

Zehnder ComfoWell 420

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



Advantages

Zehnder ComfoWell 420 is a modular system comprising an attenuator, fine filter, active carbon filter and manifold box. At a width of 420 mm, it can be used for connecting eight ComfoTube tubes. The system features compact dimensions and good attenuation, and is also easy to clean. The pipework is connected to the end pieces via connectors. All other components can easily be connected with sliding profiles. There is a direct connection between all components. Optimal sound reduction can be achieved with a series circuit of two attenuators. High-efficiency fine filters up to filter class F9 are available for the system. Neutralisation of odours can be ensured by using active carbon filters.



ComfoWell as attenuator



ComfoWell as manifold box



ComfoWell as filter housing



Mounting plate



End plate



Mounting set



Spacer frame



Fine dust filter F7



Fine dust filter F9



Active carbon filter FC

Technical specifications

Zehnder ComfoWell 420

Housing	Galvanised sheet steel
Inner lining	Closed-cell melamine resin foam
Permissible operating temperature	-25 to +60 °C
Maximum air volume	320 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 numbers

Description	Article number
Attenuator CW-S 420	990 323 504
Manifold box CW-D 420	990 323 620
Filter housing CW-F 420	990 323 554
Mounting plate CW-M 420-8 x 75	990 323 621
Mounting plate CW-M 420-8 x 90	990 323 622
End plate CW-P 420 – DN 150	990 323 626
End plate CW-P 420 – DN 160	990 323 627

End plate CW-P 420 – DN 180	990 323 628
End plate CW-P 420 – DN 200	990 323 629
Spacer frame CW-DF 420	990 323 624
Fine dust filter CW-F7 420	990 323 650
Fine dust filter CW-F9 420	990 323 651
Active carbon filter CW-FC 420	990 323 652
Mounting set CW-K-420 – ComfoAir Q350/450 TR	990 323 640
Mounting set CW-K-420 – ComfoAir Q600 ST	990 323 641

Tender specification

Attenuator:

Zehnder ComfoWell attenuator CW-S 420. 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: from 6.4 dB / 250 Hz
- Housing: galvanised sheet steel
- Attenuation element: special foam with hygienic coating
- Dimensions: length: 500 mm; depth: 420 mm; height: 230 mm

Manifold box:

Zehnder ComfoWell manifold box CW-D 420. Compact sound-absorbing manifold box with closed-cell, attenuating inner lining, fits mounting plate for ComfoTube 8 x 75 or 8 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.

Technical specifications:

- Material: galvanised sheet steel
- Dimensions: length: 230 mm; width: 420 mm; height: 230 mm

Filter housing:

Zehnder ComfoWell filter housing CW-F 420. 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.

Technical specifications:

- Material: galvanised sheet steel
- Dimensions: length: 300 mm; width: 420 mm; height: 230 mm

Mounting plate:

Zehnder ComfoWell mounting plate CW-M 420-8 x 75 or 90 for connecting 8x 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 420 – DN150 / DN160 / DN180 / DN200 (with central support) for connecting the ComfoWell attenuator and distribution system to a DN150 / DN160 / DN180 / DN200 round duct.

Clamping rails included.

Spacer frame:

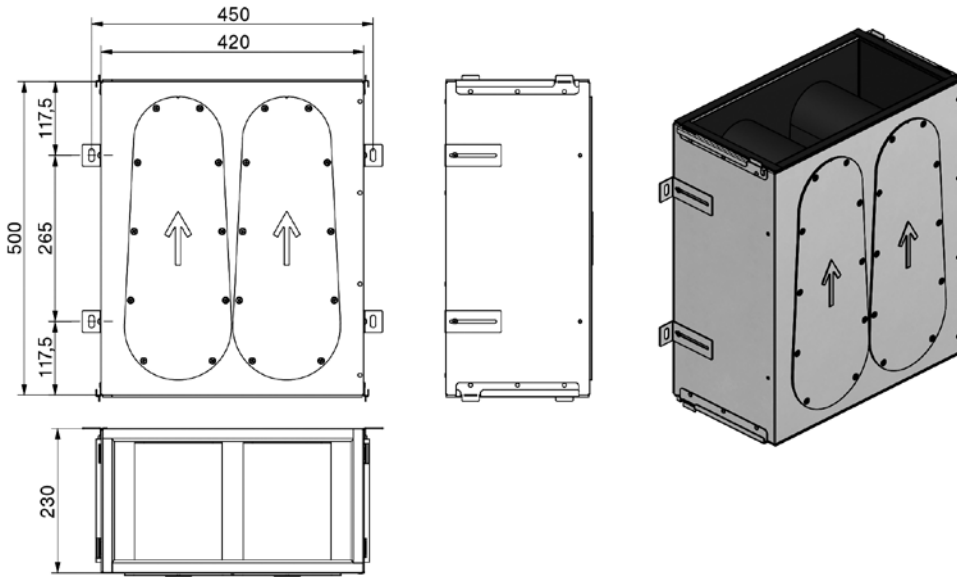
Zehnder ComfoWell Spacer Frame CW-DF 420 to compensate for uneven surfaces when components and mounting plate (concreted in place) are at 90°. Spacer frame includes the necessary mounting accessories.

Filter:

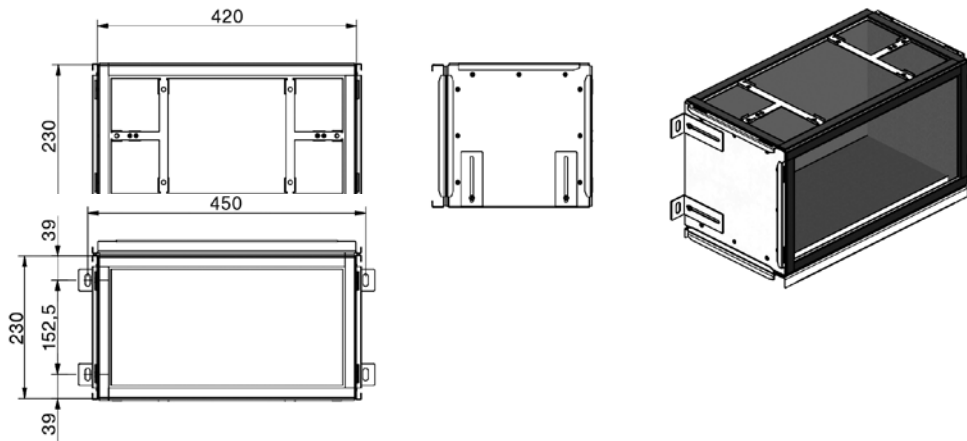
Filter for mounting in filter housing CW-F 420. Available filter classes include F7 (pollen filter), F9 (fine dust filter) and an active carbon filter for odour neutralisation.

Dimensional drawings

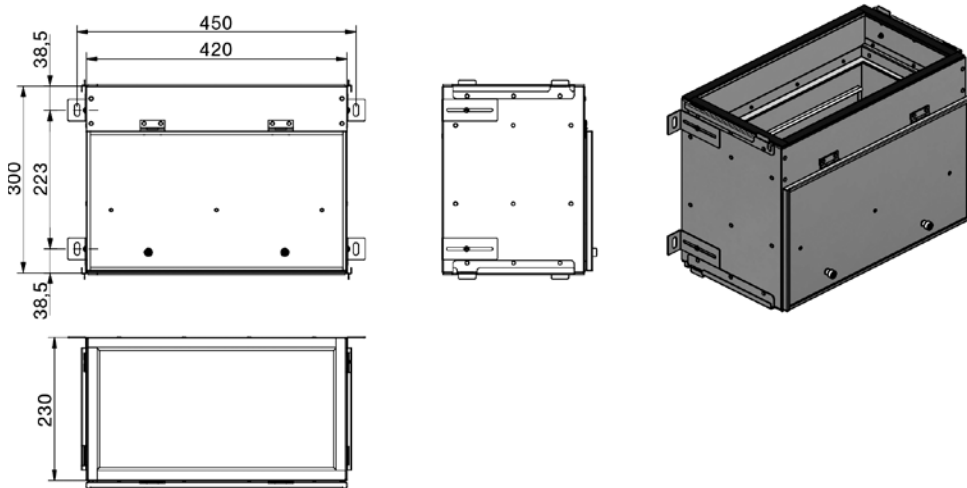
Attenuator



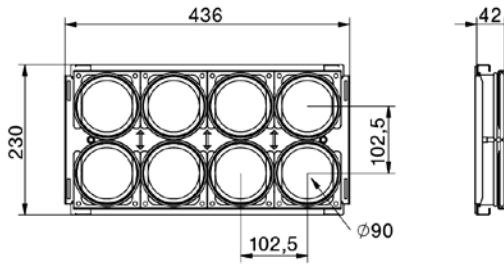
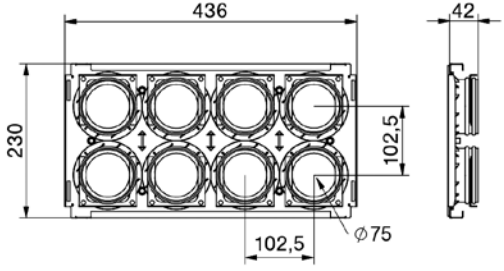
Manifold box



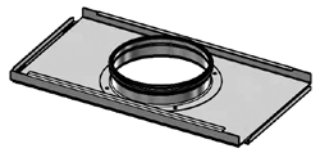
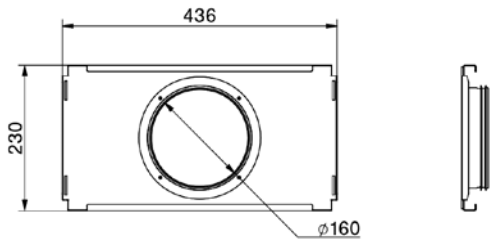
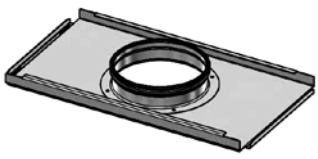
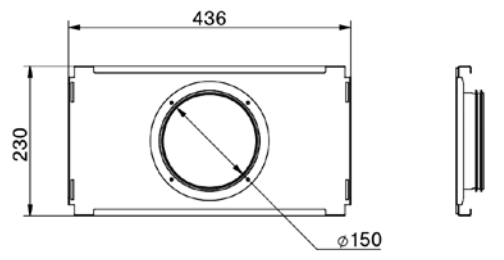
Filter housing

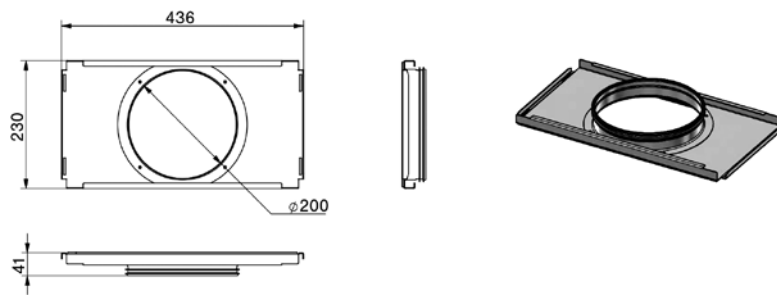
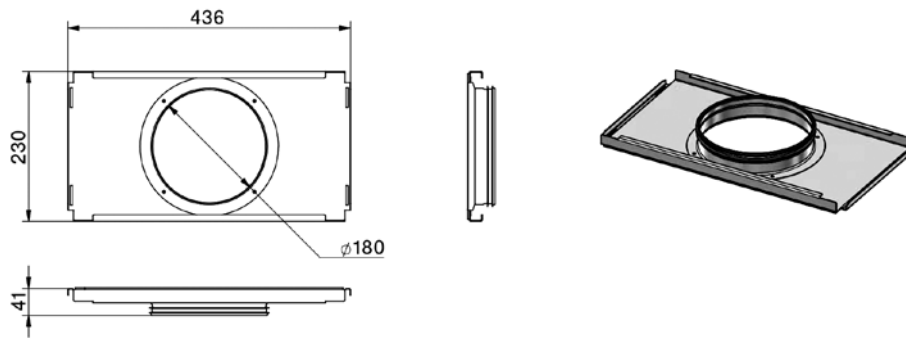


Mounting plate

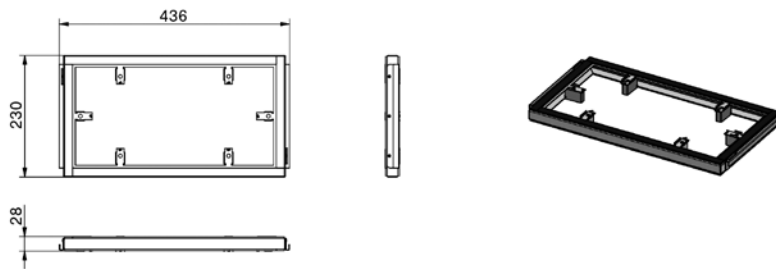


End plate

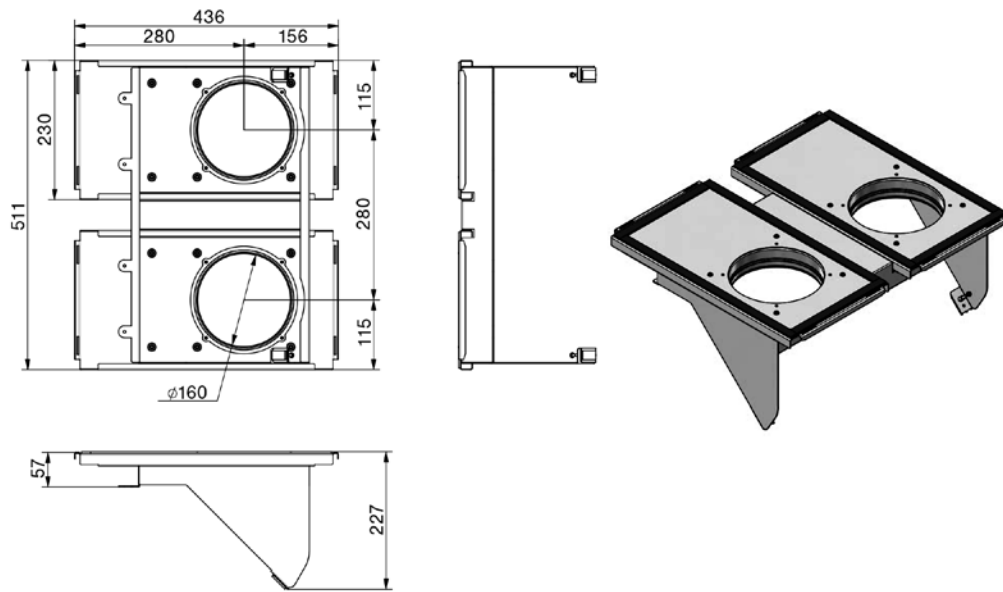




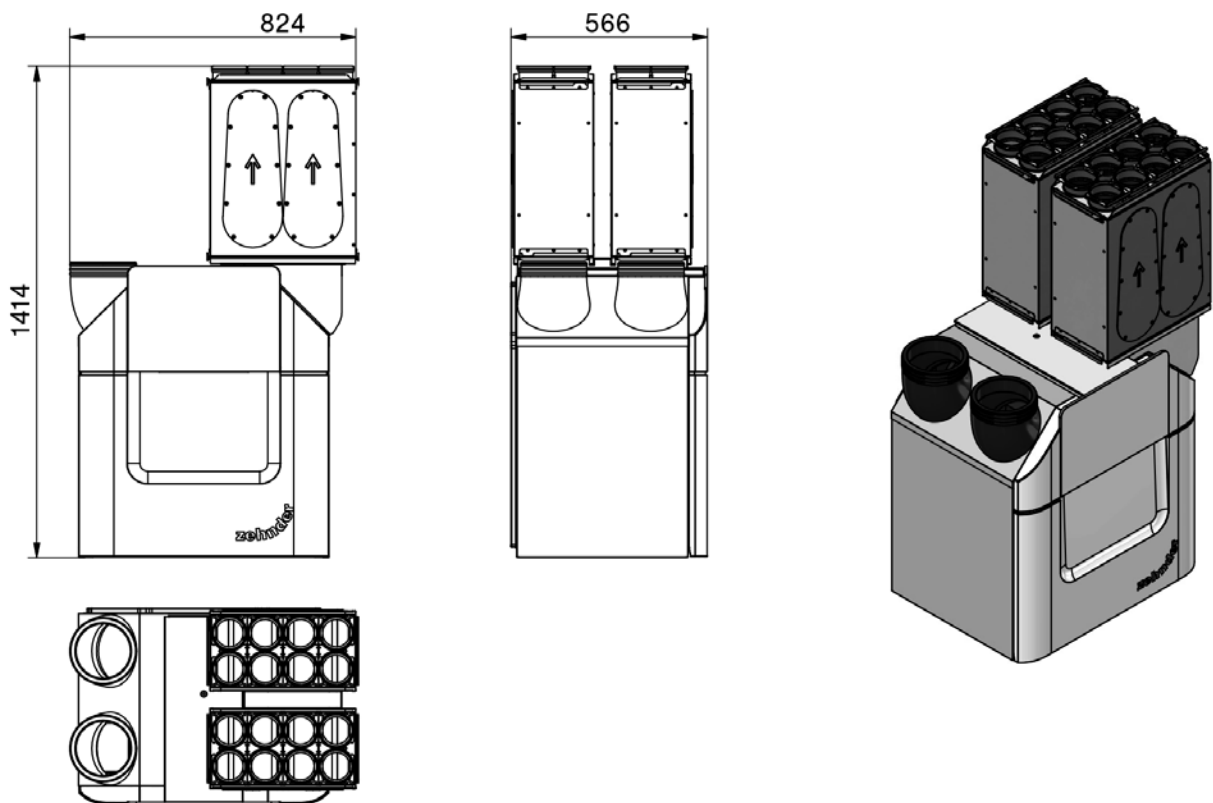
Spacer frame



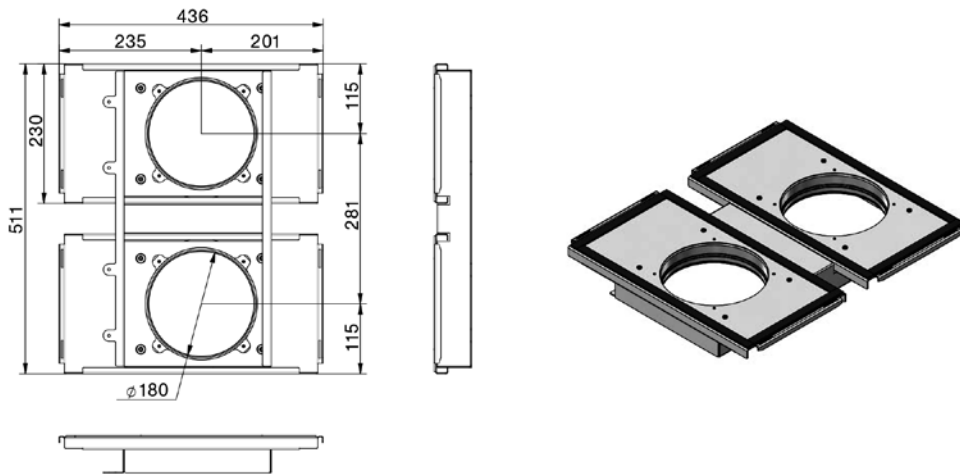
Mounting set ComfoAir Q350/450 TR



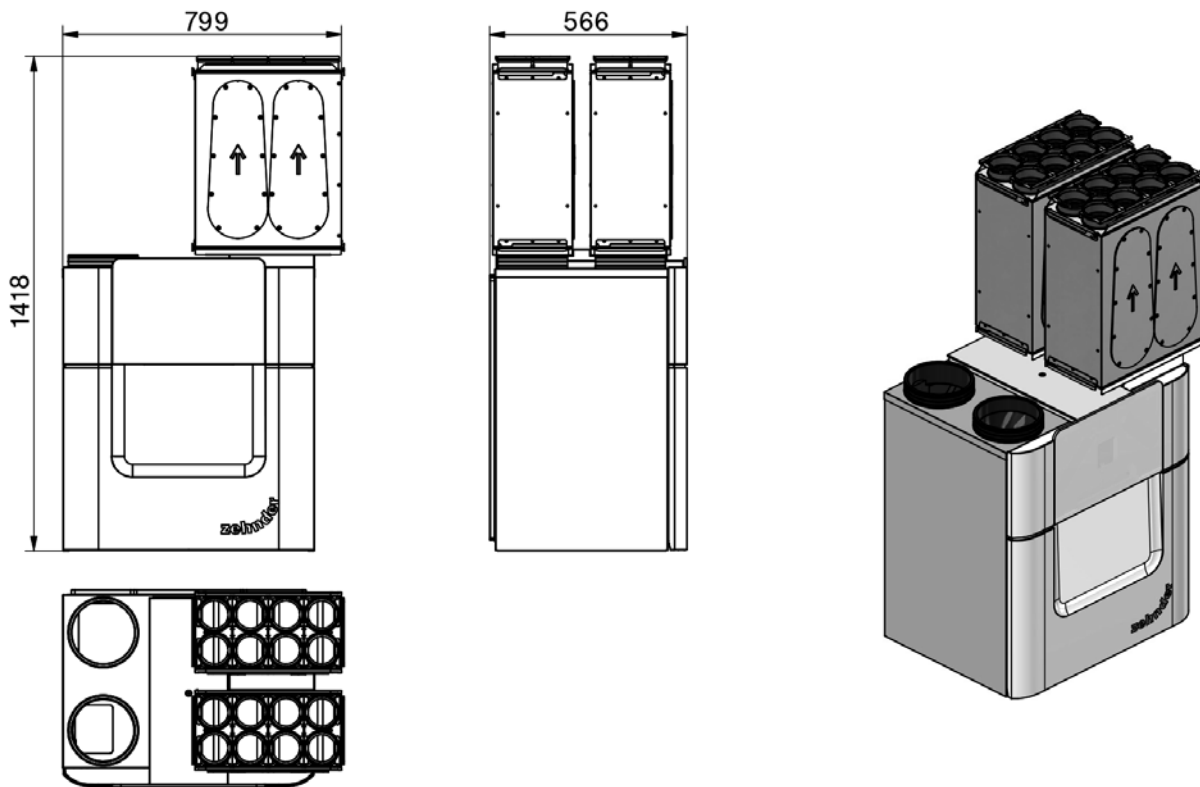
ComfoAir Q350/450 TR with mounting set



Mounting set ComfoAir Q600 ST

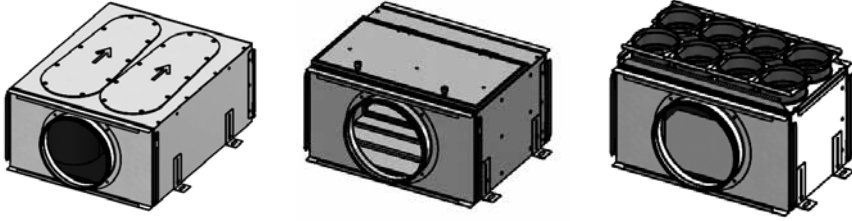


ComfoAir Q600 ST with mounting set

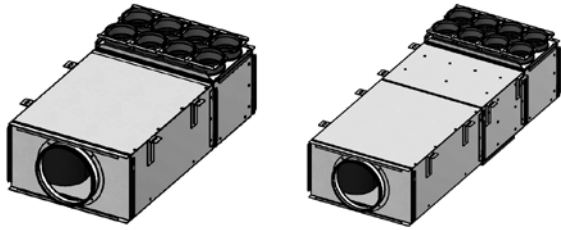


Usage scenarios

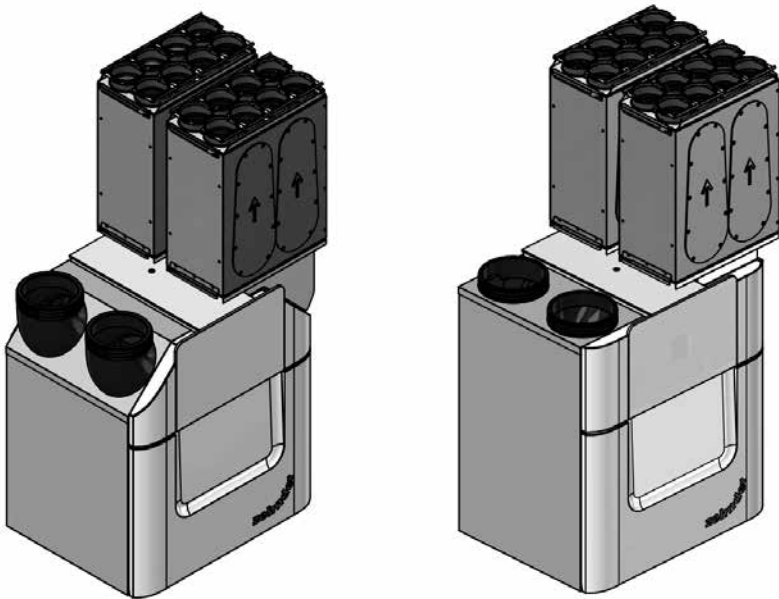
Standalone



Combined

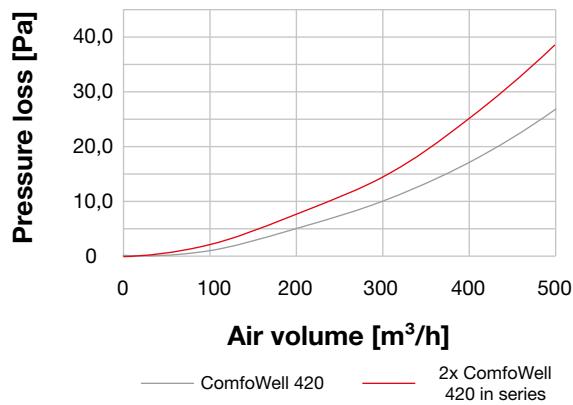


Compact with ventilation unit



Pressure losses

**ComfoWell attenuator CW-S 420
with end plate CW-P – DN160**



Insertion loss

1x end plate CW-P 420 + 1x attenuator CW-S 420 + 1x end plate CW-P420 or mounting plate CW-M 420

Insertion loss with one attenuator*

Frequency [Hz]	63	125	250	500	1,000	2,000	4,000	8,000
[dB]	3.0	4.6	6.4	10.6	8.1	14.4	7.8	6.7

1x end plate CW-P 420 + 2x attenuators CW-S 420 + 1x end plate CW-P 420 or mounting plate CW-M 420

Insertion loss with two attenuators*

Frequency [Hz]	63	125	250	500	1,000	2,000	4,000	8,000
[dB]	4.8	11.7	16.7	23.3	17.3	32.4	21.8	18.3

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

CDE-FLYERTS224, V1116, en, subject to change without notice

Zehnder ComfoWell Manifold

w/ twist-connect terminations

zehnder

CW-M 220 4-port manifold

CW-M 320 6-port manifold

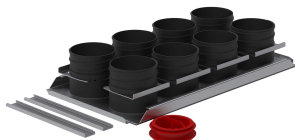
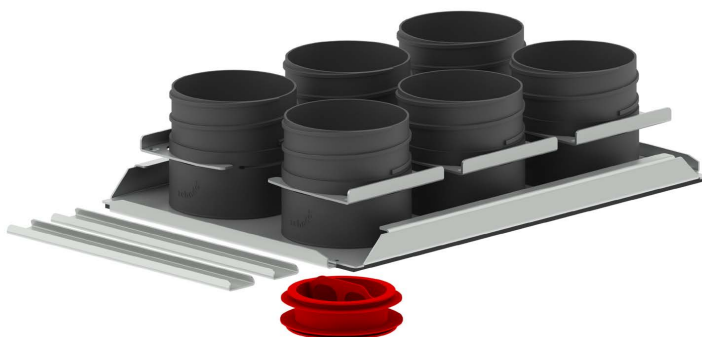
CW-M 420 8-port manifold

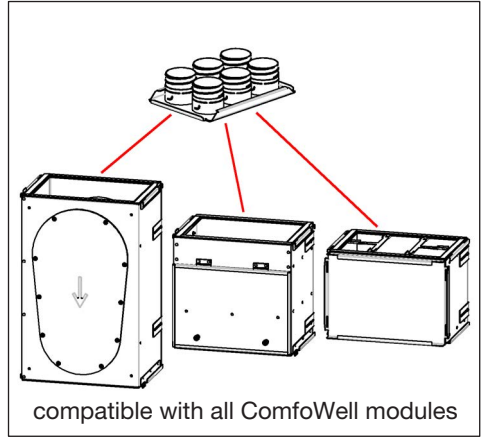
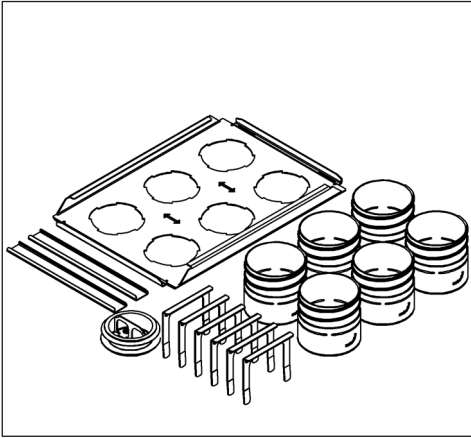
CW-M 520 10-port manifold

CW-M 625 12-port manifold



Installer Manual





i

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

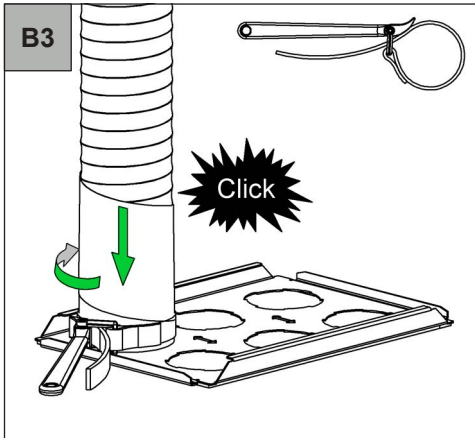
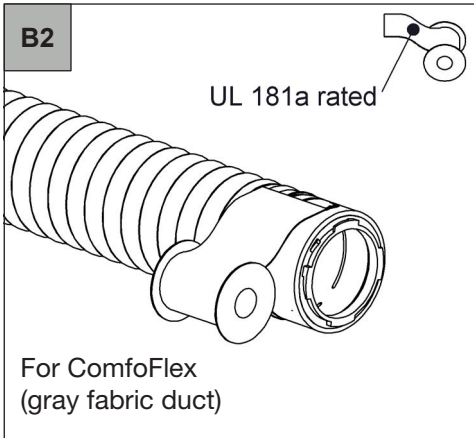
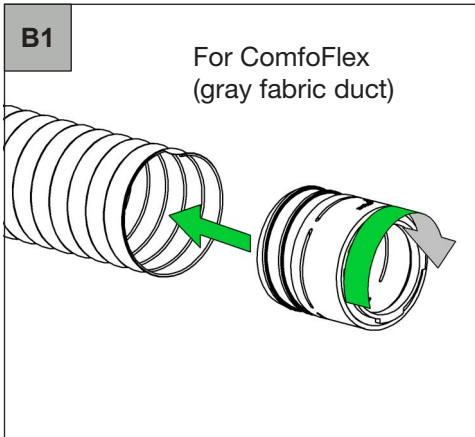
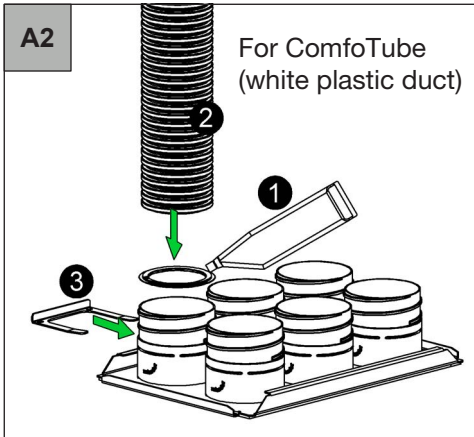
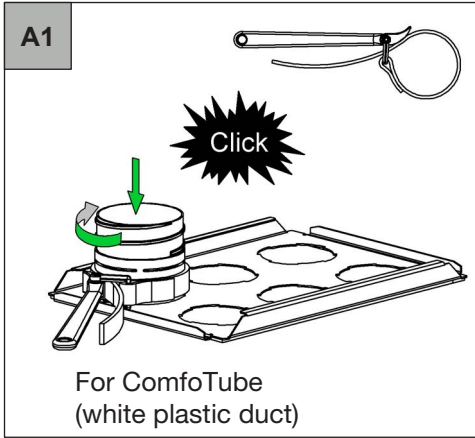
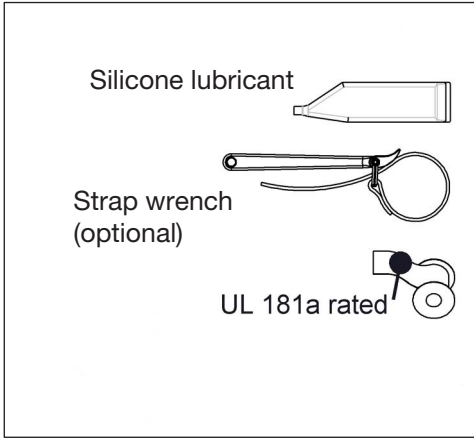
Diagram A illustrates the assembly for ComfoTube. It shows a white plastic duct (ComfoTube) with a twist-connect fitting being attached to a manifold plate. A green arrow labeled '1' points from the fitting to the manifold plate. A second green arrow labeled '2' points from the duct to the fitting.

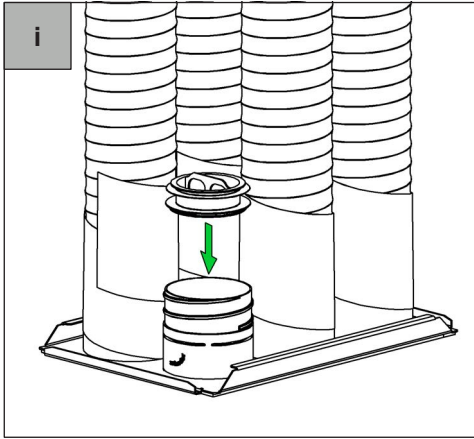
A

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

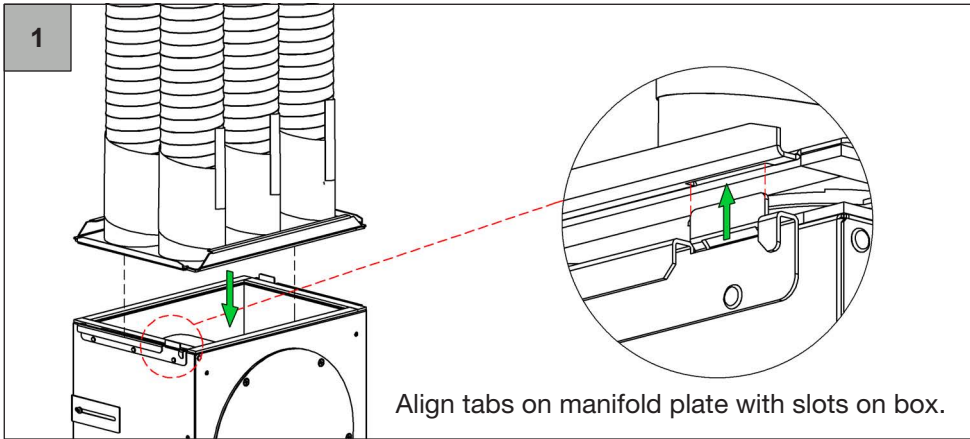
Diagram B illustrates the assembly for ComfoFlex. It shows a gray fabric duct (ComfoFlex) with a twist-connect fitting being inserted into the duct end. A green arrow labeled '1' points from the fitting into the duct. A second green arrow labeled '2' points from the fitting to the manifold plate.

B

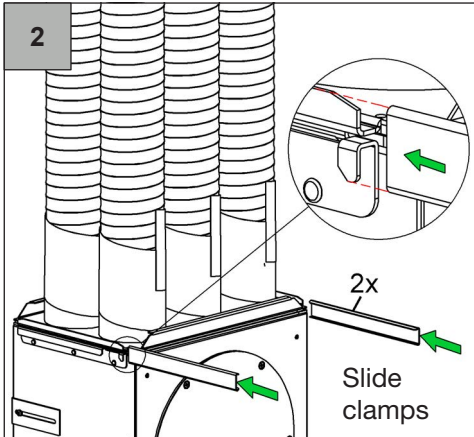




To cap an un-used port, install twist connector and push red plug all the way to the bottom past slots.



Align tabs on manifold plate with slots on box.



2x
Slide clamps

