# Zehnder ComfoWell 220

**Modular manifold for use with semi-rigid ductwork**

Product data sheet

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# ComfoWell 220

The Zehnder ComfoWell 220 is a modular system consisting of attenuators, fine grade filters and active carbon filters all integrated for use with a rigid or semi-rigid ductwork approach. With a width of 220 mm it can be used for connecting up to 4 ComfoTube connections. The systems compact dimensions ensure good sound absorption and also make it easy to clean. Rigid pipe can be connected to the end plate securely by utilising the gasket seal connection. All other components are fitted using the RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork.
Noise reduction can be improved by combining two attenuators together. Filters are available in ISO ePM1 (F9) grade in addition to an odour neutralising active carbon filter.

## Key Features

- Attenuator, fine grade filter, active carbon filter and manifold all combined into one space saving combination with the option to bespoke build exactly what's required.
- Easy to assemble thanks to its modular and compact design.

## Article Numbers

| Description | Product Code |
|---|---|
| **Attenuator** | |
| Zehnder ComfoWell attenuator, CW-S 220 | 990 323 500 |
| | |
| **Manifold** | |
| Zehnder ComfoWell manifold box, CW-D 220 | 990 323 530 |
| | |
| **Filter Housing** | |
| Zehnder ComfoWell filter housing, CW-F 220 | 990 323 550 |
| | |
| **Mounting Plates** | |
| Zehnder ComfoWell mounting plate, CW-M 220, 4 x 75 mm connections | 990 323 610 |
| Zehnder ComfoWell mounting plate, CW-M 220, 4 x 90 mm connections | 990 323 611 |
| | |
| **End Plates** | |
| Zehnder ComfoWell end plate, CW-P 220, ø 125 mm | 990 323 510 |
| | |
| **Spacer Frame** | |
| Zehnder ComfoWell spacer frame, CW-DF 220 | 990 323 537 |
| | |
| **Mounting Set** | |
| Zehnder ComfoWell mounting set, CW-K 220, for Zehnder ComfoAir 160 | 990 323 569 |
| Zehnder ComfoWell connection plate, CW-P DK 220, for Zehnder ComfoAir 180 downward supply spigot | 990 323 577 |
| Zehnder ComfoWell mounting set, CW-K 220, for Zehnder ComfoAir Flex 250/350 | 990 323 710 |
| | |
| **Filters** | |
| Filter for ComfoWell 220, CW-F9 220, ISO ePM1 (F9), 1 Piece | 990 323 601 |
| Filter for ComfoWell 220, CW-AC 220, active carbon filter, 1 Piece | 990 323 602 |

## Technical Specification

| | |
|---|---|
| Housing | Galvanised sheet steel |
| Inner lining | Closed-cell melamine resin foam |
| Mounting Plates | High-density polyethylene (HDPE) |
| Operating temperature range | -25 to +60°C |
| Recommended maximum air volume | 44.4 l/s (160 m³/h) at normal ventilation level |
| Air tightness class to EN 1507:2006 | B |
| Air tightness class to EN 12237:2003 | B |
| Fire rating to EN 13501-1 | C |

## Sound Data

| Combination | Octave Band (Hz) Insertion Loss, dB | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 1 x Attenuator (CW-S 220) with 2 x 125 mm end plates (CW-P 220) | 11.6 | 7.1 | 8.2 | 12.8 | 15.2 | 23.9 | 24.6 | 19.5 |
| 2 x Attenuator (CW-S 220) stacked with 2 x 125 mm end plates (CW-P 220) | 11 | 11.4 | 16.1 | 27.2 | 25.2 | 36.6 | 37.9 | 27.2 |
| 1 x Attenuator (CW-S 220) with 1 x 125 mm end plates (CW-P 220) and 1 x 75 mm mounting plate ( CW-M 220) | 26.8 | 6.6 | 23.7 | 19.3 | 21.6 | 33.7 | 41.1 | 33.9 |

Acoustic performance measured according to EN ISO 7235 (pink noise)

## Example Connections

| Individual Components / Combination Options | ComfoAir 160 right handed (factory setting) with mounting set, 2 x attenuators and 2 x 6 port ø 75mm mounting plates | Stand alone attenuator with 2 x ø 125mm end plates | Stand alone manifold with 1 x ø 125mm end plate and 4 x ø 75mm mounting plate | Stand alone filter housing with 2 x ø 125mm | Stand alone silencer and manifold combined with 1 x ø 125mm end plate and 4 x ø 75mm mounting plate | Stand alone 2 x attenuator with 1 x ø 125mm end plate and 4 x ø 75mm mounting plate |
|---|---|---|---|---|---|---|
| **Silencer** Article Number: 990 323 500 | 2 x Zehnder ComfoWell attenuator, CW-S 220 | 1 x Zehnder ComfoWell attenuator, CW-S 220 | ___ | ___ | 1 x Zehnder ComfoWell attenuator, CW-S 220 | 2 x Zehnder ComfoWell attenuator, CW-S 220 |
| **Manifold Box** Article Number: 990 323 530 | ___ | ___ | 1 x Zehnder ComfoWell manifold box, CW-D 220 | ___ | ___ | ___ |
| **Filter Housing** Article Number: 990 323 550 | ___ | ___ | ___ | 1 x Zehnder ComfoWell filter housing, CW-F 220 | ___ | ___ |
| **Mounting Plate -ø 75** Article Number: 990 323 610 | 2 x Zehnder ComfoWell mounting plate, CW-M 220, 4 x 75mm connections | ___ | 1 x Zehnder ComfoWell mounting plate, CW-M 220, 4 x 75mm connections | ___ | 1 x Zehnder ComfoWell mounting plate, CW-M 220, 4 x 75mm connections | 1 x Zehnder ComfoWell mounting plate, CW-M 220, 4 x 75mm connections |
| **End Plate - ø 125** Article Number: 990 323 510 | ___ | 2 x Zehnder ComfoWell end plate, CW-P 220, ø 125mm | 1 x Zehnder ComfoWell end plate, CW-P 220, ø 125mm | 2 x Zehnder ComfoWell end plate, CW-P 220, ø 125mm | 1 x Zehnder ComfoWell end plate, CW-P 220, ø 125mm | 1 x Zehnder ComfoWell end plate, CW-P 220, ø 125mm |
| **Mounting Set** Article Number: 990 323 569 | 1 x Zehnder ComfoWell mounting set, CW-K 220, for Zehnder ComfoAir 160 | ___ | ___ | ___ | ___ | ___ |
| **Filter** Article Number: 990 323 601 | ___ | ___ | ___ | 1 x Filter for Comfowell 220, CW-F( 220, ISO ePM1 > 90% (F9), 1 piece | ___ | ___ |

## Zehnder ComfoWell attenuator CW-S 220
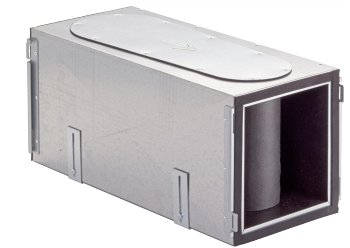
Article number: 990 323 500

### Description
**Attenuator:**
Zehnder ComfoWell attenuator CW-S 220. Rectangular compact attenuator with highly efficient sound insulation combined with low pressure losses. The attenuator can be used individually or in combination with all ComfoWell components. The airtight connection between components is via a clamping strip. For cleaning purposes the sound absorbing element can be removed. Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.
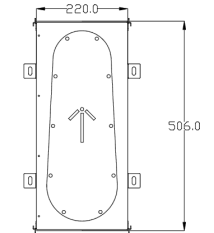
### Technical Specification

| | |
|---|---|
| Height | 506 mm |
| Width | 236 mm |
| Depth | 232.5 mm |
| Weight | 5.1 kg |

### Dimensions



Front View

Side View

Access for maintenance

Top View

### Pressure Curve



— 1 x Attenuator (CW-S 220) with 2 x 125 mm end plates (CW-P 220)
— 2 x Attenuator (CW-S 220) stacked with 2 x 125 mm end plates (CW-P 220)
— 1 x Attenuator (CW-S 220) with 1 x 125 mm end plates (CW-P 220) and 1 x 75 mm mounting plate ( CW-M 220) - Supply
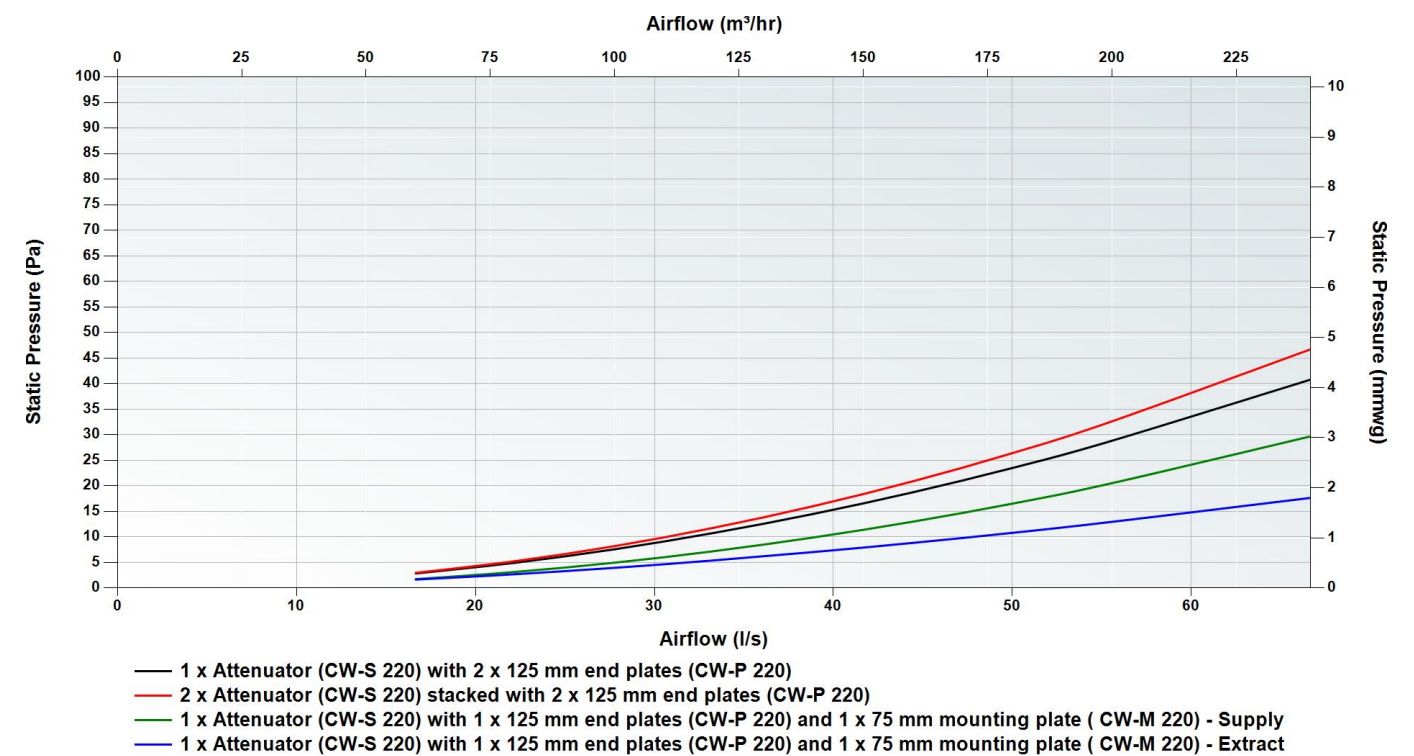— 1 x Attenuator (CW-S 220) with 1 x 125 mm end plates (CW-P 220) and 1 x 75 mm mounting plate ( CW-M 220) - Extract
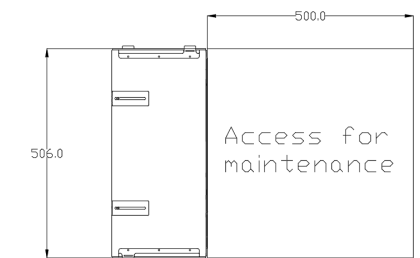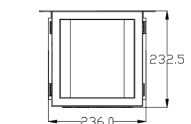
## Zehnder ComfoWell manifold box CW-D 220

Article number: 990 323 530
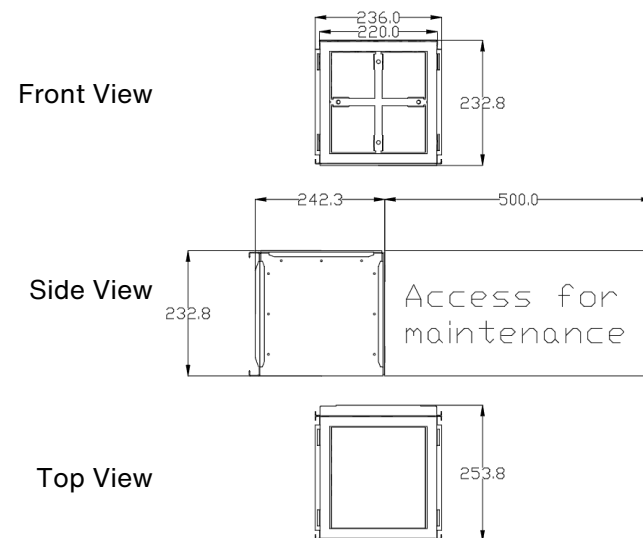
### Description

**Manifold Box:**

Zehnder ComfoWell manifold box CW-D 220. Rectangular compact design with closed pore internal lining. Suitable for use with the mounting plate for 4 x ComfoTube 75 mm connections or 4 x 90 mm connections. The mounting plate can be mounted on the top or side of the manifold box. The airtight connection between components is via a clamping strip. For cleaning purposes the manifold box side plate can be removed for easy access. Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

### Technical Specification

| | |
|---|---|
| Height | 232.8 mm |
| Width | 236 mm |
| Depth | 253.8 mm |
| Weight | 3.51 kg |

### Dimensions

Front View

Side View

Top View

## Zehnder ComfoWell filter housing CW-F 220

Article number: 990 323 550

### Description

**Filter Housing:**

Zehnder ComfoWell filter housing CW-F 220. Rectangular compact design for use with a fine dust filter graded ISO ePM1 (F9) or an active carbon filter to neutralise odours in the supply air duct run. The filter elements are not included with the filter housing and need to be purchased separately, with only 1 filter per housing possible. The filter housing can be used individually or in combination with all ComfoWell components. The airtight connection between components is via a clamping strip. Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.
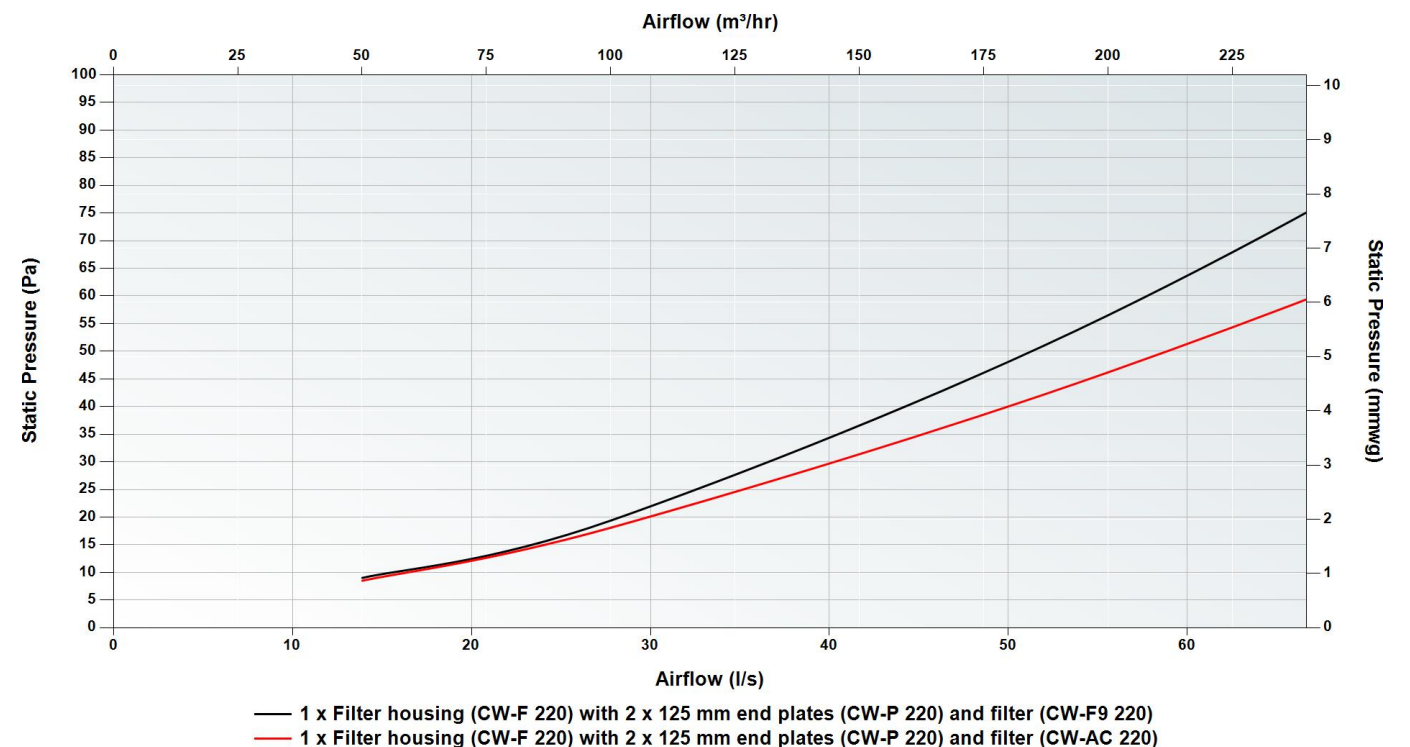
### Technical Specification

| | |
|---|---|
| Height | 306 mm |
| Width | 236 mm |
| Depth | 242.2 mm |
| Weight | |
| Housing | 4.25 kg |
| CW-F9 | 0.4 kg |
| CW-AC | 0.66 kg |

### Dimensions

Front View

Side View

Top View

### Pressure Curve

Airflow (m³/hr)

Static Pressure (Pa) — Static Pressure (mmwg)

Airflow (l/s)

—— 1 x Filter housing (CW-F 220) with 2 x 125 mm end plates (CW-P 220) and filter (CW-F9 220)
—— 1 x Filter housing (CW-F 220) with 2 x 125 mm end plates (CW-P 220) and filter (CW-AC 220)
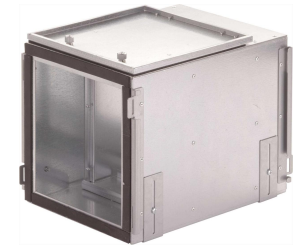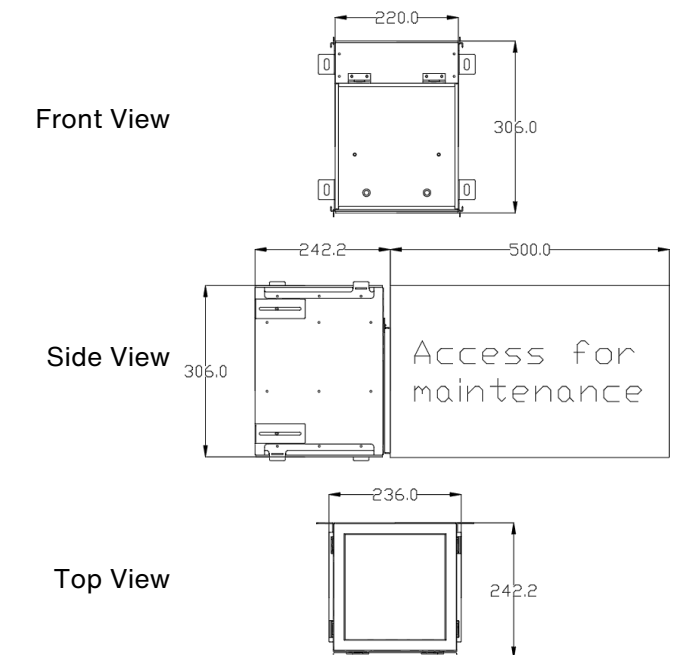
## Zehnder ComfoWell mounting plate CW-M 220

Article number: 990 323 610 / 990 323 611

### Description
**Mounting Plate:**
Zehnder ComfoWell mounting plate CW-M 220-4 x 75 or 90.  Manifold mounting plate for connection of 4 x ComfoTube 75 mm or 90 mm semi-rigid ducting. The mounting plate includes a protective film and the necessary mounting accessories, including RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork.
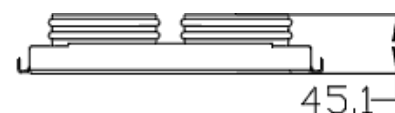
### Technical Specification

| | |
|---|---|
| Height | 56.7 mm / 61.3 mm |
| Width | 236 mm |
| Depth | 230 mm |
| Weight | <0.7 kg |

**Dimensions**

990 323 610 Front View

990 323 610 Side View
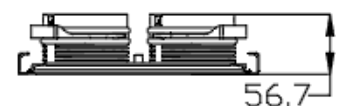
990 323 610 Top View
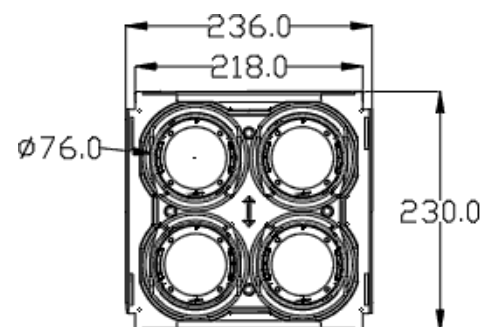
990 323 611 Front View

990 323 611 Side View

990 323 611 Top View
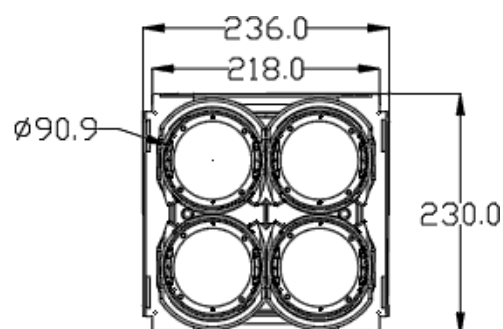
## Zehnder ComfoWell end plate CW-P 220 - ø 125

Article number: 990 323 510

### Description
**End Plate:**
Zehnder ComfoWell end plate CW-P 220 - DN125 (with centre connection) for the connection to the ComfoWell attenuator/manifold box or filter housing to the matching ducting size required. The end plate includes the necessary mounting accessories.

### Technical Specification

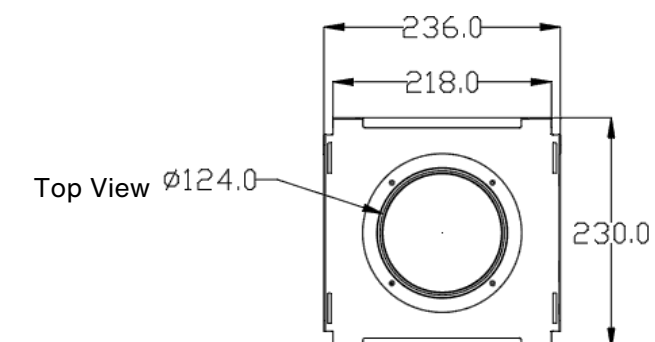| | |
|---|---|
| Diameter | 125 mm |
| Height | 42.3 mm |
| Width | 236 mm |
| Depth | 230 mm |
| Weight | <0.73 kg |
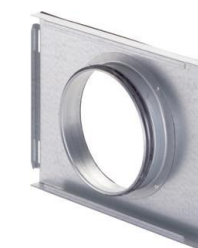
**Dimensions**

Front View

Side View

Top View

## Zehnder ComfoWell spacer frame, CW-DF 220

Article number: 990 323 537

### Description
**Spacer Frame:**
Zehnder ComfoWell spacer frame CW-DF220. Rectangular frame for use in the event of uneven surfaces when connecting components and mounting plate (concreted in place) are at 90 degrees. The spacer frame includes the necessary mounting accessories.

### Technical Specification

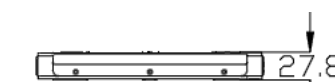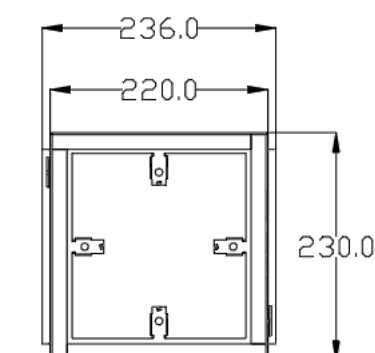| | |
|---|---|
| Height | 27.8 mm |
| Width | 236 mm |
| Depth | 230 mm |
| Weight | 0.84 kg |

**Dimensions**

Front View

Side View

Top View

**Zehnder ComfoWell mounting set, CW-K 220, for Zehnder ComfoAir 160**

Article number: 990 323 569

### Description

**Mounting set:**

A range of special mounting sets are available for the Zehnder ComfoWell 220 for direct mounting to the ComfoAir 160 / ComfoAir Flex 250 / ComfoAir Flex 350 ventilation unit. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).
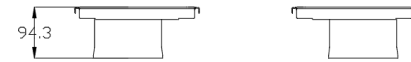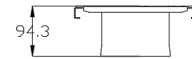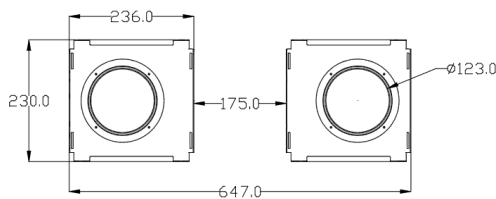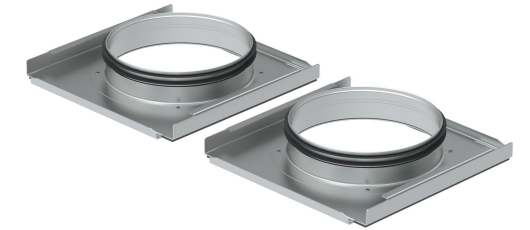
### Technical Specification

| | |
|---|---|
| Height | 94.3 mm |
| Width | 236 mm |
| Depth | 230 mm |
| Weight | 1.7 kg |

**Dimensions**

Front View

Side View

Top View

94.3
94.3
236.0
230.0
175.0
Ø123.0
647.0

**Zehnder ComfoWell mounting set, CW-K 220, for Zehnder ComfoAir Flex 250/350**

Article number: 990 323 710

### Description

**Mounting set:**

A range of special mounting sets are available for the Zehnder ComfoWell 220 for direct mounting to the ComfoAir 160 / ComfoAir Flex 250 / ComfoAir Flex 350 ventilation unit. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).
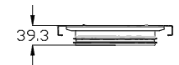
### Technical Specification

| | |
|---|---|
| Height | 39.3 mm |
| Width | 236 mm |
| Depth | 230 mm |
| Weight | 1.1 kg |

**Dimensions**

Side View

Top View

39.3
236.0
Ø159.0
230.0
657.0

## For use with

Our range of Comfowell units can be used in conjunction with our Zehnder ComfoTube ø 75 mm and ø 90 mm semi-rigid ductwork.

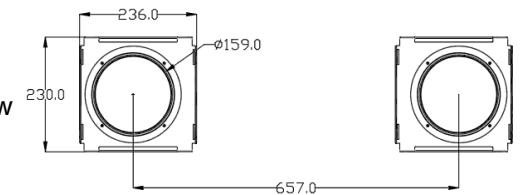**Zehnder ComfoWell connection plate, CW-P DK 220, for Zehnder ComfoAir 180 downward supply spigot**
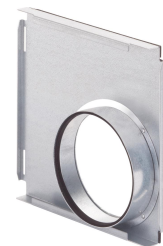
Article number: 990 323 577

### Description

**Mounting set:**

A range of special mounting sets are available for the Zehnder ComfoWell 220 for direct mounting to the ComfoAir 160 / ComfoAir Flex 250 / ComfoAir Flex 350 ventilation unit. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).
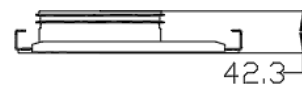
### Technical Specification

| | |
|---|---|
| Height | 42.3 mm |
| Width | 236 mm |
| Depth | 230 mm |
| Weight | 0.7 kg |

**Dimensions**

Front View

Top View

42.3
230.0
236.0
Ø124.0

**TO VIEW OUR COMFOTUBE INFORMATION**

**CLICK HERE**

## BIM/CAD Components

If you would like to download the BIM / CAD files for this or any other of our products then please visit our BIM library.

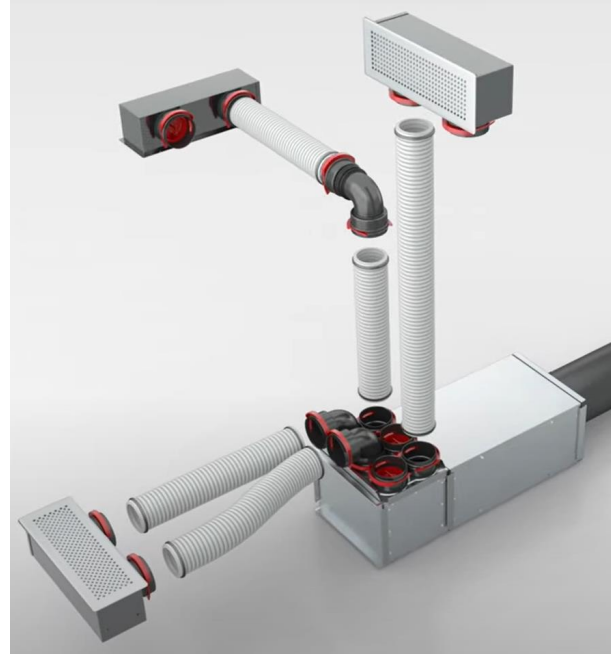**TO VISIT OUR BIM/CAD LIBRARY**

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## Installation Instructions

If you would like to download the installation files for this or any other of our products then please visit our download page by clicking the link below.

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## Our Informational Videos





Watch our video on the future of air distribution installation - Zehnder RapidLock®!

Watch our video on how to clean the Zehnder ComfoTube ductwork.

**TO WATCH OUR VIDEO**

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## Consultant Specification

**Specification**

The semi-rigid ductwork manifold shall be constructed of galvanised sheet steel with a closed-cell melamine resin foam inner lining to prevent dust collection and have a fire class C according to EN 13501-1.

It shall be of modular construction with options to combine attenuators, manifold box, filter housing with ISO ePM1 (F9) or active carbon filters and end plates ranging from ø 125 mm to ø 200 mm.

It shall have the option of a mounting set for direct connection to the mechanical ventilation with heat recovery unit.

The components shall be tested to BS EN 1507:2006 and BS EN 12237:2003 for airtightness and have removable elements to provide access for cleaning.

Comfowell220_Technical_Specification_2024_V1