

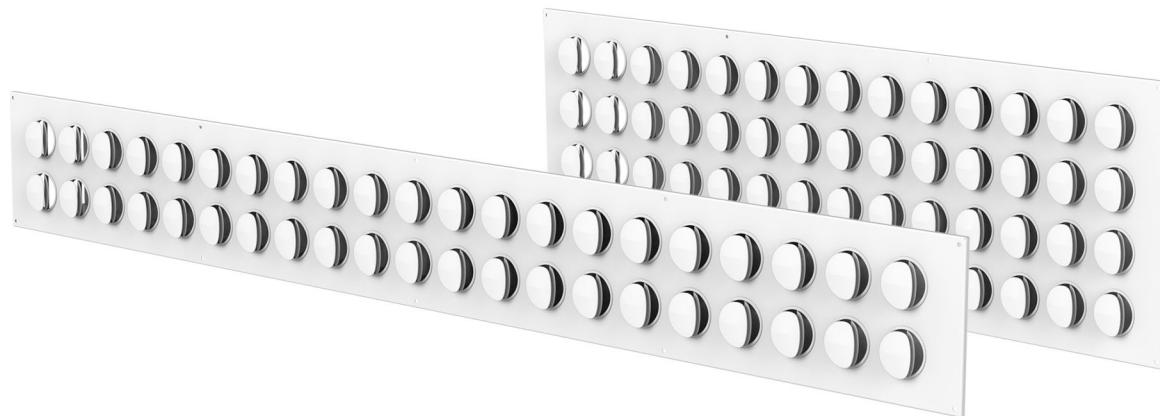
# CAP-SD

Multi-Nozzle Diffuser



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## Description

CAP-SD is a multi-nozzle diffuser for installation on the rectangular ventilation duct. It is mainly intended for air supply, eventually it can be used for air extract. Air flow pattern can be adjusted by nozzle rotation.

The field of application of CAP-SD is ventilation in industrial or public spaces with exposed ventilation ducts.

The recommended elevation for installation of CAP-SD is up to 6 m.

### Highlights

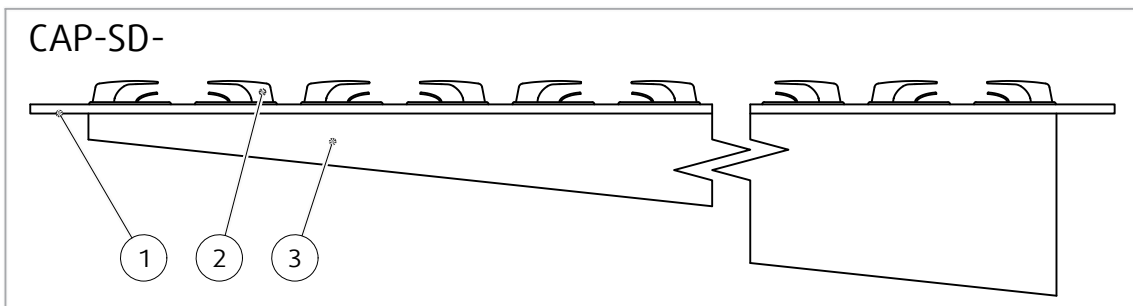
- Individually adjustable nozzles for a large variety of air flow patterns
- Excellent air induction
- Low level of generated sound

## Design

The CAP-SD is made from galvanized steel, composed of the front diffuser plate with polymer nozzles and the rear perforated air flow equalizing box. The nozzles can be rotated by 360° in the plane of the diffuser plate. The proper directional adjustment of the individual nozzles results in the desired air discharge pattern. The diffuser can be attached to the duct by screws. Self-adhering foam seal stripes as a part of product delivery can be used to hermitize the joint between the diffuser and the duct.

The standard surface finish for the diffuser is powder paint in signal white colour RAL9003, gloss 30 %. The nozzles are also RAL9003. Other RAL colours are available upon request.

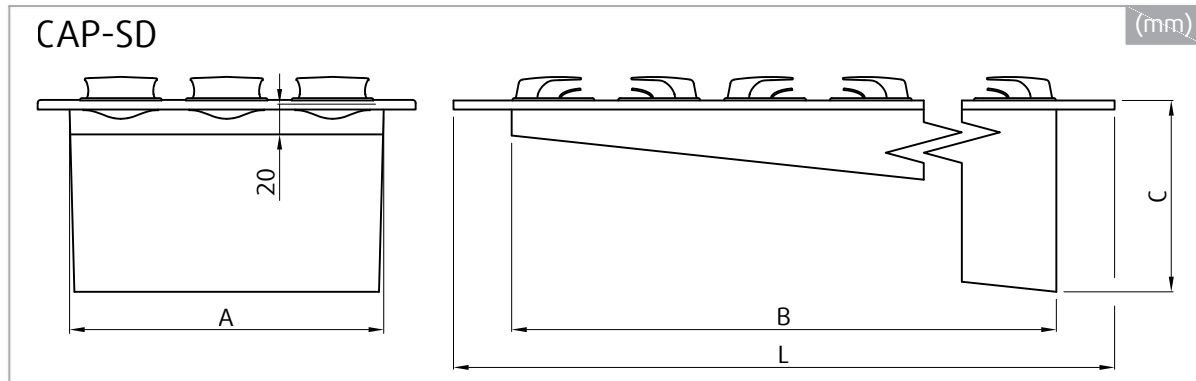
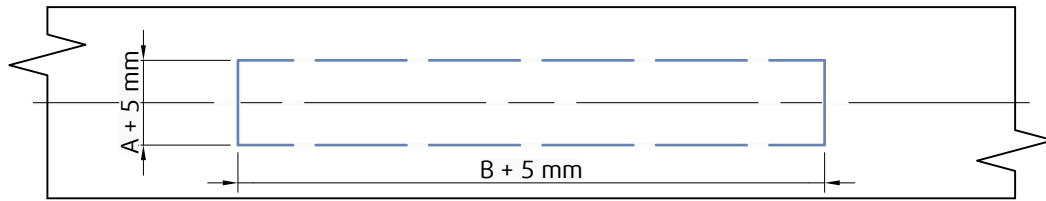
**Product Parts**



**Legend**

- 1** Diffuser frame
- 2** Nozzle
- 3** Equalizer screen

# Dimensions



CAP-SD	L	A	B	C	m
	mm				kg
CAP-SD-1001	1042	65	965	62	1,7
CAP-SD-1002		136		92	2,7
CAP-SD-1003		208		127	3,7
CAP-SD-1004		278			4,5
CAP-SD-1501	1542	65	1465	62	2,5
CAP-SD-1502		136		92	4
CAP-SD-1503		208		127	5,5
CAP-SD-1504		278			6,7

# Ordering Codes

## Dimensions

- 1001** Length 1000 mm, 1 row of nozzles
- 1002** Length 1 000 mm, 2 rows of nozzles
- 1003** Length 1000 mm, 3 rows of nozzles
- 1004** Length 1000 mm, 4 rows of nozzles
- 1501** Length 1500 mm, 1 row of nozzles
- 1502** Length 1500 mm, 2 rows of nozzles
- 1503** Length 1500 mm, 3 rows of nozzles
- 1504** Length 1500 mm, 4 rows of nozzles

## Surface finish

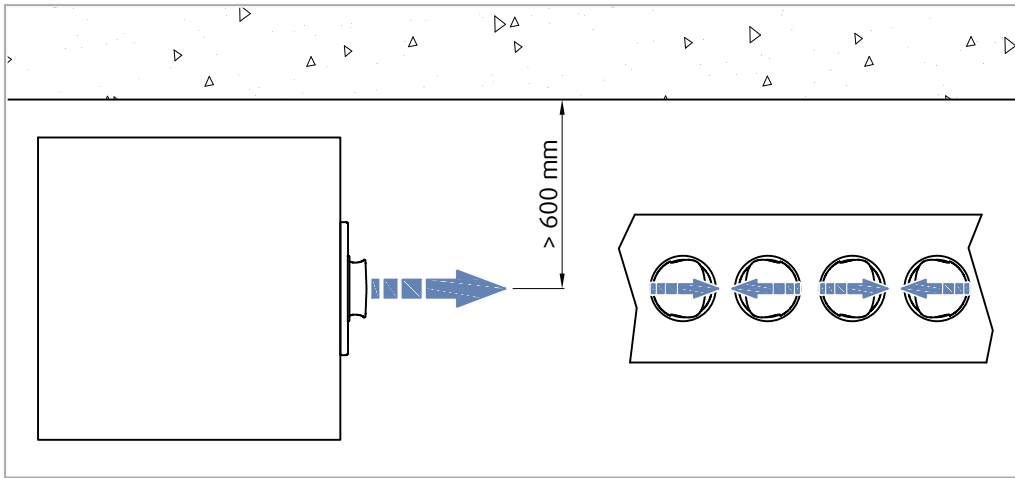
- SW** Signal white (RAL9003, gloss 30%)

## Example of the Ordering Code

**CAP-SD-1001-SW**

Diffuser with length 1000 mm, 1 row of nozzles, signal white RAL9003 surface finish.

# Technical Parameters



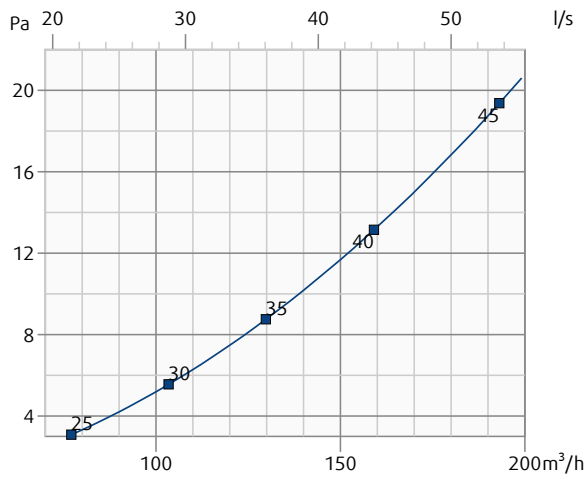
Measurement setup

Pressure drop and radiated sound power level dependent on air flow volume.

Throw length with terminal velocity 0,2 m/s dependent on air flow volume.

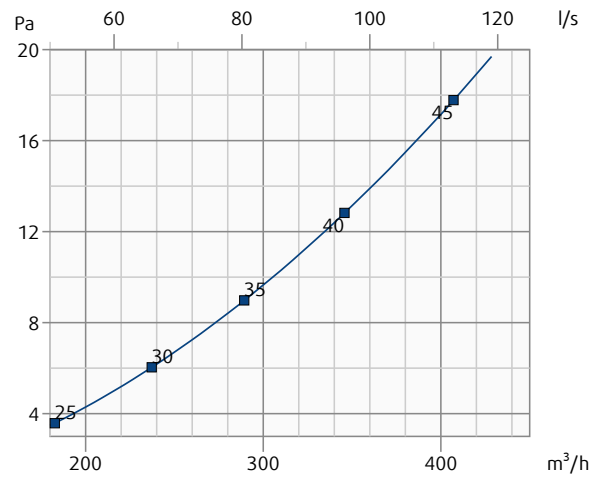
**CAP-SD-1001-SW**

Pressure drop & A-weighted sound power level in dB(A)



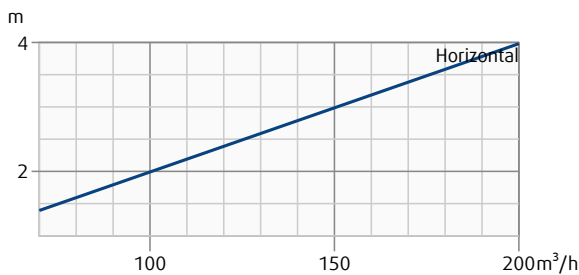
**CAP-SD-1002-SW**

Pressure drop & A-weighted sound power level in dB(A)



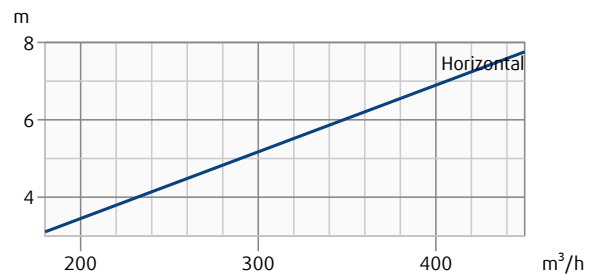
**CAP-SD-1001-SW**

Throw length (terminal velocity 0.2 m/s)



**CAP-SD-1002-SW**

Throw length (terminal velocity 0.2 m/s)

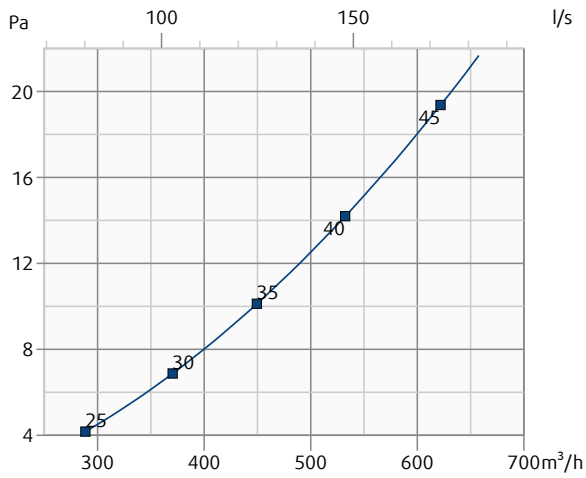


Pressure drop and radiated sound power level dependent on air flow volume.

Throw length with terminal velocity 0,2 m/s dependent on air flow volume.

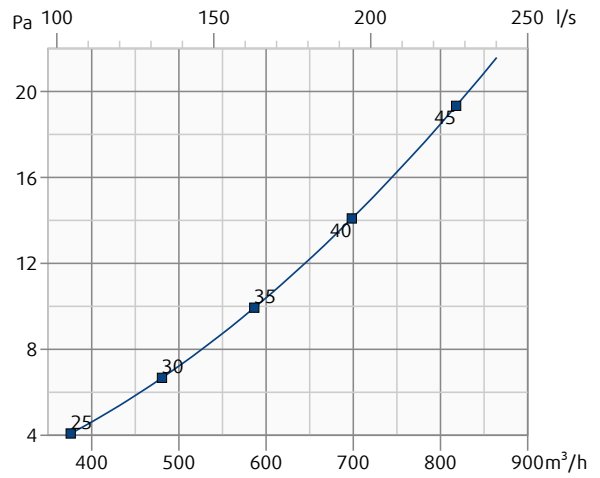
**CAP-SD-1003-SW**

Pressure drop & A-weighted sound power level in dB(A)



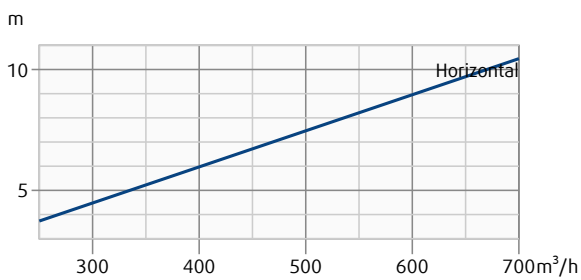
**CAP-SD-1004-SW**

Pressure drop & A-weighted sound power level in dB(A)



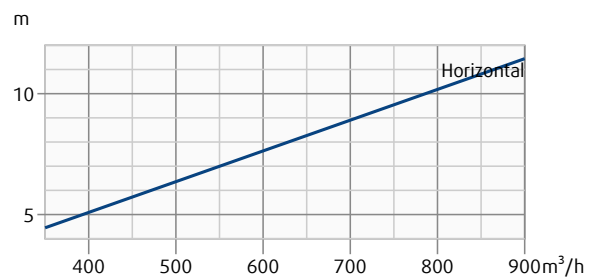
**CAP-SD-1003-SW**

Throw length (terminal velocity 0.2 m/s)



**CAP-SD-1004-SW**

Throw length (terminal velocity 0.2 m/s)



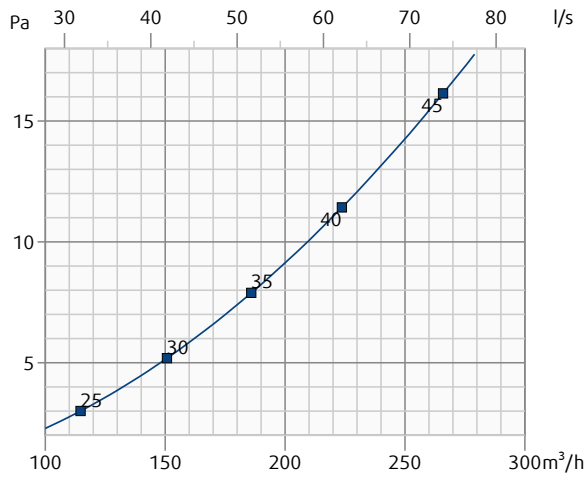


Pressure drop and radiated sound power level dependent on air flow volume.

Throw length with terminal velocity 0,2 m/s dependent on air flow volume.

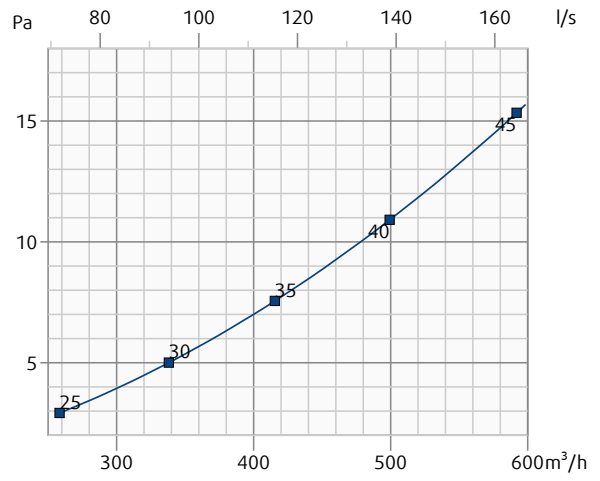
**CAP-SD-1501-SW**

Pressure drop & A-weighted sound power level in dB(A)



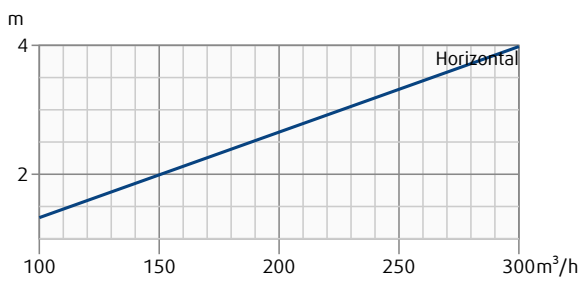
**CAP-SD-1502-SW**

Pressure drop & A-weighted sound power level in dB(A)



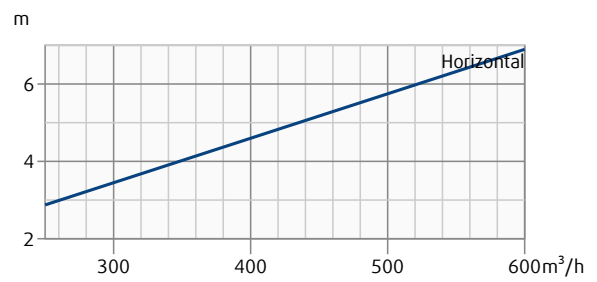
**CAP-SD-1501-SW**

Throw length (terminal velocity 0.2 m/s)



**CAP-SD-1502-SW**

Throw length (terminal velocity 0.2 m/s)

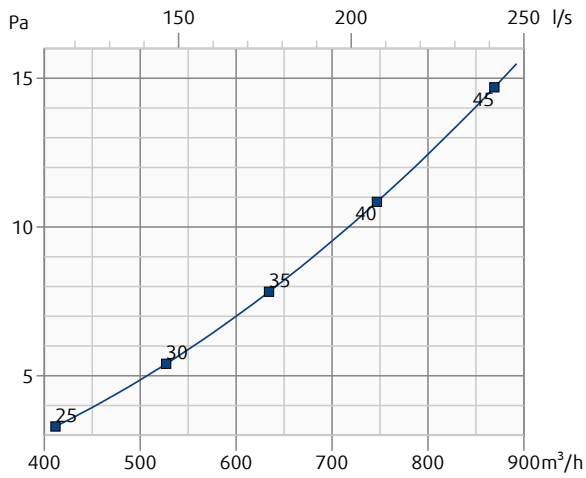


Pressure drop and radiated sound power level dependent on air flow volume.

Throw length with terminal velocity 0,2 m/s dependent on air flow volume.

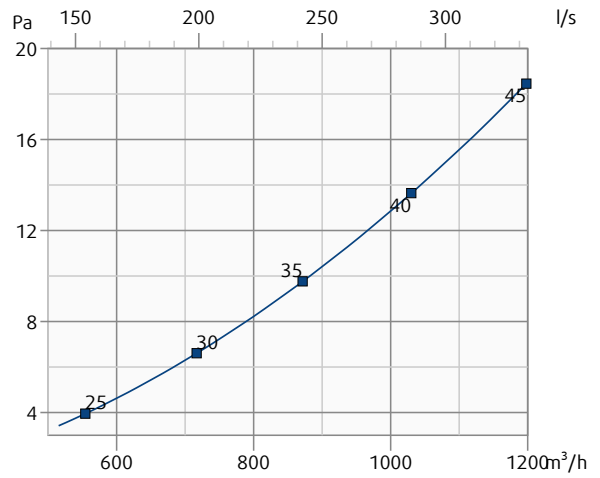
**CAP-SD-1503-SW**

Pressure drop & A-weighted sound power level in dB(A)



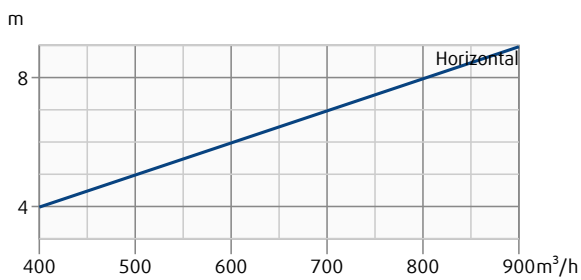
**CAP-SD-1504-SW**

Pressure drop & A-weighted sound power level in dB(A)



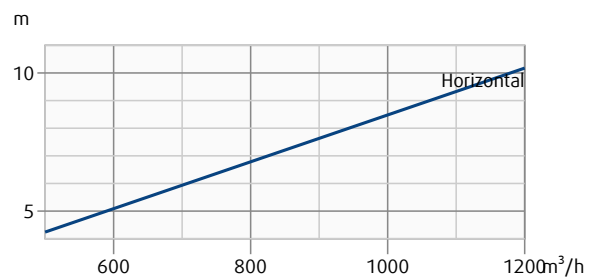
**CAP-SD-1503-SW**

Throw length (terminal velocity 0.2 m/s)



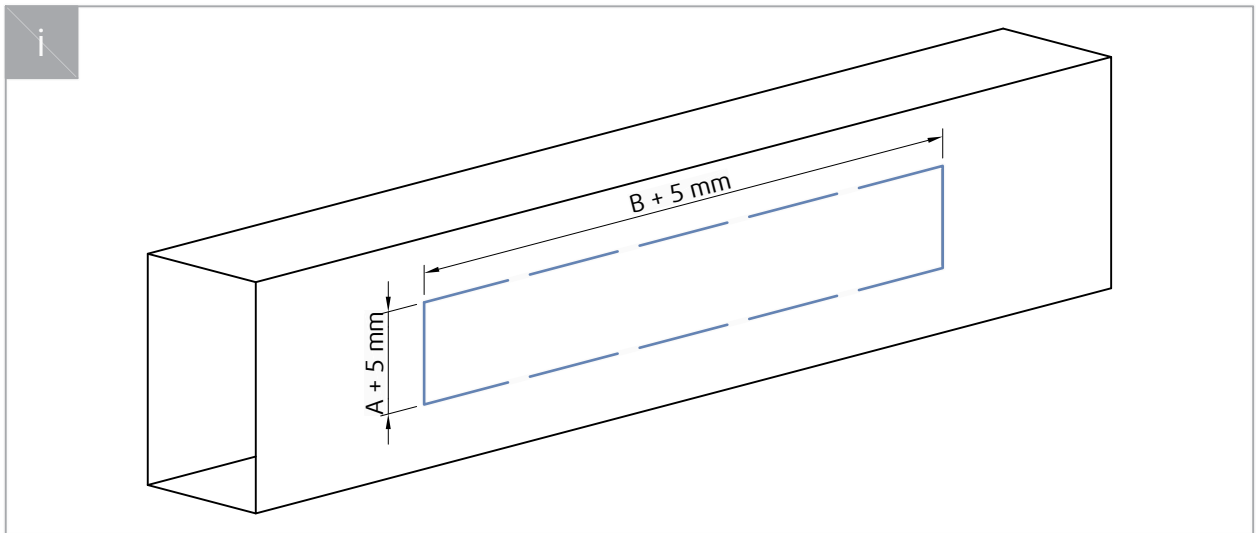
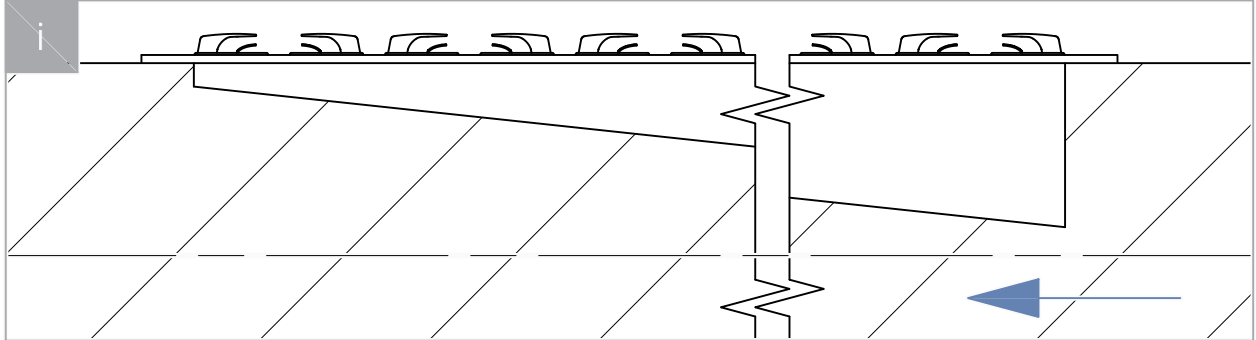
**CAP-SD-1504-SW**

Throw length (terminal velocity 0.2 m/s)

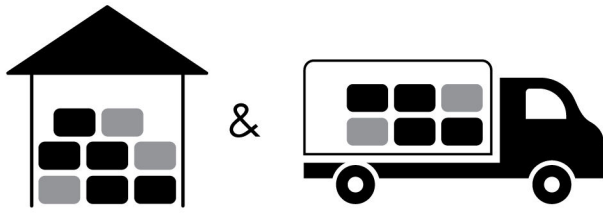


# Installation


CAP-SD is fixed to the rectangular ventilation duct by the screws through the holes in the diffuser frame. Proper orientation of the equalizing screen to the air flow direction shall be considered.



# Transport, Storage and Operation




 °C -40°C ... +50°C

 % ≤ 95%



 °C -20°C ... +70°C

 % ≤ 95%

# Supplement

Any deviations from the technical specifications contained on our website and the terms should be discussed with the manufacturer. We reserve the right to make any changes to the product without prior notice, provided that these changes do not affect the quality of the product and the required parameters. Current information on all products is available on [design.systemair.com](http://design.systemair.com).

