

PREFORMED PIPE SECTIONS

- **High quality**
- **80kg/m³ density**
- **The only NZ made/ locally manufactured product**
- **Short lead-time (if it's not ex stock, we can have it to you in 2 weeks)**
- **Full range of sizes available**
- **Zero ozone depleting potential**
- **Environmental Choice Certified (License No. 2504017)**

PRODUCT DESCRIPTION

Accumen Shapes Ltd Preformed Pipe Sections are manufactured from non-combustible glass fibres bonded with a thermosetting resin into cylindrical insulation sections.

A slit along one wall allows the pipe section to be opened and installed over the pipe.

BENEFITS

The Preformed Pipe Sections are a highly efficient thermal insulation product for use on pipes operating in the temperature range 2°C to 450°C.

They are designed for use on chilled water, hot water, steam and other service lines in commercial and institutional projects, as well as industrial process and steam lines.

NON CORROSIVE

Inorganic fibres will not cause or accelerate the corrosion of any metal. Cannot act as a catalyst for stress corrosion cracking of stainless steel unless wet by solutions containing chloride.

Preformed Pipe Section is also halide free; this is important because free halides are known, like chlorides, to cause stress corrosion cracking in stainless steel pipe. If the preformed pipe section is being used to lag stainless steel pipe and moisture is likely to be present, the recommendation is to first wrap the pipe with aluminium foil to act as a sacrificial anode.



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APPLICATIONS

Indoor – Preformed Pipe Sections should be covered by material such as Flamestop foil laminate, or clad with zinc anneal or stainless jackets. The choice of facing should be made by the designer to suit the requirements of environment, hygiene and mechanical damage. Sections must be protected from moisture and water.

Outdoor – Preformed Pipe Sections must be clad in a weathertight jacket. This may consist of suitably formed zinc anneal, aluminium or stainless sheeting, or other suitable materials. Mastic coatings may also be used. Jacketing must be capable of preventing penetration by rain water and water from other sources where applicable.

MAXIMUM SERVICE TEMPERATURE - 450°C

The temperature at which the pipe sections may be used must not exceed 450°C.

At operating temperatures over 180°C, as with all bonded glass wool products, there may be some volatilization of binder at the hot face of the insulation, but this causes no deterioration of thermal properties.

Plant should be commissioned in the normal manner, with the maximum operating temperature being reached in stages of about 50°C per hour.

Maximum recommended thickness at 450°C is 100mm.

DIMENSIONS

The standard pipe section length is 1000mm. The sections are manufactured to ASTM C585 to suit steel pipes to BS 3600 and copper pipes to NZS 3501. Sections for steel pipes above 300mm nominal bore and copper pipes above 150mm nominal bore can be manufactured on request.

The pipe sections are available with wall thickness of 19mm, 25mm, 38mm, 50mm and 63mm. Greater wall thickness may be manufactured on request.

ASTM C585 also requires a clearance fit of the insulation on the pipe. Nominal inside diameters of insulation are listed on the price list.

STANDARD FINISHES

Pipe sections are available in plain (unfaced) finish, or with a foil facing, typically for chilled water lines.

PHYSICAL PROPERTIES

Thermal Conductivity. Pipe Sections meet NZS 4859.1 testing requirements via ASTM C518.

Indicative table below of thermal conductivity up to 275°C, based on testing to ASTM C518.

Mean Temperature °C	λ^*
10	0.032
25	0.034
50	0.037
100	0.043
125	0.047
150	0.051
175	0.056
200	0.062
225	0.068
250	0.075
275	0.082

* λ = W/m°C

Moisture Absorption. Less than 0.2% by volume when held for 96 hours in an atmosphere of 95% relative humidity at 40°C.

Fire Performance. NZBC Section C3 Group1S for both plain and foiled pipe.

Early Fire Hazard. Unfaced product tested to Australian Standard AS 1530 pt3 1982.

Applied Physics Laboratory Test Report 8832.

Ignitability	0
Spread of Flame index	0
Heat Evolved Index Smoke	0
Developed Index	2

Bacterial & Fungal Resistance. Glass wool insulation does not sustain bacterial or fungal growth. Alkalinity. pH9, slightly alkaline (pH7 is neutral)

Resilience. Sufficient to resist moderate compressional forces. Will accommodate pipeline expansion or contraction without cracking.

The information in this leaflet is issued in good faith.

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