

## Product description

AVF is made from a PVC base, mixed with selected heavy fillers.

The sheet comes in two thicknesses with a surface weight of 7 to 14 kg/m<sup>2</sup>.

## Application

For damping vibrations in sheet materials, as well as increasing constructions' sound reduction index. Used in the machine, shipping, transport and building industries for noise reduction of machines, vehicles, boats, pipes and ducts, etc., as well as in engine compartments, partitions and machine enclosures.

## Acoustic data

The AVF sheet's noise-damping effect is due to the small bending stiffness, high loss factor and high surface weight.

The loss factor, which is a measure of the vibration energy which is converted into heat, typically ranges from 0.001 to 0.01 for thin sheet constructions.

If the AVF sheet is stuck onto a 1 mm steel plate, a loss factor of 0.1–0.2 and up to 0.3 is obtained with a 5 mm thick sheet.

The reduction value of airborne noise is illustrated in the graphs to the right.

## Assembly



It is cut with a sharp knife and stuck to the surfaces which are to be damped. If greater sound reduction is desired, the sound film can be glued to a sound absorbent, for example, type Ikalon 135. The absorbent is mounted towards the noise source.



**Bonding:** For sticking, use contact adhesive type 555, applied to the surfaces using a brush or a fine-toothed putty knife. Use about 0.3 L/m<sup>2</sup> for non-absorbent surfaces. After assembly with adhesive, the temperature should not exceed 50 °C.

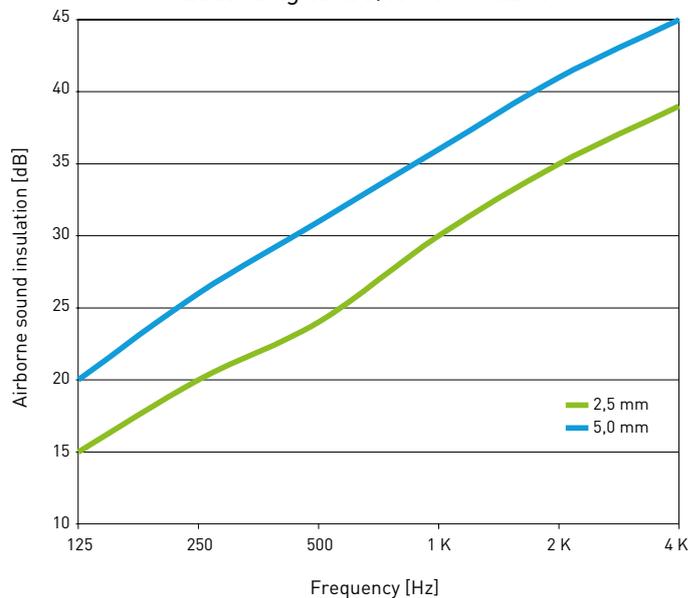
It is crucial for the adhesion that preparation (cleaning, degreasing, etc.) is done carefully, as well as that the temperature conditions are correct. It must also be ensured that the film has full adhesive contact with the surface – use a rubber hammer or hand roller for assembly.

**Mechanical attachment:** Under extreme conditions (bad gluing surface, downward-facing underlay, difficult installation conditions), further mechanical fastening is recommended, for example screws and washers.

**Surface treatment:** Can be painted, for example with polyurethane paint.



Airborne sound insulation according to ISO/R140-4 - as AVF



	Product data	
Thickness	2.5 mm	5 mm
Width	1.2 m	1.2 m
Roll length	10 m	5 m
Surface weight	7 kg/m <sup>2</sup>	14 kg/m <sup>2</sup>
Colour	Black	
Temperature range	-30 °C to +80 °C	
Properties	Self-extinguishing and meets the requirements of ASTM D 1692-68	