

# Zehnder ComfoTube 110 mm

**Semi-rigid ductwork**

Product data sheet

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# ComfoTube 110 mm

The Zehnder ComfoTube 110 mm is a high performance semi-rigid ductwork ideal for residential applications using decentralised mechanical extract ventilation (dMEV). The clinside smooth internal lining help to reduce build up of dust and enable the ductwork to be cleaned. The ductwork is fully accredited and listed on the PCDB.

The ductwork can be installed much faster than conventional ductwork with a reduced number of connections helping to reduce any potential air leakage within the system resulting in reduced noise levels and running costs. The O-rings and locking slides also help to prevent the ductwork being disconnected during first fix and maintain an airtight seal. End caps are also available to prevent dust ingress during first fix to maintain a hygienic system.



## Key Features

- Easy and quick to install
- Airtight
- High-quality food-grade plastic (HDPE)
- Fully accredited and listed on the PCDB
- Low pressure losses
- Easy to clean
- Suitable for installation in the building concrete structure
- Crush resistant a ring stiffness of  $>8 \text{ kN/m}^2$
- Corrosion resistant
- Lightweight and easy to handle
- No sealant or tape required
- Suitable for use with the CV2CTA110 and CV2.1CTA110 dMEV

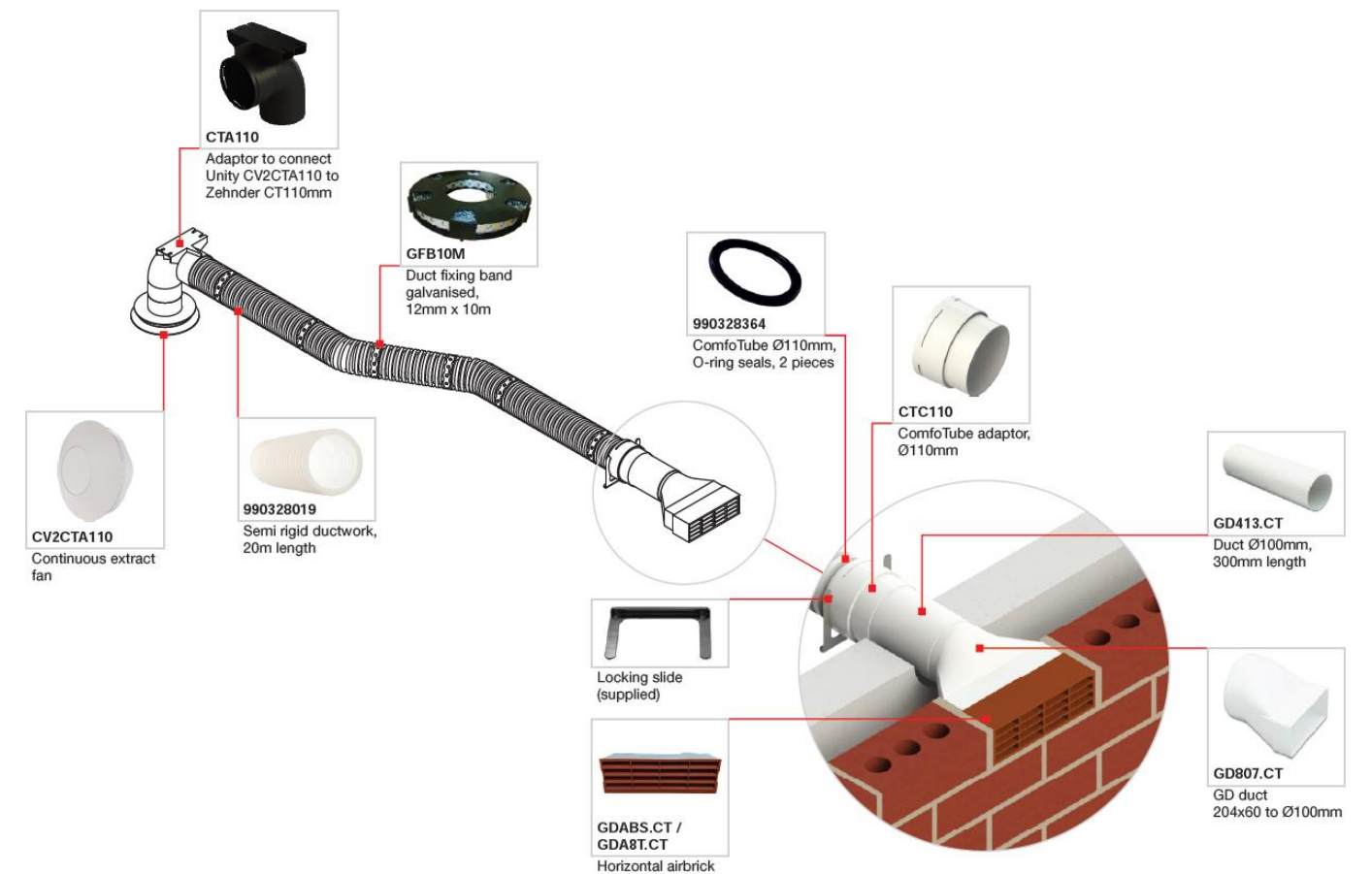
## Article Numbers

Description	Product Code
<b>Ductwork</b>	
<a href="#">Zehnder ComfoTube Ø 110 mm, 50 m roll</a>	990 328 018
<a href="#">Zehnder ComfoTube Ø 110 mm, 20 m roll</a>	990 328 019
<b>Ancillaries</b>	
<a href="#">CTA110 adaptor to connect Unity CV2CTA110 to Zehnder CT110 mm</a>	CTA110
<a href="#">Fire collar ø 100mm for CV2GIP, CV2.1 and CV3, ceiling mounting, 50mm depth</a>	FIRO100.SPV
<a href="#">Connector to fix Zehnder ComfoTube DN110 to GG82W 125 mm Grille</a>	990 328 111
<a href="#">Connector to fix Zehnder ComfoTube DN110 to GD413.CT</a>	CTC110
<a href="#">Zehnder ComfoTube ø 110 mm, locking slides, 2 pieces</a>	990 326 014
<a href="#">Zehnder ComfoTube ø 110 mm, end caps, 2 pieces</a>	990 328 264
<a href="#">Zehnder ComfoTube ø 110 mm O-ring seal, 2 pieces</a>	990 328 364
<a href="#">GD rectangular ducting, GD4 ø 100 mm to GD8 204x60 adaptor</a>	GD807.CT
<a href="#">GD round ducting, GD4 pipe, ø 100 mm x 350 mm</a>	GD413.CT
<a href="#">Duct fixing band, galvanised, 12 mm x 10 m</a>	GFB10M
<a href="#">Fixing worm drive clip, ø 180 mm</a>	FC180
<a href="#">Insulated Flexiduct ø 150 mm, aluminium, 5 m pipe</a>	GFA6.5I
<a href="#">Insulated Flexiduct ø 150 mm, aluminium, 10 m pipe</a>	GFA6.10I

## Article Numbers

Description	Product Code
<b>External terminals</b>	
<a href="#">External terminal, square louvred vent, ø 125 mm connector, brown</a>	GG82B
<a href="#">External terminal, square louvred vent, ø 125 mm connector, white</a>	GG82W
<a href="#">External terminal, horizontal airbrick, GD8 204x60 mm connector, sand</a>	GDA8S.CT
<a href="#">External terminal, horizontal airbrick, GD8 204x60 mm connector, terracotta</a>	GDA8T.CT
<a href="#">Roof terminal with universal stepped adaptor, connects ø 100, 110, 125, 150 and 160 mm pipe, black</a>	RTUB41

## 3D System Layout



## Zehnder ComfoTube ø 110 mm, 20/50 m roll

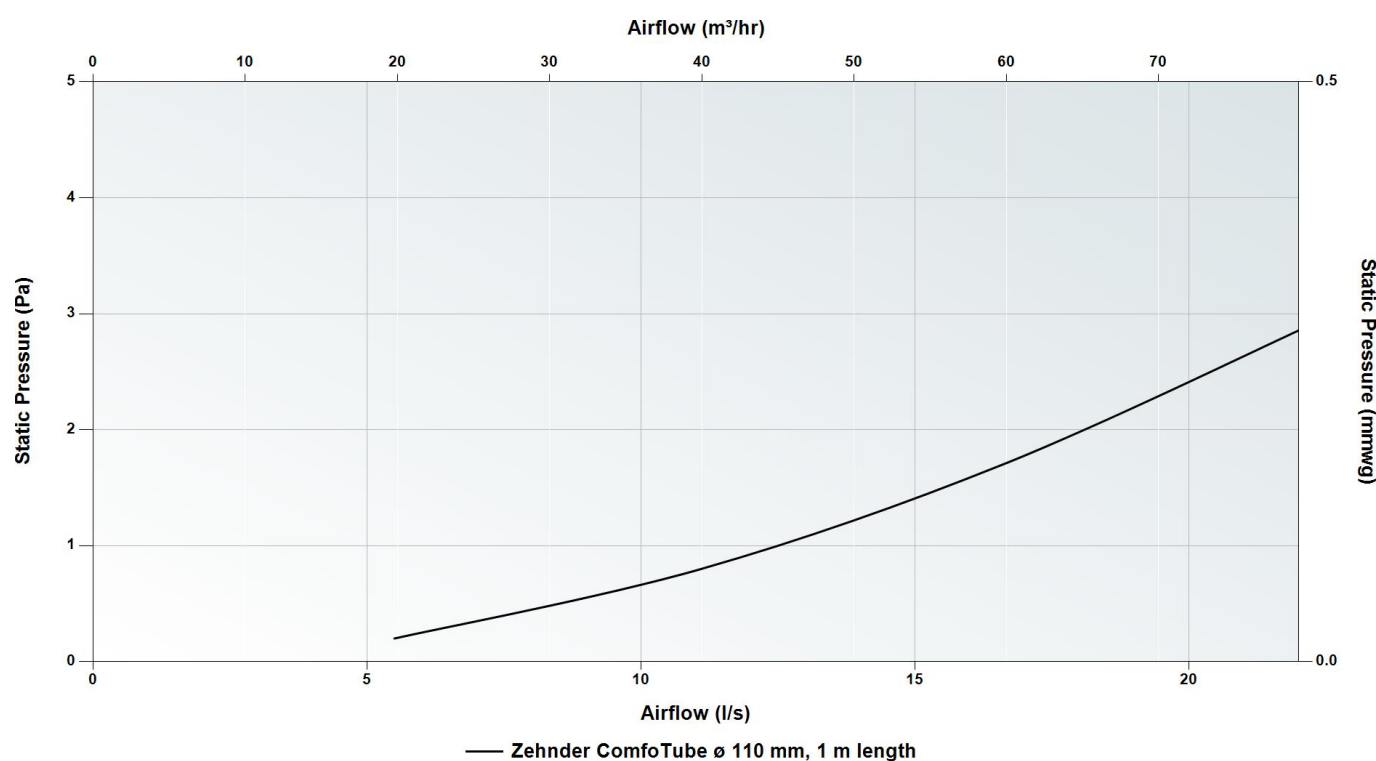
Article number: 990 328 018 / 990 328 019



### Technical Specification

Material	High-quality food-grade plastic polyethylene (PE)
Operating temperature range	-25 to +40°C
Maximum recommended air volume per tube	22.2 l/s (80 m³/h)
Minimum bending radius	2 x diameter
Outside diameter	110 mm
Inside diameter	92 mm
Weight per m	0.55 kg/m
Fire rating in accordance with EN 13501-1	E
Ring stiffness	>8 kN/m²
BS EN ISO 9969:2016 crushability compliant	Yes
Coil diameter (50 m roll)	1780 mm
Coil height (50 m roll)	500 mm

### Pressure Curve



### Sound Data

	Octave Band (Hz) Insertion Loss, dB					
	125	250	500	1000	2000	4000
Zehnder ComfoTube ø 110 mm, 1 m length	0.5	0.4	0.5	0.5	0.7	0.8

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

■ Supported using GFB10M galvanised duct fixing banding, 12 mm x 10 m

## CTA110 adaptor to connect Unity CV2CTA110 to Zehnder CT110 mm

Article number: CTA110

### Description

#### Adaptor:

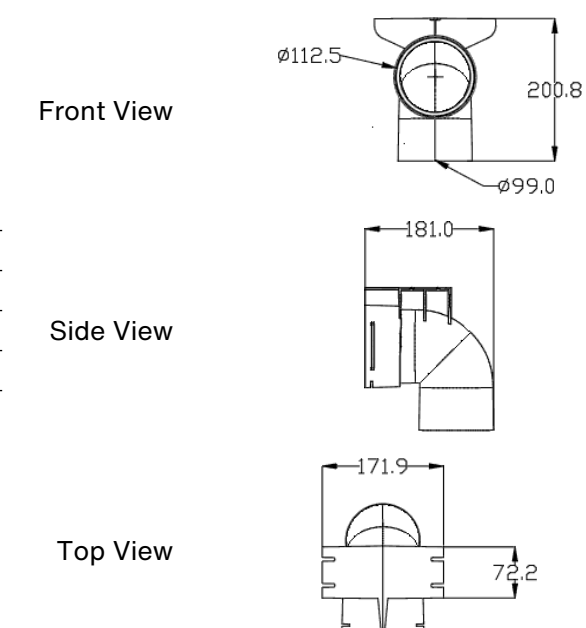
Zehnder ComfoTube ø 110 mm, adaptor. The adaptor is used to connect the CV2CTA110 dMEV fan to Zehnder ComfoTube ø 110 mm ductwork at a 90 degree angle, as featured on the (PCDB) Product Characteristic Database, and comes complete with locking slide.

### Technical Specification

Height	200.8 mm
Width	171.9 mm
Depth	181 mm
Weight	0.32 kg
Material	Acrylonitrile butadiene styrene (ABS)



### Dimensions



## Fire collar ø 100mm for CV2GIP, CV2.1 and CV3, ceiling mounting, 50mm depth

Article number: FIRO100.SPV

### Description

#### Fire collar:

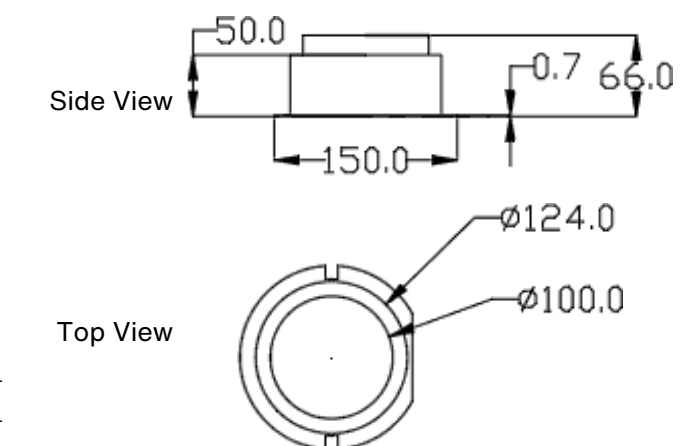
Recessed ceiling fans are commonplace in domestic buildings, primarily for aesthetic gains. Ceilings are subject to fire regulations and must be fire protected in accordance with Approved Document B. To support this, any holes that are made for ceiling fans must be fire stopped, in order to reinstate the original fire rating of the ceiling. To satisfy this requirement the fire collar for ceiling fan has been developed to provide protection for holes created by 100 mm ceiling fans. The Fire Damper for Ceiling Fan is both quick and easy to install and has been independently approved with Unity CV2, CV2.1 and CV3 extract fans.

### Technical Specification

Length	66 mm
Diameter ID	100 mm
Diameter OD	124 mm
Weight	0.5 kg
Material	Modified steel / fire wrap
Fire Tested to BS EN 1365-2 standard	30 minute fire rating Tested in Timber / Metal Web Joist system



### Dimensions



### Connector to fix Zehnder ComfoTube DN110 to GG82W 125 mm Grille

Article number: 990 328 111

#### Description

##### Pipe connector:

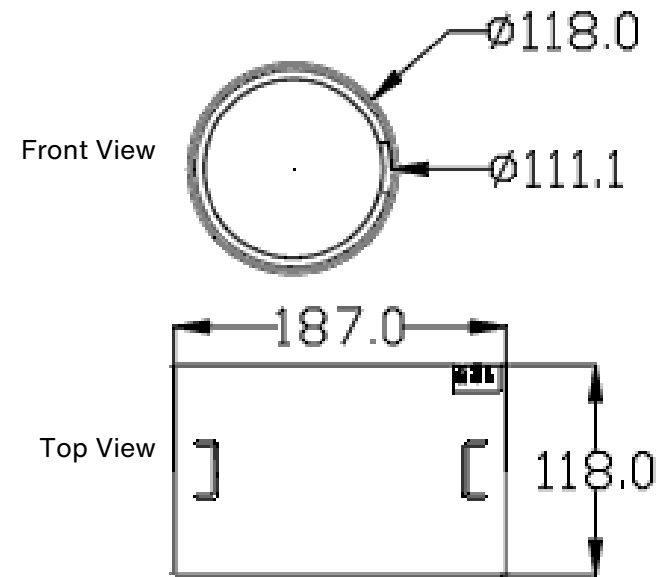
Zehnder ComfoTube  $\varnothing$  110 mm, pipe connector. The connector is used to join two lengths of Zehnder ComfoTube  $\varnothing$  110 mm together to create an airtight and robust seal using O-rings, alternatively it can be used to connect Zehnder ComfoTube  $\varnothing$  110 mm to a [GG82B/W](#) 125 mm external grille

#### Technical Specification

Length	187 mm
Diameter ID	111.1 mm
Diameter OD	118 mm
Weight	0.19 kg
Material	Medium-density polyethylene



#### Dimensions



### Connector to fix Zehnder ComfoTube DN110 to $\varnothing$ 100 mm GD413.CT

Article number: CTC110

#### Description

##### Pipe connector:

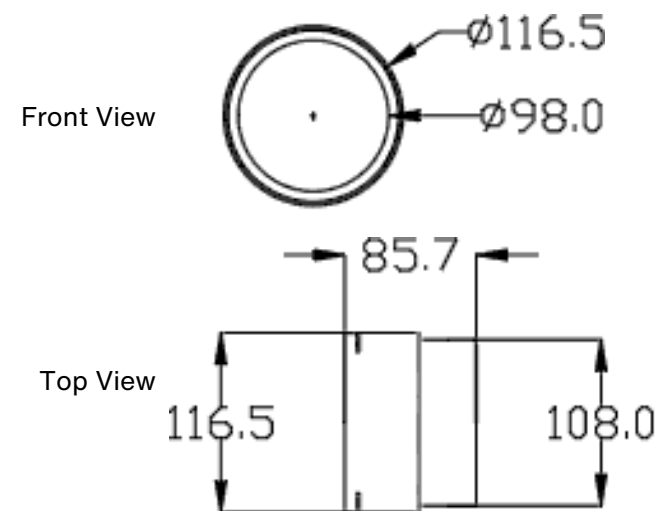
Zehnder ComfoTube  $\varnothing$  110 mm, pipe connector. The female connector is used to connect Zehnder ComfoTube  $\varnothing$  110 mm to  $\varnothing$  100 mm [GD413.CT](#)  $\varnothing$  100 mm ductwork, and comes complete with locking slide.

#### Technical Specification

Length	85.7 mm
Diameter ID	98 / 112.5 mm
Diameter OD	108 / 116.5 mm
Weight	0.128 kg
Material	Acrylonitrile butadiene styrene (ABS)



#### Dimensions



### Connection clip for Zehnder ComfoAdaptor to Zehnder ComfoTube DN110

Article number: 990 326 014

#### Description

##### Locking slide:

Zehnder ComfoTube  $\varnothing$  110 mm, locking slide. The locking slide is used to secure the Zehnder ComfoTube  $\varnothing$  110 mm ductwork without the need for messy sealants.

#### Technical Specification

Weight	0.051 kg (each)
Material	Galvanised steel



### Zehnder ComfoTube $\varnothing$ 110 mm, end caps, 2 pieces

Article number: 990 328 264

#### Description

##### End caps:

Zehnder ComfoTube end caps. The 110 mm end caps can be placed within their corresponding Zehnder ComfoTube  $\varnothing$  110 mm during the construction phase to prevent dust ingress. The 110 mm end caps can be placed directly into the 90 mm manifold or mounting plate to seal off any unwanted ports.

#### Technical Specification

Length	55.3 mm
Diameter	102 mm
Weight	0.05 kg (each)
Material	Medium-density polyethylene



### Zehnder ComfoTube 110 mm O-ring seal, 2 pieces

Article number: 990 328 364

#### Description

##### O-ring:

Zehnder ComfoTube O-ring seal. The O-ring is used to ensure an airtight connection is made with pipe connectors, grille housings, manifold/mounting plates and connecting elements.

#### Technical Specification

Outside diameter	114 mm
Inside diameter	93 mm
Weight	0.015 kg (each)
Material	EPDM (Ethylene Propylene Diene Monomer)



### GD round ducting, GD4 pipe, ø 100 mm x 350 mm

Article number: GD413.CT

#### Description

##### Ductwork:

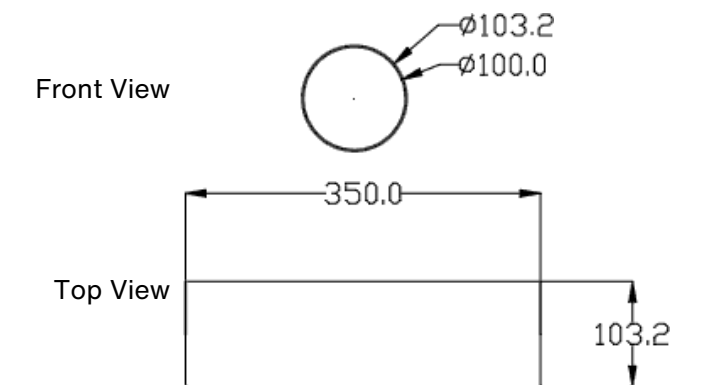
The pre-cut 350 mm ø 100 mm ductwork is ideal for through wall terminations connecting the [CTC110](#) and [GD807.CT](#)

#### Technical Specification

Length	350 mm
Outside diameter	103.2 mm
Inside diameter	100 mm
Weight	0.233 kg
Material	Polyvinyl Chloride Un-plasticised (PVCu)



#### Dimensions



### GD rectangular ducting, GD4 ø 100 mm to GD8 204x60 adaptor

Article number: GD807.CT

#### Description

##### Pipe connector:

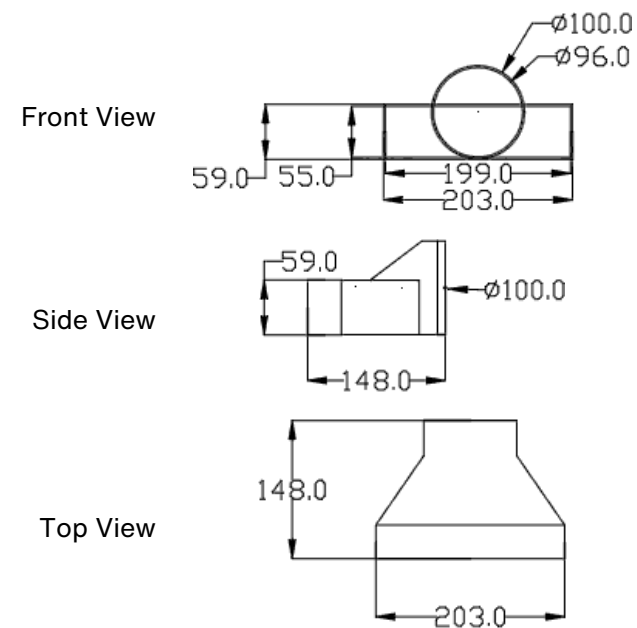
204x60 to ø 100 mm, pipe connector. The female connector is used to connect ø 100 mm [GD413.CT](#) to a [GDA8S.CT](#) or [GDA8T.CT](#) 204x60 mm airbrick.

#### Technical Specification

Height	100 mm
Width	203 mm
Depth	148 mm
Weight	0.152 kg
Material	High Impact Polystyrene



#### Dimensions



### Duct fixing band, galvanised, 12 mm x 10 m

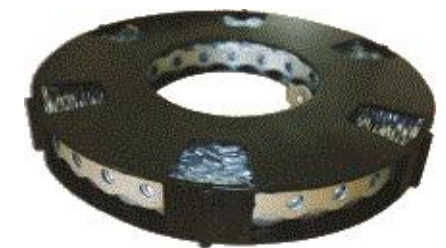
Article number: GFB10M

#### Description

Perforated metal banding to securely fix ductwork.

#### Technical Specification

Length	10 m
Width	12 mm





### Fixing worm drive clip, ø 180 mm

Article number: FC180

#### Description

##### Fixing:

Worm drive clip to secure ductwork in place. These quick release worm drive clamps are easy to install and remove due to the swivel action locking of the screw.

#### Technical Specification

Clamping capacity / range	60-170 mm
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### External terminal, square louvred vent, ø 125 mm connector

Article number: GG82B / GG82W

#### Description

##### Termination:

Termination for ø 125 mm duct system to securely connect to a straight length of duct.

#### Technical Specification

RAL colour	Brown (RAL8017) / White (RAL9003)
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Height	163 mm
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Width	163 mm
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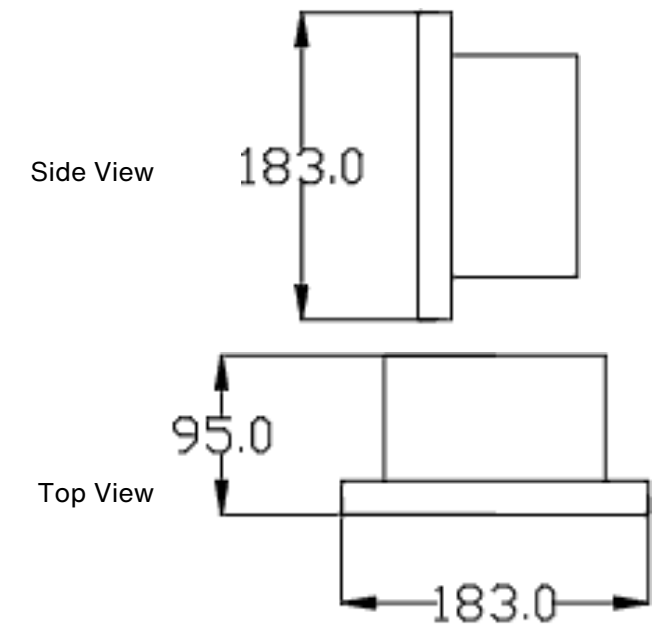
Depth	38 mm
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Material	High Impact Polypropylene
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Free area	11,500 mm <sup>2</sup>
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Core drill diameter	127 mm
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#### Dimensions



### Insulated Flexiduct ø 150 mm, aluminium

Article number: GFA6.5I / GFA6.10I

#### Description

##### Ductwork:

Preinsulated aluminium flexible ductwork to minimise condensation when passing ductwork through a cold area such as a roof space. Manufactured to BS456 Parts 6 and 7 Class 0.



#### Technical Specification

Length	5 m / 10 m
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Outside diameter	202 mm
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Inside diameter	152 mm
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Operating temperature	-30 to +150°C
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Material	Aluminium / Polyester
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### External terminal, horizontal airbrick, GD8 204x60 mm connector

Article number: GDA8S.CT / GDA8T.CT

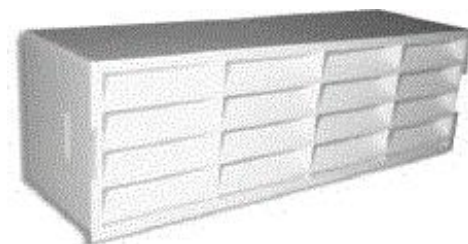
#### Description

##### Termination:

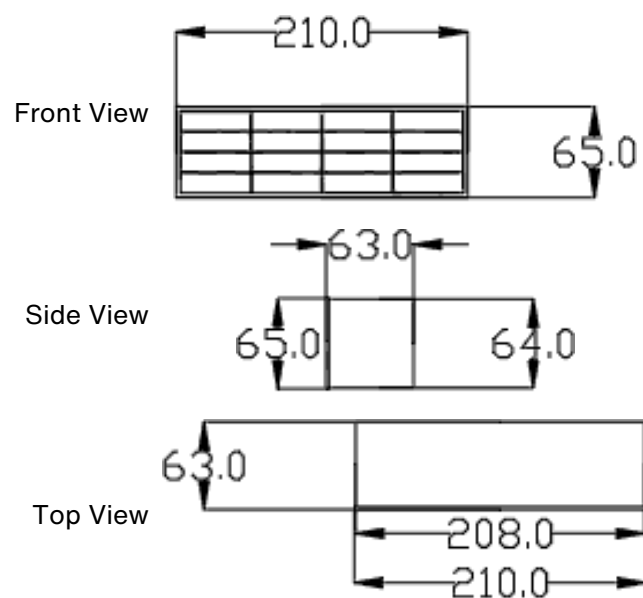
Termination for 204x60 duct system to securely connect to [GD807.CT](#) adaptor.

#### Technical Specification

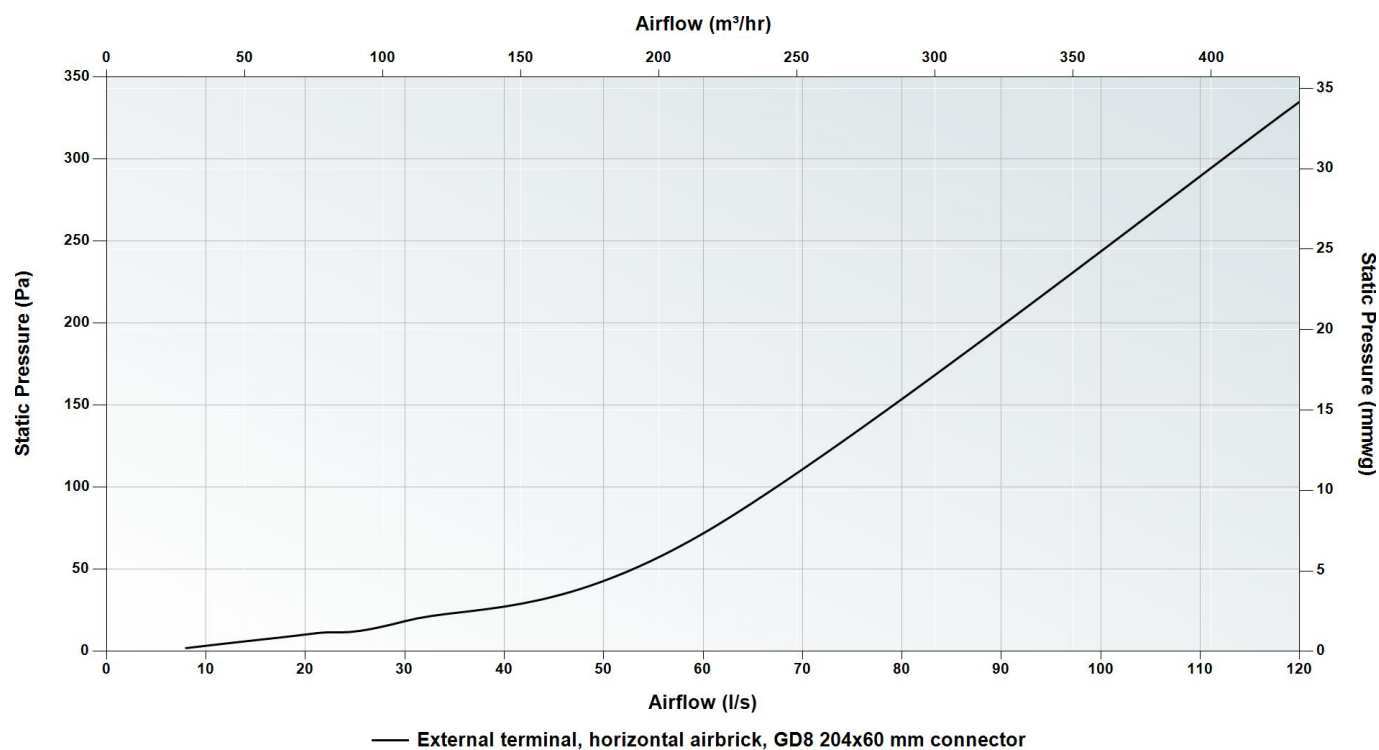
RAL colour	Sand (RAL1001) / Terracotta (RAL2001)
Height	65 mm
Width	210 mm
Depth	63 mm
Weight	0.115 kg
Material	High Impact Polypropylene
Free area	7680 mm <sup>2</sup>



#### Dimensions



#### Pressure Curve



### Roof terminal with universal stepped adaptor, connects ø 100, 110, 125, 150 and 160 mm pipe, black

Article number: RTUB41

#### Description

##### Termination:

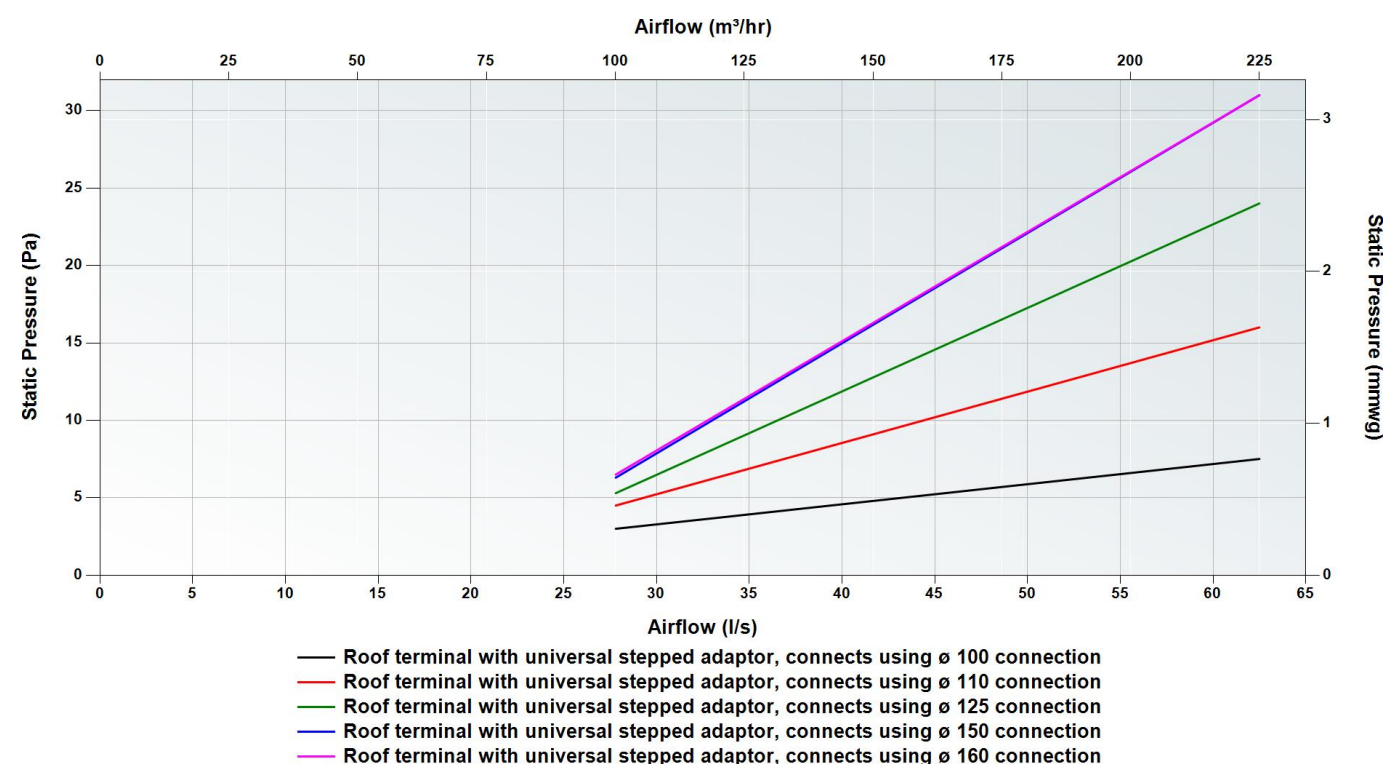
The RTUB41 has a stepped adaptor for use with a range of connections between 100-160 mm. The roof terminal can be used on most tiled and slated pitched roofs and comes complete with a 500x500 mm flashing skirt and streamlined box hood on a circular upstand.

#### Technical Specification

RAL colour	Anthracite (RAL7016)
Height (hood / adaptor)	120 mm / 215 mm
Width (hood / flashing)	220 / 500 mm
Depth (hood / flashing)	280 / 500 mm
Diameter	100 / 110 / 125 / 150 / 160 mm
Adaptor length	215 mm
Weight	1.53 kg
Material	Polyvinyl Chloride Unplasticised (PVCu)
Free area	100 mm - 7,850 mm <sup>2</sup> 110 mm - 8,850 mm <sup>2</sup> 125 mm - 12,250 mm <sup>2</sup> 150 mm - 17,775 mm <sup>2</sup> 160 mm - 18,750 mm <sup>2</sup>
Min roof pitch	22.5°



#### Pressure Curve



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## Consultant Specification

### Specification

The semi-rigid ductwork shall be dual wall constructed of high-quality food-grade plastic PE with a crush resistant ring stiffness of  $>8 \text{ kN/m}^2$ . It shall be suitable for installation into concrete with a fire rating in accordance with [EN 13501-1](#) of E. It shall have an operating temperature range of  $-25$  to  $+60^\circ\text{C}$  and not be designed to exceed flowrates of  $22.2 \text{ l/s}$ .

The ductwork shall be accredited for use in SAP Appendix Q.

The ductwork shall be manufactured by Zehnder.