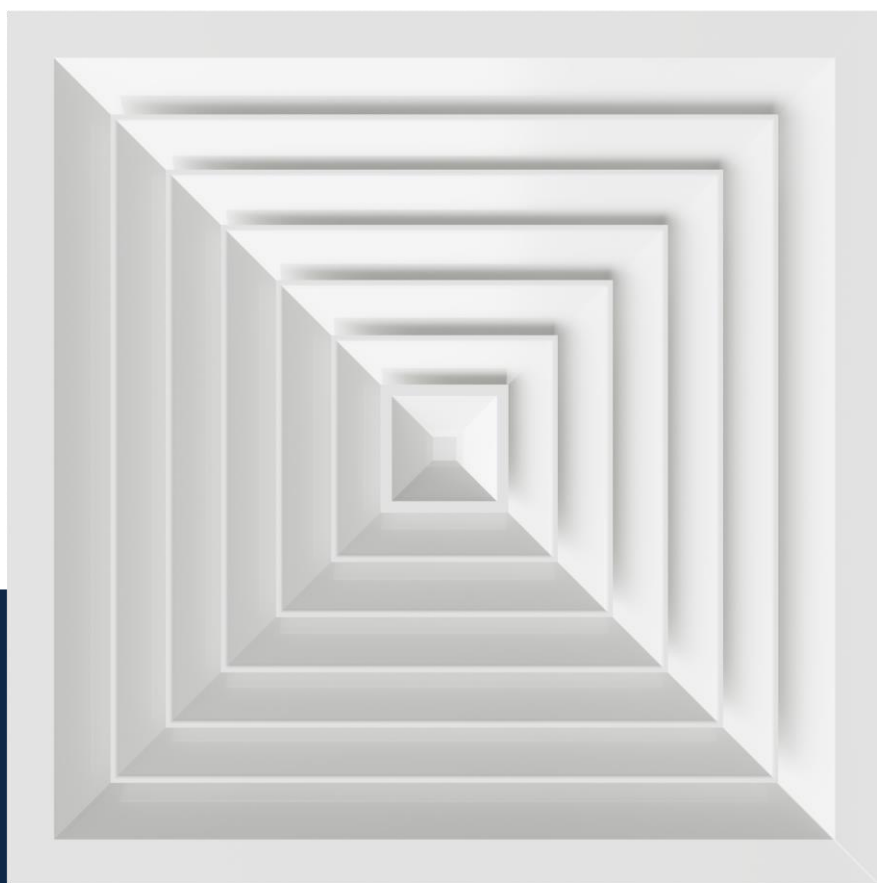


Air through perfection

Ceiling diffuser 4-way

CD-4



ACP
Ceiling diffusers

Ceiling diffuser 4-way 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.

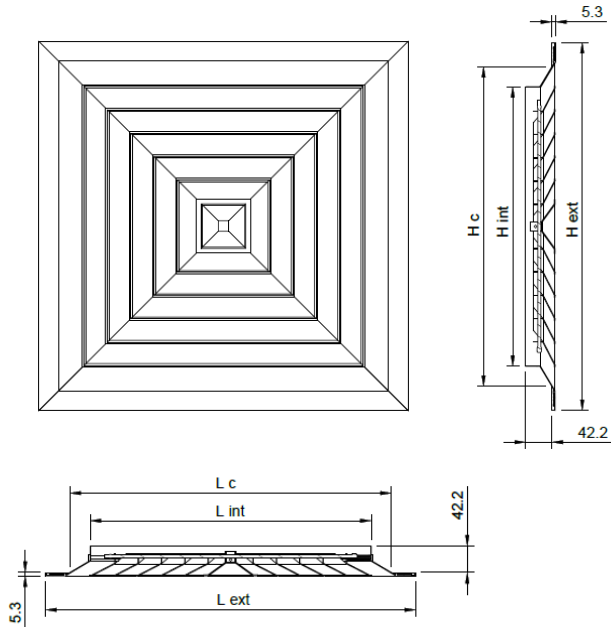
Materials

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

Other RAL colours are available on request.

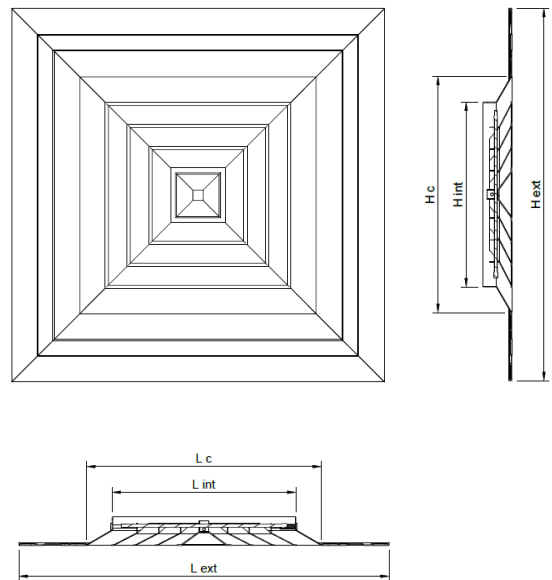
Technical drawing

Narrow frame ceiling diffuser



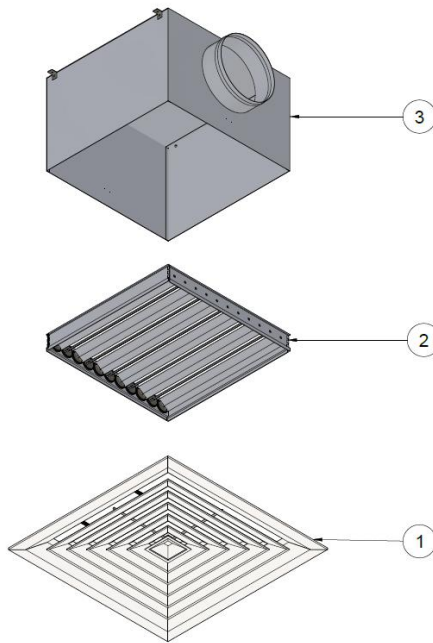
Int / Ext [mm]	Lint x Hint [mm]	Lext x Hext [mm]	Lc x Hc [mm]
150/290	150 x 150	290 x 290	224 x 224
225/365	225 x 225	365 x 365	299 x 299
300/440	300 x 300	440 x 440	374 x 374
375/520	375 x 375	520 x 520	449 x 449
453/595	453 x 453	595 x 595	529 x 529

Wide frame ceiling diffuser



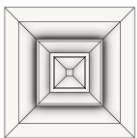
Int / Ext [mm]	Lint x Hint [mm]	Lext x Hext [mm]	Lc x Hc [mm]
148/595	148 x 148	595 x 595	226 x 226
222/595	222 x 222	595 x 595	308 x 308
300/595	300 x 300	595 x 595	378 x 378
373/595	373 x 373	595 x 595	460 x 460

Product specifications

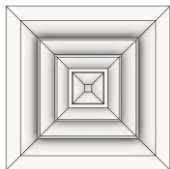


- 1- CD-4 Ceiling diffuser
- 2- OBD opposed blade damper (optional)
- 3- Plenum box (optional)

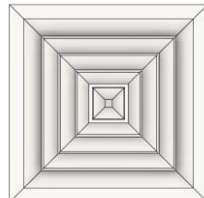
Narrow frame ceiling diffuser



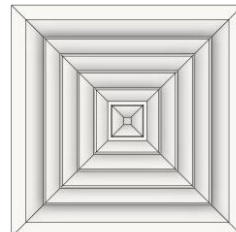
CD-4-150/290



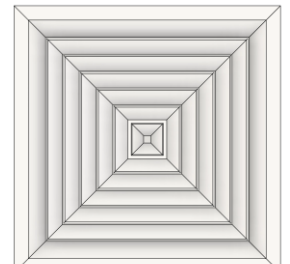
CD-4-225/365



CD-4-300/440

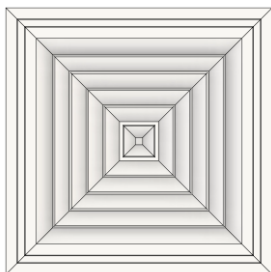


CD-4-375/520

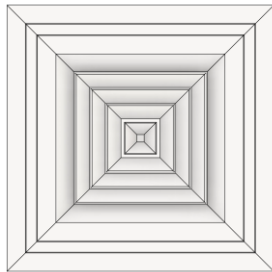


CD-4-453/595

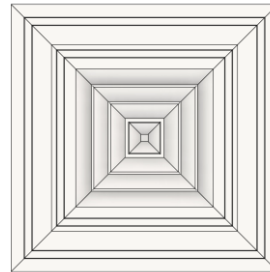
Wide frame ceiling diffuser



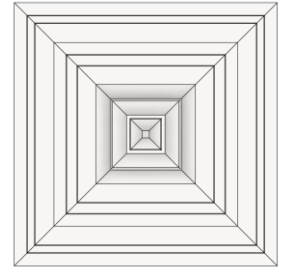
CD-4-373/595



CD-4-300/595



CD-4-222/595



CD-4-148/595

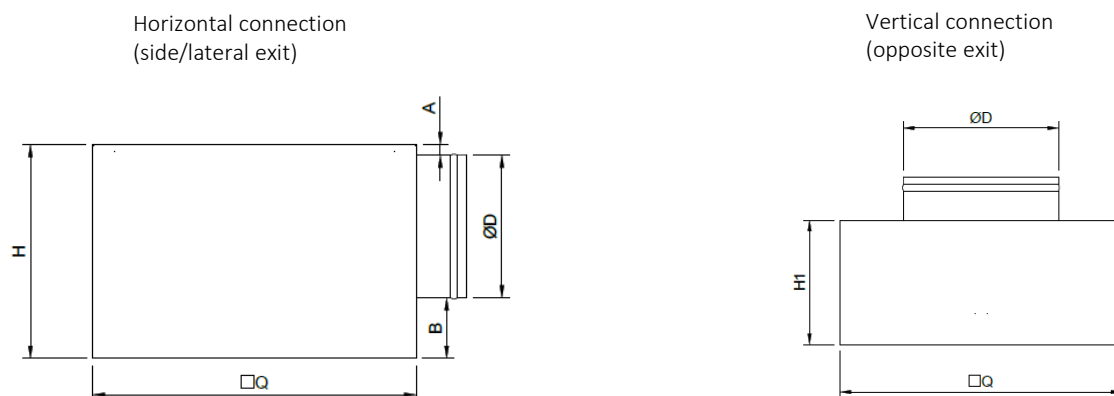
Accessories

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.

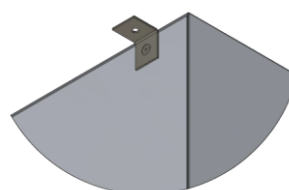
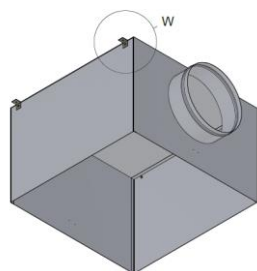
The product can be accessorized with opposed blade damper or G4 air filter.

Adapter (plenum box)



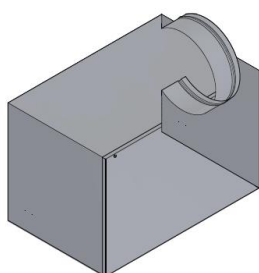
$\square Q$ – depending on the size of the ceiling diffuser Lint x Hint
A, B, H1, $\varnothing D$ – on request
H – depending on A, B and $\varnothing D$

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

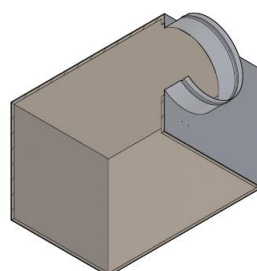


W - Suspension lug

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

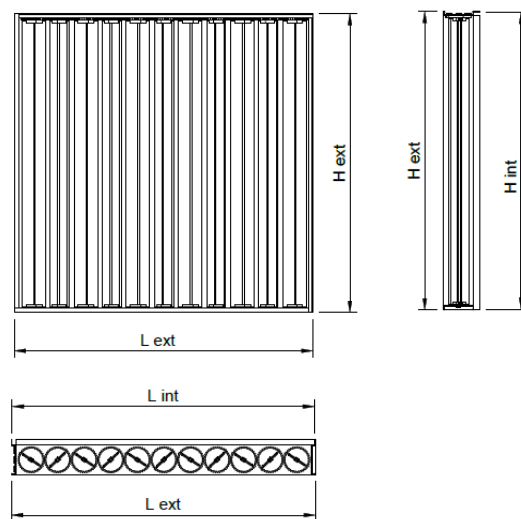


AN - Uninsulated adapter



AIZ - Insulated adapter

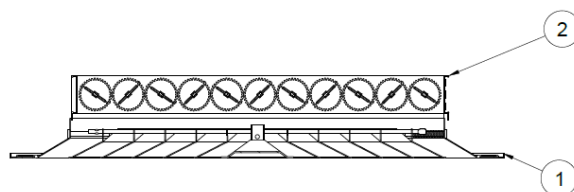
Opposed blade damper (OBD)



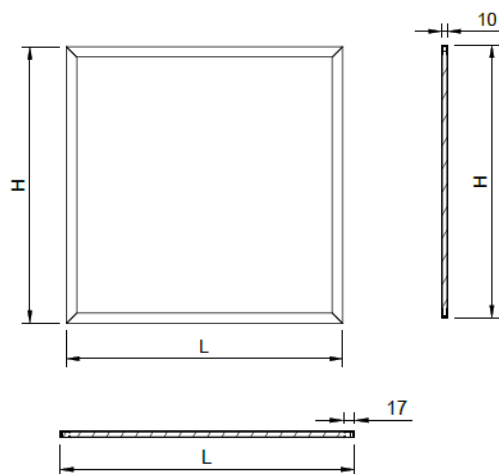
The damper is equipped with opposable blades and is mounted on the ceiling diffuser connection for adjusting the air flow.

Example: CD-4 + OBD

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



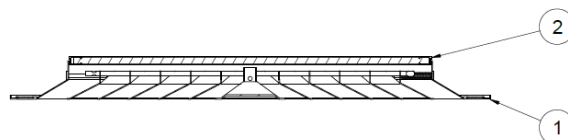
Air filter G4 (F-R)



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	453x453
[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

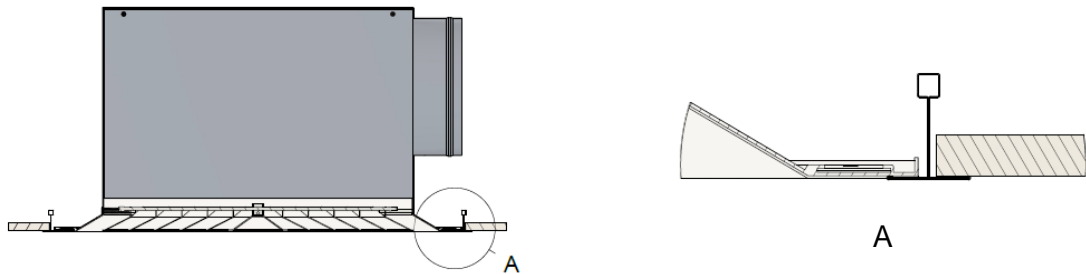
NR [dB (A)] - Noise level without room attenuation

ΔPt [Pa] - Pressure loss

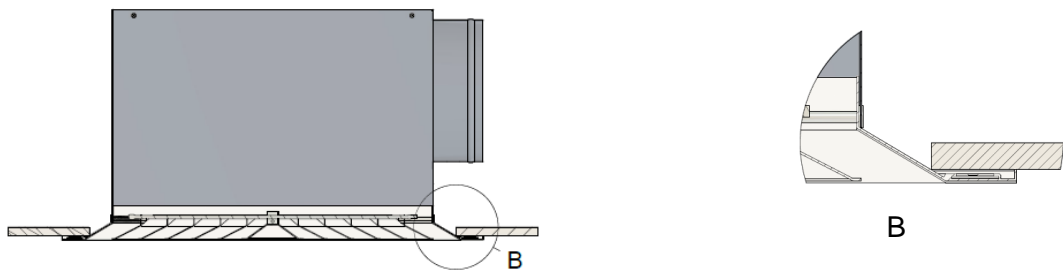
Installation

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					