

- Insulated
- Aluminium laminated
- Acoustically insulated



## Insulated flexible ducts type SONOFLEX EC

**SONOFLEX EC** is a thermally and acoustically insulated duct, consisting of a micro-perforated inner duct of the **ALUFLEX** type, a yellow fibreglass insulation and a metalized polyester outer jacket. A polyester barrier is applied between the fibreglass insulation and the inner duct to avoid the diffusion of insulation particles in the air stream.

### Application

- The **SONOFLEX EC** flexible ducts are used in ventilation, air conditioning, and air handling systems where high mechanical strength, temperature, fire-resistance, and thermal and sound attenuating qualities are required

### Composition

- Micro-perforated inner duct of the **ALUFLEX** type, consisting of 2 layers of 7  $\mu$  aluminium each, and 2 layers of 12  $\mu$  polyester each, total thickness with glue: 48,5  $\mu$
- Metalized polyester outer jacket, consisting of 2 layers of polyester of 12  $\mu$  each, reinforced with glass fibre wire, total thickness: 30  $\mu$
- Fibreglass insulation:
  - Density : 15 kg/m<sup>3</sup>
  - Thickness: 25 mm
  - Thermal conductivity: 0,057 W/m-K according to ASTM C-177
  - Colour: pink
  - Fire safety: Class 1 according to UL 723 ASTM E-84
- Polyester barrier between insulation and inner duct Diameter range: 82 mm - 560 mm
- Wire spacing: a steel spiral spring of different thicknesses and a pitch of 25mm (Ø82-90mm), 36mm (Ø102-560mm)
- Colour: Aluminium

### Specification

- Temperature range: From - 30°C till + 140°C
- Air velocity (max): 25 m / sec (4912 ft / min)
- Operating pressure (max): + 1500 Pa (+ 150 mm WC)
- Bend radius: 0.54 x D + 25mm
- Diameter range: 82 mm - 560 mm
- Fire resistance: LNE classification obtained M1



- Report number: F050918 - Cemate/6
- As the product does not contain PVC, no toxic vapours are released should fire occur

### Packaging

- Each standard length of 10 m is compressed in an individual, reinforced cardboard box

### Chemical resistance

- Good resistance to many organic solvents
- Moderate resistance to acid and base

### Static properties

- The **SONOFLEX EC** is suitable for applications where static discharges have to be avoided

### Restrictions

- The **SONOFLEX EC** ducts are not suitable for transporting air with a high concentration of acid and base
- The **SONOFLEX EC** can not be used for discharging combustion gases from open fire places and oil-fired boilers

### Accessories

- Clamps type **MCA**
- Aluminium tape , type **Alutape**

### Other available products

- Sonoflex 25 with pink insulation
- Sonoflex 250 with fire class M0/M1 , upon request

### Text for tender

- The connection of the plenum boxes shall be done with the use of acoustically and thermally insulated flexible ducts, M1/M1 according to French standard. The outer jacket shall be reinforced to prevent rupture
- Brand **ATC** Type **SONOFLEX EC**

### Sound attenuation for 1m duct - Tolernace +/- 2 dB

F [Hz] D [mm]	125	250	500	1000	2000	4000
82	17	26	33	38	28	17
102	9	20	32	37	32	21
127	12	20	21	25	28	17
165	17	22	22	26	20	14
203	7	15	17	20	16	13
254	16	16	16	16	14	10
315	12	13	13	14	11	7
457	12	10	8	8	6	8
508	7	8	8	9	6	7

### Order example

Sonoflex EC , 254

Explanation :

**Sonoflex EC** = Type of flexible duct

**254** = Diameter of flexible duct