

Zehnder ComfoWell 520

Technical specification for a modular system comprising an attenuator and manifold system



Advantages

- All air treatment functions available: attenuator, fine filter, active carbon filter, manifold box
- Modular design
- Compact dimensions
- Easy to clean
- Components connected with sliding profiles for easy mounting
- Pipes connected by end pieces with connectors
- Directly connected to all components of the ComfoWell system
- Very good sound attenuation
- Two attenuators can be used in series for maximum sound reduction
- Mounting set available for vertical mounting of attenuators on ComfoAir 350, ComfoAir 550, ComfoAir Q350/450 TR, ComfoAir Q600 ST
- High-efficiency fine filters up to filter class F9 available
- Odour neutralisation by active carbon filter
- Components available in width of 520 mm to connect 10 ComfoTubes.



ComfoWell as attenuator



ComfoWell as manifold box



ComfoWell as filter housing



Mounting plate



End plate



Mounting set



Mounting set



Spacer frame



Fine dust filter F7



Fine dust filter F9



Active carbon filter FC

Technical specifications

Zehnder ComfoWell 520

Housing	Galvanised sheet steel
Inner lining	Closed-cell melamine resin foam
Permissible operating temperature	-25 to +60 °C
Maximum air volume	400 m ³ /h at normal ventilation level

Benefits

- Everything from a single source: with attenuator, fine filter, active carbon filter and manifold boxes, all functions are available for air treatment
- Easy installation owing to the modular structure, compact dimensions and connection of the components with sliding profiles

Article number

Description	Article number
Attenuator CW-S 520	990 323 502
Manifold box CW-D 520	990 323 532
Filter housing CW-F 520	990 323 552
Mounting plate CW-M 520-10 x 75	990 323 524
Mounting plate CW-M 520-10 x 90	990 323 525
End plate CW-P 520 – DN 160	990 323 564
End plate CW-P 520 – DN 180	990 323 513
Mounting set CW-K 520 – ComfoAir 350	990 323 518
Mounting set CW-K 520 – ComfoAir 550	990 323 519
Mounting set CW-K 520 – ComfoAir Q350/450 TR	990 323 645
Mounting set CW-K 520 – ComfoAir Q600 ST	990 323 646
Spacer frame CW-DF 520	990 323 539
Fine dust filter CW-F7 520	990 323 606
Fine dust filter CW-F9 520	990 323 607

Tender specification

Attenuator:

Zehnder ComfoWell attenuator CW-S 520. Compact rectangular attenuator with high-efficiency special sound attenuation pack and low pressure losses. The attenuator can be used on its own or in combination with any add-on from the ComfoWell system.

It is connected to all add-ons with a folded joint and clamping rail to create an airtight seal. The attenuation element can be removed for inspection and cleaning. The attenuator is mounted on a wall or ceiling with height-adjustable mounting brackets. Mounting accessories are supplied with the unit.

Technical specifications:

- Insertion loss: 10.3 dB / 250 Hz
- Housing: galvanised sheet steel
- Attenuation element: special foam with hygienic coating
- Dimensions: length: 500 mm; depth: 520 mm; height: 230 mm

Manifold box:

Zehnder ComfoWell manifold box CW-D 520. Compact sound-absorbing manifold box with closed-cell, attenuating inner lining, fits mounting plate for ComfoTube 10 x 75 or 10 x 90 ventilation tubes. The mounting plate connection can be moved from the front to the side. The manifold box can be used on its own or in combination with any add-on. It is connected to all add-ons with a folded joint and clamping rail to create an airtight seal.

The manifold box features an access panel for easy cleaning and adjustment of the ComfoTube ventilation tubes. Mounting accessories are supplied with the unit.

- Material: galvanised sheet steel
- Dimensions: length: 230 mm; width: 520 mm; height: 230 mm

Filter housing:

Zehnder ComfoWell filter housing CW-F 520. Compact filter housing for mounting in supply line, to accommodate pollen filter F7 or active carbon filter element.

Filter elements are not supplied with the unit. The manifold box can be used on its own or in combination with any add-on from the ComfoWell system. It is connected to all add-ons with a folded joint and clamping rail to create an airtight seal. It is mounted with adjustable mounting brackets; mounting accessories are included.

- Material: galvanised sheet steel
- Dimensions: length: 300 mm; width: 520 mm; height: 230 mm

Mounting plate:

Zehnder ComfoWell mounting plate CW-M 520-10 x 75 or 90 for connecting 10x Zehnder ComfoTube 75 or 90 flexible ducts. Supplied with guard and clamping rails. Mounting plate can also be used for mounting in concrete.

End plate:

Zehnder ComfoWell end plate CW-P 520 – DN160 / DN180 (with central support) for connecting the ComfoWell attenuator and distribution system to a DN160 / DN180 round duct. Clamping rails included.

Mounting set:

A special mounting set is available for the Zehnder ComfoWell 520 attenuator and distribution system for direct mounting on the ventilation unit. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

Spacer frame:

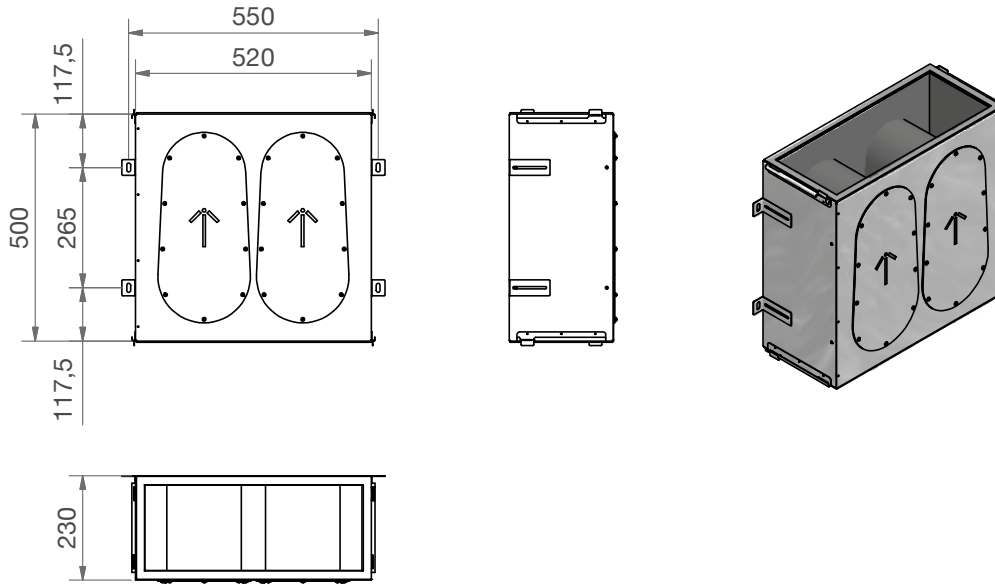
Zehnder ComfoWell spacer frame CW-DF 520 to compensate for uneven surfaces when components and mounting plate (concreted in place) are at 90°. Spacer frame includes the necessary mounting accessories.

Filter:

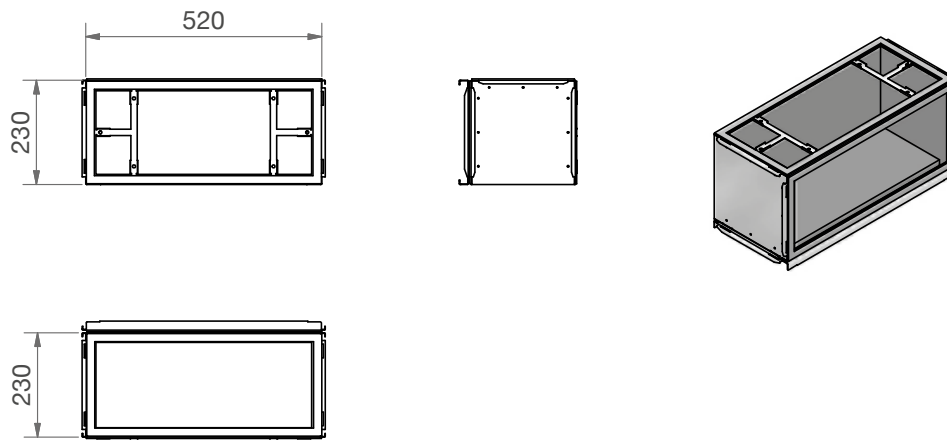
Filter for mounting in filter housing CW-F 520. Available filter classes include F7 (pollen filter), F9 (fine dust filter) and an active carbon filter for odour neutralisation.

Dimensional drawings

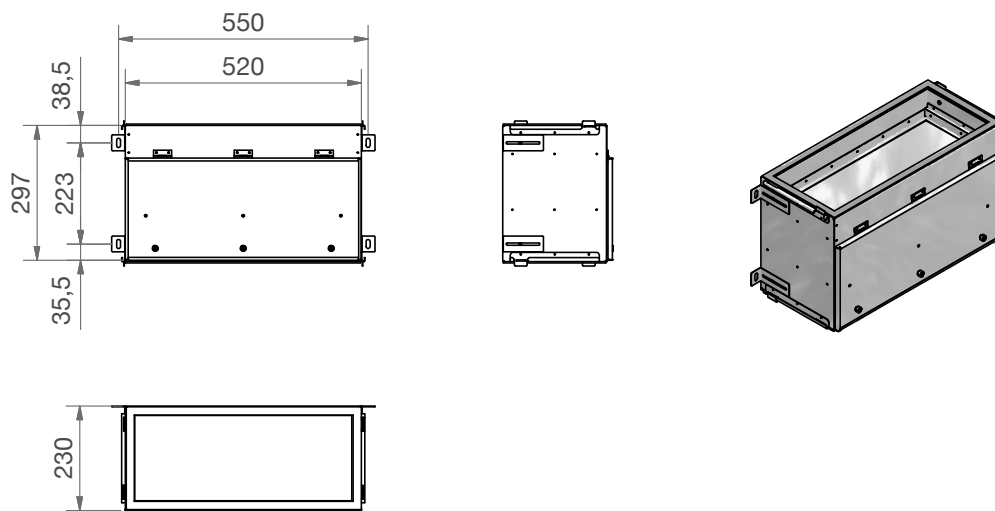
Attenuator



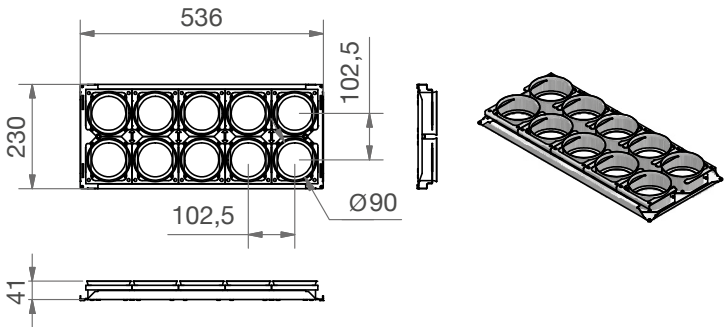
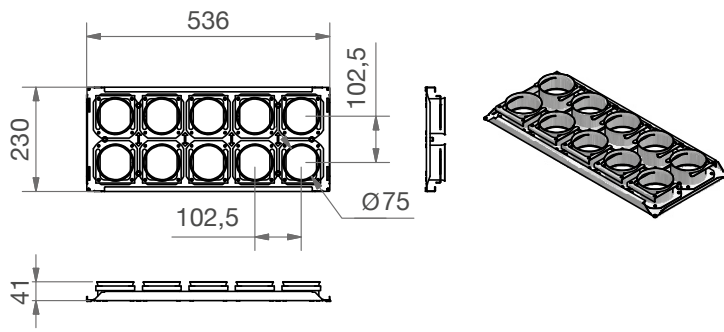
Manifold box



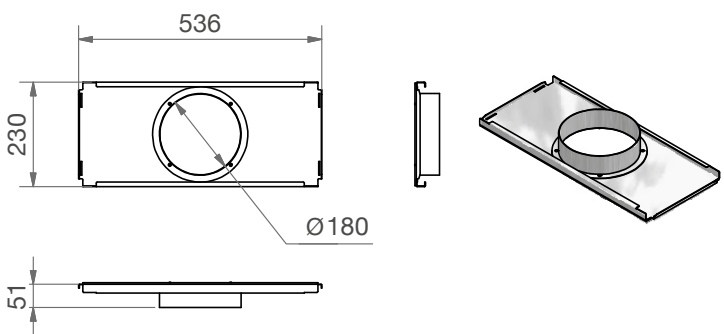
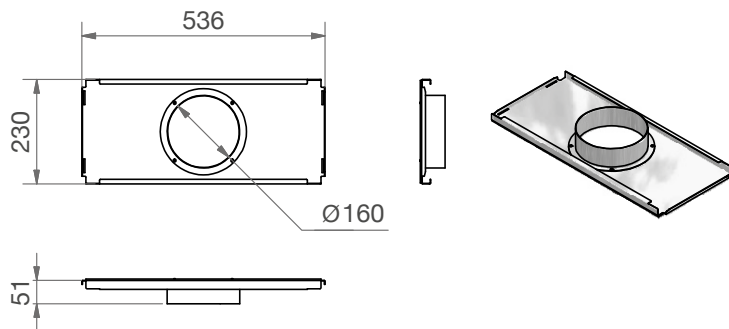
Filter housing



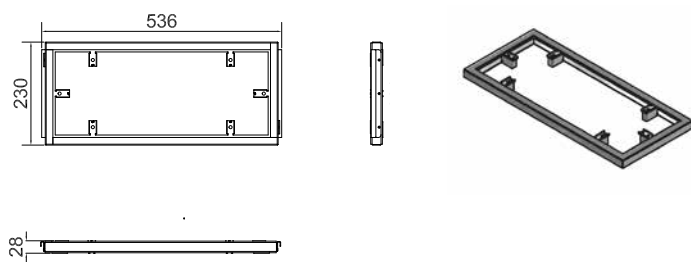
Mounting plate



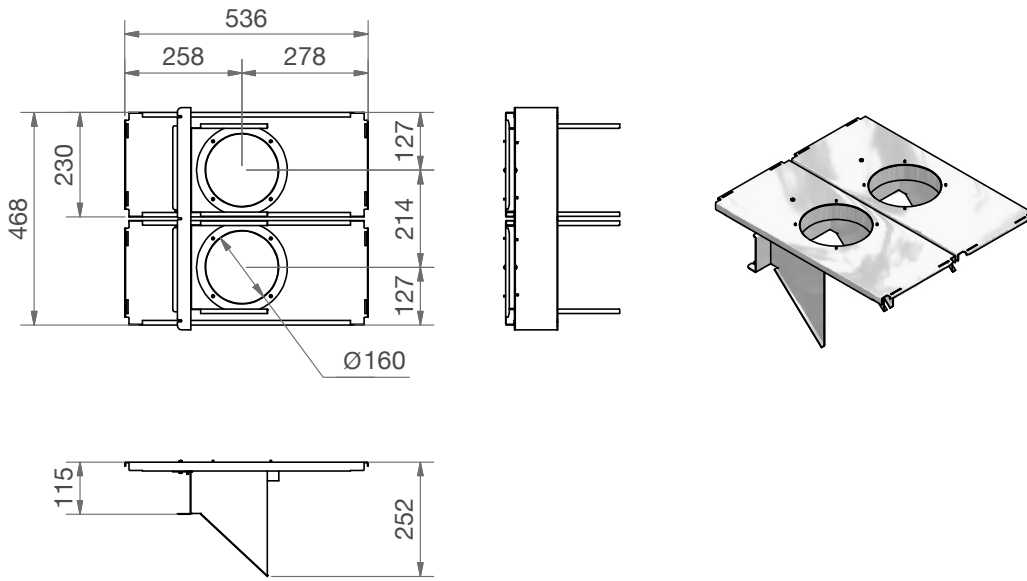
End plate



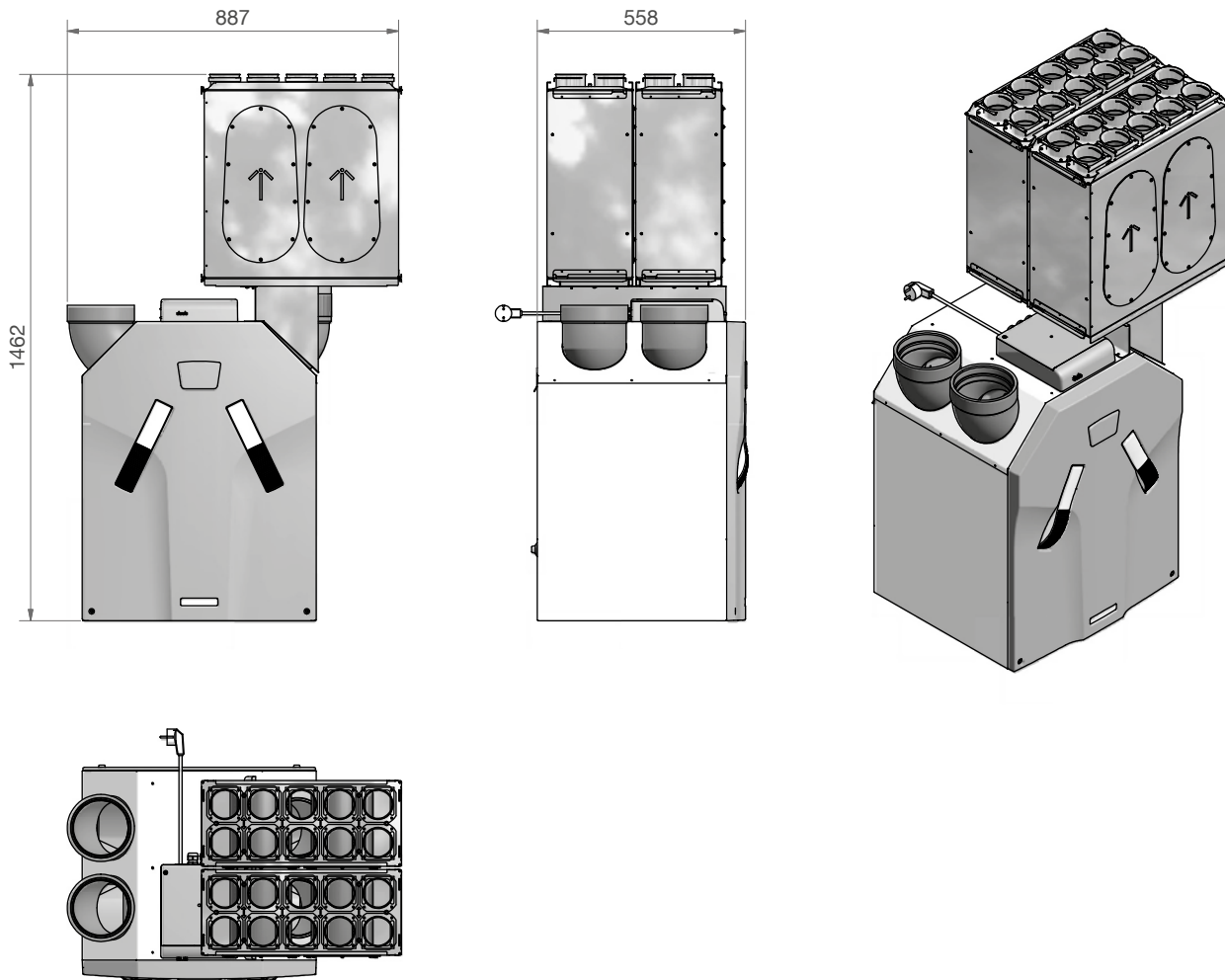
Spacer frame



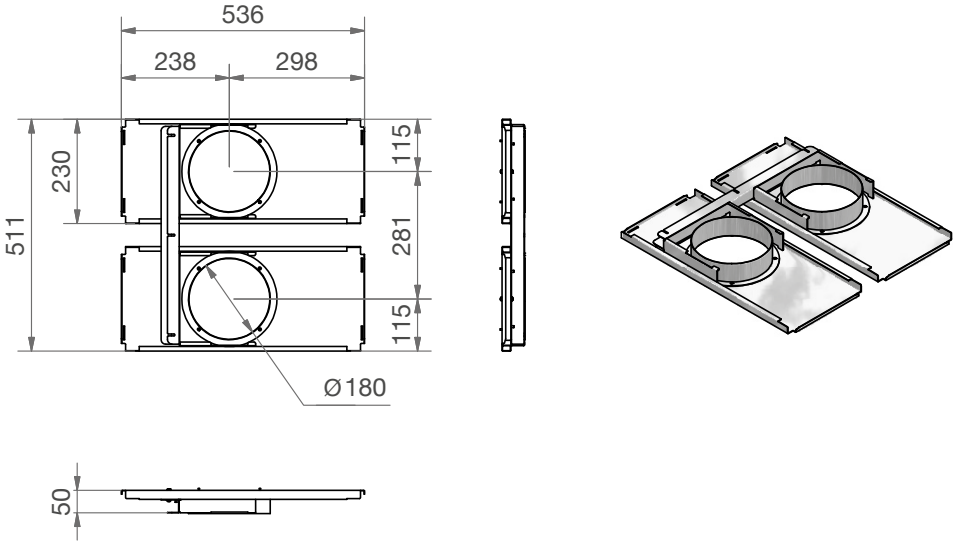
Mounting set ComfoAir 350



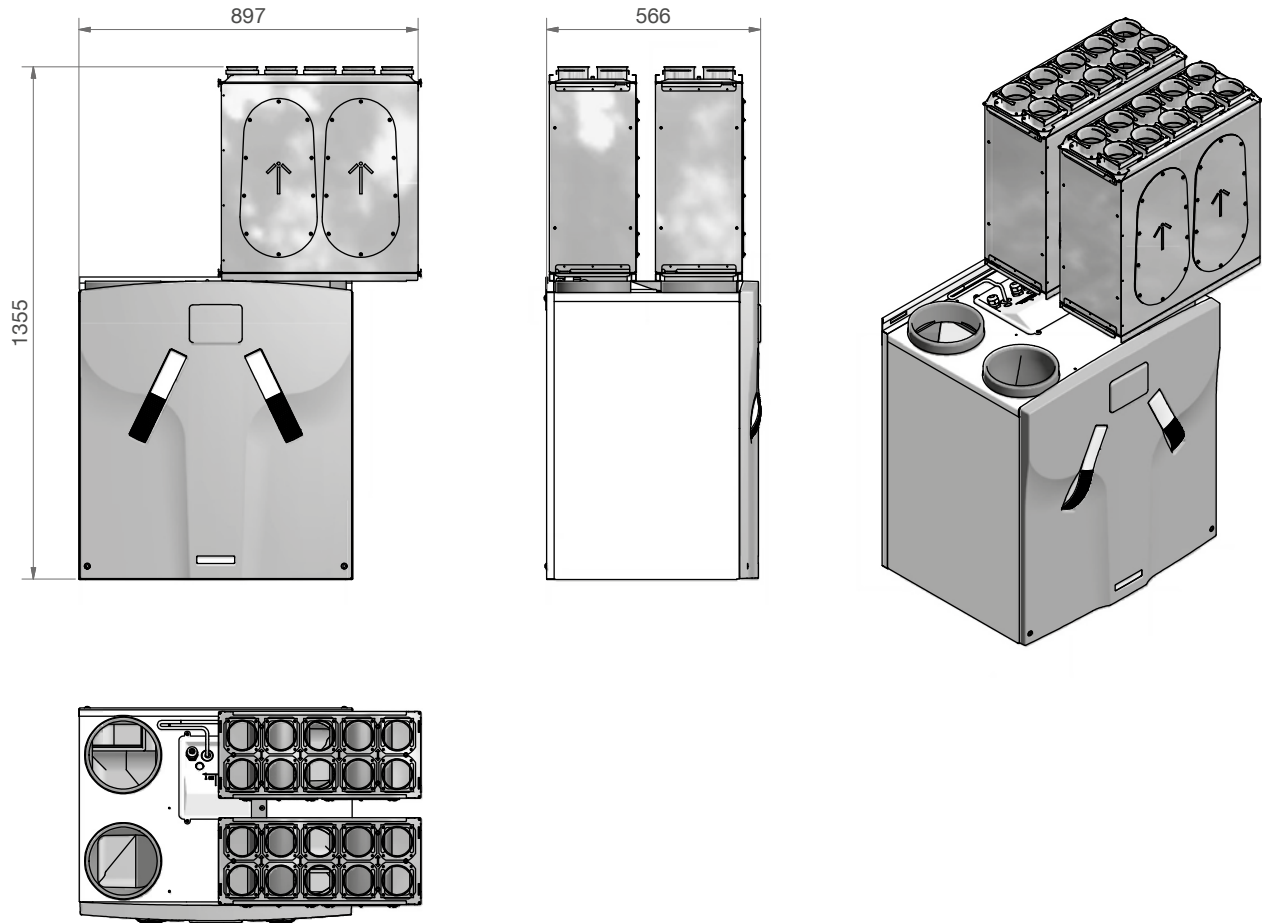
ComfoAir 350 with mounting set



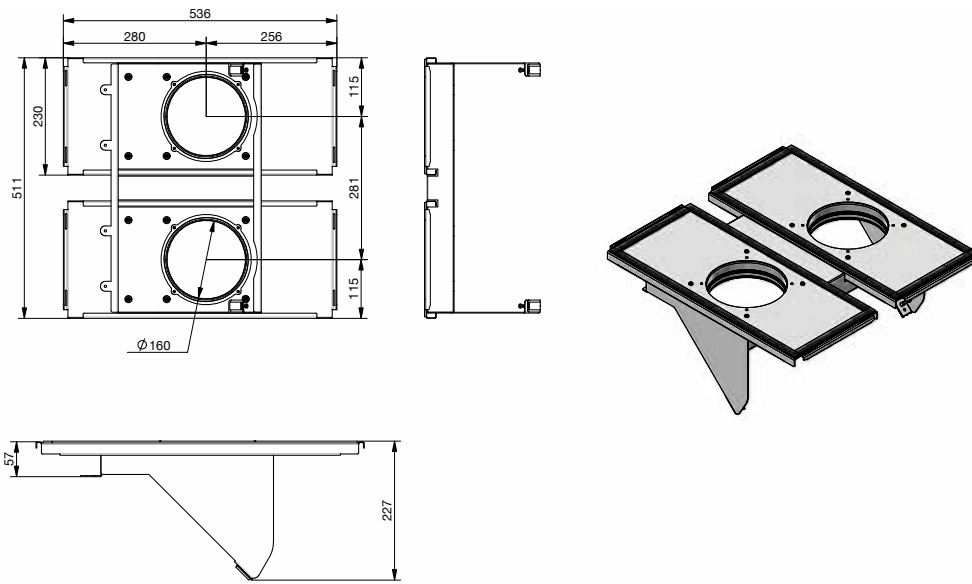
Mounting set ComfoAir 550



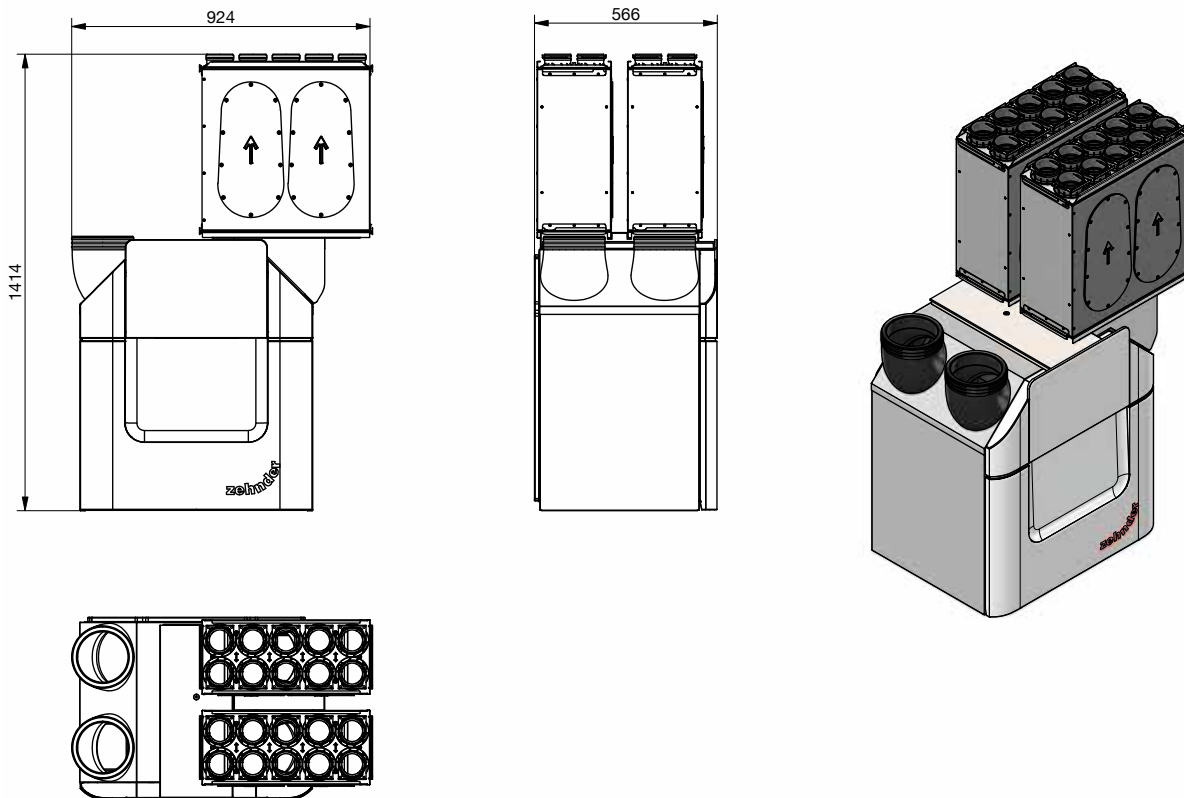
ComfoAir 550 with mounting set



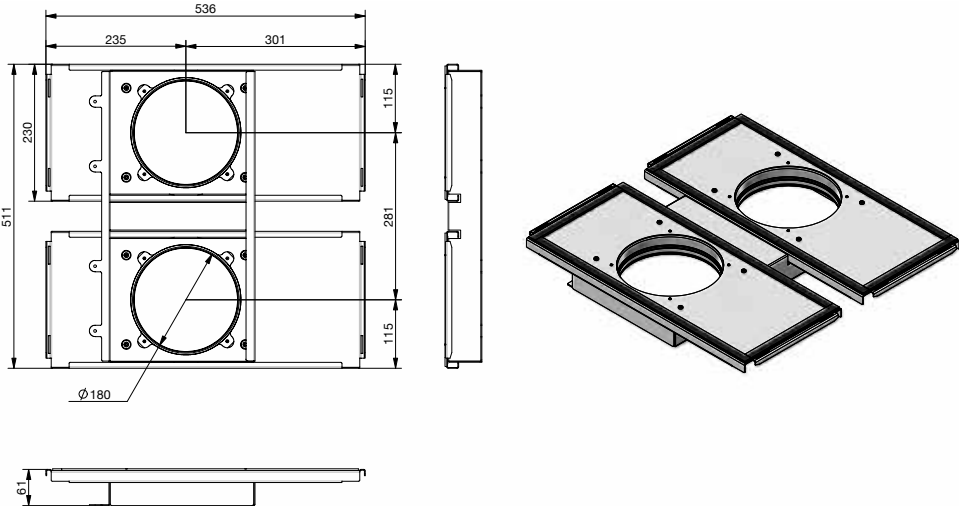
Mounting set ComfoAir Q350/450 TR



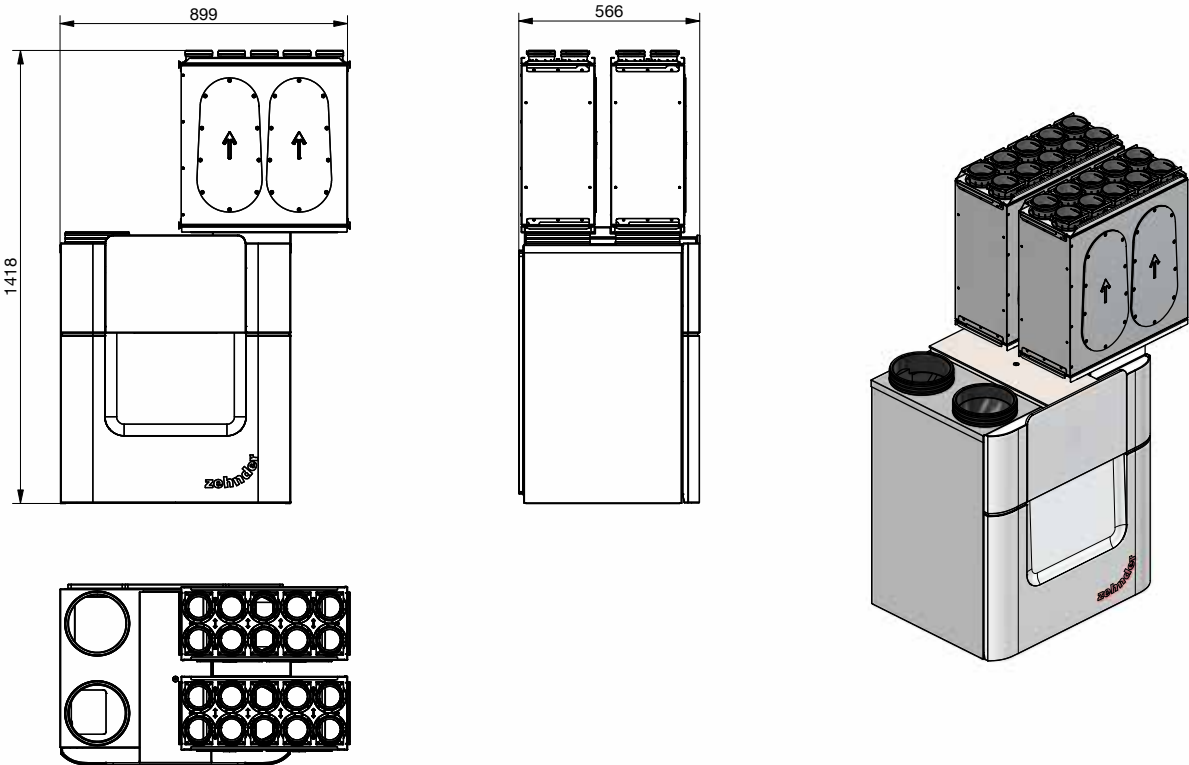
ComfoAir Q350/450 TR with mounting set



Mounting set ComfoAir Q600 ST

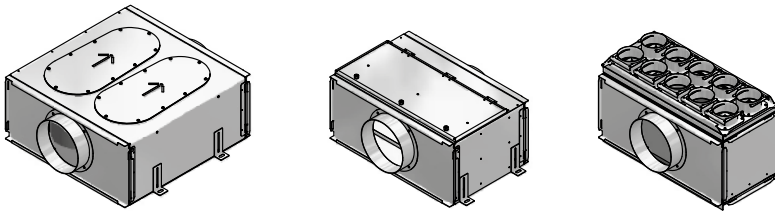


ComfoAir Q600 ST

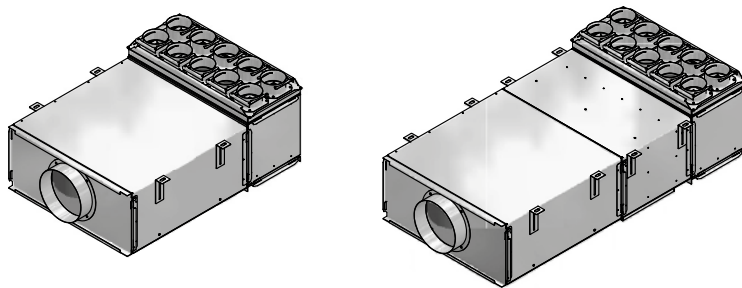


Usage scenarios

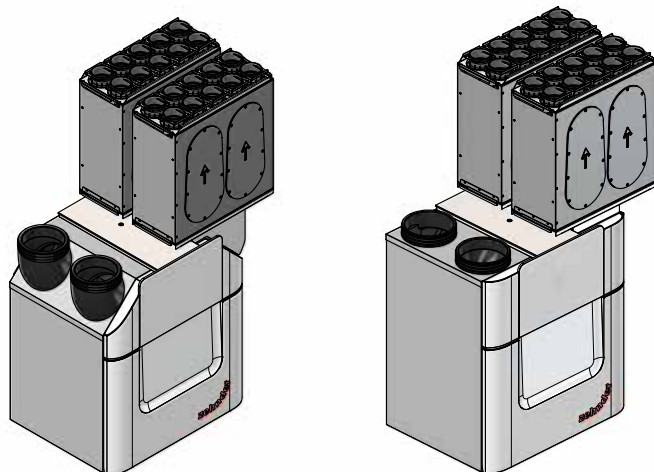
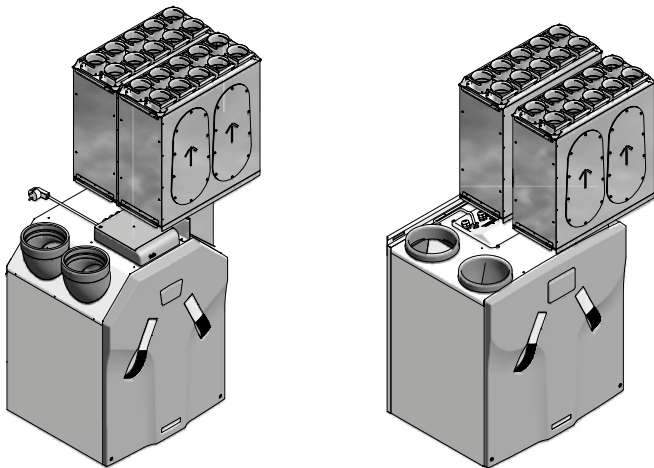
Standalone



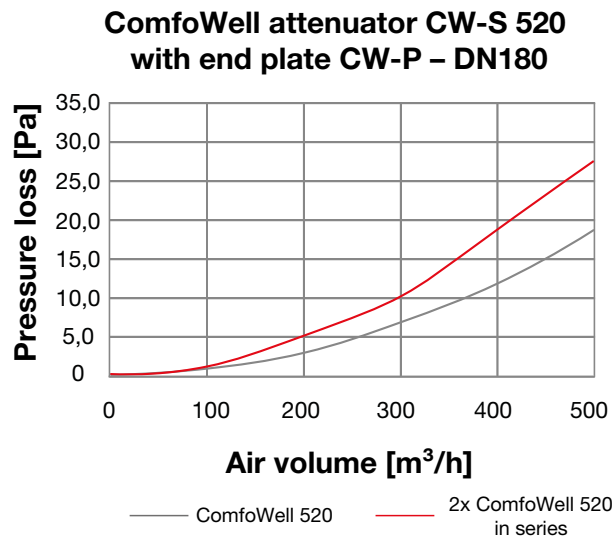
Combined



Compact with ventilation unit



Pressure losses



Insertion loss

1x end plate CW-P 520 + 1x attenuator CW-S 520 + 1x end plate CW-P 520 or mounting plate CW-M 520

Insertion loss with one attenuator*

Frequency [Hz]	63	125	250	500	1,000	2,000	4,000	8,000
[dB]	0.2	6.3	10.3	16.5	12.0	20.4	15	13.5

1x end plate CW-P 520 + 2x attenuators CW-S 520 + 1x end plate CW-P 520 or mounting plate CW-M 520

Insertion loss with two attenuators*

Frequency [Hz]	63	125	250	500	1,000	2,000	4,000	8,000
[dB]	6.7	12.3	20.3	22.5	19.2	37.8	27.6	23.9

* Insertion loss measured in accordance with EN ISO 7235 (pink noise)

Zehnder ComfoWell Manifold

w/ twist-connect terminations

zehnder

CW-M 220 4-port manifold

CW-M 320 6-port manifold

CW-M 420 8-port manifold

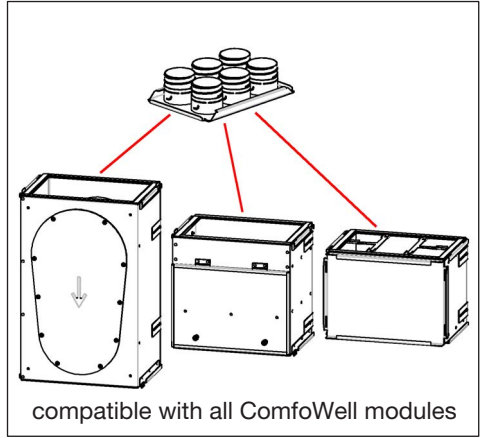
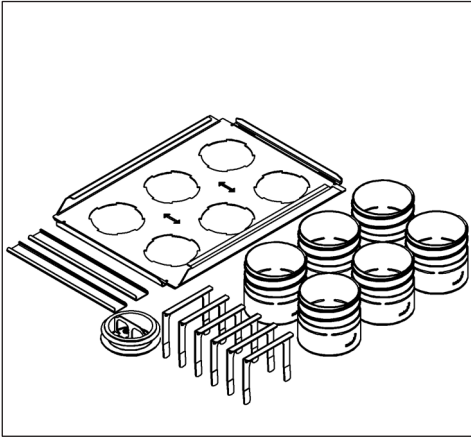
CW-M 520 10-port manifold

CW-M 625 12-port manifold



Installer Manual





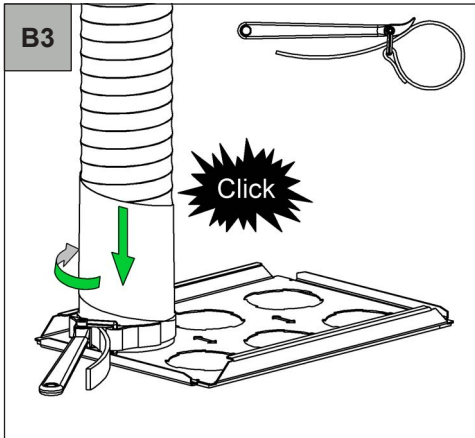
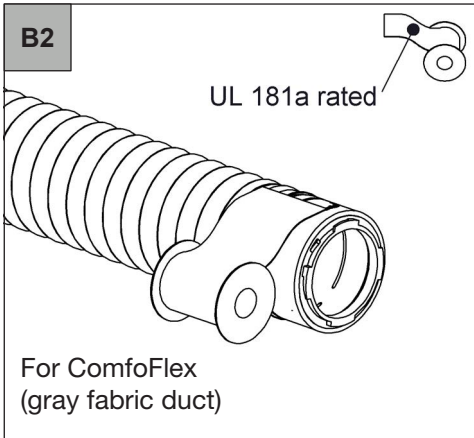
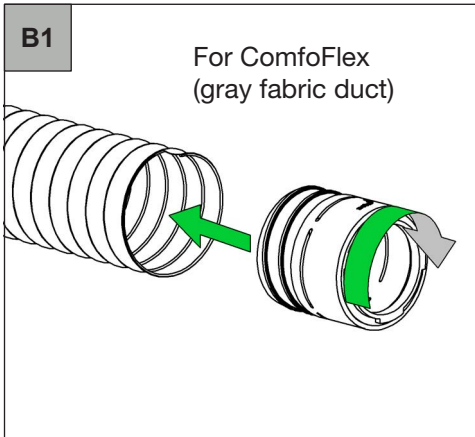
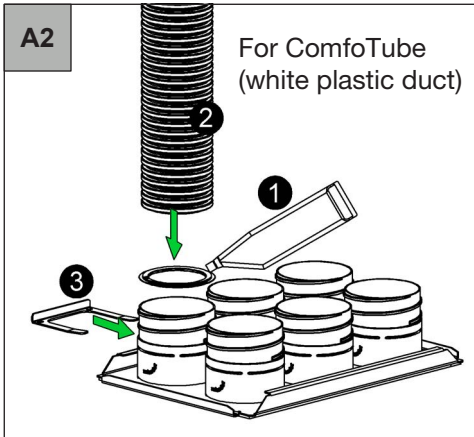
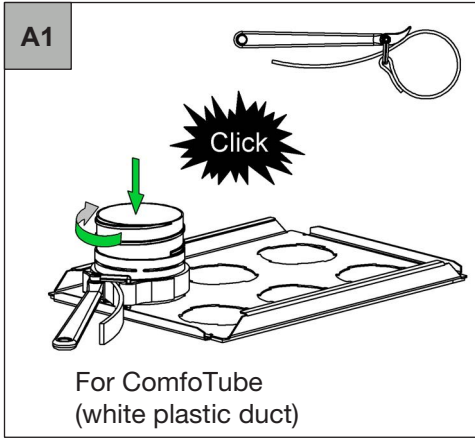
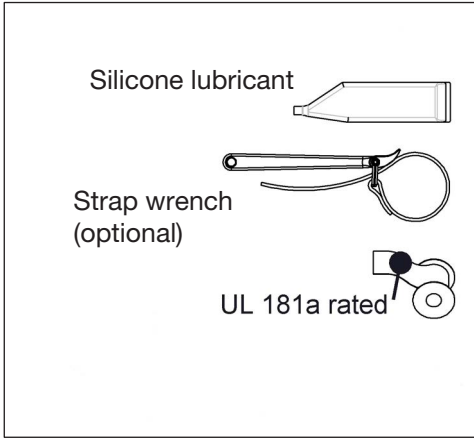
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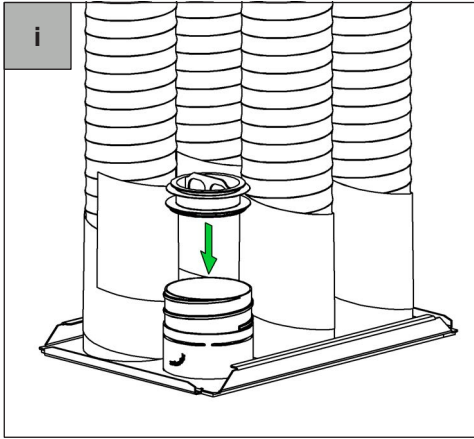
For ComfoTube (white plastic duct) first attach twist-connect fitting to manifold plate, then connect tube to fitting.

Diagram A shows the assembly sequence for ComfoTube. It starts with a white plastic duct (ComfoTube) and a twist-connect fitting. A green arrow labeled '2' points from the fitting to the duct. A second green arrow labeled '1' points from the fitting to a manifold plate with six ports, labeled 'A'.

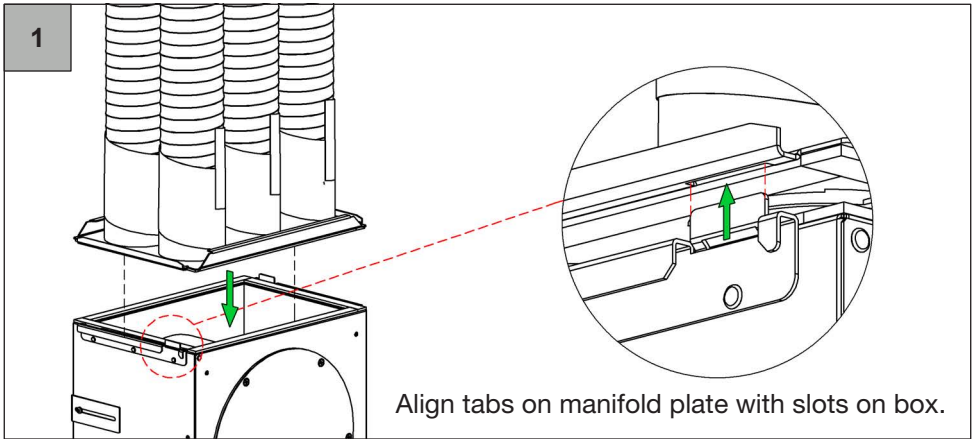
For ComfoFlex (gray fabric duct) first insert the twist-connect fitting into the duct end, then connect the fitting to the mounting plate.

Diagram B shows the assembly sequence for ComfoFlex. It starts with a gray fabric duct (ComfoFlex) and a twist-connect fitting. A green arrow labeled '1' points from the fitting into the end of the duct. A second green arrow labeled '2' points from the fitting to a manifold plate with six ports, labeled 'B'.





To cap an un-used port, install twist connector and push red plug all the way to the bottom past slots.



Align tabs on manifold plate with slots on box.

