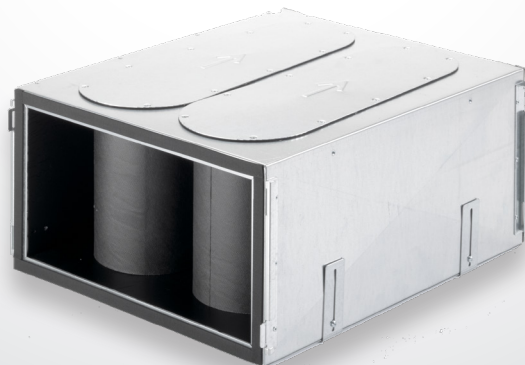zehnder

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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
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 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
End Plates	
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	990 312 627
Zehnder ComfoWell end plate, CW-P 420, ø 180mm	990 312 628
Zehnder ComfoWell end plate, CW-P 420, ø 200mm	990 323 629

Article Numbers

Spacer Frame

Zehnder ComfoWell spacer frame, CW-DF 420	990 323 624

Mounting Set

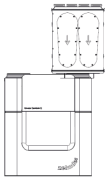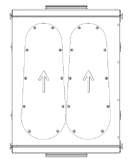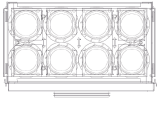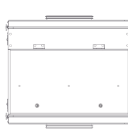|	
Zehnder ComfoWell mounting set, CW-K 420, for Zehnder ComfoAir Q350	990 323 648
Zehnder ComfoWell mounting set, CW-K 420, for Zehnder ComfoAir Q450/600	990 323 641
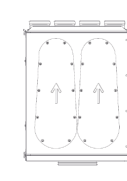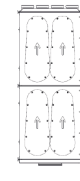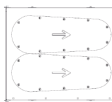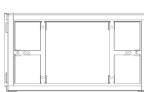
Filters

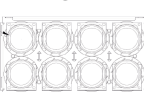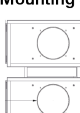|	
Filter for ComfoWell 420, CW-F7 420, ISO ePM1 >80% (F7), 1 Piece	990 323 650
Filter for ComfoWell 420, CW-F9 420, ISO ePM1 >90% (F9), 1 Piece	990 323 651
Filter for ComfoWell 420, CW-AC 420, active carbon filter, 1 Piece	990 323 652

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
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	———	———

Dimensions

Zehnder ComfoWell attenuator, CW-S 420

Article number: 990 323 504
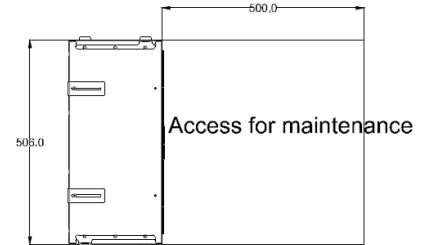
Description

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.
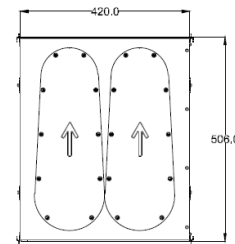
Dimensions

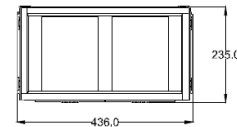| Height	506mm
Width	436mm
Depth	235mm
Weight	6 kg

Side view

Access for maintenance

Front view

Top View

Zehnder ComfoWell manifold box CW-D 420

Article number: 990 323 620

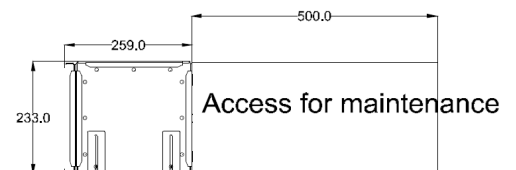### Description

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.
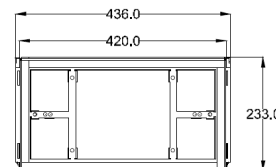
Dimensions

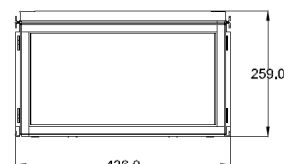| Height	233mm
Width	436mm
Depth	259 mm
Weight	4.7 kg

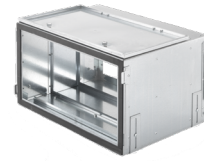Side view

Access for maintenance

Front view

Top View

Dimensions

Zehnder ComfoWell filter housing CW-F 420
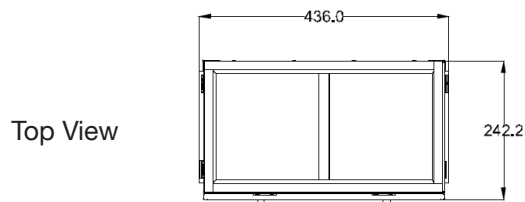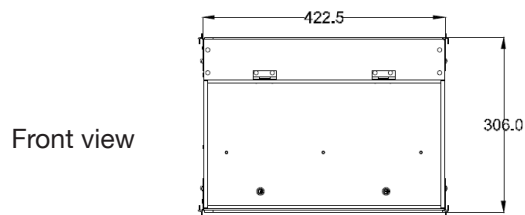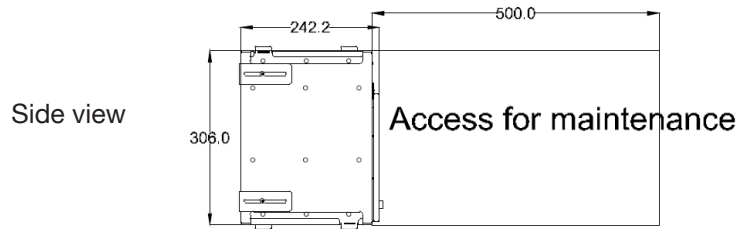
Article number: 990 323 554

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

Side view

Front view

Top View

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

Side view

Front view

Top View

Dimensions

Zehnder ComfoWell mounting plate CW-M 420

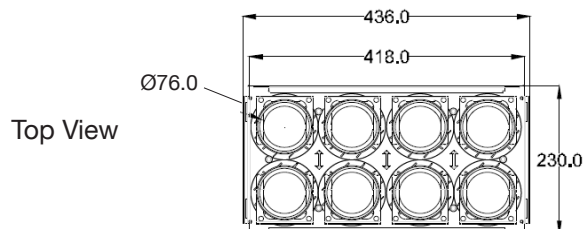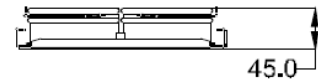Article number: 990 323 622

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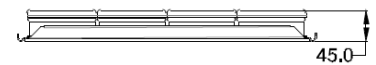
The mounting plate includes a protective film and the necessary mounting accessories.
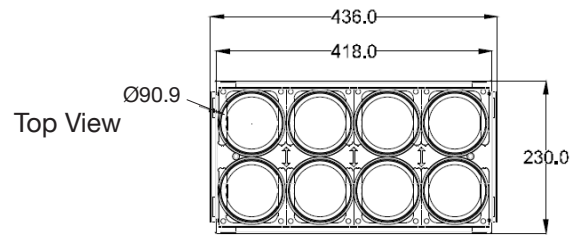
Side view

45.0

Front view

45.0

Dimensions

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

Top View

436.0
418.0
Ø90.9
230.0

Zehnder ComfoWell mounting plate CW-M 420

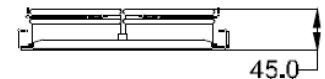Article number: 990 323 623

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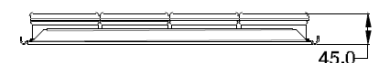The mounting plate includes a protective film and the necessary mounting accessories.
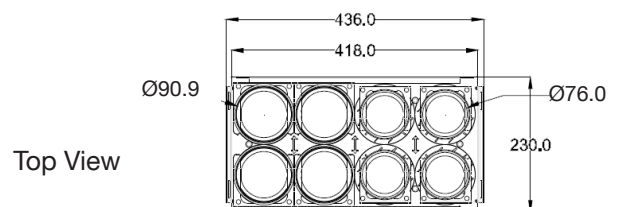
Side view

45.0

Front view

45.0

Dimensions

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

436.0
418.0
Ø90.9
Ø76.0
230.0

Top View

Dimensions

Zehnder ComfoWell end plate CW-P
420 -ø 125

Article number: 990 323 625

Side view

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.

Front view

Dimensions

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

Top View
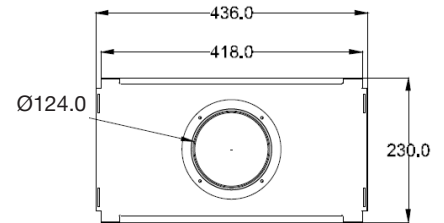
Zehnder ComfoWell end plate CW-P
420 -ø 150mm

Article number: 990 323 626

Side view

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
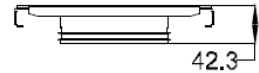to the matching ducting size required. The end plate
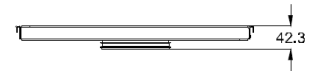includes the necessary mounting accessories.

Front view

Dimensions

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

Top View

Dimensions

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

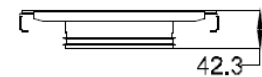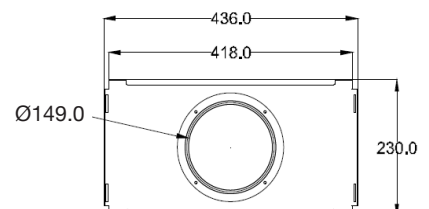Article number: 990 323 627

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

42.3

Front view

42.3

Top View

436.0
418.0
Ø159.0
230.0

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

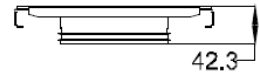Article number: 990 323 628

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

42.3
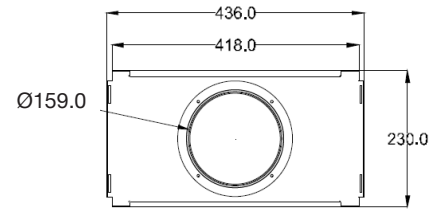
Front view

42.3

Top View

436.0
418.0
Ø180.0
230.0

Dimensions

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

Article number: 990 323 629
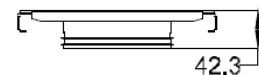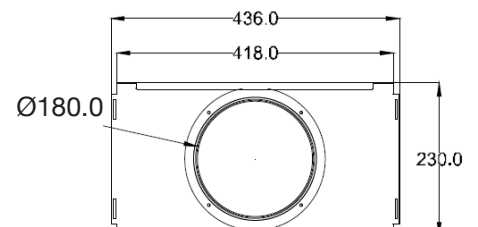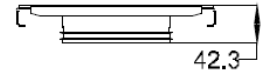
Description

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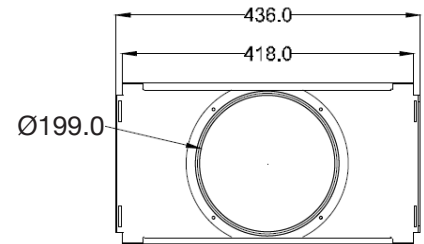
Height	42.3mm
Width	436mm
Depth	230mm
Diameter	200mm

Side view

42.3

Front view

42.3

Top View

436.0
418.0
Ø199.0

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.
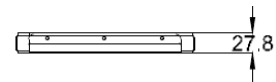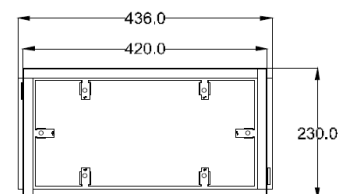
Dimensions

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

Side view

27.8

Front view
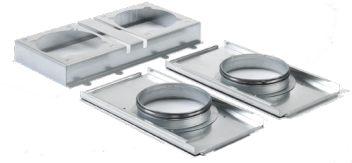
27.8

Top View

436.0
420.0
230.0

Dimensions

Zehnder ComfoWell mounting set, CW-K 420, for Zehnder ComfoAir Q350
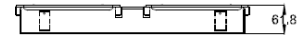
Article number: 990 323 648

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).

Side view

Front view

Dimensions

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

Top View

Ø160.0
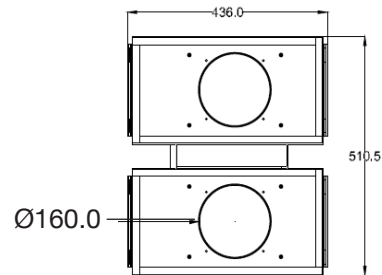
Zehnder ComfoWell mounting set, CW-K 420, for Zehnder ComfoAir Q450/600

Article number: 990 323 641
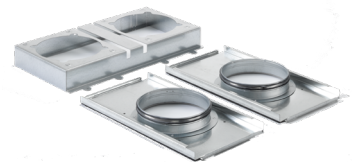
Description

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).
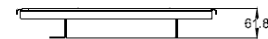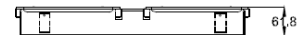
Side view

Front view

Dimensions

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

Top View

Ø180.0
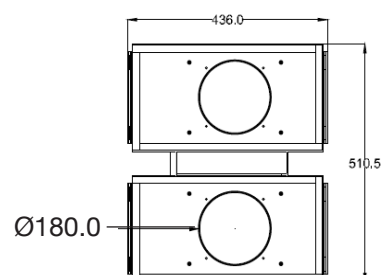
Pressure Curve

Comfowell 420

Legend:

1 x Attenuator (CW-S 420) with 2 x 160mm end plates (CW-P 420) — yellow

2 x Attenuator (CW-S 420) stacked with 2 x 160mm end plates (CW-P 420) — light blue

1 x Filter housing (CW-F 420) with 2 x 160mm end plates (CW-P 420) and filter (CW-F7 420) — dark blue

1 x Filter housing (CW-F 420) with 2 x 160mm end plates (CW-P 420) and filter (CW-AC 420) — grey

1 x Filter housing (CW-F 420) with 2 x 160mm end plates (CW-P 420) and filter (CW-F9 420) — orange

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 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.

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Installation Instructions

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

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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.

Comfowell420_Technical_Specification_2018_V1

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