

Air through perfection

Perforated grille with access

PF-D



ACP
Access grilles

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.

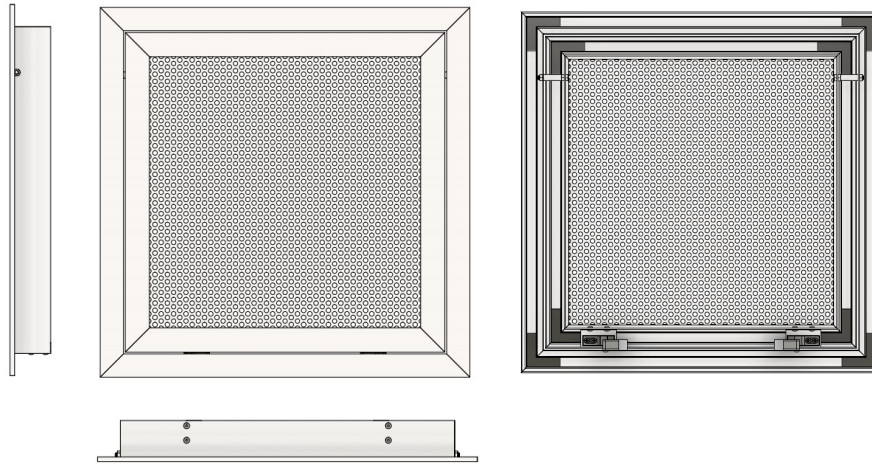
Materials

The grille is made of extruded aluminum profiles (frame) with the perforated central part in galvanized steel sheet.

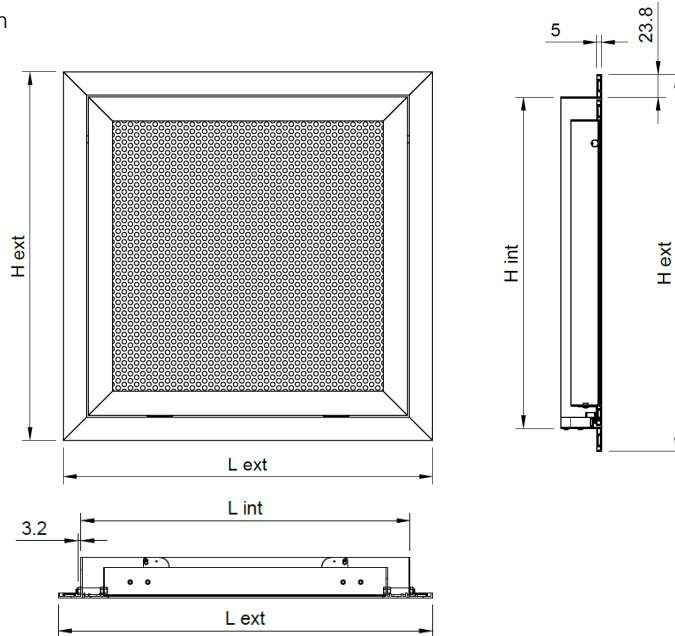
Standard grille is electrostatic field painted in glossy white RAL9016.

Other RAL colours are available on request.

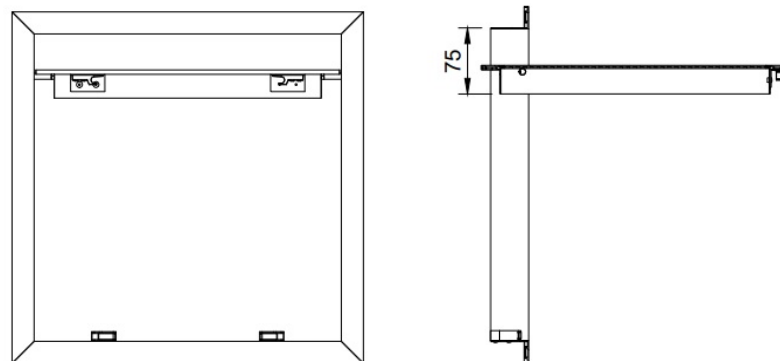
Technical drawing



Grille in closed position



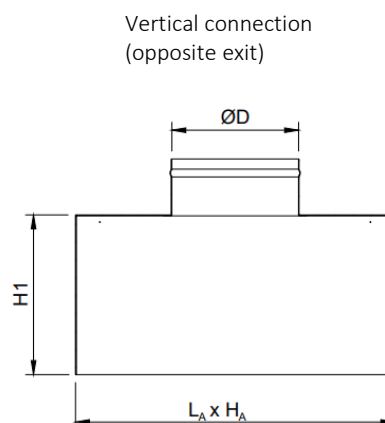
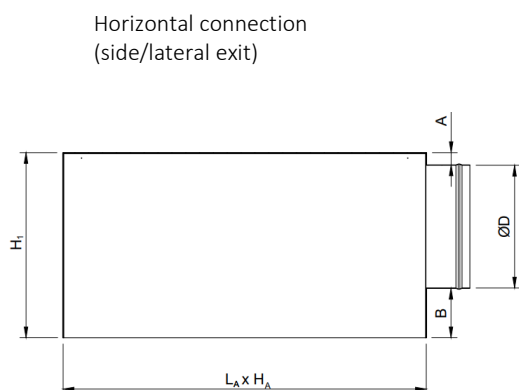
Grille in open position



Accessories

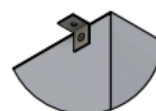
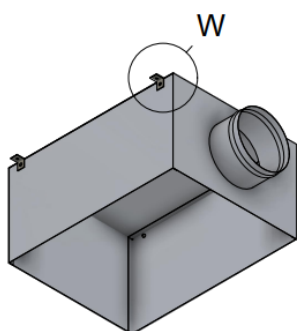
The grille can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection. The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct. On request, the product can be delivered with G4 air filter or adjustment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

Adapter (plenum box)



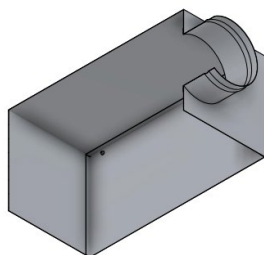
$L_A \times H_A = \text{Lint} \times \text{Hint grille} + 7 \text{ mm}$
 $A, B, H1$ - depending on demand and $\varnothing D$

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

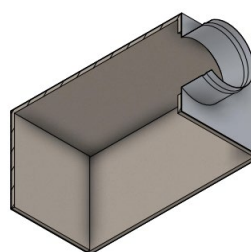


W - Suspension lug

The plenum is available in two options, uninsulated or insulated with 6 mm thick elastomeric rubber.



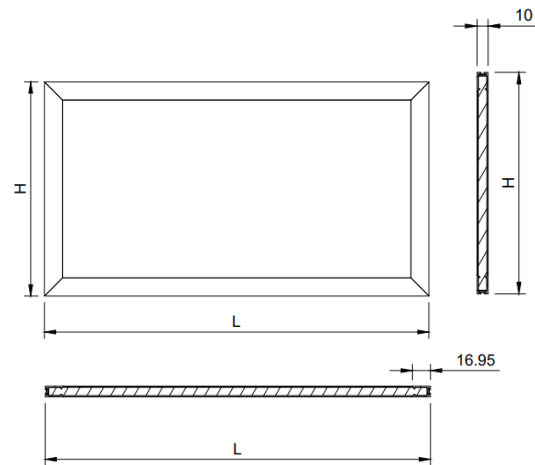
AN - Uninsulated adapter



AIZ - Insulated adapter

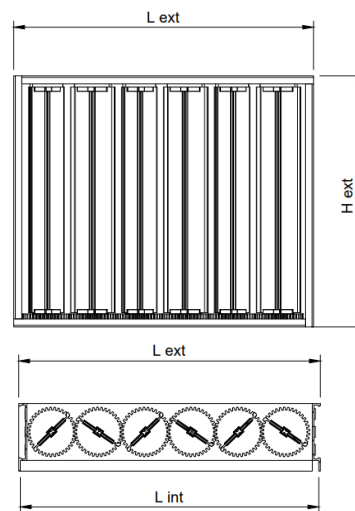
G4 air filter with frame (F-R)

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	Ve _{eff} [m/s]	1.5			
	X [m]	0.9			
	NR [dB(A)]	22.0			
	ΔPt [Pa]	9.0			
200	Ve _{eff} [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	Ve _{eff} [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	Ve _{eff} [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	Ve _{eff} [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	Ve _{eff} [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	Ve _{eff} [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	Ve _{eff} [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	Ve _{eff} [m/s]	1.5			
	NR [dB(A)]	19.0			
	ΔPt [Pa]	20.0			
200	Ve _{eff} [m/s]	1.8			
	NR [dB(A)]	20.0			
	ΔPt [Pa]	31.0			
300	Ve _{eff} [m/s]	2.8			
	NR [dB(A)]	26.0			
	ΔPt [Pa]	76.0			
400	Ve _{eff} [m/s]	3.7	2.0		
	NR [dB(A)]	35.0	<20		
	ΔPt [Pa]	125.0	33.0		
500	Ve _{eff} [m/s]	4.6	2.5		
	NR [dB(A)]	42.0	23.0		
	ΔPt [Pa]	185.0	47.0		
700	Ve _{eff} [m/s]		3.5	2.2	
	NR [dB(A)]		34.0	20.0	
	ΔPt [Pa]		95.0	37.0	
1000	Ve _{eff} [m/s]			3.2	2.1
	NR [dB(A)]			31.0	20.0
	ΔPt [Pa]			73.0	33.0
1600	Ve _{eff} [m/s]				3.4
	NR [dB(A)]				36.0
	ΔPt [Pa]				85.0

The legend

Ak [m²] - The free surface

Ve_{eff} [m/s] - Air velocity in the grille

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

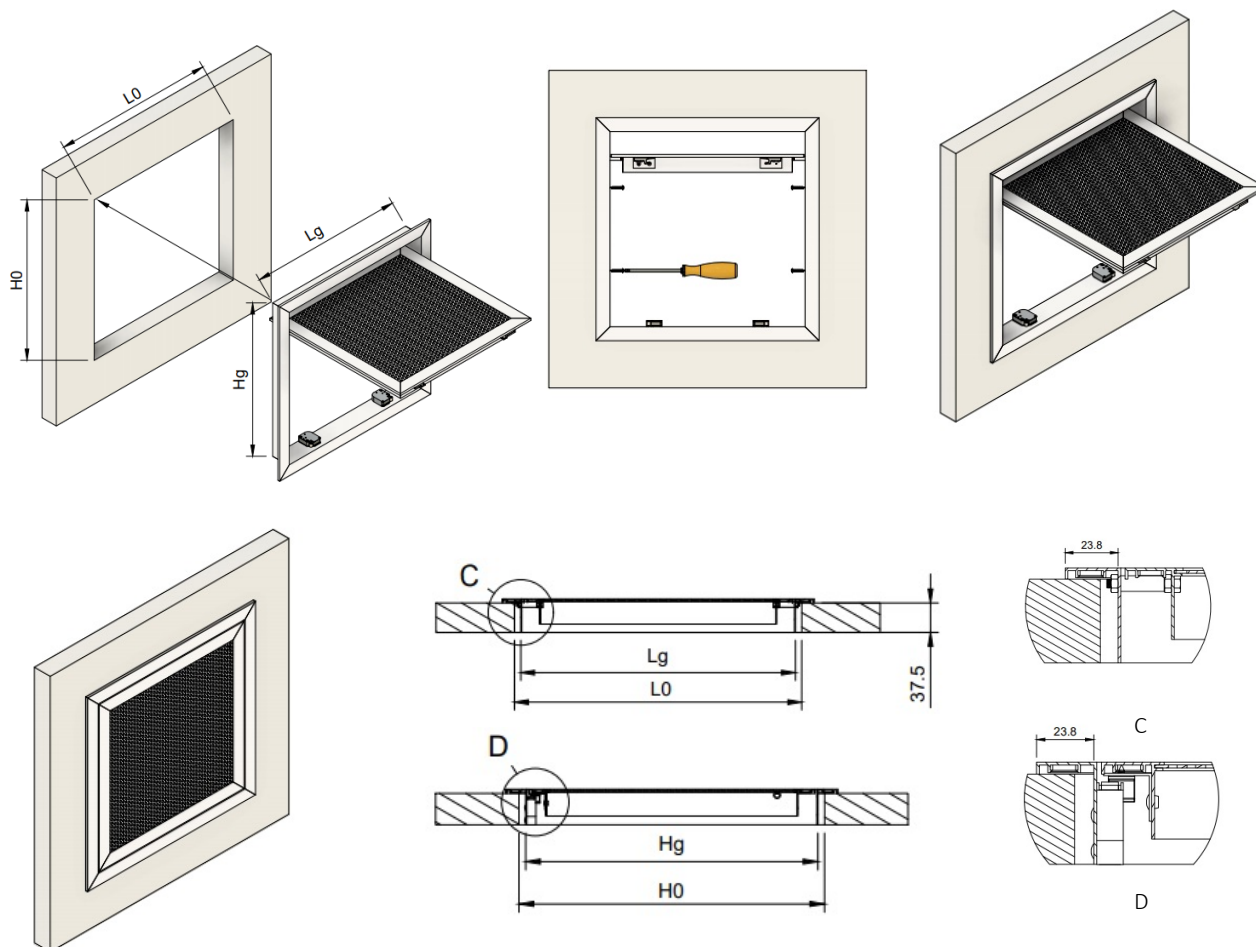
X [m] - The length of the air jet at a speed of 0.2 m/s

ΔPt [Pa] - Pressure loss

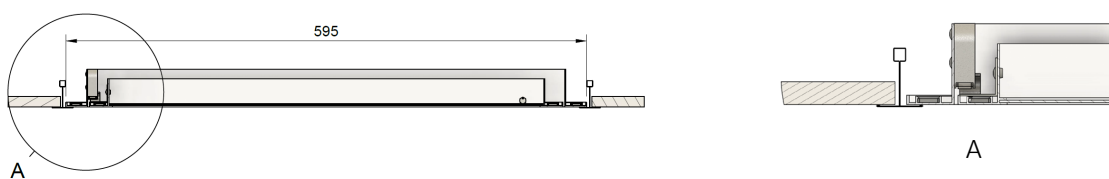
Installation

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			