

Installation Instructions.

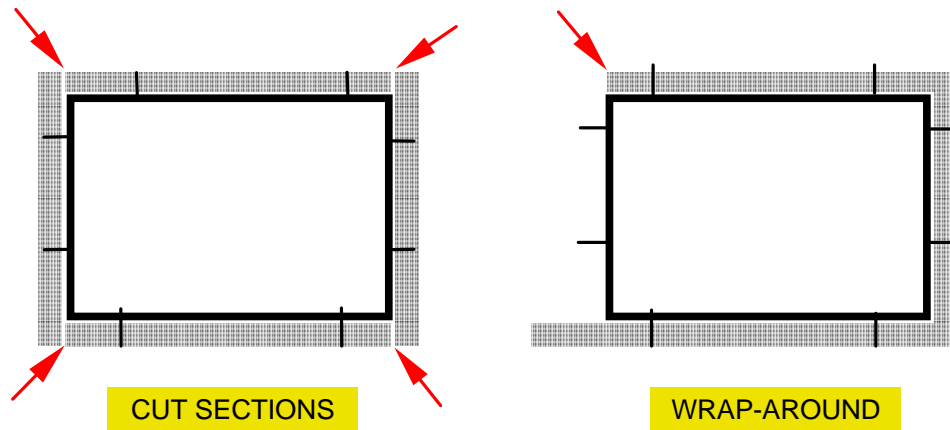
DUCTING

- Thermobreak™ insulation can be installed either with conventional mechanical fastening method (weld pins), or with pressure sensitive adhesive (applied inhouse).
- Thermobreak™ can be easily cut with a sharp knife.
- All joints should be butted firmly together & sealed with high grade aluminium foil such as PPC 493 or equivalent.
- Thermobreak™ can be supplied with *Flange Strips* of 150 mm width for insulation of flanges.

Installation Methods

Mechanical Fixing (Weld pins).

- Thermobreak's flexibility allows it to either be wrapped around a duct or, for large thicknesses, to be sheeted for easier application.



→ AREAS TO BE SEALED WITH 75 mm ALUMINIUM FOIL TAPE

Fixing with transfer adhesive.

Adhesive basics.

- ❑ The adhesive used is a pressure sensitive acrylic system. It relies on pressure to properly bond to the duct. Once fixed, adhesive should be padded firmly to ensure contact with the duct metal sheet.
- ❑ The adhesive can be re-positioned for better alignment, provided no pressure is applied and it is done immediately. However, once the adhesive cures, it will be impossible to re-position or peel off the duct.
- ❑ No weld pins are required.



Surface preparation

- ❑ All ductwork should be clean of duct and grease & oil. To clean the duct, first wipe down with a clean cloth to remove excess dust. To remove grease & oil, a suitable solvent should be used such as methylated spirits or acetone. Wipe ducts clean and allow solvent to evaporate.
- ❑ Work in a reasonably clean area and avoid dusty places.



Application of Thermobreak

- ❑ Firstly cut the required length of Thermobreak required. This will depend on whether a wrap-around system (usually less than 25 mm thickness) is used or whether four cut sections are used (usually above 25 mm thickness).

WRAP – AROUND SYSTEM

- ❑ Cut Thermobreak to the required length. Always allow excess 20 mm for final adjustment. Do not peel the backing paper off at this stage.
- ❑ Lay duct section on the floor. To avoid damage to the insulation, use cardboard sheets on the floor.
- ❑ Peel off only a small section to start off with (150 mm). Align duct edge with the insulation sheet edge, and gently lower to the duct. Pad firmly. Starting from the fixed edge, move to the other edge by lowering the insulation to the duct progressively whilst padding insulation at the same time. Peel off enough paper to cover one side at a time only. Ensure air is expelled. **DO NOT TRY TO LOWER ENTIRE SHEET TO ONE SIDE OF THE DUCT AT ONCE. THIS WILL LEAD TO TRAPPED AIR POCKETS. (see Fig 1)**
Thermobreak is a closed cell material and will not allow trapped air to escape.

- ❑ Once one side is fixed, turn duct to expose new bare side.
- ❑ Slowly peel off enough backing paper to cover the edge and side of duct. Slowly pad the adhesive to the edge; **DO NOT PULL THE INSULATION ON THE DUCT CORNERS**. Guide the insulation over the corner by pressing *lightly* (Fig 2). The insulation on the corners should be the same thickness as on the flat sections.
- ❑ Repeat until completely covered. On the final side, ensure the insulation length reaches the same level as the starting edge. Trim off excess length with sharp knife until it is level with adjacent side. (Fig 3).
- ❑ Use aluminium foil tape to seal the joint.

APPLY PRESSURE IN THIS DIRECTION
STARTING FROM ONE EDGE

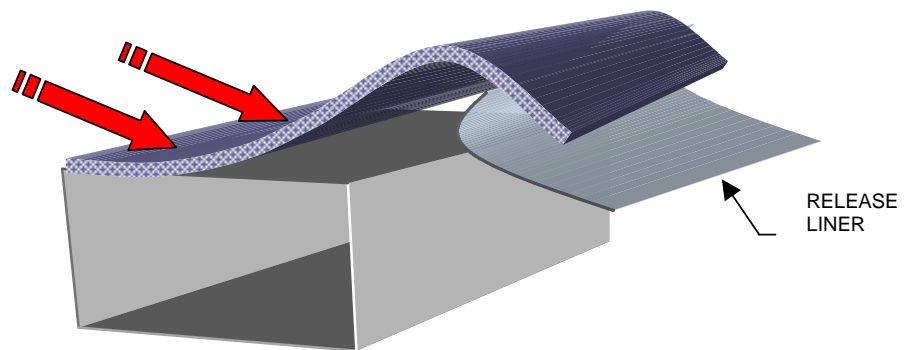


Fig 1

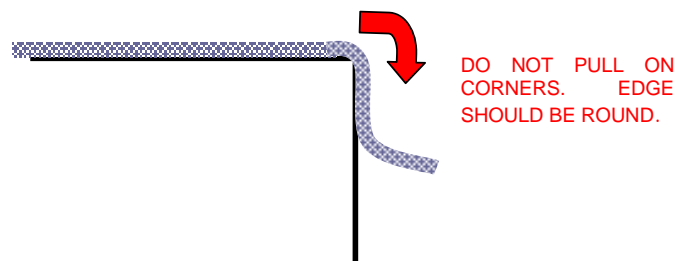


Fig 2

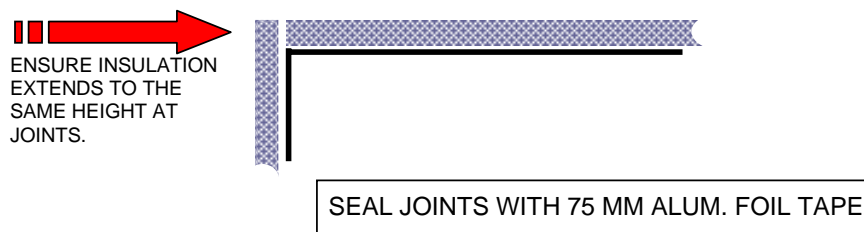


Fig 3

CUT SECTION INSTALLATION

- ❑ For thicknesses above 25 mm it is advisable to use four cut sections to insulate the duct.
- ❑ Observe cleaning requirements of the duct as outlined in the previous section.
- ❑ Observe application techniques as explained in the previous section relating to application of sheets. Apply sheets slowly starting from one edge and then slowly moving to the opposite edge, whilst applying pressure at the same time. NEVER LAY THE WHOLE SHEET AT ONCE AS THIS WILL LEAD TO AIR POCKETS.
- ❑ Ensure width of sheets is adequate to cover the duct and the extra width from the adjacent sheets of insulation. (See Fig 3).

HANGERS

- ❑ Conventional hangers are suitable for the installation of Thermobreak. If the duct is insulated before it is installed, the hanger base must be lined with foam of the same thickness of Thermobreak to protect against compression. (Fig 4). Thermobreak can also be used in place of plain PE foam.

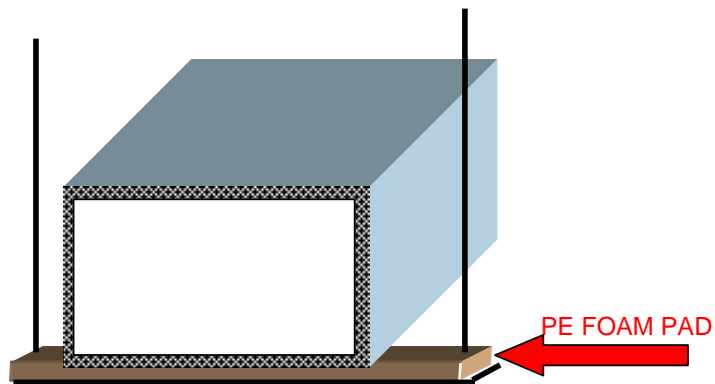


Fig 4