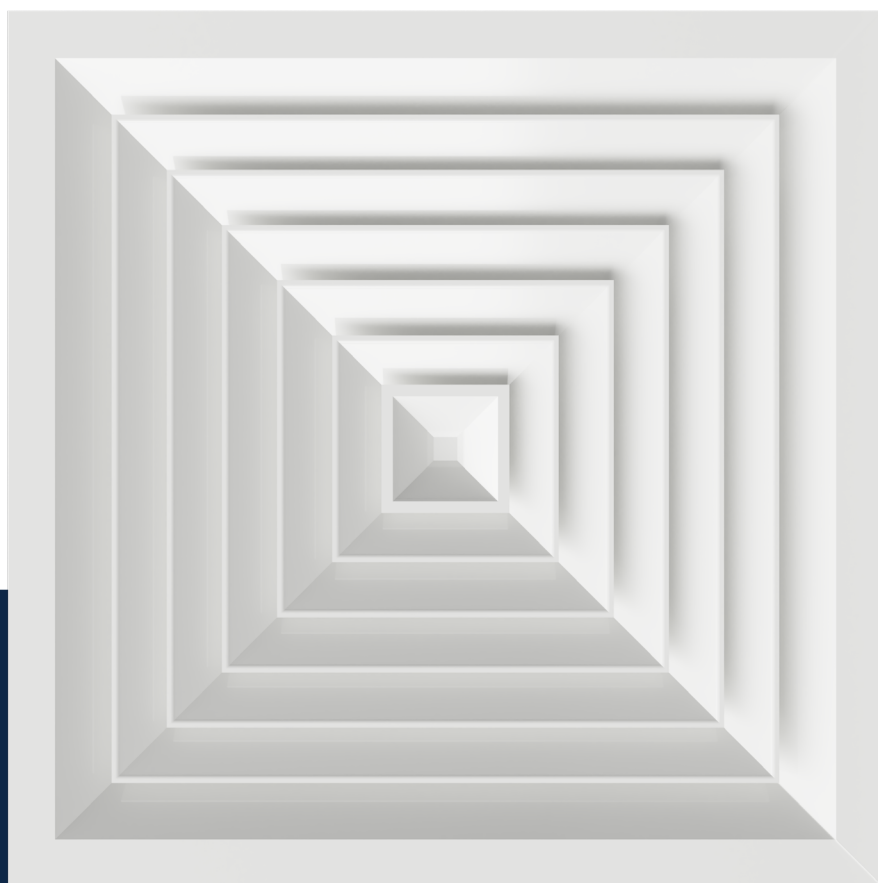


Air through perfection

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.

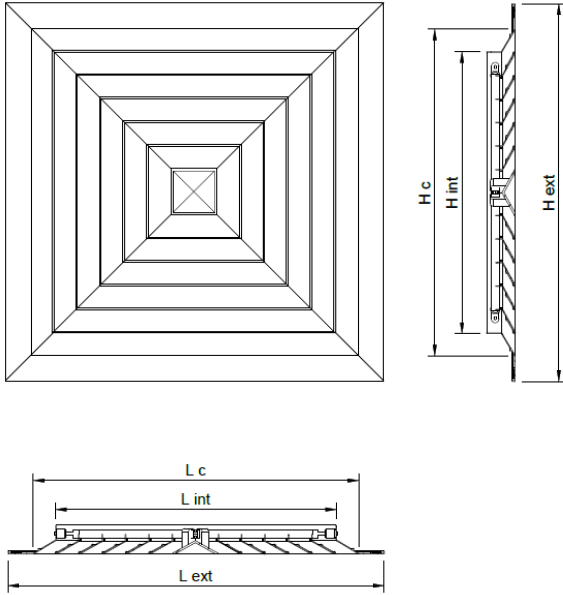
Materials

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

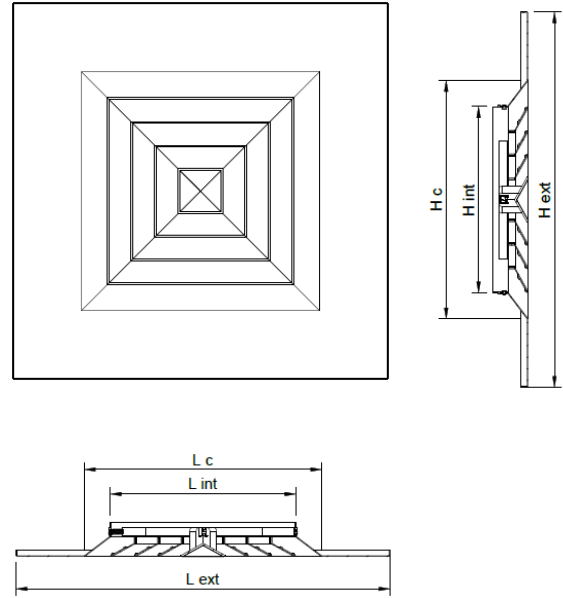
Other RAL colours are available on request.

Technical drawing

Narrow frame ceiling diffuser



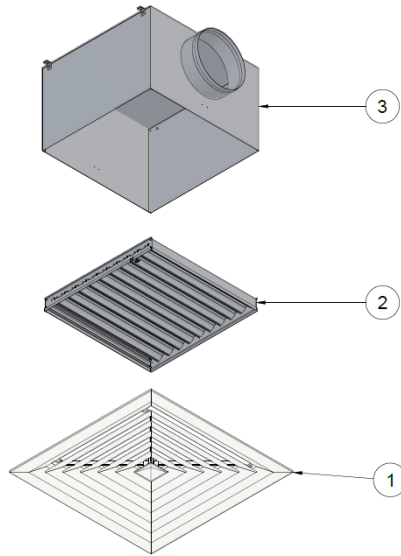
Wide frame ceiling diffuser



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

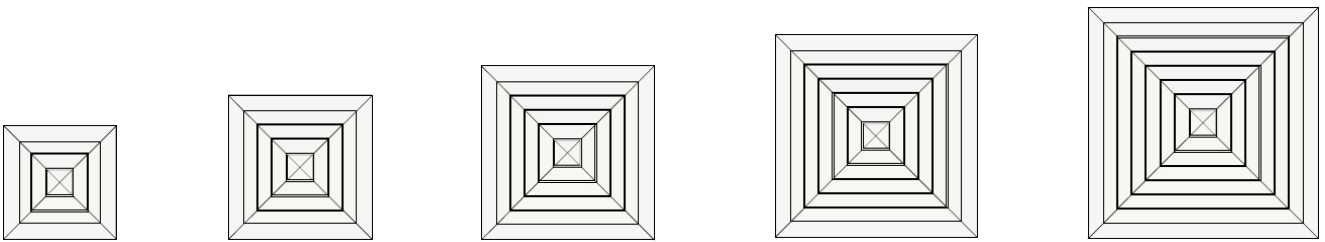
Int / Ext [mm]	Lint x Hint [mm]	Lext x Hext [mm]	Lc x Hc [mm]
150/595	145 x 145	595 x 595	227 x 227
225/595	223 x 223	595 x 595	302 x 302
300/595	295 x 295	595 x 595	377 x 377
375/595	370 x 370	595 x 595	452 x 452

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

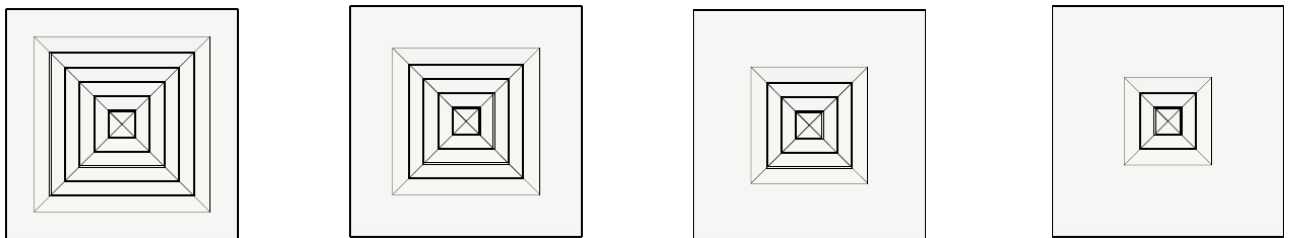
CD-4-225/370

CD-4-300/445

CD-4-375/520

CD-4-445/595

Wide frame ceiling diffuser



CD-4-375/595

CD-4-300/595

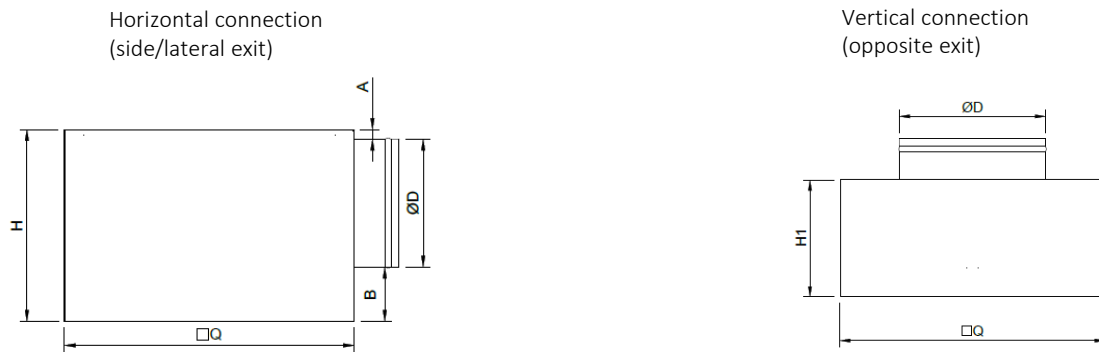
CD-4-225/595

CD-4-150/595

Accessories

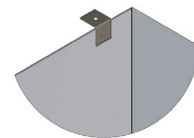
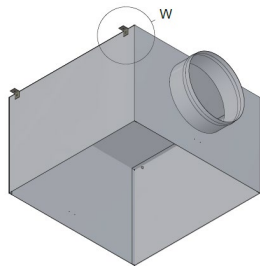
The diffuser can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection. The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct. The product can be accessorized with opposed blade damper or G4 air filter.

Adapter (plenum box)



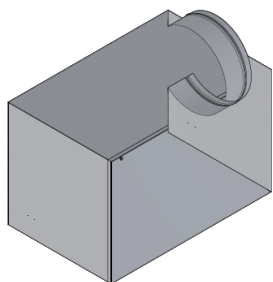
$\square Q$ – depending on the size of the ceiling diffuser Lint x Hint
 A, B, H1, $\varnothing D$ – on request
 H – depending on A, B and $\varnothing D$

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

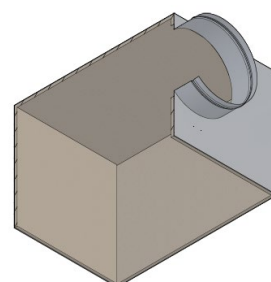


W - Suspension lug

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

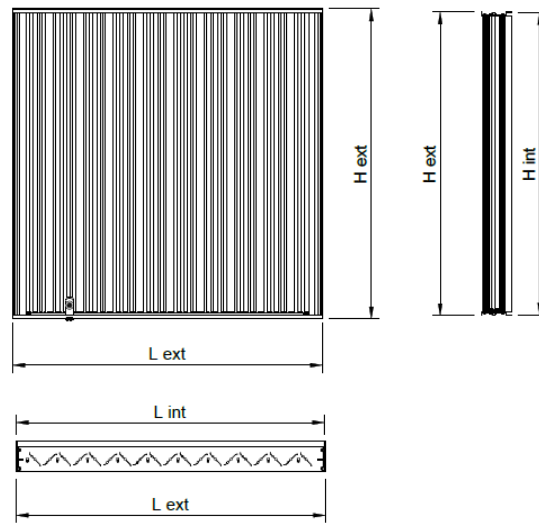


AN - Uninsulated adapter



AIZ - Insulated adapter

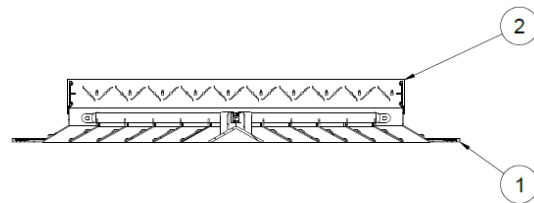
Opposed blade damper (OBD)



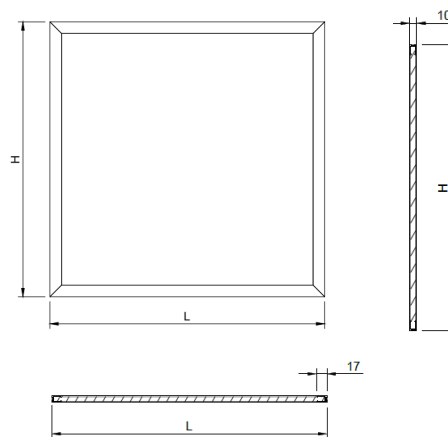
The damper is equipped with opposable blades and is mounted on the ceiling diffuser connection for adjusting the air flow.

Example: CD-4 + OBD

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



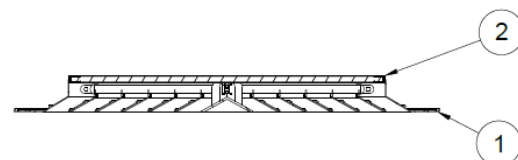
Air filter G4 (F-R)



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	LXH int	150x150	225x225	300x300	375x375	445x445
[m ³ / h]	Ak [m ²]	0.0108	0.0245	0.0436	0.0680	0.0978
160	V _{eff} [m/s]	4.1				
	X [m]	1.0				
	NR [dB(A)]	29.0				
	ΔPt [Pa]	12.0				
200	V _{eff} [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	V _{eff} [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	V _{eff} [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	V _{eff} [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	V _{eff} [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	V _{eff} [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	V _{eff} [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	V _{eff} [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	V _{eff} [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	V _{eff} [m/s]					8.5
	X [m]					6.3
	NR [dB(A)]					57.0
	ΔPt [Pa]					51.0

The legend

Ak [m²] - The free surface

V_{eff} [m/s] – Air velocity in diffuser

X [m] - The length of the air jet at a speed of 0.25 m/s

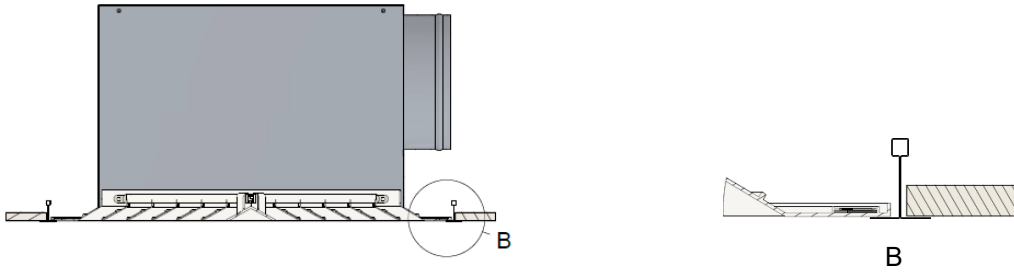
NR [dB (A)] - Noise level without room attenuation

ΔPt [Pa] - Pressure loss

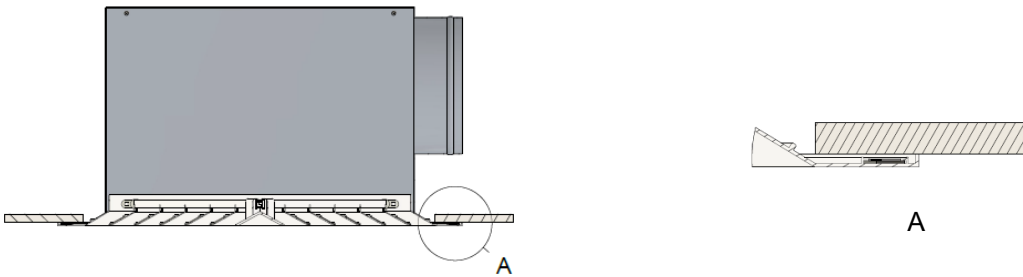
Installation

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