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Zehnder ComfoWell 220

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 160 / end plate available for ComfoAir 180
- High-efficiency fine filters up to filter class F9 available
- Odour neutralisation by active carbon filter
- Components available in width of 220 mm to connect 4 ComfoTubes

Spacer frame

Fine dust filter F7

Fine dust filter F9

Active carbon filter FC

ComfoWell as attenuator

ComfoWell as manifold box

ComfoWell as filter housing

Mounting plate

End plate

Mounting set

Technical specifications

Zehnder ComfoWell 220	
Housing	Galvanised sheet steel
Inner lining	Closed-cell melamine resin foam
Permissible operating temperature	-25 to +60 °C
Maximum air volume	160 m³/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 220	990 323 500
Manifold CW-D 220	990 323 530
Filter housing CW-F 220	990 323 550
Mounting plate CW-M 220-4 x 75	990 323 520
Mounting plate CW-M 220-4 x 90	990 323 521
End plate CW-P 220 – DN 125	990 323 510
End plate CW-P 220 – DN125, eccentric	990 323 577
Mounting set CW-K 220 – CA 160	990 323 569
Spacer frame CW-DF 220	990 323 537
Fine dust filter CW-F7 220	990 323 600
Fine dust filter CW-F9 220	990 323 601
Fine dust filter CW-FC 220	990 323 602

Tender specification

Attenuator:

Zehnder ComfoWell attenuator CW-S 220. 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: 11.1 dB / 250 Hz
- Housing: galvanised sheet steel
- Attenuation element: special foam with hygienic coating
- Dimensions: length: 500 mm; depth: 220 mm; height: 230 mm

Manifold box:

Zehnder ComfoWell manifold box CW-D 220. Compact sound-absorbing manifold box with closed-cell, attenuating inner lining, fits mounting plate for ComfoTube 4 x 75 or 4 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: 220 mm; height: 230 mm

Filter housing:

Zehnder ComfoWell filter housing CW-F 220. 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: 220 mm; height: 230 mm

Mounting plate:

Zehnder ComfoWell mounting plate CW-M 220-4 x 75 or 90 for connecting 4x 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 220 – DN125 (with central support) for connecting the ComfoWell attenuator and distribution system to a DN125 round duct. A special end plate is available for the CA 180. Clamping rails included.

Mounting set:

A special mounting set is available for the Zehnder ComfoWell 220 attenuator and distribution system for direct mounting on the ComfoAir 160 ventilation unit. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).
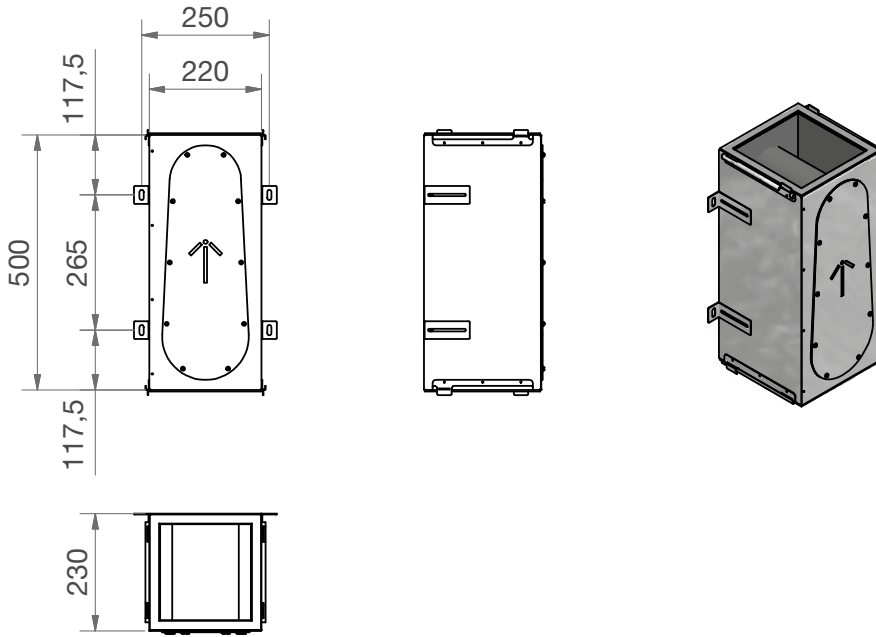
Spacer frame:

Zehnder ComfoWell spacer frame CW-DF 220 to compensate for uneven surfaces when components and mounting plate (concreted in place) are at 90°. Spacer frame includes the necessary mounting accessories.
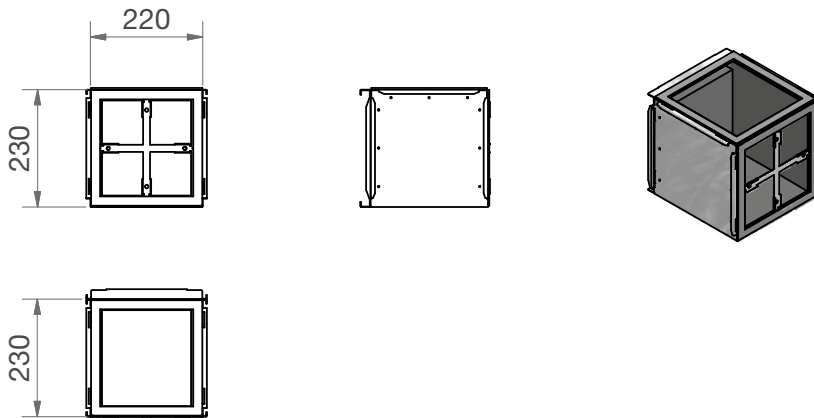
Filter:

Filter for mounting in filter housing CW-F 220. Available filter classes include F7 (pollen filter), F9 (fine dust filter) and an active carbon filter for odour neutralisation.
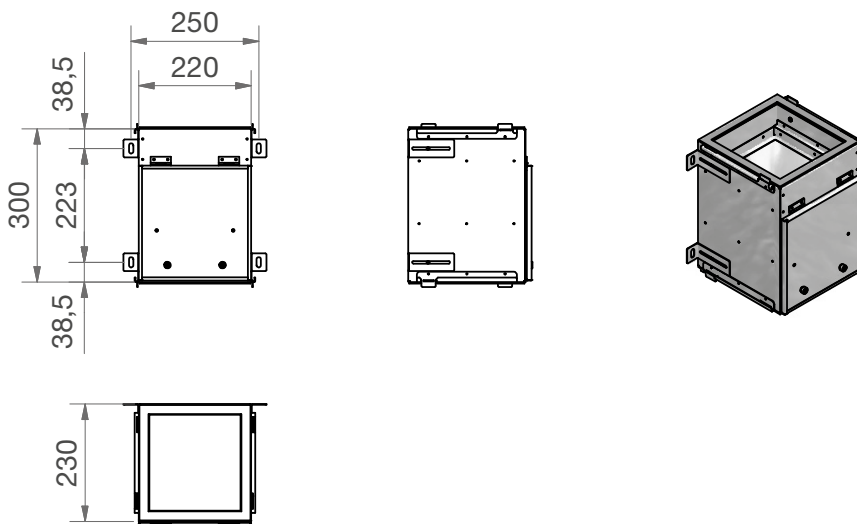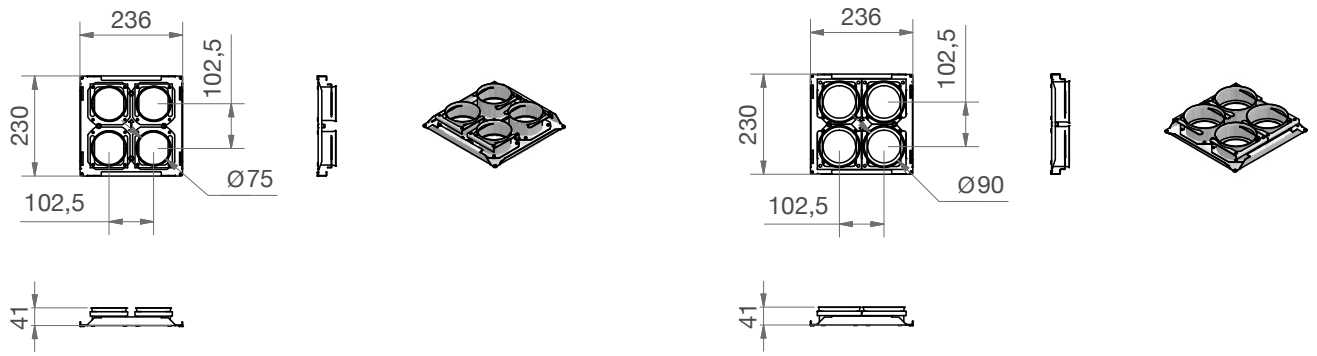
Dimensional drawings

Attenuator

250
220
117,5
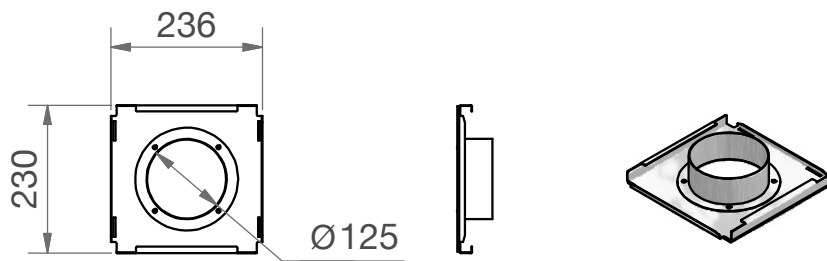500
265
117,5
230

Manifold box

220
230
230

Filter housing

250
220
38,5
300
223
38,5
230

Mounting plate

236

102,5

230

102,5

Ø75

41

236

102,5

230

102,5

Ø90

41

End plate

236

230

Ø125

End plate ComfoAir 180

236

230

Ø125

Spacer frame

236

230
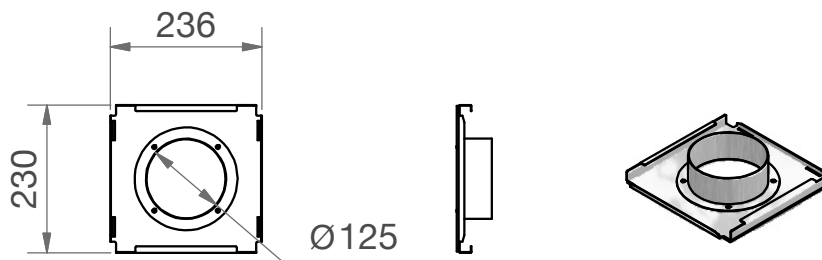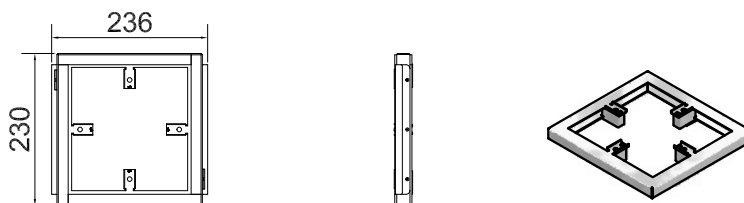
Mounting set ComfoAir 160

95
230
236
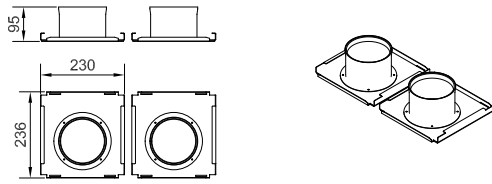
ComfoAir 160 with mounting set

647
275
1466
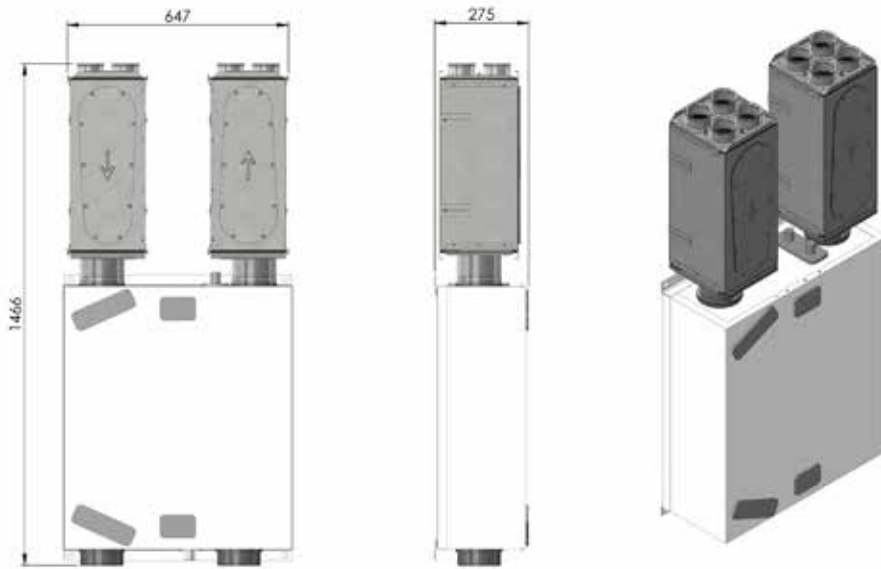
Usage scenarios

Standalone
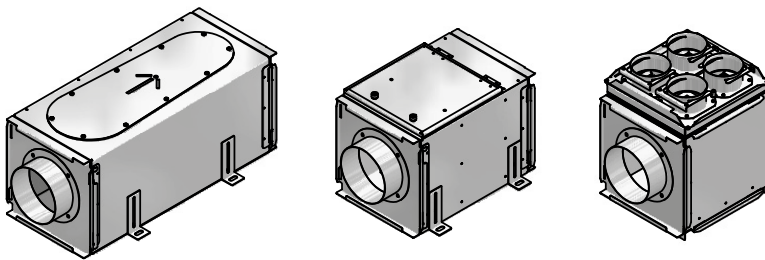
Combined
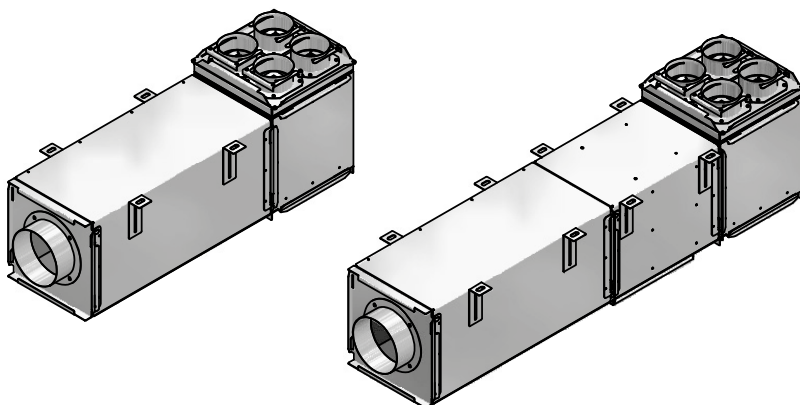
Compact with ventilation unit
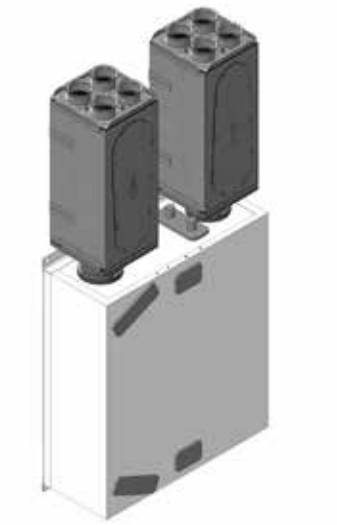
Pressure losses

ComfoWell attenuator CW-S 220 with end plate CW-P – DN125

ComfoWell 220 — 2x ComfoWell 220 in series
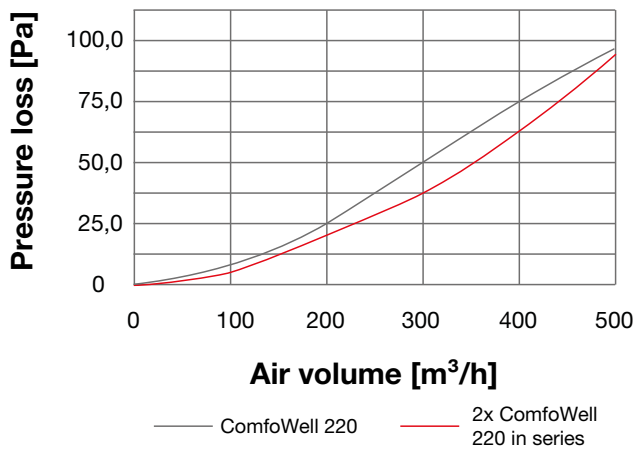
Insertion loss

1x end plate CW-P 220 + 1x attenuator CW-S 220 + 1x end plate CW-P 220 or mounting plate CW-M 220

Insertion loss with one attenuator*							
Frequency [Hz]	63	125	250	500	1,000	2,000	4,000	8,000
[dB]	5.9	10.2	11.1	16.3	14.8	32.2	25.8	28.1

1x end plate CW-P 220 + 2x attenuators CW-S 220 + 1x end plate CW-P 220 or mounting plate CW-M 220

Insertion loss with two attenuators*							
Frequency [Hz]	63	125	250	500	1,000	2,000	4,000	8,000
[dB]	7.8	19.4	18.6	28.7	26.5	51.5	45.0	39.1

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

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Zehnder ComfoWell Manifold

w/ twist-connect terminations

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

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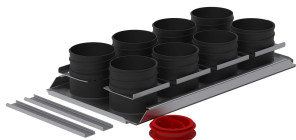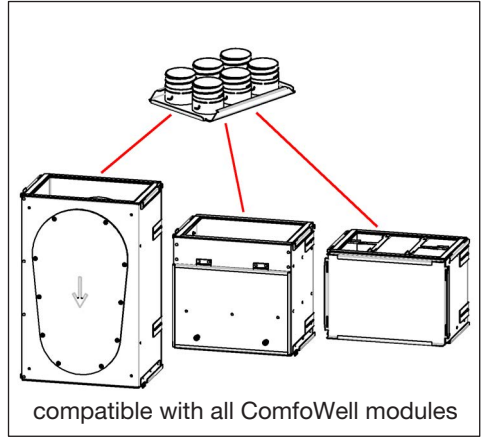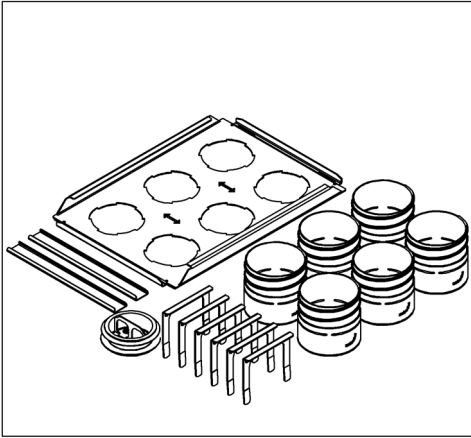
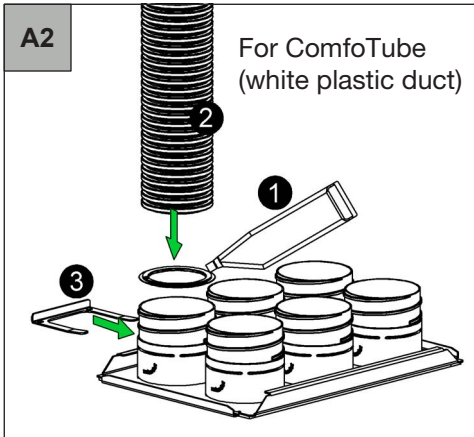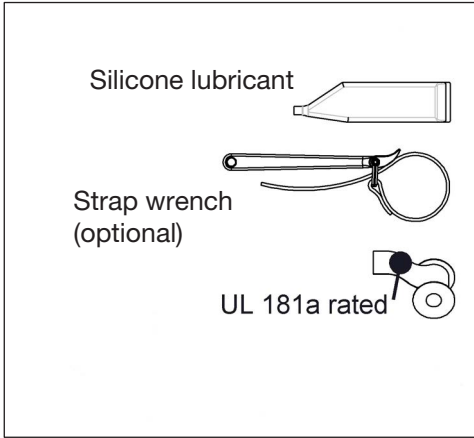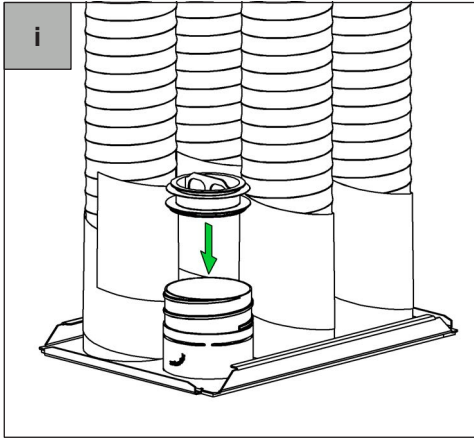For ComfoTube (white plastic duct) first attach twist-connect fitting to manifold plate, then connect tube to fitting.

A

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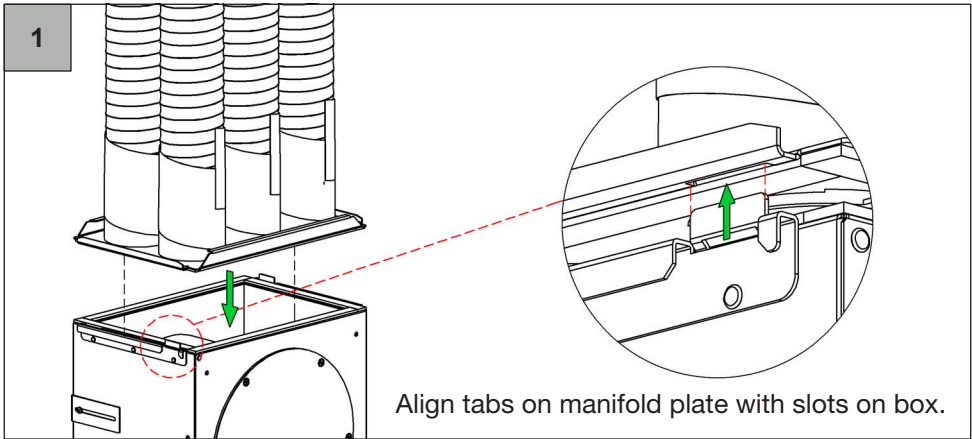
B

Silicone lubricant

Strap wrench (optional)

UL 181a rated

A1

Click

For ComfoTube (white plastic duct)

A2 For ComfoTube (white plastic duct)

❶ ❷ ❸

B1 For ComfoFlex (gray fabric duct)

B2

UL 181a rated

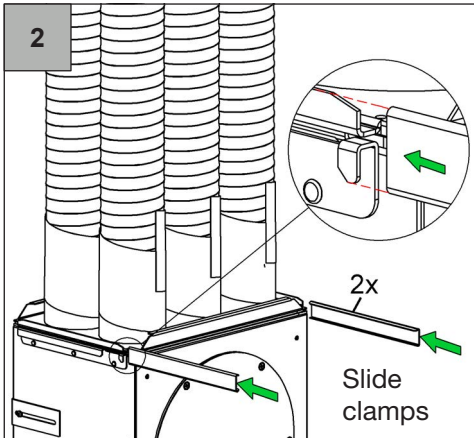For ComfoFlex (gray fabric duct)

B3

Click

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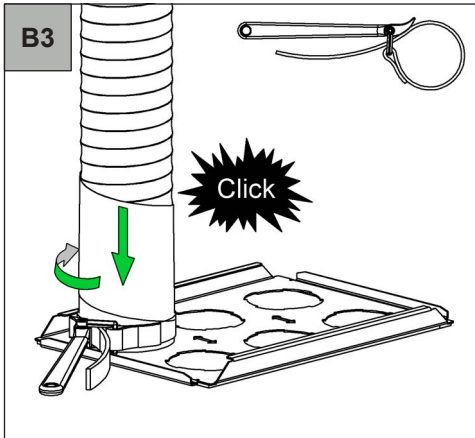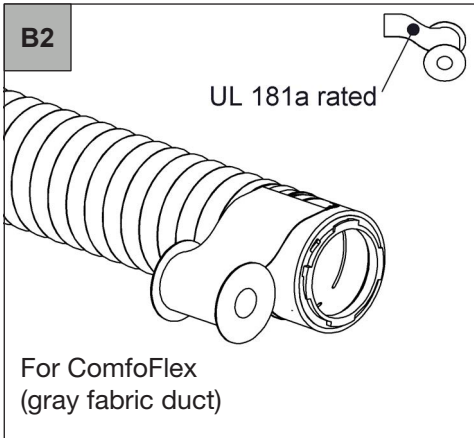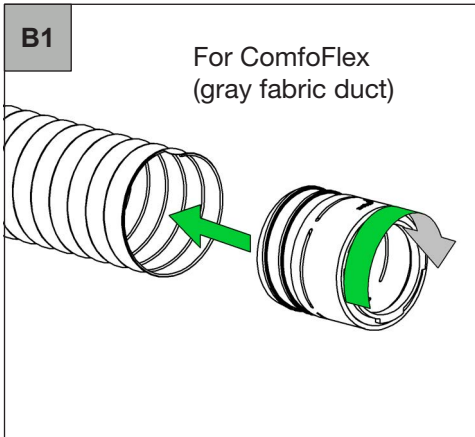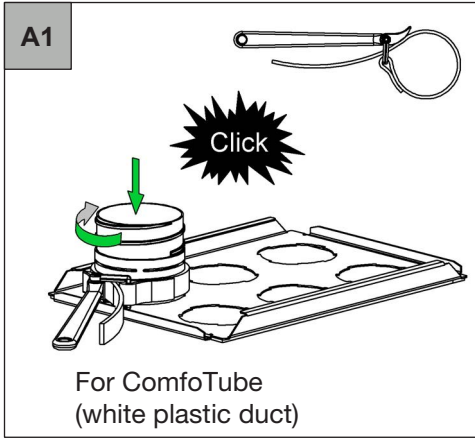
To cap an un-used port, install twist connector and push red plug all the way to the bottom past slots.

1

Align tabs on manifold plate with slots on box.

2

2x

Slide clamps

3