

# Zehnder ComfoWell 320

Modular manifold for use with semi-rigid ductwork

Product data sheet

always the best climate



# ComfoWell 320

The Zehnder ComfoWell 320 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 320 mm it can be used for connecting up to 6 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                |
|---|-----------------------------|
| <b>Attenuator</b>   |                             |
| <a href="#">Zehnder ComfoWell attenuator, CW-S 320</a>                                      | <a href="#">990 323 501</a> |
| <b>Manifold</b>   |                             |
| <a href="#">Zehnder ComfoWell manifold box, CW-D 320</a>                                    | <a href="#">990 323 531</a> |
| <b>Filter Housing</b>   |                             |
| <a href="#">Zehnder ComfoWell filter housing, CW-F 320</a>                                  | <a href="#">990 323 551</a> |
| <b>Mounting Plates</b>  |                             |
| <a href="#">Zehnder ComfoWell mounting plate, CW-M 320, 6 x 75 mm connections</a>           | <a href="#">990 323 612</a> |
| <a href="#">Zehnder ComfoWell mounting plate, CW-M 320, 6 x 90 mm connections</a>           | <a href="#">990 323 613</a> |
| <b>End Plates</b>   |                             |
| <a href="#">Zehnder ComfoWell end plate, CW-P 320, ø 125 mm</a>                             | <a href="#">990 323 511</a> |
| <a href="#">Zehnder ComfoWell end plate, CW-P 320, ø 160 mm</a>                             | <a href="#">990 323 512</a> |
| <b>Spacer Frame</b>   |                             |
| <a href="#">Zehnder ComfoWell spacer frame, CW-DF 320</a>                                   | <a href="#">990 323 538</a> |
| <b>Mounting Set</b>   |                             |
| <a href="#">Zehnder ComfoWell mounting set, CW-K 320, for Zehnder ComfoAir 160</a>          | <a href="#">990 323 570</a> |
| <a href="#">Zehnder ComfoWell mounting set, CW-K 320, for Zehnder ComfoAir 200</a>          | <a href="#">990 323 517</a> |
| <a href="#">Zehnder ComfoWell mounting Set, CW-K 320, for Zehnder ComfoAir Q350</a>         | <a href="#">990 323 647</a> |
| <a href="#">Zehnder ComfoWell mounting set, CW-K 320, for Zehnder ComfoAir Flex 250/350</a> | <a href="#">990 323 711</a> |
| <b>Filters</b>  |                             |
| <a href="#">Filter for ComfoWell 320, CW-F9 320, ISO ePM1 (F9), 1 Piece</a>                 | <a href="#">990 323 604</a> |
| <a href="#">Filter for ComfoWell 320, CW-AC 320, active carbon filter, 1 Piece</a>          | <a href="#">990 323 605</a> |

## 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                       | 66.6 l/s (240 m³/h) at normal ventilation level |
| Air tightness class to <a href="#">EN 1507:2006</a>  | B   |
| Air tightness class to <a href="#">EN 12237:2003</a> | B   |
| Fire rating to <a href="#">EN 13501-1</a>            | C   |

## Sound Data

| Combination   | Octave Band (Hz) Insertion Loss, dB |      |      |      |      |      |      |      |
|---|-------------------------------------|------|------|------|------|------|------|------|
|   | 63                                  | 125  | 250  | 500  | 1000 | 2000 | 4000 | 8000 |
| 1 x Attenuator (CW-S 320) with 2 x 125 mm end plates (CW-P 320)   | 9.5                                 | 8.1  | 12.7 | 12   | 12   | 26.6 | 28.4 | 24   |
| 2 x Attenuator (CW-S 320) stacked with 2 x 125 mm end plates (CW-P 320)                                 | 14                                  | 13.1 | 23.7 | 21.3 | 26.7 | 40.2 | 41.4 | 35.6 |
| 1 x Attenuator (CW-S 320) with 1 x 125 mm end plates (CW-P 320) and 1 x 75 mm mounting plate (CW-M 320) | 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

| Combination Options                                       | ComfoAir 200 Left handed with mounting set, 2 x attenuators and 2 x 6 port ø 75mm mounting plates | Stand alone attenuator with 2x ø 160mm end plates  | Stand alone manifold with 1 x ø 125mm end plate and 6 x ø 75mm mounting plate | Stand alone filter housing with 2 x ø 160mm end plate                | Stand alone attenuator and manifold combined with 1 x ø 160mm end plate and 6 x ø 75mm mounting plate | Stand alone 2 x attenuator with 1 x ø 160mm end plate and 6 x ø 75mm mounting plate |
|---|---|--|---|--|---|---|
| <b>Individual Components</b>                              |   |  |   |  |   |   |
| <b>Silencer</b><br>Article Number: 990 323 501            | 2 x Zehnder ComfoWell attenuator, CW-S 320  | 1 x Zehnder ComfoWell attenuator, CW-S 320         | —   | —  | 1 x Zehnder ComfoWell attenuator, CW-S 320  | 2 x Zehnder ComfoWell attenuator, CW-S 320  |
| <b>Manifold Box</b><br>Article Number: 990 323 531        | —   | —  | 1 x Zehnder ComfoWell manifold box, CW-D 320                                  | —  | —   | —   |
| <b>Filter Housing</b><br>Article Number: 990 323 551      | —   | —  | —   | 1 x Zehnder ComfoWell filter housing, CW-F 320                       | —   | —   |
| <b>Mounting Plate -ø75</b><br>Article Number: 990 323 612 | 2 x Zehnder ComfoWell mounting plate, CW-M 320, 6 x 75mm connections                              | —  | 1 x Zehnder ComfoWell mounting plate, CW-M 320, 6 x 75mm connections          | —  | 1 x Zehnder ComfoWell mounting plate, CW-M 320, 6 x 75mm connections                                  | 1 x Zehnder ComfoWell mounting plate, CW-M 320, 6 x 75mm connections                |
| <b>End Plate - ø 125</b><br>Article Number: 990 323 511   | —   | —  | 1 x Zehnder ComfoWell end plate, CW-P 320, ø 125mm                            | —  | —   | —   |
| <b>End Plate - ø 160</b><br>Article Number: 990 323 512   | —   | 2 x Zehnder ComfoWell end plate, CW-P 320, ø 160mm | —   | 2 x Zehnder ComfoWell end plate, CW-P 320, ø 160mm                   | 1 x Zehnder ComfoWell end plate, CW-P 320, ø 160mm  | 1 x Zehnder ComfoWell end plate, CW-P 320, ø 160mm                                  |
| <b>Mounting Set 200</b><br>Article Number: 990 323 517    | 1 x Zehnder ComfoWell mounting set, CW-K 320, for Zehnder ComfoAir 160                            | —  | —   | —  | —   | —   |
| <b>Filter</b><br>Article Number: 990 323 604              | —   | —  | —   | 1 x Filter for ComfoWell 320, CW-F9 320, ISO ePM1 >90% (F9), 1 Piece | —   | —   |

### Zehnder ComfoWell attenuator CW-S 320

Article number: 990 323 501

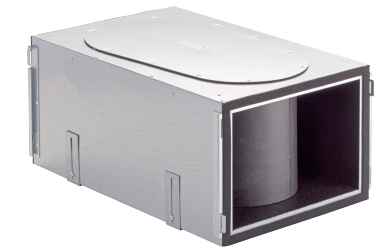
#### Description

##### Attenuator:

Zehnder ComfoWell attenuator CW-S 320. 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.

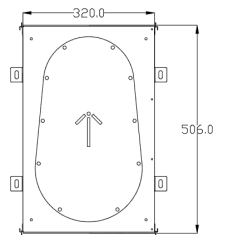
#### Technical Specification

|        |          |
|--------|----------|
| Height | 506 mm   |
| Width  | 336 mm   |
| Depth  | 232.5 mm |
| Weight | 6.6 kg   |

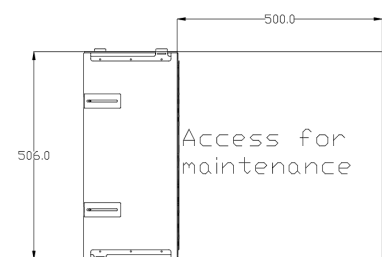


#### Dimensions

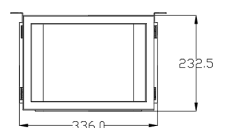
Front View



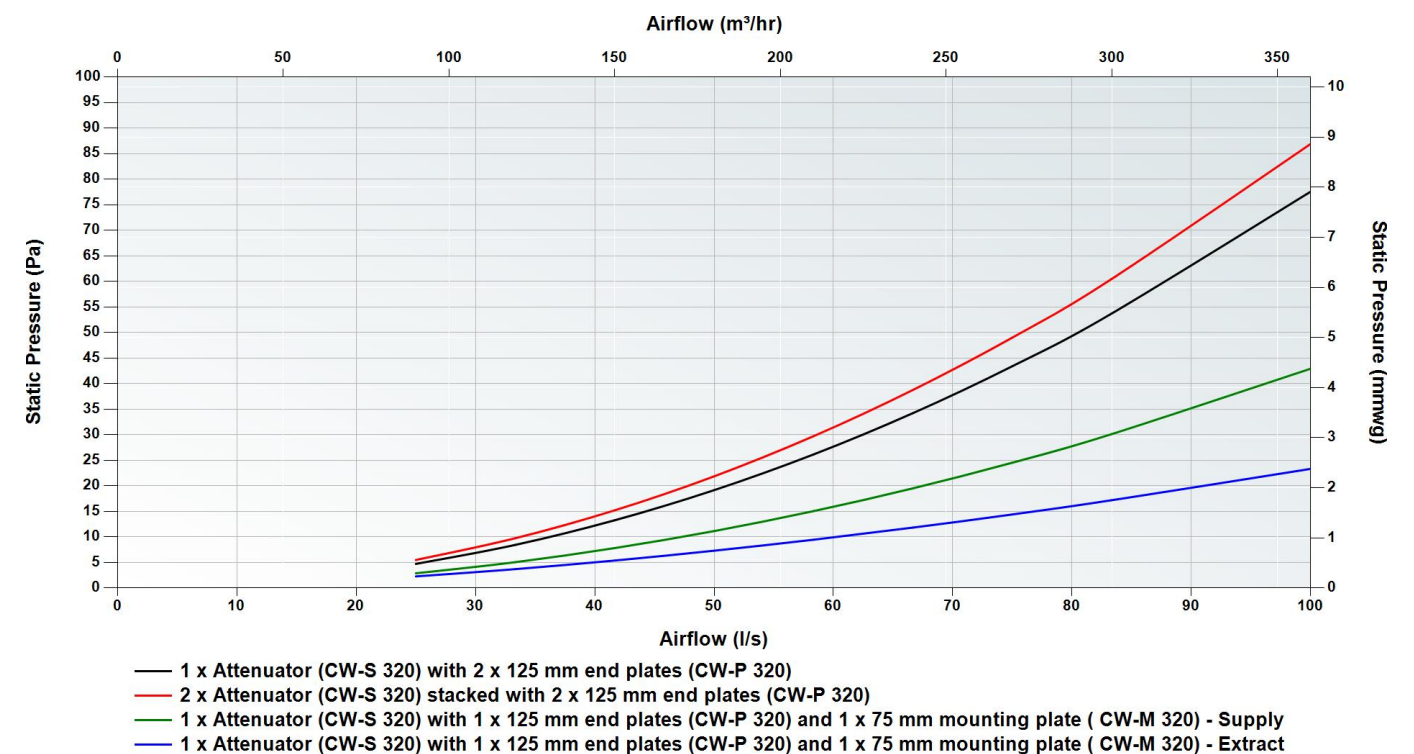
Side View



Top View



### Pressure Curve



### Zehnder ComfoWell manifold box CW-D 320

Article number: 990 323 531

#### Description

##### Manifold Box:

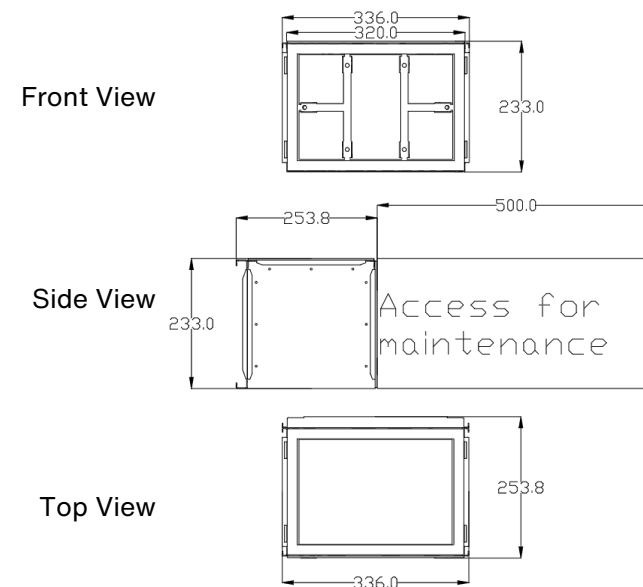
Zehnder ComfoWell manifold box CW-D 320. Rectangular compact design with closed pore internal lining. Suitable for use with the mounting plate for 6 x ComfoTube 75 mm connections or 6 x 90 mm connections. The mounting plate can be mounted on the top or side of the manifold box. The airtight connection 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 | 233 mm   |
| Width  | 336 mm   |
| Depth  | 253.8 mm |
| Weight | 4.52 kg  |



#### Dimensions



### Zehnder ComfoWell filter housing CW-F 320

Article number: 990 323 551

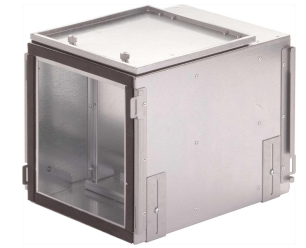
#### Description

##### Filter Housing:

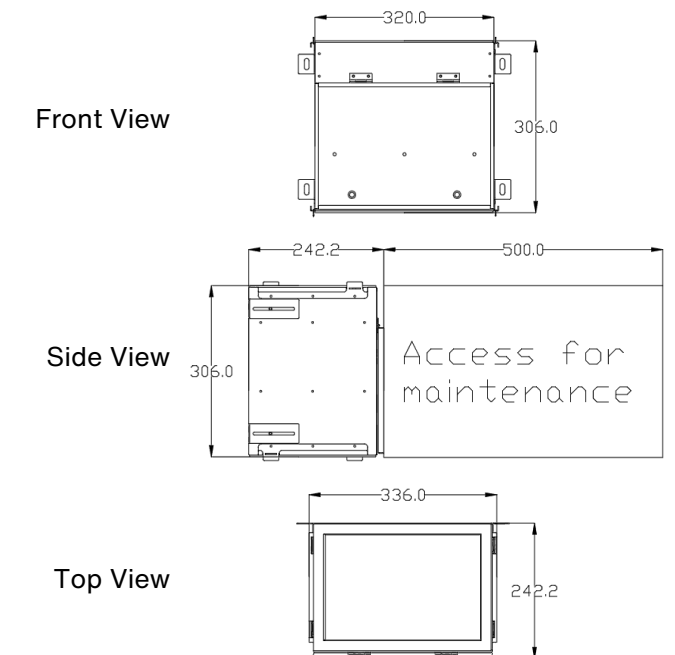
Zehnder ComfoWell filter housing CW-F 320. Rectangular compact design for use with a fine dust filter graded ISO ePM1 (F9) or an active carbon filter to neutralise odours in the supply air duct run. The filter elements are not included with the filter housing and need to be purchased separately, with 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

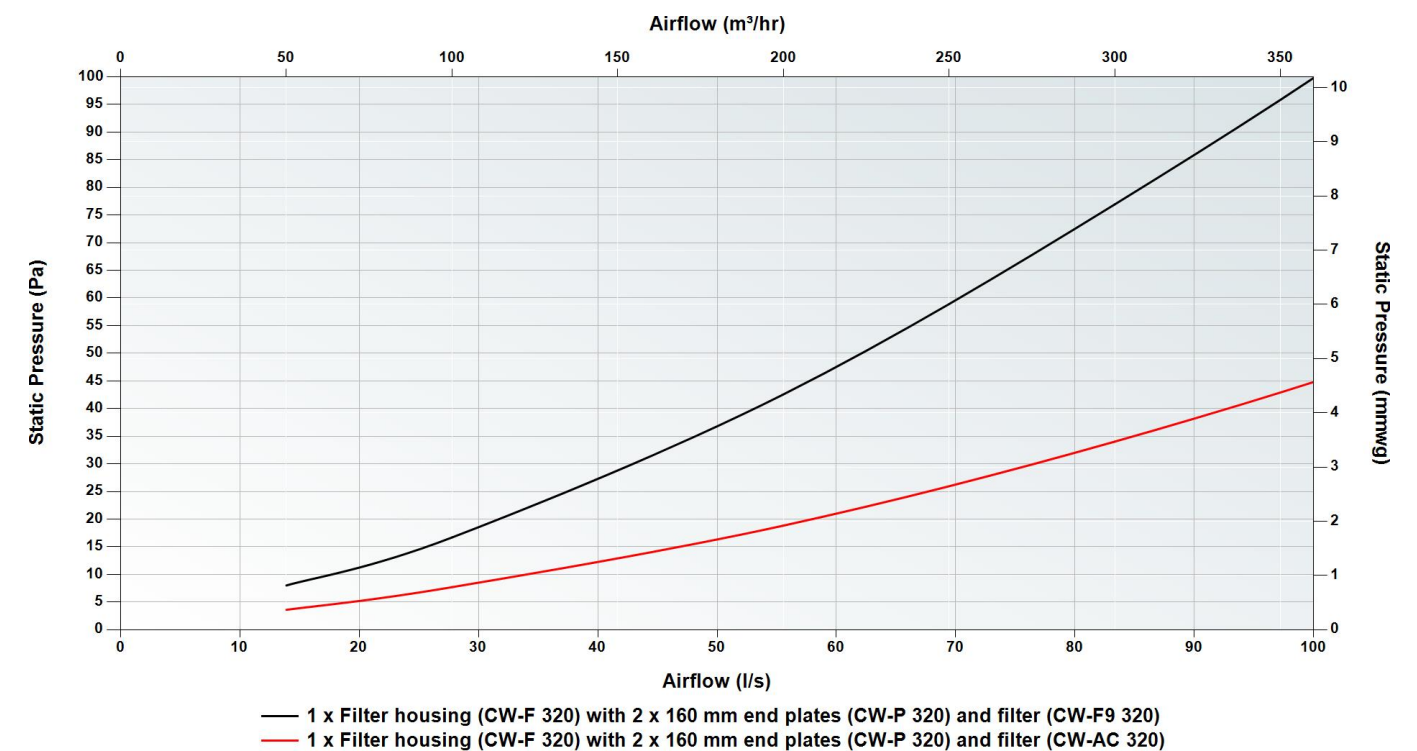
|         |          |
|---------|----------|
| Height  | 306 mm   |
| Width   | 336 mm   |
| Depth   | 242.2 mm |
| Weight  |          |
| Housing | 4.73 kg  |
| CW-F9   | 0.5 kg   |
| CW-AC   | 0.84 kg  |



#### Dimensions



#### Pressure Curve





## Zehnder ComfoWell mounting plate CW-M 320

Article number: 990 323 612 / 990 323 613

### Description

#### Mounting Plate:

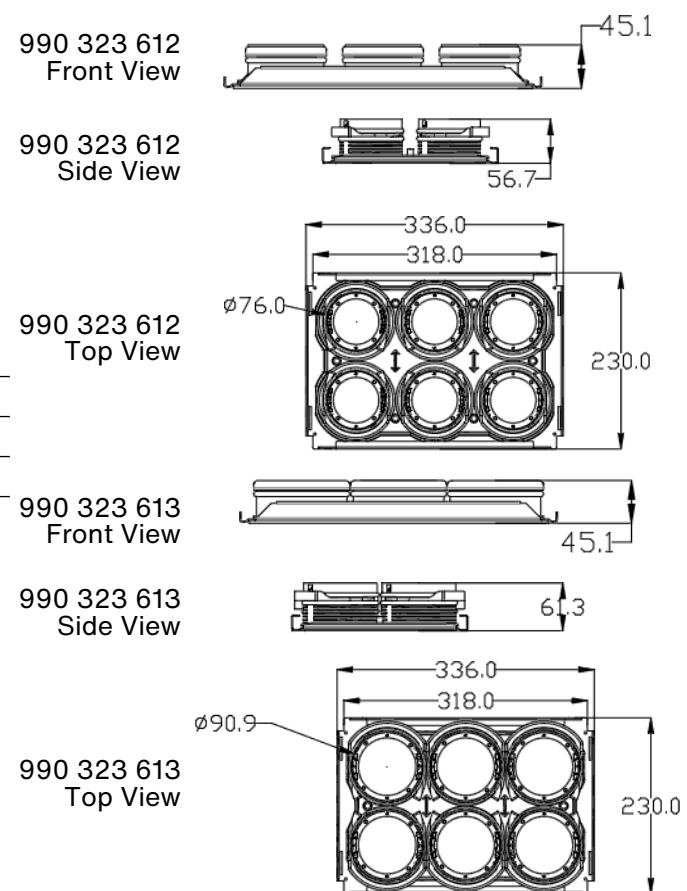
Zehnder ComfoWell mounting plate CW-M 320-6 x 75 or 90. Manifold mounting plate for connection of 6 x ComfoTube 75 mm or 90 mm semi-rigid ducting. The mounting plate includes a protective film and the necessary mounting accessories, including RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork.

#### Technical Specification

|        |                   |
|--------|-------------------|
| Height | 56.7 mm / 61.3 mm |
| Width  | 336 mm            |
| Depth  | 230 mm            |
| Weight | <1.0 kg           |



### Dimensions



## Zehnder ComfoWell end plate CW-P 320 - ø 125 / 160 mm

Article number: 990 323 511 / 990 323 512

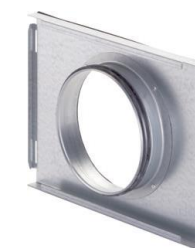
### Description

#### End Plate:

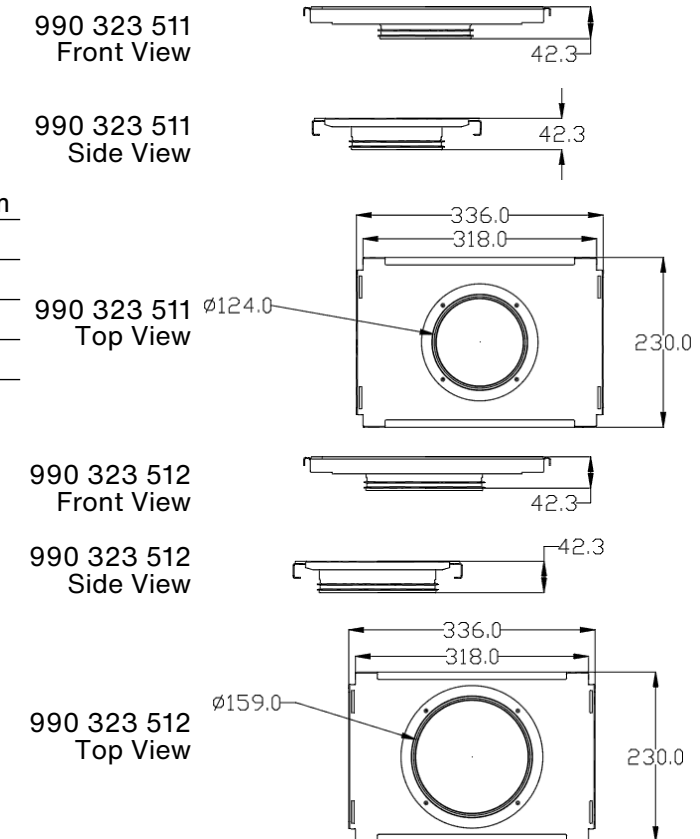
Zehnder ComfoWell end plate CW-P 320 - DN125 / DN160 (with centre connection) for the connection to the ComfoWell attenuator/manifold box or filter housing to the matching ducting size required. The end plate includes the necessary mounting accessories.

#### Technical Specification

|          |                 |
|----------|-----------------|
| Diameter | 125 mm / 160 mm |
| Height   | 42.3 mm         |
| Width    | 336 mm          |
| Depth    | 230 mm          |
| Weight   | <1.01 kg        |



### Dimensions



### Zehnder ComfoWell spacer frame, CW-DF 320

Article number: 990 323 538

#### Description

##### Spacer Frame:

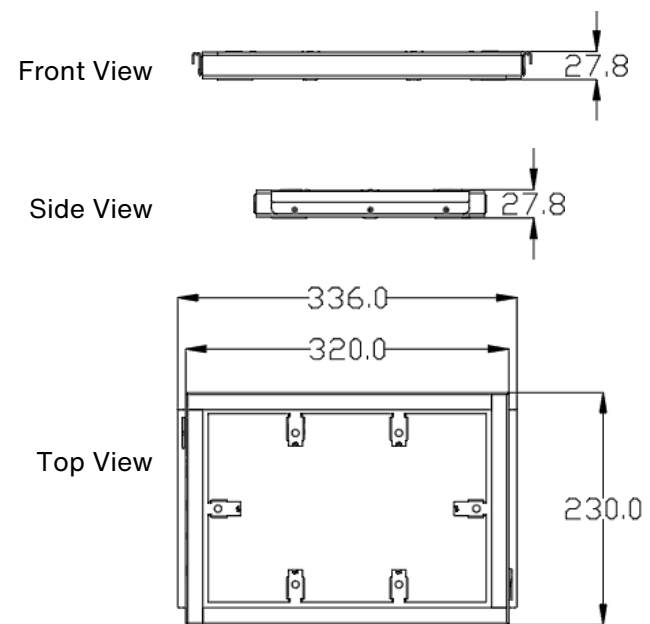
Zehnder ComfoWell spacer frame CW-DF320. Rectangular frame for use in the event of uneven surfaces when connecting components and mounting plate (concreted in place) are at 90 degrees. The spacer frame includes the necessary mounting accessories.

#### Technical Specification

|        |         |
|--------|---------|
| Height | 27.8 mm |
| Width  | 336 mm  |
| Depth  | 230 mm  |
| Weight | 1.02 kg |



#### Dimensions



### Zehnder ComfoWell mounting set, CW-K 320, for Zehnder ComfoAir 160

Article number: 990 323 570

#### Description

##### Mounting set:

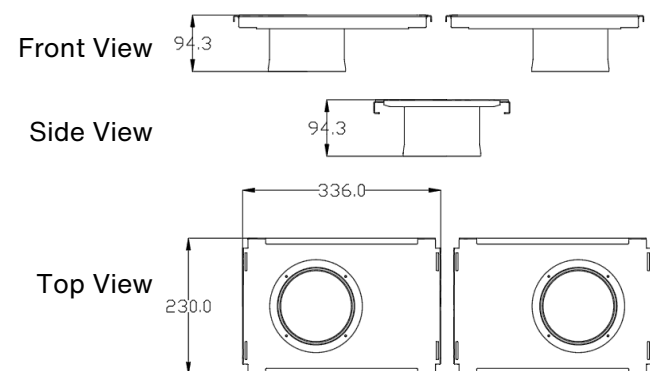
A range of special mounting sets are available for the Zehnder ComfoWell 320 for direct mounting to the ComfoAir 160 / ComfoAir 200 / ComfoAir 350 / ComfoAir Q350 ComfoAir Flex 250 / ComfoAir Flex 350 ventilation units. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

#### Technical Specification

|        |        |
|--------|--------|
| Height | 94 mm  |
| Width  | 336 mm |
| Depth  | 230 mm |
| Weight | 2.3 kg |



#### Dimensions



### Zehnder ComfoWell mounting set, CW-K 320, for Zehnder ComfoAir 200

Article number: 990 323 517

#### Description

##### Mounting set:

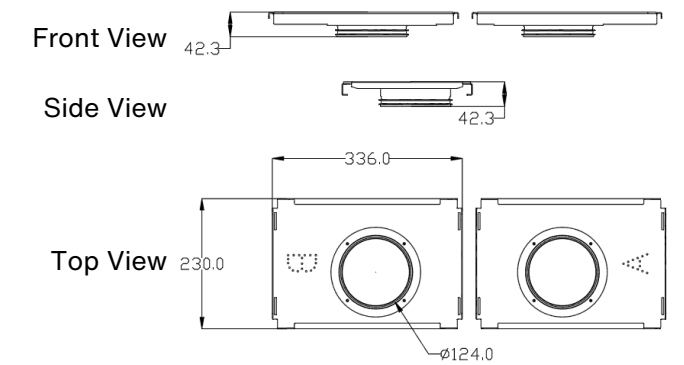
A range of special mounting sets are available for the Zehnder ComfoWell 320 for direct mounting to the ComfoAir 160 / ComfoAir 200 / ComfoAir 350 / ComfoAir Q350 ComfoAir Flex 250 / ComfoAir Flex 350 ventilation units. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

#### Technical Specification

|        |        |
|--------|--------|
| Height | 42 mm  |
| Width  | 336 mm |
| Depth  | 230 mm |
| Weight | 1.8 kg |



#### Dimensions



### Zehnder ComfoWell mounting set, CW-K 320, for Zehnder ComfoAir Q350

Article number: 990 323 647

#### Description

##### Mounting set:

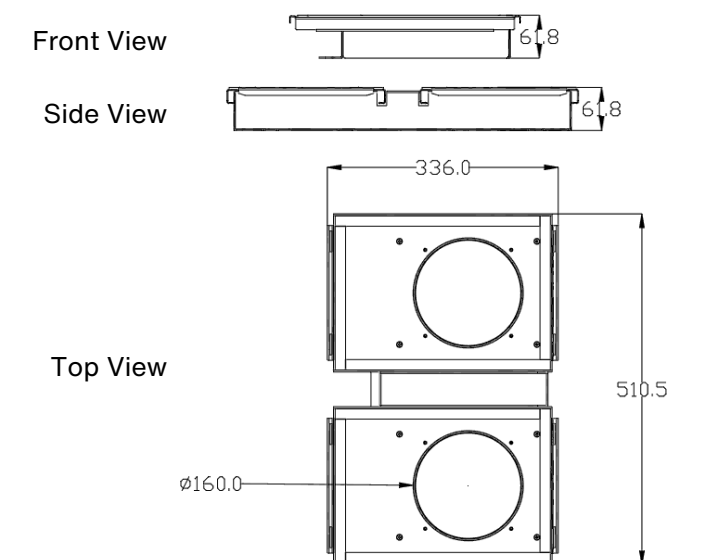
A range of special mounting sets are available for the Zehnder ComfoWell 320 for direct mounting to the ComfoAir 160 / ComfoAir 200 / ComfoAir 350 / ComfoAir Q350 ComfoAir Flex 250 / ComfoAir Flex 350 ventilation units. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

#### Technical Specification

|        |          |
|--------|----------|
| Height | 61.8 mm  |
| Width  | 336 mm   |
| Depth  | 510.5 mm |
| Weight | 3.5 kg   |



#### Dimensions



## Zehnder ComfoWell mounting set, CW-K 320, for Zehnder ComfoAir Flex 250/350

Article number: 990 323 711

### Description

#### Mounting set:

A range of special mounting sets are available for the Zehnder ComfoWell 320 for direct mounting to the ComfoAir 160 / ComfoAir 200 / ComfoAir 350 / ComfoAir Q350 ComfoAir Flex 250 / ComfoAir Flex 350 ventilation units. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

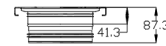
#### Technical Specification

|        |        |
|--------|--------|
| Height | 87 mm  |
| Width  | 336 mm |
| Depth  | 230 mm |
| Weight | 2.3 kg |

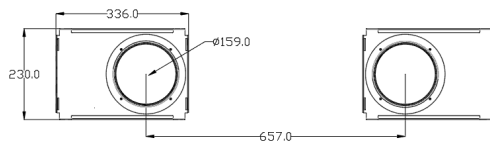


### Dimensions

Side View



Top View



### For use with

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



TO VIEW OUR COMFOTUBE INFORMATION

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### 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.

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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®!

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

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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  $\varnothing$  125 mm to  $\varnothing$  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.