

Tecsound FT 55 AL Product Data

Description: Tecsound FT55 AL is a soundproofing complex consisting of a porous felt bonded to the high density polymer-based, synthetic soundproofing Tecsound membrane, reinforced with an aluminium foil on its upper side as a protection or finishing of the membrane. It offers good acoustic insulation for pipes and conducts.

Features and Benefits:

- High sound damping capacity on surfaces
- Flexibility
- Easy handling and adaptable to uneven surfaces
- Easy application
- Cold- and heat-resistance
- Excellent ageing resistance
- Rot-proof

Application:

- Soundproofing of PVC sewage ducts in buildings
- Soundproofing of air conditioning ducts
- Soundproofing of industrial pipes
- Application in the industrial field: soundproofing of booths, acoustic insulation of machine rooms, gutter pipes, sound-damping of metal sheets and many others.

Regulations: According to CTE-DB-HR, EN ISO 140-1, EN ISO 140-3, EN ISO 140-6, EN ISO 140-8 y EN ISO 717/1/2. Quality management system according to ISO 9001

Precautions:

- Check that the support is free of sharp elements that could damage the product.
- Check that the joints are properly sealed and that there are no openings, as small openings can reduce the acoustic insulation level you want to achieve.



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Typical Physical Properties:

| Attribute and Test Method: | Specification: |
|--------------------------------------|--|
| Density (Tecsound) | 2,010 kg/m ³ |
| Density (felt) | 60 kg/m ³ |
| Operating Temperature | -20°C - 60°C |
| Tensile Strength NT-67 | >30 N/50mm |
| Pliability EN 1109 | -20°C |
| Thermal Conductivity UNE-EN 12667 | 0.034 W/m°C |
| Young Modulus (Membrane) | Longitudinal: 1.35637 MPa Transversal: 1.1744 MPa |
| Poisson Coefficient (Membrane) | 0.23 |

Description and Packaging:

| Attribute | |
|-------------------------|--|
| Weight | 5.6kg/m ² |
| Thickness | 12.5mm |
| Length | 5.50m |
| Width | 1.2m |
| m ² /Roll | 6.6m ² |
| Rolls / Pallet | 12 Rolls |
| m ² / Pallet | 79.2m ² |
| Storage | Keep dry, do not expose to temperatures above 35°C |

Tecsound FT55 AL Test Data

Acoustic insulation of a downpipe with Tecsound FT55 AL, which wraps the pipe and is fixed by flanges.

R_w = 25 dB (Class A1)

Testing carried out and laboratory measurement results obtained by Izosound Laboratories Ltd

Acoustic Results Per Octave

| Frequency (Hz) | R (dB) | IL according to ISO 15665 (dB) |
|--|--------|--------------------------------|
| 125 | 12.1 | 0.7 |
| 250 | 16.0 | 0.0 |
| 500 | 20.6 | 2.2 |
| 1000 | 25.7 | 10.6 |
| 2000 | 30.9 | 15.8 |
| 4000 | 36.3 | 23.8 |
| Global index of weighted acoustic reduction A, RA | 25 | Class A1 |
| Global index of acoustic reduction, R _w | 25 | Class A1 |

IL: insertion losses. The standard ISO 15665 is used for the acoustic insulation of industrial ducts and pipes.

Tecsound FT55 AL Flow Test Data

Acoustic insulation of a downpipe with Tecsound FT55 AL, which wraps the pipe and is fixed by flanges.

Airborne and structure borne sound are measured according to EN 14366 (2005) standard for the bare pipe and pipe insulated with Tecsound FT55 AL.

Airborne / Flow Results

| Flow Rate | 0.5 l/s | 1.0 l/s | 2.0 l/s | 4.0 l/s |
|---|---------|---------|---------|---------|
| L_{an} Bare Pipe | 50 | 52 | 55 | 57 |
| L_{an} Insulated Pipe (Tecsound FT 55 AL) | 37 | 38 | 41 | 45 |
| IL_{a,A} (Tecsound FT 55 AL) | 13 | 14 | 14 | 12 |
| Airborne Sound; Normalised measured sound pressure levels, values in dB(a) 100Hz - 5000Hz | | | | |

Structral / Flow Results

| Flow Rate | 0.5 l/s | 1.0 l/s | 2.0 l/s | 4.0 l/s |
|--|---------|---------|---------|---------|
| L_{an} Bare Pipe | 13 | 15 | 20 | 25 |
| L_{an} Insulated Pipe (Tecsound FT 55 AL) | 12 | 13 | 18 | 23 |
| IL_{sc,A} (Tecsound FT 55 AL) | 1 | 2 | 2 | 2 |
| Structure-borne sound; Normalised measured sound pressure levels, values in dB(a) 100Hz - 5000Hz | | | | |