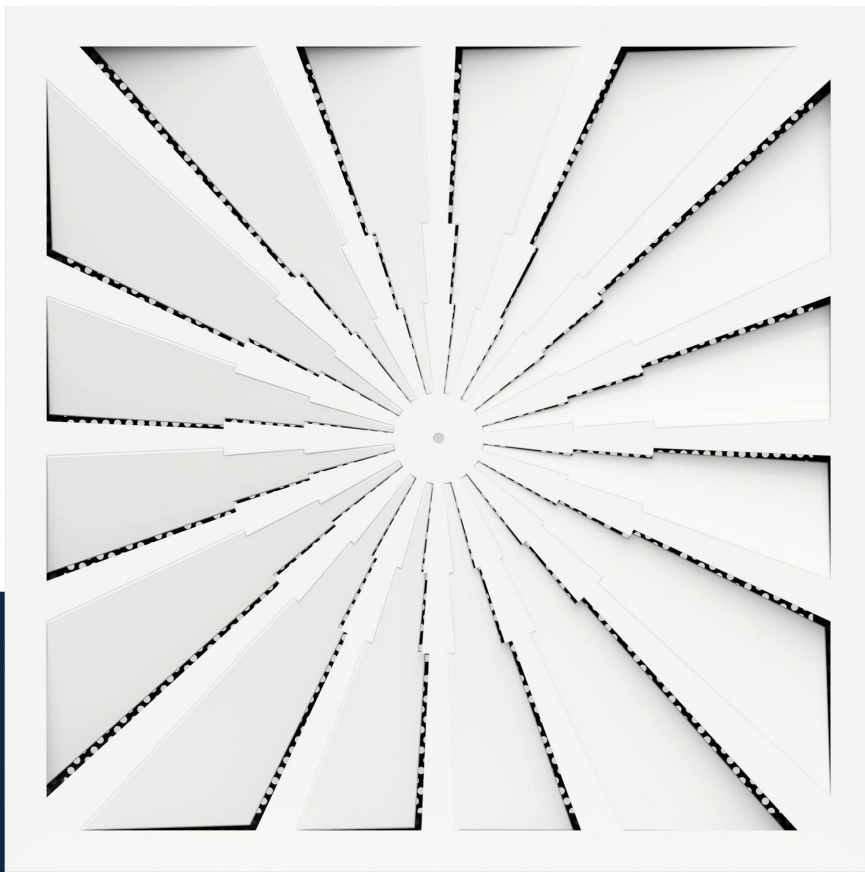


Air through perfection

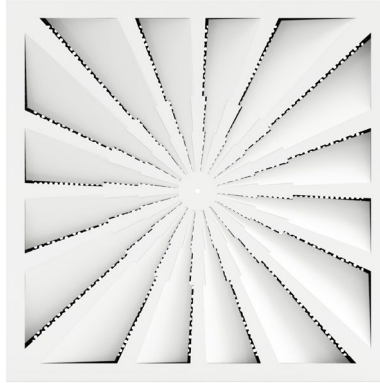
Architectural diffuser

**CRACK**



**ACP**  
Architectural diffusers

## 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.

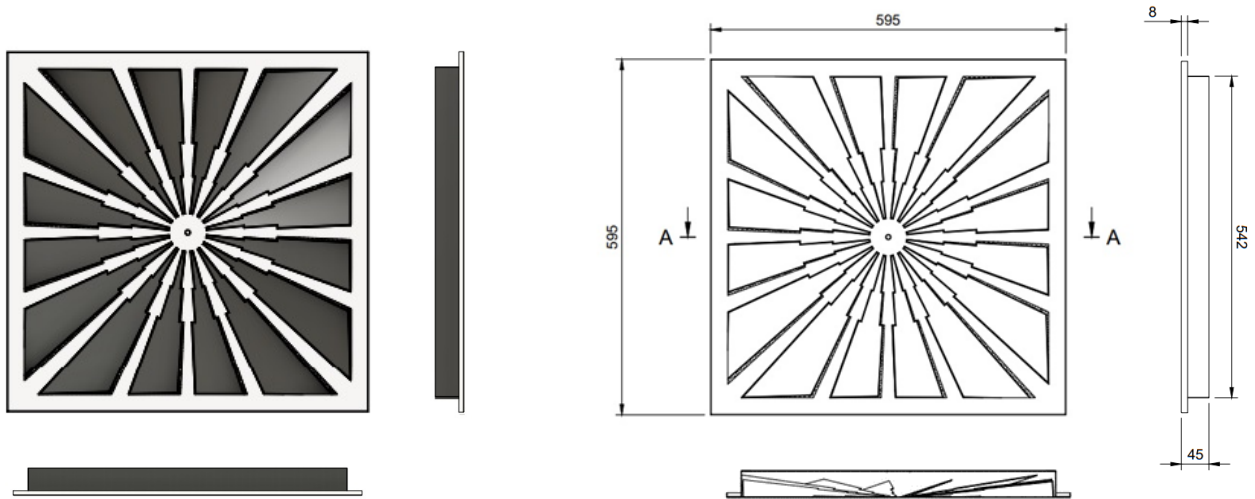
For a uniform appearance of the enclosures, the CRACK diffuser can also be used for air evacuation.

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

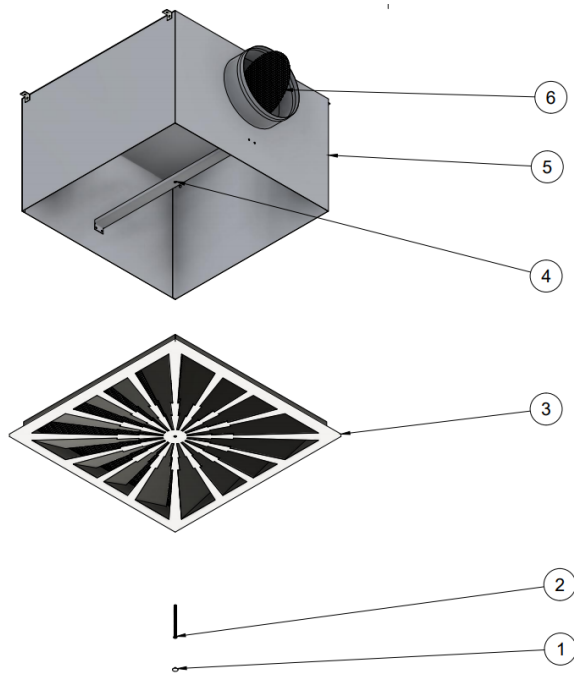
## Materials

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 (optional)
- 6 - Perforated damper (optional)

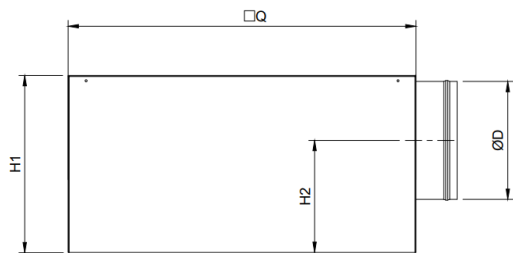
## Accessories

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.

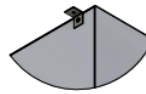
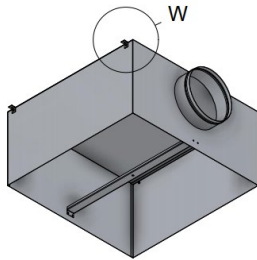
Optionally, a perforated damper can be mounted on the plenum connection to balance the air flow.

### Adapter (plenum box)



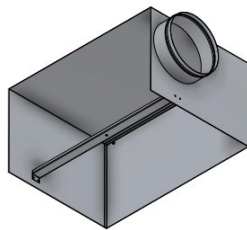
ØD	□Q	H1	H2
mm	mm	mm	mm
250	552	340	200
315	552	410	237.5

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

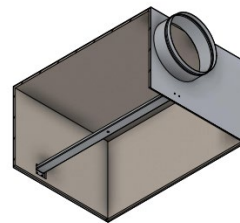


W - Suspension lug

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

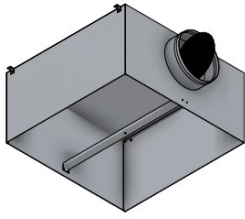


AN - Uninsulated adapter

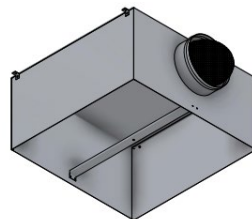


AIZ - Insulated adapter

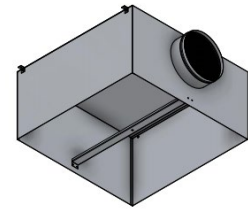
## Perforated damper



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 m <sup>2</sup>		Blade position					
			0°		45°		90°	
	D [mm]	Air flow [m <sup>3</sup> /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 [m<sup>2</sup>] - The free surface  
 D [mm] - Diameter of plenum connection  
 NR [dB (A)] - Noise level without room attenuation  
 ΔPt [Pa] - Pressure loss

### Note

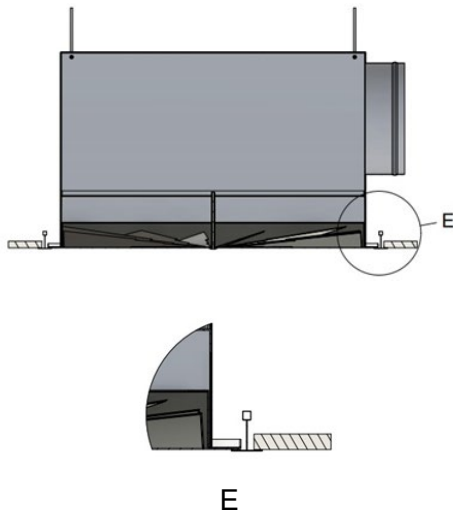
0° blade position - damper open  
 45° blade position - damper inclined  
 90° blade position - damper closed  
 Values are provided for a plenum diffuser,  
 horizontal (side) connection to duct.

## Installation

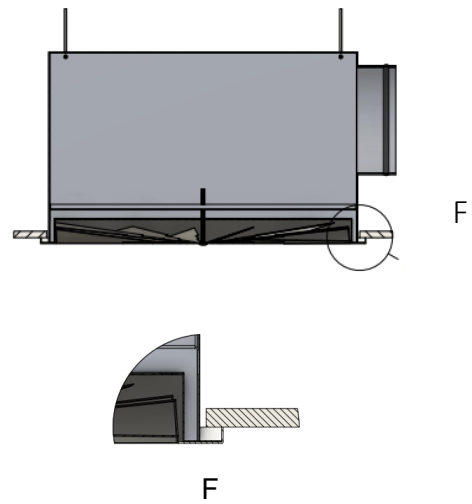
The diffuser can be mounted in 600 x 600 mm T-bar false ceiling, continuous ceiling or suspended.

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
<b>CRACK</b>	595 x 595 mm	<b>AIZ</b> - Insulated adapter <b>AN</b> - Uninsulated adapter Perforated damper (plenum box)	<b>RAL 9016</b> - front plate <b>RAL 9005</b> - perforated sheet