

# PHENOLIC FOAM BOARD INSULATION

**GreenStuf<sup>®</sup> Phenolic Foam Board is a versatile and high-performance moisture resistant thermal insulation panel that comes with an embossed foil layer on one side.**

## APPLICATIONS

GreenStuf<sup>®</sup> Phenolic Foam Board is designed to be installed as a rigid insulation, providing superior building thermal performance and energy efficiency. GreenStuf Phenolic Foam Board cuts into any desired shape and size and has a broad range of uses, from the external side of framed walls to timber and steel framing to concrete ceiling (soffit) interior lining, roofing and block wall applications. GreenStuf Phenolic Foam Board promotes and maintains superior thermal, fire, acoustic, and moisture insulation performance.

To ensure Building Code compliance, architects and building designers are advised to consult an engineer or the relevant NZ Standards before specifying thermal insulation.

For information and assistance, please contact your GreenStuf account manager.

## TECHNICAL

**NZ Building Code Compliance:** When installed in accordance with the manufacturer's instructions. GreenStuf Phenolic Foam Board will satisfy the 50-year durability clause NZBC B2.3.1(a). GreenStuf Phenolic Foam Board; 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.

**Fire Ratings:** Class C s1 d0 in accordance with EN 13501-1 which correlates to Group 2-S as per C/AS2 New Zealand Building Code Acceptable Solutions table C1.1.

Flame Propagation (AS 1366.2:1992): Complies.  
Needle Flame Test ( IEC 60695-11-5:2016): Pass.

**Durability:** GreenStuf Phenolic Foam Board has a 50-year Durability Warranty.

**Thermal Performance:** GreenStuf Phenolic Foam Board has been aged and tested to EN 13166:2012+A2:2016 in accordance with AS/NZS 4859.1:2018. Declared thermal conductivity reflects predicted performance after 25 years of use.

**Thermal Conductivity:** Thermal conductivity at 15°C as per AS/NZS 4859.1:2018: 0.023 W/mK.

**Foil Emittance Value:** Emittance (Foil Face) = 0.04.

**Product Format:** GreenStuf Phenolic Foam Board is supplied as 1000mm x 1200mm sheets with embossed foil finish on one side. Custom sizes may be available on request but are subject to minimum order quantities.

**Dimensional Stability:** GreenStuf Phenolic Foam Board shows good dimensional stability in extreme temperature conditions.

**Compressive Strength:** GreenStuf Phenolic Foam Board has been tested to AS 2498.3-1993 achieving a compressive strength that exceeds 150 kPa.

**VOC Emissions:** 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/m<sup>3</sup> after 28 days is below the classification threshold of 1. The formaldehyde emission after 28 days is below the classification threshold of 100 µg/m<sup>3</sup>.

**Halogens:** Halogen free.

**Water Vapour Transmissions:** GreenStuf Phenolic Foam Board has been tested to AS 2498.5-1993 for water vapour transmission achieving a water vapour transmission rate <500µg/m<sup>2</sup>.s.

**Moisture Absorption:** Less than 3% moisture absorption after 6 hours at 80% humidity.

**Installation:** GreenStuf recommends that GreenStuf Phenolic Foam Board be installed in accordance with the manufacturer's instructions and NZS 4246 Energy Efficiency - Installing Insulation in Residential Buildings.

**Specification and Substitution:** GreenStuf Phenolic Foam Board specification documents are available through Masterspec or can be downloaded from our website ([greenstuf.co.nz](http://greenstuf.co.nz)). Substitution of any products in NZBC complaint systems should not be accepted and we recommend this be made clear in all specification and tender documents.

**Packaging Recycling:** GreenStuf Phenolic Foam Board packaging is recyclable LDPE shrink wrap material with recyclable cardboard corner protectors. Please refer to your local recycling providers for drop-off and collection services.

**Environmental:** Manufactured using a CFC/HCFC-free blowing agent that has a zero Ozone Depletion Potential (ODP) and low global Warming Potential (GWP).



PRODUCT	INITIAL R-VALUE AT 15°C	AGED R-VALUE AT 15°C	THICKNESS	DIMENSIONS
GreenStuf Phenolic Foam Board 20mm	R0.94	R0.90	20mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 25mm	R1.15	R1.10	25mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 30mm	R1.40	R1.35	30mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 40mm	R1.85	R1.80	40mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 50mm	R2.35	R2.25	50mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 55mm	R2.55	R2.45	55mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 60mm	R2.80	R2.70	60mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 65mm	R3.05	R2.90	65mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 70mm	R3.30	R3.15	70mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 75mm	R3.50	R3.35	75mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 80mm	R3.75	R3.60	80mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 85mm	R4.00	R3.80	85mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 90mm	R4.20	R4.05	90mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 95mm	R4.45	R4.25	95mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 100mm	R4.70	R4.50	100mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 105mm	R4.95	R4.70	105mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 110mm	R5.15	R4.95	110mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 120mm	R5.65	R5.40	120mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 130mm	R6.10	R5.85	130mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 140mm	R6.60	R6.30	140mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 150mm	R7.05	R6.75	150mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 160mm	R7.50	R7.20	160mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 170mm	R8.00	R7.65	170mm	1000mm x 1200mm
GreenStuf Phenolic Foam Board 180mm	R8.45	R8.10	180mm	1000mm x 1200mm



#### GreenStuf<sup>®</sup> FACTORY AND COLLECTIONS

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