

Crown Pipe Insulation

Thermal Insulation for heating, ventilating and light industrial applications



H&V

Crown Pipe Insulation

Crown Pipe Insulation is a high quality preformed pipe insulation product, which is made from shot free non-combustible glass mineral wool.

Description

It is available plain or as SA Grade which comprises a factory applied Bright Class 'O' facing with a self-adhesive overlap.

Crown Pipe insulation can be used up to continuous operating temperatures of 230°C and at a nominal density of 80 kg/m³ it has a combination of lightness, strength and ease of application which make it the perfect product for heating, ventilating and light industrial applications.

Standards

Crown Pipe Insulation is a non-combustible inorganic glass wool, defined as mineral wool in BS 3533. It complies with the requirements of BS 3958: Part 4, BS 5422 and BS 5970: 2001. Crown Pipe Insulation is manufactured to BSI Quality Assurance Standard BS EN ISO 9001: 2000.

Thermal Conductivity

Mean temperature °C	Thermal conductivity (W/mK)
10	0.031
50	0.035
100	0.042
150	0.050

Note: tested in accordance with BS 874:1973 (1980)

Operating Temperatures

Crown Pipe Insulation may be used on pipework at continuous operating temperatures up to 230°C and may be used at below ambient temperatures provided that a 100% vapour barrier is maintained. When using SA Grade the surface temperature of the product should not exceed 80°C.

Facings

Crown Pipe Insulation is available in all sizes either unfaced or as SA Grade, which comprises a factory applied Bright Class 'O' facing, which is a reinforced aluminium foil with high puncture resistance and is a vapour barrier with a permeability of 0.00114g/sMN.

Thermal Conductivity

Crown Pipe Insulation has one of the lowest thermal conductivities of any mineral wool pipe section.

Fire Performance

Crown Pipe Insulation base mineral wool is non-combustible when tested in accordance with BS 476: Part 4: 1970. Faced product complies with the Class 'O' requirements of the Building Regulations when tested to BS 476: Part 6: 1989 and Part 7: 1997.

Permanence

Crown Pipe Insulation is water resistant, rot-proof, odourless, non-hygroscopic, does not sustain vermin and will not encourage the growth of fungi, mould or bacteria. It is compatible with all surfaces on which it is likely to be used in H&V and light industrial applications.



Acoustics

Where there is a need to reduce radiated noise levels from pipework, Crown Pipe Insulation provides effective control, actual performance varying with thickness and surface finish - eg, 100mm thickness under 20swg mild steel gives an average reduction of over 31dB. Particular care in sealing joints and avoiding bridging is required to achieve the best results.

Form and Dimensions

Crown Pipe Insulation is available as one-piece snap-on tubes 1200mm long throughout the range.

All dimensions are nominal. Product may also be nested where required.

Application

Crown Pipe insulation is used for the thermal insulation of heating, ventilating pipes and light industrial applications.

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Installation

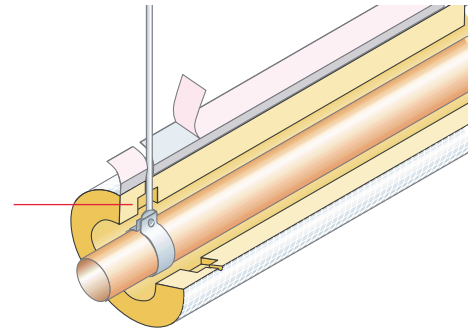
- 1 Crown Pipe Insulation should be kept dry in store and during erection/ installation. When stored outside it should be fully protected against adverse weather conditions.
- 2 It should be installed at ambient temperatures only above 0°C and ideally when the ambient temperature is at least 2°C higher than dew point.

Additional instructions for the use of SA Grade Crown Pipe Insulation

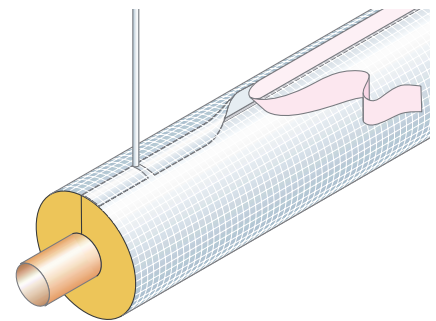
- 3 The portion of the facing to which the overlap is stuck to must be clean, dry and free from condensation, dust, grease, oil and hand creams.
- 4 When the product requires cutting or shaping this should be carried out prior to the removal of the backing tape.
- 5 The overlap is stuck down by removing the backing tape, peeling it away from one end and pressing down the overlap as the adhesive is exposed. As the backing tape is removed, the exposed overlap adhesive should be pressed into position in one simultaneous movement.
- 6 Alternatively, the backing tape may be removed entirely and the overlap stuck down starting at the centre and working out to each end. In all cases, the overlap should be stuck by applying the maximum amount of pressure available possible and smoothing down to achieve 100% contact area.
- 7 Butt circumferential joints should be covered with suitable self-adhesive tape not less than 50mm wide. Normally, circumferential bands or wire ties should not be necessary. However, where this is felt appropriate (ie, extra support for large sections) they should be installed at 450mm maximum centres and not nearer than 50mm to the ends. Over-tightening should be avoided to prevent damage to the facing. Bands or wire ties should only be installed once the overlap has been stuck down.

Crown Pipe insulation - cut away

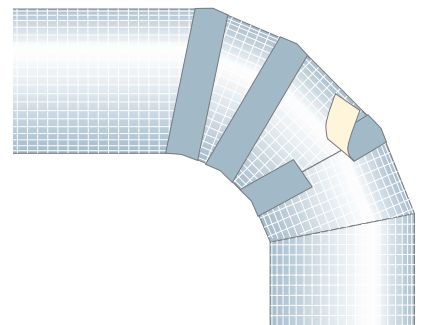
Insulation cut away for pipe support



Crown Pipe insulation - removing backing tape



Crown Pipe insulation - radiused bends



- 8 Radiused bends should be insulated using site-mitred segments wired or banded into place. Separate self-adhesive matching tape should be used at all joints.
- 9 The self-adhesive overlap on Crown Pipe Insulation SA Grade can be treated as a conventional overlap and stuck down using separate matching self-adhesive tapes if desired.

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