AccuThermax™ Phenolic PPS

Product Technical Statement: 115511

miproducts

Foil-faced rigid phenolic pipe insulation, Group 1-S, aged 0.023 W/mK. Services -180 to +120C.

View miproducts listing



Level of assurance needed to demonstrate NZ Building Code Compliance

LOW

Supporting documentation should include self-assessment and technical information by manufacturer

AccuThermax™ confirms that this minimum level of assurance has been met or exceeded by the following:
Accumen Shapes Ltd
BPIR disclosure - AccuThermax Phenolic PPS (Building (BPIR) Regulations 2022) - Rev 1.1, Sep 2026

masterspec partner

BPIR

The following information has been provided by AccuThermax™ demonstrating how this product complies with the Building Product Information Requirements.

Technical Statement

Product Class

CLASS 1

Product Description

AccuThermax Phenolic PPS is a rigid, closed-cell, fibre-free phenolic-foam preformed pipe section with a factory-applied aluminium-foil vapour-barrier jacket, fabricated in New Zealand by Accumen Shapes Ltd (imported phenolic foam core). It insulates chilled water, heating, refrigeration and low-temperature process pipework from -180 to +120 deg C, and has its own Masterspec work section: 7642AP Accumen Phenolic Pipe Insulation.

Why specify:

- Thinner walls for the same R-value: aged lambda 0.023 W/mK at 15 deg C, declared to AS/NZS 4859.1:2018 (BRANZ Thermal Assessment DC20033-01-3; calculated lambda 50/90 0.024 W/mK).

- Fire, foil-faced 40 kg/m3 sections: Euroclass B(L)-s1,d0 to EN 13501-1 (Efectis 2014-Efectis-R0155l; wall to 50 mm, OD to 300 mm), corresponding to NZBC Group Number 1-S via MBIE Building Product Specifications Table 8.5.3.1A - a correlation, not an ISO 9705 test. AS/NZS 1530.3 indices 0/0/0/0-1 (AWTA 24-000414 and 24-000417).

- Plain (unfaced) sections and preformed elbows as supplied: C-s1,d0 to EN 13501-1 (Group 2-S equivalence).

- Built for cold services: the foil facing and taped joints form the vapour barrier, with vapour stops at terminations, valves and every support insert.

- One system: 1 m sections hinged on the foil, 120 kg/m3 support inserts (80 kg/m3 option), preformed 90 deg elbows to the Preformed Elbow Schedule, Accumen foil tape and an Installation Guide.

- Project Thickness Schedule: Accumen sets the wall for each pipe size and minimum R-value, pre-tender.

- Fibre-free and clean to handle; CFC/HCFC-free foam core with a halogen-free blowing agent, no added halogenated flame retardants or chlorides, and AgBB/DIBt VOC-tested.

TDS, R-values, Installation Guide, SDS and BPIR at accumen.co.nz; test reports to BCAs and specifiers on request, complete and unaltered.

Scope of use

AccuThermax Phenolic PPS insulates building-services and HVAC pipework in commercial, industrial and residential buildings: chilled water and refrigeration (with the continuous foil vapour barrier), heating and hot-water distribution, and low-temperature process services, within -180 to +120 deg C. Suitability for specific pipework (including stainless steel, copper, carbon steel and plastic) is subject to system design and management of corrosion under insulation - refer to Accumen Technical Services.

Wall thickness is selected against the declared R-value schedule for the project's pipe sizes and required R-values; Accumen prepares a Project Thickness Schedule on request. Support inserts (120 kg/m3 standard, 80 kg/m3 option) carry the pipe at every hanger, clamp and support. Preformed elbows are made to the Preformed Elbow Schedule; other bends are mitred on site from straight sections.

Limitations: not a structural product; support inserts are load-bearing at supports only. The foil-faced fire classification covers 40 kg/m3 sections up to 50 mm wall and 300 mm outer diameter with foil-

Company Contact Details

accumen

Company:	Accumen Shapes Ltd
Physical Address:	95 Hugo Johnston Drive Penrose AUCKLAND
Postal Address:	PO Box 22675 Otahuhu AUCKLAND
Telephone:	64 09 2709228
Fax:	64 09 2764269
Email:	info@accumen.co.nz
Website:	www.accumen.co.nz

taped joints; plain sections and elbows are C-s1,d0; the EN 13501-1 classification of the 80/120 kg/m3 inserts is pending. The foil is not a weather or UV barrier - jacket exterior work to the specification. Install to the AccuThermax Phenolic PPS Installation Guide.

New Zealand Building Code (NZBC)

The product will, if employed in accordance with the supplier's installation and maintenance requirements, assist with meeting the following provisions of the building code:

- **Clause B2 Durability:** Performance B2.3.1(b), B2.3.1(c)

  B2 Durability — B2.3.1(b), not less than 15 years → Pathway: B2/AS1 principles, project-specific — established in-service history of rigid phenolic pipe insulation, with the foil vapour barrier and taped joints kept intact and maintained per published guidance → Documents: TDS v2.1 (Jul 2026); BPIR Rev 1.1 (Sep 2026); Installation Guide v1.0 (Oct 2026) → URL: https://www.accumen.co.nz/insulation/phenolic-pipe-section

  B2 Durability — B2.3.1(c), not less than 5 years → Pathway: as above, where the installation is easy to access and replace → Documents: TDS v2.1; BPIR Rev 1.1; Installation Guide v1.0 → URL: https://www.accumen.co.nz/insulation/phenolic-pipe-section

- **Clause C3 Fire affecting areas beyond the fire source:** Performance C3.4(a)

  C3.4(a) → Pathway: Group Number by correlation from EN 13501-1 via MBIE Building Product Specifications Table 8.5.3.1A (C/VM2 Appendix A basis) → Documents: Efectis classification report 2014-Efectis-R0155l (foil-faced pipe section, B(L)-s1,d0, wall to 50 mm, OD to 300 mm); AWTA 24-000414 and 24-000417 (AS/NZS 1530.3); TDS v2.1 (Jul 2026) → URL: https://www.accumen.co.nz/insulation/phenolic-pipe-section

- **Clause F2 Hazardous building materials:** Performance F2.3.1

  F2.3.1 → Pathway: HSNO classification status of the product as supplied → Document: AccuThermax Phenolic Foam SDS v1.0 (Sep 2026) → URL: https://www.accumen.co.nz/insulation/phenolic-pipe-section

- **Clause H1 Energy efficiency :** Performance H1.3.4(a), H1.3.6(b)

  H1 (services heat-loss clauses) → Pathway: heat-loss / thermal-resistance calculation using the declared aged lambda 0.023 W/mK at 15 deg C (AS/NZS 4859.1) and the declared R-value schedule → Documents: TDS v2.1 (Jul 2026); R-Values v2.1 (Sep 2026); BRANZ Thermal Assessment DC20033-01-3 → URL: https://www.accumen.co.nz/insulation/phenolic-pipe-section

Notes

C3.4(a): foil-faced 40 kg/m3 sections are Euroclass B(L)-s1,d0 to EN 13501-1, corresponding to NZBC Group Number 1-S via MBIE Building Product Specifications Table 8.5.3.1A, within 50 mm wall and 300 mm outer diameter; plain sections and elbows are C-s1,d0 (Group 2-S equivalence). H1: limits heat loss from services pipework; design with declared aged lambda 0.023 W/mK at 15 deg C (AS/NZS 4859.1) and the declared R-value schedule. B2.3.1(b) and (c): project-specific, depending on accessibility, replaceability, maintenance and the consequences of failure. F2.3.1: fibre-free and not classified as hazardous under HSNO in the form supplied - refer SDS. The product is one component of a building-services system; compliance of the installed system rests with the design professional.

Evidence

The product meets the requirements set out in the following documents, or relevant parts of cited standards within the documents:

C3.4(a) Fire: EN 13501-1 - Efectis Nederland classification report 2014-Efectis-R0155l (foil-faced pipe section, Euroclass B(L)-s1,d0, wall 0-50 mm, outer diameter to 300 mm); AS/NZS 1530.3 - AWTA 24-000414 (25 mm) and AWTA 24-000417 (100 mm), indices 0/0/0/0-1; Group Number 1-S by correlation from EN 13501-1 via MBIE Building Product Specifications Table 8.5.3.1A; plain foam C-s1,d0 to EN 13501-1 (classification reports held). H1 Energy Efficiency: AS/NZS 4859.1:2018 - BRANZ Thermal Assessment DC20033-01-3 (declared aged lambda 0.023 W/mK at 15 deg C; calculated lambda 50/90 0.024 W/mK); R-Value schedule v2.1. B2 Durability: B2/AS1 principles, project-specific - TDS v2.1, BPIR Rev 1.1, Installation Guide v1.0. F2 Hazardous Building Materials: AccuThermax Phenolic Foam SDS v1.0 - not classified as hazardous under HSNO in the form supplied. Independent test reports are available to BCAs and specifiers on request, complete and unaltered, under written authorisation.

Supporting Evidence

The product has and can make available the following additional evidence to support the above statements:

Accumen Shapes Ltd
BPIR disclosure - AccuThermax Phenolic PPS (Building (BPIR) Regulations 2022) - Rev 1.1, Sep 2026

Use in Service History

Rigid phenolic foam has a long international record in building-services pipe insulation, where its low thermal conductivity at minimal wall thickness and its reaction-to-fire performance are the selection drivers; this in-service history is the basis of the B2 durability position. AccuThermax Phenolic PPS is supported by an independent programme: a BRANZ thermal assessment to AS/NZS 4859.1 (DC20033-01-3; declared aged lambda 0.023 W/mK at 15 deg C); an EN 13501-1 classification for the

foil-faced section (Efectis 2014-Efectis-R0155l, B(L)-s1,d0); and AS/NZS 1530.3 early fire hazard indices (AWTA 24-000414 and 24-000417). Sections are fabricated in New Zealand by Accumen Shapes Ltd from imported phenolic foam, with batch and production records held to trace supplied product back to its production batch.

Product Criteria

Design requirements

Specify with Masterspec work section 7642AP Accumen Phenolic Pipe Insulation. Select wall thickness for the required R-value from the declared R-value schedule (outside diameter 6 to 610 mm, wall 20 to 100 mm; declared aged lambda 0.023 W/mK at 15 deg C), or ask Accumen for a Project Thickness Schedule for the project's pipe sizes and minimum R-values. Where the fire classification is relied on, keep foil-faced sections within 50 mm wall and 300 mm outer diameter. Fit 120 kg/m3 support inserts at every support (80 kg/m3 for lighter duty). Preformed elbows are made to the Preformed Elbow Schedule; other bends are mitred on site. On cold services, detail vapour stops at terminations, valves and supports; below 0 deg C add a multi-layer vapour-barrier jacket. Manage corrosion under insulation on metal pipework to the project design. Not structural. Accumen Technical Services: info@accumen.co.nz.

Installation requirements

Install to the AccuThermax Phenolic PPS Installation Guide. Open each section at its open joint, fit it over the pipe and close it; butt the next section hard up. On horizontal runs keep the open joint at the side, alternating side to side. Seal every open and butt joint with Accumen aluminium foil tape (a reinforced foil tape matching the facing is accepted - check with Accumen first on fire-rated work) and add two full tape bands round each section; the taped joint is part of the tested fire and vapour performance. Fit a support insert at every support. Use preformed elbows where the size is on the schedule; mitre other bends from straight sections. Cold services: form vapour stops at terminations, both sides of valves and flanges and at every insert; below 0 deg C add a multi-layer vapour-barrier jacket. Exterior: weatherproof jacket. Wear gloves - cut foil edges are sharp. Store flat, dry, under cover and off the ground, out of direct sun.

Maintenance requirements

AccuThermax Phenolic PPS needs no routine maintenance while its foil facing and taped joints are intact. Durability relies on the foil vapour barrier and joint seals: inspect the insulation and jacketing annually, and after any building works nearby, for mechanical damage, joint integrity and water ingress, and repair promptly to keep thermal and vapour performance. Repair damaged facing and re-tape joints with Accumen aluminium foil tape; on cold services, restore any disturbed vapour stop. In accessible plant areas, protect the insulation from impact and foot traffic - it is not a wearing or trafficable surface and must not be walked on or loaded. The product's contribution to B2.3.1 assumes these conditions are maintained; specified durability for the installation remains a project-specific assessment by the design professional.

Warrantees

AccuThermax Phenolic PPS is covered by the Accumen Product Warranty (v1.0, August 2026): 15 years from the date of supply, on a supply-only (not installation), ex-factory basis. Nothing in this listing limits rights under the Consumer Guarantees Act 1993 where it applies. Conditions: the product is stored, handled and installed in accordance with the published Technical Data Sheet, Installation Guide and Safety Data Sheet, with every joint sealed with Accumen aluminium foil tape, and used within the published service conditions (-180 to +120 deg C; foil-faced fire classification to 50 mm wall). Exclusions: installation workmanship; damage after delivery; use outside the published scope. Batch and production records are held by Accumen to support any claim. Warranty terms: accumen.co.nz or info@accumen.co.nz.

Company Product Information

Environmental

AccuThermax Phenolic PPS has a closed-cell, fibre-free phenolic foam core made with a halogen-free blowing agent: CFC- and HCFC-free, with low Ozone Depletion Potential and low Global Warming Potential. The foam core contains no added halogenated flame retardants and no added chlorides, and its VOC emissions are tested to the AgBB/DIBt scheme (complies). It is clean to handle and not classified as hazardous under HSNO in the form supplied - refer to the SDS. In service it limits heat loss and gain on services pipework for the life of the installation. Dispose of offcuts and surplus as inert, non-hazardous construction waste to an approved landfill; the aluminium foil facing may be separated for metal recycling where facilities exist. Contain offcuts and dust during cutting and disposal so material does not reach stormwater drains or waterways.

Building Product Information Requirements

Manufacturer

Legal Trading Name:
Accumen Shapes Ltd

Business Email:

AccuThermax™ Phenolic PPS

Product Technical Statement: 115511

miproducts

info@accumen.co.nz

Company Website:
www.accumen.co.nz

Contact Number/s:
+64 09 -2709228

Product Identifier

CLASS 1 DESIGNATED BUILDING PRODUCT. EACH ITEM IS IDENTIFIED BY ITS PRODUCT LABEL NAME - FOR EXAMPLE "ACCUTHERMAX PHENOLIC PPS, FOIL-FACED, 40 KG/M3, 114.3 MM BORE X 40 MM WALL X 1000 MM" - WITH BATCH AND PRODUCTION IDENTIFIERS ON PACKAGING AND DELIVERY DOCUMENTATION. BATCH-TO-SHIPMENT AND PURCHASE-ORDER RECORDS ARE HELD BY ACCUMEN SHAPES LTD, PROVIDING TRACEABILITY FROM SUPPLIED PRODUCT BACK TO ITS PRODUCTION BATCH. A FORMAL SKU SCHEME IS PENDING; CODES ARE NOT YET PUBLISHED.

Warnings

This product has no warnings associated with it.

Date last validated: **10 November 2026**

Date last updated: **10 November 2026**

Disclaimer: The Product Technical Statement (PTS) template is copyright to Construction Information Limited. However the content of this PTS is the responsibility of the product manufacturer/supplier. Refer to the miproducts Terms and Conditions