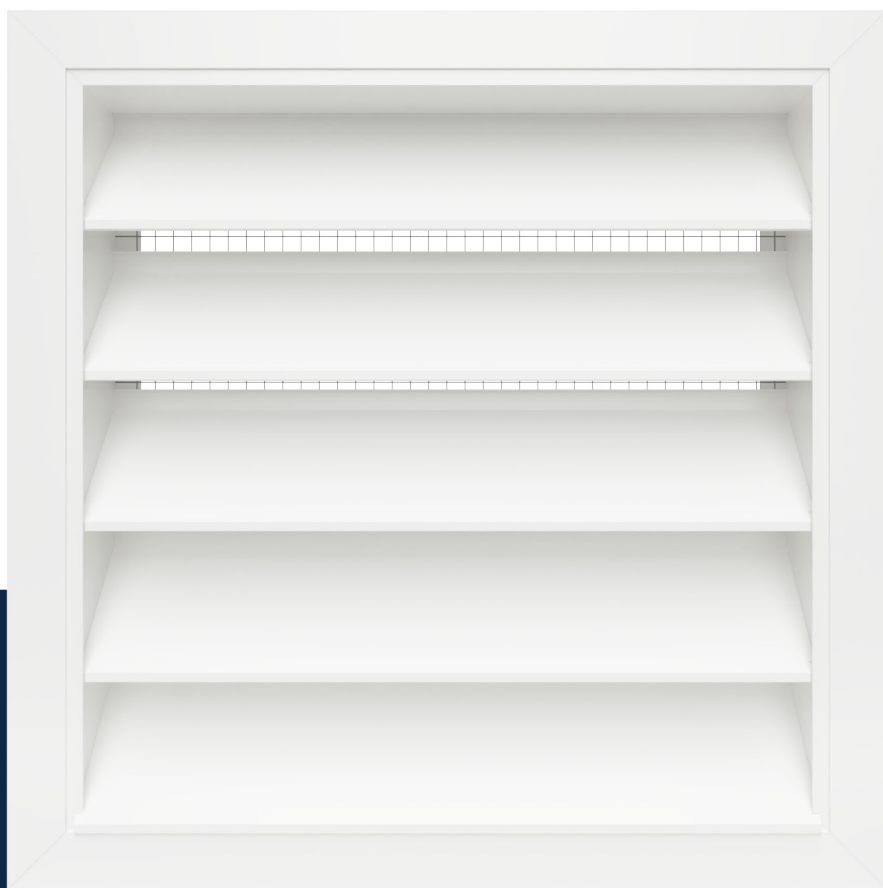


Air through perfection

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.

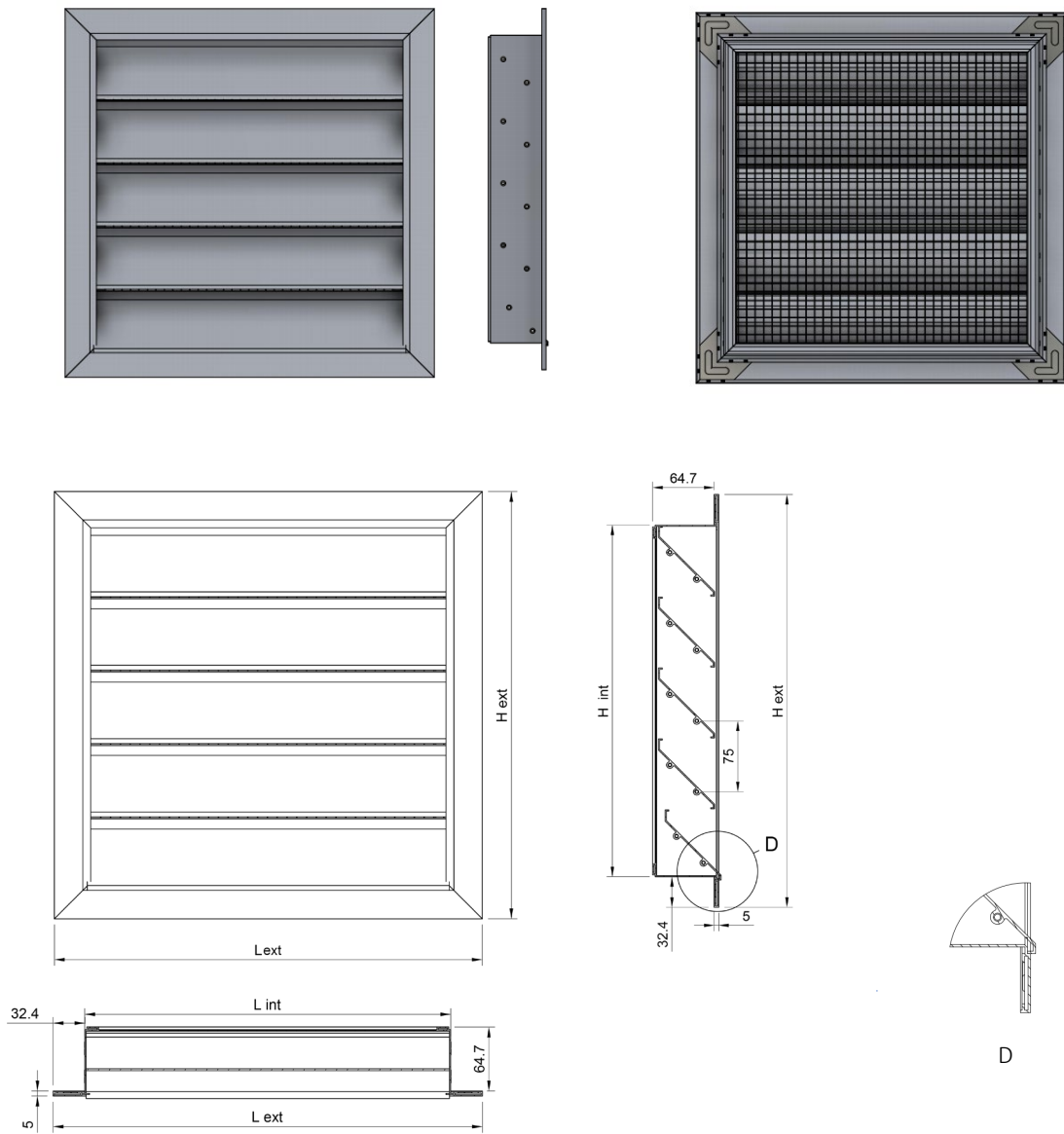
Materials

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



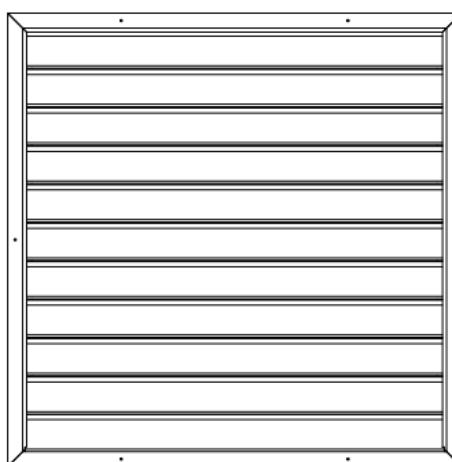
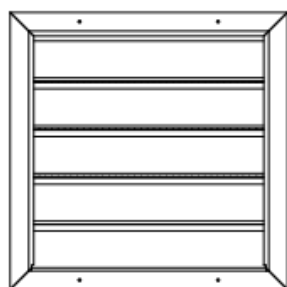
Product specifications

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]	Number of holes																
	Nr.gauri	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
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)

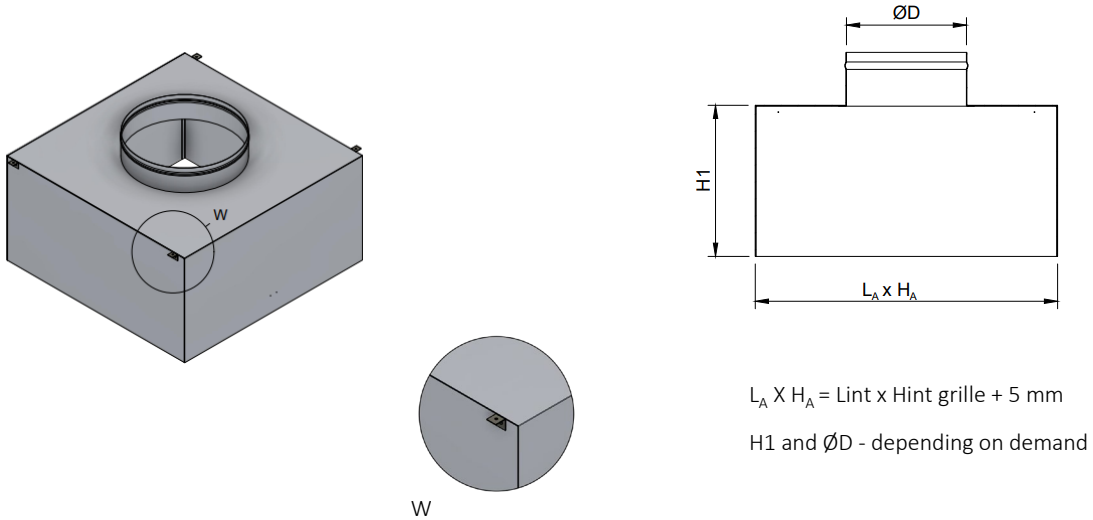


Accessories

The grille can be delivered with a connecting plenum to the circular duct.

Adapter (plenum box)

Vertical connection
(opposite exit)

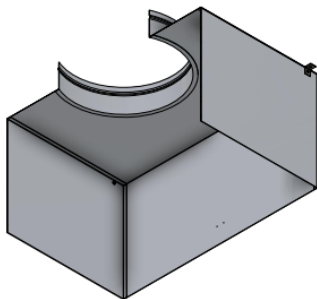


$L_A \times H_A = \text{Lint} \times \text{Hint grille} + 5 \text{ mm}$
 H_1 and $\varnothing D$ - depending on demand

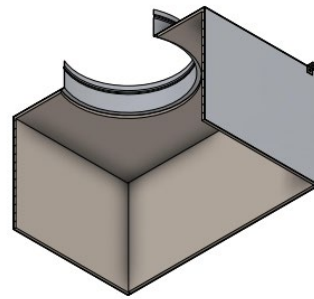
The adapter is made of Z140 galvanized sheet metal and is equipped with lugs for mounting.

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 [m ²]															
	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	1.07	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

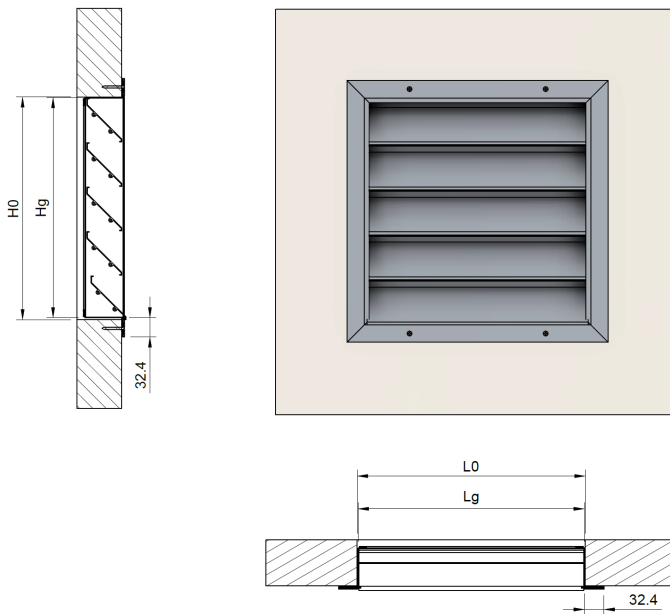
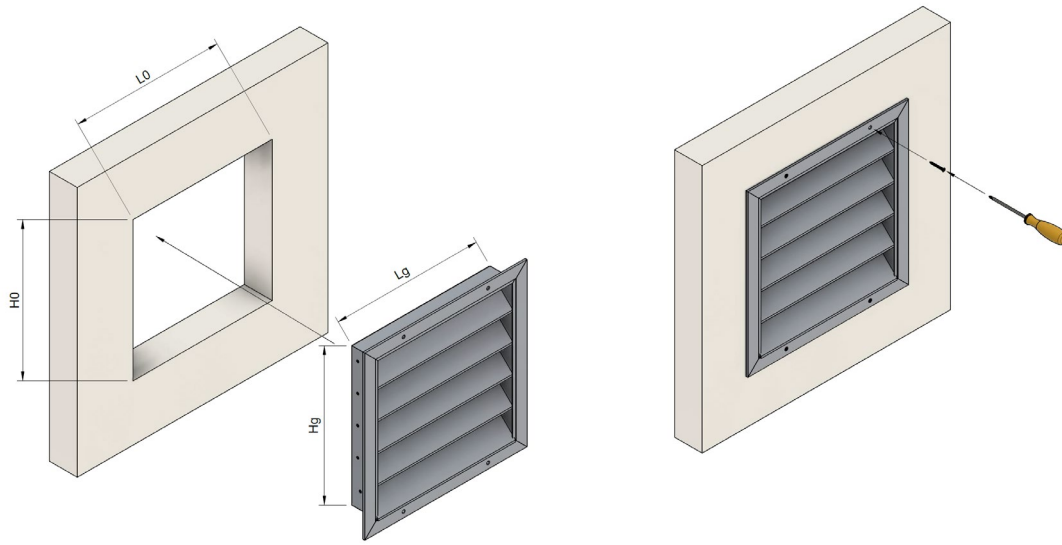
Air flow [m ³ /h]	Ak [m ²]	0.1	0.15	0.2	0.25	0.3	0.4	0.5	0.6	0.8	1	1.5	2	2.5
1000	Veff [m/s]	2.6												
	ΔPt asp [Pa]	28.0												
	ΔPt ref [Pa]	23.0												
2000	Veff [m/s]	5.2	3.6	2.7	2.2									
	ΔPt asp [Pa]	100.0	48.0	32.0	18.0									
	ΔPt ref [Pa]	80.0	40.0	23.0	12.0									
3000	Veff [m/s]	8.2	5.3	4.2	3.4	2.8	2.2							
	ΔPt asp [Pa]	190.0	110.0	65.0	45.0	32.0	17.0							
	ΔPt 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						
	ΔPt asp [Pa]		170.0	120.0	78.0	60.0	35.0	22.0						
	ΔPt 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					
	ΔPt asp [Pa]			165.0	118.0	82.0	49.0	35.0	26.0					
	ΔPt 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				
	ΔPt asp [Pa]			190.0	150.0	120.0	70.0	45.0	38.0	16.0				
	ΔPt 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				
	ΔPt asp [Pa]			220.0	180.0	150.0	85.0	52.0	42.0	22.0				
	ΔPt 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			
	ΔPt asp [Pa]				220.0	180.0	125.0	78.0	55.0	28.0	18.0			
	ΔPt 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			
	ΔPt asp [Pa]					220.0	140.0	90.0	65.0	38.0	23.0			
	ΔPt 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			
	ΔPt asp [Pa]						175.0	125.0	85.0	45.0	32.0			
	ΔPt 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		
	ΔPt asp [Pa]						210.0	160.0	128.0	65.0	41.0	18.0		
	ΔPt 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	
	ΔPt asp [Pa]								200.0	130.0	75.0	38.0	20.0	
	ΔPt 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
	ΔPt asp [Pa]									170.0	130.0	65.0	35.0	22.0
	ΔPt ref [Pa]									140.0	100.0	48.0	25.0	13.0
25000	Veff [m/s]										7.2	5.1	3.7	3.1
	ΔPt asp [Pa]										170.0	100.0	52.0	38.0
	ΔPt ref [Pa]										140.0	78.0	43.0	27.0
30000	Veff [m/s]										8.6	5.8	4.3	3.6
	ΔPt asp [Pa]										200.0	130.0	67.0	50.0
	ΔPt ref [Pa]										160.0	100.0	58.0	43.0
40000	Veff [m/s]											7.8	5.5	4.4
	ΔPt asp [Pa]											180.0	110.0	70.0
	ΔPt ref [Pa]											145.0	85.0	60.0
50000	Veff [m/s]												6.8	5.5
	ΔPt asp [Pa]												165.0	120.0
	ΔPt 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 adaptor			
RAL9016			
RAL.. - Other RAL colors on request			
EL - Natural anodized			