

**PRODUCT BROCHURE**

EPS Pipe Lagging

Pre-cut split EPS pipe insulation, made to order in bores 15NB-650NB and insulation-wall thicknesses of 20-150 mm, supplied bare as 2- or 3-piece sections at a standard 1220 mm length.

DOCUMENT	ISSUED	PRODUCT	STATUS
TP-BR-PIPE-LAGGING	2026-08-20	pipe-lagging	Issued for use

OVERVIEW

Technopol EPS Pipe Lagging is a made-to-order pipe insulation supplied as pre-cut split sections that open, wrap the pipe and close back together. It is made to the client's nominal bore, insulation-wall thickness and length across 15NB-650NB (plus 290ID) and 20-150 mm walls, in EPS density grades 16DV / 20DV / 24DV / 32DV, at a standard supply length of 1220 mm. It is supplied bare: the shells only, with no cover, no facing and no vapour barrier. The jacket, the vapour barrier and the fixings are the installer's scope.

Each ring of lagging is a curved shell whose inside face is made to the pipe outside diameter and whose outside face is set by the specified insulation-wall thickness. Smaller bores are supplied as two half-shells; larger bores are supplied as two- or three-piece sets so that each piece can be handled and closed around a big-diameter pipe. At the largest bores the ring can be split into more pieces; the piece count is confirmed on the quotation.

Pipe outside diameters run from 22 mm (15NB) to 324 mm (300NB) on the standard price lists, with larger nominal bores priced up to 650NB plus a 290ID size. Fourteen insulation-wall thicknesses are made: 20, 25, 30, 35, 40, 50, 70, 75, 80, 90, 100, 110, 130 and 150 mm. The standard supply length is 1220 mm; any section between 610 and 1220 mm is invoiced at the 1220 mm price. Sections are locked together on the pipe; the jointing arrangement and the dimensional tolerances on bore, wall and length are agreed per order.

A StoneWool core is also made, in factory pipe sections from 1/4" (13 mm) to 14" (356 mm) bore and 25, 30, 40, 50, 60, 80 or 100 mm wall - every bore/wall combination is available, custom made to order. It carries a genuine A1 non-combustible reaction-to-fire class and holds its performance well past the temperature where the EPS shell would soften, so it is the route to specify for steam, boiler and other high-temperature lines, and anywhere the works require a reaction-to-fire class from the insulation itself.

Nothing else comes with the product: no cladding, no mastic, no banding and no vapour barrier.

KEY FACTS

PROPERTY	VALUE
Material / core	Expanded polystyrene (EPS), the standard core. A StoneWool core is also made, in factory pipe sections - see the StoneWool rows below°
StoneWool bore range	1/4" (13 mm) to 14" (356 mm), 16 standard bore sizes. Density, wall thickness and diameter are custom made to order°
StoneWool insulation-wall thickness	25, 30, 40, 50, 60, 80, 100 mm - every bore/wall combination available°
StoneWool density	90-100 kg/m3°
StoneWool thermal conductivity (lambda) by mean temperature	Rises with mean temperature: 0.044 W/m.K at 50 C, 0.049 at 100 C, 0.059 at 150 C, 0.068 at 250 C, 0.110 at 300 C, 0.115 W/m.K at 350 C°
StoneWool reaction to fire	A1 (non-combustible) to EN 13501-1 / TS EN 13162°
Form	Pre-cut split shells that wrap and close over the pipe: 2-piece (half-shells) at smaller bores, 2- or 3-piece sets at larger bores°

PROPERTY	VALUE
Facing / cover	None. Supplied bare - the price list heading reads 'WITHOUT COVER OR VAPOUR BARRIER' [°]
Pipe nominal-bore range	15NB to 650NB, plus 290ID (standard nominal-bore steps)
Pipe outside diameters made to	22 mm (15NB) up to 324 mm (300NB). Outside diameters above 300NB are confirmed on the quotation
Insulation wall thickness	20, 25, 30, 35, 40, 50, 70, 75, 80, 90, 100, 110, 130, 150 mm [°]
EPS density grades	Standard Grade/16DV, 20DV, 24DV, 32DV (nominal 16-32 kg/m3). The Insulpro line is quoted at 15DV and 24DV [°]
Standard supply length	1220 mm (1.22 m). Sections of 610-1220 mm are invoiced at the 1220 mm price [°]
Design thermal conductivity (lambda)	16DV 0.038 W/m.K, 20DV 0.035 W/m.K, 24DV 0.034 W/m.K, at 10 C, from Technopol's EPS Physical Properties datasheet. 32DV sits outside that datasheet's tested range - confirmed on the quotation [°]
Reaction to fire	Standard EPS pipe lagging carries no reaction-to-fire class. All EPS is combustible [°]
Fire resistance (REI, minutes)	Not rated as a fire division. A fire-resistance rating is a tested-assembly property; the lagging carries none [°]
Certification	No Agreement certificate covers pipe insulation - Agreement SA 2020/609 covers the LiteCore Building System, as a non-load-bearing wall. SANS 1508 / EN 13163 are the EPS thermal-insulation product standards and the source of declared values by grade [°]
Quality management	Technopol holds ISO 9001:2015 quality-management certification (EQCSA, SANAS C22), valid to 2028-06-02. Certified scope: EPS Blocks; EPS Sheets; EPS Cornice; Insulated Ceiling Solutions; Adhesives & Polymers; Roof solutions. It certifies the management system, not the product [°]

[°] Catalogue or declared value. Where a figure is load-bearing in your design, confirm it for the material supplied — on a load-bearing application, by testing the product delivered to your site.

WHERE IT IS USED

- Cold-water plumbing - condensation ('sweating') control on internal pipework
- Chilled-water and HVAC distribution lines, with a site-applied continuous sealed vapour barrier over the shells
- Refrigeration suction lines, on the same condition - the vapour barrier is mandatory and is not supplied
- Domestic hot-water lines running at 55-60 C, well below the EPS softening range
- Underfloor-heating manifolds and distribution pipework at moderate flow temperature
- Frost protection of exposed and external pipework, clad against UV
- Moderate-temperature industrial and process pipework, below about 70 C surface temperature
- Large-bore process pipe and duct runs, supplied as 2- or 3-piece sets
- A lower-cost alternative to mineral-fibre and elastomeric pipe insulation on moderate hot and cold duty, where the installer supplies the vapour barrier and the jacket

- StoneWool pipe sections (a factory-made mineral-wool option, section 9): steam, boiler and other high-temperature process lines, and anywhere a reaction-to-fire class is required from the insulation itself

WHERE NOT TO USE IT

- Steam lines, boiler and hot-process pipework, solar primary circuits, or any line whose surface runs above roughly 70 C. EPS softens and creeps at sustained temperatures of 70-80 C: the shell shrinks off the pipe, the joints open and the section collapses. Specify Technopol StoneWool pipe sections instead - factory-made shells holding their performance to 350 C mean temperature, with proper cladding - or Technopol's PIR32 / PIC32 closed-cell rigid shells for a different duty profile. Ask for either by name.
- Chilled, glycol or refrigerant lines run bare, as supplied. Below the dew point, vapour drives inward through the joints, condenses inside the insulation, ices, and corrodes the pipe underneath where nobody can see it. EPS lagging is supplied without a vapour barrier. Either a mechanical engineer designs and inspects a fully continuous, sealed external vapour barrier and jacket, or specify closed-cell elastomeric sections instead.
- As a fire division, or anywhere a reaction-to-fire class is a condition of the works - service risers through compartment floors, plant rooms, escape routes, ducts crossing fire divisions. A fire division requires a fire-resistance rating in minutes, which is an assembly property that no pipe-insulation core supplies on its own; standard EPS pipe lagging additionally carries no reaction-to-fire class and is combustible. Where the works call for a reaction-to-fire class from the insulation itself, specify Technopol StoneWool pipe sections - A1, non-combustible to EN 13501-1 - but still confirm the fire-resistance rating of the assembly as a whole with the works' fire engineer.
- Within the clearance zone of a flue, boiler, kiln, cooker or condenser discharge, or inside any hot-works zone.
- Carrying pipe load at hangers, clamps, saddles or rollers. The shell is not a load-bearing component. Use a rated load-bearing insert or a saddle designed by others, and pass the lagging around it.
- Outdoors or in sunlight without a jacket. Bare EPS yellows, embrittles and degrades under UV.
- Anywhere solvents, hydrocarbons, bitumen, coal-tar primers, solvent-based paints, solvent-based mastics or solvent-bearing tapes can reach it. These dissolve EPS outright - including the adhesive on ordinary duct tape.
- Buried, submerged or permanently wet runs without an independent waterproof jacket. Sustained saturation destroys the thermal performance of EPS.
- On any project whose specification requires the pipe insulation itself to carry an Agreement certificate, a CE mark / Declaration of Performance or a product listing. Agreement SA 2020/609 covers the LiteCore Building System as a non-load-bearing wall and does not cover pipe insulation.

How to read this document. Where a figure is load-bearing in your design, confirm it for the material actually supplied — on any load-bearing application, by testing the product delivered to your site. That is the right way to buy from anybody, including us.

This is product information, not a design. It does not replace a competent person. Technopol SA (Pty) Ltd · info@technopol.co.za · +27 11 363 2780 · The test reports and certificates cited here are held by Technopol and their current status is available on request.