

Technical Data Sheet

Product: Resolution Phenolic – Pipe Support Block (120kg/m³)

Product Description: Resolution Phenolic Pipe Support Block is a high-performance, rigid phenolic foam pipe insulation with a density of 120kg/m³, specifically engineered for HVAC, industrial, and commercial applications. Designed to minimise the effects of thermal bridging caused by pipe suspension systems, it helps maintain the overall energy efficiency of pipework. Featuring a closed-cell, fibre-free core with a factory-applied foil vapour barrier jacket, it delivers exceptional thermal performance with minimal thickness. Additionally, it boasts outstanding fire properties, including zero flame spread and near-zero smoke development, making it a safe and dependable choice for even the most demanding environments. Resolution Phenolic Pipe Support Block does not contain chlorides or halogenated fire retardants.

Product Features and Benefits:

- High-performance thermal insulation (low aged thermal conductivity)
- ISO 9705 Group 1-S fire rating, Euroclass BL-s1, d0, with HVAC foil facing
- Also achieves fire performance AS/NZS 1530.3 and AS 1366.2:1992 test standards
- Resistant to moisture - Closed Cell > 95%, plus factory-applied foil vapour barrier jacket
- Contains no chlorides or halogenated fire retardants.
- Wide temperature operating ranges from +120°C down to -180°C
- Lightweight, durable, and easy to handle and install.
- Compliant with environmental standards: low ODP and GWP

Product Properties:

Property	Test Standard	Unit	Typical Result
Density	ASTM D 1622	Kg/m ³	120
Operating Temperature		Upper Limit (°C)	120
		Lower Limit (°C)	-180
Product Sizes (<i>Note 1</i>)		Diameter (mm)	Any
		Wall Thickness (mm)	Any
		Length (mm)	Any (<i>typically 60mm</i>)
Thermal Conductivity	AS/NZS 4859.1:2018	W/m.K @ 15°C	0.034
Thermal Resistance	AS/NZS 4859.1:2018	R Value	(<i>Note 2</i>)
Fire Performance (<i>Note 3</i>)	EN 13501-1		B/BL-S1-D0
	ISO 9705		Group 1-S
	AS/NZS 1530.3	Ignitability	0
		Spread of Flame	0
		Heat Evolved	0
		Smoke Developed	0-1
	AS 1366.2:1992	Flame Propagation	Complies

<u>Compressive Strength</u> Parallel to Rise Perpendicular to Rise	EN 826	kPa	1050 (+/- 40) 760 (+/- 40)
<u>Tensile Strength</u> Parallel to Rise Perpendicular to Rise	EN 1607	kPa	700 (+/- 40) 620 (+/- 40)
Flexural Strength	ASTM C 203	kPa	1300 (+/-50)
Shear Strength	ASTM C 273	kPa	230 (+/-40)
Closed Cell Content	EN ISO 4590	%	>95
Foil Emittance Value	ASTM C1371	%	4
C Emissions	DIBt / AgBB - scheme 2015		Complies (<i>Note 4</i>)

Product Properties - Notes:

1. Refer to “Resolution Phenolic Pipe Support Block - Specification Guidelines” for the correct insulation thickness recommendations based on specific temperature and diameter requirements.
2. Refer to “Resolution Phenolic Pipe Support Block – Thermal Resistance Table (all pipe schedules)” for the relevant R Values.
3. Fire Performance - Class B/BL-S1-D0 in accordance with EN 13501-1, which correlates to Group 1-S as per C/AS2 New Zealand Building Code Acceptable Solutions table C1.1 below.

Table C1.1 Alternative test or classification standards for Group Numbers		
Requirements according to C/VM2 Appendix A using ISO 9705 or ISO 5660	Australian requirements according to NCC Specification C1.10 Clause 4 using AS ISO 9705	European Classification using EN 13501-1
Group Number 1-S	Group Number 1, and a smoke growth rate index not more than 100	Class A1, A2 or Class B and smoke production rating s1 or s2
Group Number 1	Group Number 1	Class A1, A2 or B
Group Number 2-S	Group Number 2, and a smoke growth rate index not more than 100	Class C and smoke production rating s1 or s2
Group Number 2	Group Number 2	Class C
Group Number 3	Group Number 3	Class D
Group Number 4	Group Number 4	Class E and F

4. VOC's - The tested product complies with the requirements of DIBt / AgBB - scheme 2015. The product is suitable for indoor use in buildings. The classification value R for the (WOC, VOC, SVOC with NIK) substances with more than 5 µg/m³ after 28 days is below the classification threshold of 1. The formaldehyde emission after 28 days is below the classification threshold of 100 µg/m³

Scope of Use:

- Resolution Phenolic Pipe Support Block is an insulation solution for pipework supports in building services and HVAC applications. Specifically designed to minimise the effects of thermal bridging from pipe suspension systems, maintaining the overall energy efficiency of pipework.
- Suitable for insulating mild steel, stainless steel, carbon steel, copper, multiplex and plastic pipework.

Installation Guidelines:

- For optimum performance, install Resolution Phenolic Pipe Support Block using factory-supplied self-adhesive tape to complete the vapour barrier at joints and gaps. Low-permeability, multi-layer vapour barrier jackets are recommended for applications below 0°C. Consult Accumen's Technical Services for installation guidelines.

Product Compliance:

When installed in accordance with the manufacturer's instructions, Resolution Phenolic Pipe Support Block will satisfy the 15-year durability clause NZBC B2.3.1(a).

Resolution Phenolic Pipe Support Block; meets the relevant clauses of NZBC C3.4(a) Prevention of Fire, E3 Internal Moisture, F2 Hazardous Building Materials, and contributes to meeting H1 Efficiency and G6 Acoustic Design requirements.

Environmental Data:

- Manufactured with a CFC/HCFC-free blowing agent.
- Zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP).
- Recyclability: New Zealand pending further development

Warranty Information:

- Standard product warranty applies. Please refer to the manufacturer's warranty documentation for further details.

For technical support, custom specifications, or further product information, please contact Accumen Shapes – info@accumen.co.nz



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Users are advised to seek advice from a qualified expert or professional to ensure the product's suitability and compliance with specific requirements, relevant standards, and applicable laws or regulations.