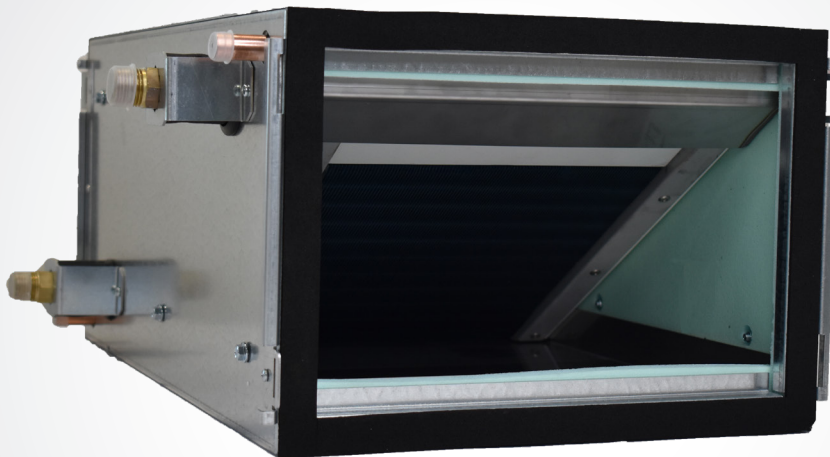


# Designing ComfoPost

Tackling the issue of overheating requires an integrated solution, incorporating a suite of innovative products that each play their part in ensuring that indoor air quality and comfort levels are delivered during the warmer summer months, whilst also complementing heating requirements during the winter. In Passive House and Net Zero energy properties, these integrated products are likely to provide the sole source of heating.

Considering the expected increase in external temperatures predicted across the globe, being able to deliver forward thinking solutions can help mitigate the issue of overheating.



## What is ComfoPost

The Zehnder ComfoPost is a range of air to water exchangers for use with ComfoWell air distribution connections. The ComfoPost helps to reduce the supply air temperature of the ComfoAir MVHR unit in the summer months and if required increase it in the winter months. Chilled water is fed into the ComfoPost during the summer months typically by a chiller or reversible heat pump to help reduce the supply air to all habitable rooms in the property resulting in comfortable supply air during warmer periods. In the winter warm water can be supplied to it to compliment any heating system, especially when using district heating to assist in reducing the return water flow temperature thus increasing efficiency.

The ComfoWell air distribution connections to the ComfoPost allows for ducting selection flexibility, offering a range of rigid circular ductwork or Zehnder ComfoTube semi-rigid ductwork to be attached. The ComfoPost units are also suitable for a wide range of airflows up to 166l/s (600m<sup>3</sup>/hr). The units are made of steel with aluminium and copper pipe forming the heating and cooling coils and are maintenance free.

The ComfoPost can be controlled by the heating/cooling system controls and thermostats. Multiple ComfoPost units could also be used in the same property to enable zonal control.

The ComfoAir Q range of MVHR units can be used with the ComfoPost. These MVHR units are ideal for use with the ComfoPost due to the automatic cold recovery function when the internal temperature is lower than the external temperature. The ComfoAir Q350 has been the first unit to be independently certified by the Passivhaus Institute for its cold recovery efficiency of 87%. The ComfoAir Q range also have a unique modulating summer bypass. If the external temperature is lower than that of the internal temperature then it will activate to bring the cooler air into the property without the need for activating the ComfoPost. This can activate down to much lower temperatures than a standard summer bypass whilst avoiding hitting the dew point due to it being able to partially recover some of the heat. The ComfoAir Q also has 3 temperature profiles which react to the average external temperature. This means during spikes in external temperature the unit is more inclined to react to these sudden changes by opening the bypass or activating the ComfoPost accordingly.

The ComfoConnect KNX C or LAN C enable the end user to control and monitor the unit using the KNX building automation infrastructure or the ComfoControl free app (available on iOS and Android). These can be used to enable remote activation and support via the ComfoControl app.

The ComfoPost cannot be compared to air conditioning since air conditioning recirculates the stale cooled air, whilst the ComfoPost delivers fresh filtered air. This helps to meet ADF ventilation rates whilst having the added benefit of air temperation.

ComfoPost in conjunction with the ComfoWell 320



## Design out overheating

The ComfoPost range can help to temper the supply air. However if the gains exceed the cooling capacity of the unit then the property will still overheat. Things to consider to combat overheating would be as follows:

- Improve thermal mass
- Options to cool thermal mass such as false ceiling or hollow core concrete flooring
- Reduce the size of windows and avoid too much south-facing glazing
- Solar shading through overhangs or external shutters
- Window glass type such as reflective, photochromic, thermochromic or electrochromic
- Insulate hot water pipes and tanks
- Reduce electrical appliances
- Use higher efficiency appliances that emit lower heat levels such as LED lighting
- Openable windows for purge ventilation without a security risk

## Thermal modelling

It's important that thermal modelling is carried out to ensure the appropriate ComfoPost is selected and that it is sufficient to meet the cooling demands of the property. Thermal modelling is entirely reliant on the model inputs; we recommend modelling to the new TM59 guidance which draws from TM52 and CIBSE Guide A. Modelling should be based on the unit running at a minimum of 1ach per habitable room or the minimum air flow published in the relevant ComfoPost Performance Data table, whichever is higher. The output will vary dependent on the conditions and water flow rate/temperature, the Performance Data table should be used as a guide for the units cooling/heating capacity.

When modelling the property it's important that any solar shading requiring user intervention, such as blinds, is modelled with and without them. Window opening modelling should also include any restrictions and take into account noise, security and air quality issues which would reduce the opening area. The windows should also only be modelled as open when rooms are scheduled to be occupied unless security isn't an issue.

### Design methodology for the assessment of overheating risk in homes





ComfoAir Q600

## Additional notes

All equipment should be installed by a competent person; poor or incorrect installation could result in the unit not achieving its desired cooling capacity. The ISO ePM1 >55% (F7) filters within the ComfoAir Q range of units help to reduce fine pollen and carbon black particles in the supply air, however additional filtration such as NOx filters may be required. These need to be factored into the design pressure drop and are available from Zehnder.

Selecting an appropriate ComfoAir unit relevant to the air flow required can be done by simply using our product selector [www.zehnderproductselector.co.uk](http://www.zehnderproductselector.co.uk)



Filters

## Key design considerations

- Minimum and maximum air flow design rates for the ComfoPost can be found within the Performance Data Table, ventilation pipework velocity must be < 3m/s.
- Ductwork should be sized accordingly to equate to the ComfoAir units spigot size.
- Thermal modelling to achieve the cooling/heating capacity for the specified ComfoPost relevant to the design flow temperatures within the appropriate Performance Data table. The recommended operating water temperature range is between 7 and 55°C.
- Maximum operating water pressure 6 bar.
- The ComfoPost can be installed horizontally or vertically but the condensate drain must always be in the lower position with the water connection on the side and not on the top or bottom. When installing vertically the airflow must NOT be directed downwards.
- Insulate intake/exhaust ductwork to a minimum of 25mm of insulating material, with a thermal conductivity of 0.04W/Mk.
- Insulate supply ductwork to a minimum of 10mm of insulating material, with a thermal conductivity of 0.04W/Mk.
- Insulate the water IN and water OUT pipework with the appropriate thickness and material.
- Enthalpy cube for the relevant ComfoAir Q or ComfoAir 160/180/200/350 unit used as standard.
- A buffer tank can be used to reduce the peak phases and ensure a quicker reaction time, requirement to be confirmed by thermal modeller.
- Ensure adequate attenuation is factored in at the higher flow rate.
- Ensure the intake/exhaust terminations are separated by a minimum of 2m and terminate to the external façade.
- Locate the MVHR unit on an external wall if possible.
- If a switch live boost is desired, then a relay linked to the Option Box is required when using the ComfoAir Q.
- The ComfoPost can be used in conjunction with corresponding ComfoWell, which can only be installed directly to it.
- Intake air from north facing orientation if possible.
- Don't intake air from south facing orientation.
- Don't intake air from underneath roof tiles or solar panels.
- Use a water filled siphon with a water lock of at least 100mm for the ComfoPost condensate drain.
- Use a dry trap on the ComfoAir MVHR units capable of achieving 500Pa of pressure.
- Due to the increased risk of corrosion, installations near the coast should be avoided

**TO DOWNLOAD OUR COMFOPOST DATASHEET**

**CLICK HERE**

**TO DOWNLOAD OUR COMFOWELL DATASHEET**

**CLICK HERE**

**TO DOWNLOAD OUR COMFOAIR DATASHEET**

**CLICK HERE**

## Contact information

Zehnder Group UK Ltd

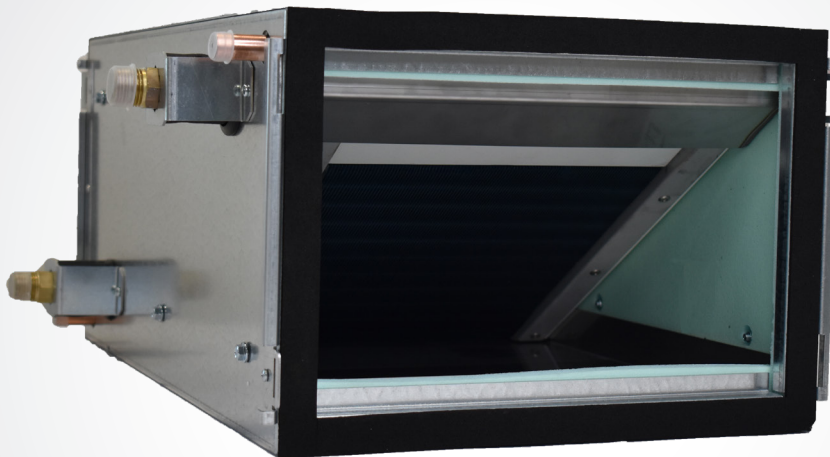
Registered office: Concept House,  
Watchmoor Point, Camberley  
Surrey GU15 3AD  
Registered in England No.2296696

© Copyright Zehnder Group UK Ltd 2020

Head Office: 01276 605800  
Technical Services: 01276 408 404  
Email: [enquiries@zehnder.co.uk](mailto:enquiries@zehnder.co.uk)  
Website: [www.zehnder.co.uk](http://www.zehnder.co.uk)

**zehnder**

# Zehnder ComfoPost CW6



# ComfoPost CW6

The Zehnder ComfoPost is an air to water exchanger for use with ComfoWell air distribution connections. The ComfoWell connections allows for selection flexibility, offering a range of rigid circular ductwork or Zehnder ComfoTube semi-rigid ductwork to attached. The ComfoPost is available in a variety of sizes to heat or cool the air supplied by the Zehnder ventilation system.

The ComfoPost units are suitable for a wide range of airflows up to 166l/s (600m<sup>3</sup>hr), the CW6 is suitable for airflows up to 83.3l/s (300m<sup>3</sup>hr). The units are made of steel with aluminium and copper pipe forming the heating and cooling coils and are maintenance free.

## Key Features

- Ideal for use with reversible heat pumps or chillers to meet SAP 10 or TM59 overheating demands
- Low pressure losses
- Filtered fresh supply air, not recycled stale air
- Suitable for use with the unique modular ComfoWell manifolds
- Suitable for horizontal or vertical installation
- Condensation water tray and drain as standard
- Suitable for Passive House application
- Corrosion resistant

## Article Numbers

Description	Product Code
Zehnder ComfoPost CW6 post-treatment battery for heating and cooling with an airflow up to 300m <sup>3</sup> /h	398 480 002

## Technical Specification

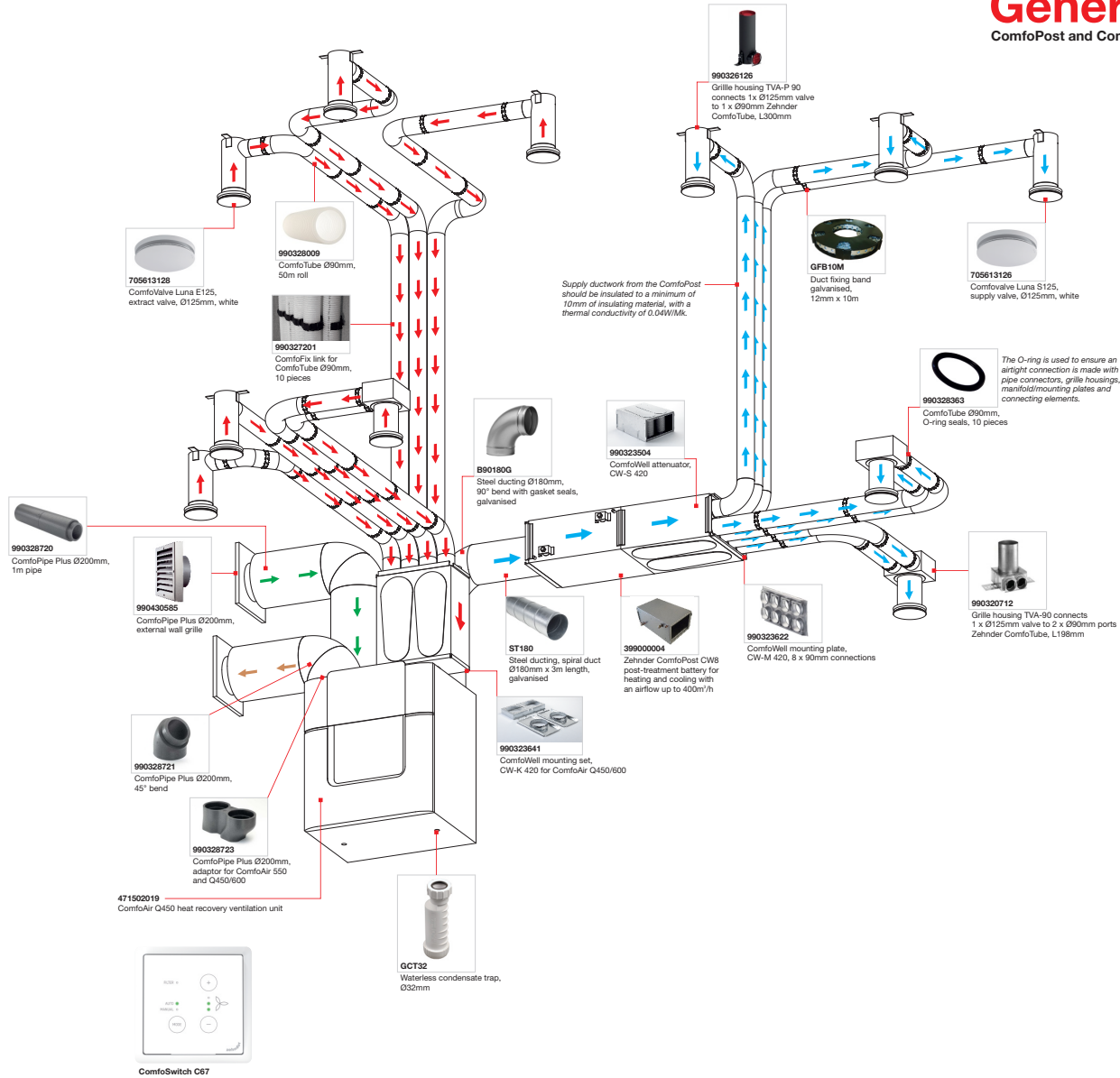
Height	230mm
Width	320mm
Depth	520mm
Water connection diameter (ø)	1/2"
Water connection type	BSPT male thread
Condensate drain diameter OD (ø)	14mm
Condensate connection type	Worm drive clip to fix to hose or crimped to copper pipe
ComfoWell range	ComfoWell 320
ComfoWell rigid round air connection options (ø)	125mm / 150mm / 160mm / 180mm
ComfoWell semi-rigid air connection options (ø)	6 x 75mm / 6 x 90mm / 2 x 90mm + 4 x 75mm
Material	Casing: Galvanised sheet steel Tubes: Copper Fins: Aluminium with hydrophilic treatment
Recommended operating water temperature range	7 to 55 °C
Recommended maximum operating air flow	<83.3l/s (<300m <sup>3</sup> hr)
Maximum thermal heating output	3.13kW*
Maximum thermal cooling output	2.8kW*
Maximum operating water pressure?	6 bar
Water volume capacity	0.6 Litres
Maintenance free	Yes
Weight	13.5 kg

\*Total capacity (sensible and latent) based on test conditions shown in the Performance Data table

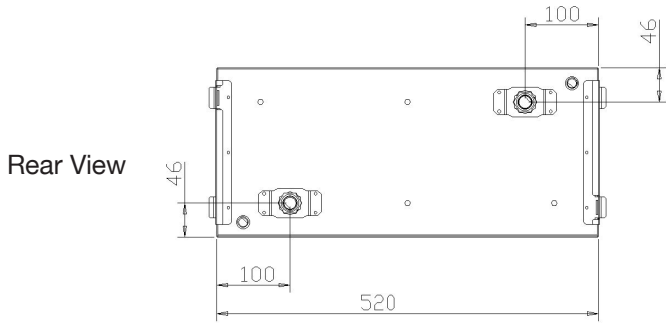
## 3D System Layout

## Generic Example

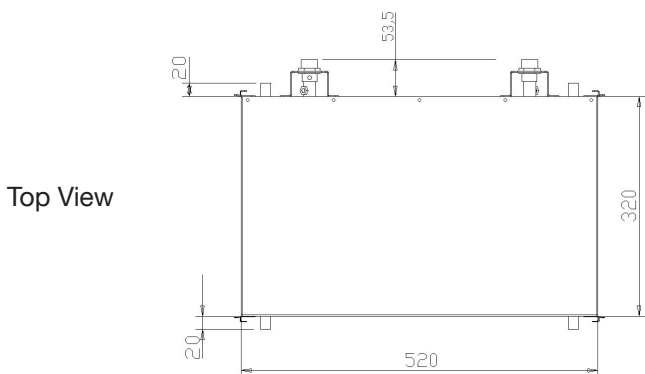
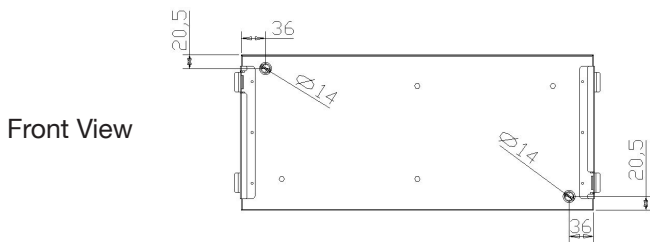
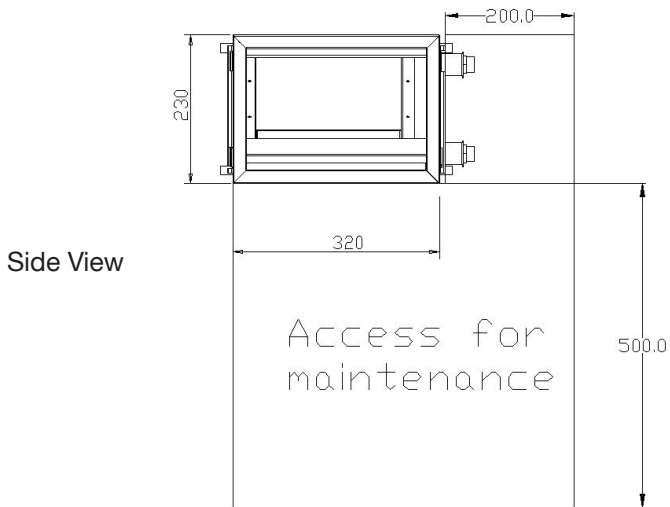
ComfoPost and ComfoTube Ø90mm Semi-Rigid Ductwork



## Dimensions



Height	230mm
Width	320mm
Depth	520mm
Weight	13.5 kg

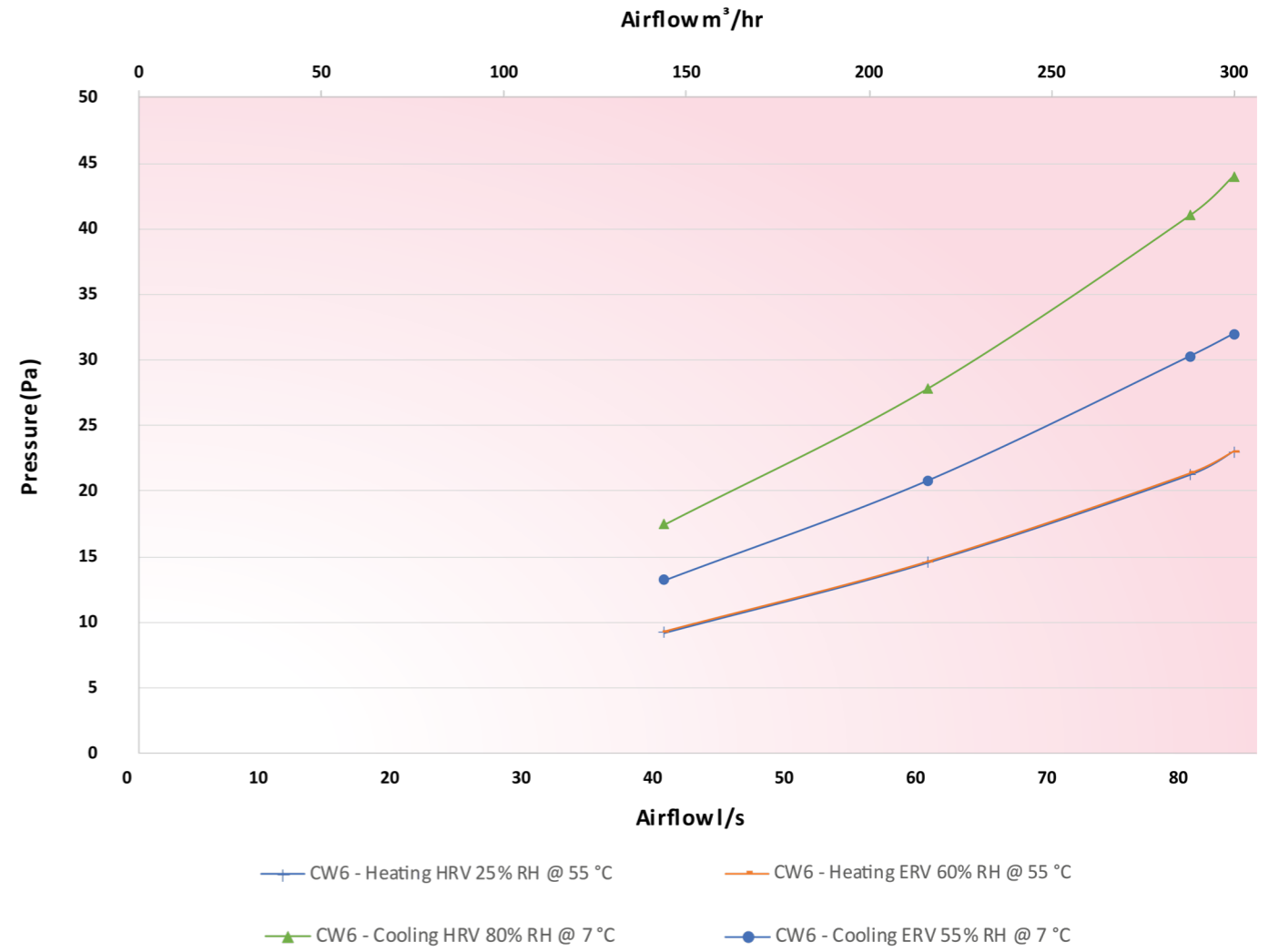


## Performance Data

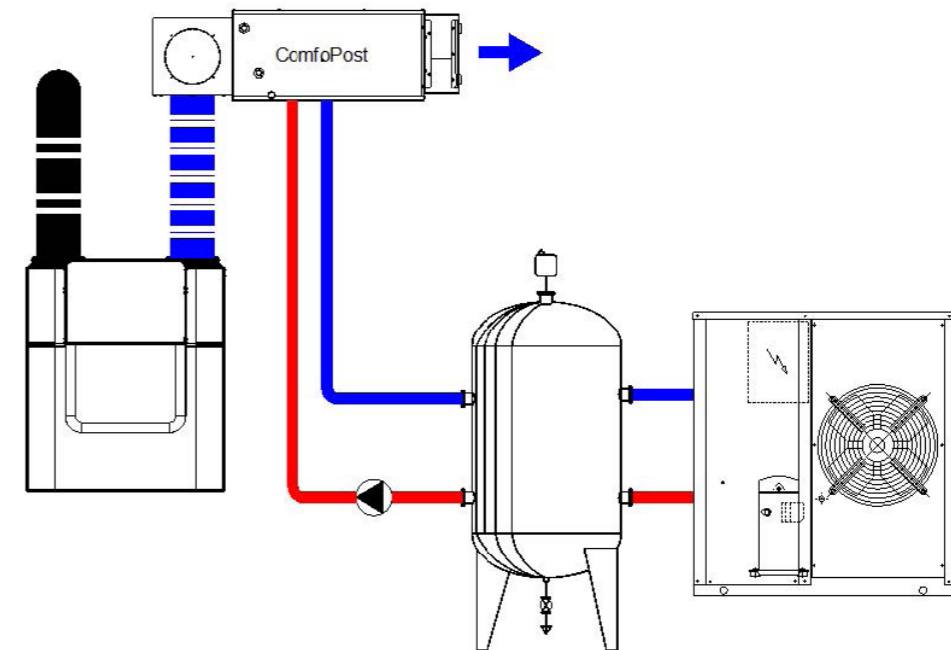
Air conditions IN to ComfoPost	Heating								Cooling			
	HRV exchanger				ERV exchanger				HRV	ERV		
	T °C	18 °C				17 °C				27°C	28°C	
	RH %	25%				60%				80%	55%	
AH	3.2 g/kg				7.3 g/kg				18.1 g/kg	13.1 g/kg		
Water temperature IN	°C	55	50	45	40	55	50	45	40	7	7	
MINIMUM Air flow 40l/s (144m³/h)	H <sub>2</sub> O flow	l/h	600				600				600	600
	H <sub>2</sub> O temperature OUT	°C	52	48	43	39	52	48	43	38	10	9
	H <sub>2</sub> O ΔP	kPa	9	10	10	10	9	10	10	10	12	12
	Air temperature OUT	°C	53	48	43	38	52	47	43	38	12	11
	Air RH OUT	%	4	5	6	8	9	11	14	17	100	96
	Air AH OUT	g/kg	3.2	3.2	3.2	3.2	7.2	7.2	7.2	7.2	9.1	7.9
	Air ΔP	Pa	9	9	9	9	9	9	9	9	17	13
	Condensation	l/h	-	-	-	-	-	-	-	-	1.7	2.1
	Sensible power	kW	-	-	-	-	-	-	-	-	0.74	0.4
	<b>TOTAL POWER</b>	<b>kW</b>	<b>1.73</b>	<b>1.5</b>	<b>1.26</b>	<b>1.03</b>	<b>1.79</b>	<b>1.55</b>	<b>1.32</b>	<b>1.08</b>	<b>1.88</b>	<b>1.52</b>
Air flow 60l/s (216m³/h)	H <sub>2</sub> O flow	l/h	600				600				600	600
	H <sub>2</sub> O temperature OUT	°C	52	47	43	38	51	47	42	38	10	10
	H <sub>2</sub> O ΔP	kPa	9	10	10	10	9	10	10	10	12	12
	Air temperature OUT	°C	50	46	41	37	50	46	41	37	14	13
	Air RH OUT	%	4	5	7	8	9	12	15	19	100	93
	Air AH OUT	g/kg	3.2	3.2	3.2	3.2	7.2	7.2	7.2	7.2	10.3	8.6
	Air ΔP	Pa	15	14	14	14	15	14	14	14	28	21
	Condensation	l/h	-	-	-	-	-	-	-	-	2.1	2.1
	Sensible power	kW	-	-	-	-	-	-	-	-	0.94	0.63
	<b>TOTAL POWER</b>	<b>kW</b>	<b>2.35</b>	<b>2.03</b>	<b>1.71</b>	<b>1.39</b>	<b>2.43</b>	<b>2.1</b>	<b>1.78</b>	<b>1.46</b>	<b>2.35</b>	<b>1.94</b>
Air flow 80l/s (288m³/h)	H <sub>2</sub> O flow	l/h	600				600				600	600
	H <sub>2</sub> O temperature OUT	°C	51	46	42	38	51	46	42	37	11	10
	H <sub>2</sub> O ΔP	kPa	9	10	10	10	9	10	10	10	12	12
	Air temperature OUT	°C	48	44	40	36	48	44	40	36	16	14
	Air RH OUT	%	5	6	7	9	11	13	17	20	99	90
	Air AH OUT	g/kg	3.2	3.2	3.2	3.2	7.2	7.2	7.2	7.2	11.3	9.2
	Air ΔP	Pa	21	21	21	21	21	21	21	21	41	30
	Condensation	l/h	-	-	-	-	-	-	-	-	2.4	2.2
	Sensible power	kW	-	-	-	-	-	-	-	-	1.1	0.85
	<b>TOTAL POWER</b>	<b>kW</b>	<b>2.93</b>	<b>2.53</b>	<b>2.13</b>	<b>1.73</b>	<b>3.03</b>	<b>2.62</b>	<b>2.22</b>	<b>1.82</b>	<b>2.74</b>	<b>2.29</b>
MAXIMUM Air flow 83.3l/s (300 m³/h)	H <sub>2</sub> O flow	l/h	600				600				600	600
	H <sub>2</sub> O temperature OUT	°C	51	46	42	37	51	47	42	38	11	10
	H <sub>2</sub> O ΔP	kPa	10	10	10	10	10	10	10	10	12	12
	Air temperature OUT	°C	48	44	40	36	48	43	39	35	16	15
	Air RH OUT	%	5	6	7	9	10	12	15	19	99	90
	Air AH OUT	g/kg	3.2	3.2	3.2	3.2	7.2	7.2	7.2	7.2	11.4	9.3
	Air ΔP	Pa	23	23	23	22	23	23	23	22	44	32
	Condensation	l/h	-	-	-	-	-	-	-	-	2.4	2.2
	Sensible power	kW	-	-	-	-	-	-	-	-	1.12	0.89
	<b>TOTAL POWER</b>	<b>kW</b>	<b>3.03</b>	<b>2.62</b>	<b>2.2</b>	<b>1.79</b>	<b>3.13</b>	<b>2.71</b>	<b>2.29</b>	<b>1.88</b>	<b>2.8</b>	<b>2.34</b>

Initial temperature and humidity outdoor/indoor: winter 2°C 70% R.H. / 20°C 60% R.H.; summer 35°C 50% R.H. / 25°C 50% R.H.  
The calculations include the cold recovery efficiency of an enthalpy exchanger as extrapolated from the results provided by the PHI certification

## Performance Data

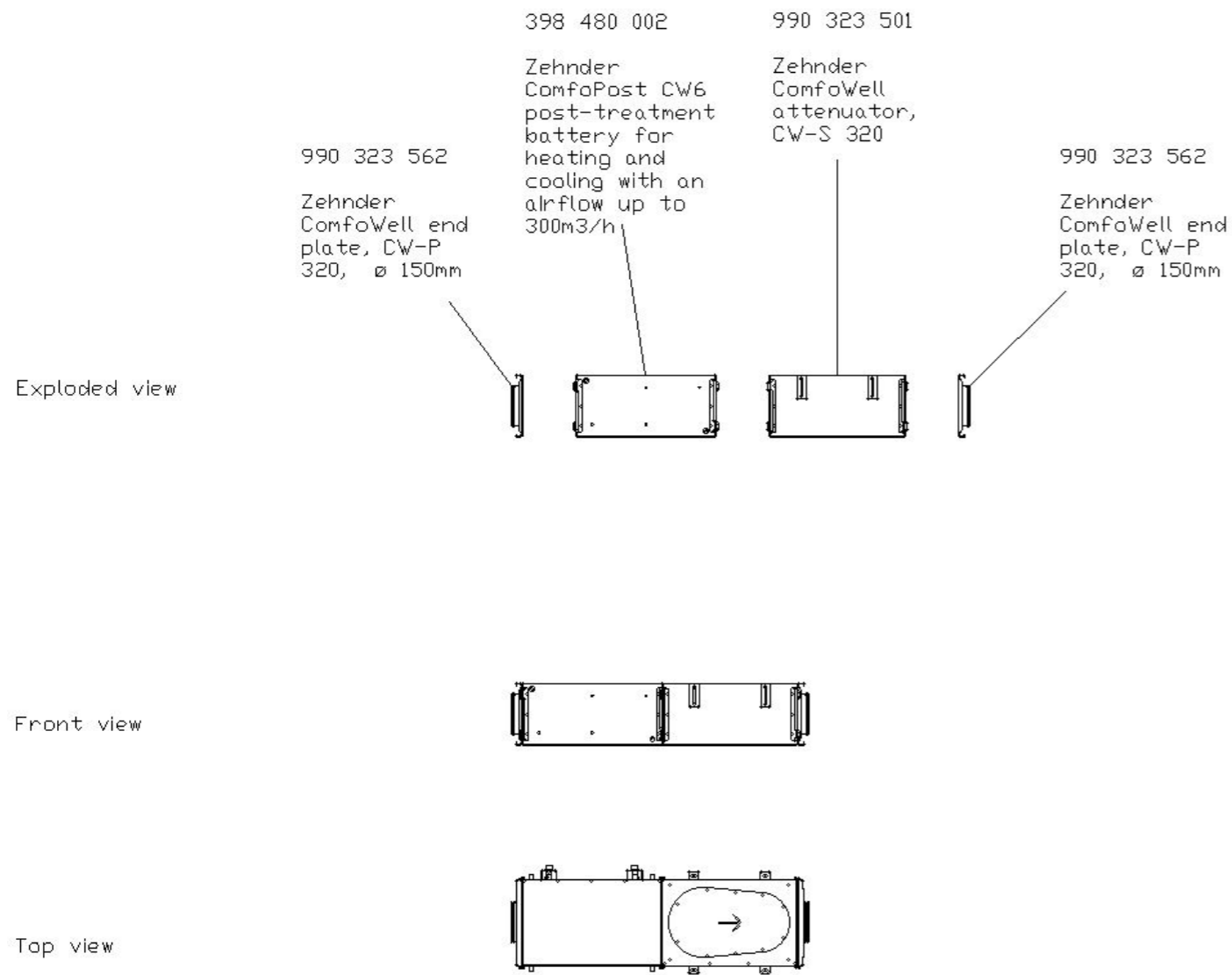


## Schematics



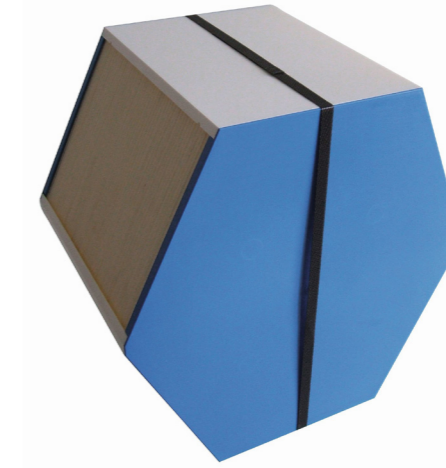


## Example Connection



## For Use With

Our range of ComfoPost products can be used in conjunction with our ComfoAir units, complete with enthalpy cube for improved sensible cooling capacity. The unit shall be manufactured by Zehnder.



**TO DOWNLOAD OUR ENTHALPY CUBE DATASHEET**

**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**

**CLICK HERE**

## 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.

**TO VISIT OUR DOWNLOAD PAGE**

**CLICK HERE**

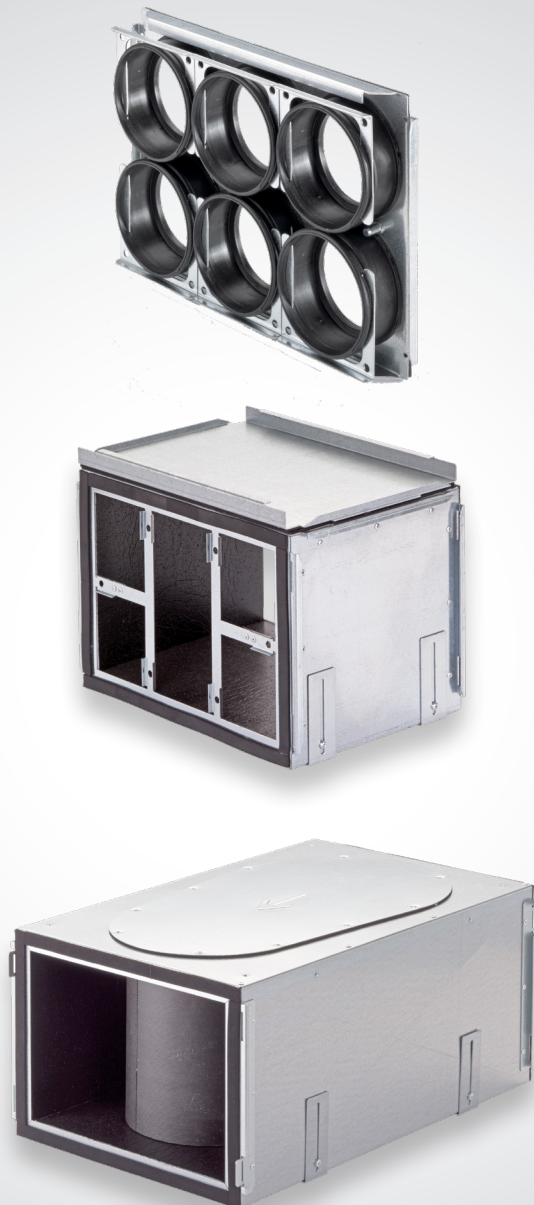
## Consultant specification

### Specification

The air to water exchanger shall be constructed of galvanised sheet steel with copper tubes and aluminum fins with hydrophilic treatment to enhance thermal transfer. It shall be connected to the MVHR units supply ductwork with options to combine attenuators, manifold box, filter housing with ISO ePM1 >80% (F7), ISO ePM1 >90% (F9) or active carbon filters and end plates ranging from ø 125mm to ø 200mm. It shall have the option for horizontal or vertical mounting.

The unit shall be manufactured by Zehnder.

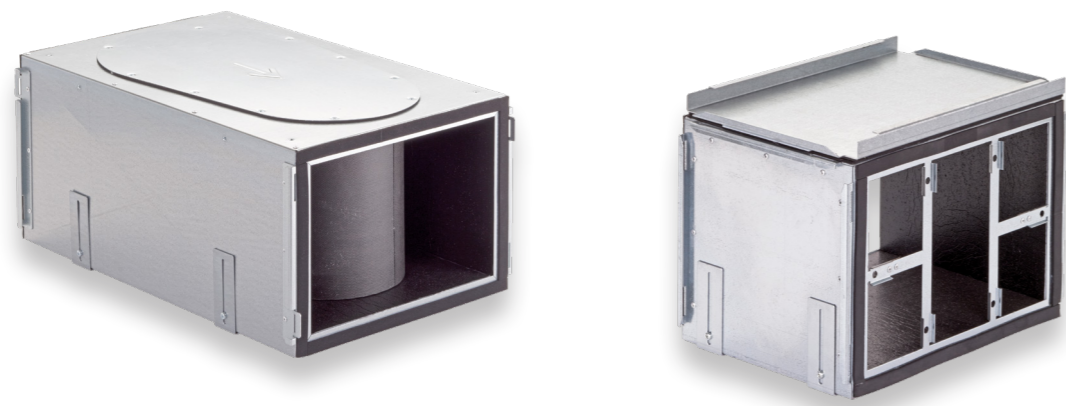
# Zehnder ComfoWell 320



# 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 320mm 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 locking slide connections to form an airtight and robust seal.

Noise reduction can be improved by combining two attenuators together. Filters are available in ISO ePM1 >80% (F7) or ISO ePM1 >90% (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 is required.
- Easy to assemble thanks to its modular and compact design.

## Article Numbers

Description	Product Code
<b>Attenuator</b>	
Zehnder ComfoWell attenuator, CW-S 320	990 323 501
<b>Manifold</b>	
Zehnder ComfoWell manifold box CW-D 320	990 323 531
<b>Filter Housing</b>	
Zehnder ComfoWell filter housing CW-F 320	990 323 551
<b>Mounting Plates</b>	
Zehnder ComfoWell mounting plate, CW-M 320, 6 x 75mm connections	990 323 612
Zehnder ComfoWell mounting plate, CW-M 320, 6 x 90mm connections	990 323 613
<b>End Plates</b>	
Zehnder ComfoWell end plate, CW-P 320, ø 125mm	990 323 511
Zehnder ComfoWell end plate, CW-P 320, ø 150mm	990 323 562
Zehnder ComfoWell end plate, CW-P 320, ø 160mm	990 312 512
Zehnder ComfoWell end plate, CW-P 320, ø 180mm	990 312 527

## Article Numbers

### Spacer Frame

Zehnder ComfoWell spacer frame, CW-DF 320	990 323 538
---	-------------

### Mounting Set

Zehnder ComfoWell mounting set, CW-K 320, for Zehnder ComfoAir 160	990 323 570
Zehnder ComfoWell mounting set, CW-K 320, for Zehnder ComfoAir 200	990 323 517
Zehnder ComfoWell mounting set, CW-K 320, for Zehnder ComfoAir Q350	990 323 647

### Filters

Filter for ComfoWell 320, CW-F7 320, ISO ePM1 >80% (F7), 1 Piece	990 323 603
Filter for ComfoWell 320, CW-F9 320, ISO ePM1 >90% (F9), 1 Piece	990 323 604
Filter for ComfoWell 320, CW-AC 320, active carbon filter, 1 Piece	990 323 605

## Technical Specification

Housing material	Galvanised Sheet Steel
Operating temperature range	-25 to +60 °C
Inner lining	Closed-cell melamine resin foam
Recommended maximum air volume	66.6l/s (240 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 ISO13501	C

## Example Connections

Combination Options	ComfoAir 200 Left handed with mounting set, 2 x attenuators and 2 x 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 125mm 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
Individual Components						
<b>Silencer</b>  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>  Article Number: 990 323 531	—	—	1 x Zehnder ComfoWell manifold box, CW-D 320	—	—	—
<b>Filter Housing</b>  Article Number: 990 323 551	—	—	—	1 x Zehnder ComfoWell filter housing, CW-F 320	—	—
<b>Mounting Plate -ø75</b>  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>  Article Number: 990 323 511	—	—	1 x Zehnder ComfoWell end plate, CW-P 320, ø 125mm	—	—	—
<b>End Plate - ø160</b>  Article Number: 990 323 512	—	2 x Zehnder ComfoWell end plate, CW-P 320, ø 125mm	—	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>  Article Number: 990 323 517	1 x Zehnder ComfoWell mounting set, CW-K 320, for Zehnder ComfoAir 160	—	—	—	—	—
<b>Filter</b>  Article Number: 990 323 604	—	—	—	1 x Filter for ComfoWell 320, CW-F9 320, ISO ePM1 >90% (F9), 1 Piece	—	—

## Dimensions

### 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.

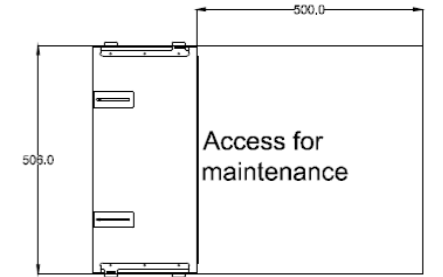
Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

#### Dimensions

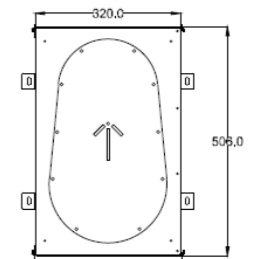
Height	506mm
Width	336mm
Depth	232.5mm
Weight	6.6 kg



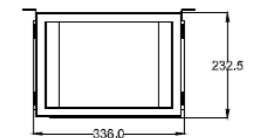
Side view



Front view



Top View



### 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 ComfoTube 75mm x 6 connections, 90mm x 6 connections or a combination of 90mm x 2 and 75mm x 4 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.

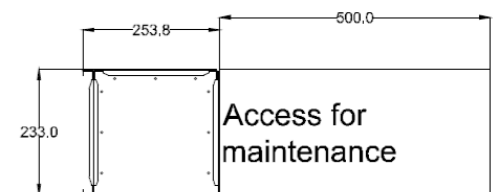
For cleaning purposes the manifold box side plate can be removed for easy access. Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

#### Dimensions

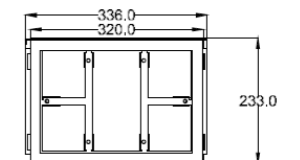
Height	233mm
Width	336mm
Depth	253.8mm
Weight	4.52 kg



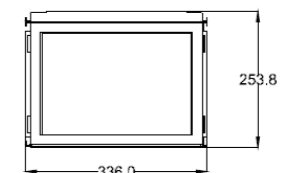
Side view



Front view



Top View



## Dimensions

### Zehnder ComfoWell filter housing CW-F 320

Article number: 990 323 551

#### Description

##### Filter Housing:

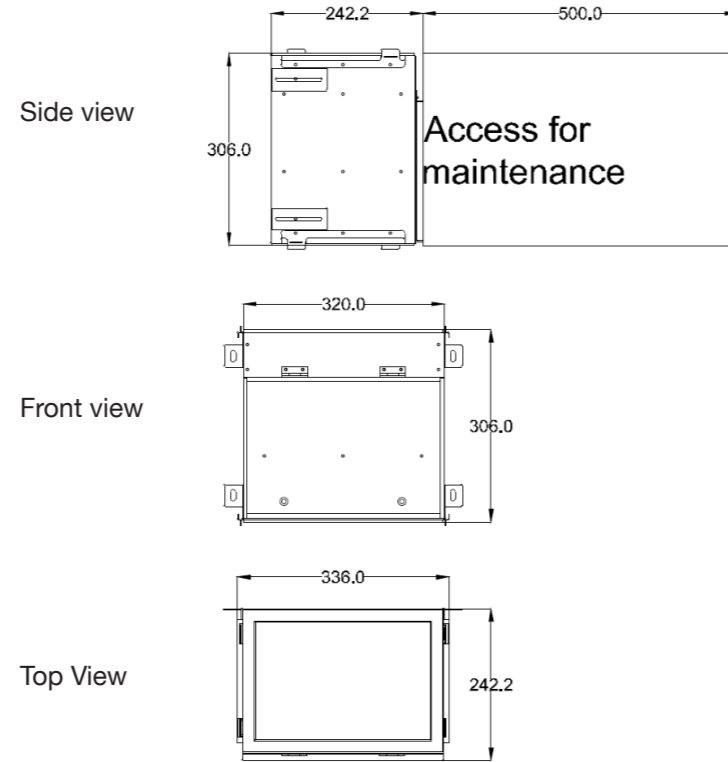
Zehnder ComfoWell filter housing CW-F 220. Rectangular compact design for use with a fine pollen filter graded ISO ePM1 >80% (F7), a fine dust filter graded ISO ePM1 >90% (F9) or an active carbon filter to neutralise odours in the supply air duct run.

The filter elements are not included with the filter housing and need to be purchased separately. 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.

#### Dimensions

Height	306mm
Width	336mm
Depth	242.2mm
Weight	4.73 kg



## Dimensions

### Zehnder ComfoWell mounting plate CW-M 320

Article number: 990 323 613

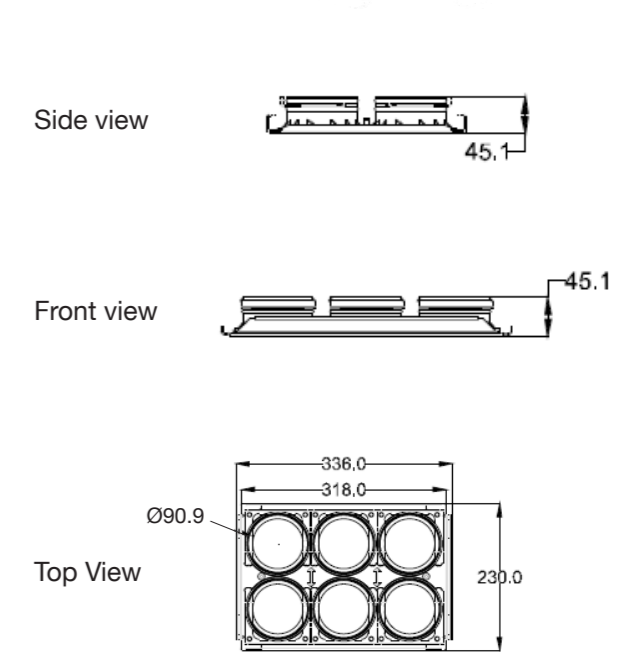
#### Description

##### Mounting Plate:

Zehnder ComfoWell mounting plate CW-M 320-6 x 90. Manifold mounting plate for connection of 6 x ComfoTube 90mm semi-rigid ducting. The mounting plate includes a protective film and the necessary mounting accessories.

#### Dimensions

Height	45.1mm
Width	336mm
Depth	230mm
Weight	<1.53 kg



### Zehnder ComfoWell mounting plate CW-M 320

Article number: 990 323 612

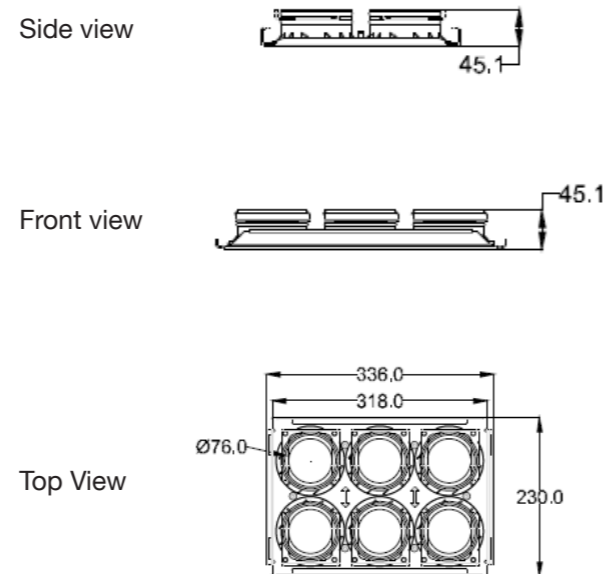
#### Description

##### Mounting Plate:

Zehnder ComfoWell mounting plate CW-M 320-6 x 75. Manifold mounting plate for connection of 6 x ComfoTube 75mm semi-rigid ducting. The mounting plate includes a protective film and the necessary mounting accessories.

#### Dimensions

Height	45.1mm
Width	336mm
Depth	230mm
Weight	<1.53 kg



## Dimensions

### Zehnder ComfoWell end plate CW-P 320 -ø 125

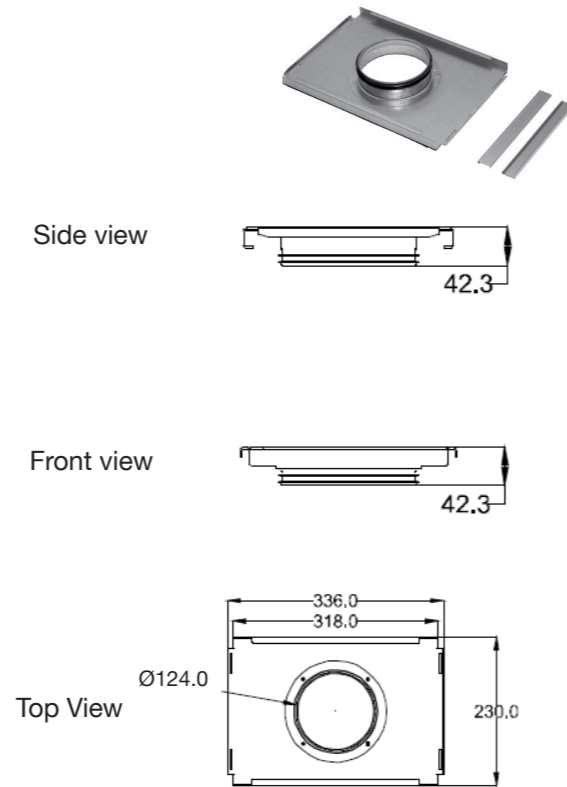
Article number: 990 323 511

#### Description

**End Plate:**  
Zehnder ComfoWell end plate CW-P 320 - 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.

#### Dimensions

Height	42.3mm
Width	336mm
Depth	230mm
Diameter	125mm



## Dimensions

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

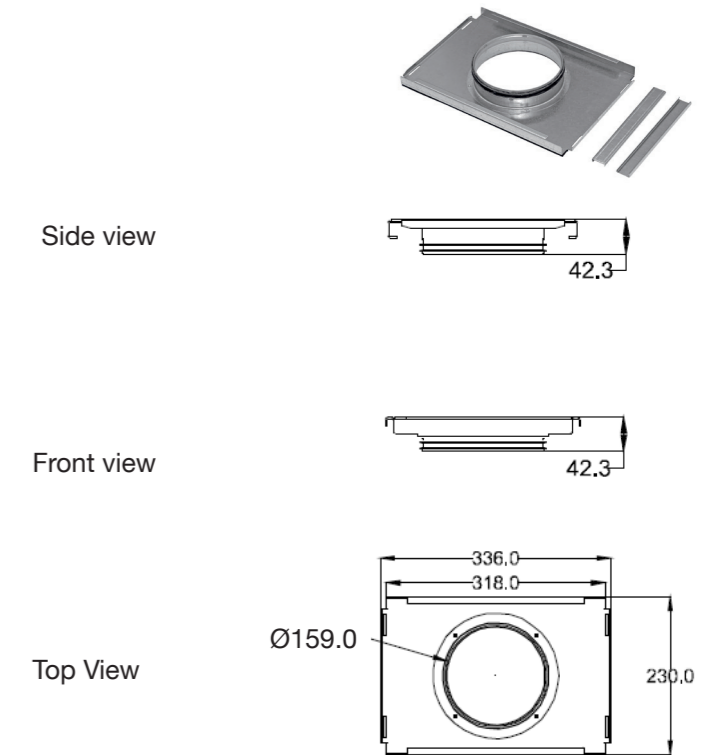
Article number: 990 323 512

#### Description

**End Plate:**  
Zehnder ComfoWell end plate CW-P 320 - 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.

#### Dimensions

Height	42.3mm
Width	236mm
Depth	230mm
Diameter	160mm



### Zehnder ComfoWell end plate CW-P 320 -ø 150mm

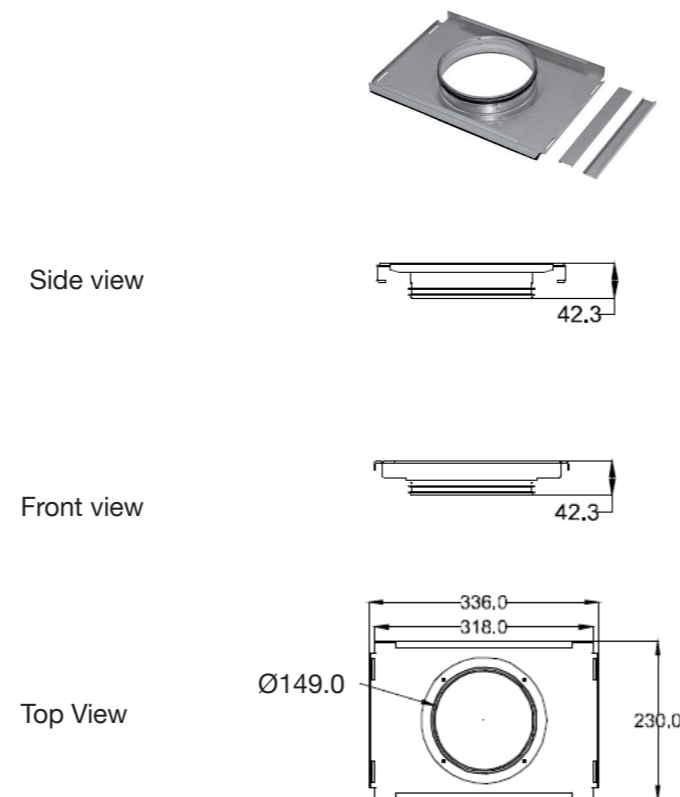
Article number: 990 323 562

#### Description

**End Plate:**  
Zehnder ComfoWell end plate CW-P 320 - DN150 (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.

#### Dimensions

Height	42.3mm
Width	236mm
Depth	230mm
Diameter	150mm



### Zehnder ComfoWell end plate CW-P 320 -ø 180mm

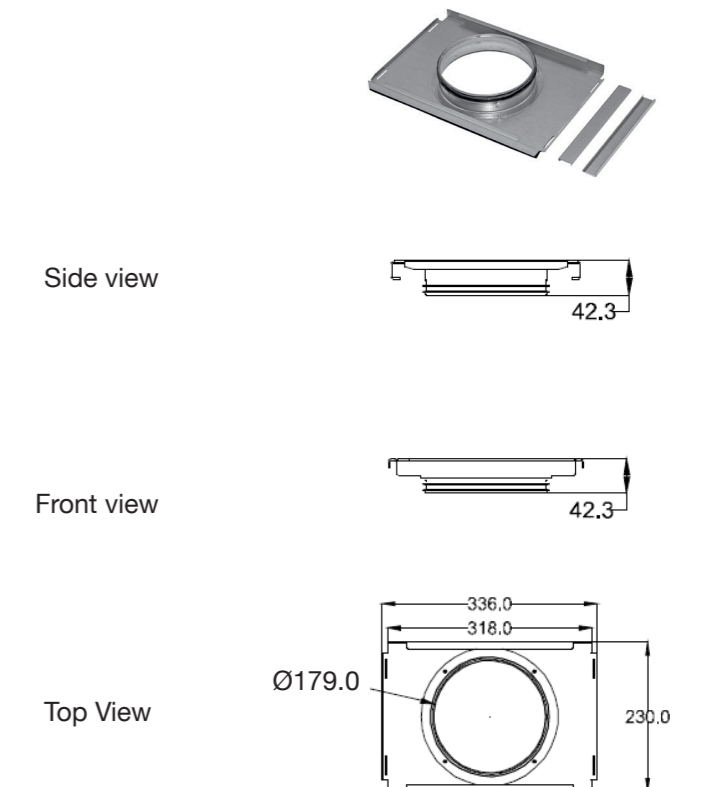
Article number: 990 323 527

#### Description

**End Plate:**  
Zehnder ComfoWell end plate CW-P 320 - DN180 (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.

#### Dimensions

Height	42.3mm
Width	236mm
Depth	230mm
Diameter	180mm



## Dimensions

Zehnder ComfoWell spacer frame, CW-DF 320

Article number: 990 323 538

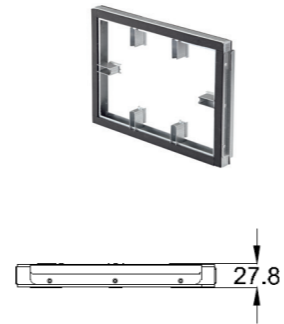
### Description

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.

### Dimensions

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

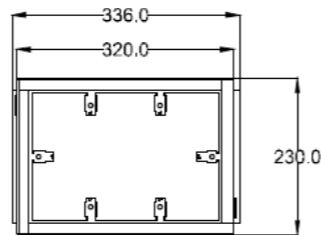
Side view



Front view



Top View



## Dimensions

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

Article number: 990 323 517

### Description

#### Mounting set:

A special mounting set is available for the Zehnder ComfoWell 320 for direct mounting to the ComfoAir 200 ventilation unit. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

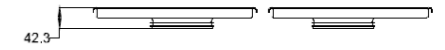
### Dimensions

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

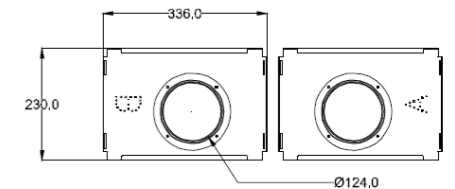
Side view



Front view



Top View



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

Article number: 990 323 570

### Description

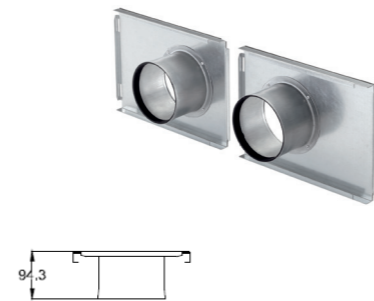
#### Mounting set:

A special mounting set is available for the Zehnder ComfoWell 320 for direct mounting to the ComfoAir 160 ventilation unit. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

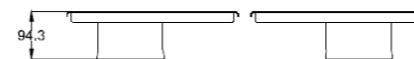
### Dimensions

Height	94.3mm
Width	336mm
Depth	230mm
Weight	2.3 kg

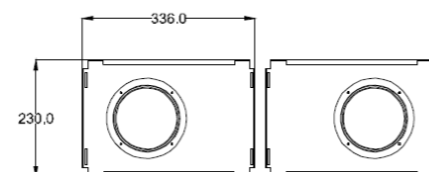
Side view



Front view



Top View



Zehnder ComfoWell mounting set, CW-K 320, for Zehnder ComfoAirQ 350

Article number: 990 323 647

### Description

#### Mounting set:

A special mounting set is available for the Zehnder ComfoWell 320 for direct mounting to the ComfoAir Q 350 ventilation unit. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

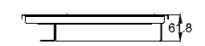
### Dimensions

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

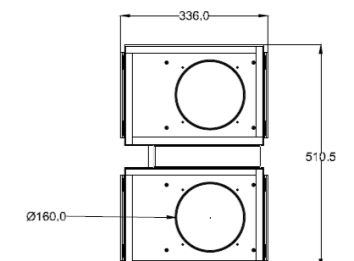
Side view



Front view



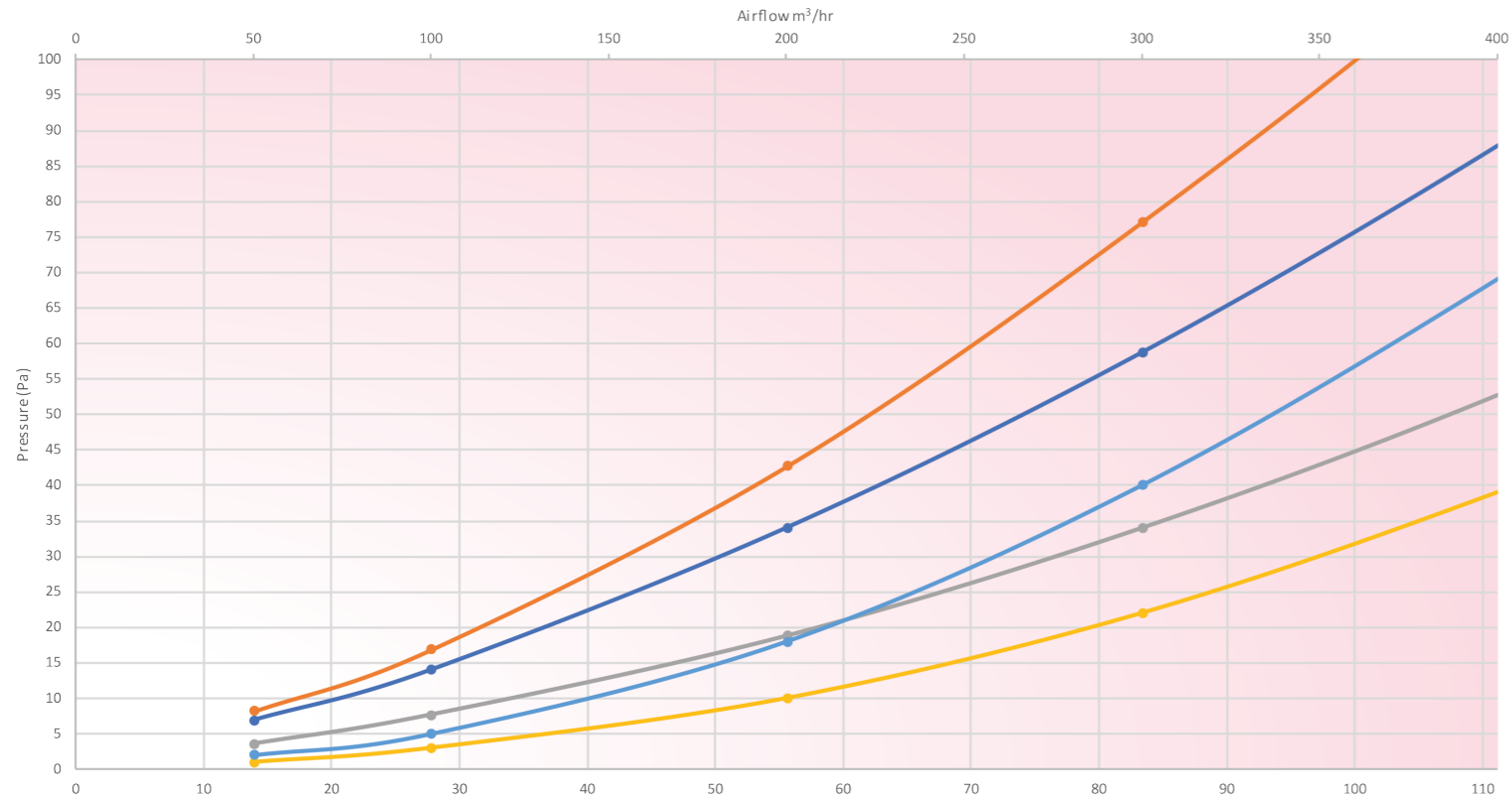
Top View





## Pressure Curve

### Comfowell 320



- 1 x Attenuator (CW-S 320) with 2 x 160mm end plates (CW-P 320)
- 2 x Attenuator (CW-S 320) stacked with 2 x 160mm end plates (CW-P 320)
- 1 x Filter housing (CW-F 320) with 2 x 160mm end plates (CW-P 320) and filter (CW-F7 320)
- 1 x Filter housing (CW-F 320) with 2 x 160mm end plates (CW-P 320) and filter (CW-AC 320)
- 1 x Filter housing (CW-F 420) with 2 x 160mm end plates (CW-P 420) and filter (CW-F9 320)

## Sound Data

### Comfowell 320

Combination	Octave Band (Hz) Insertion Loss, dB							
	63	125	250	500	1000	2000	4000	8000
1 x Attenuator (CW-S 320) with 2 x 160mm end plates (CW-P 320)	4,6	5,6	9,2	6,5	4,6	23,0	17,4	23,8
2 x Attenuator (CW-S 320) stacked with 2 x 160mm end plates (CW-P 320)	6,0	10,4	17,8	14,1	13,6	47,4	36,8	34,9

## For use with

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



**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**

**CLICK HERE**

## 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 following the link below.

**TO VISIT OUR DOWNLOAD PAGE**

**CLICK HERE**

## Consultant specification

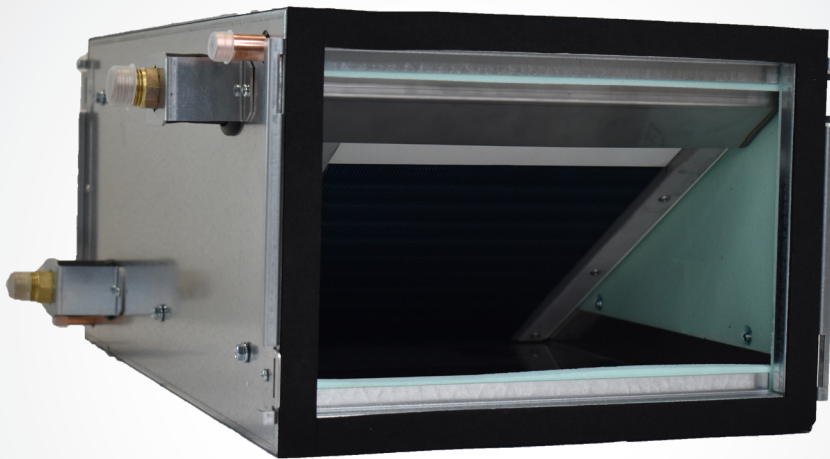
### Specification

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 rating according to EN ISO13501.

It shall be of modular construction with options to combine attenuators, manifold box, filter housing with ISO ePM1 >80% (F7), ISO ePM1 >90% (F9) or active carbon filters and end plates ranging from ø 125mm to ø 200mm.

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.

# Zehnder ComfoPost CW8\*



# ComfoPost CW8

The Zehnder ComfoPost is an air to water exchanger for use with ComfoWell air distribution connections. The ComfoWell connections allows for selection flexibility, offering a range of rigid circular ductwork or Zehnder ComfoTube semi-rigid ductwork to attached. The ComfoPost is available in a variety of sizes to heat or cool the air supplied by the Zehnder ventilation system.

The ComfoPost units are suitable for a wide range of airflows up to 166l/s (600m<sup>3</sup>hr), the CW8 is suitable for airflows up to 111.1l/s (400m<sup>3</sup>hr). The units are made of steel with aluminium and copper pipe forming the heating and cooling coils and are maintenance free.

## Key Features

- Ideal for use with reversible heat pumps or chillers to meet SAP 10 or TM59 overheating demands
- Low pressure losses
- Filtered fresh supply air, not recycled stale air
- Suitable for use with the unique modular ComfoWell manifolds
- Suitable for horizontal or vertical installation
- Condensation water tray and drain as standard
- Suitable for Passive House application
- Corrosion resistant

## Article Numbers

Description	Product Code
Zehnder ComfoPost CW8 post-treatment battery for heating and cooling with an airflow up to 400m <sup>3</sup> /h	399 000 004

## Technical Specification

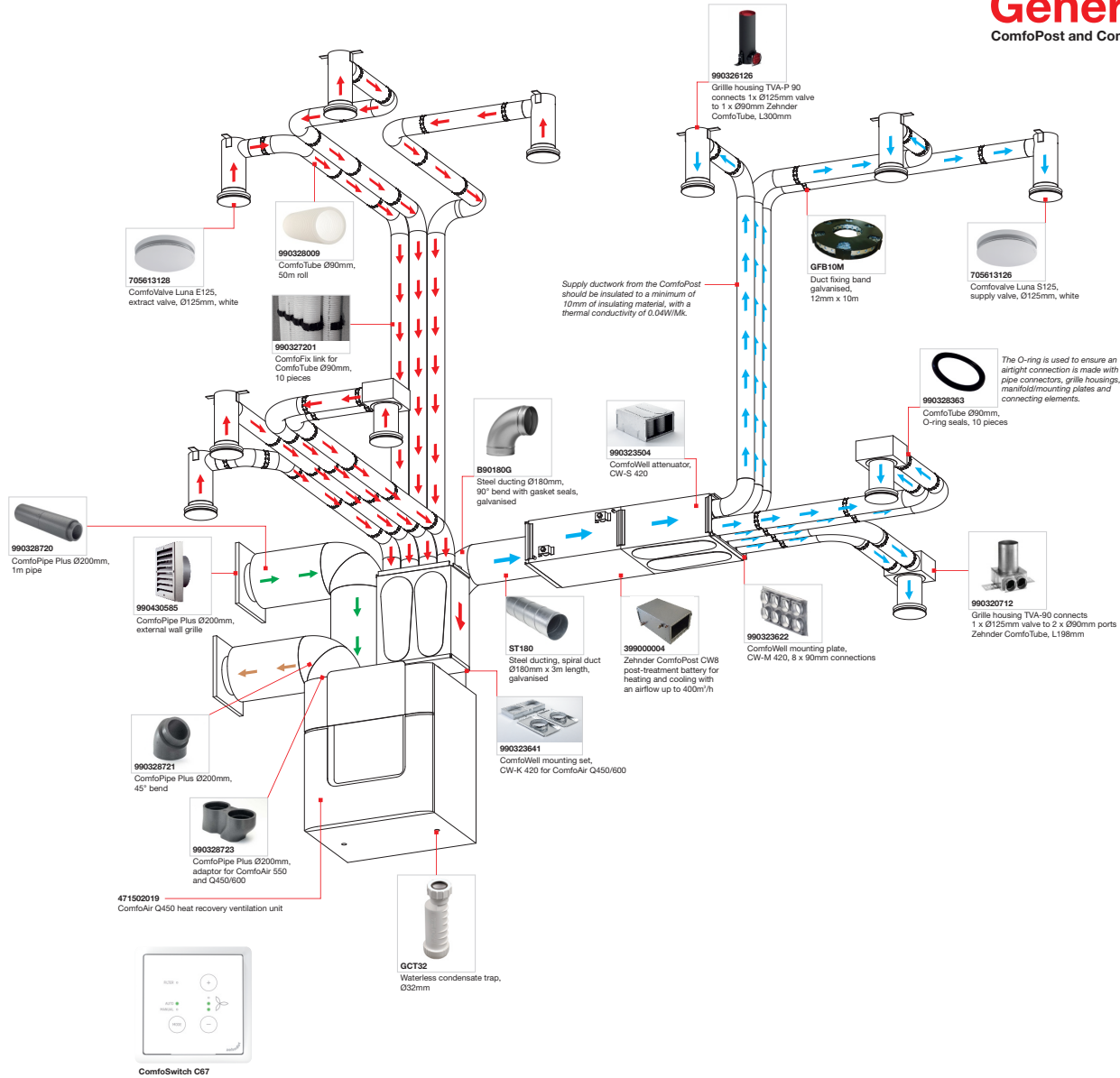
Height	230mm
Width	420mm
Depth	520mm
Water connection diameter (ø)	1/2"
Water connection type	BSPT male thread
Condensate drain diameter OD (ø)	14mm
Condensate connection type	Worm drive clip to fix to hose or crimped to copper pipe
ComfoWell range	ComfoWell 420
ComfoWell rigid round air connection options (ø)	125mm / 150mm / 160mm / 180mm / 200mm
ComfoWell semi-rigid air connection options (ø)	8 x 75mm / 8 x 90mm / 4 x 90mm + 4 x 75mm
Material	Casing: Galvanised sheet steel Tubes: Copper Fins: Aluminium with hydrophilic treatment
Recommended operating water temperature range	7 to 55 °C
Recommended maximum operating air flow	<111.1l/s (<400m <sup>3</sup> hr)
Maximum thermal heating output	4.18kW*
Maximum thermal cooling output	3.73kW*
Maximum operating water pressure?	6 bar
Water volume capacity	0.8 Litres
Maintenance free	Yes
Weight	16 kg

\*Total capacity (sensible and latent) based on test conditions shown in the Performance Data table

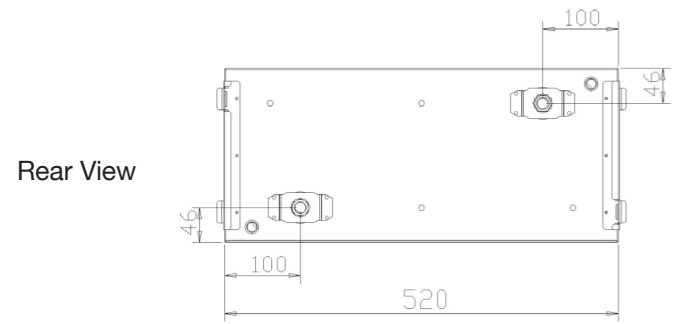
## 3D System Layout

## Generic Example

ComfoPost and ComfoTube Ø90mm Semi-Rigid Ductwork

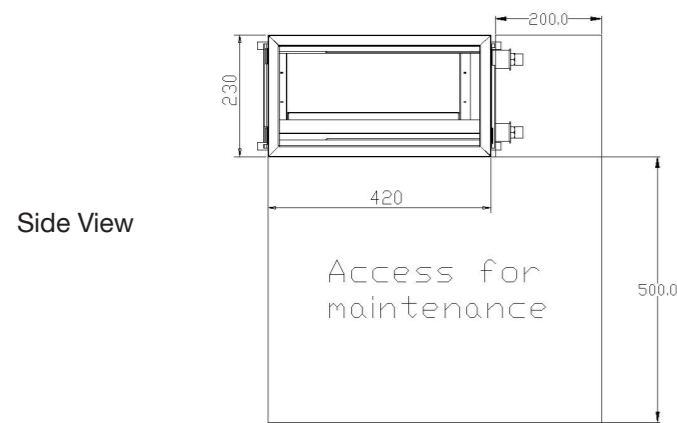


## Dimensions

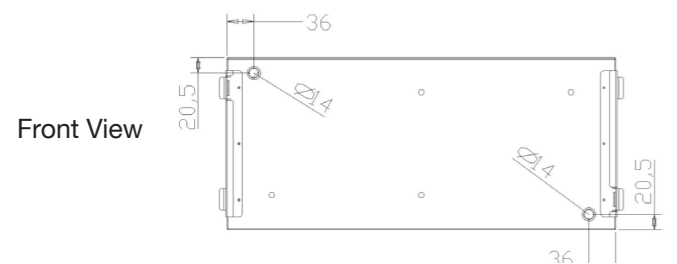


Rear View

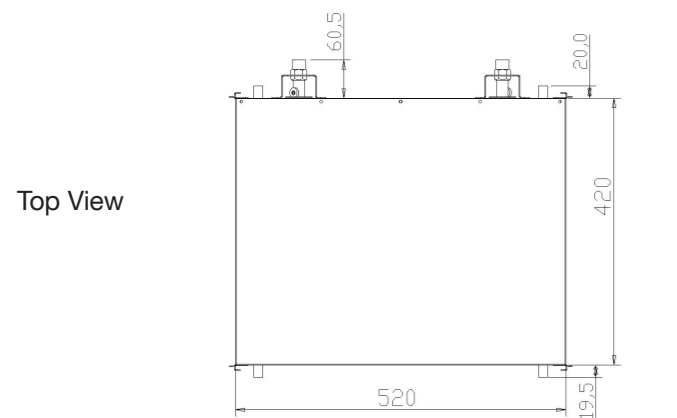
Height	230mm
Width	420mm
Depth	520mm
Weight	16 kg



Side View



Front View



Top View

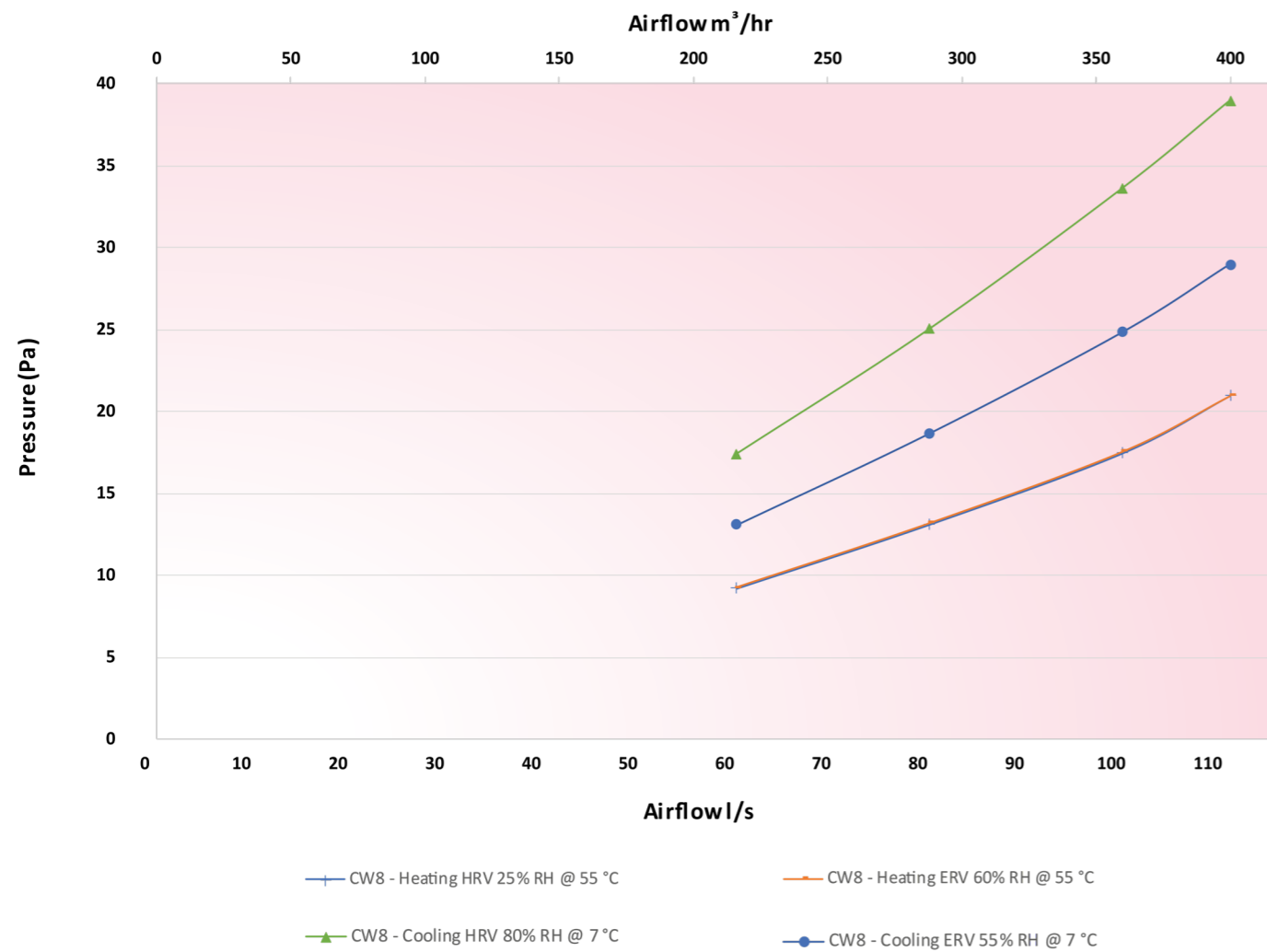
## Performance Data

Air conditions IN to ComfoPost		Heating								Cooling		
		HRV exchanger				ERV exchanger				HRV	ERV	
		T °C	18 °C				17 °C				27 °C	28 °C
		RH %	25%				60%				80%	55%
AH	3.2 g/kg				7.3 g/kg				18.1 g/kg	13.1 g/kg		
Water temperature IN	°C	55	50	45	40	55	50	45	40	7	7	
MINIMUM Air flow 60l/s (216m³/h)	H <sub>2</sub> O flow	l/h	600				600				600	600
	H <sub>2</sub> O temperature <sub>OUT</sub>	°C	51	47	42	38	51	47	42	38	11	10
	H <sub>2</sub> O ΔP	kPa	11	11	11	11	11	11	11	12	13	14
	Air temperature <sub>OUT</sub>	°C	52	47	43	38	52	47	43	38	13	11
	Air RH <sub>OUT</sub>	%	4	5	6	8	9	11	14	18	100	95
	Air AH <sub>OUT</sub>	g/kg	3.2	3.2	3.2	3.2	7.2	7.2	7.2	7.2	9.3	8.0
	Air ΔP	Pa	9	9	9	9	9	9	9	9	17	13
	Condensation	l/h	-	-	-	-	-	-	-	-	2.3	1.3
	Sensible power	kW	-	-	-	-	-	-	-	-	1.03	1.23
	<b>TOTAL POWER</b>	<b>kW</b>	<b>2.48</b>	<b>2.14</b>	<b>1.8</b>	<b>1.47</b>	<b>2.56</b>	<b>2.22</b>	<b>1.88</b>	<b>1.54</b>	<b>2.64</b>	<b>2.15</b>
Air flow 80l/s (288m³/h)	H <sub>2</sub> O flow	l/h	600				600				600	600
	H <sub>2</sub> O temperature <sub>OUT</sub>	°C	50	46	42	37	50	46	42	37	12	11
	H <sub>2</sub> O ΔP	kPa	11	11	11	11	11	11	11	12	13	14
	Air temperature <sub>OUT</sub>	°C	50	46	42	37	50	46	41	37	14	13
	Air RH <sub>OUT</sub>	%	4	5	6	8	9	12	15	19	100	93
	Air AH <sub>OUT</sub>	g/kg	3.2	3.2	3.2	3.2	7.2	7.2	7.2	7.2	10.3	8.6
	Air ΔP	Pa	13	13	13	13	13	13	13	13	25	19
	Condensation	l/h	-	-	-	-	-	-	-	-	2.7	1.6
	Sensible power	kW	-	-	-	-	-	-	-	-	1.26	1.5
	<b>TOTAL POWER</b>	<b>kW</b>	<b>3.14</b>	<b>2.72</b>	<b>2.29</b>	<b>1.86</b>	<b>3.25</b>	<b>2.82</b>	<b>2.39</b>	<b>1.96</b>	<b>3.13</b>	<b>2.58</b>
Air flow 100l/s (360m³/h)	H <sub>2</sub> O flow	l/h	600				600				600	600
	H <sub>2</sub> O temperature <sub>OUT</sub>	°C	50	45	41	37	49	45	41	37	12	11
	H <sub>2</sub> O ΔP	kPa	11	11	11	11	11	11	11	12	14	14
	Air temperature <sub>OUT</sub>	°C	49	45	40	36	49	44	40	36	16	14
	Air RH <sub>OUT</sub>	%	4	6	7	9	10	13	16	20	99	91
	Air AH <sub>OUT</sub>	g/kg	3.2	3.2	3.2	3.2	7.2	7.2	7.2	7.2	11.1	9.1
	Air ΔP	Pa	18	17	17	17	18	17	17	17	34	25
	Condensation	l/h	-	-	-	-	-	-	-	-	3.1	1.7
	Sensible power	kW	-	-	-	-	-	-	-	-	1.42	1.74
	<b>TOTAL POWER</b>	<b>kW</b>	<b>3.74</b>	<b>3.23</b>	<b>2.72</b>	<b>2.21</b>	<b>3.87</b>	<b>3.35</b>	<b>2.83</b>	<b>2.32</b>	<b>3.53</b>	<b>2.94</b>
MAXIMUM Air flow 111.1l/s (400 m³/h)	H <sub>2</sub> O flow	l/h	600				600				600	600
	H <sub>2</sub> O temperature <sub>OUT</sub>	°C	49	45	41	37	49	45	41	38	11	11
	H <sub>2</sub> O ΔP	kPa	11	11	12	12	11	11	12	12	14	14
	Air temperature <sub>OUT</sub>	°C	48	44	40	36	48	44	40	35	16	15
	Air RH <sub>OUT</sub>	%	5	6	7	9	11	13	16	20	99	90
	Air AH <sub>OUT</sub>	g/kg	3.2	3.2	3.2	3.2	7.2	7.2	7.2	7.2	9.1	9.3
	Air ΔP	Pa	21	21	20	20	21	21	20	20	39	29
	Condensation	l/h	-	-	-	-	-	-	-	-	1.7	1.8
	Sensible power	kW	-	-	-	-	-	-	-	-	1.5	1.8
	<b>TOTAL POWER</b>	<b>kW</b>	<b>4.06</b>	<b>3.5</b>	<b>2.95</b>	<b>2.4</b>	<b>4.18</b>	<b>3.63</b>	<b>3.07</b>	<b>2.51</b>	<b>3.73</b>	<b>3.11</b>

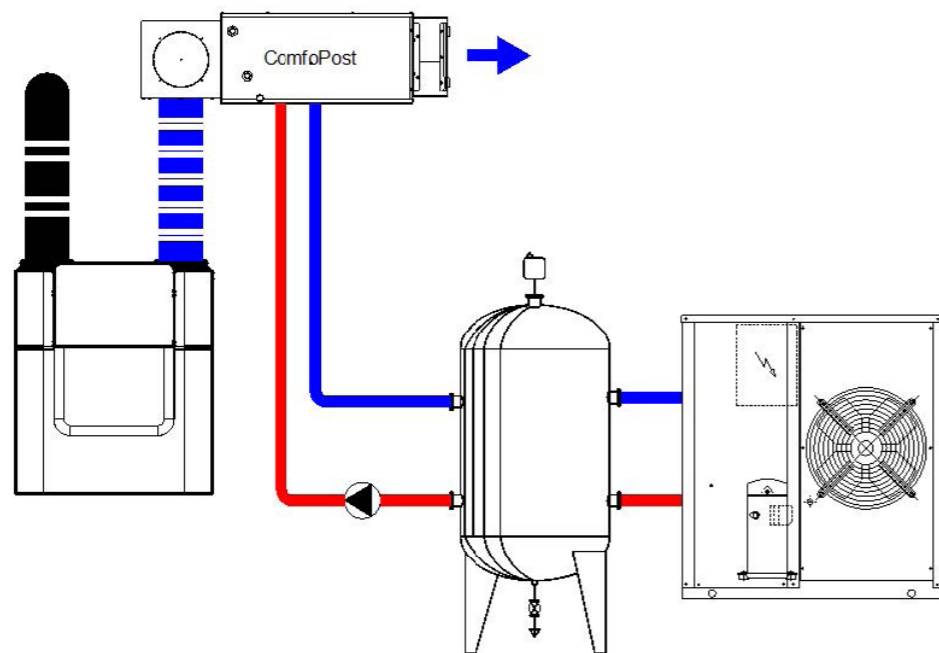
Initial temperature and humidity outdoor/indoor: winter 2°C 70% R.H. / 20°C 60% R.H.; summer 35°C 50% R.H. / 25°C 50% R.H.

The calculations include the cold recovery efficiency of an enthalpy exchanger as extrapolated from the results provided by the PHI certification

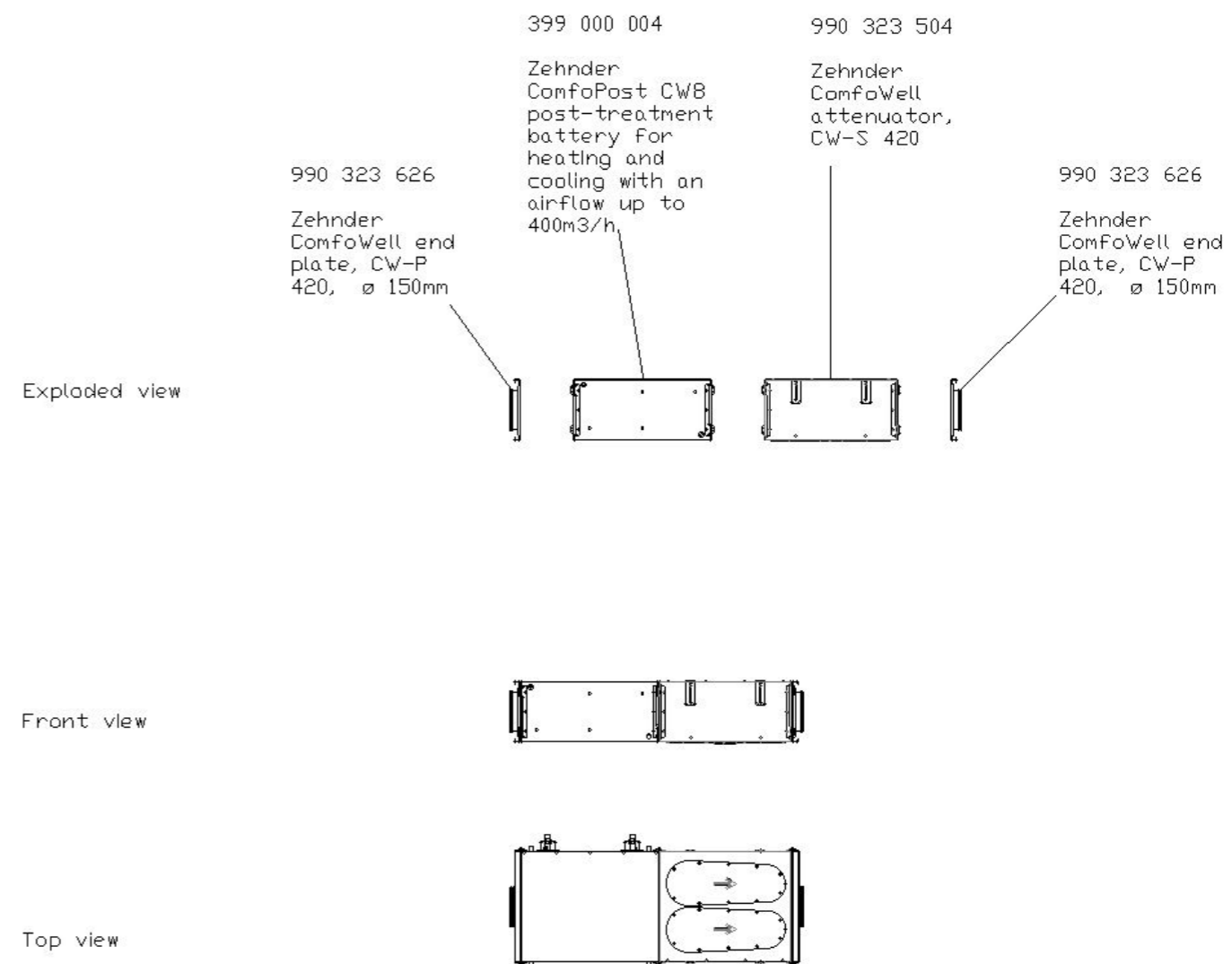
## Performance Data



## Schematics

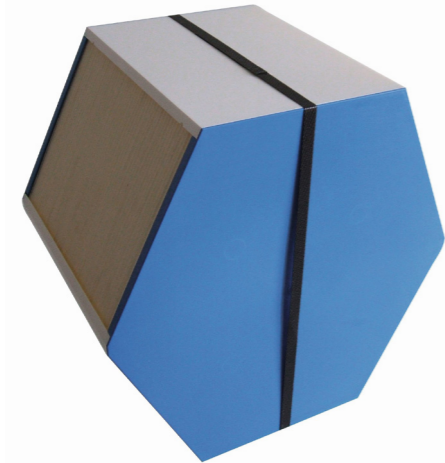


## Example Connection



## For Use With

Our range of ComfoPost products can be used in conjunction with our ComfoAir units, complete with enthalpy cube for improved sensible cooling capacity. The unit shall be manufactured by Zehnder.



**TO DOWNLOAD OUR ENTHALPY  
CUBE DATASHEET**

**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  
CLICK HERE**

## 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.

**TO VISIT OUR DOWNLOAD PAGE  
CLICK HERE**

## Consultant specification

### Specification

The air to water exchanger shall be constructed of galvanised sheet steel with copper tubes and aluminum fins with hydrophilic treatment to enhance thermal transfer. It shall be connected to the MVHR units supply ductwork with options to combine attenuators, manifold box, filter housing with ISO ePM1 >80% (F7), ISO ePM1 >90% (F9) or active carbon filters and end plates ranging from  $\varnothing$  125mm to  $\varnothing$  200mm. It shall have the option for horizontal or vertical mounting.

The unit shall be manufactured by Zehnder.

**zehnder**

always the  
best climate



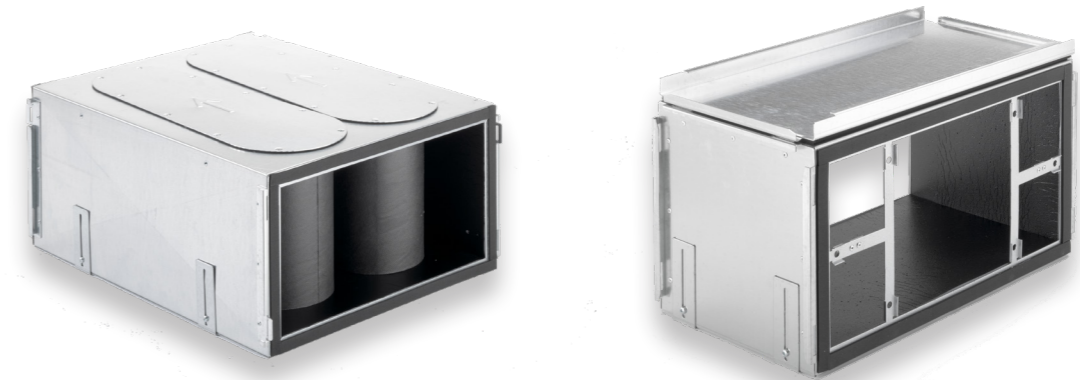
# Zehnder ComfoWell 420



## ComfoWell 420

The Zehnder ComfoWell 420 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 420mm it can be used for connecting up to 8 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 locking slide connections to form an airtight and robust seal.

Noise reduction can be improved by combining two attenuators together. Filters are available in ISO ePM1 >80% (F7) or ISO ePM1 >90% (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 is required.
- Easy to assemble thanks to its modular and compact design.

### Article Numbers

Description	Product Code
<b>Attenuator</b>	
Zehnder ComfoWell attenuator, CW-S 420	990 323 504
<b>Manifold</b>	
Zehnder ComfoWell manifold box CW-D 420	990 323 620
<b>Filter Housing</b>	
Zehnder ComfoWell filter housing CW-F 420	990 323 554
<b>Mounting Plates</b>	
Zehnder ComfoWell mounting plate, CW-M 420, 8 x 75mm connections	990 323 621
Zehnder ComfoWell mounting plate, CW-M 420, 8 x 90mm connections	990 323 622
Zehnder ComfoWell mounting plate, CW-M 420, 4 x 90mm + 4 x 75mm connections	990 323 623
<b>End Plates</b>	
Zehnder ComfoWell end plate, CW-P 420, ø 125mm	990 323 625
Zehnder ComfoWell end plate, CW-P 420, ø 150mm	990 323 626
Zehnder ComfoWell end plate, CW-P 420, ø 160mm	990 323 627
Zehnder ComfoWell end plate, CW-P 420, ø 180mm	990 323 628
Zehnder ComfoWell end plate, CW-P 420, ø 200mm	990 323 629

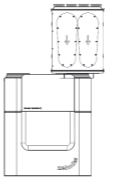
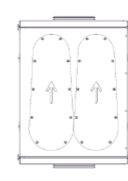
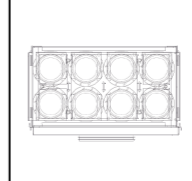
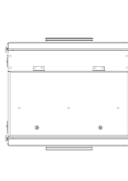
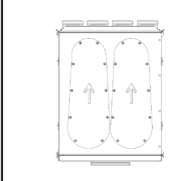
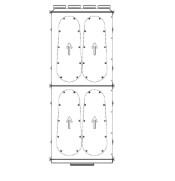
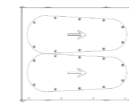


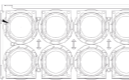

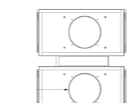
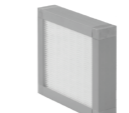
## Article Numbers

<b>Spacer Frame</b>	
Zehnder ComfoWell spacer frame, CW-DF 420	990 323 624
<b>Mounting Set</b>	
Zehnder ComfoWell mounting set, CW-K 420, for Zehnder ComfoAir Q350	990 323 648
Zehnder ComfoWell mounting set, CW-K 420, for Zehnder ComfoAir Q450/600	990 323 641
<b>Filters</b>	
Filter for ComfoWell 420, CW-F7 420, ISO ePM1 >80% (F7), 1 Piece	990 323 650
Filter for ComfoWell 420, CW-F9 420, ISO ePM1 >90% (F9), 1 Piece	990 323 651
Filter for ComfoWell 420, CW-AC 420, active carbon filter, 1 Piece	990 323 652

## Technical Specification

Housing material	Galvanised Sheet Steel
Operating temperature range	-25 to +60 °C
Inner lining	Closed-cell melamine resin foam
Recommended maximum air volume	88.8l/s (320 m³/h) at normal ventilation level
Air tightness class to EN 1507:2006	C
Air tightness class to EN 12237:2003	C
Fire rating to ISO13501	C

## Example Connections

Combination Options / Individual Components	ComfoAir Q350 right handed with mounting set, 2 x attenuators and 2 x 8 port ø 75mm mounting plates	Stand alone attenuator with 2 x ø 160mm end plates	Stand alone manifold with 1 x ø 160mm end plate and 8 x ø 75mm mounting plate	Stand alone filter housing with 2 x ø 160mm	Stand alone silencer and manifold combined with 1 x ø 160mm end plate and 8 x ø 75mm mounting plate	Stand alone 2 x attenuator with 1 x ø 160mm end plate and 8 x ø 75mm mounting plate
						
<b>Attenuator</b>  Article Number: 990 323 504	2 x Zehnder ComfoWell attenuator, CW-S 420	1 x Zehnder ComfoWell attenuator, CW-S 420	—	—	1 x Zehnder ComfoWell attenuator, CW-S 420	2 x Zehnder ComfoWell attenuator, CW-S 420
<b>Manifold Box</b>  Article Number: 990 323 620	—	—	1 x Zehnder ComfoWell manifold box, CW-D 420	—	—	—
<b>Filter Housing</b>  Article Number: 990 323 554	—	—	—	1 x Zehnder ComfoWell filter housing, CW-F 420	—	—
<b>Mounting Plate -ø75</b>  Article Number: 990 323 621	2 x Zehnder ComfoWell mounting plate, CW-M 420, 8 x 75mm connections	—	1 x Zehnder ComfoWell mounting plate, CW-M 420, 8 x 75mm connections	—	1 x Zehnder ComfoWell mounting plate, CW-M 420, 8 x 75mm connections	1 x Zehnder ComfoWell mounting plate, CW-M 420, 8 x 75mm connections
<b>End Plate - ø 160</b>  Article Number: 990 323 627	—	2 x Zehnder ComfoWell end plate, CW-P 420, ø 160mm	1 x Zehnder ComfoWell end plate, CW-P 420, ø 160mm	2 x Zehnder ComfoWell end plate, CW-P 420, ø 160mm	1 x Zehnder ComfoWell end plate, CW-P 420, ø 160mm	1 x Zehnder ComfoWell end plate, CW-P 420, ø 160mm
<b>Mounting Set</b>  Article Number: 990 323 648	1 x Zehnder ComfoWell mounting set, CW-K 420, for Zehnder ComfoAir Q350	—	—	—	—	—
<b>Filter</b>  Article Number: 990 323 604	—	—	—	1 x Filter for ComfoWell 420, CW-F9 420, ISO ePM1 >90% (F9), 1 Piece	—	—

## Dimensions

### Zehnder ComfoWell attenuator, CW-S 420

Article number: 990 323 504

#### Description

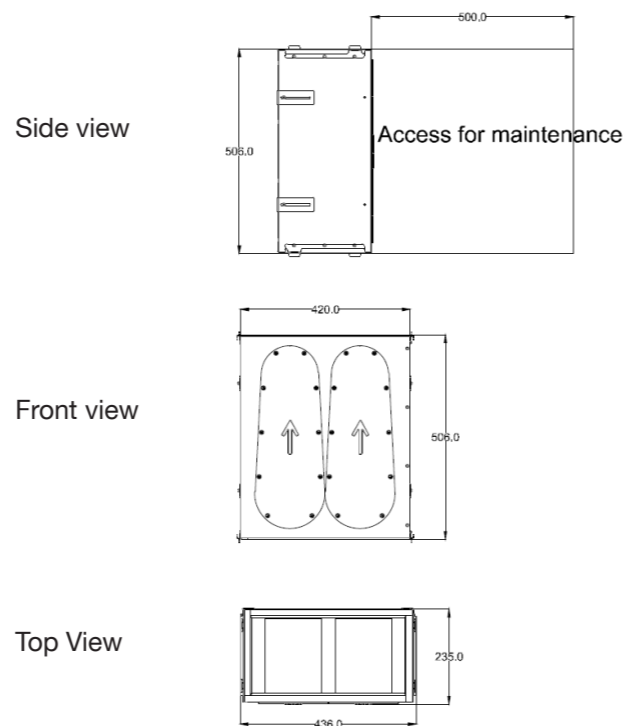
##### Attenuator:

Zehnder ComfoWell attenuator CW-S 420. 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.

#### Dimensions

Height	506mm
Width	436mm
Depth	235mm
Weight	6 kg



### Zehnder ComfoWell manifold box CW-D 420

Article number: 990 323 620

#### Description

##### Manifold Box:

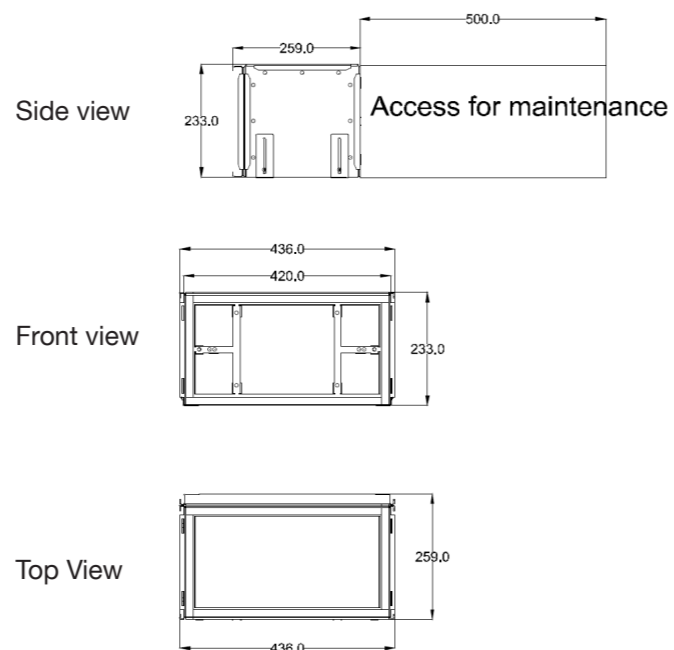
Zehnder ComfoWell manifold box CW-D 420. Rectangular compact design with closed pore internal lining. Suitable for use with the mounting plate for ComfoTube 75mm x 8 connections, 90mm x 8 connections or a combination of 90mm x 4 and 75mm x 4 connections.

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.

#### Dimensions

Height	233mm
Width	436mm
Depth	259 mm
Weight	4.7 kg



## Dimensions

### Zehnder ComfoWell filter housing CW-F 420

Article number: 990 323 554

#### Description

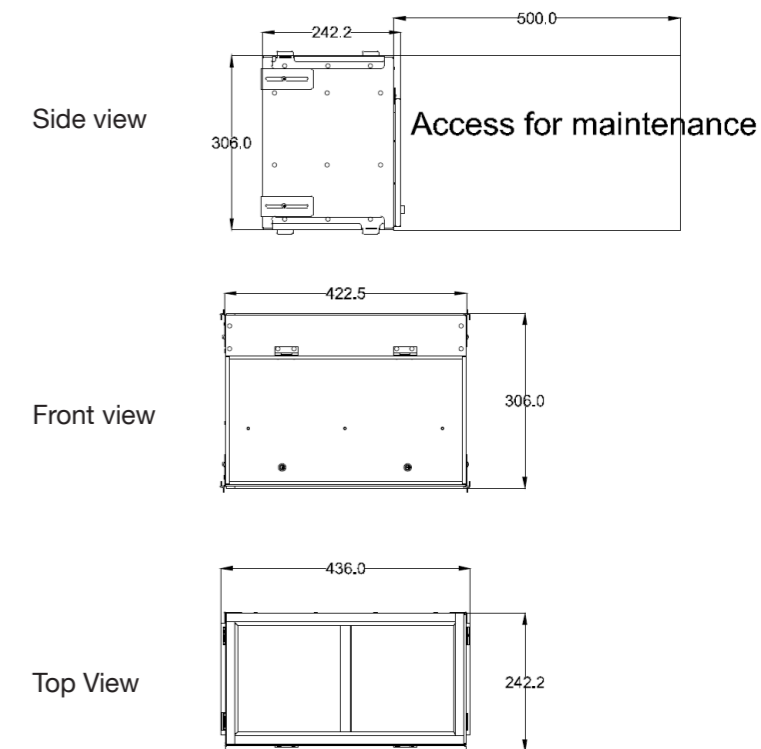
##### Filter Housing:

Zehnder ComfoWell filter housing CW-F 420. Rectangular compact design for use with a fine pollen filter graded ISO ePM1 >80% (F7), a fine dust filter graded ISO ePM1 >90% (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. 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.

#### Dimensions

Height	306mm
Width	436mm
Depth	242.2mm
Weight	1.32 kg



### Zehnder ComfoWell mounting plate CW-M 420

Article number: 990 323 621

#### Description

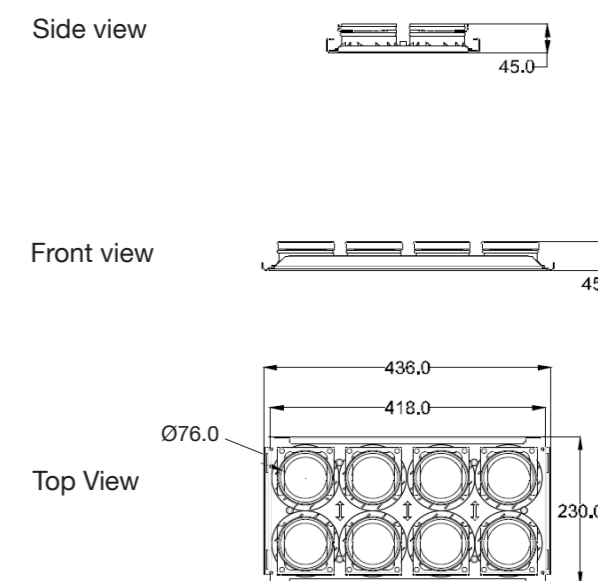
##### Mounting Plate:

Zehnder ComfoWell mounting plate CW-M 420-8 x 75. Manifold mounting plate for connection of 8 x ComfoTube 75mm semi-rigid ducting.

The mounting plate includes a protective film and the necessary mounting accessories.

#### Dimensions

Height	45mm
Width	436mm
Depth	230mm
Weight	<1.5 kg



## Dimensions

### Zehnder ComfoWell mounting plate CW-M 420

Article number: 990 323 622

#### Description

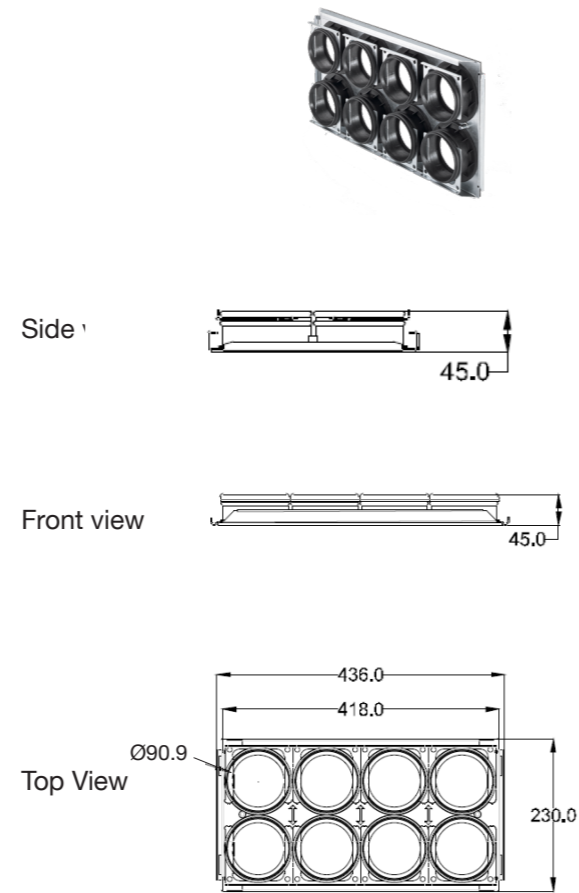
##### Mounting Plate:

Zehnder ComfoWell mounting plate CW-M 420-8 x 90. Manifold mounting plate for connection of 8 x ComfoTube 90mm semi-rigid ducting.

The mounting plate includes a protective film and the necessary mounting accessories.

#### Dimensions

Height	45mm
Width	436mm
Depth	230mm
Weight	<1.5 kg



### Zehnder ComfoWell mounting plate CW-M 420

Article number: 990 323 623

#### Description

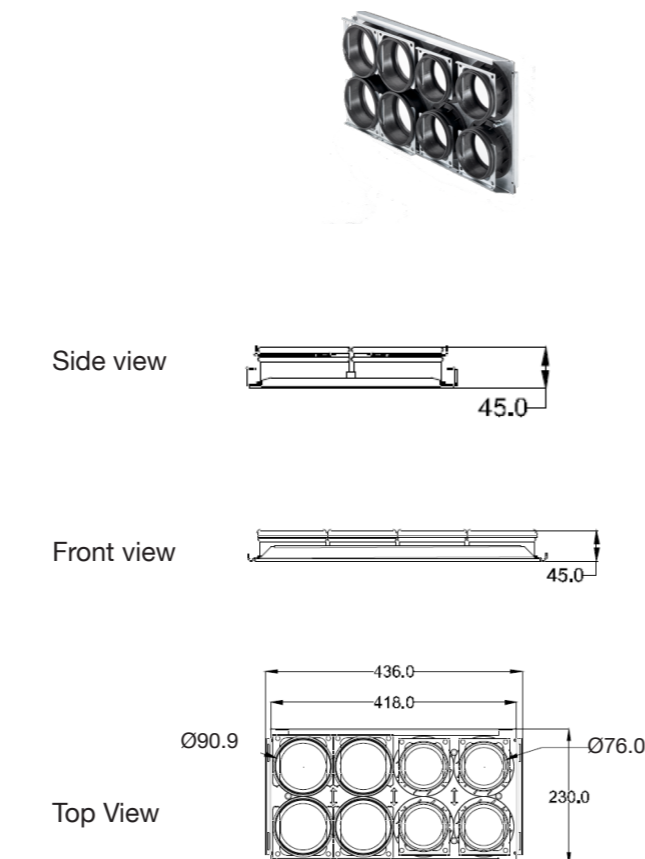
##### Mounting Plate:

Zehnder ComfoWell mounting plate CW-M 2 x 90 and 4 x 75. Manifold mounting plate for connection of 2 x 90 and 4 x 75 semi-rigid ducting.

The mounting plate includes a protective film and the necessary mounting accessories.

#### Dimensions

Height	45mm
Width	436mm
Depth	230mm
Weight	<1.53 kg



## Dimensions

### Zehnder ComfoWell end plate CW-P 420 -ø 125

Article number: 990 323 625

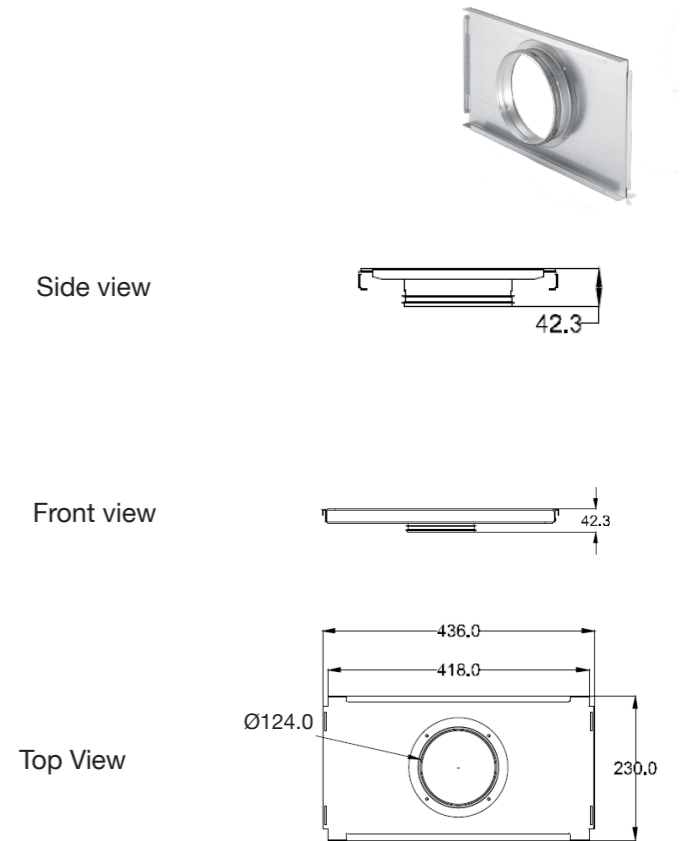
#### Description

##### End Plate:

Zehnder ComfoWell end plate CW-P 420 - 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.

#### Dimensions

Height	42.3mm
Width	436mm
Depth	230mm
Diameter	125mm



### Zehnder ComfoWell end plate CW-P 420 -ø 150mm

Article number: 990 323 626

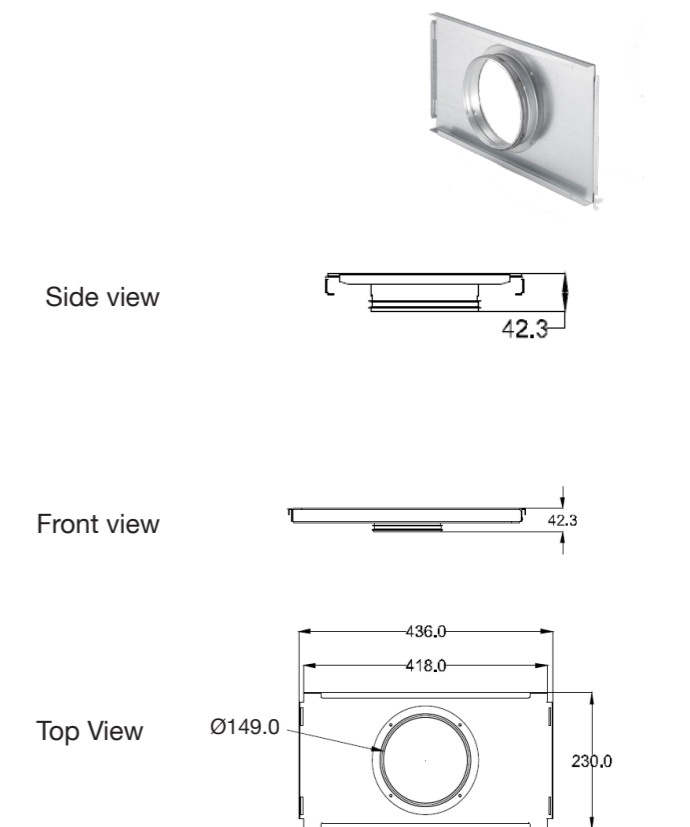
#### Description

##### End Plate:

Zehnder ComfoWell end plate CW-P 420 - DN150 (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.

#### Dimensions

Height	42.3mm
Width	436mm
Depth	230mm
Diameter	150mm



## Dimensions

### Zehnder ComfoWell end plate CW-P 420 -ø 160mm

Article number: 990 323 627

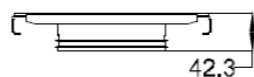
#### Description

**End Plate:**  
Zehnder ComfoWell end plate CW-P 420 - 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.

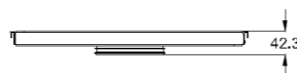
#### Dimensions

Height	42.3mm
Width	436mm
Depth	230mm
Diameter	160mm

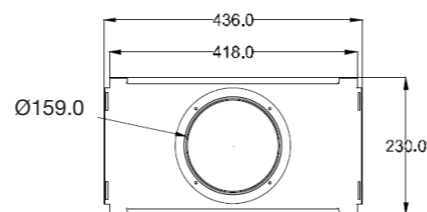
Side view



Front view



Top View



## Dimensions

### Zehnder ComfoWell end plate CW-P 420 -ø 200mm

Article number: 990 323 629

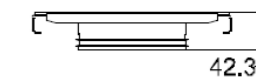
#### Description

**End Plate:**  
Zehnder ComfoWell end plate CW-P 420 - DN200 (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.

#### Dimensions

Height	42.3mm
Width	436mm
Depth	230mm
Diameter	200mm

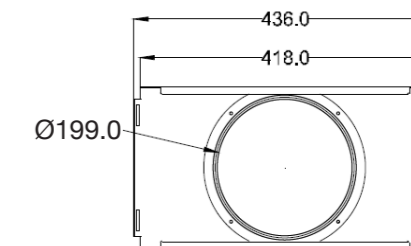
Side view



Front view



Top View



### Zehnder ComfoWell end plate CW-P 420 -ø 180mm

Article number: 990 323 628

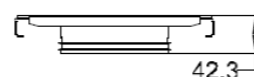
#### Description

**End Plate:**  
Zehnder ComfoWell end plate CW-P 420 - DN180 (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.

#### Dimensions

Height	42.3mm
Width	436mm
Depth	230mm
Diameter	180mm

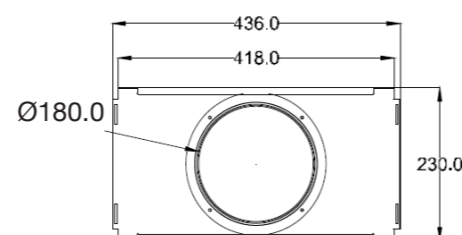
Side view



Front view



Top View



### Zehnder ComfoWell spacer frame, CW-DF 420

Article number: 990 323 624

#### Description

Zehnder ComfoWell spacer frame CW-DF420. 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.

#### Dimensions

Height	27.8mm
Width	436mm
Depth	230mm
Weight	1.12 kg

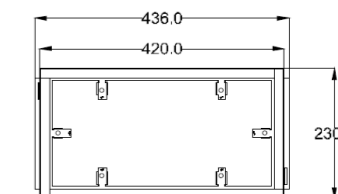
Side view



Front view



Top View



## Dimensions

### Zehnder ComfoWell mounting set, CW-K 420, for Zehnder ComfoAir Q350

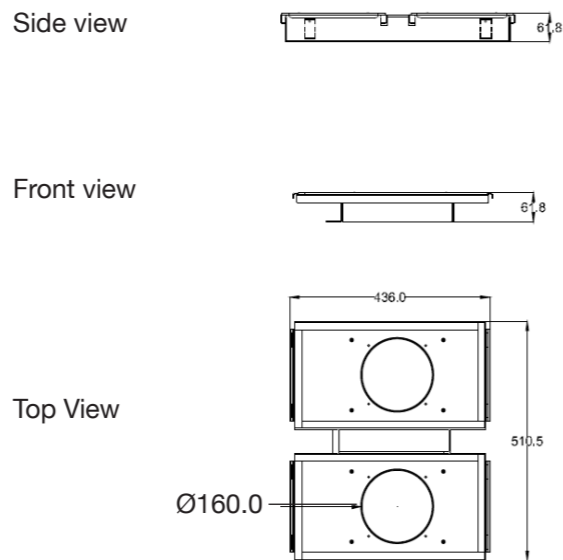
Article number: 990 323 648

#### Description

**Mounting set:**  
A special mounting set is available for the Zehnder ComfoWell 420 for direct mounting to the ComfoAir Q350 ventilation units. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

#### Dimensions

Height	61.8mm
Width	436mm
Depth	510.5mm
Weight	4.04 kg



### Zehnder ComfoWell mounting set, CW-K 420, for Zehnder ComfoAir Q450/600

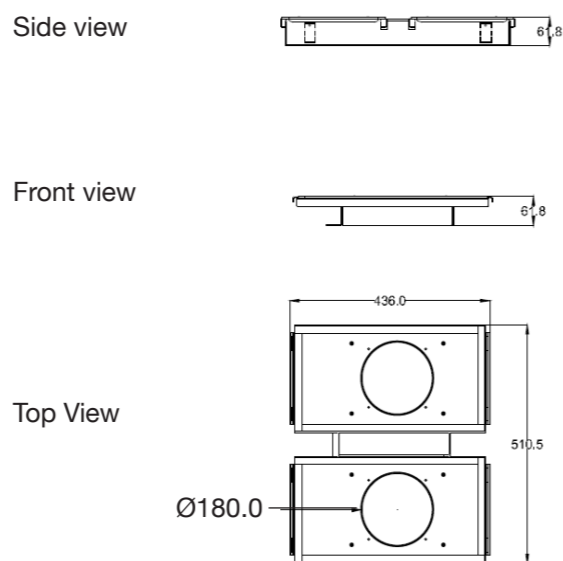
Article number: 990 323 641

#### Description

**Mounting set:**  
A special mounting set is available for the Zehnder ComfoWell 420 for direct mounting to the ComfoAir Q450/ ComfoAir Q600 ventilation units. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

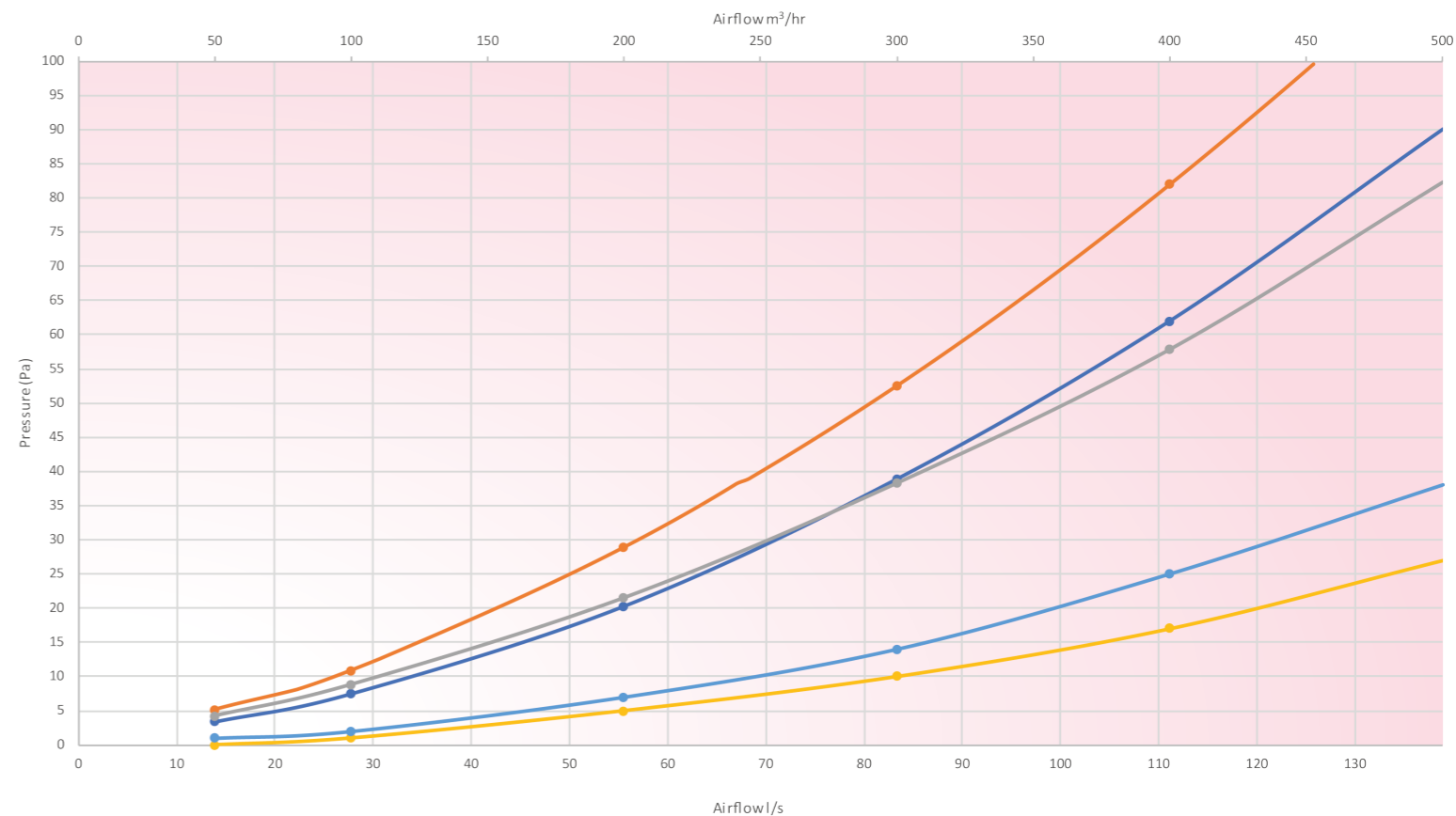
#### Dimensions

Height	61.8mm
Width	436mm
Depth	510.5mm
Weight	4.04 kg



## Pressure Curve

### Comfowell 420



- 1 x Attenuator (CW-S 420) with 2 x 160mm end plates (CW-P 420) —
- 2 x Attenuator (CW-S 420) stacked with 2 x 160mm end plates (CW-P 420) —
- 1 x Filter housing (CW-F 420) with 2 x 160mm end plates (CW-P 420) and filter (CW-F7 420) —
- 1 x Filter housing (CW-F 420) with 2 x 160mm end plates (CW-P 420) and filter (CW-AC 420) —
- 1 x Filter housing (CW-F 420) with 2 x 160mm end plates (CW-P 420) and filter (CW-F9 420) —

## Sound Data

### Comfowell 420

Combination	Octave Band (Hz) Insertion Loss, dB							
	63	125	250	500	1000	2000	4000	8000
1 x Attenuator (CW-S 420) with 2 x 160mm end plates (CW-P 420)	3.0	4.6	6.4	10.6	8,1	14,4	7,8	6,7
2 x Attenuator (CW-S 420) stacked with 2 x 160mm end plates (CW-P 420)	4,8	11,7	16,7	23,3	17,3	32,4	21,8	18,3

## For use with

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



**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**

**CLICK HERE**

## 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.

**TO VISIT OUR DOWNLOAD PAGE**

**CLICK HERE**

## Consultant specification

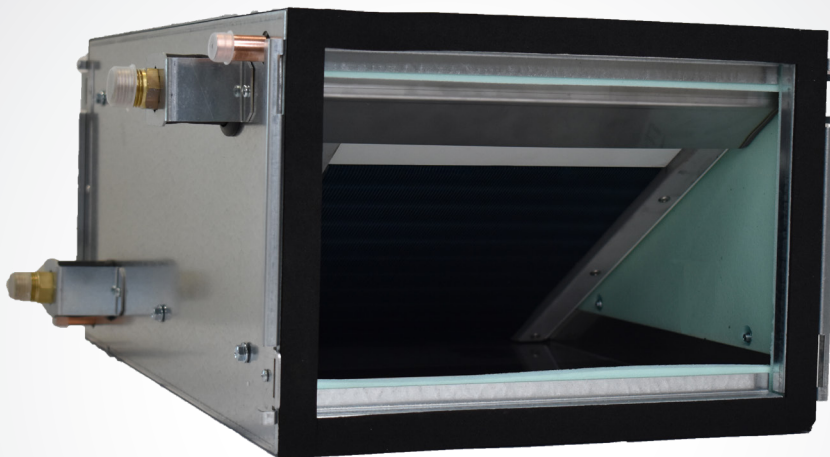
### Specification

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 rating according to EN ISO13501.

It shall be of modular construction with options to combine attenuators, manifold box, filter housing with ISO ePM1 >80% (F7), ISO ePM1 >90% (F9) or active carbon filters and end plates ranging from  $\varnothing$  125mm to  $\varnothing$  200mm.

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.

# Zehnder ComfoPost CW10\*





# ComfoPost CW10

The Zehnder ComfoPost is an air to water exchanger for use with ComfoWell air distribution connections. The ComfoWell connections allows for selection flexibility, offering a range of rigid circular ductwork or Zehnder ComfoTube semi-rigid ductwork to attached. The ComfoPost is available in a variety of sizes to heat or cool the air supplied by the Zehnder ventilation system.

The ComfoPost units are suitable for a wide range of airflows up to 166l/s (600m<sup>3</sup>hr), the CW10 is suitable for airflows up to 138.9l/s (500m<sup>3</sup>hr) The units are made of steel with aluminium and copper pipe forming the heating and cooling coils and are maintenance free.

## Key Features

- Ideal for use with reversible heat pumps or chillers to meet SAP 10 or TM59 overheating demands
- Low pressure losses
- Filtered fresh supply air, not recycled stale air
- Suitable for use with the unique modular ComfoWell manifolds
- Suitable for horizontal or vertical installation
- Condensation water tray and drain as standard
- Suitable for Passive House application
- Corrosion resistant

## Article Numbers

Description	Product Code
Zehnder ComfoPost CW10 post-treatment battery for heating and cooling with an airflow up to 500m <sup>3</sup> /h	398 480 003

## Technical Specification

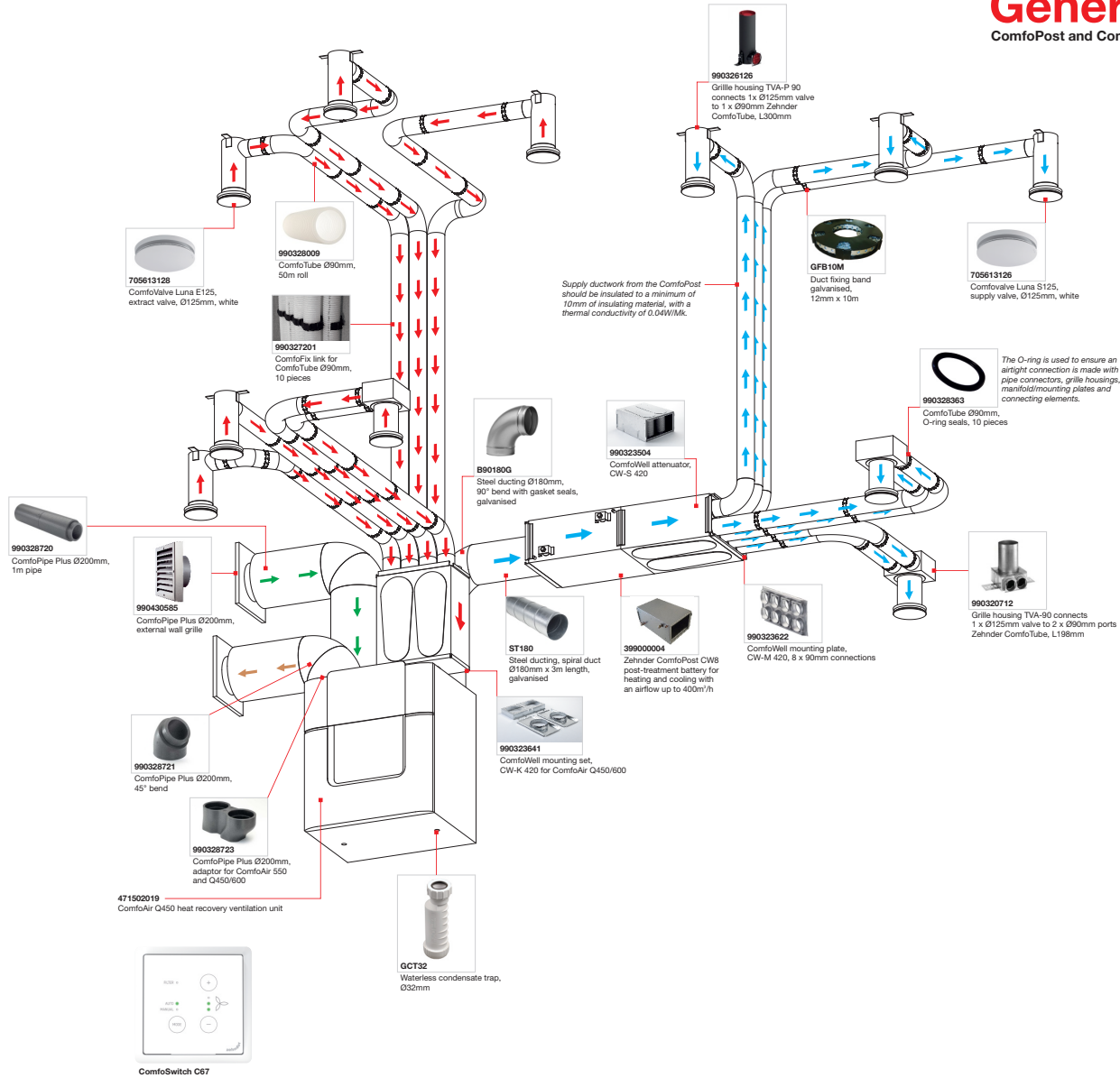
Height	230mm
Width	520mm
Depth	520mm
Water connection diameter (ø)	1/2"
Water connection type	BSPT male thread
Condensate drain diameter OD (ø)	14mm
Condensate connection type	Worm drive clip to fix to hose or crimped to copper pipe
ComfoWell range	ComfoWell 520
ComfoWell rigid round air connection options (ø)	150mm / 160mm / 180mm / 200mm
ComfoWell semi-rigid air connection options (ø)	10 x 75mm / 10 x 90mm / 4 x 90mm + 6 x 75mm
Material	Casing: Galvanised sheet steel Tubes: Copper Fins: Aluminium with hydrophilic treatment
Recommended operating water temperature range	7 to 55 °C
Recommended maximum operating air flow	<138.9l/s (<500m <sup>3</sup> hr)
Maximum thermal heating output	5.21kW*
Maximum thermal cooling output	4.57kW*
Maximum operating water pressure?	6 bar
Water volume capacity	1 Litres
Maintenance free	Yes
Weight	19 kg

\*Total capacity (sensible and latent) based on test conditions shown in the Performance Data table

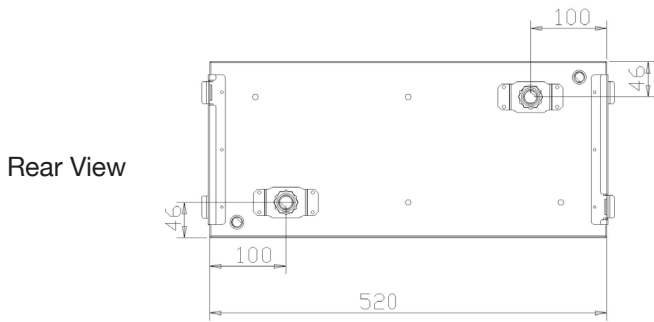
## 3D System Layout

## Generic Example

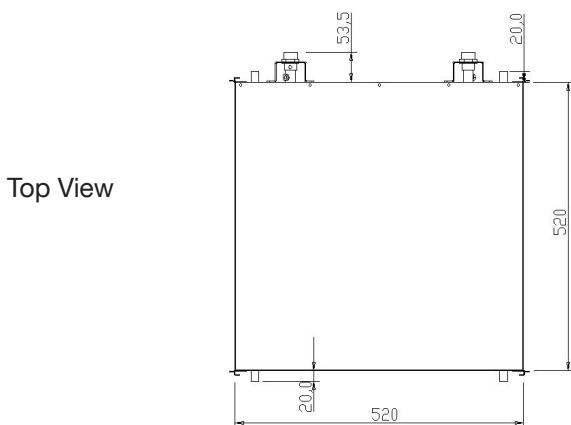
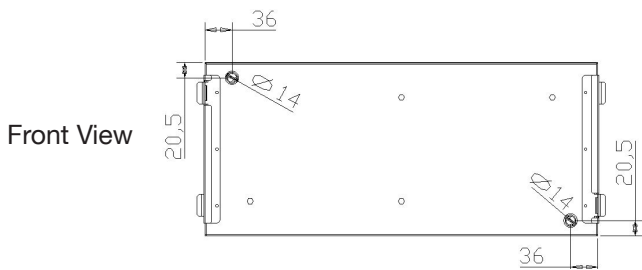
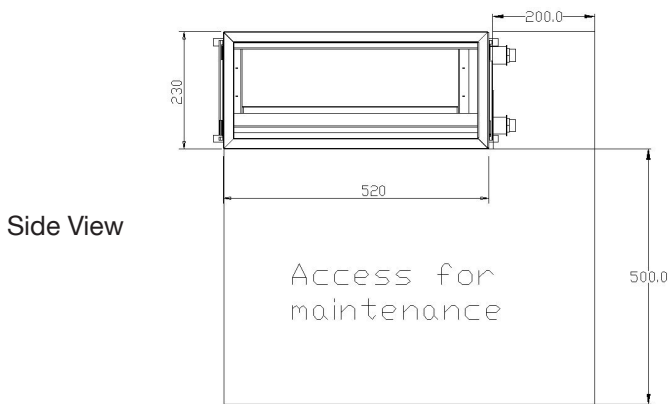
ComfoPost and ComfoTube Ø90mm Semi-Rigid Ductwork



## Dimensions



Height	230mm
Width	520mm
Depth	520mm
Weight	19 kg

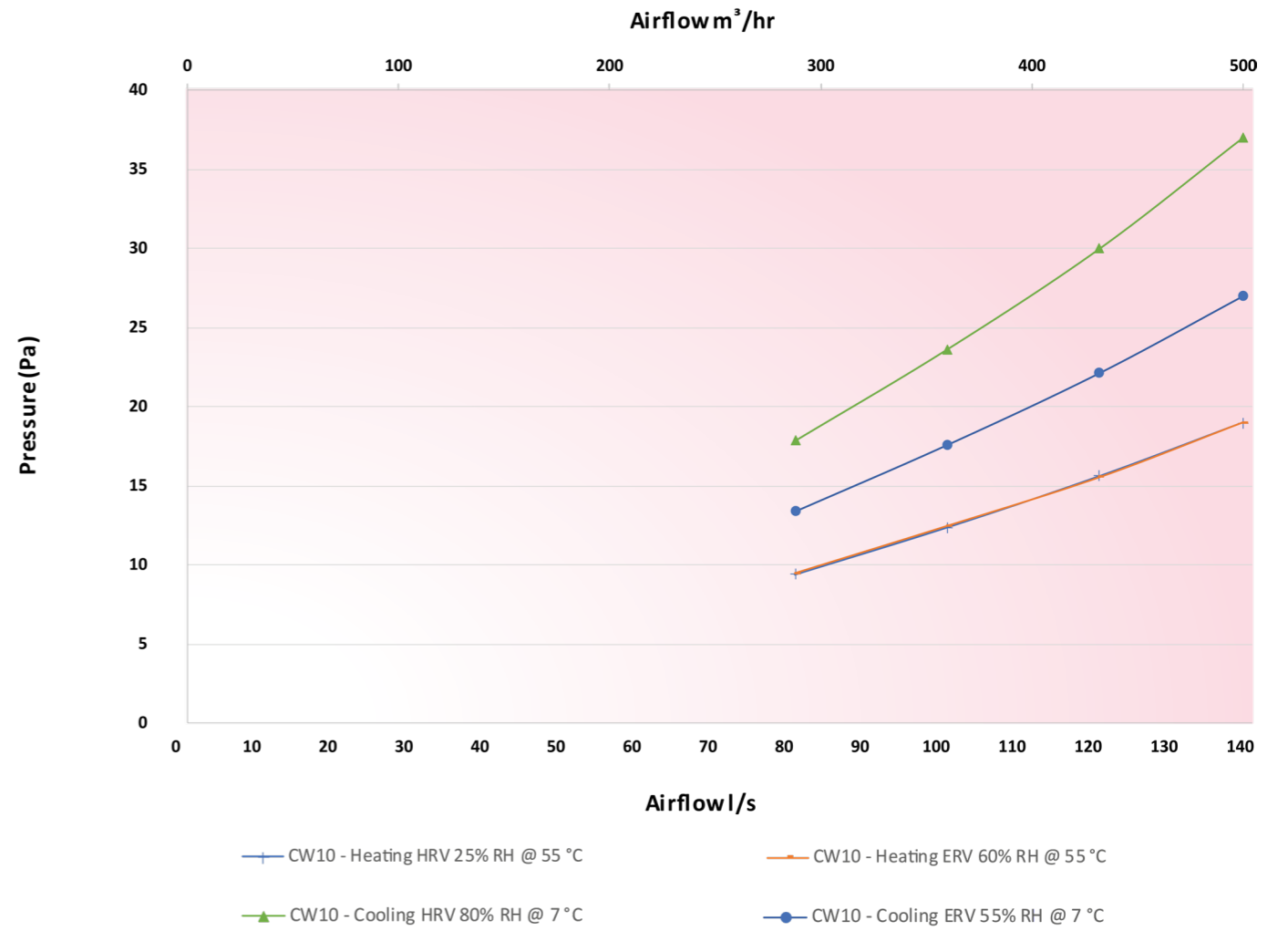


## Performance Data

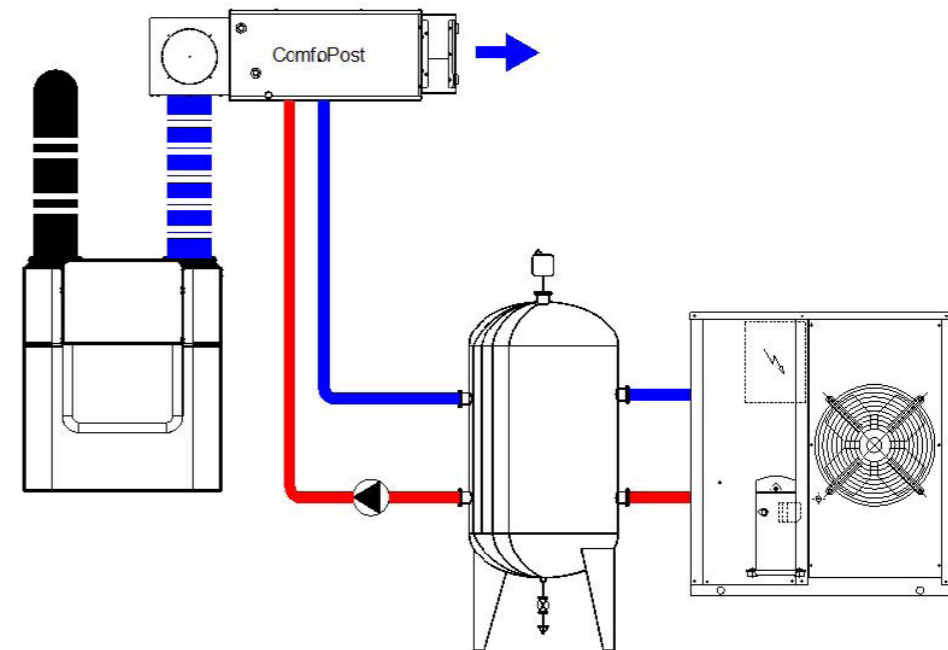
Air conditions IN to ComfoPost		Heating								Cooling		
		HRV exchanger				ERV exchanger				HRV	ERV	
		18 °C				17 °C				27 °C	28 °C	
		25%				60%				80%	55%	
Water temperature IN		3.2 g/kg				7.3 g/kg				18.1 g/kg	13.1 g/kg	
°C		55	50	45	40	55	50	45	40	7	7	
MINIMUM Air flow 80l/s (288m³/h)	H <sub>2</sub> O flow	l/h	600				600				600	600
	H <sub>2</sub> O temperature <sub>OUT</sub>	°C	50	46	42	37	50	46	41	37	12	11
	H <sub>2</sub> O ΔP	kPa	12	12	13	13	12	13	13	13	16	16
	Air temperature <sub>OUT</sub>	°C	52	47	42	38	51	47	42	38	13	12
	Air RH <sub>OUT</sub>	%	4	5	6	8	9	11	14	18	100	95
	Air AH <sub>OUT</sub>	g/kg	3.2	3.2	3.2	3.2	7.2	7.2	7.2	7.2	9.6	8.2
	Air ΔP	Pa	9	9	9	9	9	9	9	9	18	13
	Condensation	l/h	-	-	-	-	-	-	-	-	3	1.7
	Sensible power	kW	-	-	-	-	-	-	-	-	1.33	1.59
	<b>TOTAL POWER</b>	<b>kW</b>	<b>3.27</b>	<b>2.82</b>	<b>2.38</b>	<b>1.94</b>	<b>3.38</b>	<b>2.93</b>	<b>2.48</b>	<b>2.04</b>	<b>3.41</b>	<b>2.78</b>
Air flow 100l/s (360m³/h)	H <sub>2</sub> O flow	l/h	600				600				600	600
	H <sub>2</sub> O temperature <sub>OUT</sub>	°C	49	45	41	37	49	45	41	36	13	12
	H <sub>2</sub> O ΔP	kPa	12	13	13	13	12	13	13	13	15	16
	Air temperature <sub>OUT</sub>	°C	50	46	41	37	50	46	41	37	15	13
	Air RH <sub>OUT</sub>	%	4	5	6	8	9	12	15	19	100	93
	Air AH <sub>OUT</sub>	g/kg	3.2	3.2	3.2	3.2	7.2	7.2	7.2	7.2	10.4	8.7
	Air ΔP	Pa	12	12	12	12	12	12	12	12	24	18
	Condensation	l/h	-	-	-	-	-	-	-	-	3.4	1.9
	Sensible power	kW	-	-	-	-	-	-	-	-	1.55	1.86
	<b>TOTAL POWER</b>	<b>kW</b>	<b>3.93</b>	<b>3.39</b>	<b>2.86</b>	<b>2.32</b>	<b>4.05</b>	<b>3.52</b>	<b>2.98</b>	<b>2.44</b>	<b>3.86</b>	<b>3.19</b>
Air flow 120l/s (432m³/h)	H <sub>2</sub> O flow	l/h	600				600				600	600
	H <sub>2</sub> O temperature <sub>OUT</sub>	°C	48	44	40	36	48	44	40	36	13	12
	H <sub>2</sub> O ΔP	kPa	12	13	13	13	12	12	13	13	15	15
	Air temperature <sub>OUT</sub>	°C	49	45	41	36	49	45	40	36	16	14
	Air RH <sub>OUT</sub>	%	4	5	7	9	10	12	16	19	99	92
	Air AH <sub>OUT</sub>	g/kg	3.2	3.2	3.2	3.2	7.2	7.2	7.2	7.2	11.0	9.1
	Air ΔP	Pa	16	15	15	15	16	16	15	15	30	22
	Condensation	l/h	-	-	-	-	-	-	-	-	3.7	2.1
	Sensible power	kW	-	-	-	-	-	-	-	-	1.7	2.09
	<b>TOTAL POWER</b>	<b>kW</b>	<b>4.52</b>	<b>3.91</b>	<b>3.29</b>	<b>2.67</b>	<b>4.67</b>	<b>4.05</b>	<b>3.43</b>	<b>2.81</b>	<b>4.25</b>	<b>3.54</b>
MAXIMUM Air flow 138.9l/s (500 m³/h)	H <sub>2</sub> O flow	l/h	600				600				600	600
	H <sub>2</sub> O temperature <sub>OUT</sub>	°C	48	44	40	36	47	44	40	36	14	12
	H <sub>2</sub> O ΔP	kPa	13	13	13	13	13	13	13	13	16	16
	Air temperature <sub>OUT</sub>	°C	48	44	40	36	48	44	39	35	16	15
	Air RH <sub>OUT</sub>	%	5	6	7	9	11	13	16	20	99	90
	Air AH <sub>OUT</sub>	g/kg	3.2	3.2	3.2	3.2	7.2	7.2	7.2	7.2	11.6	9.4
	Air ΔP	Pa	19	19	19	19	19	19	19	19	37	27
	Condensation	l/h	-	-	-	-	-	-	-	-	3.9	2.2
	Sensible power	kW	-	-	-	-	-	-	-	-	1.83	2.3
	<b>TOTAL POWER</b>	<b>kW</b>	<b>5.06</b>	<b>4.37</b>	<b>3.67</b>	<b>2.98</b>	<b>5.21</b>	<b>4.52</b>	<b>3.82</b>	<b>3.13</b>	<b>4.57</b>	<b>3.82</b>

Initial temperature and humidity outdoor/indoor: winter 2°C 70% R.H. / 20°C 60% R.H.; summer 35°C 50% R.H. / 25°C 50% R.H.  
The calculations include the cold recovery efficiency of an enthalpy exchanger as extrapolated from the results provided by the PHI certification

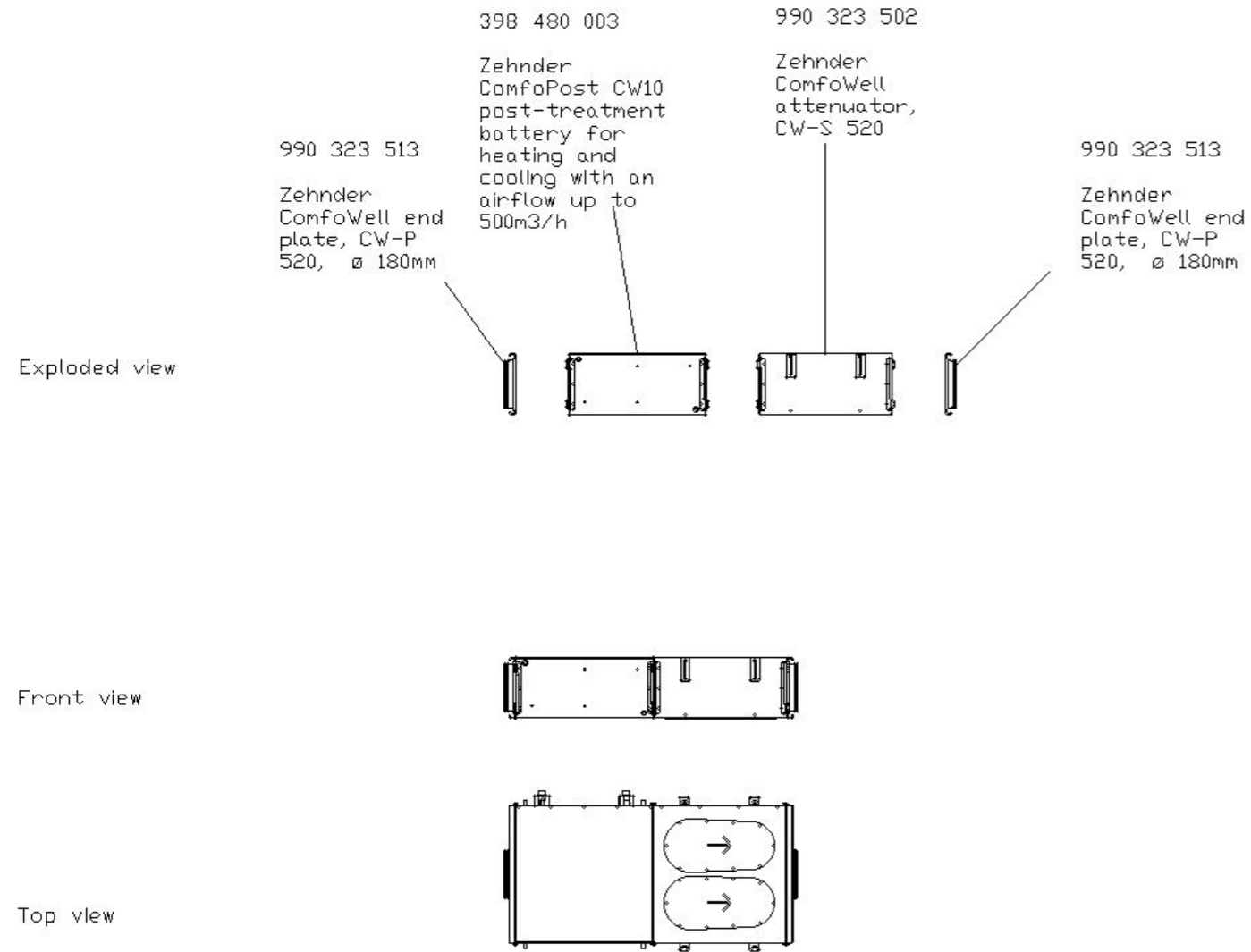
## Performance Data



## Schematics

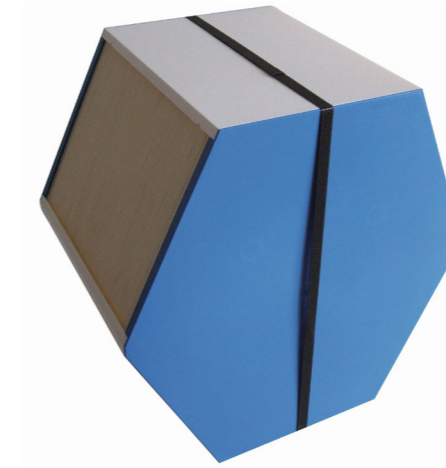


## Example Connection



## For Use With

Our range of ComfoPost products can be used in conjunction with our ComfoAir units, complete with enthalpy cube for improved sensible cooling capacity. The unit shall be manufactured by Zehnder.



**TO DOWNLOAD OUR ENTHALPY CUBE DATASHEET**

**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**  
**CLICK HERE**

## 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.

**TO VISIT OUR DOWNLOAD PAGE**  
**CLICK HERE**

## Consultant specification

### Specification

The air to water exchanger shall be constructed of galvanised sheet steel with copper tubes and aluminum fins with hydrophilic treatment to enhance thermal transfer. It shall be connected to the MVHR units supply ductwork with options to combine attenuators, manifold box, filter housing with ISO ePM1 >80% (F7), ISO ePM1 >90% (F9) or active carbon filters and end plates ranging from ø 125mm to ø 200mm. It shall have the option for horizontal or vertical mounting.

The unit shall be manufactured by Zehnder.

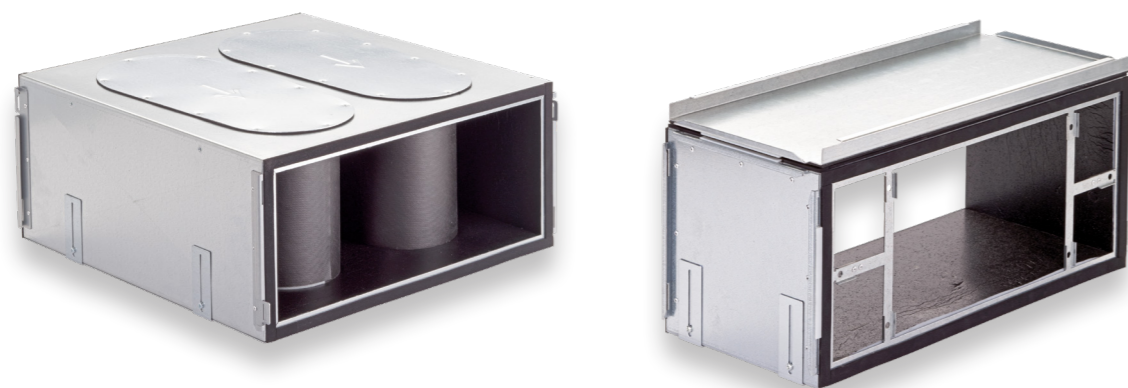
# Zehnder ComfoWell 520



# Comfowell 520

The Zehnder ComfoWell 520 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 520mm it can be used for connecting up to 10 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 locking slide connections to form an airtight and robust seal.

Noise reduction can be improved by combining two attenuators together. Filters are available in ISO ePM1 >80% (F7) or ISO ePM1 >90% (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 is required.
- Easy to assemble thanks to its modular and compact design.

## Article Numbers

Description	Product Code
<b>Attenuator</b>	
Zehnder ComfoWell attenuator, CW-S 520	990 323 502
<b>Manifold</b>	
Zehnder ComfoWell manifold box CW-D 520	990 323 532
<b>Filter Housing</b>	
Zehnder ComfoWell filter housing CW-F 520	990 323 552
<b>Mounting Plates</b>	
Zehnder ComfoWell mounting plate, CW-M 520, 10 x 75mm connections	990 323 614
Zehnder ComfoWell mounting plate, CW-M 520, 10 x 90mm connections	990 323 615
<b>End Plates</b>	
Zehnder ComfoWell end plate, CW-P 520, ø 150mm	990 323 568
Zehnder ComfoWell end plate, CW-P 520, ø 160mm	990 323 564
Zehnder ComfoWell end plate, CW-P 520, ø 180mm	990 312 513
Zehnder ComfoWell end plate, CW-P 520, ø 200mm	990 312 514

## Article Numbers

### Spacer Frame

Zehnder ComfoWell spacer frame, CW-DF 520	990 323 539
---	-------------

### Mounting Set

Zehnder ComfoWell mounting set, CW-K 520, for Zehnder ComfoAir Q350	990 323 649
Zehnder ComfoWell mounting set, CW-K 520, for Zehnder ComfoAir Q450/600	990 323 646

### Filters

Filter for ComfoWell 520, CW-F7 520, ISO ePM1 >80% (F7), 1 Piece	990 323 606
Filter for ComfoWell 520, CW-F9 520, ISO ePM1 >90% (F9), 1 Piece	990 323 607
Filter for ComfoWell 520, CW-AC 520, active carbon filter, 1 Piece	990 323 608

## Technical Specification

Housing material	Galvanised Sheet Steel
Operating temperature range	-25 to +60 °C
Inner lining	Closed-cell melamine resin foam
Recommended maximum air volume	111.1l/s (400 m³/h) at normal ventilation level
Air tightness class to EN 1507:2006	C
Air tightness class to EN 12237:2003	C
Fire rating to ISO13501	C



## Example Connections

Combination Options	ComfoAir Q450 right handed with mounting set, 2 x attenuators and 2 x 10 port ø 75mm mounting plates	Stand alone attenuator with 2 x ø 180mm end plates	Stand alone manifold with 1 x ø 180mm end plate and 10 x ø 90mm mounting plate	Stand alone filter housing with 2 x ø 180mm end plate	Stand alone silencer and manifold combined with 1 x ø 180mm end plate and 10 x ø 90mm mounting plate	Stand alone 2 x attenuator with 1 x ø 180mm end plate and 10 x ø 90mm mounting plate
Individual Components						
Attenuator  Article Number: 990 323 502	2 x Zehnder ComfoWell attenuator, CW-S 520	1 x Zehnder ComfoWell attenuator, CW-S 520	—	—	1 x Zehnder ComfoWell attenuator, CW-S 520	2 x Zehnder ComfoWell attenuator, CW-S 520
Manifold Box  Article Number: 990 323 532	—	—	1 x Zehnder ComfoWell manifold box, CW-D 520	—	—	—
Filter Housing  Article Number: 990 323 552	—	—	—	1 x Zehnder ComfoWell filter housing, CW-F 520	—	—
Mounting Plate -ø75  Article Number: 990 323 614	2 x Zehnder ComfoWell mounting plate, CW-M 520, 10 x 75mm connections	—	—	—	—	—
Mounting Plate -ø90  Article Number: 990 323 615	—	—	1 x Zehnder ComfoWell mounting plate, CW-M 520, 10 x 90mm connections	—	1 x Zehnder ComfoWell mounting plate, CW-M 520, 10 x 90mm connections	1 x Zehnder ComfoWell mounting plate, CW-M 520, 10 x 90mm connections
End Plate - ø 180  Article Number: 990 323 513	—	2 x Zehnder ComfoWell end plate, CW-P 520, ø 180mm	1 x Zehnder ComfoWell end plate, CW-P 520, ø 180mm	2 x Zehnder ComfoWell end plate, CW-P 520, ø 180mm	1 x Zehnder ComfoWell end plate, CW-P 520, ø 180mm	1 x Zehnder ComfoWell end plate, CW-P 520, ø 180mm
Mounting Set  Article Number: 990 323 646	1 x Zehnder ComfoWell mounting set, CW-K 520, for Zehnder ComfoAir Q450/600	—	—	—	—	—
Filter  Article Number: 990 323 607	—	—	—	1 x Filter for ComfoWell 520, CW-F9 520, ISO ePM1 >90% (F9), 1 Piece	—	—

## Dimensions

### Zehnder ComfoWell attenuator, CW-S 520

Article number: 990 323 502

#### Description

##### Attenuator:

Zehnder ComfoWell attenuator CW-S 520. 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.

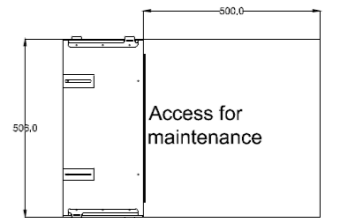
For cleaning purposes the sound absorbing element can be removed. Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

#### Dimensions

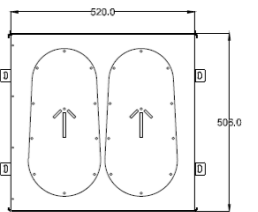
Height	506mm
Width	536mm
Depth	232.5mm
Weight	8.2 kg



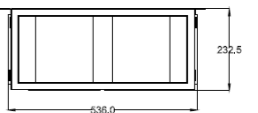
Side view



Front view



Top View



### Zehnder ComfoWell manifold box CW-D 520

Article number: 990 323 532

#### Description

##### Manifold Box:

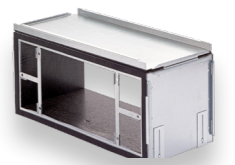
Zehnder ComfoWell manifold box CW-D 520. Rectangular compact design with closed pore internal lining. Suitable for use with the mounting plate for ComfoTube 75mm x 10 connections, 90mm x 10 connections or a combination of 90mm x 4 and 75mm x 6 connections.

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.

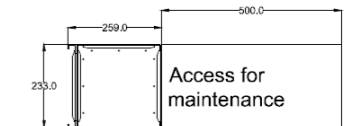
For cleaning purposes the manifold box side plate can be removed for easy access. Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

#### Dimensions

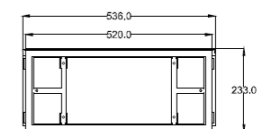
Height	233mm
Width	536mm
Depth	259 mm
Weight	5.42 kg



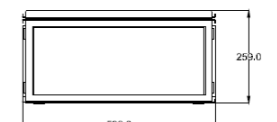
Side view



Front view



Top View



## Dimensions

### Zehnder ComfoWell filter housing CW-F 520

Article number: 990 323 552

#### Description

##### Filter Housing:

Zehnder ComfoWell filter housing CW-F 520. Rectangular compact design for use with a fine pollen filter graded ISO ePM1 >80% (F7), a fine dust filter graded ISO ePM1 >90% (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. The filter housing can be used individually or in combination with all ComfoWell components. The airtight connection between components is via a clamping strip.

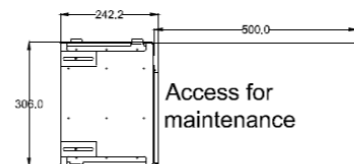
Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

#### Dimensions

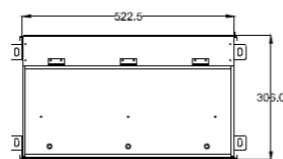
Height	306 mm
Width	536 mm
Depth	242.2 mm
Weight	6.66 kg



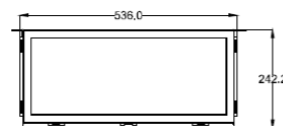
Side view



Front view



Top View



## Dimensions

### Zehnder ComfoWell mounting plate CW-M 520

Article number: 990 323 615

#### Description

##### Mounting Plate:

Zehnder ComfoWell mounting plate CW-M 520-10 x 90. Manifold mounting plate for connection of 10 x ComfoTube 90mm semi-rigid ducting.

The mounting plate includes a protective film and the necessary mounting accessories.

#### Dimensions

Height	45mm
Width	536mm
Depth	230mm
Weight	<2.42 kg



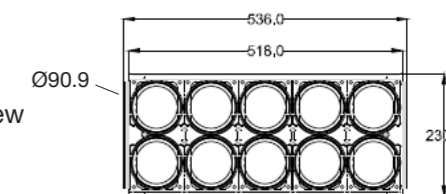
Side view



Front view



Top View



### Zehnder ComfoWell mounting plate CW-M 520

Article number: 990 323 614

#### Description

##### Mounting Plate:

Zehnder ComfoWell mounting plate CW-M 520-10 x 75. Manifold mounting plate for connection of 10x ComfoTube 75mm semi-rigid ducting.

The mounting plate includes a protective film and the necessary mounting accessories.

#### Dimensions

Height	45mm
Width	536mm
Depth	230mm
Weight	<2.42 kg



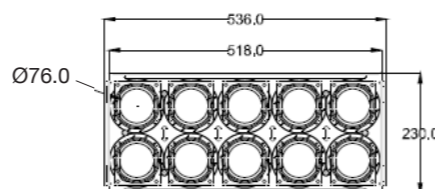
Side view



Front view



Top View



## Dimensions

### Zehnder ComfoWell end plate CW-P 520 -ø 150

Article number: 990 323 568

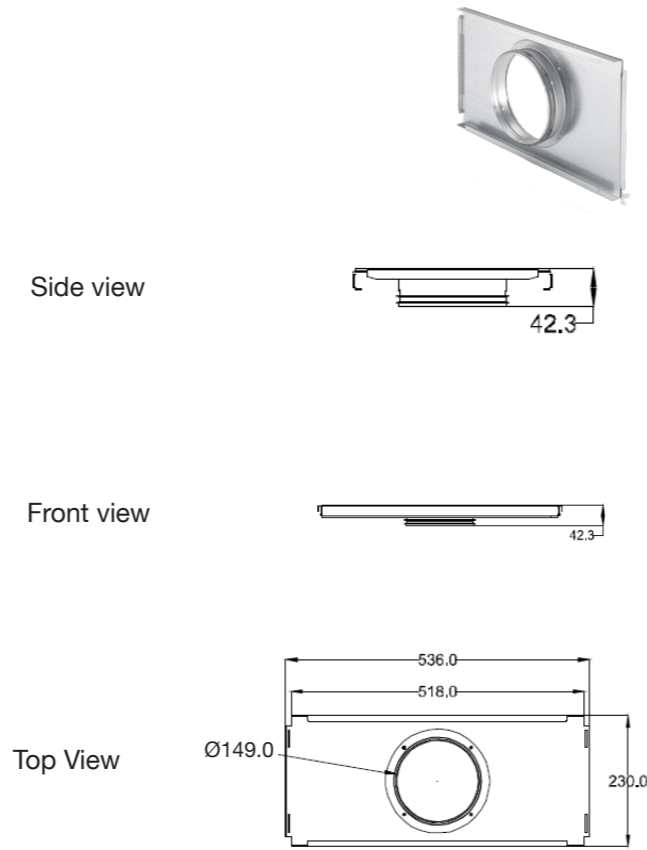
#### Description

##### End Plate:

Zehnder ComfoWell end plate CW-P 520 - DN150 (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.

#### Dimensions

Height	42.3mm
Width	536mm
Depth	230mm
Diameter	150mm



## Dimensions

### Zehnder ComfoWell end plate CW-P 520 -ø 180mm

Article number: 990 323 513

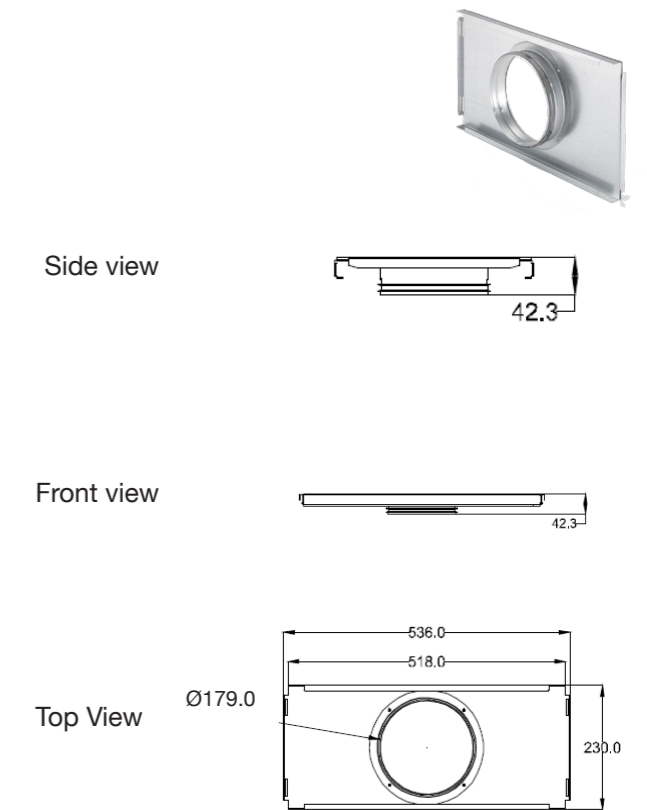
#### Description

##### End Plate:

Zehnder ComfoWell end plate CW-P 520 - DN180 (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.

#### Dimensions

Height	42.3mm
Width	536mm
Depth	230mm
Diameter	180mm



### Zehnder ComfoWell end plate CW-P 520 -ø 160mm

Article number: 990 323 564

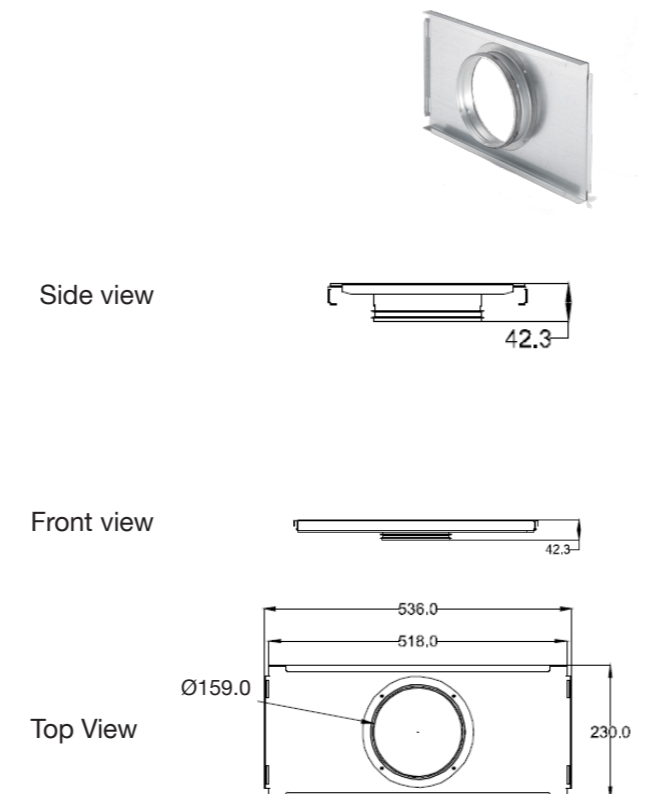
#### Description

##### End Plate:

Zehnder ComfoWell end plate CW-P 520 - 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.

#### Dimensions

Height	42.3mm
Width	536mm
Depth	230mm
Diameter	160mm



### Zehnder ComfoWell end plate CW-P 520 -ø 200mm

Article number: 990 323 514

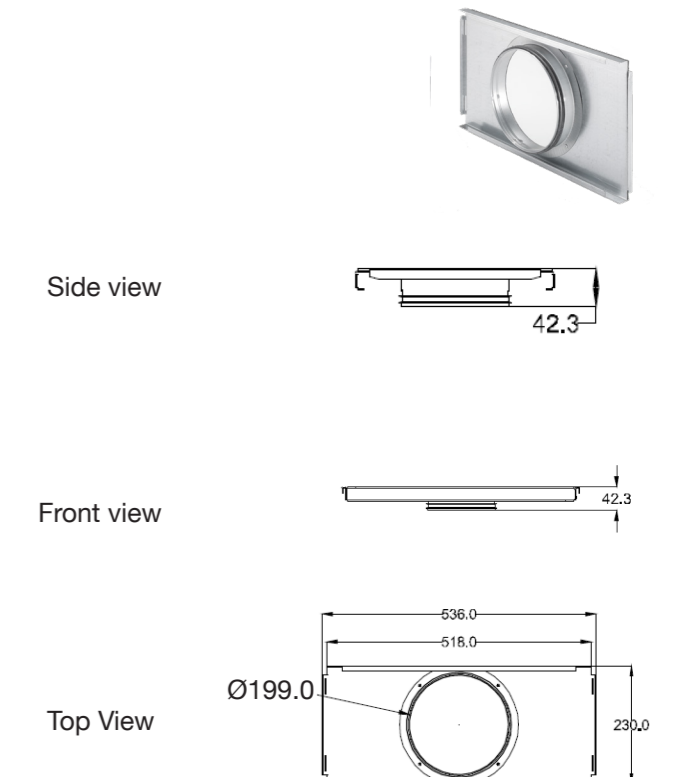
#### Description

##### End Plate:

Zehnder ComfoWell end plate CW-P 520 - DN200 (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.

#### Dimensions

Height	42.3mm
Width	536mm
Depth	230mm
Diameter	200mm



## Dimensions

### Zehnder ComfoWell spacer frame, CW-DF 520

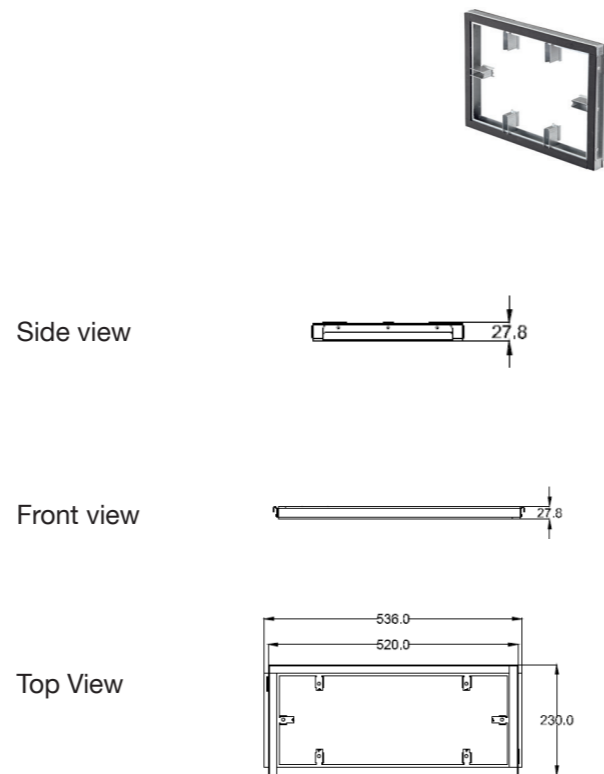
Article number: 990 323 539

#### Description

Zehnder ComfoWell spacer frame CW-DF520. 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.

#### Dimensions

Height	27.8mm
Width	536mm
Depth	230mm
Weight	1.36 kg



## Dimensions

### Zehnder ComfoWell mounting set, CW-K 520, for Zehnder ComfoAir Q450/600

Article number: 990 323 646

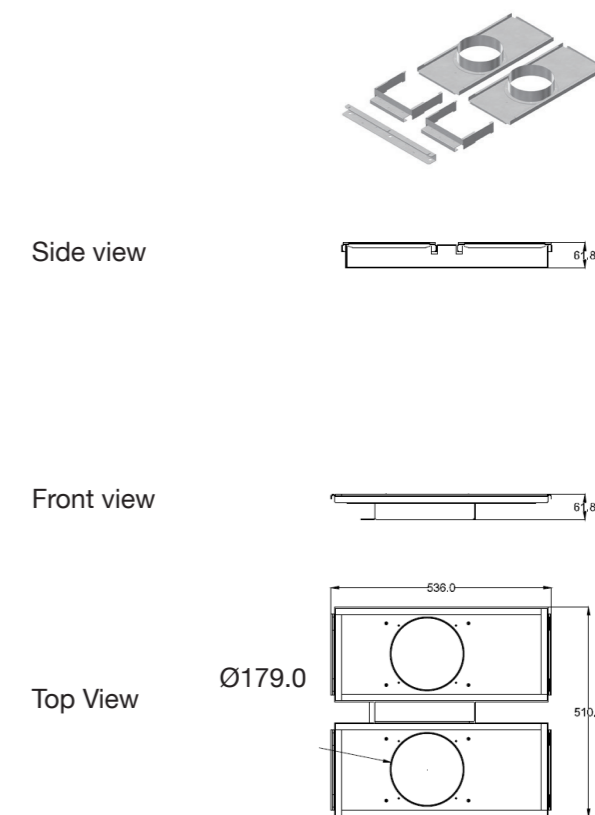
#### Description

##### Mounting set:

A special mounting set is available for the Zehnder ComfoWell 520 for direct mounting to the ComfoAir Q450/ComfoAir Q600 ventilation units. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

#### Dimensions

Height	61.8mm
Width	536mm
Depth	510.5mm
Weight	5.5 kg



### Zehnder ComfoWell mounting set, CW-K 520, for Zehnder ComfoAir Q350

Article number: 990 323 649

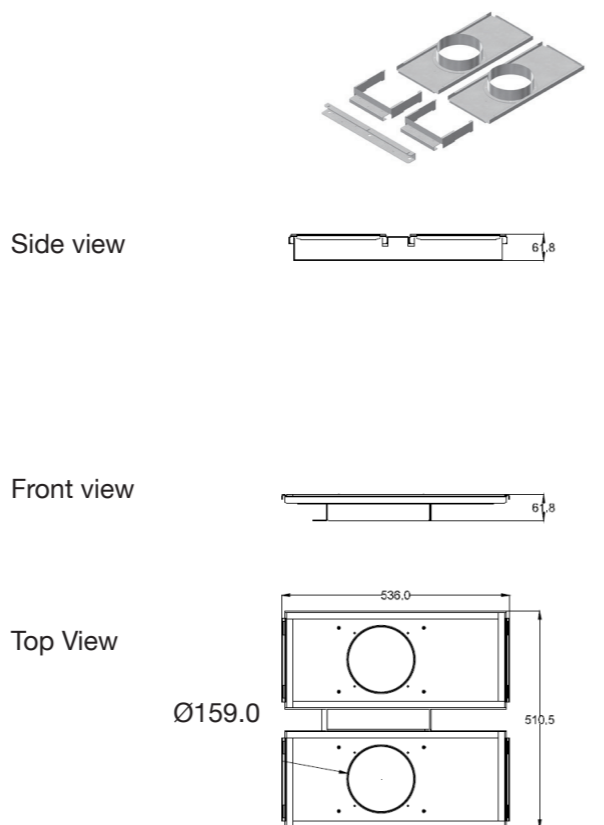
#### Description

##### Mounting set:

A special mounting set is available for the Zehnder ComfoWell 520 for direct mounting to the ComfoAir Q350 ventilation units. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

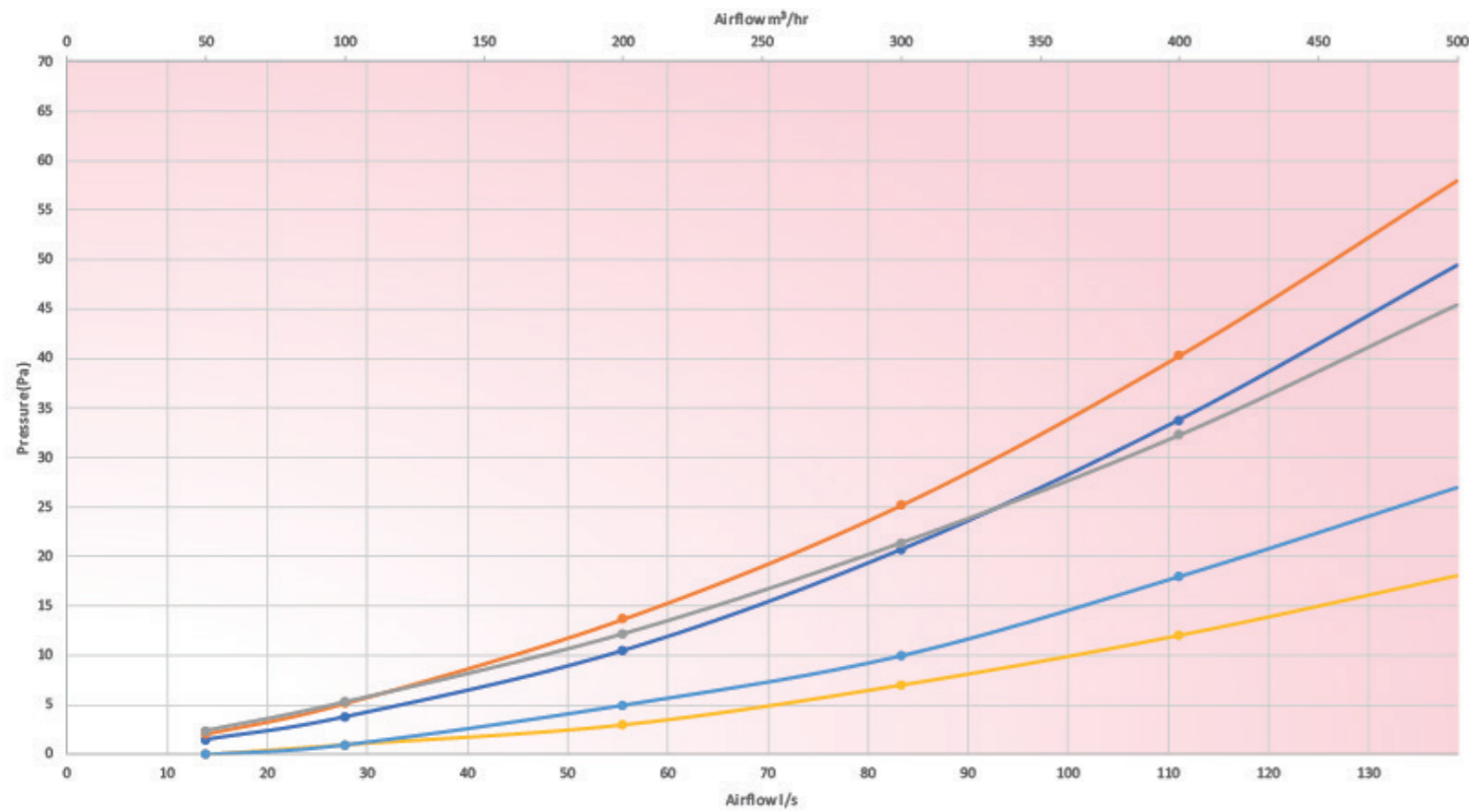
#### Dimensions

Height	61.8mm
Width	536mm
Depth	510.5mm
Weight	4.56 kg



## Pressure Curve

Comfowell 520



- 1 x Attenuator (CW-S 520) with 2 x 180mm end plates (CW-P 520)
- 2 x Attenuator (CW-S 520) stacked with 2 x 180mm end plates (CW-P 520)
- 1 x Filter housing (CW-F 520) with 2 x 180mm end plates (CW-P 520) and filter (CW-F7 520)
- 1 x Filter housing (CW-F 520) with 2 x 180mm end plates (CW-P 520) and filter (CW-AC 520)
- 1 x Filter housing (CW-F 520) with 2 x 180mm end plates (CW-P 520) and filter (CW-F9 520)

## Sound Data

Comfowell 520

Combination	Octave Band (Hz) Insertion Loss, dB							
	63	125	250	500	1000	2000	4000	8000
1 x Attenuator (CW-S 520) with 2 x 180mm end plates (CW-P 520)	2,0	6,3	10,3	16,5	12,0	20,4	15,0	13,5
2 x Attenuator (CW-S 520) stacked with 2 x 180mm end plates (CW-P 520)	6,7	12,3	20,3	22,5	19,2	37,8	27,6	23,9

## For use with

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



**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**

**CLICK HERE**

## 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 following the link below.

**TO VISIT OUR DOWNLOAD PAGE**

**CLICK HERE**

## Consultant specification

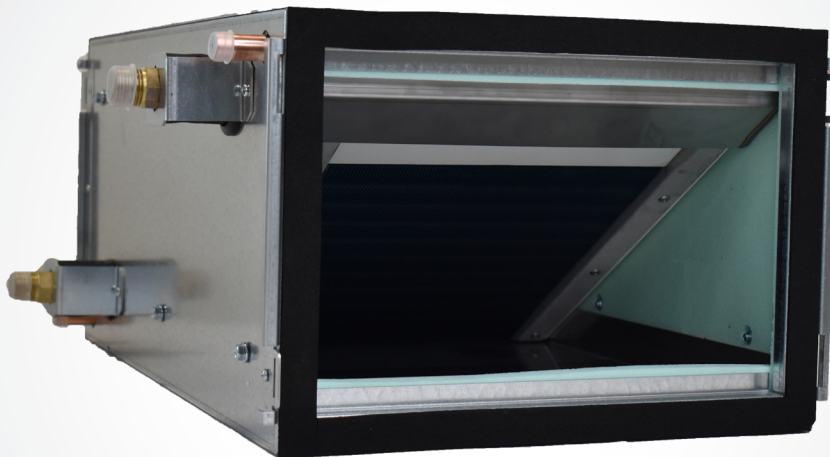
### Specification

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 rating according to EN ISO13501.

It shall be of modular construction with options to combine attenuators, manifold box, filter housing with ISO ePM1 >80% (F7), ISO ePM1 >90% (F9) or active carbon filters and end plates ranging from ø 125mm to ø 200mm.

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.

# Zehnder ComfoPost CW12\*



# ComfoPost CW12

The Zehnder ComfoPost is an air to water exchanger for use with ComfoWell air distribution connections. The ComfoWell connections allows for selection flexibility, offering a range of rigid circular ductwork or Zehnder ComfoTube semi-rigid ductwork to attached. The ComfoPost is available in a variety of sizes to heat or cool the air supplied by the Zehnder ventilation system.

The ComfoPost units are suitable for a wide range of airflows up to 166l/s (600m<sup>3</sup>hr), the CW12 is suitable for airflows up to 166l/s (600m<sup>3</sup>hr). The units are made of steel with aluminium and copper pipe forming the heating and cooling coils and are maintenance free.

## Key Features

- Ideal for use with reversible heat pumps or chillers to meet SAP 10 or TM59 overheating demands
- Low pressure losses
- Filtered fresh supply air, not recycled stale air
- Suitable for use with the unique modular ComfoWell manifolds
- Suitable for horizontal or vertical installation
- Condensation water tray and drain as standard
- Suitable for Passive House application
- Corrosion resistant

## Article Numbers

Description	Product Code
Zehnder ComfoPost CW12 post-treatment battery for heating and cooling with an airflow up to 600m <sup>3</sup> /h	399 000 003

## Technical Specification

Height	230mm
Width	625mm
Depth	520mm
Water connection diameter (ø)	1/2"
Water connection type	BSPT male thread
Condensate drain diameter OD (ø)	14mm
Condensate connection type	Worm drive clip to fix to hose or crimped to copper pipe
ComfoWell range	ComfoWell 625
ComfoWell rigid round air connection options (ø)	150mm / 160mm / 180mm / 200mm
ComfoWell semi-rigid air connection options (ø)	12 x 75mm / 12 x 90mm / 6 x 90mm + 6 x 75mm
Material	Casing: Galvanised sheet steel Tubes: Copper Fins: Aluminium with hydrophilic treatment
Recommended operating water temperature range	7 to 55 °C
Recommended maximum operating air flow	<166.6l/s (<600m <sup>3</sup> hr)
Maximum thermal heating output	6.51kW*
Maximum thermal cooling output	5.64kW*
Maximum operating water pressure	6 bar
Water volume capacity	1.2 Litres
Maintenance free	Yes
Weight	22.4 kg

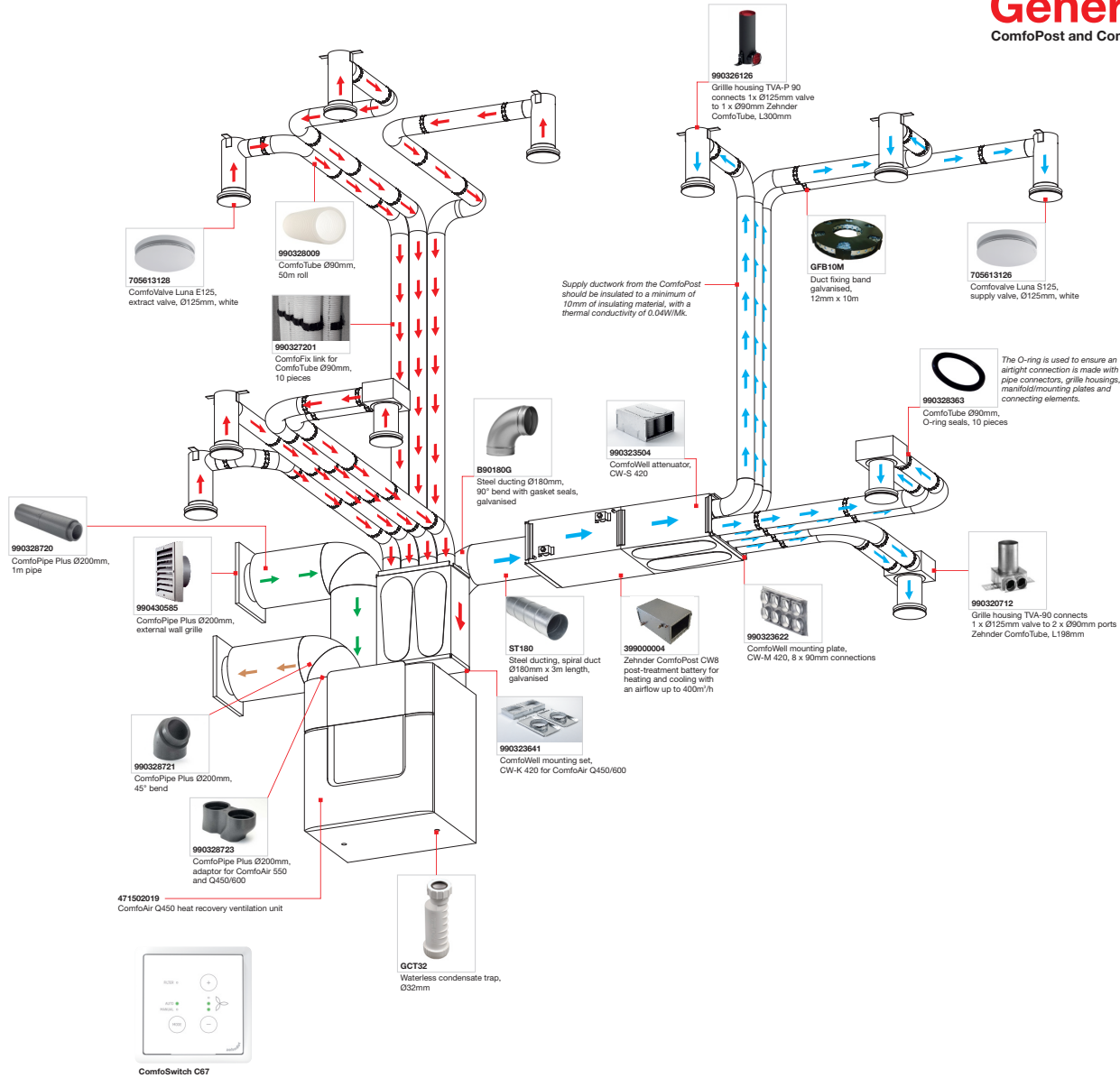
\*Total capacity (sensible and latent) based on test conditions shown in the Performance Data table



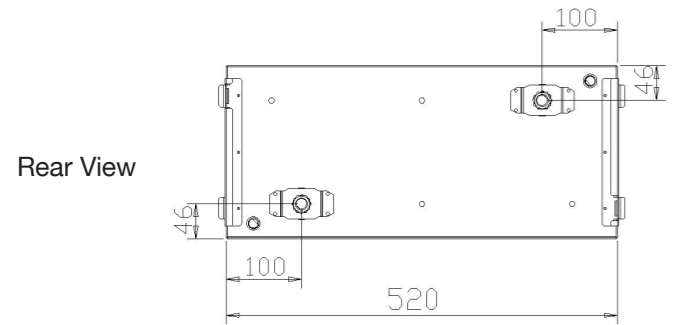
## 3D System Layout

## Generic Example

ComfoPost and ComfoTube Ø90mm Semi-Rigid Ductwork

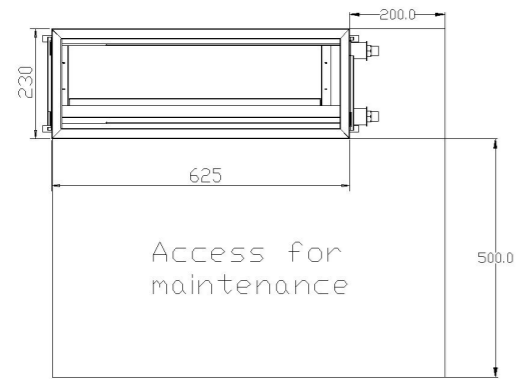


## Dimensions

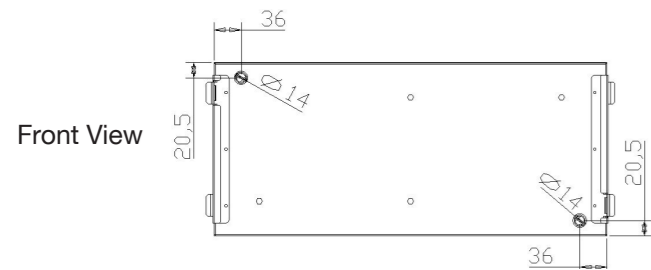


Rear View

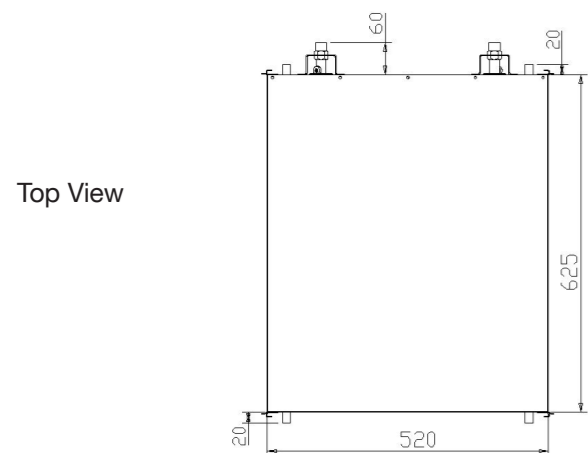
Height	230mm
Width	625mm
Depth	520mm
Weight	22.4 kg



Side View



Front View



Top View

■ For use with Zehnder ComfoWell 625

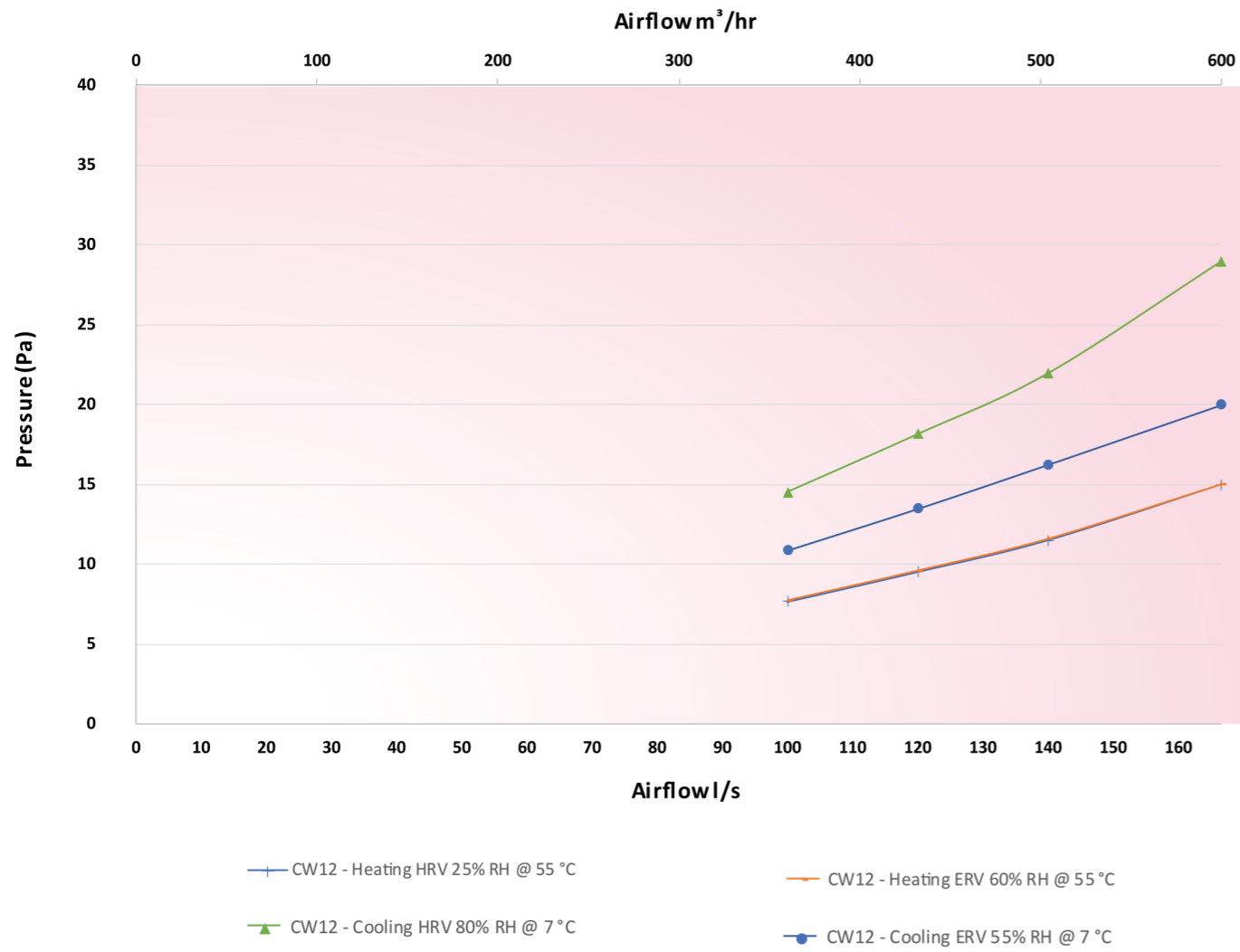
## Performance Data

Air conditions IN to ComfoPost		Heating								Cooling		
		HRV exchanger				ERV exchanger				HRV	ERV	
		18 °C				17 °C				27 °C	28 °C	
		25%				60%				80%	55%	
Water temperature IN		°C	55	50	45	40	55	50	45	40	7	7
MINIMUM Air flow 100l/s (960m³/h)	H <sub>2</sub> O flow	l/h	600				600				600	600
	H <sub>2</sub> O temperature <sub>OUT</sub>	°C	49	45	41	36	49	45	40	36	13	12
	H <sub>2</sub> O ΔP	kPa	15	15	16	16	15	15	16	16	19	19
	Air temperature <sub>OUT</sub>	°C	52	47	43	38	52	47	43	38	13	12
	Air RH <sub>OUT</sub>	%	4	5	6	8	9	11	14	18	100	96
	Air AH <sub>OUT</sub>	g/kg	3.2	3.2	3.2	3.2	7.2	7.2	7.2	7.2	9.5	8.1
	Air ΔP	Pa	8	8	8	7	8	8	8	7	15	11
	Condensation	l/h	-	-	-	-	-	-	-	-	3.7	2.2
	Sensible power	kW	-	-	-	-	-	-	-	-	1.69	2.01
	<b>TOTAL POWER</b>	<b>kW</b>	<b>4.14</b>	<b>3.57</b>	<b>3.01</b>	<b>2.45</b>	<b>4.27</b>	<b>3.71</b>	<b>3.14</b>	<b>2.58</b>	<b>4.31</b>	<b>3.52</b>
Air flow 120l/s (432m³/h)	H <sub>2</sub> O flow	l/h	600				600				600	600
	H <sub>2</sub> O temperature <sub>OUT</sub>	°C	48	44	40	36	48	44	40	36	14	13
	H <sub>2</sub> O ΔP	kPa	15	16	16	16	15	16	16	16	19	19
	Air temperature <sub>OUT</sub>	°C	51	47	42	38	51	46	42	37	14	12
	Air RH <sub>OUT</sub>	%	4	5	6	8	9	11	14	18	100	95
	Air AH <sub>OUT</sub>	g/kg	3.2	3.2	3.2	3.2	7.2	7.2	7.2	7.2	10.2	8.5
	Air ΔP	Pa	10	9	9	9	10	9	9	9	18	14
	Condensation	l/h	-	-	-	-	-	-	-	-	4.1	2.4
	Sensible power	kW	-	-	-	-	-	-	-	-	1.92	2.29
	<b>TOTAL POWER</b>	<b>kW</b>	<b>4.81</b>	<b>4.16</b>	<b>3.5</b>	<b>2.85</b>	<b>4.98</b>	<b>4.31</b>	<b>3.65</b>	<b>3</b>	<b>4.78</b>	<b>3.94</b>
Air flow 140l/s (504m³/h)	H <sub>2</sub> O flow	l/h	600				600				600	600
	H <sub>2</sub> O temperature <sub>OUT</sub>	°C	47	43	39	35	47	43	39	35	14	13
	H <sub>2</sub> O ΔP	kPa	15	16	16	16	15	15	16	16	19	19
	Air temperature <sub>OUT</sub>	°C	50	46	41	37	50	45	41	37	15	13
	Air RH <sub>OUT</sub>	%	4	5	7	8	10	12	15	19	100	93
	Air AH <sub>OUT</sub>	g/kg	3.2	3.2	3.2	3.2	7.2	7.2	7.2	7.2	10.8	8.9
	Air ΔP	Pa	12	11	11	11	12	11	11	11	22	16
	Condensation	l/h	-	-	-	-	-	-	-	-	4.4	2.6
	Sensible power	kW	-	-	-	-	-	-	-	-	2.07	2.55
	<b>TOTAL POWER</b>	<b>kW</b>	<b>5.44</b>	<b>4.7</b>	<b>3.96</b>	<b>3.22</b>	<b>5.62</b>	<b>4.87</b>	<b>4.13</b>	<b>3.38</b>	<b>5.17</b>	<b>4.31</b>
MAXIMUM Air flow 166.6l/s (600 m³/h)	H <sub>2</sub> O flow	l/h	600				600				600	600
	H <sub>2</sub> O temperature <sub>OUT</sub>	°C	46	42	38	35	46	42	38	34	15	14
	H <sub>2</sub> O ΔP	kPa	16	16	16	16	16	16	16	16	19	19
	Air temperature <sub>OUT</sub>	°C	48	44	40	36	48	44	40	36	16	14
	Air RH <sub>OUT</sub>	%	5	6	7	9	10	13	16	20	99	92
	Air AH <sub>OUT</sub>	g/kg	3.2	3.2	3.2	3.2	7.2	7.2	7.2	7.2	11.3	9.3
	Air ΔP	Pa	15	15	15	15	15	15	15	15	29	20
	Condensation	l/h	-	-	-	-	-	-	-	-	4.8	2.7
	Sensible power	kW	-	-	-	-	-	-	-	-	2.26	2.84
	<b>TOTAL POWER</b>	<b>kW</b>	<b>6.3</b>	<b>5.44</b>	<b>4.59</b>	<b>3.73</b>	<b>6.51</b>	<b>5.64</b>	<b>4.78</b>	<b>3.92</b>	<b>5.64</b>	<b>4.73</b>

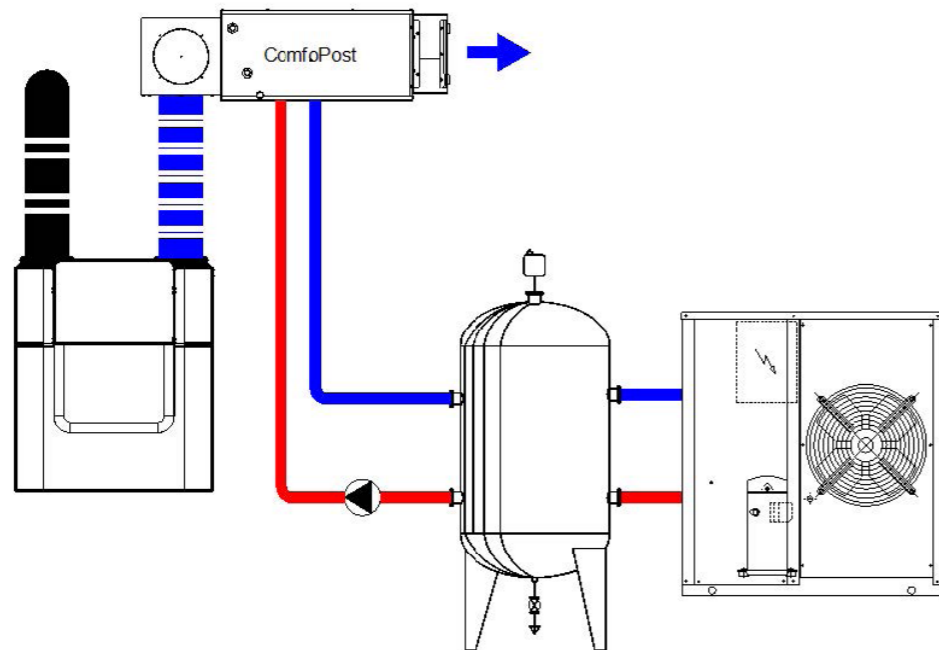
Initial temperature and humidity outdoor/indoor: winter 2°C 70% R.H. / 20°C 60% R.H.; summer 35°C 50% R.H. / 25°C 50% R.H.

The calculations include the cold recovery efficiency of an enthalpy exchanger as extrapolated from the results provided by the PHI certification

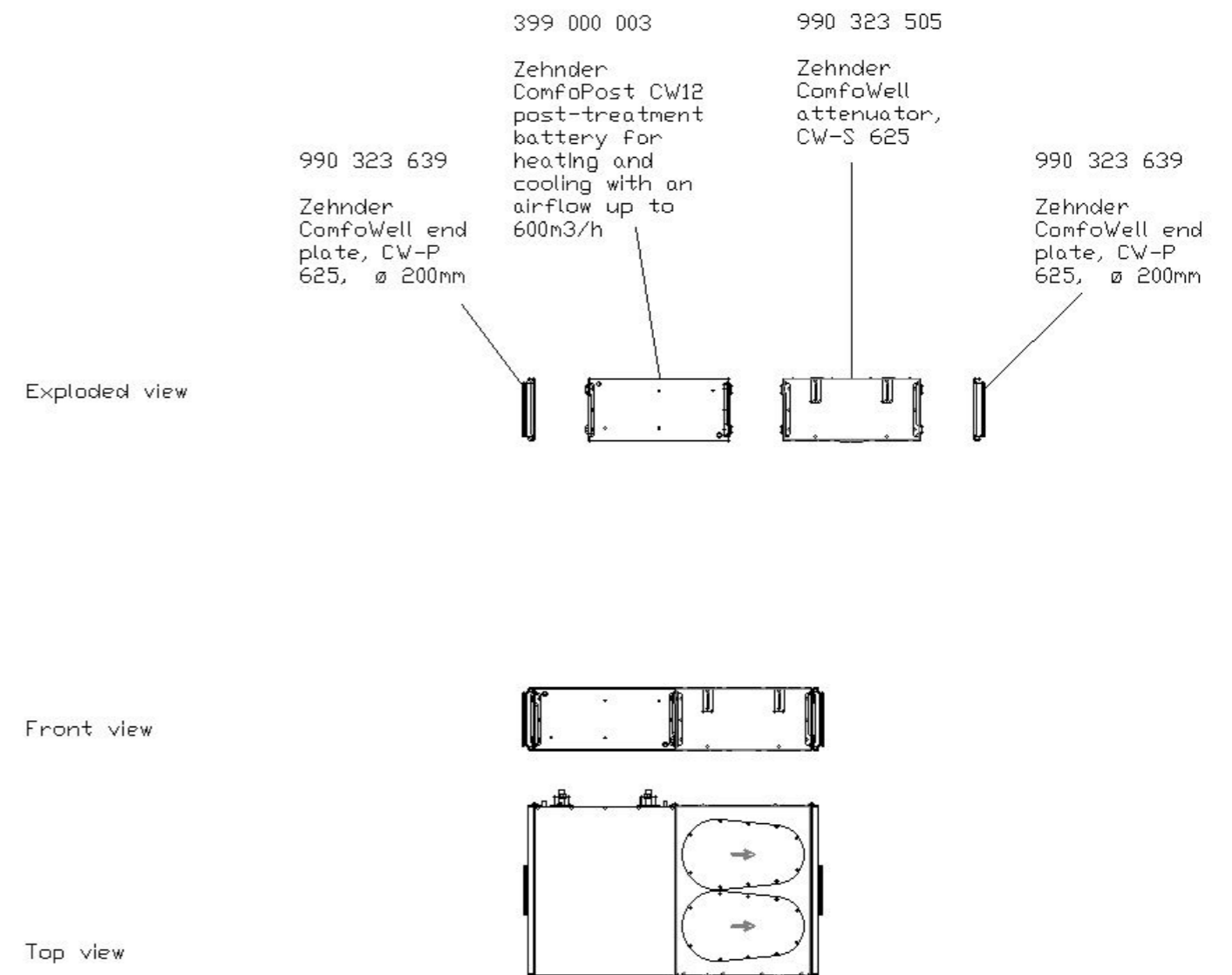
## Performance Data



## Schematics

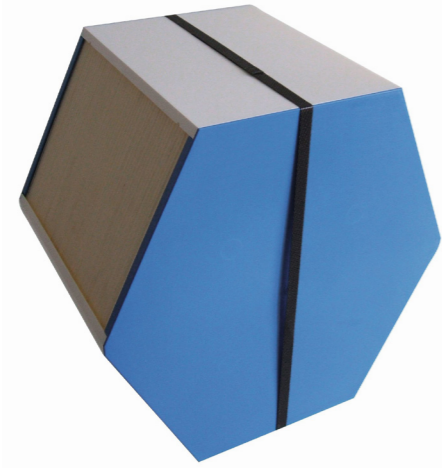


## Example Connection



## For Use With

Our range of ComfoPost products can be used in conjunction with our ComfoAir units, complete with enthalpy cube for improved sensible cooling capacity. The unit shall be manufactured by Zehnder.



**TO DOWNLOAD OUR ENTHALPY  
CUBE DATASHEET**

**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**

**CLICK HERE**

## 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.

**TO VISIT OUR DOWNLOAD PAGE**

**CLICK HERE**

## Consultant specification

### Specification

The air to water exchanger shall be constructed of galvanised sheet steel with copper tubes and aluminum fins with hydrophilic treatment to enhance thermal transfer. It shall be connected to the MVHR units supply ductwork with options to combine attenuators, manifold box, filter housing with ISO ePM1 >80% (F7), ISO ePM1 >90% (F9) or active carbon filters and end plates ranging from  $\varnothing$  125mm to  $\varnothing$  200mm. It shall have the option for horizontal or vertical mounting.

The unit shall be manufactured by Zehnder.

**zehnder**

always the  
best climate

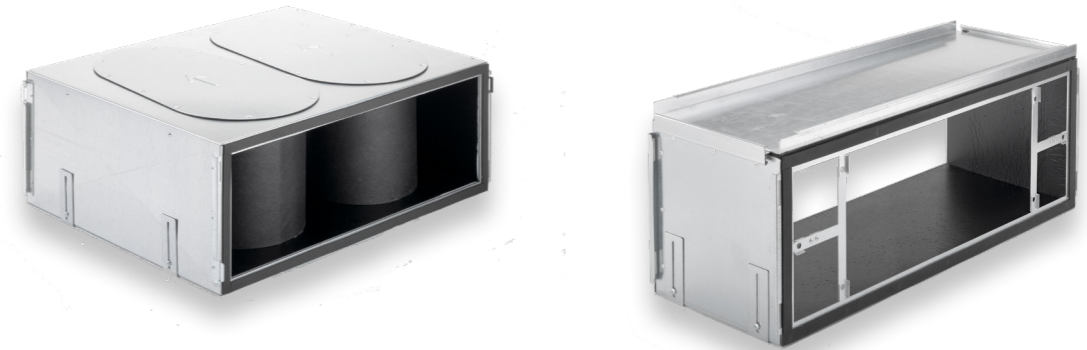
# Zehnder ComfoWell 625



## ComfoWell 625

The Zehnder ComfoWell 625 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 625mm it can be used for connecting up to 12 ComfoTube connections. The system's 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 locking slide connections to form an airtight and robust seal.

Noise reduction can be improved by combining two attenuators together. Filters are available in ISO ePM1 >80% (F7) or ISO ePM1 >90% (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 is required.
- Easy to assemble thanks to its modular and compact design.

### Article Numbers

Description	Product Code
<b>Attenuator</b>	
Zehnder ComfoWell attenuator, CW-S 625	990 323 505
<b>Manifold</b>	
Zehnder ComfoWell manifold box CW-D 625	990 323 630
<b>Filter Housing</b>	
Zehnder ComfoWell filter housing CW-F 625	990 323 555
<b>Mounting Plates</b>	
Zehnder ComfoWell mounting plate, CW-M 625, 12 x 75mm connections	990 323 631
Zehnder ComfoWell mounting plate, CW-M 625, 12 x 90mm connections	990 323 632
<b>End Plates</b>	
Zehnder ComfoWell end plate, CW-P 625, ø 150mm	990 323 636
Zehnder ComfoWell end plate, CW-P 625, ø 160mm	990 323 637
Zehnder ComfoWell end plate, CW-P 625, ø 180mm	990 323 638
Zehnder ComfoWell end plate, CW-P 625, ø 200mm	990 323 639

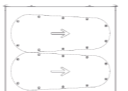



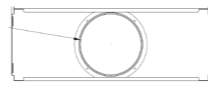
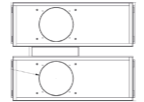

## Article Numbers

<b>Spacer Frame</b>	
Zehnder ComfoWell spacer frame, CW-DF 625	990 323 634
<b>Mounting Set</b>	
Zehnder ComfoWell mounting set, CW-K 625, for Zehnder ComfoAir Q450/600	990 323 642
<b>Filters</b>	
Filter for ComfoWell 625, CW-F7 625, ISO ePM1 >80% (F7), 1 Piece	990 323 653
Filter for ComfoWell 625, CW-F9 625, ISO ePM1 >90% (F9), 1 Piece	990 323 654
Filter for ComfoWell 625, CW-AC 625, active carbon filter, 1 Piece	990 323 655

## Technical Specification

Housing material	Galvanised sheet steel
Operating temperature range	-25 to +60 °C
Inner lining	Closed-cell melamine resin foam
Recommended maximum air volume	133.3l/s (480 m³/h) at normal ventilation level
Air tightness class to EN 1507:2006	C
Air tightness class to EN 12237:2003	C
Fire rating to ISO13501	C

## Example Connections

Combination Options / Individual Components	ComfoAir Q600 right handed with mounting set, 2 x attenuators and 2 x 12 port ø 90mm mounting plates					
	Stand alone attenuator with 2 x ø 200mm end plates	Stand alone manifold with 1 x ø 200mm end plate and 12 x ø 90mm mounting plate	Stand alone filter housing with 2 x ø 200mm	Stand alone silencer and manifold combined with 1 x ø 200mm end plate and 12 x ø 90mm mounting plate	Stand alone 2 x attenuator with 1 x ø 200mm end plate and 12 x ø 90mm mounting plate	
<b>Attenuator</b>  Article Number: 990 323 505	2 x Zehnder ComfoWell attenuator, CW-S 625	1 x Zehnder ComfoWell attenuator, CW-S 625	—	—	1 x Zehnder ComfoWell attenuator, CW-S 625	2 x Zehnder ComfoWell attenuator, CW-S 625
<b>Manifold Box</b>  Article Number: 990 323 630	—	—	1 x Zehnder ComfoWell manifold box, CW-D 625	—	—	—
<b>Filter Housing</b>  Article Number: 990 323 555	—	—	—	1 x Zehnder ComfoWell filter housing, CW-F 625	—	—
<b>Mounting Plate -ø90</b>  Article Number: 990 323 632	2 x Zehnder ComfoWell mounting plate, CW-M 625, 12 x 90mm connections	—	1 x Zehnder ComfoWell mounting plate, CW-M 625, 12 x 90mm connections	—	1 x Zehnder ComfoWell mounting plate, CW-M 625, 12 x 90mm connections	1 x Zehnder ComfoWell mounting plate, CW-M 625, 12 x 90mm connections
<b>End Plate - ø 200</b>  Article Number: 990 323 639	—	2 x Zehnder ComfoWell end plate, CW-P 625, ø 200mm	1 x Zehnder ComfoWell end plate, CW-P 625, ø 200mm	2 x Zehnder ComfoWell end plate, CW-P 625, ø 200mm	1 x Zehnder ComfoWell end plate, CW-P 625, ø 200mm	1 x Zehnder ComfoWell end plate, CW-P 625, ø 200mm
<b>Mounting Set</b>  Article Number: 990 323 642	1 x Zehnder ComfoWell mounting set, CW-K 625, for Zehnder ComfoAir Q450/600	—	—	—	—	—
<b>Filter</b>  Article Number: 990 323 654	—	—	—	1 x Filter for ComfoWell 625, CW-F9 625, ISO ePM1 >90% (F9), 1 Piece	—	—

## Dimensions

### Zehnder ComfoWell attenuator, CW-S 625

Article number: 990 323 505

#### Description

##### Attenuator:

Zehnder ComfoWell attenuator CW-S 625. 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.

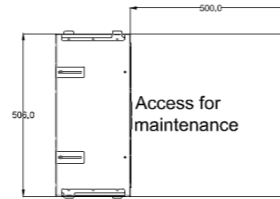
For cleaning purposes the sound absorbing element can be removed. Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

#### Dimensions

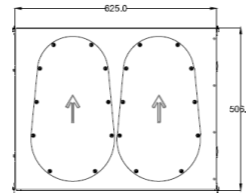
Height	506mm
Width	625mm
Depth	233.8mm
Weight	8 kg



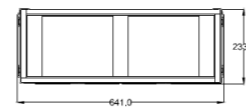
Side view



Front view



Top View



### Zehnder ComfoWell manifold box CW-D 625

Article number: 990 323 630

#### Description

##### Manifold Box:

Zehnder ComfoWell manifold box CW-D 625. Rectangular compact design with closed pore internal lining. Suitable for use with the mounting plate for ComfoTube 75mm x 12 connections, 90mm x 12 connections or a combination of 90mm x 6 and 75mm x 6 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.

#### Dimensions

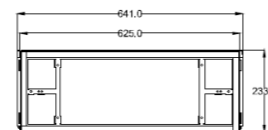
Height	233mm
Width	641mm
Depth	259 mm
Weight	6.5 kg



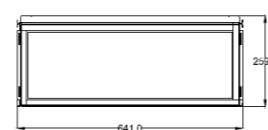
Side view



Front view



Top View



## Dimensions

### Zehnder ComfoWell filter housing CW-F 625

Article number: 990 323 555

#### Description

##### Filter Housing:

Zehnder ComfoWell filter housing CW-F 625. Rectangular compact design for use with a fine pollen filter graded ISO ePM1 >80% (F7), a fine dust filter graded ISO ePM1 >90% (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. The filter housing can be used individually or in combination with all ComfoWell components. The airtight connection between components is via a clamping strip.

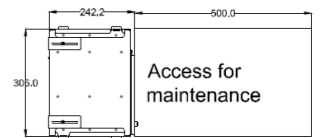
Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

#### Dimensions

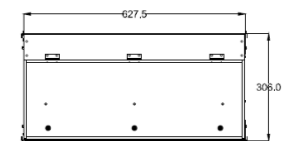
Height	306 mm
Width	627.5 mm
Depth	242.2 mm
Weight	1.68 kg



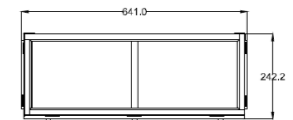
Side view



Front view



Top View



### Zehnder ComfoWell mounting plate CW-M 625

Article number: 990 323 631

#### Description

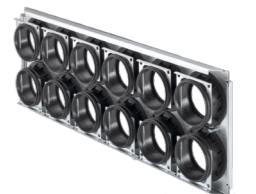
##### Mounting Plate:

Zehnder ComfoWell mounting plate CW-M 625-12 x 75. Manifold mounting plate for connection of 12x ComfoTube 75mm semi-rigid ducting.

The mounting plate includes a protective film and the necessary mounting accessories.

#### Dimensions

Height	45mm
Width	641mm
Depth	230mm
Weight	<2.2 kg



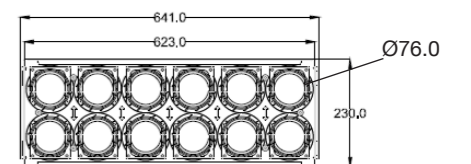
Side view



Front view



Top View



## Dimensions

### Zehnder ComfoWell mounting plate CW-M 625

Article number: 990 323 632

#### Description

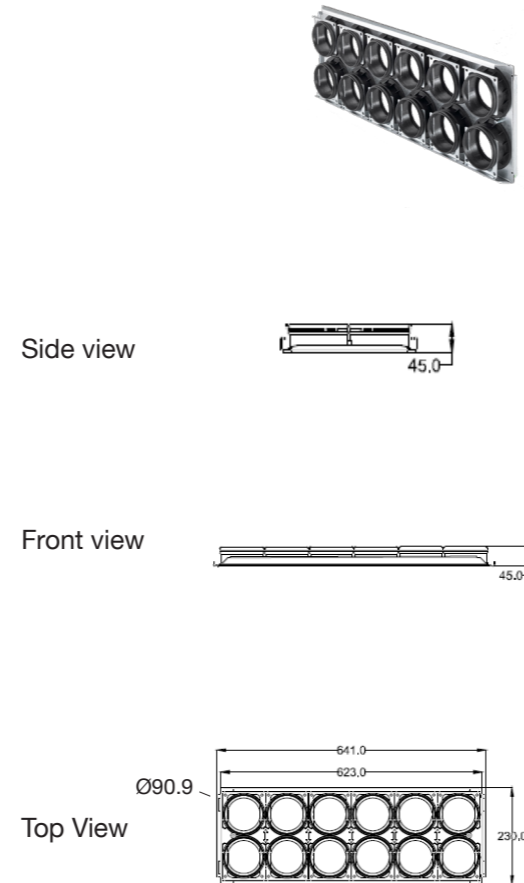
##### Mounting Plate:

Zehnder ComfoWell mounting plate CW-M 625-12 x 90. Manifold mounting plate for connection of 12 x ComfoTube 90mm semi-rigid ducting.

The mounting plate includes a protective film and the necessary mounting accessories.

#### Dimensions

Height	45mm
Width	641mm
Depth	230mm
Weight	<2.2 kg



## Dimensions

### Zehnder ComfoWell end plate CW-P 625 -Ø 150

Article number: 990 323 636

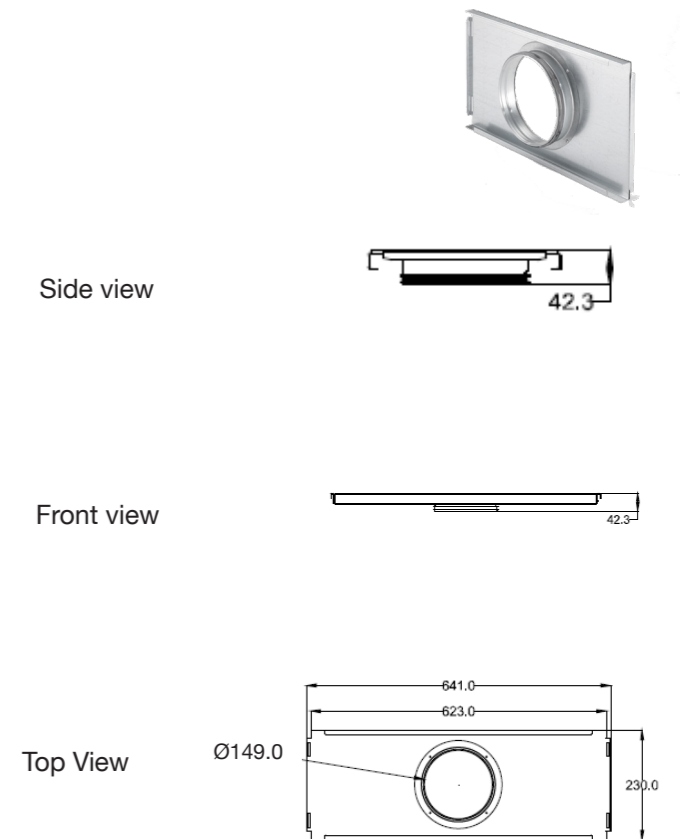
#### Description

##### End Plate:

Zehnder ComfoWell end plate CW-P 625 - DN150 (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.

#### Dimensions

Height	42.3mm
Width	641mm
Depth	230mm
Diameter	150mm



### Zehnder ComfoWell end plate CW-P 625 -Ø 160mm

Article number: 990 323 637

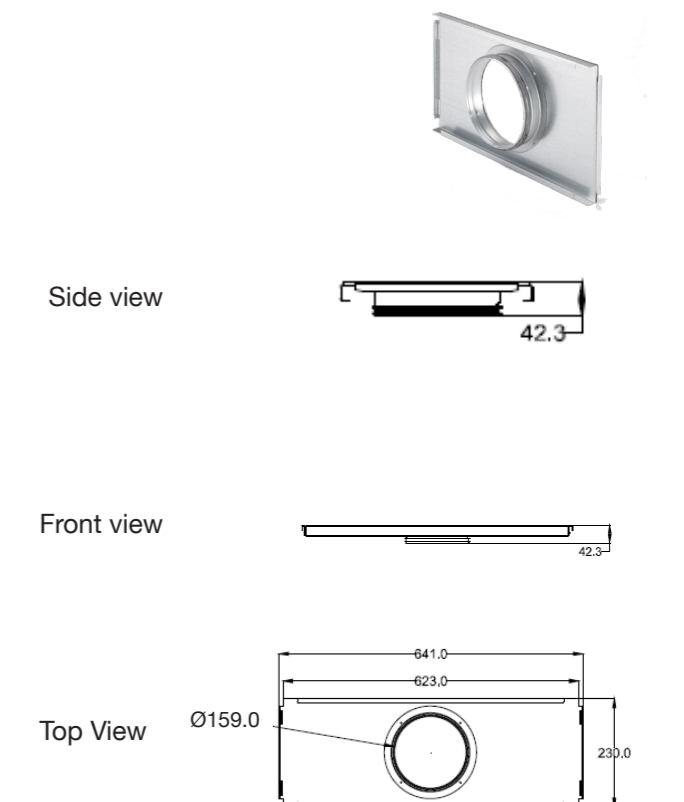
#### Description

##### End Plate:

Zehnder ComfoWell end plate CW-P 625 - 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.

#### Dimensions

Height	42.3mm
Width	641mm
Depth	230mm
Diameter	160mm





## Dimensions

### Zehnder ComfoWell end plate CW-P 625 -ø 180mm

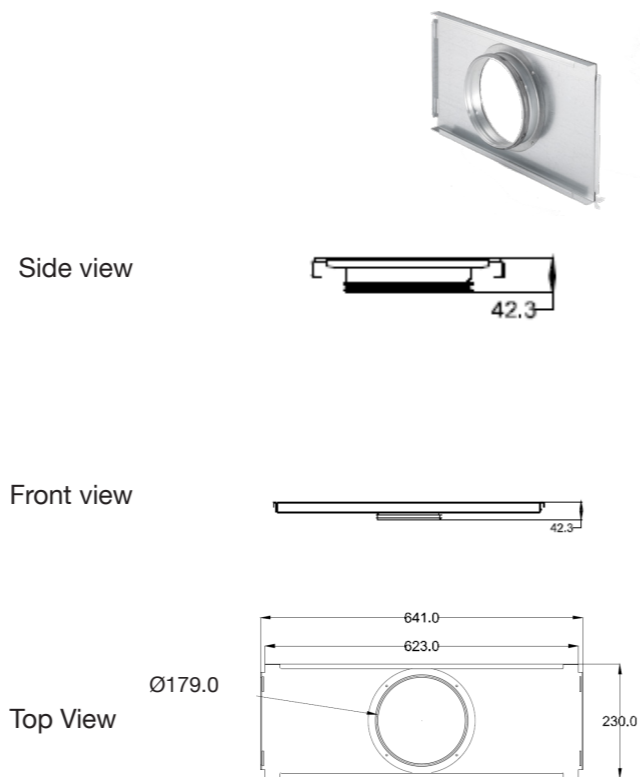
Article number: 990 323 638

#### Description

**End Plate:**  
Zehnder ComfoWell end plate CW-P 625 - DN180 (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.

#### Dimensions

Height	42.3mm
Width	641mm
Depth	230mm
Diameter	180mm



### Zehnder ComfoWell end plate CW-P 625 -ø 200mm

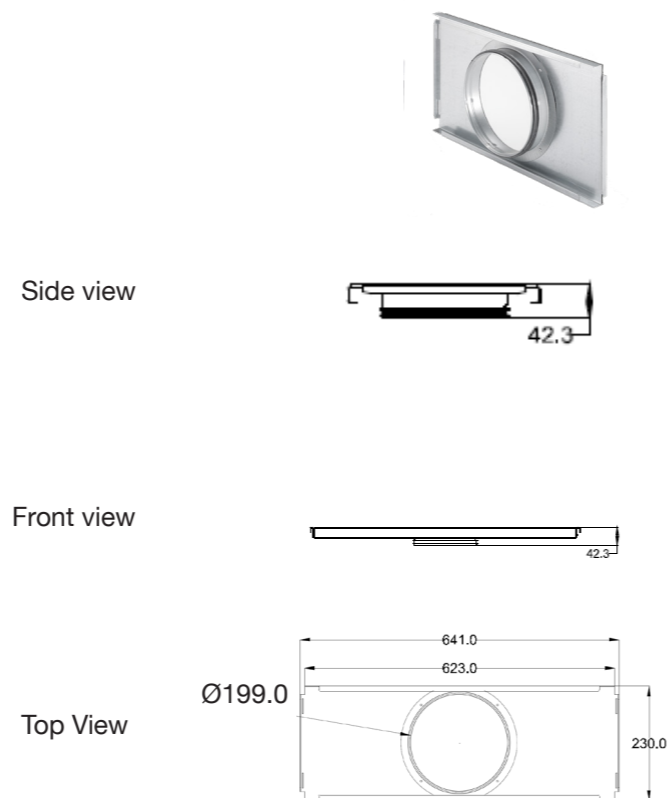
Article number: 990 323 639

#### Description

**End Plate:**  
Zehnder ComfoWell end plate CW-P 625 - DN200 (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.

#### Dimensions

Height	42.3mm
Width	641mm
Depth	230mm
Diameter	200mm



## Dimensions

### Zehnder ComfoWell spacer frame, CW-DF 625

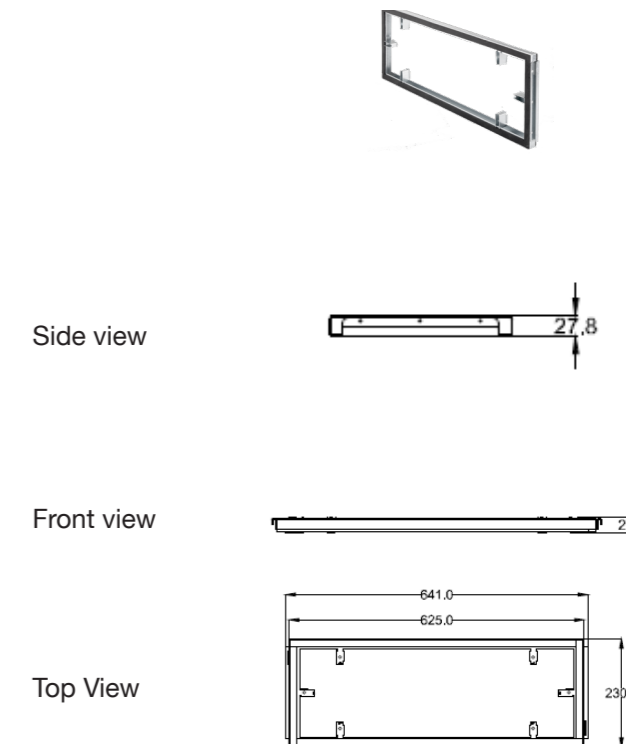
Article number: 990 323 634

#### Description

Zehnder ComfoWell spacer frame CW-DF625. 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.

#### Dimensions

Height	27.8mm
Width	641mm
Depth	230mm
Weight	1.36 kg



### Zehnder ComfoWell mounting set, CW-K 625, for Zehnder ComfoAir 450/600

Article number: 990 323 642

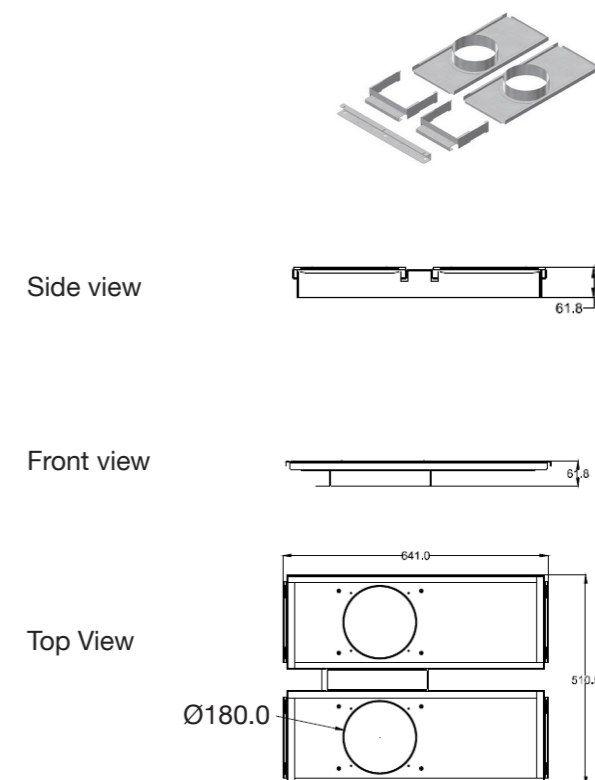
#### Description

##### Mounting set:

A special mounting set is available for the Zehnder ComfoWell 625 for direct mounting to the ComfoAir Q450/600 ventilation units. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

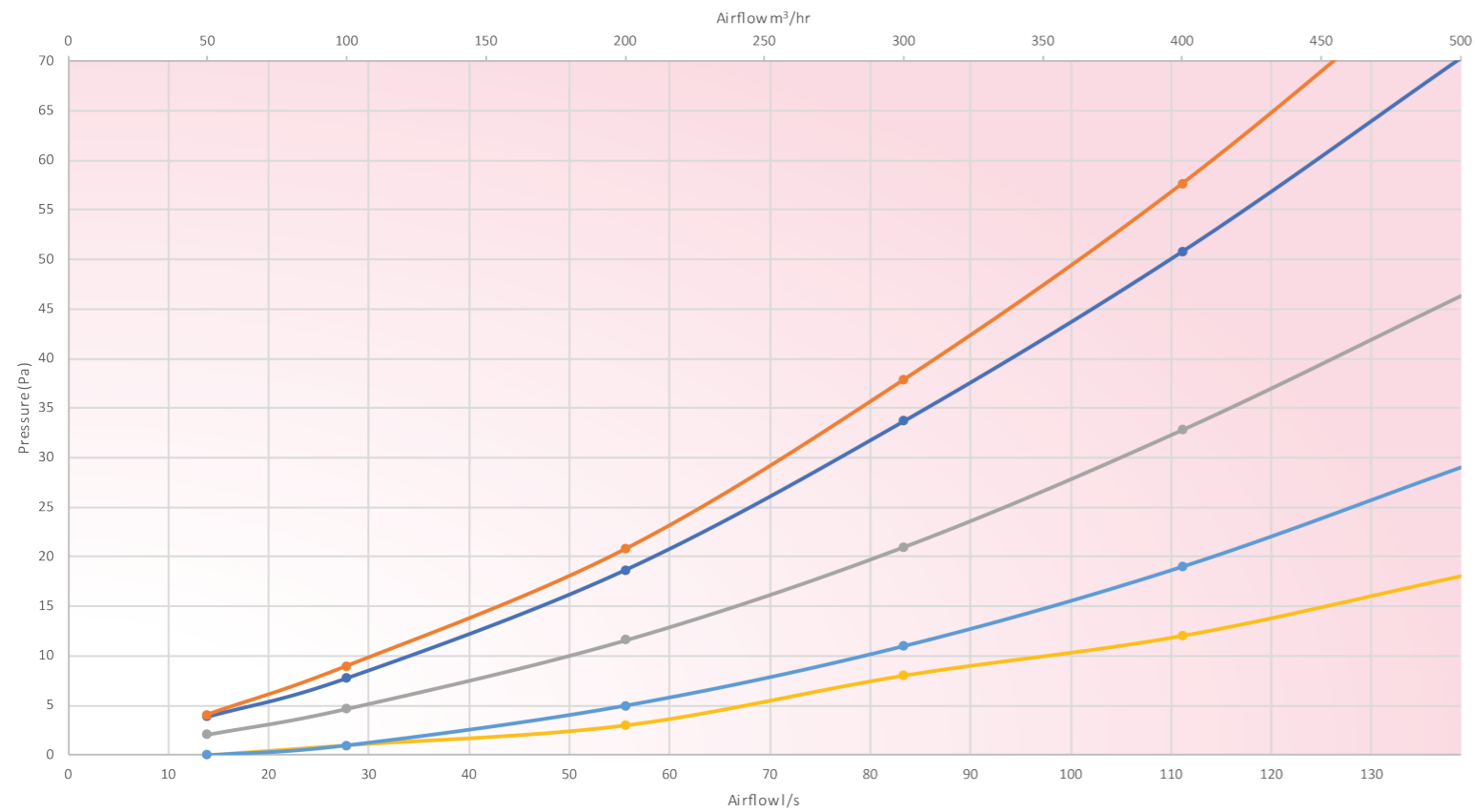
#### Dimensions

Height	61.8mm
Width	641mm
Depth	510.5mm
Weight	5.17 kg



## Pressure Curve

### Comfowell 625



- 1 x Attenuator (CW-S 625) with 2 x 180mm end plates (CW-P 625) —
- 2 x Attenuator (CW-S 625) stacked with 2 x 180mm end plates (CW-P 625) —
- 1 x Filter housing (CW-F 625) with 2 x 180mm end plates (CW-P 625) and filter (CW-F7 625) —
- 1 x Filter housing (CW-F 625) with 2 x 180mm end plates (CW-P 625) and filter (CW-AC 625) —
- 1 x Filter housing (CW-F 625) with 2 x 180mm end plates (CW-P 625) and filter (CW-F9 625) —

## Sound Data

### Comfowell 625

Combination	Octave Band (Hz) Insertion Loss, dB							
	63	125	250	500	1000	2000	4000	8000
1 x Attenuator (CW-S 625) with 2 x 180mm end plates (CW-P 625)	3,0	8,9	13,7	18,7	12,0	18,6	14,6	12,9
2 x Attenuator (CW-S 625) stacked with 2 x 180mm end plates (CW-P 625)	9,2	17,0	23,4	23,8	21,0	34,2	26,4	22,6

## For use with

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



**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**

**CLICK HERE**

## 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.

**TO VISIT OUR DOWNLOAD PAGE**

**CLICK HERE**

## 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 rating according to EN ISO13501.

It shall be of modular construction with options to combine attenuators, manifold box, filter housing with ISO ePM1 >80% (F7), ISO ePM1 >90% (F9) or active carbon filters and end plates ranging from ø 125mm to ø 200mm.

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.