through perfection

Exhaust air valve

EV



ACP
Valves

Exhaust air valve
EV



Description

EV is a circular exhaust air valve used for air evacuation.

The valve is a practical ventilation solution for installations with constant or variable air flow.

It is recommended for small rooms with wall or ceiling mounting.

Technical specifications

Characteristics

The valve is available in the following dimensional options: 100, 125, 150, 160, 200 mm.

EV is equipped with adjustable center disc and mounting frame.

Screwing/unscrewing the center disc increases/decreases the space between the disc and the frame, thus obtaining the adjustment of the air flow.

Adjusting the disc is easy and is done manually.

The mounting frame is provided with holes and is used to attach the valve to the wall or ceiling.

The valve is provided with a sealing gasket.

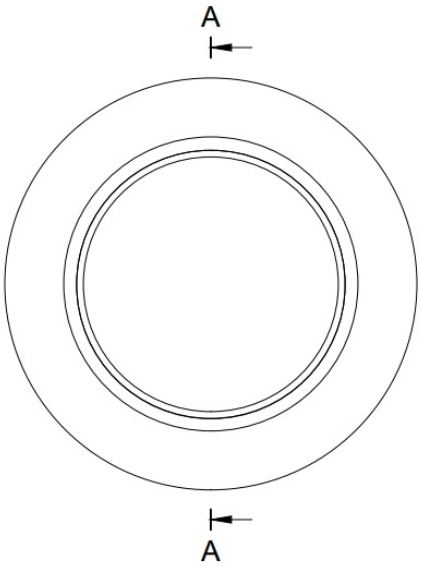
Materials

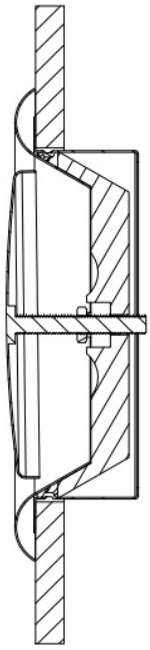
The valve is made of steel, electrostatic field painted in glossy white RAL9016.

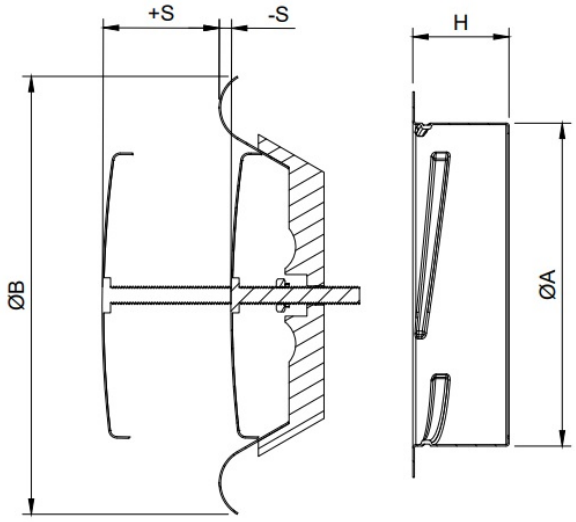
Other RAL colours are available on request.

The mounting frame is made of galvanized steel sheet.

Technical drawing







Ø A [mm]	Ø B [mm]	H [mm]
100	138	50
125	164	50
150	202	50
160	211	50
200	248	50

Functional parameters

Air flow [m³/h]	Dimension [mm]	100						125							
	S [mm]	-10	-8	-5	0	5	10	-15	-12	-9	-6	-3	0	3	6
20	NR [dB(A)]	21.00	15.00	12.00				12.00	5.00						
	△Pt [Pa]	83.00	42.00	18.00				28.00	13.00						
35	NR [dB(A)]	27.00	22.50	17.00	12.00			19.00	10.00	7.00					
	△Pt [Pa]	200.00	95.00	45.00	18.00			58.00	28.00	16.00					
50	NR [dB(A)]		33.00	28.00	22.00	17.00	12.00	31.00	22.00	20.00	16.00	10.00			
	△Pt [Pa]		250.00	130.00	50.00	28.00	13.00	155.00	80.00	50.00	30.00	18.00			
70	NR [dB(A)]		40.00	33.00	27.00	22.00	18.00	37.00	29.00	24.00	22.00	18.00	15.00		
	△Pt [Pa]		330.00	200.00	80.00	42.00	26.00	250.00	140.00	70.00	45.00	30.00	20.00		
150	NR [dB(A)]				40.00	37.00	33.00				40.00	35.00	31.00	27.00	22.00
	△Pt [Pa]				320.00	180.00	100.00				200.00	135.00	82.00	60.00	48.00

Air flow [m³/h]	Dimension [mm]	150							160					
	S [mm]	-15	-13	-10	-5	0	5	10	-15	-10	-5	0	5	10
20	NR [dB(A)]	5.00												
	△Pt [Pa]	10.00												
35	NR [dB(A)]	13.00	7.00						8.00					
	△Pt [Pa]	29.00	16.00						25.00					
50	NR [dB(A)]	24.00	20.00	13.00	8.00				20.00	10.00	6.00			
	△Pt [Pa]	78.00	45.00	27.00	18.00				72.00	28.00	14.00			
70	NR [dB(A)]	27.00	21.00	17.00	12.00				21.00	10.00	8.00	3.00		
	△Pt [Pa]	98.00	58.00	32.00	20.00				84.00	32.00	18.00	10.00		
150	NR [dB(A)]			38.00	32.00	26.00	20.00	18.00	37.00	27.00	22.00	18.00	12.00	8.00
	△Pt [Pa]			190.00	97.00	58.00	37.00	23.00	290.00	120.00	58.00	32.00	22.00	14.00
350	NR [dB(A)]					50.00	41.00	38.00			40.00	36.00	32.00	29.00
	△Pt [Pa]					250.00	150.00	100.00			310.00	190.00	140.00	90.00
550	NR [dB(A)]							60.00				45.00	38.00	36.00
	△Pt [Pa]							280.00				320.00	250.00	160.00

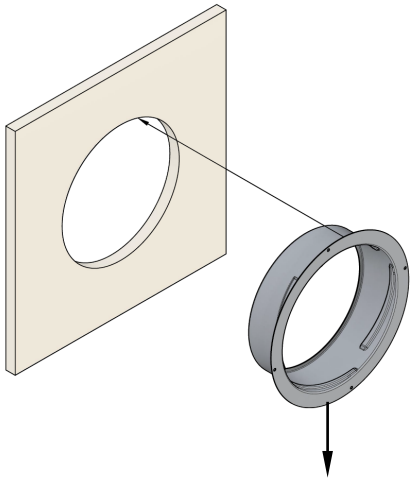
Air flow [m³/h]	Dimension [mm]	200							
	S [mm]	-25	-20	-15	-10	-5	0	10	20
50	NR [dB(A)]	17.00	7.00						
	△Pt [Pa]	50.00	18.00						
70	NR [dB(A)]	23.00	12.00	7.00					
	△Pt [Pa]	85.00	28.00	14.00					
150	NR [dB(A)]	45.00	30.00	23.00	17.00	13.00	15.00		
	△Pt [Pa]	350.00	130.00	60.00	33.00	22.0	16.0		
350	NR [dB(A)]			40.00	38.00	33.0	30.0	23.0	18.0
	△Pt [Pa]			260.00	160.00	130.0	80.0	42.0	23.0
550	NR [dB(A)]					45.00	40.00	38.0	32.0
	△Pt [Pa]					300.00	210.0	120.0	62.0

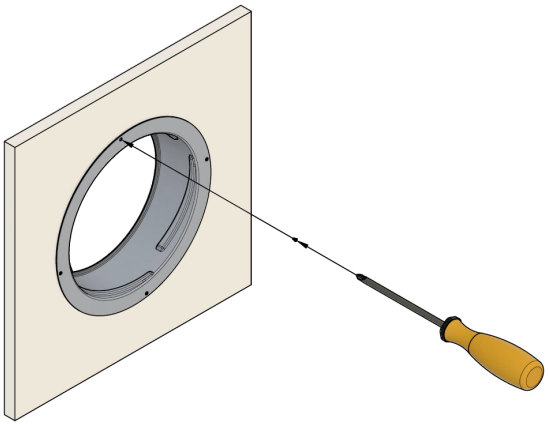
The legend
S [mm] - Opening the disc
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

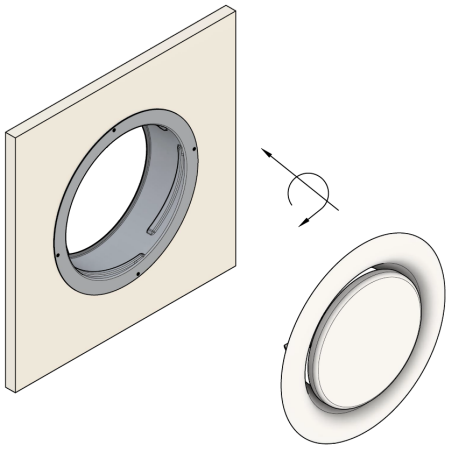
Installation

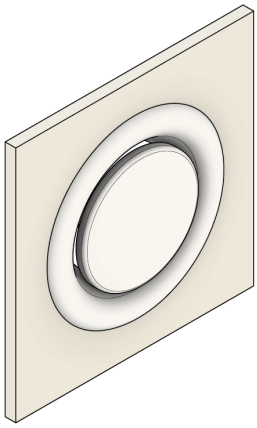
The valve can be mounted in the ceiling or wall.

The valve is fixed by means of the mounting frame.









Order code

Example on how to place an order

Type	Diameter	Finish
EV		
	100, 125, 150, 160, 200 mm	
		RAL 9016
		RAL.. - Other RAL colours on request

Air through perfection

Supply air valve

SV



ACP
Valves

www.acp.ro

Supply air valve
SV



Description

SV is a circular supply valve used to introduce air.

The valve is a practical ventilation solution, used in installations with constant or variable air flow.

Recommended for small rooms with wall or ceiling mounting.

Technical specifications

Characteristics

The valve is available in the following dimensional options: 100, 125, 150, 160, 200 mm.

The SV is equipped with an adjustable center disc and a mounting frame.

Screwing/unscrewing the center disc increases/decreases the space between the disc and the frame, thus obtaining the adjustment of the air flow.

Adjusting the disc is easy and is done manually.

The mounting frame is provided with holes and is used to attach the valve to the wall or ceiling.

The valve is provided with a sealing gasket.

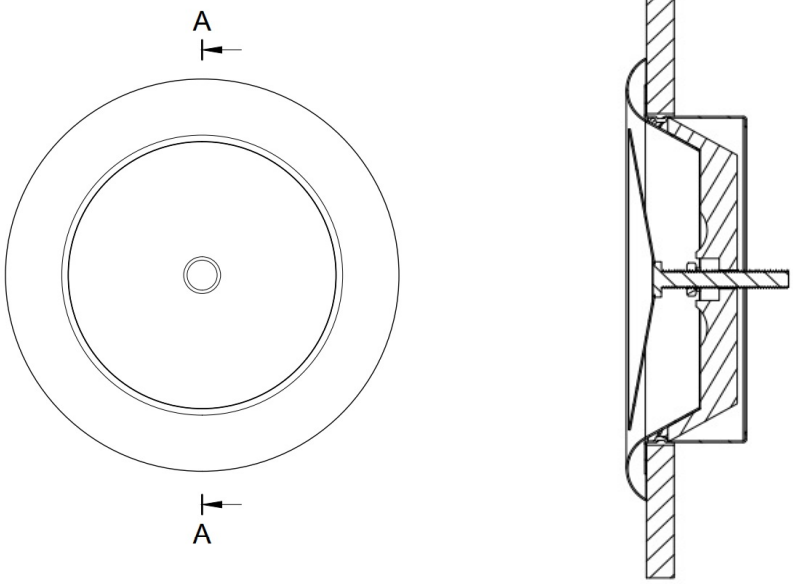
Materials

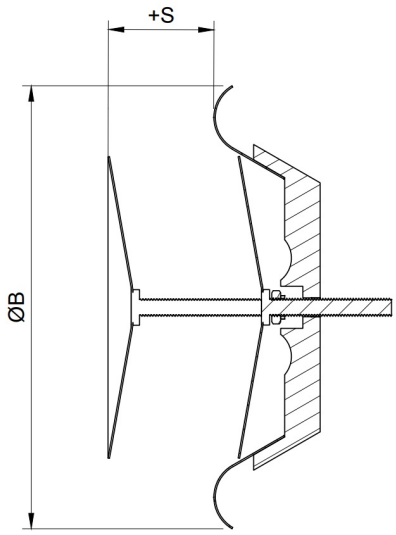
The valve is made of steel, electrostatic field painted in glossy white RAL9016.

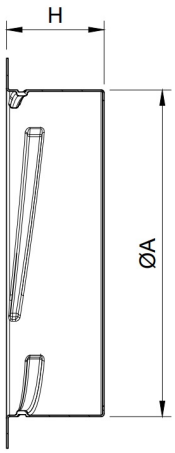
Other RAL colours are available on request.

The mounting frame is made of galvanized steel sheet.

Technical drawing







Ø A [mm]	Ø B [mm]	H [mm]
100	138	50
125	164	50
150	202	50
160	211	50
200	248	50

Functional parameters

Air flow [m³/h]	Dimension [mm]	100								125							
	S [mm]	-3	-2	0	2	4	6	8	10	-7	-3	0	3	6	9	12	15
20	X [m]	0.7	0.6	0.5	0.2					0.3							
	NR [dB(A)]	30.0	28.0	17.0	4.0					5.0							
	△Pt [Pa]	96.0	57.0	20.0	10.0					13.0							
35	X [m]	1.3	1.1	1.1	0.8	0.5				0.8	0.5						
	NR [dB(A)]	45.0	35.0	24.0	17.0	7.0				18.0	10.0						
	△Pt [Pa]	190.0	100.0	42.0	20.0	12.0				30.0	13.0						
50	X [m]			1.8	1.5	1.4	1.3	1.3	1.2	1.9	1.7	1.5	1.5				
	NR [dB(A)]			38.0	30.0	24.0	22.0	20.0	16.0	32.0	22.0	20.0	15.0				
	△Pt [Pa]			140.0	68.0	40.0	26.0	20.0	17.0	87.0	40.0	25.0	9.0				
70	X [m]			2.1	2.0	1.7	1.6	1.5	1.5	2.3	2.0	1.8	1.5	1.4	1.2		
	NR [dB(A)]			45.0	37.0	32.0	28.0	26.0	25.0	38.0	27.0	22.0	19.0	15.0	5.0		
	△Pt [Pa]			200.0	110.0	62.0	43.0	32.0	28.0	140.0	66.0	40.0	26.0	16.0	12.0		
150	X [m]					2.7	2.5	2.3	2.2			3.9	3.4	3.0	2.8	2.7	2.6
	NR [dB(A)]					43.0	40.0	38.0	37.0			42.0	36.0	31.0	28.0	27.0	25.0
	△Pt [Pa]					170.0	120.0	90.0	75.0			160.0	98.0	60.0	45.0	32.0	28.0

Air flow [m³/h]	Dimension [mm]	150							160					
	S [mm]	-5	-3	0	3	6	10	15	-10	-5	0	5	10	15
20	X [m]								1.7					
	NR [dB(A)]								17.0					
	△Pt [Pa]								22.0					
35	X [m]	0.3							3.7	2.0				
	NR [dB(A)]	8.0							27.0	16.0				
	△Pt [Pa]	14.0							60.0	18.0				
50	X [m]	3.0	2.6	2.0					5.6	3.3	1.8			
	NR [dB(A)]	22.0	16.0	10.0					38.0	23.0	18.0			
	△Pt [Pa]	38.0	25.0	14.0					145.0	43.0	16.0			
70	X [m]	4.0	3.4	2.7	2.2				7.0	4.5	2.9	1.8		
	NR [dB(A)]	30.0	23.0	16.0	10.0				42.0	32.0	20.0	10.0		
	△Pt [Pa]	62.0	42.0	25.0	15.0				240.0	70.0	28.0	12.0		
150	X [m]		6.5	5.2	4.4	3.8	3.0	2.7			5.6	4.2	3.1	2.8
	NR [dB(A)]		42.0	35.0	28.0	22.0	18.0	12.0			38.0	28.0	22.0	20.0
	△Pt [Pa]		160.0	100.0	59.0	38.0	27.0	16.0			115.0	50.0	29.0	20.0
350	X [m]				7.0	6.0	5.4	5.0				7.5	5.5	5.1
	NR [dB(A)]				50.0	43.0	39.0	35.0				50.0	40.0	38.0
	△Pt [Pa]				250.0	140.0	100.0	60.0				185.0	105.0	75.0

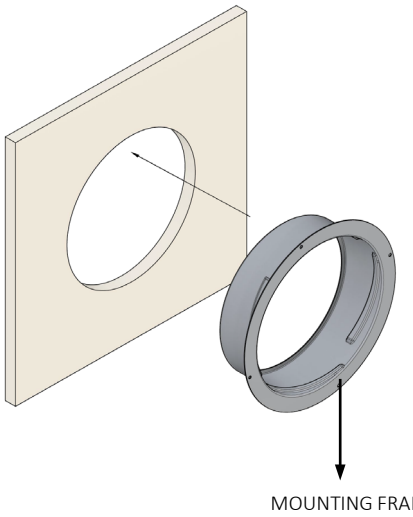
Air flow [m³/h]	Dimension [mm]	200							
	S [mm]	-3	0	3	6	9	12	15	20
35	X [m]	1.5							
	NR [dB(A)]	18.0							
	△Pt [Pa]	23.0							
50	X [m]	3.1	1.8						
	NR [dB(A)]	28.0	18.0						
	△Pt [Pa]	52.0	16.0						
70	X [m]	4.0	2.5	1.4					
	NR [dB(A)]	37.0	22.0	12.0					
	△Pt [Pa]	90.0	29.0	12.0					
150	X [m]		5.0	3.9	2.9	2.2	1.8		
	NR [dB(A)]		38.0	27.0	20.0	18.0	12.0		
	△Pt [Pa]		115.0	50.0	29.0	18.0	12.0		
350	X [m]			6.5	5.5	4.9	4.0	3.5	3.0
	NR [dB(A)]			40.0	35.0	30.0	28.0	16.0	24.0
	△Pt [Pa]			170.0	100.0	60.0	42.0	32.0	23.0
550	X [m]				7.0	6.0	5.4	5.1	5.0
	NR [dB(A)]				45.0	40.0	37.0	37.0	34.0
	△Pt [Pa]				200.0	135.0	90.0	62.0	50.0

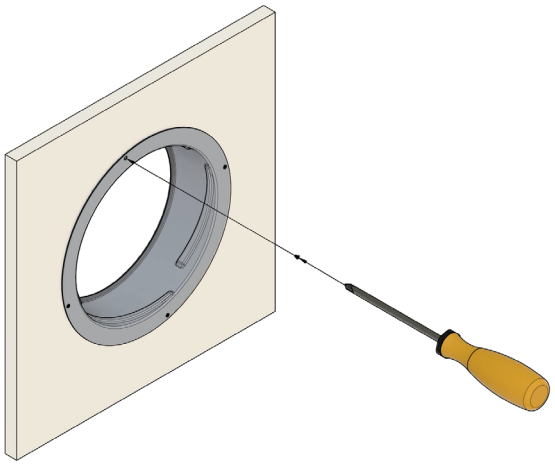
The legend
S [mm] - Opening the disc
X [m] - Air jet length at the velocity 0.2 m/s
NR [dB (A)] - Noise level without room attenuation
ΔPt [Pa] - Pressure loss

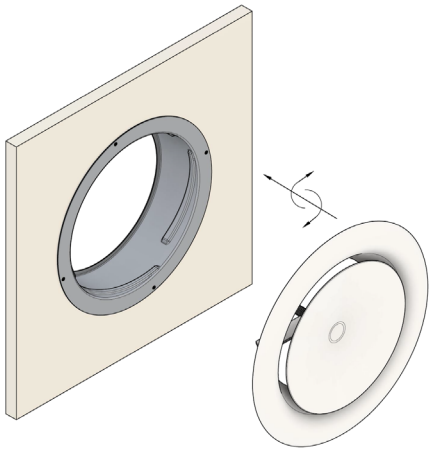
Installation

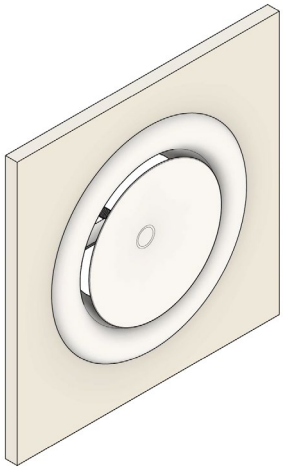
The valve can be mounted in the ceiling or wall.

The valve is fixed by means of the mounting frame.









Order code

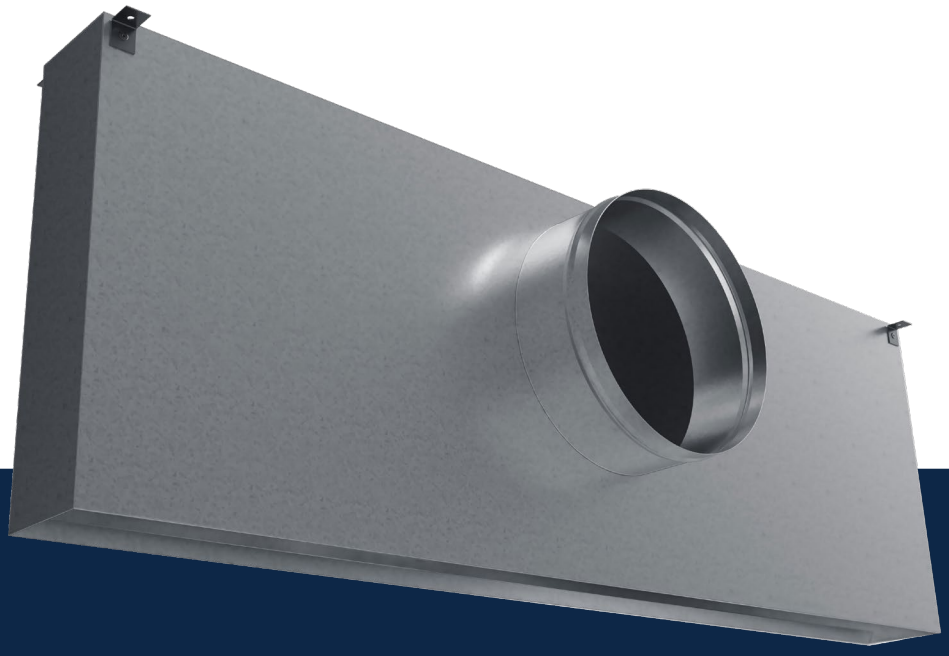
Example on how to place an order

Type	Diameter	Finish
SV		
	100, 125, 150, 160, 200 mm	
		RAL 9016
		RAL.. - Other RAL colours on request

Air through perfection

Plenum box

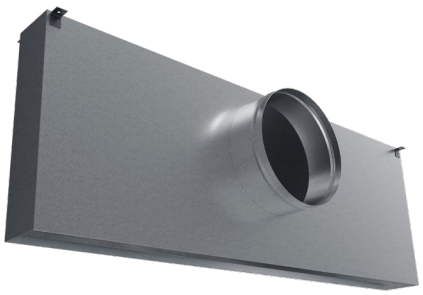
AN & AI2



ACP
Plenum

www.acp.ro

Plenum box
AN & AIZ



Description

Adapter (plenum box) made of Z140 galvanized steel sheet as a mixing element, air distribution and connection between the grille/diffuser and the duct.

The plenum is designed to distribute and balance airflow before diffusion, through the terminals (grilles and diffuser).

Depending on the functional role, it can be insulated (AIZ) or uninsulated (AN).

Technical specifications

Characteristics

The adapter is made with one or more connections (spigots) for connection to the duct.

The spigot is positioned opposite the grille (vertical connection) or sideways (horizontal connection), according to the drawings.

The adapter is insulated inside. On request, the insulation can be placed on the outside of the plenum.

The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct.

Materials

The product is made of galvanized steel sheet with zinc coating Z-140 g/m^2.

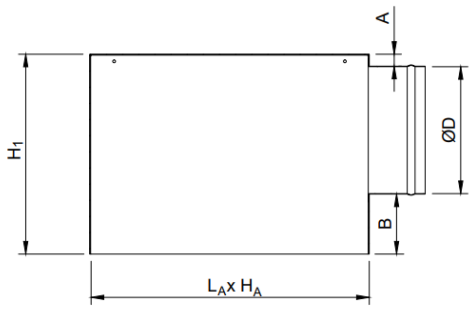
The thickness of the metal sheet is 0.6 mm (standard) and can vary between 0.6 - 1 mm depending on the request or the dimensions of the plenum.

The insulation of the AIZ adapter is made by applying an elastomeric rubber with a thickness of 6 mm.

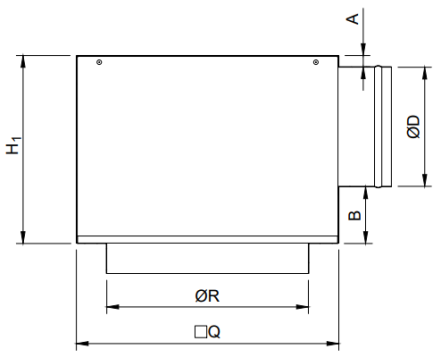
Technical drawing

Constructive variants

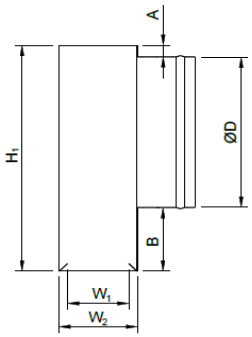
A.



B.



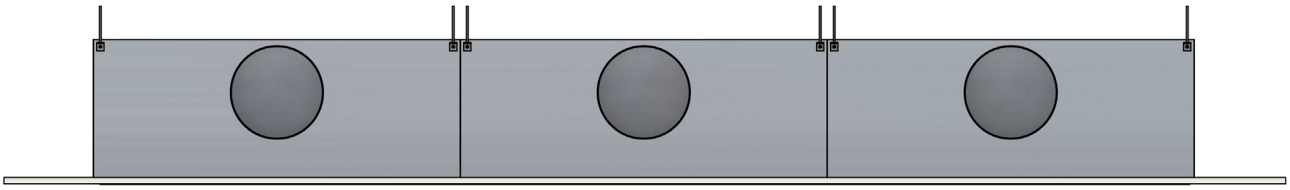
C.



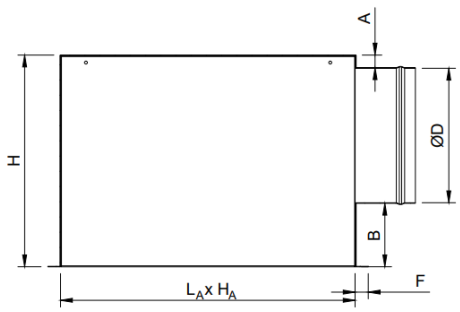
A – Plenum model for rectangular or square grilles/diffusers
B – Plenum model for circular grilles/diffusers
C – Plenum model for linear diffusers

L_A x H_A, ØR, □Q, W1, W2 – depending on grille or diffuser size
A, H1, ØD – according on the request
B – depending on the depth of the grille/diffuser and the request

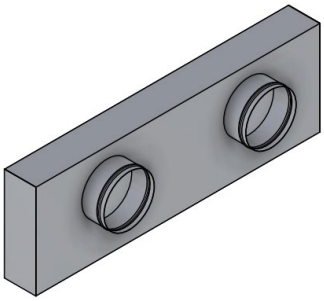
In the case of long linear diffusers, the plenum -Model C- is delivered in several sections

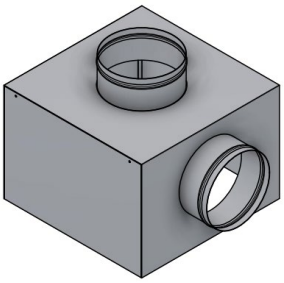


The plenum model A can be made, on request, with a seating flange. Flange size (F) is made according to the request ex. 10, 15, 20 mm.

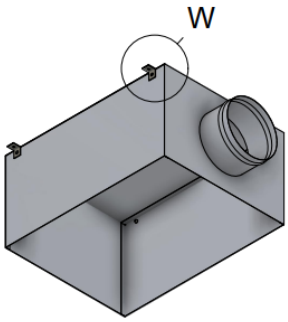


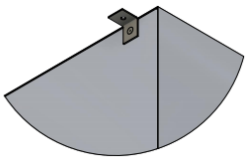
On request, plenums can be made with 1,2,3 or more connection for circular duct.





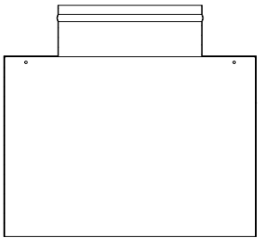
The plenums are equipped, as standard, with suspension lugs.



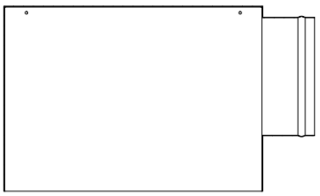


W - Suspension lug

Vertical or horizontal connection



Vertical connection
(opposite exit)

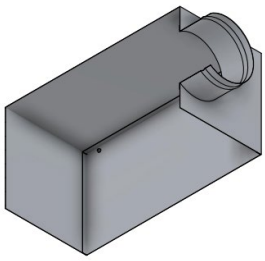


Horizontal connection
(side/lateral exit)

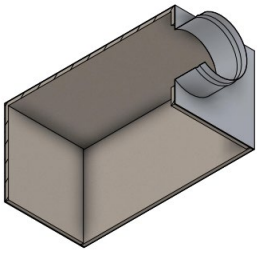
Uninsulated and insulated plenums

The material used to insulate the plenums is made of elastomeric rubber with a thickness of 6 mm.

The insulation is positioned, as standard, on the inside of the plenum. On request, it can be positioned on the outside.



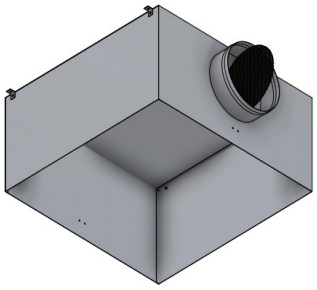
AN - Uninsulated plenum box



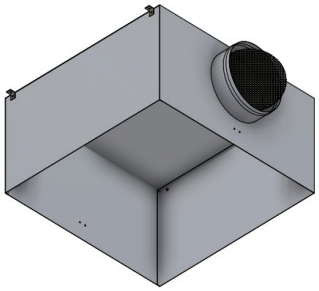
AIZ - Insulated plenum box

Accessories

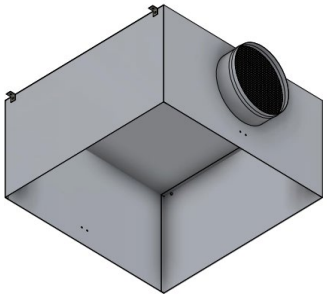
Perforated damper



Position 0°



Position 45°



Position 90°

The perforated damper is mounted on the adapter nozzle and has the role of balancing the air flow.

Control damper



RD-G – Shut-off damper

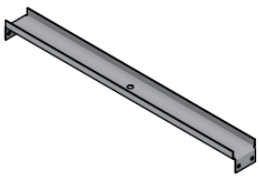


RD-S – Shut-off damper for actuator

The manually or electrically operated control damper (with servomotor) can be mounted on the plenum box connection.

Bracket ("U" system)

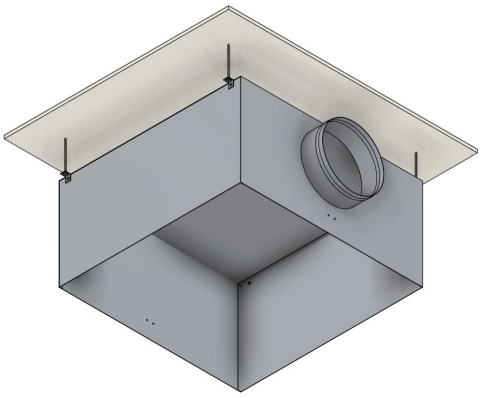
The bracket is used for mounting/fixing the plenum diffusor.



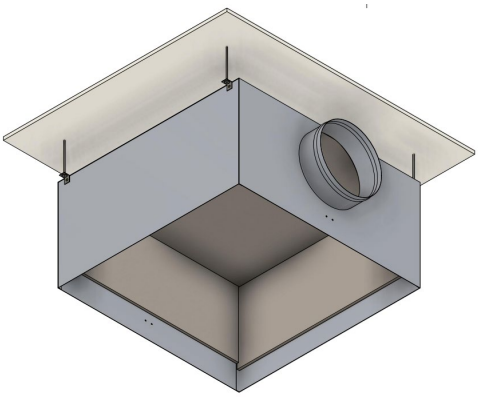
Installation

The fixing of the plenum in the ceiling is done with the help of the suspension elements (lugs).

Suspended in the ceiling

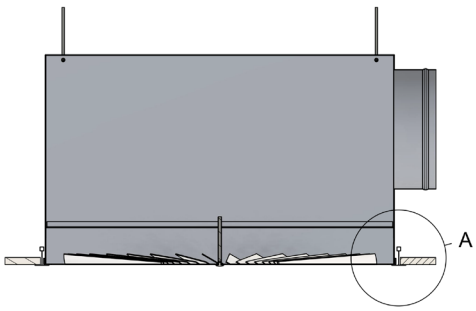


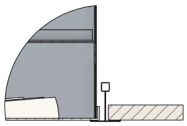
AN



AIZ

Ex. Plenum mounting with ST diffusor in suspended grid ceiling





A

Order code

Example on how to place an order

Type	Dimensions	Spigot	Accessories
AIZ			
AN			
	On request		
		1 (Number of outputs) x Ø...	
		Perforated damper	
		RD-G - Shut-off damper	
		RD-S - Shut-off damper for actuator	
			Bracket

Air through perfection

Uninsulated flexible duct

TF-N



ACP
Flexible duct

Uninsulated flexible duct
TF-N



Description

Uninsulated flexible duct is used in ventilation and air conditioning systems, without special requirements, for air supply.

Technical specifications

Characteristics

The duct can be easily installed on the round or oval connecting parts.

Uninsulated flexible duct is made in accordance with EN13180.

The flexible duct has a length of 10 m/piece.

The temperature range is -30°C ÷ 140°C and the pressure is up to +2500 Pa.

Dimensional range: Ø102, Ø127, Ø160, Ø203, Ø254, Ø315, Ø356.

Materials

The flexible duct is made of multiple layers of aluminum and polyester with a high-strength carbon steel spiral, closed between the layers.

Product specifications

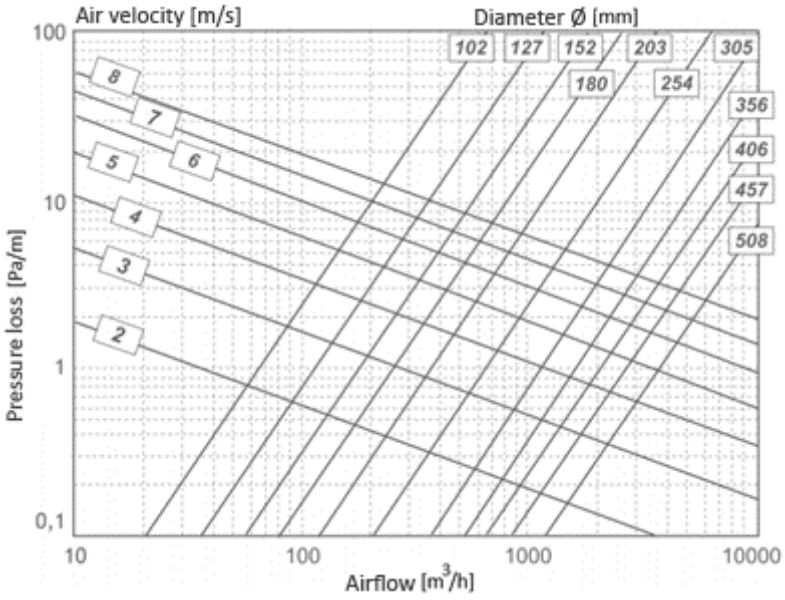
TF-N is made of 2 layers: 1 layer of 7µ aluminum and 1 layer of 12µ polyester.

The total thickness is 19µ.

The distance between the wires is 25-36 mm.

The maximum operating air velocity is 20 m/s.

Chart



Order code

Example on how to place an order

Type	Dimensions
TF-N	
On request	

Air through perfection

Insulated flexible duct

TF-12



ACP
Flexible duct

Insulated flexible duct
TF-IZ



Description

Insulated flexible ducting is used in ventilation and air conditioning systems for air supply.

The insulated duct prevents condensation and minimizes heat or cold losses in the installation.

Technical specifications

Characteristics

The insulated duct consists of a flexible inner tube, a layer of mineral wool insulation and a high-strength outer shell.

The duct is made in accordance with EN13180.

It is classified according to EU (EN 13501-1) - B-s1, d0 and FR (NF) - M1.

The duct can be easily installed on the round or oval connecting parts.

The flexible duct has a length of 10 m/piece.

The temperature range is -30 ° C ÷ 140 ° C and the pressure up to +1500 Pa.

Dimensional range: Ø102, Ø127, Ø160, Ø203, Ø254, Ø315, Ø356.

Materials

The inner duct and outer shell are made of multiple layers of aluminum and polyester.

The inner duct contains a high-strength carbon steel spiral, closed between layers.

The insulation is made of 25 mm thick mineral wool and is yellow.

Product specifications

The inner duct is made of 2 layers: 1 layer of 7µ layer of aluminum and 1 layer of 12µ polyester.

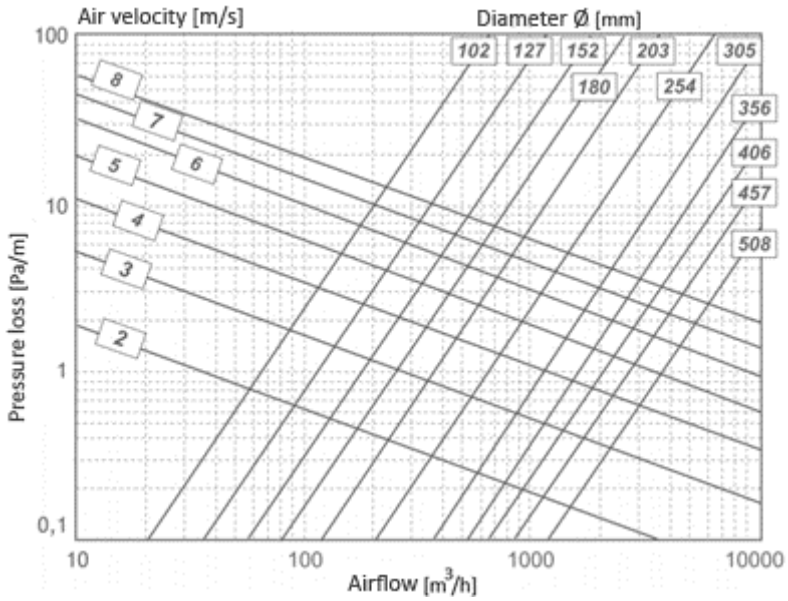
Inner duct thickness 19µ.

The outer shell is made of 3 layers: 1 layer of 7µ aluminum and 2 layers of 12µ polyester.

Total outer channel thickness 31µ.

The maximum speed is 20 m/s.

Chart



Order code

Example on how to place an order

Type	Dimensions
TF-IZ	
On request	

Air through perfection

Mounting frame



ACP
Accessories

www.acp.ro

Mounting frame
CC



Description

Galvanized steel sheet mounting frame is used for mounting the grille in the wall or ceiling.

The mounting frame is the element that gives us the advantage of a hidden grille mounting.

Technical specifications

Characteristics

Device used for hidden, easy and fast mounting.

In order to be mounted with a mounting frame, the grille is accessorized with fixing clips.

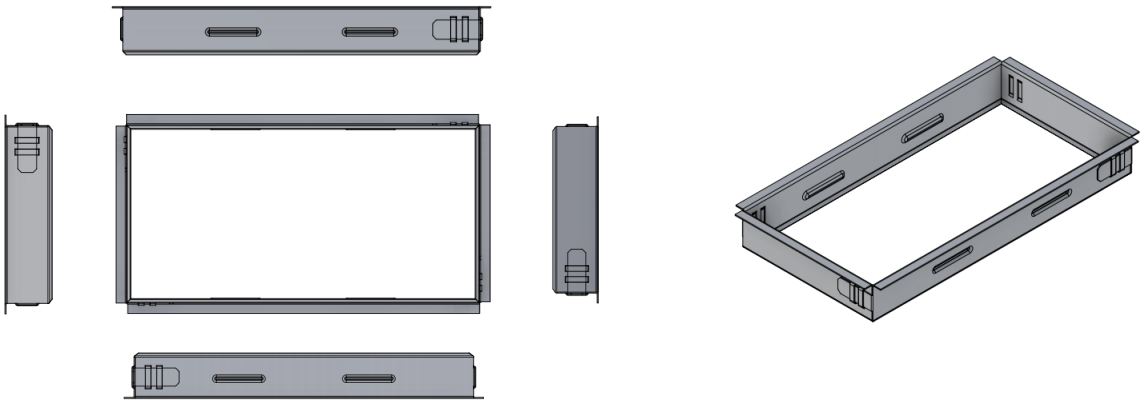
The fixing of the grille in the mounting frame is done by clamping which determines an easy assembly and disassembly.

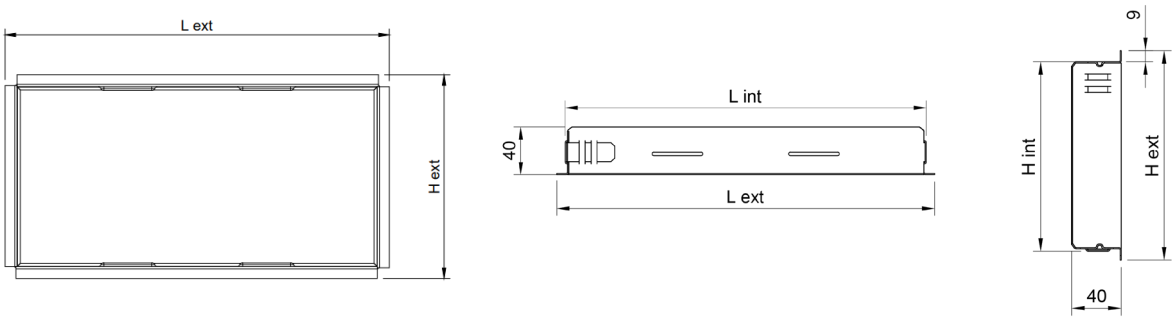
The large dimensions are made of several pieces with the possibility of joining.

Materials

The mounting frame and fixing clips are made of galvanized steel sheet.

Technical drawing



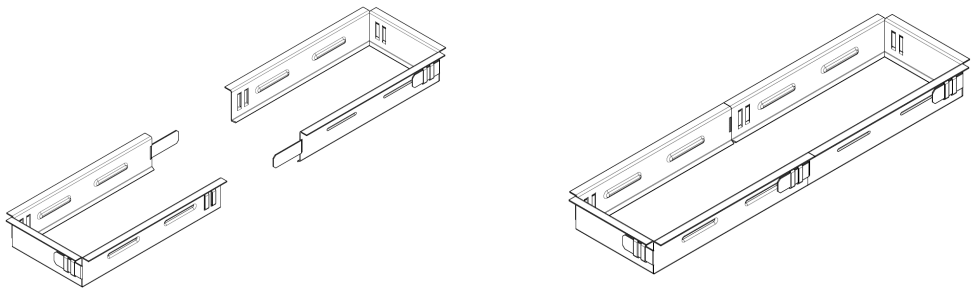


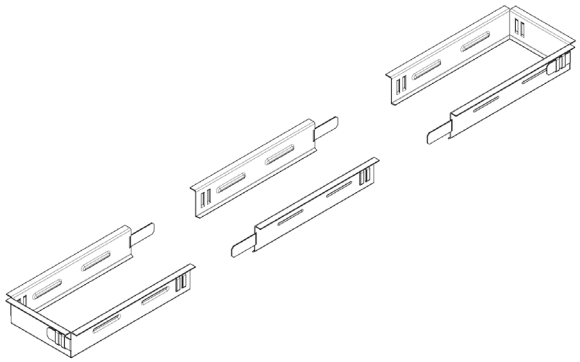
Large sizes are made of several pieces/elements.

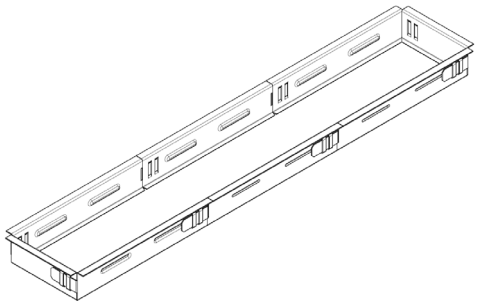
The table below gives the number of elements, from which a mounting frame can be made, depending on the dimensions.

L x H [mm]	Mounting frame																			
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
100	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
150	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
200	-	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
300	-	-	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
400	-	-	-	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
500	-	-	-	-	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
600	-	-	-	-	-	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2

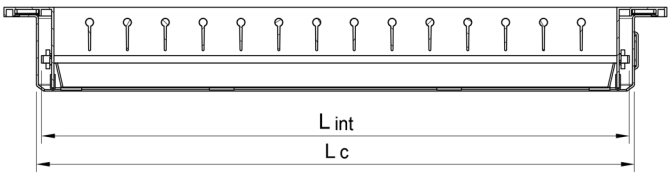
When the mounting frame is made of several pieces, the assembly is performed according to the drawings below.

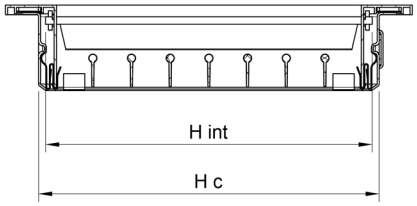






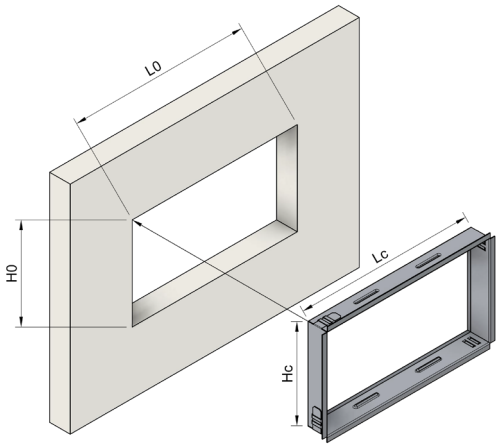
Example: mounting the DD grille with mounting frame

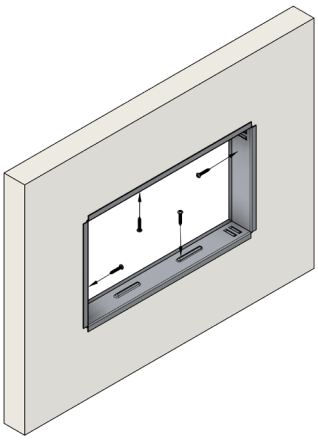


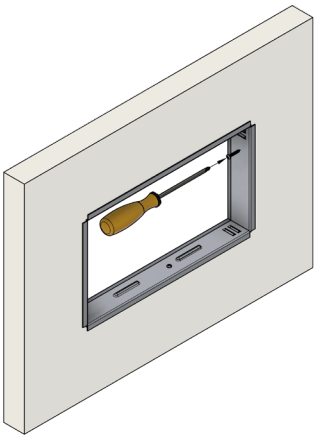


Installation

The mounting frame is fixed in the existing hole with screws.







Order code

Example on how to place an order

Type	Dimensions
CC	
On request	

Air through perfection

Filter material



ACP
Accessories

www.acp.ro

Filter material
F

Description

G4 class filter material, used for coarse filtration in ventilation and air conditioning systems.

Technical specifications

Characteristics

The thickness of the filter material is 20 mm.

The filtering capacity is 94% and according to EN779 it has filter class G4.

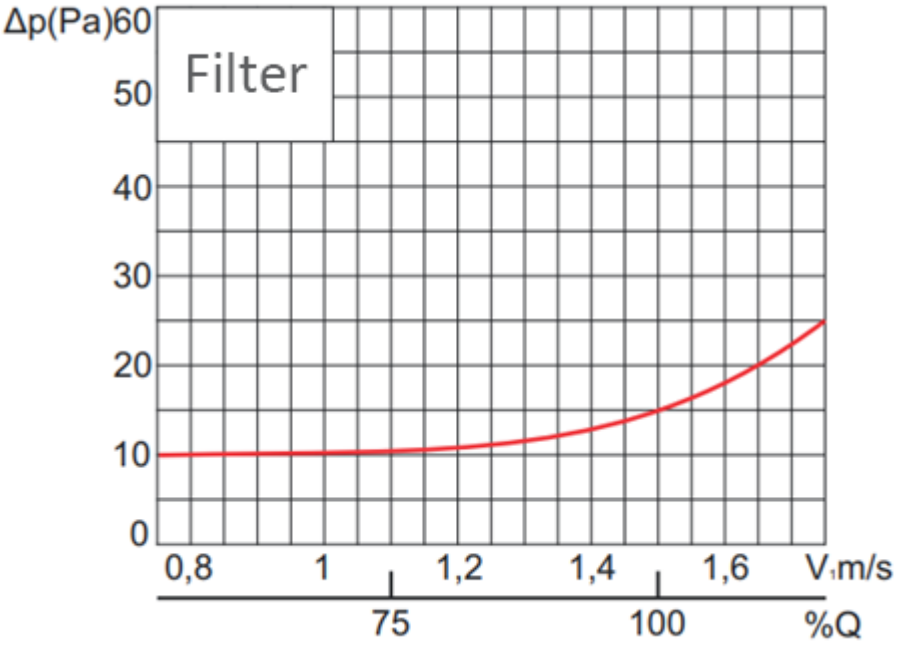
Materials

The filter material is made of synthetic polyester.

Maintenance

The product does not require maintenance, but periodic checks are recommended to check the degree of clogging.

Functional parameters



Order code

Example on how to place an order

Type	Dimensions
F	
On request	

Air through perfection

Washable filter material

FL



ACP
Accessories

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Washable filter material
FL



Description

Washable filter material is used in ventilation-air conditioning systems for air filtration.

Technical specifications

Characteristics

The thickness of the filter material is 12 mm.

The degree of retention is high 80-90%.

The airflow is bidirectional.
The filter is washed with water.

Materials

The filter material is washable and is made of synthetic polyester.

Maintenance

The product does not require maintenance, but periodic checks are recommended to check the degree of clogging.

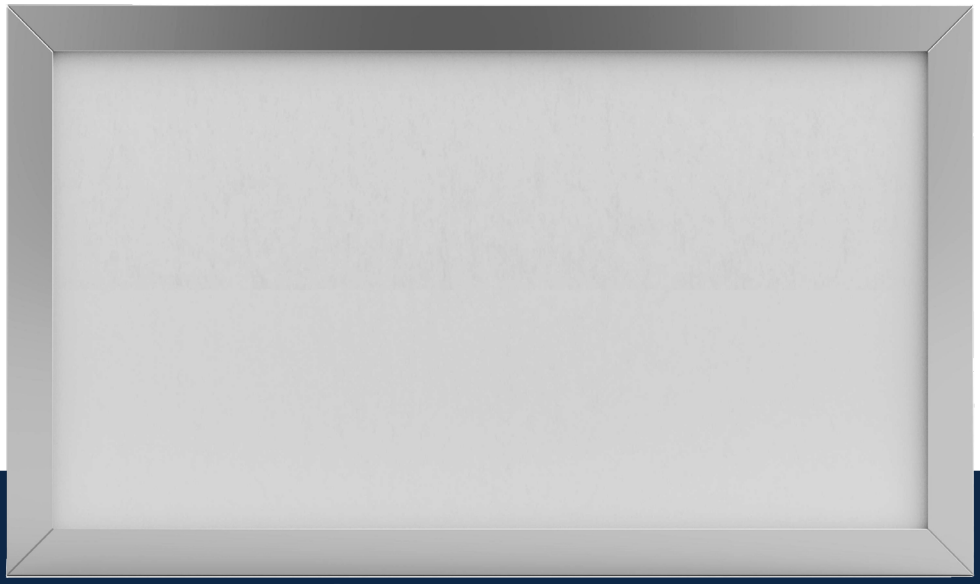
Order code

Example on how to place an order

Type	Dimensions
FL	
	On request

Air through perfection

Air filter with frame



ACP
Accessories

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Air filter with frame
F-R



Description

G4 air filter with “U” type frame is used in ventilation-air conditioning systems for air filtration.

It is recommended for mounting on extraction (return) grilles.

Technical specifications

Characteristics

F-R is composed of G4 filter material and "U" type aluminum frame.

The thickness of the filter material is 20 mm.

Materials

The filter material is made of synthetic polyester.

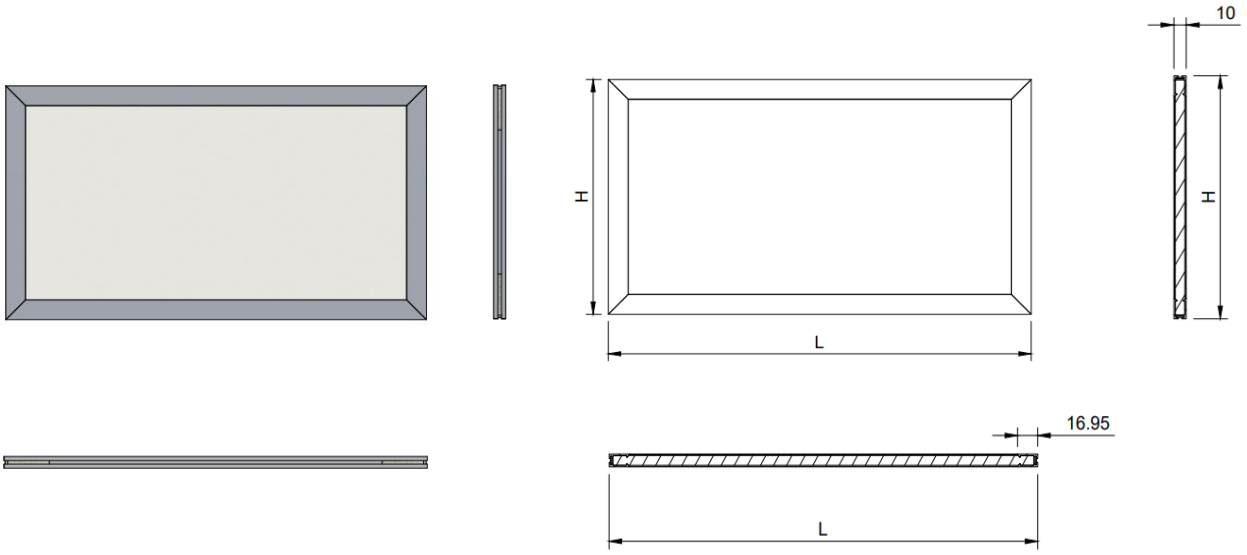
The filtering capacity of the material is 94% and according to EN779 it has G4 filtration class.

The filter frame is made of extruded aluminum profiles with natural finish (unpainted).

Maintenance

The product does not require maintenance, but periodic checks are recommended to check the degree of clogging.

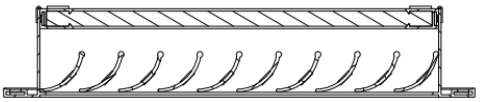
Technical drawing



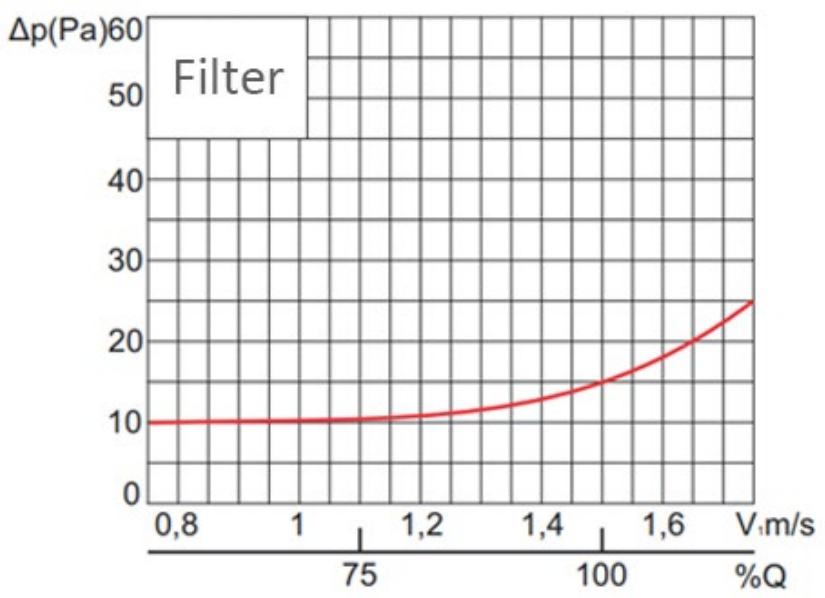
The large dimensions are made of several independent pieces.

L x H [mm]	Air filter																			
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
150	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
200	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
300	-	-	1	1	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3
400	-	-	-	1	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3
500	-	-	-	-	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3
600	-	-	-	-	-	1	2	2	2	2	2	2	2	3	2	3	3	3	3	4

Example: F-R filter mounted on SD grille



Functional parameters



Installation

Mounting with screws on the grille connection.

Order code

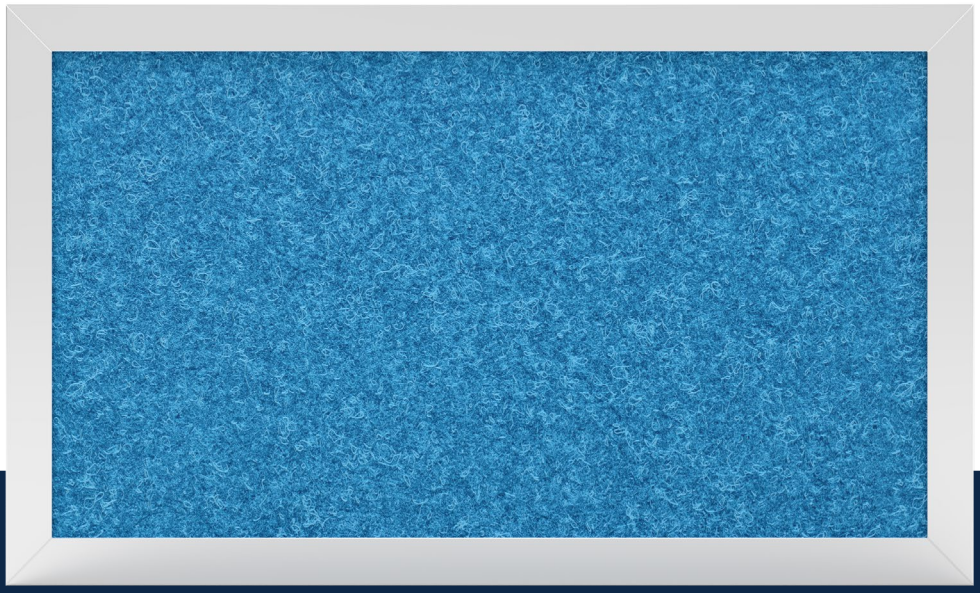
Example on how to place an order

Type	Dimensions
F-R	
On request	

Air through perfection

Washable filter with frame

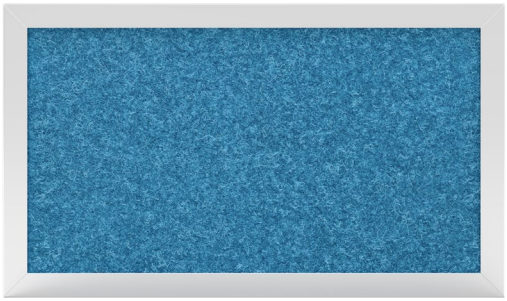
FL-R



ACP
Accessories

www.acp.ro

Washable filter with frame
FL-R



Description

Washable air filter with “U” type frame is used in ventilation-air conditioning systems for air filtration.

It is recommended for mounting on extraction/return grilles.

Technical specifications

Characteristics

The FL-R is made of washable filter material and a “U” type aluminum frame.

The thickness of the filter material is 12 mm.

The airflow is bidirectional.

Materials

The filter material is made of synthetic polyester with a high degree of retention 80-90%.

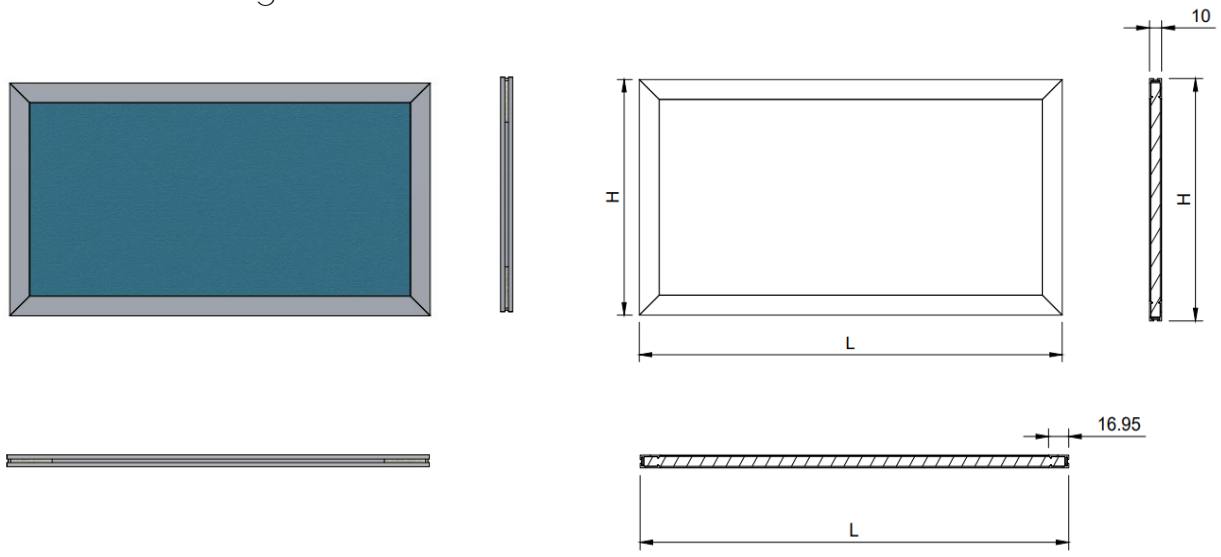
The filter frame is made of extruded aluminum profiles with natural finish (unpainted).

Maintenance

The product does not require maintenance, but periodic checks are recommended to check the degree of clogging.

The filter is washed with water.

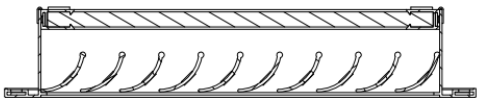
Technical drawing



The large dimensions are made of several independent pieces.

L x H [mm]	Air filter																			
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
85	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
150	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
200	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
300	-	-	1	1	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3
400	-	-	-	1	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3
500	-	-	-	-	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3

Example: FL-R filter mounted on SD grille



Installation

Mounting with screws on the grille connection.

Order code

Example on how to place an order

Type	Dimensions
FL-R	
On request	