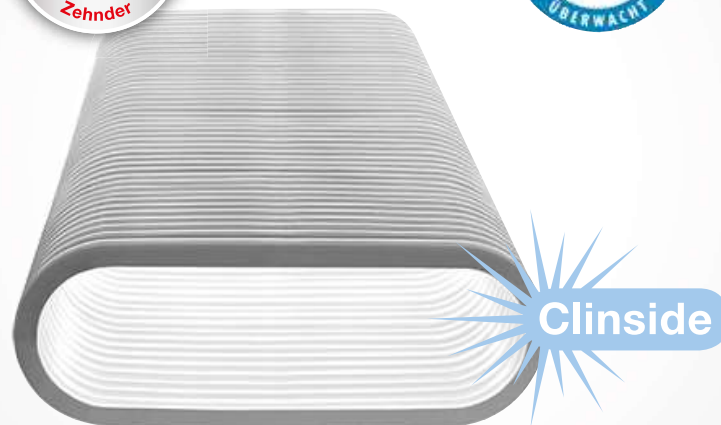


# Zehnder ComfoTube Flat 51

Technical specification for ventilation tube (flat oval tube)



## General

Zehnder ComfoTube Flat 51 meets all the requirements for quick and easy installation. The oval-shaped, flexible flat oval tube is easy to handle. The ventilation tube is manufactured from high-quality, food-grade plastic (HDPE). It has a smooth Zehnder Clinside inner surface and is easy to clean. Zehnder ComfoTube features low pressure loss and can be used for centrally and decentrally adjustable airflow rates. The excellent, tried-and-tested product quality is indicated by the SKZ seal and in the hygiene certificate issued by the Hygiene Institute for the Ruhrgebiet



Y piece Flat 51

Cross-piece Flat 51



ComfoTube Flat 51



Connector Flat 51



Locking slide Flat 51



Mounting bracket Flat 51



End cap Flat 51



Bend Flat 51 H



Bend Flat 51 V



Junction 90/75 to Flat 51



Junction 90 to Flat 51, 90° bend



Junction 2x75 to Flat 51

## Benefits

- The ribbed outer skin makes Zehnder ComfoTube Flat 51 exceptionally flexible and enables safe handling with maximum flexibility.
- The inner skin with its hygienically smooth surface rests perfectly against the outer skin and is designed to be ideal for all technical requirements and conditions.
- Enhanced feel-good climate for the end customer due to the sound-optimised inner skin, which ensures extremely quiet air flow and refrains from generating more noise even when air volumes are larger.

## Technical specifications

### Zehnder ComfoTube Flat 51

|                                  |                |
|----------------------------------|----------------|
| Exterior dimensions W/H (mm)     | 138 mm / 51 mm |
| Interior dimensions W/H (mm)     | 127 mm / 35 mm |
| Weight per metre in length (g/m) | 400 g/m        |

| Metres per roll | 20 m   | 50 m   |
|-----------------|--------|--------|
| Weight per roll | 8 kg   | 20 kg  |
| Roll height     | 30 cm  | 45 cm  |
| Roll diameter   | 100 cm | 135 cm |

## Specifications

### Zehnder ComfoTube Flat 51

|                                   |                  |
|-----------------------------------|------------------|
| Material                          | Pure HDPE        |
| Min. horizontal bend radius       | $r = 3 \times W$ |
| Min. vertical bend radius         | $r = 3 \times H$ |
| Permissible operating temperature | -25 to 60 °C     |

### Note:

Smaller bend radius is possible when using the Flat 51 H and Flat 51 V bends. Do not keep the tube outdoors without using protective film and protect it from direct sunlight.

## Article numbers

|   | Article number |
|---|----------------|
| Ventilation tube ComfoTube Flat 51, roll: 20 m  | 990 328 002    |
| Ventilation tube ComfoTube Flat 51, roll: 50 m  | 990 328 063    |
| Ventilation tube ComfoTube Flat 51, roll: 2 m   | 990 328 080    |
| Ventilation tube ComfoTube Flat 51, roll: 0.7 m | 990 328 070    |
| Connector Flat 51                               | 990 322 014    |
| Locking slide Flat 51 (20 pieces)               | 990 326 022    |
| Mounting bracket Flat 51 (10 pieces)            | 990 322 016    |
| End cap Flat 51 (10 pieces)                     | 990 328 252    |
| Bend Flat 51 H                                  | 990 322 012    |
| Bend Flat 51 V                                  | 990 322 011    |
| Junction 90/75 to Flat 51                       | 990 322 013    |
| Junction 90 to Flat 51, 90° bend                | 990 322 046    |
| Junction 2x75 to Flat 51                        | 990 322 150    |
| Y piece Flat 51                                 | 990 322 151    |
| Cross-piece Flat 51                             | 990 322 154    |

## Description

### ComfoTube Flat 51

Flexible, externally crimped, stable air distribution tube. Zehnder ComfoTube Flat 51 can easily be laid on an unfinished floor and in cavities inside the insulation layer. Owing to its compact dimensions (with a width of 138 mm and a height of 51 mm), the ventilation tube is easy to put to use even when there is very little space available. The ventilation tube also features Zehnder Clinside – a smooth inner skin which is very easy to clean. This has also been confirmed by the Institute for Hygiene of the Ruhrgebiet in Germany. Zehnder ComfoTube Flat 51 is subject to continuous quality controls procedures by the Süddeutsche Kunststoff-Zentrum in Germany. In order to ensure easy installation, moulded bodies are available for the ventilation system.

### Connector Flat 51:

HDPE click connectors that connect easily with ComfoTube Flat 51. The joint is sealed via two O-rings (supplied) and locking slides.

### O-ring/locking slide/mounting bracket Flat 51:

O-ring seals and locking slides for sealing and fastening. Suitable for use with all ComfoTube Flat 51 accessory parts.  
O-ring PU: 10 pcs.  
Locking slide PU: 20 pcs.  
Mounting bracket PU: 10 pcs.

### End cap Flat 51:

HDPE end caps for dust-tight sealing of ComfoTube Flat 51 during construction. Can also be used for click connectors and bends.

### Bend Flat 51 H:

90° HDPE bend for connection to ComfoTube Flat 51. Horizontal 90° bend. The joint is sealed via two O-rings (supplied) and locking slides.

### Bend Flat 51 V:

90° HDPE bend for connection to ComfoTube Flat 51. Vertical 90° degree bend. The joint is sealed via two O-rings (supplied) and locking slides.

### Junction 90/75 to Flat 51:

HDPE junction for connection to ComfoTube 90 or 75 ventilation ducts with Flat 51. The joint is sealed via two O-rings (supplied) and locking slides.

### Junction 90 to Flat 51, 90° bend:

HDPE junction for connection to ComfoTube 90 ventilation ducts with Flat 51 as 90° bend. The joint is sealed via two O-rings (supplied) and locking slides.

### Junction 2x75 to Flat 51:

HDPE junction for connection to ComfoTube 90 or 75 ventilation ducts with Flat 51. The joint is sealed via the O-rings and locking slides supplied.

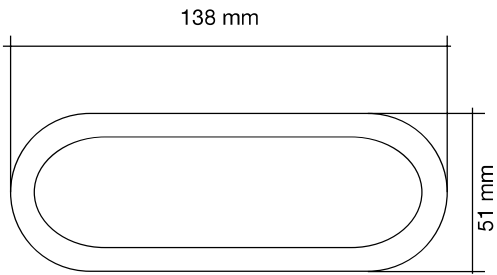
### Y piece Flat 51

HDPE y piece for setting up a branch of the ComfoTube Flat 51 ventilation tubes. The joint is sealed via the O-rings and locking slides supplied.

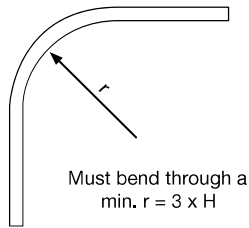
### Cross-piece Flat 51:

HDPE Flat 51 cross-piece for the crossing of Flat 51 ventilation tubes with a minimum installation height. The total height is 51 mm.

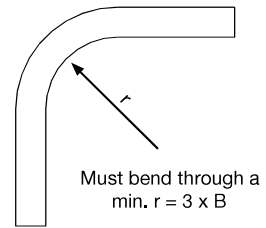
## Dimensional drawings



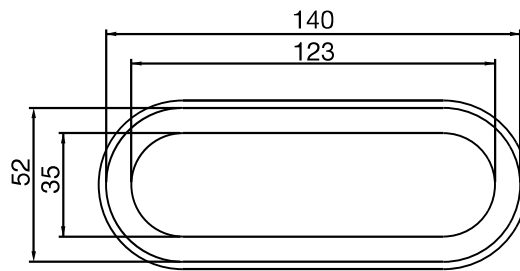
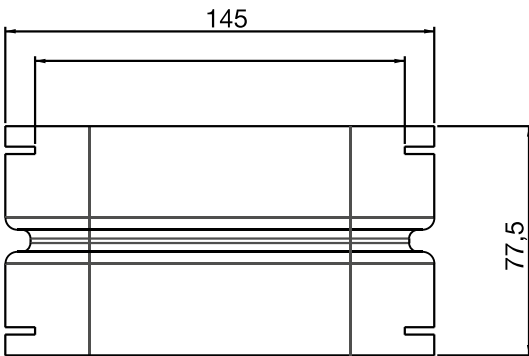
Permissible vertical bend radius



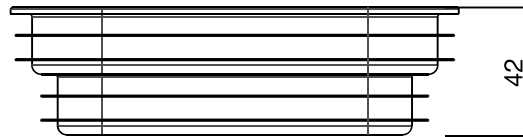
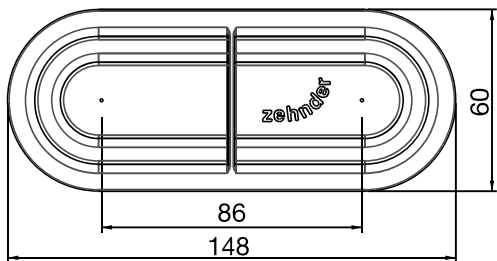
Permissible horizontal bend radius



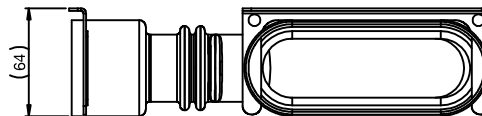
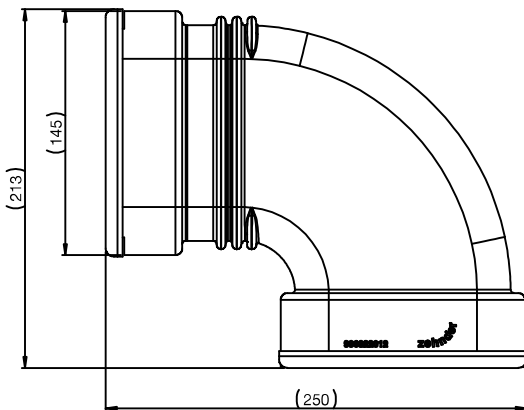
### Click connector Flat 51



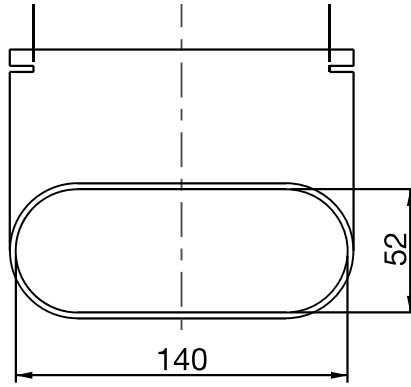
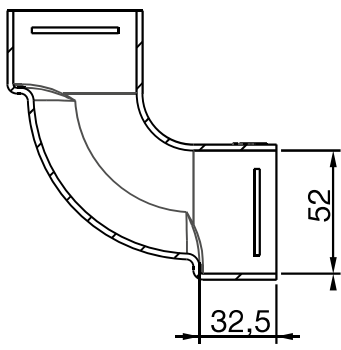
### End cap Flat 51



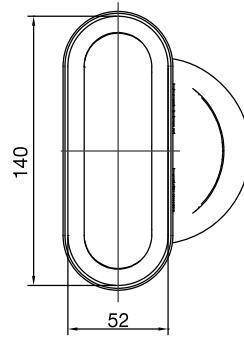
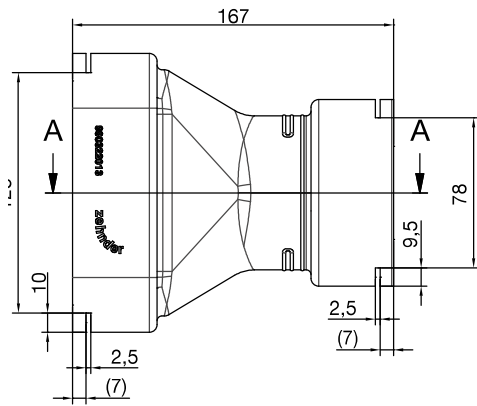
### Bend Flat 51 H



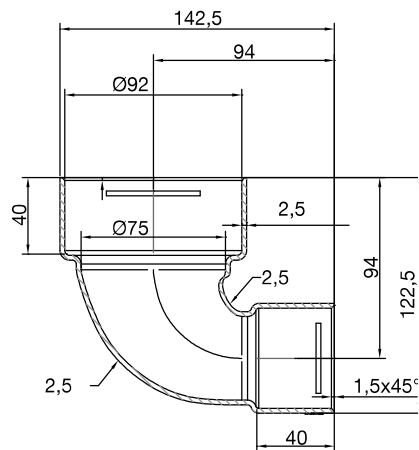
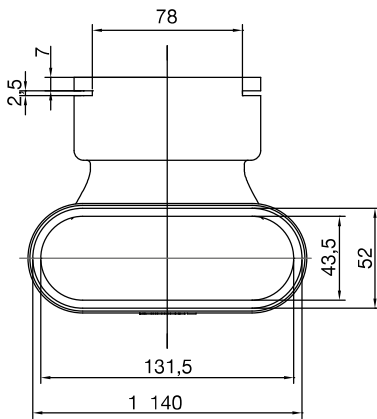
**Bend Flat 51 V**



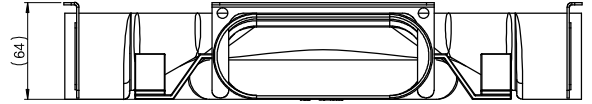
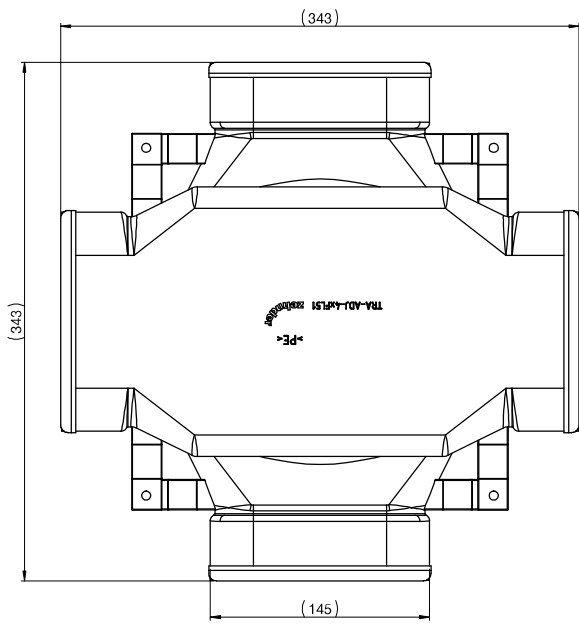
**Junction 90/75 to Flat 51**



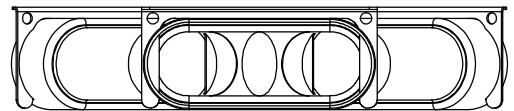
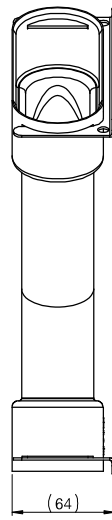
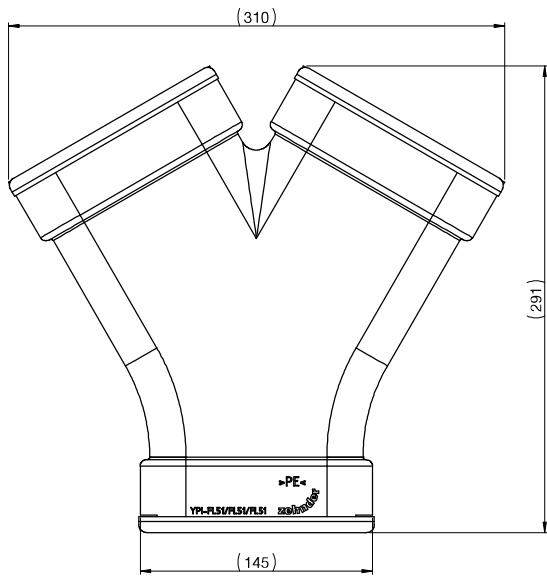
**Junction 90/75 to Flat 51, 90° bend**



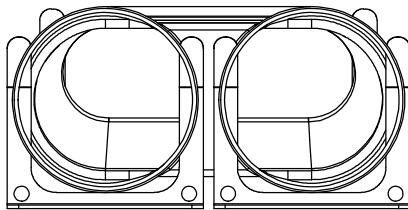
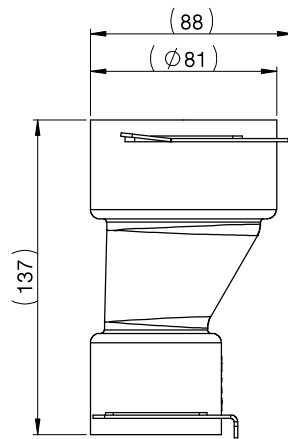
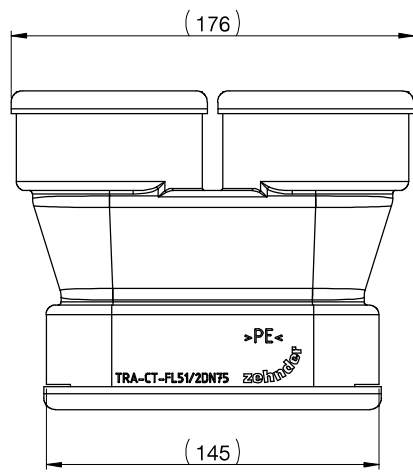
Cross-piece Flat 51



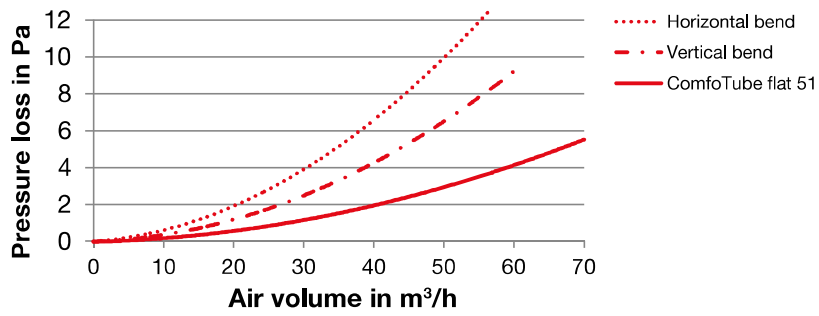
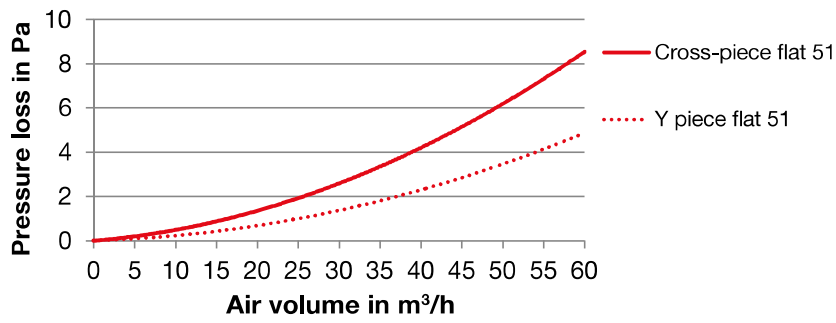
Y piece Flat 51



Junction Flat 51 to 2xDN75



## Pressure loss graphs



Z\_DE\_V1216\_CSX\_TES\_TS012, en, subject to change without notice