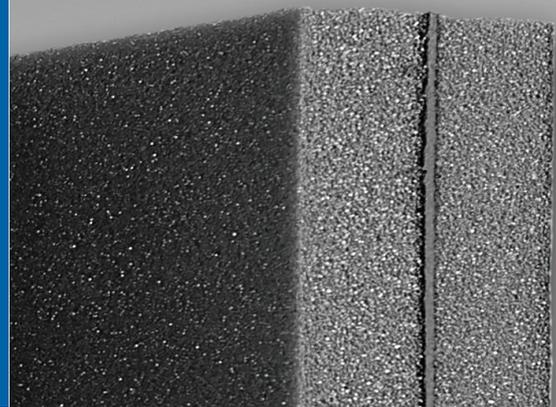


SORBERBARRIER

This Installation Guide provides recommendations to maximise the service life in various applications. Sorberbarrier is a unique composite noise control product that offers both excellent noise transmission loss and high noise absorption



WORKING HEALTH AND SAFETY

- Gloves, protective goggles and any other appropriate safety equipment based on local health & safety requirements and safe work practice must be worn by applicator.

DESCRIPTION

Sorberbarrier is supplied in sheets or rolls. Depending on installation preferences and environmental requirements, the product can be bonded to the mounting surfaces in the following ways:

1. Pressure Sensitive Adhesive (PSA)
2. Contact Adhesive (ACOUSTICK)
3. Mechanical fixing (INSTALL PINS)

Sorberbarrier must be installed with the 'faced' side exposed to the noise source. As the product is a noise barrier and not just an absorber, it is important to maintain the barrier layer intact throughout the enclosure (See Installation at Corners, Butt Joins).

Please note: Under extreme temperature and humidity conditions, air flow or where the substrate surfaces cannot be free from contaminants, mechanical fixing will be required. For all inverted installations including ceiling installations, mechanical fixing must be done in addition to pressure sensitive adhesive.

GUIDELINES FOR INSTALLING BARRIER COMPOSITES

Surface Preparation

It is important to ensure that all target surfaces (whatever the substrate) are clean, dry and free of contaminants (e.g. liquid, dirt, dust, oil, loose paint, rust, wax, grease, fibreglass release agents). Compatibility with cleaning agent must be tested before hand.

Surface preparation is common to all 3 methods of bonding.

Measure and Cut Material

- Measure surfaces to be soundproofed.
- Make allowances where necessary e.g. for corner bends - refer clause 'Installations at Corners' in this document.
- Using paper or cardboard templates may help for cutting and optimally utilising the product.
- It will help to bear in mind, sequence of installing prior to measuring/cutting sheets. e.g. where installation requires an inverted and an adjacent vertical panel to be bonded, (perpendicular) measurement and cut out for the inverted fit to be allowed first. The adjacent vertical panels installed later allows support at the edges of the inverted installation.

Sorberbarrier was developed with the aim of simplifying the acoustic treatment of enclosures, engine bays and plant rooms.

applications

- Engine compartments and firewalls of boats, trucks, buses and construction machinery
- Machinery and equipment enclosures
- Spa motor enclosures
- Containerised generator sets
- Pump motor enclosures



Cutting Of Materials

- To cut product, use straight edge or level, apply light pressure and cut with a sharp utility knife.
- Always cut from the reflective side.
- Make sure you do not tear facing. It's the 'facing' that prevents the foam layer from contamination.

Final Installation

- Install product with the 'faced' side exposed to the noise source.
- For heavier barrier weights and overhead applications, fastening pins are recommended to support the PSA backing.
- As a guide, a minimum of 3 fastening pins/m² is recommended for a 4 kg product. It is the responsibility of the installer to test and check the effectiveness of PSA products on the proposed structure prior to installation.
- The amount of Install Pins needed can vary depending on the application. Please refer to install pins guide or contact your local Pyrotek representative for more information.

Seal Exposed Edges and Joins

- All joins and edges should be taped with the appropriate joining tape. To achieve the best aesthetic and protective finish, a range of matching tapes (Reinforced Aluminium/Mylar/Polyurethane and fabric tapes) are available to choose from.

INSTALLATION AT CORNERS

Fig (1)

- Cut out length of foam absorption layer from one sheet. Cut from the facing side, up to the barrier layer without tearing or cutting the barrier layer.
- The width of the piece removed should not be greater than the total product thickness of the perpendicular sheet to be bonded.
- Product should be tightly fit in corners.
- Continuous mass barrier layer ensures optimum sound insulation
- Double check for fit by placing /aligning joins before installing.

Fig (2)

- Using a straight edge and sharp knife, cut a 45° strip, out of the product facing and front layer of foam.
- The cut out should only be down to the barrier layer taking care not to cut into the mass barrier layer.

Fig (2a)

- Align the centre of the 'V' cut to match with the corner edge of the substrate.

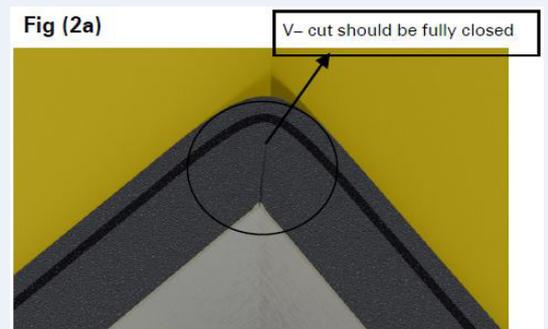
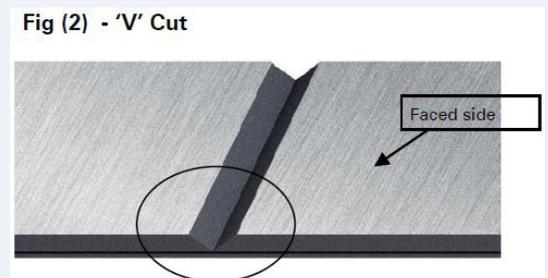
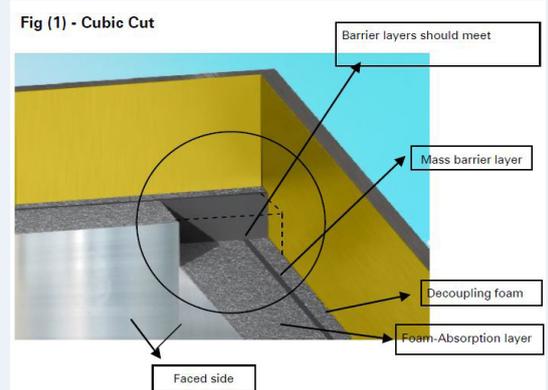


FIG (3) - TIGHT JOIN

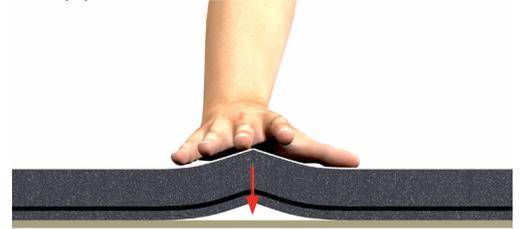
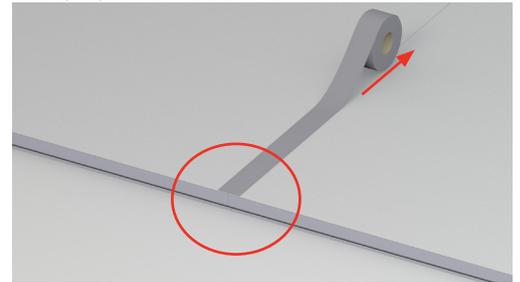


FIG (3a) - SEAL JOIN



BUTT JOINS

Fig (3) - Tight Join

- Ensure a firm and tight butt join to minimise any chances of noise leakage.

Fig (3a) - Seal Join

- Seal join with reinforced foil tape.
- Position tape centrally over join and firmly press along the entire tape surface.

MECHANICAL FIXING

1. Install Pins / Hangers

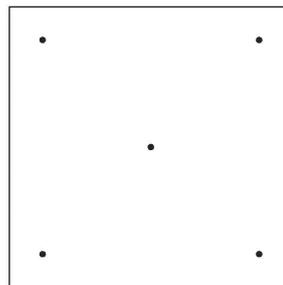
For details on our range of products and application guide, please refer to Install Pins Technical Data Sheet 512IP and installation guide

Example:

(Based on product weighing up to 7kg/m²)

For acoustic insulation:

- 5 pins / m², as per adjacent drawing
- 6 - 8 g / pin
- 30 - 40 g adhesive / m²



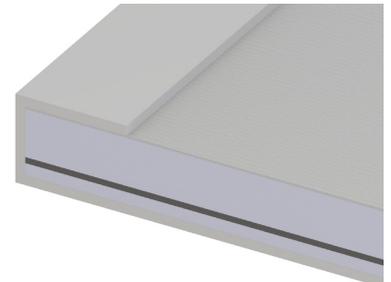
DIE PATTERN

2. C - Channel Fixing

'C' channel or a folded return is often used to protect the edge of a product from damage or contamination for instance in an electrical cabinet or compressor enclosure.

It is also used to hold in place, or as a secondary fixing point in conjunction with adhesive or mechanical fixing systems.

The internal flange height should be the same as the product thickness to give a tight fit. The length of the leg or flange can be 12 – 15 mm.



Please note: Mechanical fixing will be required on surfaces when installed under extreme temperature and humidity conditions, air flow or when substrate surfaces cannot be free from contaminants. For all inverted installations including ceiling installations, mechanical fixing must be done in addition to adhesive bonding.