

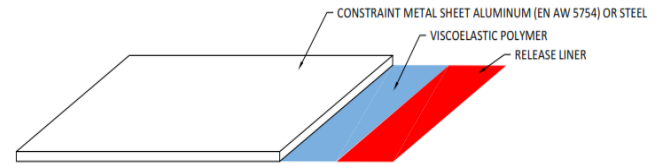
FEATURED PROPERTIES

- Reduce panel vibration and resonant noise effectively
- Increase sound transmission loss
- Low installation cost – just peel and stick on
- Thin and light weight damping tiles
- High damping efficiency for thick metal plates
- Excellent adhesion to most substrates
- Extended operating temperature range (-20→120°C)
- Non-toxic

DESCRIPTION

SilentTile® is self-adhesive constrained layer vibration damping tile. Using the latest polymer alloy technology, **SilentTile®** has a unique viscoelastic polymer blend designed to provide high viscous damping and isolation properties over a wide temperature range (-20°C/120°C) with built-in self-adhesive technology. The built-in self-adhesive provides for ease of installation. This unique adhesion enables the product to withstand temperatures up to 120°C without delaminating from the substrate (short term exposure only). In addition, **SilentTile®** has excellent adhesion to primed steel, lacquered steel, aluminium and low surface energy substrate such as polypropylene, PVC and polyethylene.

SilentTile® is designed to damp the low frequency structure-borne noise as well as increasing the sound transmission loss. **SilentTile®** is specially developed to provide sufficient damping for thick substrates such as steel, aluminium, plastic and GRP composites.



MATERIAL CHARACTERISTICS

Core layer of **SilentTile®** is made of a viscoelastic resin. When the composite sheet subject to flexural vibrations, there is slight relative movement between the cover sheets which results in periodic shear deformations in the viscoelastic interlayer. The internal friction generates in the resins and causes vibrational energy to be “lost/converted” as mechanical energy, i.e. it is converted into heat; this dampens vibration in the composite sheet.

Withins working range(25-80 °C) and the material achieves optimal vibration damping through a correspondingly high loss factor.

