

PEFLEX 4PPA / TECHNICAL DATA

NOISE ATTENUATOR

DESCRIPTION

Peflex 4PPA is a flexible insulated C-UL S110 (AIR DUCT) certified composed of two layers of pure aluminum and two layers of polyester encapsulating a galvanized metal wire. The internal duct of the 4PPA is perforated on more than 25% of its surface, thus allowing a substantial attenuation of the noise transmitted by the air.

Peflex 4PPA is corrosion resistant, completely water repellent and withstands high operating pressures. Resistance to high operating pressures is possible because of the unique quadruple lamination process. The large thickness of the walls of the internal duct (0.0041" / 0.105 mm) as well as the small distance between the wire helix (1 in, 25.2mm) allows to obtain high operating pressures.

Peflex 4PPA offers the best flame resistance in the industry since no combustible material is visible in the internal duct. The internal and external walls of the Peflex 4PPA are made of pure non-combustible aluminum. In addition, the adhesive used in the quadruple lamination process contains a retarding agent.

Peflex 4PPA has a vapor barrier composed of two layers of metallized polyester laminated with fiberglass for intensive puncture resistance. This type of vapor barrier is mandatory for the designation "flexible air duct" according to the C-UL S110 test standard (AIR DUCT).

Peflex 4PPA has a much lower internal coefficient of friction than regular flexible ducts made from fabric reducing the energy required by the system to move air.

Bending Diameter: 0 times the diameter of the pipe

Insulation: John Manville Flex-Glass certified formaldehyde-free and non-hazardous to health (see technical sheet)

Diamètre disponible : 3" - 4" - 5" - 6" - 7" - 8" - 9" - 10" - 12" - 14" - 16" - 18" - 19" - 20" - 22" - 24"

Standard length of 25' in a 48" box

*** Duct cleaning instructions, always refer to NADCA methods and experts**

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*** The duct is listed C-UL-S110 - US-UL-181 Conduit Flexible Classe 1**

***The C-UL-S110 standard includes NFPA-90A and B tests.**



Flame spread	< 25
Fume development	< 50
Maximum air velocity	4000 ft/minute
Maximum continuous positive static pressure	15 in. H ₂ O (3,7 KPa)
Maximum continuous negative static pressure	1 in. H ₂ O (0,62 kPa)
Temperature range	-30 °F to 250°F (-30°C à 121°C)
Maximum operating temperature	-30°F to 140°F continuously (to 4 "WC) -30°F to 180°F continuously (to 2 "WC) -30°F to 250°F continuously (to ½"WC)
R coefficient of insulation	4,2 – 6 – 8,4
Vapor barrier materials	Metallic Polyester
Flexible duct thickness	0,0041"/0,105 mm
Vapor barrier thickness	0,0037"/0,095 mm

INSTALLATION WARNING – ACOUSTIC FLEXIBLE DUCTS

1. Do not install upstream of VAV boxes: Acoustic ducts must be installed after Variable Air Volume (VAV) boxes to avoid pressure fluctuations or excessive stress on components.
2. Do not install in areas with continuously high negative pressure: Acoustic ducts are not designed to withstand significant negative pressure on a continuous basis. Such conditions may lead to duct deformation, loss of integrity, or reduced acoustic performance.
3. Before installing any acoustic ducts, ensure that the operating conditions comply with good engineering practices as recommended by ASHRAE.
4. Analyze the location within the HVAC system: Supply zone, return zone, transition area, etc.
5. Confirm the expected airflow and pressure conditions in the section where the duct will be installed.
6. Ensure the selected duct is suitable for the intended use based on the manufacturer's technical specifications.

