

ZRE Halton Zen Rectangular



概述

- 提供大范围的送风能力。
- 通过小孔达到均匀的送风分布，在最近距离的散流器中提供最优条件。
- 提供地面水平低速送风或者吊顶垂直送风。
- 该装置可快速安装于墙面或者吊顶。
- 可拆卸前面板和金属内部结构能使该装置和管道系统易于清洁。
- 可使用圆形或者矩形连接管，在顶部/底部配合以整体橡胶密封件，或者在侧面或者后面用圆形连接。

产品型号&附件

- 可选择的管道连接位置
- 不锈钢（AISI 316L）设计
- 使用厚的前面板的型号（1.5mm）
- 防尘罩
- 安装座
- 安装支架

说明

Halton Zen矩形置换通风送风装置由镀锌钢制成，白色（RAL 9003）聚酯环氧涂层。

该装置有稳固的无维修、无堵塞设计。

该装置由一个可拆卸多孔前面板，一个内置流量均分板和外框组成。

该装置有一个位于顶部的圆形或者矩形连接管，或者一个根据装置位置决定的在左侧/右侧或者后面的圆形连接。

安装支架包含在配送内，不含螺钉。

可选项

该装置配有一个防尘罩以及/或者安装座，如需要。

装置的前面板可为需要的空间用厚度达1.5mm的镀锌钢板。

Selection

Quick selection

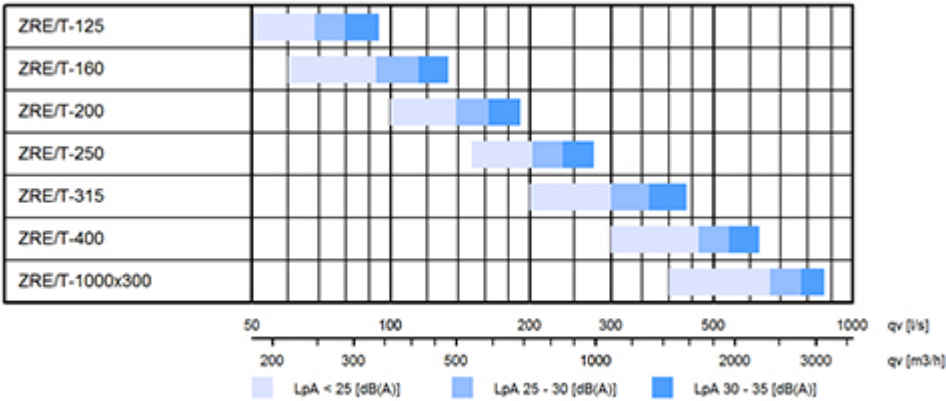


Fig.1. Halton Zen Rectangular, top connection

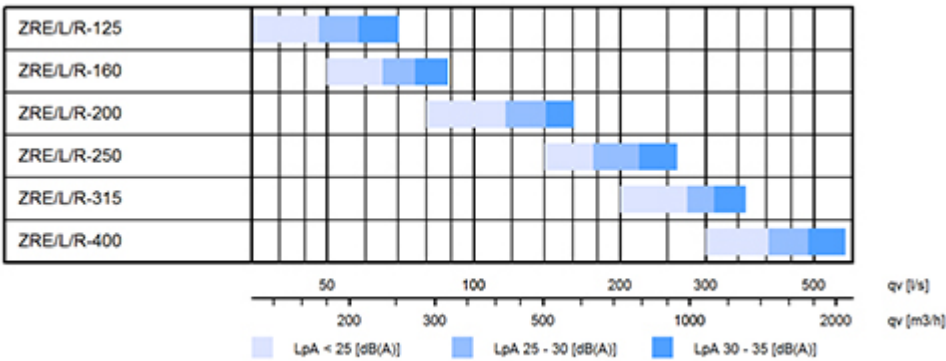


Fig.2. Halton Zen Rectangular, left and right connection

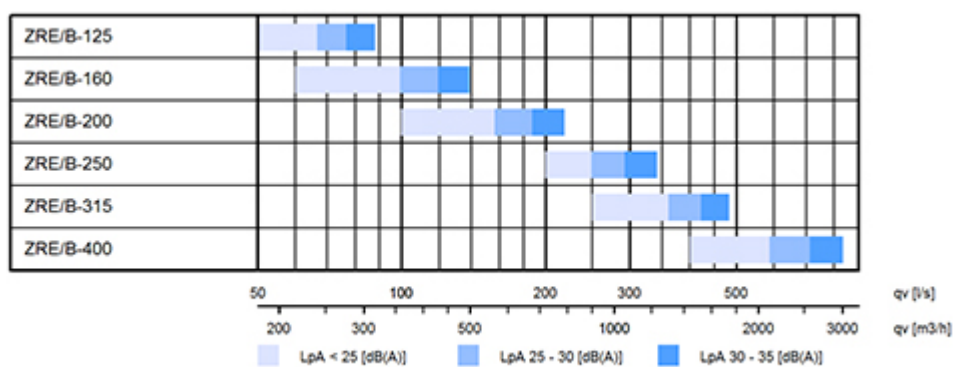
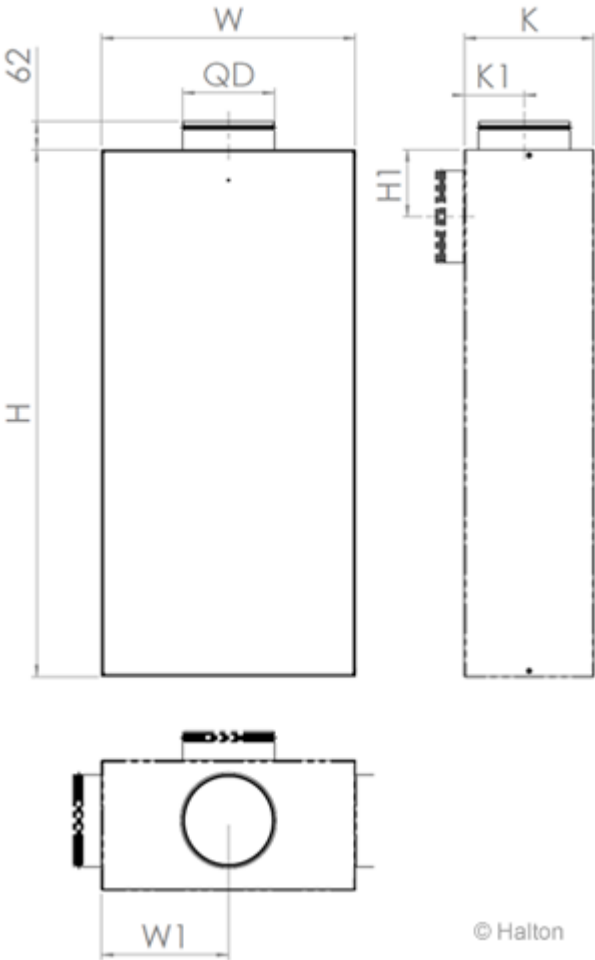


Fig.3. Halton Zen Rectangular, back connection

Dimensions and weight



NS	W	H	W1	H1	K	K1	ØD
125	550	540	275	125	240	110	124
160	550	540	275	125	240	110	159
200	550	1140	275	145	280	130	199
250	660	1350	330	170	330	155	249
315	830	1600	415	200	400	188	314
400	950	2000	475	245	480	230	399
^{*)} 1000×300	1150	2000	575	–	380	180	998×298

^{*)} Size 1000×300 available only with top connection

- **AB/ZRE** installation base:
Height = 100 mm
- **SB/ZRE** installation base, high model:
Height = 200 mm, W=W+120, K=K+60

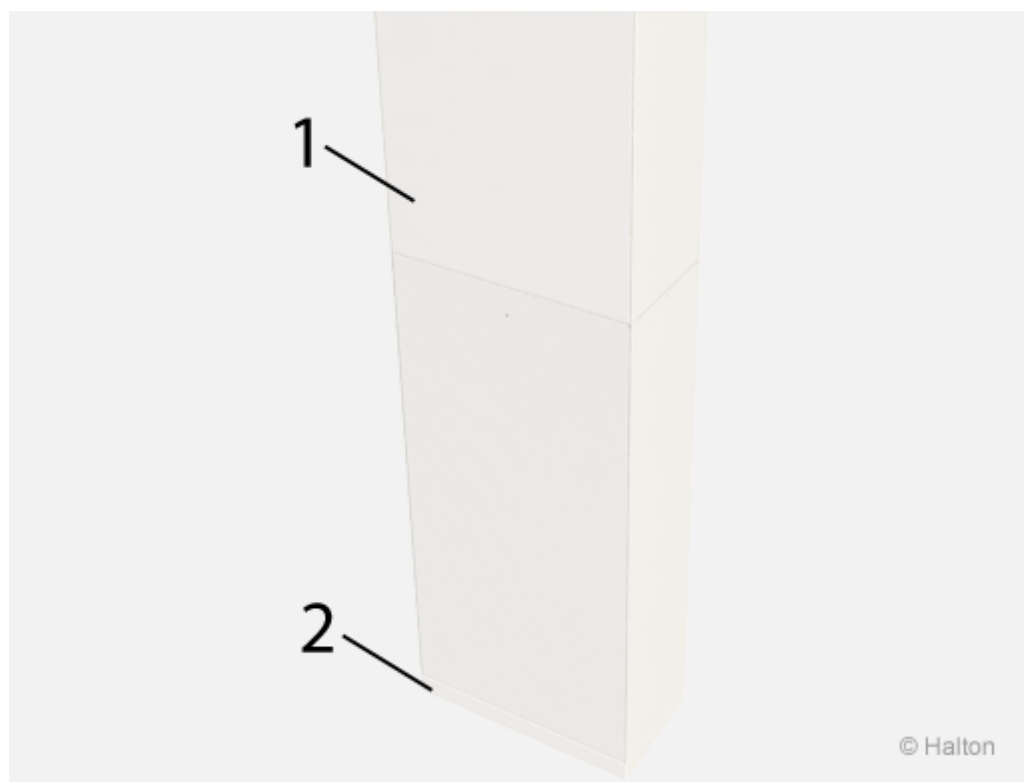
Weight

NS	kg
125	10.7
160	10.7
200	20.0
250	28.3
315	41.0
400	58.0
1000×300	62.4

Material

Part	Material	Note
Front panel	Perforated galvanised steel	Stainless steel (AISI 316L) as option
	Polyester-epoxy painted White (RAL 9003/30% gloss)	Special colours available
Casing	Galvanised steel	Stainless steel (AISI 316L) as option
Flow equalisation element	Galvanised steel	Stainless steel (AISI 316L) as option
Pressure measurement pipe	Plastic	–
Spigot	Galvanised steel	Stainless steel (AISI 316L) as option
Gasket	Rubber compound	–
Duct cover	Galvanised steel	–
	Polyester-epoxy painted White (RAL 9003/30% gloss)	Special colours available
Installation base	Galvanised steel	–
	Polyester-epoxy painted White (RAL 9003/30% gloss)	Special colours available
Cover list	Galvanised steel	Stainless steel (AISI 316L) as option
	Polyester-epoxy painted White (RAL 9003/30% gloss)	Special colours available

Accessories



Accessory	Code	Description	Note
Duct cover (1)	DC	Standard lengths 500 / 1000 / 1500 / 2000 mm	–
Installation base (2)	AB	Standard height 100 mm	–
Installation base	SB	Standard height 200 mm / Dimensions = unit size + 60 mm	High (store) model
Cover list	CL	Cover list for fixing into wall or ceiling	–

Product Models

- Duct cover (DC) made of perforated steel (same material as ZRE unit)
 - Construction made of stainless steel (AISI 316L)
 - Thicker front panel (1.5 mm)
 - Optional duct connection sides (left, right or back – see images below)
- Note:** Size 1000×300 available only with top connection



Fig.1. Connection from top (ZRE/T)



Fig.2. Connection from left (ZRE/L)



Fig.3. Connection from right (ZRE/R)

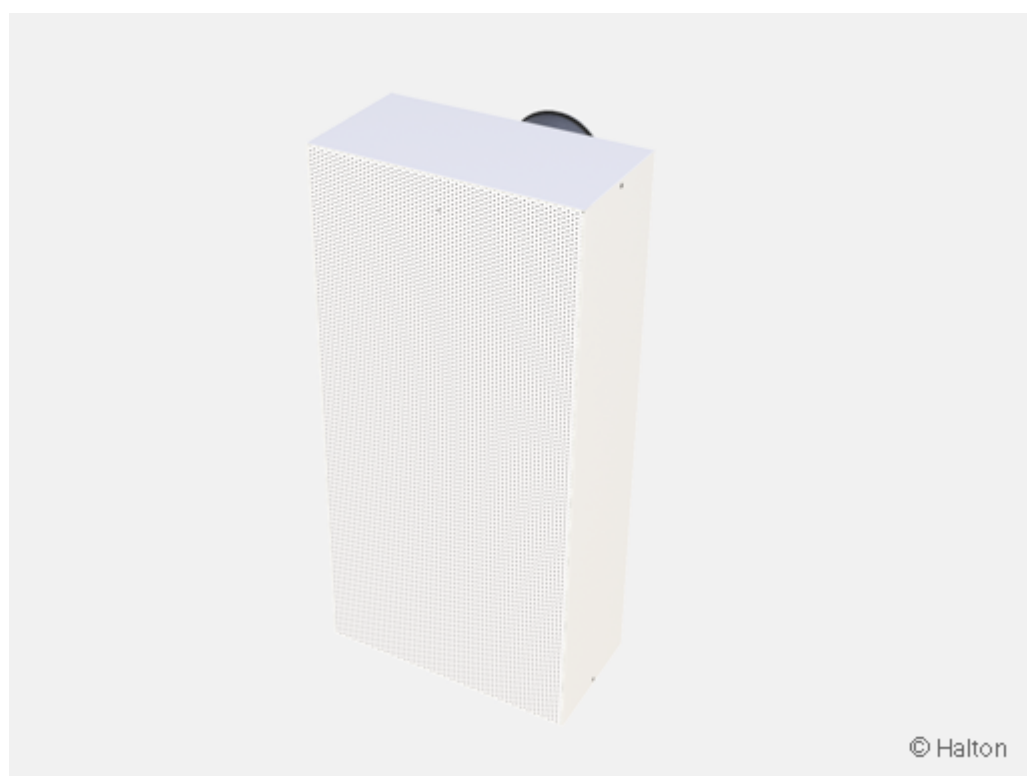
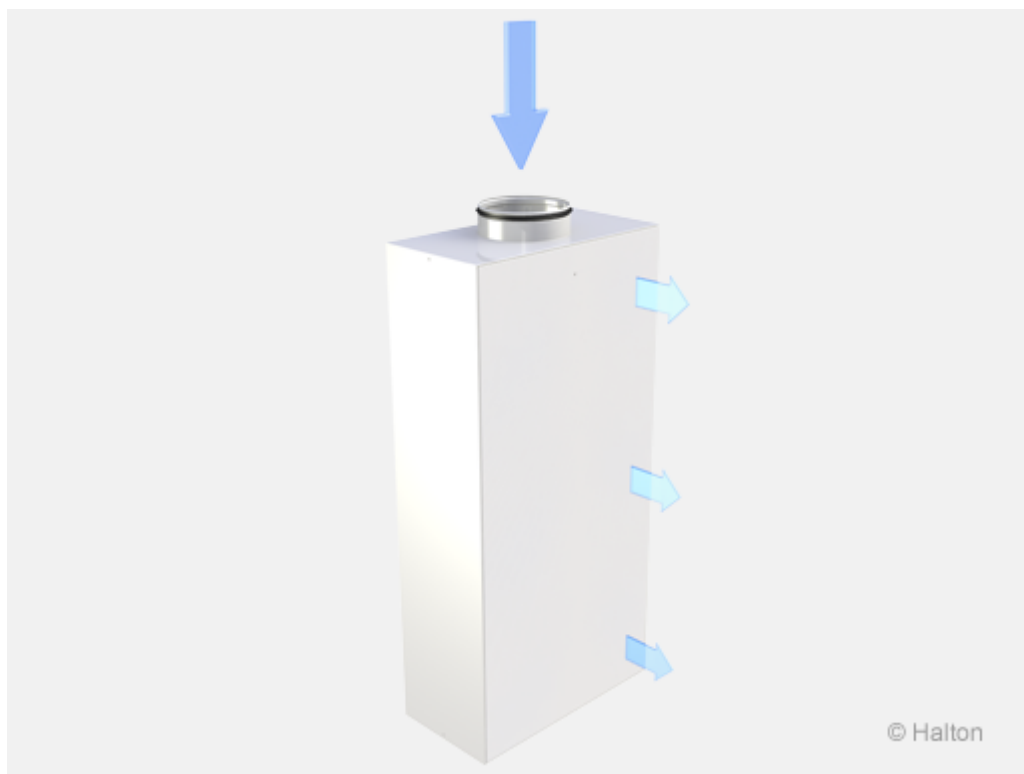


Fig.4. Connection from back (ZRE/B)

Function



Air is supplied into the space uniformly through the front panel of Halton Zen Rectangular, generally at a slightly lower temperature than the room air. The supply air flows down to the floor level, before gradually pervading the occupied zone at a low velocity. Finally the convection of warm surfaces causes the air to rise out of the occupied zone. The low velocity flow pattern is directed forwards.

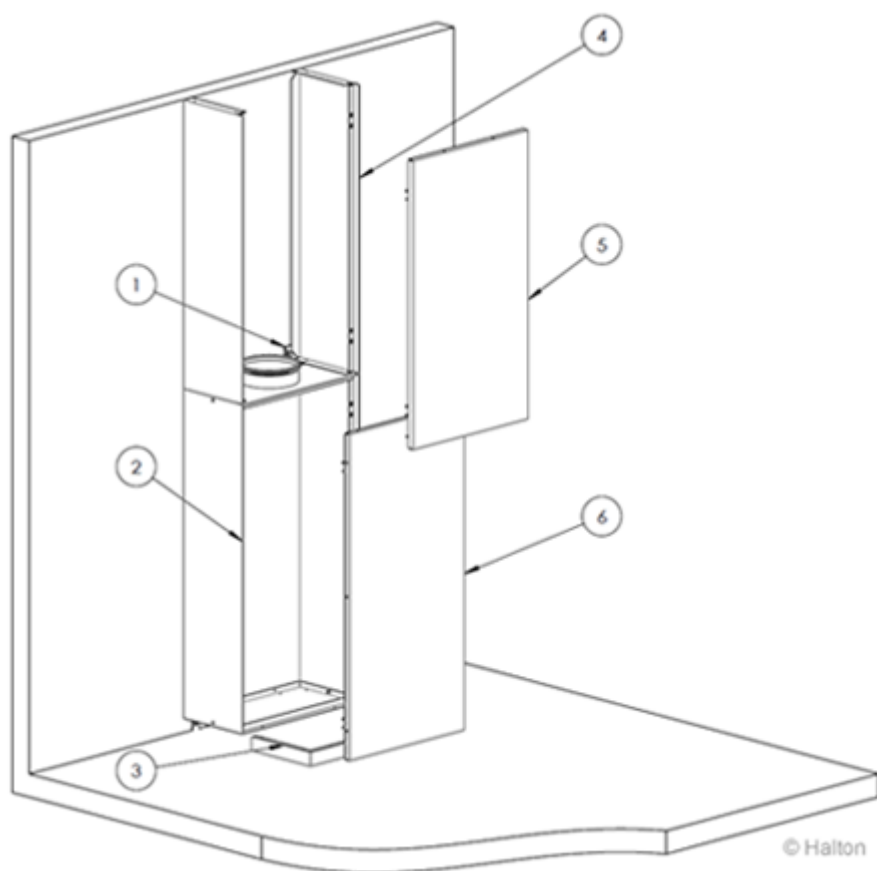
The non-clogging unit can be easily opened and cleaned.

Halton PRA or Halton PTS/C can be used as an airflow adjustment damper in round duct sections. The safety distance for reliable air flow measurement from the displacement unit is 5 duct dimensions between displacement unit and air flow adjustment damper.

If air flow adjustment damper is installed closer to the displacement unit (minimum distance about 3 duct dimensions), supply air throw pattern is correct, but air flow measurement result will not be accurate. When installing air flow adjustment damper close to the displacement unit (minimum 3xD), attenuator could be needed between the damper and the displacement unit.

Note: The flow pattern data has been defined for a floor level installation.

Installation



Perform the installation for Halton Zen Rectangular in the following order:

A) Installation without base:

Fix mounting brackets(4 places) to the unit (1).

Position the unit (2) against the wall and secure with mounting brackets (included in delivery).

Installation with base:

Fix the base (6) onto the floor and fix the unit (2) onto that.

Secure with mounting brackets on top (1) (2 places)

B) Fix duct cover sides (4) onto the wall between the unit and ceiling with screws (not included in delivery) through cover.

C) After installation of the ductwork, install the front plate of the duct cover (5).

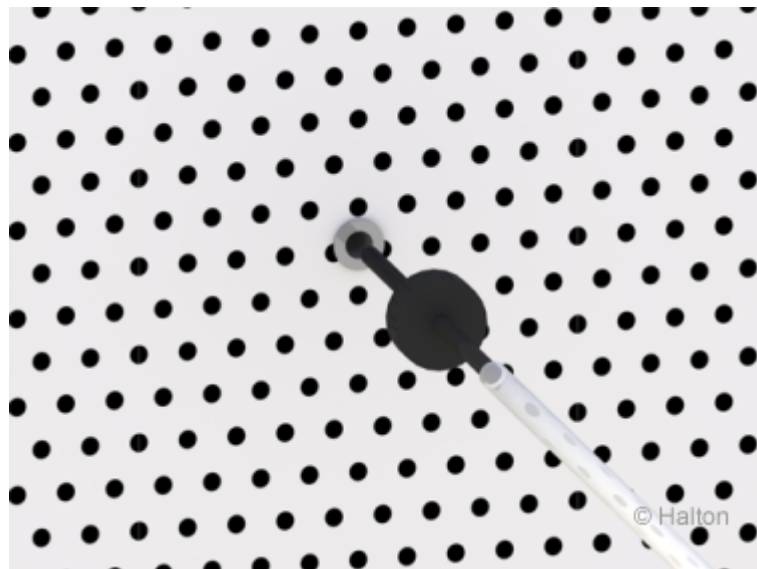
D) When multiple sections of duct covers are used, secure them with screws (not included in delivery).

E) Install front plate of the low velocity unit (6).

Ceiling installation available as tailored solution. Please contact sales.

Adjustment

The supply flow rate is determined by measuring the differential pressure from the measurement nipple with a manometer. Use a measurement probe thin enough fit into the nipple. Then use tape or another gasket to create a seal in the nipple in order to get an accurate reading .



The flow rate is calculated by using the formula below:

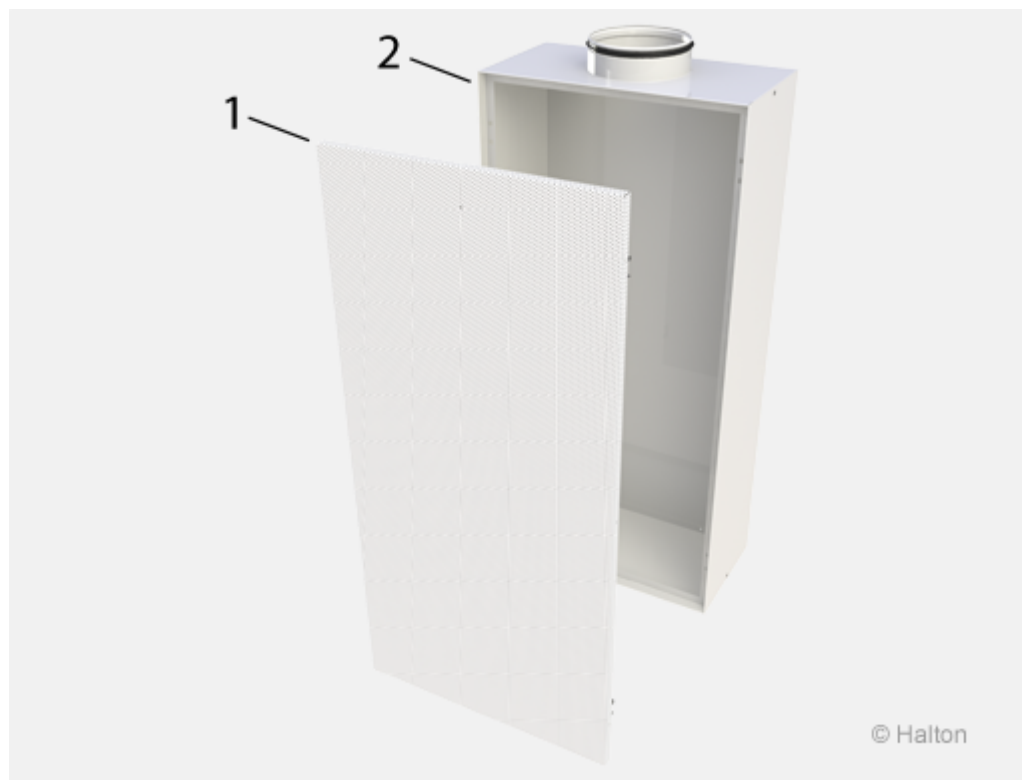
$$q_v = k * \sqrt{\Delta p_m}$$

The values of k factor for formula

(D = duct diameter; L/R, T, B = location of duct connection)

D	k – L/R	k – T	k – B
125	10.9	11.1	12.1
160	15.6	16.2	17.1
200	27.3	26.9	29.1
250	44.3	42.9	47.6
315	67.9	66.1	74.2
400	105.7	100.7	118.1
1000X300	–	166.3	–

Servicing



Code description

1. Front panel
2. Casing

Open the front panel (1) by carefully pulling the spring connections out.

If required, the flow equalization plate can be detached.

Wipe the parts with a damp cloth. Do not immerse in water.

Reassemble after cleaning in reverse order.

Specification

The Halton Zen Rectangular displacement ventilation supply unit is made of galvanised steel, polyester-epoxy-painted with a white (RAL 9003) colour.

The unit has a robust maintenance-free, non-clogging design.

The unit is comprised of a detachable, perforated front panel, an internal flow equalization plate, and casing.

The unit has a circular or rectangular duct connection on at the top, or a circular connection on the left/right side or back depending on where the unit is located.

Mounting brackets are included in the delivery, screws not.

Options

The unit is equipped with a duct cover and/or installation base, where required.

The front panel of the unit is available of 1.5mm thick galvanised steel for demanding spaces.