

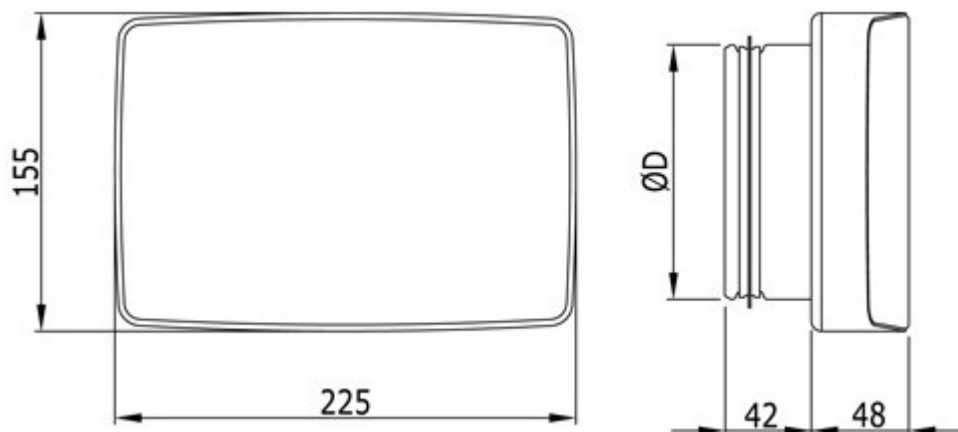
Halton BOS – Valve



Overview

- Supply air valve.
- Wall installation.
- Adjustable airflow rate.
- Ability to measure airflow rate.
- Installation without installation frame.
- Openable front panel for duct cleaning.

Dimensions



NS	ØD
100	99
125	124

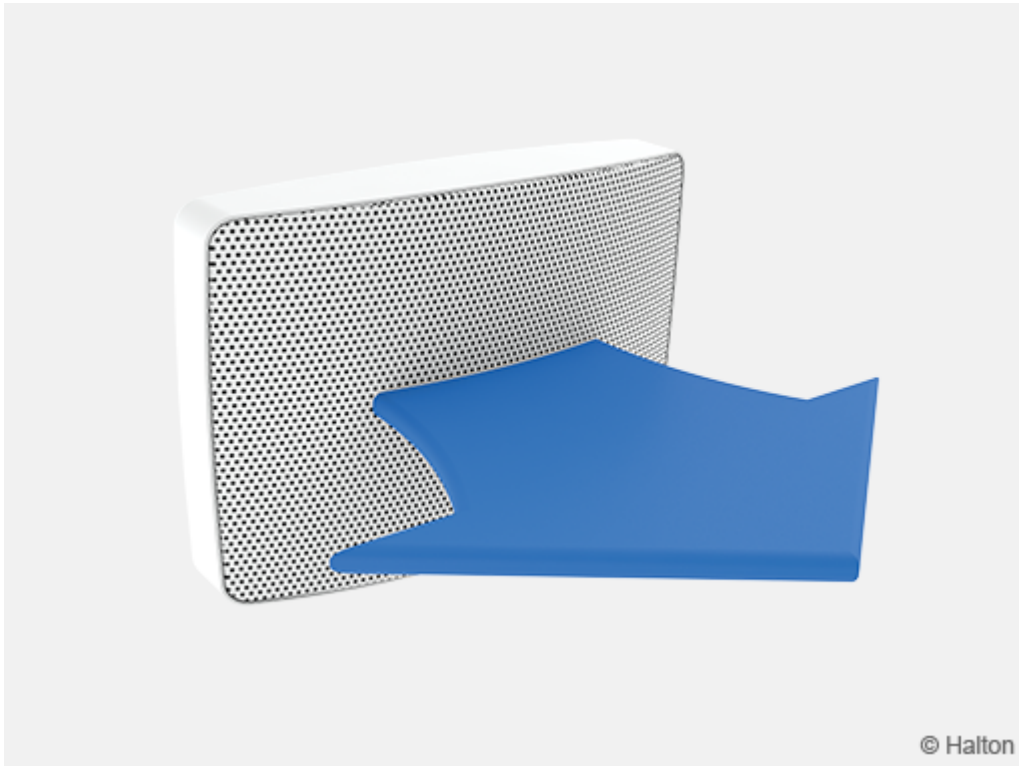
Material

Part	Material	Note
Casing	Steel	–
Front panel	Perforated steel	–
Trimming plate	HD polyethene	–
Collar	Galvanized steel	–
Gasket	Rubber compound	–
Finishing	Painted white (RAL 9003)	Special colours available

Function

Halton BOS supply air valve will be suitable in solutions where small airflow rates are required and air supply will be made from wall.

Supply air is discharged through the perforated front panel direct forwards.

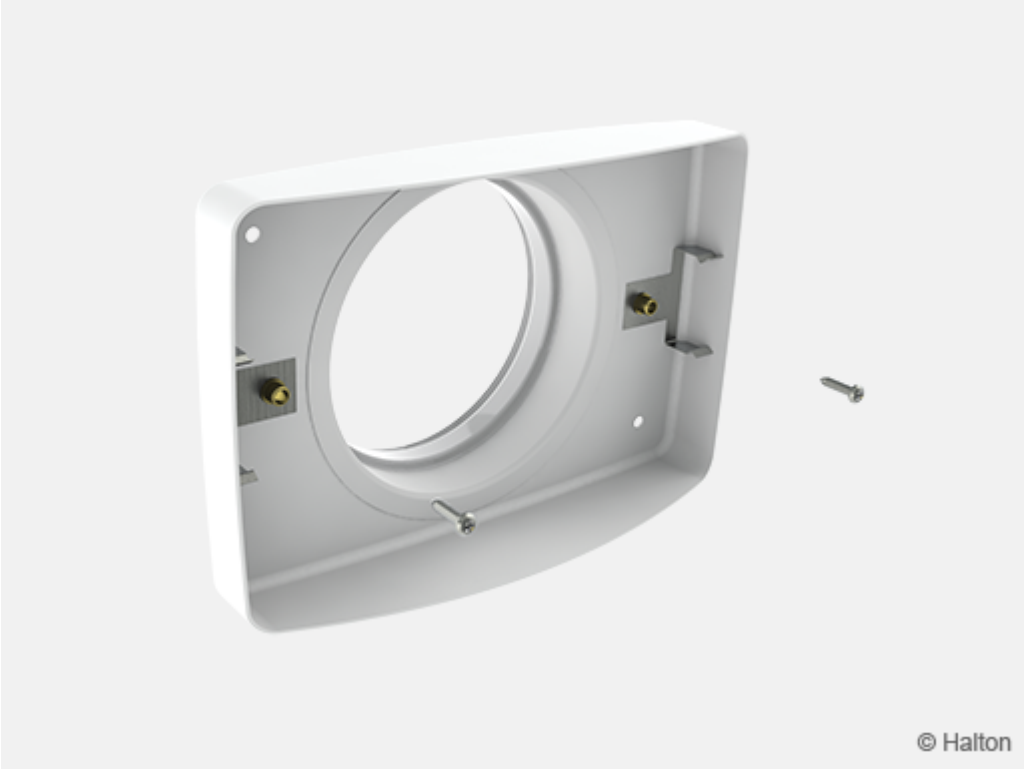


Airflow rate can be adjusted by changing the size of the trimming plate.

Installation



Fix the casing to the duct by screwing or riveting from the spigot.



Or with the screws from the bottom of the casing.

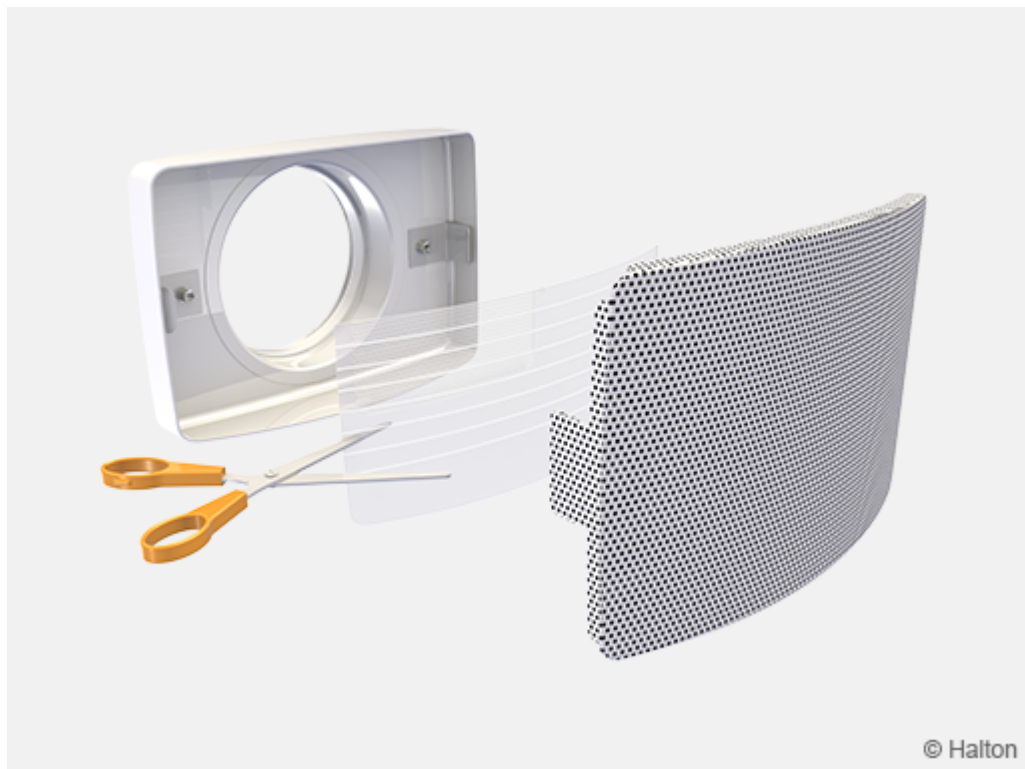
Halton BOS supply air valve will be installed on wall surface to the needed height, it could be

installed close to the ceiling surface.

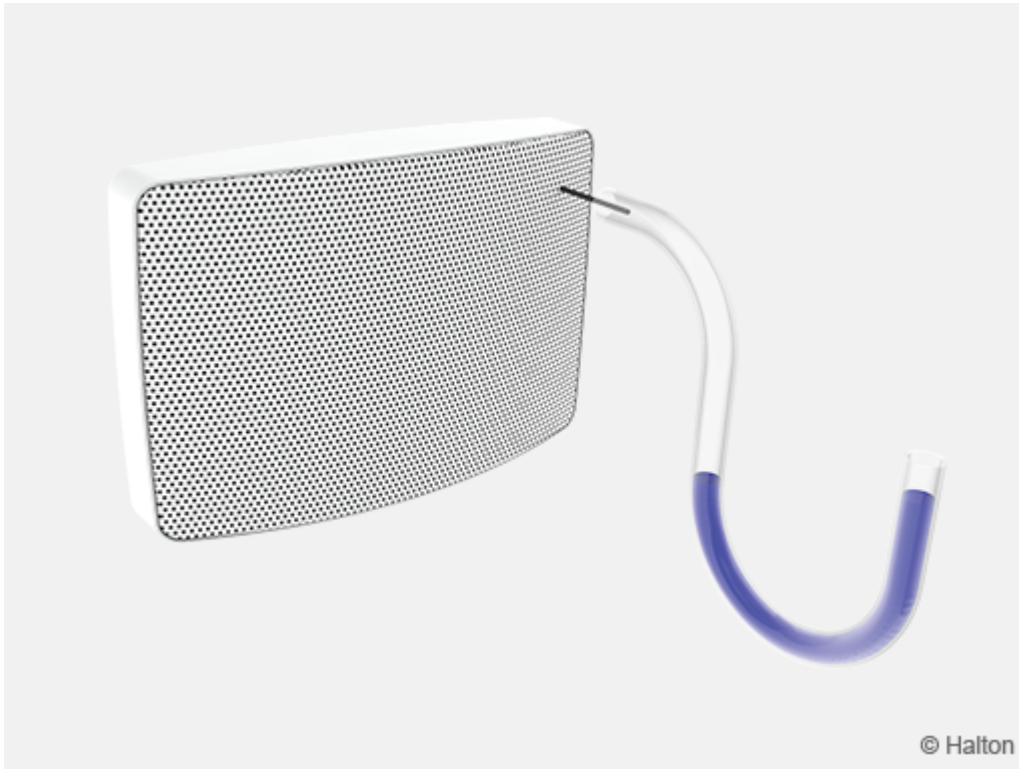
It will recommend having a minimum distance of 50 mm to the ceiling surface enabling the opening for front panel.

A recommended minimum safety distance before the valve is $3xD$.

Adjustment



Adjust the airflow rate by cutting the trimming plate according the needs.



Set a probe inside the valve and measure the differential pressure with a manometer. The location for the probe would be about 20 mm from top and side surfaces.

The airflow rate for Halton BOS is calculated using the formula and coefficients from the table below:

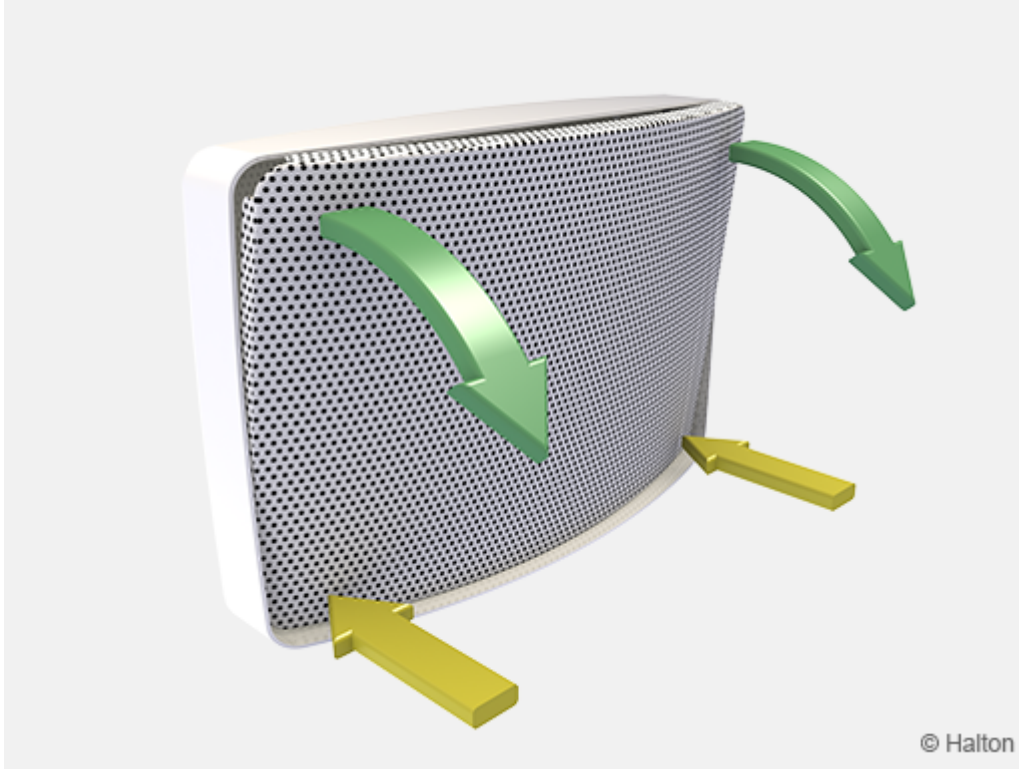
$$q_v = k * \sqrt{\Delta p_m}$$

A	k
10 *)	1,60
9	1,80
8	2,11
7	2,39
6	2,66
5	2,91
4	3,22
3	3,45
open	4,08

These values will be valid for both valve sizes (ØD = 100, 125).

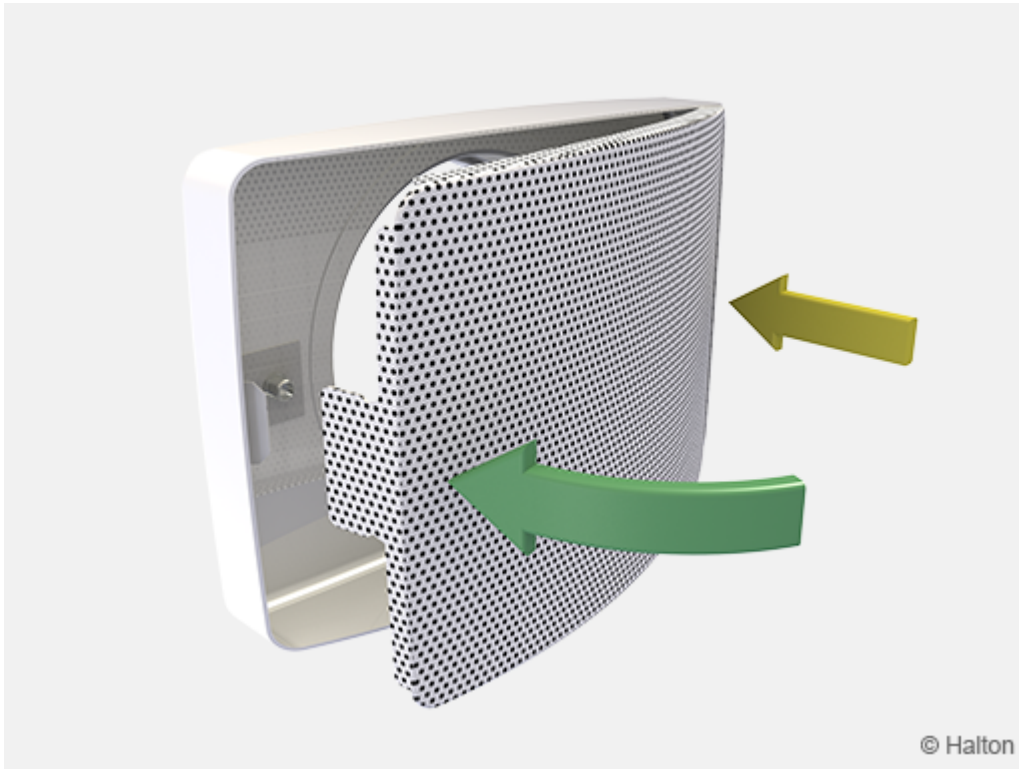
*) Uncut trimming plate

Servicing



Pressing the both corners of the front panel at the same time and release the front panel by pulling carefully from the opened side.

Note the position of the throttle plate. Wipe the parts with a damp cloth, instead of immersing in water.



Reassembly the front panel after cleaning.

Specification

The rectangular supply air valve shall have a detachable front plate and casing made of painted steel with a white (RAL 9003) standard colour.

The casing shall incorporate a sealing gasket.

Supply airflow rate and throw length shall be adjusted by adjusting the size of trimming pale in the front panel. Pressure loss shall be selected at the same time as the flow pattern adjustment and balancing.

Order code

BOS-D;CO-ZT

D = Duct connection size (mm)
100, 125

Other options and accessories

CO = Colour

SW Signal White (RAL 9003)
X Special colour (RAL xxxx)

ZT = Tailored Product

N No
Y Yes (ETO)

Code example

BOS-100, CO=W, ZT=N