

# TECHNICAL DATA SHEET

## GLASSWOOL SPI SECTIONAL PIPE INSULATION (SPI)

### Product description and typical applications:

Glasswool Sectional Pipe Insulation (SPI) is manufactured from rigid glasswool pre-moulded into one-piece cylindrical sections. Its sections are slit along one wall to allow the insulation to be opened and installed over piping. The high density characteristic provides excellent compression resistance and enables the product to be used at service temperatures up to 340°C. A variety of factory applied facings are available where extra protection of the outer surface or condensation control is required, including aluminum foil and Sisalation® 450 Facing Foil. SPI is available in 1 metre lengths, faced or unfaced, and with a variety of wall thicknesses to suit standard steel pipes and copper tubes from 12.7mm to 610mm O.D.

### Physical characteristics:

Nominal Glasswool Density:	Thickness (mm)				
64kg/m <sup>3</sup>	25	38	50	63	75

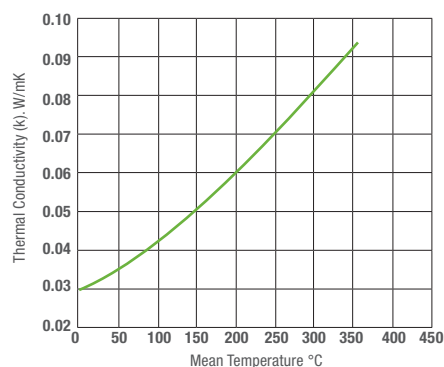
### Thermal conductivity:

The thermal conductivity of Glasswool SPI at a mean temperature\* 23°C is 0.032 (at 20°C it is 0.032 W/mK) when tested in accordance with ASTM C177. Values of thermal conductivity may be obtained from the following graph.

$$* \text{Mean Temperature} = \frac{T_1 + T_2}{2}$$

Where T1 = temperature of hot side of insulation (°C)

Where T2 = temperature of cool side of insulation (°C)



### Maximum service temperature:

The maximum service temperature for Glasswool SPI is 340°C. Where facings are applied, the temperature tolerance of the facing adhesive limits the surface temperature to 70°C.

### Suitability for stainless steel

Under certain conditions, the presence of soluble chlorides may cause stress corrosion cracking of some stainless steel. Glasswool SPI does not contain significant amounts of chlorides, and conforms to ASTM C795 'Specification for Wicking-Type Thermal Insulation for use over Austenitic Stainless Steel', and is thus considered suitable.

Fletcher<sup>®</sup>  
Insulation  
Building Better, Together.

## Applications and facings

Glasswool SPI is available with a variety of outer jacket or facing materials deeming it suitable for use on both cold and hot pipe applications.

**Cold Applications:** To prevent the ingress of water vapour and subsequent potential condensation or freezing problems, all pipe insulation requires an effective vapour barrier. Glasswool SPI is available with either Alfoil™ or Sisalation® 450 Facing Foil pre-applied to the sections to suit such applications.

**Hot Applications:** Glasswool SPI does not require a facing for hot work. However, a metal cladding (generally swaged galvanised or aluminium metal sheathing) is recommended on all outdoor applications, or on indoor applications where protection from physical damage is required.

## Early fire hazard properties

Glasswool SPI achieves the following results when tested in accordance with AS1530.3-1999:

Ignitability Index	0
Spread of Flame Index	0
Heat Evolved Index	0
Smoke Developed Index	0-1

## Moisture absorption:

Tested in an atmosphere of 65% relative humidity at 20°C in accordance with British Standard 2972. The moisture content of Glasswool SPI is less than 0.1% by volume.

## Alkalinity

When tested in accordance with British Standard 3958, Fletcher Insulation™ glasswool products receive a rating of pH9 (pH7 is neutral). They will not promote or accelerate the corrosion of steel or galvanised steel studs provided they are protected from external contamination.

## Green Star compliant

Fletcher Insulation avoids the use of Ozone Depleting Potential (ODP) substances in the manufacture or composition of its FBS-1 Glasswool Bio-Soluble Insulation® and Sisalation® reflective foil products.

The use of Glasswool SPI guarantees the use of Zero ODP insulation while also ensuring that no harmful levels of Volatile Organic Compounds (VOC's) are released. This allows the incorporation of environmentally preferable insulation whilst also maintaining indoor air quality.

## Specification notes

The insulation material shall be Fletcher Insulation Glasswool SPI with a nominal density of 64kg/m<sup>3</sup> and in accordance with the following specifications:

- \_\_\_\_\_ (specify pipe material, outside diameter and length of run);
- \_\_\_\_\_ (specify insulation thickness required);
- \_\_\_\_\_ (specify type of finish, facing or surface protection required).