

Zehnder ComfoWell 520

Modular manifold for use with semi-rigid ductwork

Product data sheet

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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 520 mm 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 air tight 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's required.
- Easy to assemble thanks to its modular and compact design.

Article Numbers

Description	Product Code
Attenuator Zehnder ComfoWell attenuator, CW-S 520	990 323 502
Manifold Zehnder ComfoWell manifold box, CW-D 520	990 323 532
Filter Housing Zehnder ComfoWell filter housing, CW-F 520	990 323 552
Mounting Plates Zehnder ComfoWell mounting plate, CW-M 520, 10 x 75 mm connections	990 323 614
Zehnder ComfoWell mounting plate, CW-M 520, 10 x 90 mm connections	990 323 615
End Plates Zehnder ComfoWell end plate, CW-P 520, ø 160 mm	990 323 564
Zehnder ComfoWell end plate, CW-P 520, ø 200 mm	990 323 514
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-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	Galvanised sheet steel
Inner lining	Closed-cell melamine resin foam
Operating temperature range	-25 to +60°C
Recommended maximum air volume	111.1 l/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 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 520) with 2 x 160 mm end plates (CW-P 520)	8.2	5.1	7.7	14.5	16.7	13.9	10.8	10.6
2 x Attenuator (CW-S 520) stacked with 2 x 160 mm end plates (CW-P 520)	6.4	7.7	12.3	19.7	21.1	27.6	19.6	17.3
1 x Attenuator (CW-S 520) with 1 x 160 mm end plates (CW-P 520) and 1 x 75 mm mounting plate (CW-M 520)	21.8	9.8	14.5	26.1	25.2	23.2	21	18.1

Acoustic performance measured according to [EN ISO 7235 \(pink noise\)](#)

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 200mm end plates	Stand alone manifold with 1 x ø 200mm end plate and 10 x ø 90mm mounting plate	Stand alone filter housing with 2 x ø 200mm end plate	Stand alone silencer and manifold combined with 1 x ø 200mm end plate and 10 x ø 90mm mounting plate	Stand alone 2 x attenuator with 1 x ø 200mm 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 200 Article Number: 990 323 514	—	2 x Zehnder ComfoWell end plate, CW-P 520, ø 200mm	1 x Zehnder ComfoWell end plate, CW-P 520, ø 200mm	2 x Zehnder ComfoWell end plate, CW-P 520, ø 200mm	1 x Zehnder ComfoWell end plate, CW-P 520, ø 200mm	1 x Zehnder ComfoWell end plate, CW-P 520, ø 200mm
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	—	—

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.

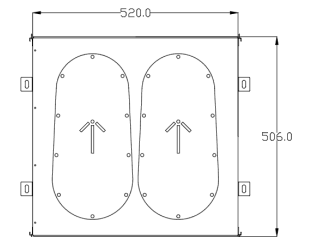
Technical Specification

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

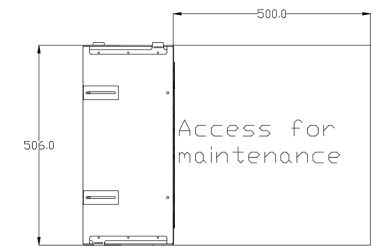


Dimensions

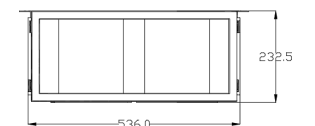
Front View



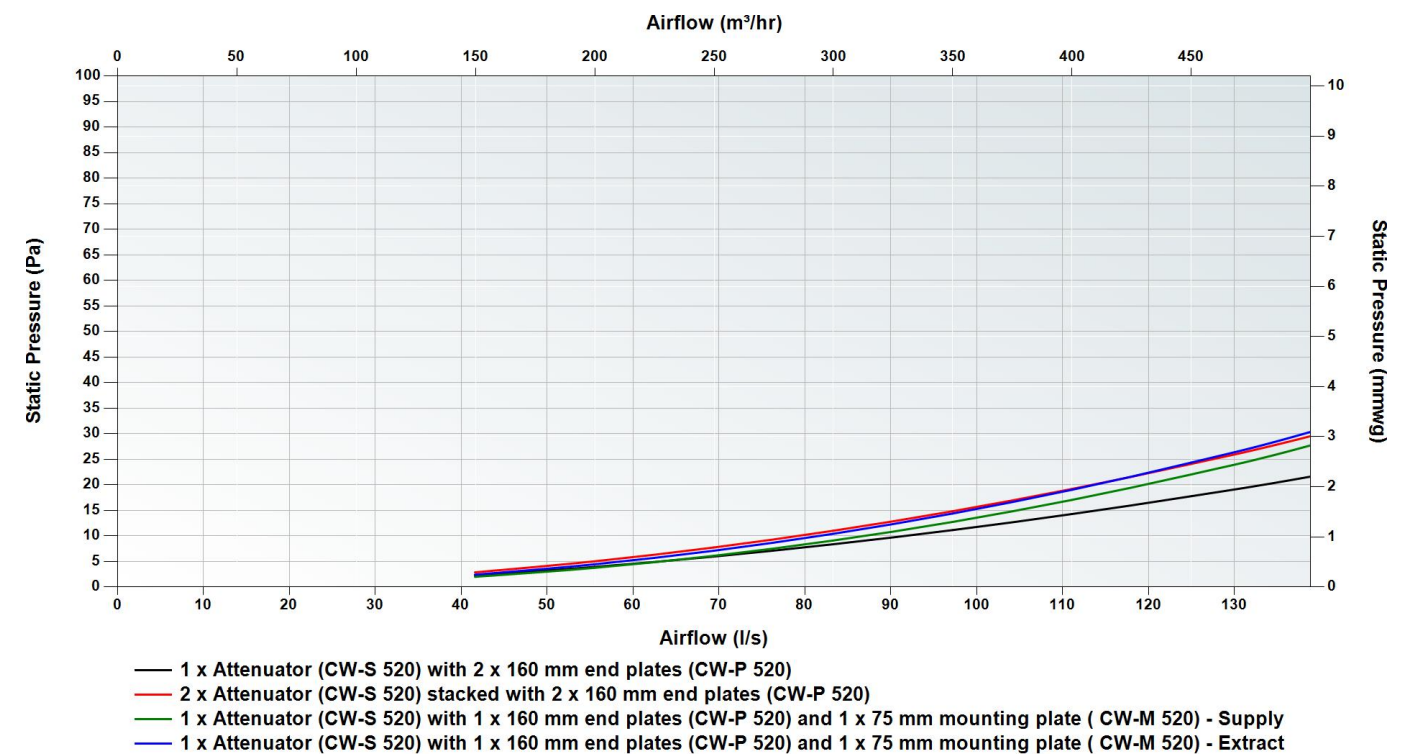
Side View



Top View



Pressure Curve



Zehnder ComfoWell manifold box CW-D 520

Article number: 990 323 532

Description

Manifold Box:

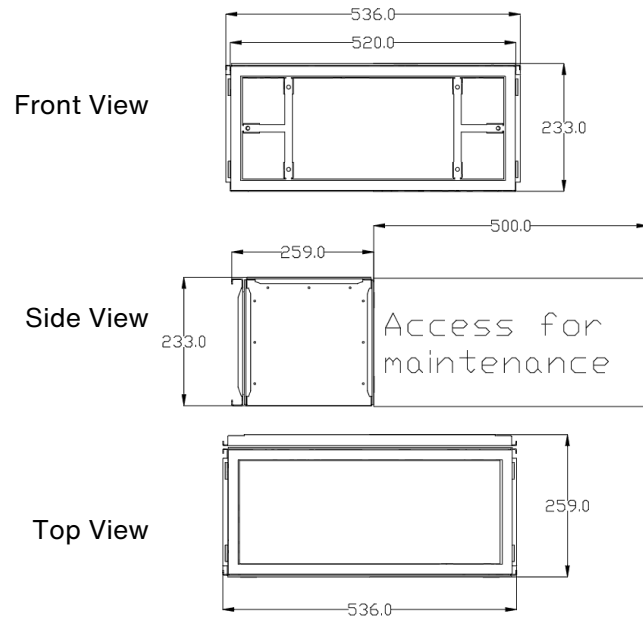
Zehnder ComfoWell manifold box CW-D 520. Rectangular compact design with closed pore internal lining. Suitable for use with the mounting plate for 10 x ComfoTube 75 mm connections or 10 x 90 mm connections. The mounting plate can be mounted on the top or side of the manifold box. The airtight connection 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	536 mm
Depth	259 mm
Weight	5.42 kg



Dimensions



Zehnder ComfoWell filter housing CW-F 520

Article number: 990 323 552

Description

Filter Housing:

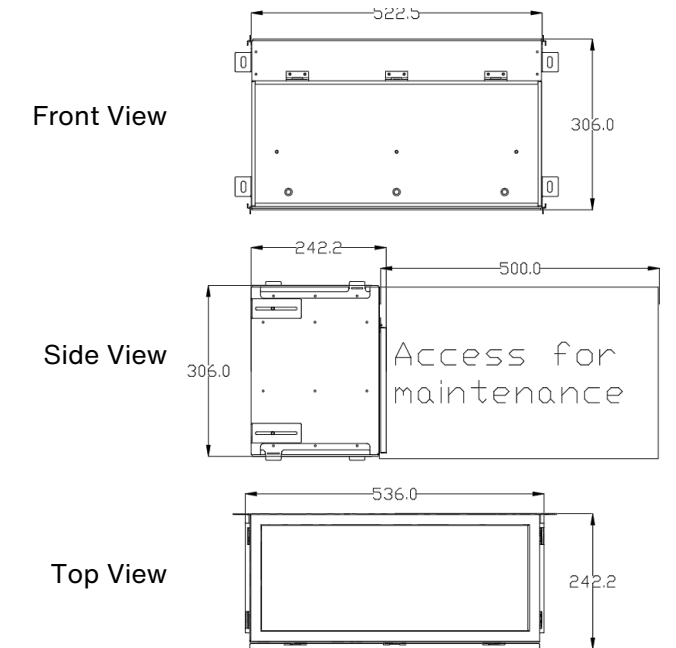
Zehnder ComfoWell filter housing CW-F 520. Rectangular compact design for use with a fine pollen filter graded ISO ePM1 >80% (F7), a fine dust filter graded ISO ePM1 >90% (F9) or an active carbon filter to neutralise odours in the supply air duct run. The filter elements are not included with the filter housing and need to be purchased separately, 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

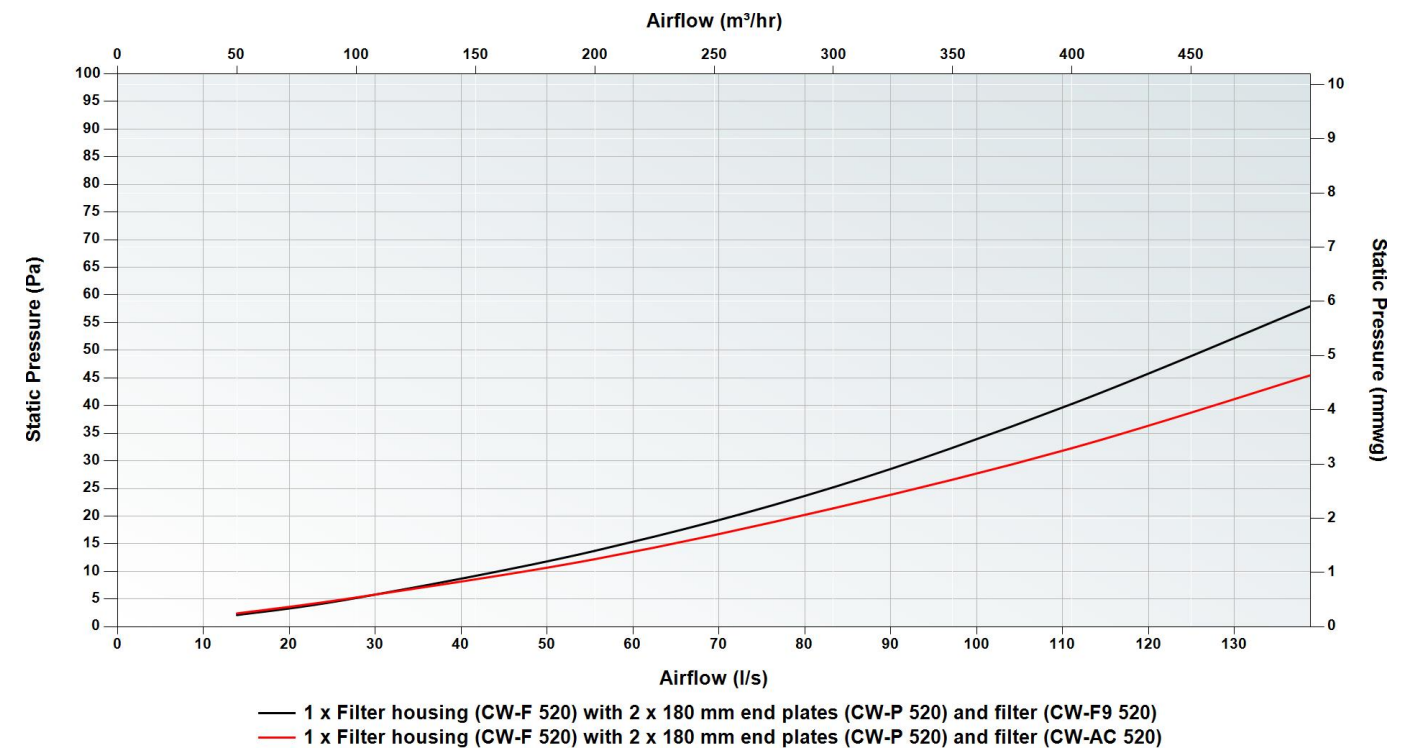
Height	306 mm
Width	536 mm
Depth	242.2 mm
Weight	
Housing	6.66 kg
CW-F7	0.7 kg
CW-F9	0.7 kg
CW-AC	1.2 kg



Dimensions



Pressure Curve



Zehnder ComfoWell mounting plate CW-M 520

Article number: 990 323 614 / 990 323 615

Description

Mounting Plate:

Zehnder ComfoWell mounting plate CW-M 520-10 x 75 or 90. Manifold mounting plate for connection of 10 x ComfoTube 75 mm or 90 mm semi-rigid ducting. The mounting plate includes a protective film and the necessary mounting accessories.

Technical Specification

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



Dimensions

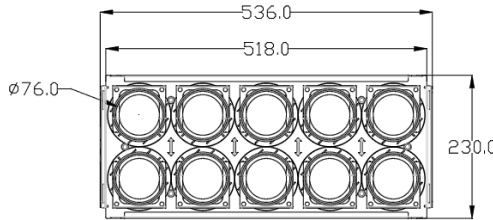
990 323 614
Front View



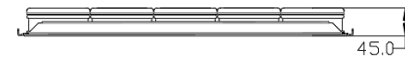
990 323 614
Side View



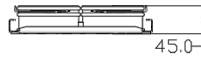
990 323 614
Top View



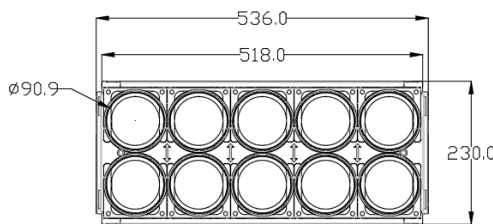
990 323 615
Front View



990 323 615
Side View



990 323 615
Top View



Zehnder ComfoWell end plate CW-P 520 - \varnothing 160 / 200 mm

Article number: 990 323 564 / 990 323 514

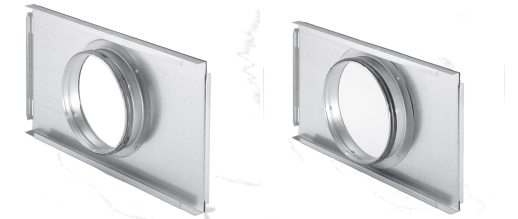
Description

End Plate:

Zehnder ComfoWell end plate CW-P 520 - DN160 / 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	160 mm / 200 mm
Height	42.3 mm
Width	536 mm
Depth	230 mm
Weight	<1.53 kg



Dimensions

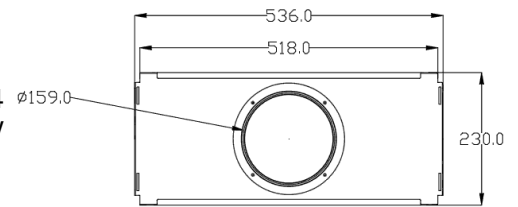
990 323 564
Front View



990 323 564
Side View



990 323 564
Top View



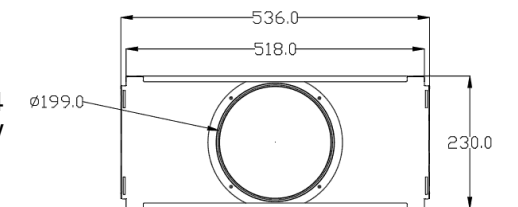
990 323 514
Front View



990 323 514
Side View



990 323 514
Top View



Zehnder ComfoWell spacer frame, CW-DF 520

Article number: 990 323 539

Description

Spacer Frame:

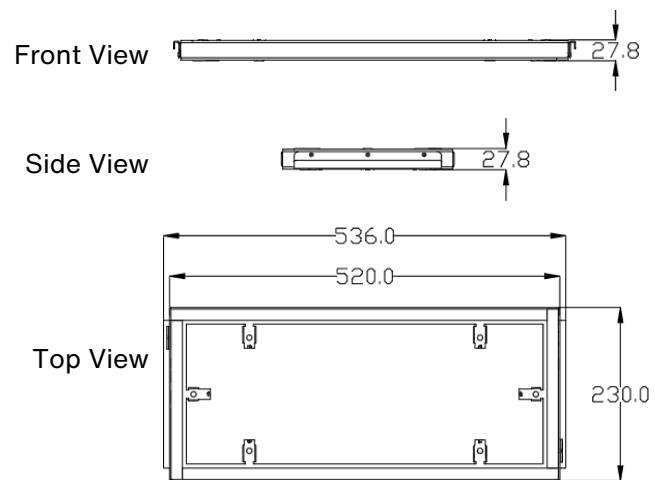
Zehnder ComfoWell spacer frame CW-DF520. Rectangular frame for use in the event of uneven surfaces when connecting components and mounting plate (concreted in place) are at 90 degrees. The spacer frame includes the necessary mounting accessories.

Technical Specification

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



Dimensions



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

Article number: 990 323 649

Description

Mounting set:

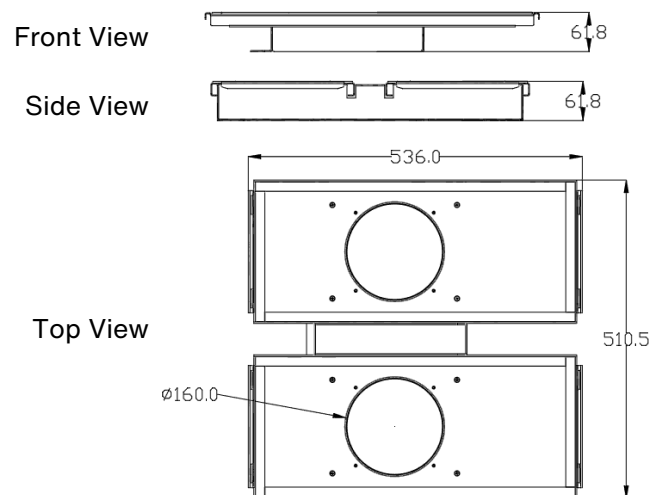
A range of special mounting sets are available for the Zehnder ComfoWell 520 for direct mounting to the ComfoAir 350 / ComfoAir Q350 / ComfoAir Q450 / ComfoAir Q600 ventilation units. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

Technical Specification

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



Dimensions



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

Article number: 990 323 646

Description

Mounting set:

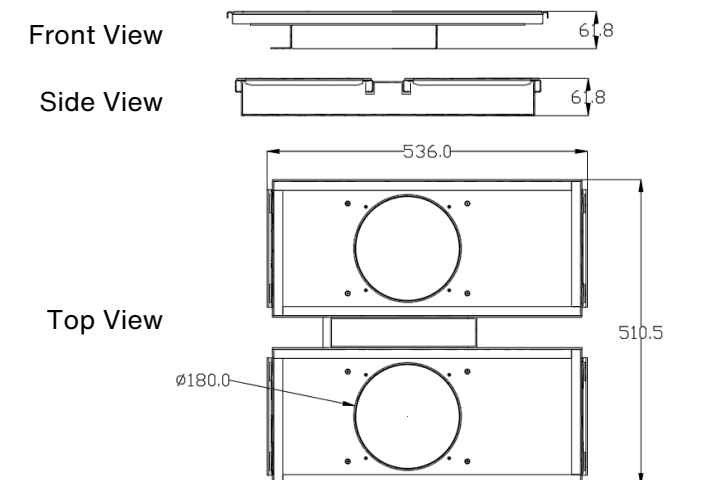
A range of special mounting sets are available for the Zehnder ComfoWell 520 for direct mounting to the ComfoAir 350 / ComfoAir Q350 / ComfoAir Q450 / ComfoAir Q600 ventilation units. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

Technical Specification

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



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Installation Instructions

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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 >80% \(F7\)](#), [ISO ePM1 >90% \(F9\)](#) or active carbon filters and end plates ranging from \varnothing 125 mm to \varnothing 200 mm.

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

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