Zehnder ComfoWell 420

Modular manifold for use with semi-rigid ductwork

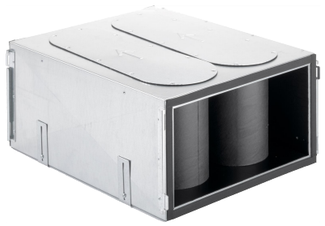
Product data sheet

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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 420 mm 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 RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork.
Noise reduction can be improved by combining two attenuators together. Filters are available in ISO ePM1 (F9) grade in addition to an odour neutralising active carbon filter.





Key Features

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

Article Numbers

Description	Product Code
Attenuator	
Zehnder ComfoWell attenuator, CW-S 420	990 323 504
Manifold	
Zehnder ComfoWell manifold box, CW-D 420	990 323 620
Filter Housing	
Zehnder ComfoWell filter housing, CW-F 420	990 323 554
Mounting Plates	
Zehnder ComfoWell mounting plate, CW-M 420, 8 x 75 mm connections	990 323 621
Zehnder ComfoWell mounting plate, CW-M 420, 8 x 90 mm connections	990 323 622
Insulated Mounting Plates	
Zehnder ComfoWell Therm insulated mounting plate, CW-M 420, 8 x 90mm connections	990 430 872
End Plates	
Zehnder ComfoWell end plate, CW-P 420, ø 125 mm	990 323 625
Zehnder ComfoWell end plate, CW-P 420, ø 160 mm	990 323 627
Zehnder ComfoWell end plate, CW-P 420, ø 180 mm	990 323 628
Zehnder ComfoWell end plate, CW-P 420, ø 200 mm	990 323 629
Insulated End Plates	
Zehnder ComfoWell Therm insulated end plate, CW-P 420, ø 160mm	990 430 862
Zehnder ComfoWell Therm insulated end plate, CW-P 420, ø 200mm	990 430 870
Spacer Frame	
Zehnder ComfoWell spacer frame, CW-DF 420	990 323 624
Mounting Set	
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
Zehnder ComfoWell mounting set, CW-K 420, for Zehnder ComfoAir Flex 250/350	990 323 712

ComfoWell 420

Article Numbers

Description	Product Code
Filters	
Filter for ComfoWell 420, CW-F9 420, ISO ePM1 (F9), 1 Piece	990 323 651
Filter for ComfoWell 420, CW-AC 420, active carbon filter, 1 Piece	990 323 652

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
Attenuator 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
Manifold Box Article Number: 990 323 620	—	—	1 x Zehnder ComfoWell manifold box, CW-D 420	—	—	—
Filter Housing Article Number: 990 323 554	—	—	—	1 x Zehnder ComfoWell filter housing, CW-F 420	—	—
Mounting Plate -ø75 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
End Plate - ø 160 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
Mounting Set Article Number: 990 323 648	1 x Zehnder ComfoWell mounting set, CW-K 420, for Zehnder ComfoAir Q350	—	—	—	—	—
Filter Article Number: 990 323 604	—	—	—	1 x Filter for ComfoWell 420, CW-F9 420, ISO ePM1 >90% (F9), 1 Piece	—	—

Technical Specification

Housing	Galvanised sheet steel
Inner lining	Closed-cell melamine resin foam
Mounting Plates	High-density polyethylene (HDPE)
Operating temperature range	-25 to +60°C
Recommended maximum air volume	88.8 l/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 EN 13501-1	C

Sound Data

Combination	Octave Band (Hz) Insertion Loss, dB							
	63	125	250	500	1000	2000	4000	8000
1 x Attenuator (CW-S 420) with 2 x 160 mm end plates (CW-P 420)		5.7	8.3	12.9	12.2	14	11.2	11.6
2 x Attenuator (CW-S 420) stacked with 2 x 160 mm end plates (CW-P 420)		10	16.8	23.9	17.6	28.1	21.2	20.8
1 x Attenuator (CW-S 420) with 1 x 160 mm end plates (CW-P 420) and 1 x 75 mm mounting plate (CW-M 420)		7.1	14.8	26.7	24.8	24.6	24.5	21.7
1 x Attenuator (CW-S 420) with 1 x 160 mm end plates (CW-P 420) and 1 x 90 mm mounting plate (CW-M 420)		17.4	23.6	25.5	34.8	43.4	46.7	43.5
1 x Attenuator (CW-S 420) with 1 x 200 mm end plates (CW-P 420) and 1 x 90 mm mounting plate (CW-M 420)		16.3	23.8	25.4	34.1	43.9	45.9	43.3

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

ComfoWell 420

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.

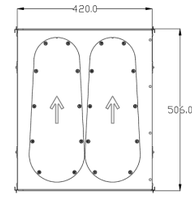
Technical Specification

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

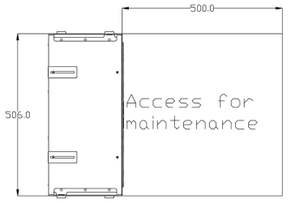


Dimensions

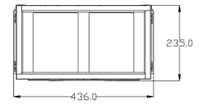
Front View



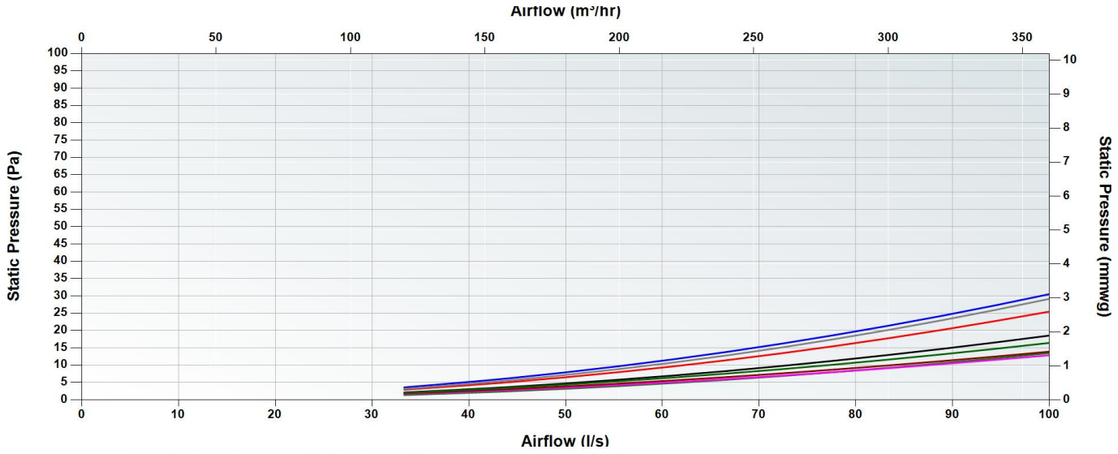
Side View



Top View



Pressure Curve



Zehnder ComfoWell manifold box CW-D 420



Article number: 990 323 620

Description

Manifold Box:

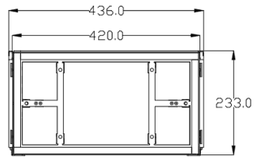
Zehnder ComfoWell manifold box CW-D 420. Rectangular compact design with closed pore internal lining. Suitable for use with the mounting plate for 8 x ComfoTube 75 mm connections or 8 x 90 mm connections. The mounting plate can be mounted on the top or side of the manifold box. The airtight connection between components is via a clamping strip. For cleaning purposes the manifold box side plate can be removed for easy access. Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

Technical Specification

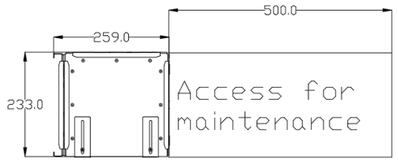
Height	233 mm
Width	436 mm
Depth	259 mm
Weight	4.7 kg

Dimensions

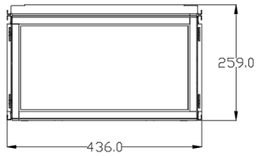
Front View



Side View



Top View



Zehnder ComfoWell filter housing CW-F 420



Article number: 990 323 554

Description

Filter Housing:

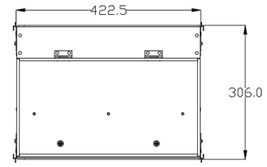
Zehnder ComfoWell filter housing CW-F 420. Rectangular compact design for use with a fine dust filter graded ISO ePM1 (F9) or an active carbon filter to neutralise odours in the supply air duct run. The filter elements are not included with the filter housing and need to be purchased separately, with only 1 filter per housing possible. The filter housing can be used individually or in combination with all ComfoWell components. The airtight connection between components is via a clamping strip. Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

Technical Specification

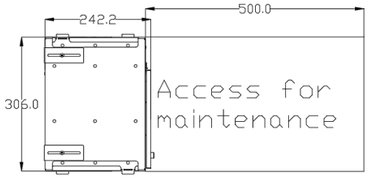
Height	306 mm
Width	436 mm
Depth	242.2 mm
Weight Housing	5.85 kg
CW-F9	0.8 kg
CW-AC	1.32 kg

Dimensions

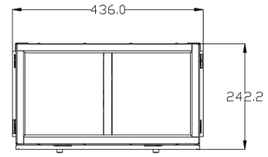
Front View



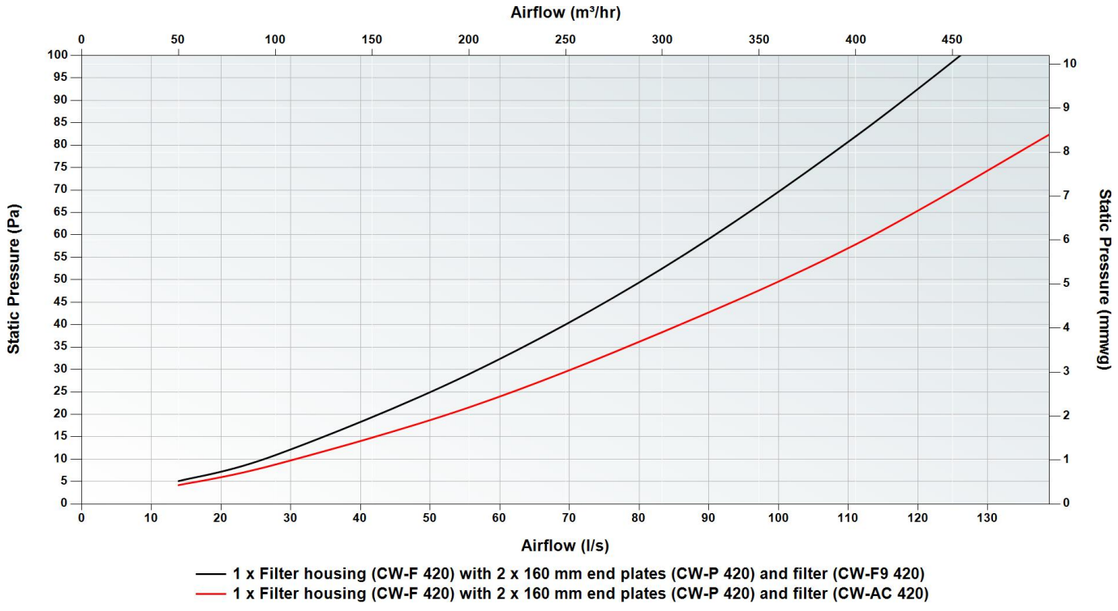
Side View



Top View



Pressure Curve





Zehnder ComfoWell mounting plate CW-M 420

Article number: 990 323 621 / 990 323 622

Description

Mounting Plate:

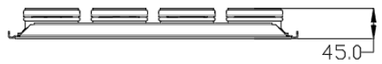
Zehnder ComfoWell mounting plate CW-M 420-8 x 75 or 90. Manifold mounting plate for connection of 8 x ComfoTube 75 mm or 90 mm semi-rigid ducting. The mounting plate includes a protective film and the necessary mounting accessories, including RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork.

Technical Specification

Height	56.7 mm / 61.3 mm
Width	436 mm
Depth	230 mm
Weight	<1.3 kg

Dimensions

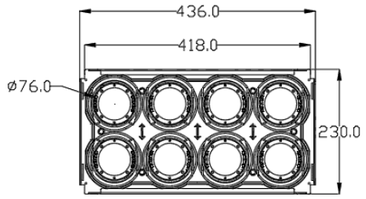
990 323 621 Front View



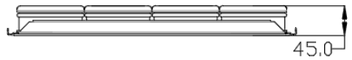
990 323 621 Side View



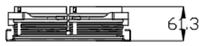
990 323 621 Top View



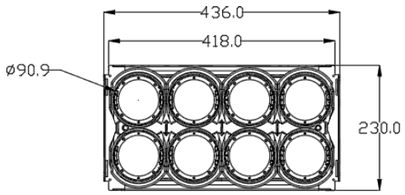
990 323 622 Front View



990 323 622 Side View



990 323 622 Top View





Zehnder ComfoWell Therm mounting plate CW-M 420

Article number: 990 430 872

Description

Insulated Mounting Plate:

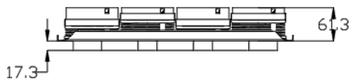
Zehnder ComfoWell Therm insulated mounting plate CW-M 420-8 x 90. Insulated manifold mounting plate for connection of 8 x ComfoTube Therm 90 mm insulated semi-rigid ducting. The mounting plate includes a protective film and the necessary mounting accessories, including RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork. The ComfoWell Therm insulated mounting plate is ideal for maintaining insulation integrity when providing tempered air to the ComfoTube Therm insulated semi-rigid ductwork.

Technical Specification

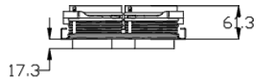
Thermal conductivity at 10°C	0.035 W/mK
Insulation thickness	20 mm
Height	61.3 mm
Width	436 mm
Depth	230 mm
Weight	<1.26 kg

Dimensions

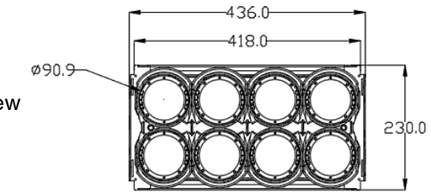
Front View



Side View



Top View



Zehnder ComfoWell end plate CW-P 420 - ø 125 / 160 / 180 / 200 mm

Article number: 990 323 625 / 990 323 627 / 990 323 628 / 990 323 629



Description

End Plate:

Zehnder ComfoWell end plate CW-P 420 - DN125 / DN160 / DN180 / 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.

Technical Specification

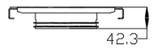
Diameter	125 mm / 160 mm / 180 mm / 200 mm
Height	42.3 mm
Width	436 mm
Depth	230 mm
Weight	<1.25 kg

Dimensions

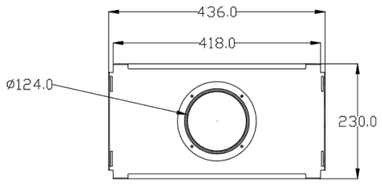
990 323 625 Front View



990 323 625 Side View



990 323 625 Top View



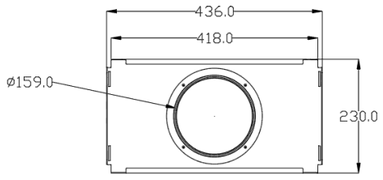
990 323 627 Front View



990 323 627 Side View



990 323 627 Top View



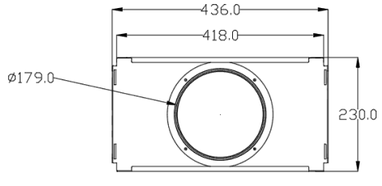
990 323 628 Front View



990 323 628 Side View



990 323 628 Top View



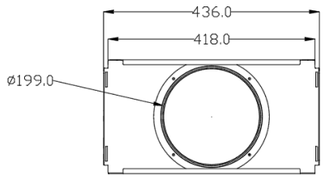
990 323 629 Front View



990 323 629 Side View



990 323 629 Top View



Zehnder ComfoWell Therm end plate CW-P 420 - ø 160 / 200 mm

Article number: 990 430 862 / 990 430 870



Description

Insulated End Plate:

Zehnder ComfoWell Therm insulated end plate CW-P 420 - DN160 / DN200 (with centre connection) for the connection to the ComfoWell attenuator box to the matching ducting size required. The end plate includes the necessary mounting accessories. The ComfoWell Therm insulated end plate is ideal for maintaining insulation integrity when supplying tempered air into the ComfoWell attenuator.

Technical Specification

Thermal conductivity at 10°C	0.035 W/mK
Insulation thickness	20 mm
Diameter	160 mm / 200 mm
Height	39.3 mm
Width	436 mm
Depth	230 mm
Weight	<1.15 kg

Dimensions

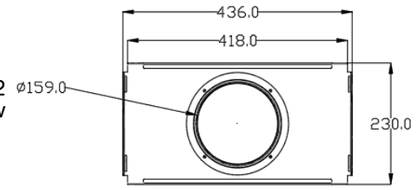
990 430 862 Front View



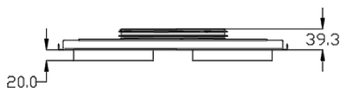
990 430 862 Side View



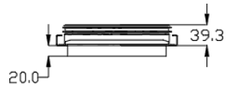
990 430 862 Top View



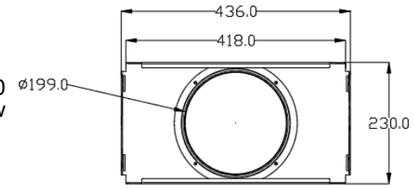
990 430 870 Front View



990 430 870 Side View



990 430 870 Top View



Zehnder ComfoWell spacer frame, CW-DF 420



Article number: 990 323 624

Description

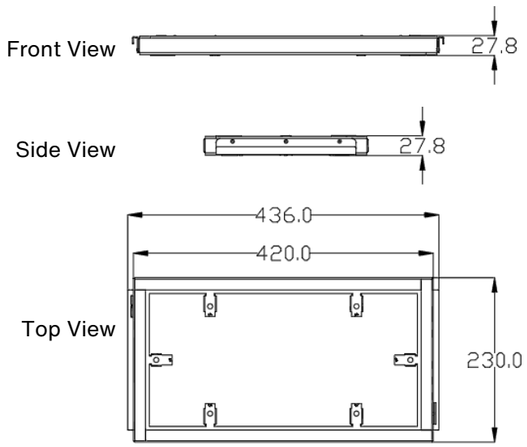
Spacer Frame:

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.

Technical Specification

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

Dimensions



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



Article number: 990 323 648

Description

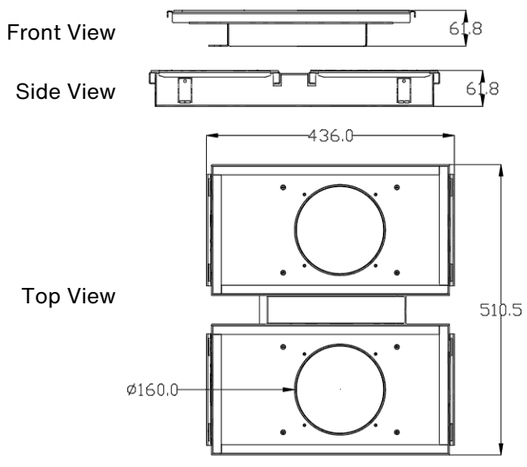
Mounting set:

A range of special mounting sets are available for the Zehnder ComfoWell 420 for direct mounting to the ComfoAir Q350 / ComfoAir Q450 / ComfoAir Q600 ComfoAir Flex 250 / ComfoAir Flex 350 ventilation units. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

Technical Specification

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

Dimensions



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



Article number: 990 323 641

Description

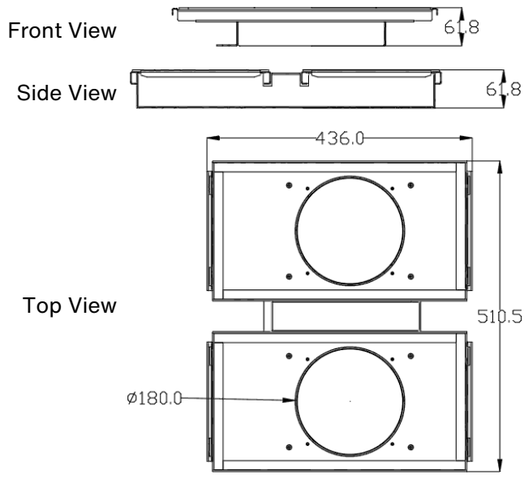
Mounting set:

A range of special mounting sets are available for the Zehnder ComfoWell 420 for direct mounting to the ComfoAir Q350 / ComfoAir Q450 / ComfoAir Q600 ComfoAir Flex 250 / ComfoAir Flex 350 ventilation units. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

Technical Specification

Height	61.8 mm
Width	436 mm
Depth	510.5 mm
Weight	4.98 kg

Dimensions



Zehnder ComfoWell mounting set, CW-K 420, for Zehnder ComfoAir Flex 250/350



Article number: 990 323 712

Description

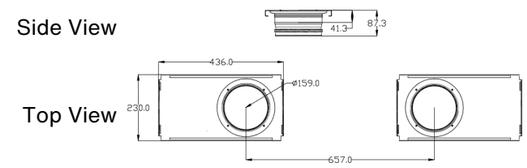
Mounting set:

A range of special mounting sets are available for the Zehnder ComfoWell 420 for direct mounting to the ComfoAir Q350 / ComfoAir Q450 / ComfoAir Q600 ComfoAir Flex 250 / ComfoAir Flex 350 ventilation units. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

Technical Specification

Height	87 mm
Width	436 mm
Depth	230 mm
Weight	2.8 kg

Dimensions



For use with

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

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.

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ComfoWell 420

Our Informational Videos



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

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

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Consultant Specification

Specification

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

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

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

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

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