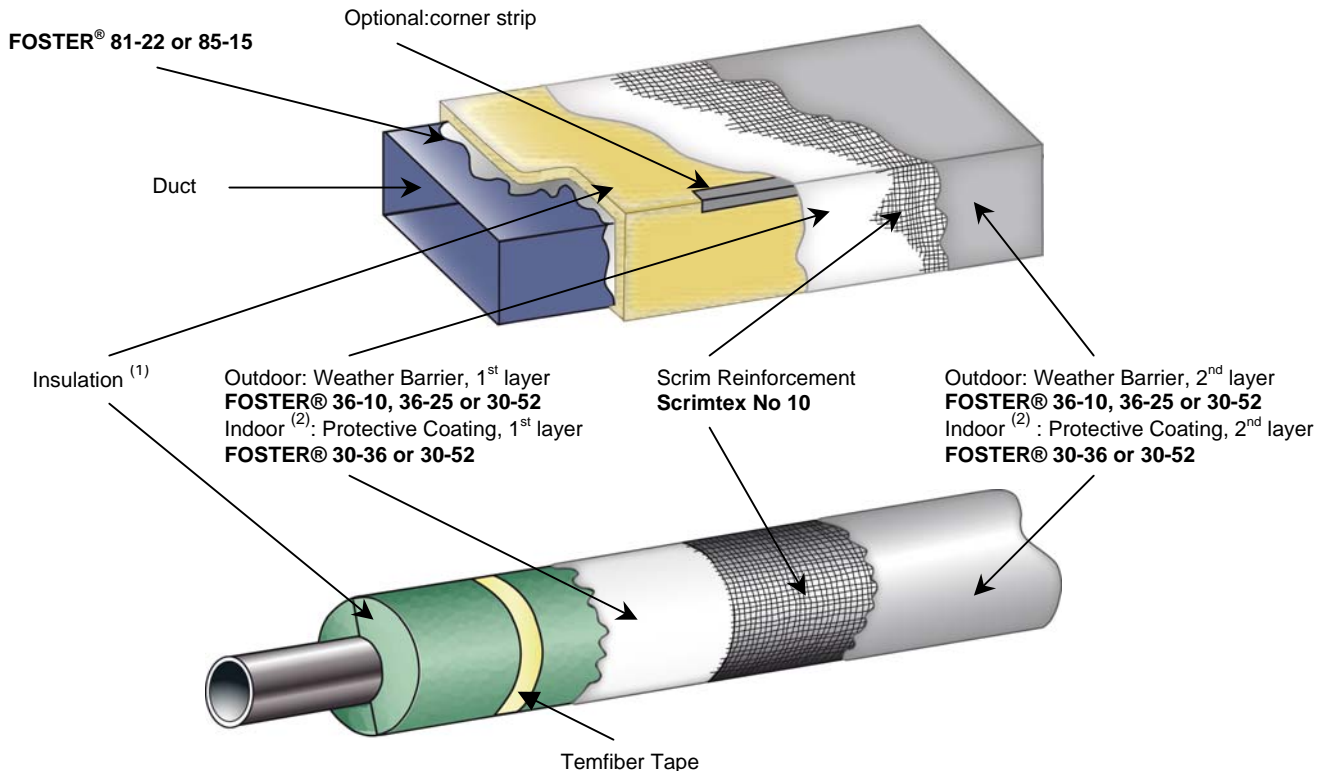




HVAC/ ambient insulation



N.B. Metal cladding ⁽³⁾ is optional

The problem

In the HVAC (heating, ventilation and air-conditioning) markets, where the operating temperatures are generally moderate (+5°C to +90°C), it is necessary to protect the insulation against the ingress of moisture and against mechanical damage. Typical problem areas in the HVAC markets include:

- Duct Insulation: damaged foil-facing and/or failure of the foil tape will allow moisture into the insulation, thus reducing its effectiveness, causing corrosion and risking the growth of mould and fungus. In public buildings repairs are costly and disruptive.
- Pipe Insulation: Elastomeric foams can come loose at the (adhered) joints, or can, in exterior applications, be damaged by pecking birds. Additionally the smoke- and fire properties of some foams are considered negative properties.

The solution

FOSTER® Products Corp, world market leader in the protection of thermal insulation for more than 50 years, provides total solutions to install and protect insulation systems.

The FOSTER® system

Adhesives – FOSTER® offers a range of adhesives for the attachment of the insulation material to the substrate or itself.

Protective coatings outdoor/ indoor – over the outer insulation surface a FOSTER® weather-barrier mastic is applied in two layers, with reinforcement fabric wrapped in the first layer prior to application of the second layer. Often different colours are used to ensure proper coverage.

Remarks:

- (1) For fibrous insulation, a factory-applied foil facing is often used in order to facilitate the application of the mastic, enhance the appearance and reduce the quantity of mastic used.
- (2) Alternative protective system for indoor insulation on pipes or ducts in lieu of a 2-coat + scrim application with light-weight lagging-cloth (canvas or fibre glass) soaked/ coated with a FOSTER coating - e.g. 30-36 or 30-52.
- (3) Where metal jacketing is used as an outer cover over the insulation, the overlaps are sealed with a Foster® metal sealant.

Technical Support

This selection guide covers the best practice for most situations. If you need additional information please contact our technical department. Based on our engineered solutions we can advise on specific details, application and engineering.



AMBIENT INSULATION – INDOOR/ OUTDOOR

Foster code ⁽³⁾	Product Name	Solvent based	Solvent free low voc	Service temp. °C	Product Description
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WEATHER BARRIER

36-10 36-25	Weatherite Mastic White/grey		✓	-29 to +82	A water-based, extremely fire-resistive weather barrier mastic for use on most insulations. It has excellent brushing and troweling properties.
30-36	Sealfas Coating White		✓	-20 to +85	A tough, white, washable, abrasion- resistant coating for indoor thermal insulation. Also used with lagging cloth (see remark 2 on front side).
30-52	Fireflex Coating White/grey		✓	-20 to +85	A Class-O tough, white, washable, abrasion- resistant coating for indoor and outdoor thermal insulation. Also used with lagging cloth (see remark 2 on front side).

ADHESIVE

81-22	Fibrous adhesive		✓	-29 to +93	A highly viscous sprayable adhesive for bonding light-weight insulation, including polystyrene, to sheet metal.
85-15	Stic-Safe® Adhesive		✓	-29 to +93	A highly viscous fast-drying, sprayable adhesive for bonding light weight insulation to sheet metal. Its superior adhesion and high strength make it ideal for high velocity ducting.
81-28	Spraytack /Spraystick		✓	+5 to +40	CFC-free aerosol adhesive for bonding a wide range of materials.

SCRIM REINFORCEMENT

Tem ⁽³⁾	Scrimtex (N 10)	-	-	+250	10 x 10 fibreglass reinforcement scrim with excellent dimensional stability.
42-24	Mast-A-Fab	-	-	+121	9 x 8 polyester scrim with a PVA finish.

METAL SEALANT/ JACKETING SEALANT

95-44	Elastolar Sealant		✓	-40 to +121 ⁽¹⁾	Fire-resistive, aluminium-coloured, flexible vapour barrier for sealing laps of metal jacketing over insulation.
96-01	Extruded Sealant tape		✓	-51 to +71	Non-hardening butyl gap sealant with excellent adhesion and weathering properties for use on plastic foam and cellular glass insulations also on sheet metal.
Tem ⁽²⁾	Temseal™ UAF		✓	-50 to +150	General purpose anti-fungal silicone sealant or adhesive.
Tem ⁽²⁾	Kiiltoflex K		✓	-40 to +90	IMO certified one-component MS Polymer elastic joint-sealant and adhesive.

KEY

Recommended Foster product	Recommended non Foster product
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Remarks

- (1) Service temperature dependant on substrate and application, please refer to TDS
(2) 'Tem' = a Temati Product (non-FOSTER)