EXPOL THERMASLAB VH GRADE – TECHNICAL DATA SHEET

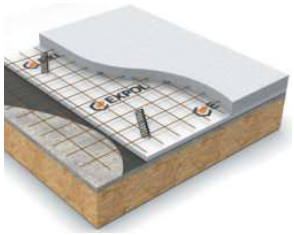
1.0 - Product Overview

EXPOL ThermaSlab (Expanded Polystyrene / EPS) provides excellent compressive strength, moisture resistance, and thermal protection.

Ideally suited for residential applications, **EXPOL ThermaSlab** is a cost effective, easy to install insulation solution that achieves R-values above building regulations.

EXPOL ThermaSlab is available in grades S, M, H, VH and SL, and can be used in:

- Retaining Walls (S Grade)
- Skillion Roof Insulation (S, M H Grades)
- Concrete Floor Insulation (S, H, VH Grades
- Wall Insulation (SL Grade)
- Cladding Insulation (S and H Grades)



2.0 - Installation

2.1 There are no special requirements for PPE when handling or installing EPS. It is an inert, non-toxic material.

2.2 When transporting, storing or installing, ensure the EPS is not exposed to:

- Petroleum based solvents, or
- Fire, or
- Sustained direct sunlight.

2.3 PVC sheathed electrical cables should not be allowed direct contact with EPS.

2.4 EPS is compatible with all common construction products.

3.0 - Maintenance

3.1 No maintenance required

4.0 - Warranty

We believe we manufacture and supply the highest quality UnderFloor, EPS and XPS Foam Insulation products and that is why we stand behind them with some of the best warranties in the industry.

4.1 We provide a 20-year warranty on our EPS Foam Insulation Products – for full warranty details visit www.expol.co.nz/expol-eps-warranty/

5.0 - Compliance with the New Zealand Building Code

EPS, when installed and maintained in accordance with the requirements outlined in this technical data sheet, will meet or contribute to meeting the following provisions of the New Zealand Building Code:

5.1 Clause B2 Durability, performance B2.3.1 (a), B2.3.1(b)

5.2 Clause E3 Internal moisture performance E3.3.1

5.3 Clause F2 Hazardous building materials performance F2.3.1(a)

EXPOL EPS is not subject to a warning or ban under the Building Act 2004.

6.0 - Quality Assurance

6.1 BRANZ, H1 Energy efficiency performance H1.3.1(a), H1.3.2(e)

7.0 - Technical Data

Properties	Test / Method / Standard	Test Results
Material	Expanded Polystyrene	
Density	28 kg / m3	
Sheet Size	2400 mm x 1200 mm	
Thickness / R Value	10mm	-
	20mm	R 0.57
	25mm	R 0.71
	30mm	R 0.88
	35mm	R 1.00
	40mm	R 1.14
	45mm	R 1.29
	50mm	R 1.43
	55mm	R 1.58
	60mm	R 1.71
	65mm	R 1.86
	70mm	R 2.00
	75mm	R 2.20
	80mm	R 2.29
	85mm	R 2.43
	90mm	R 2.57
	95mm	R 2.72
	100mm	R 2.86
	110mm	R 3.14
	120mm	R 3.43
Thermal Conductivity	ATSM 168	K – Value 0.035
Rate of water vapour transmission (max) measured parallel to rise at 23 deg C	AS 2498.5	400 mg/m2s
Permeability m/s	-	
Compressive Resistance KPA at 1% Compressive Resistance KPA at 2% Compressive Resistance KPA at 5% Compressive Resistance KPA at 10%	AS 2498.3	88 KPA 142 KPA 172 KPA 189 KPA
Youngs Modulus	-	8 MPA
Cross breaking strength KPA	AS 2498.4	320 KPA
Dimensional stability of length, width & thickness (max) at 70 deg C for 7 days	AS2498.6	1%
Long term water absorption by immersion	ASTM C72	- %v / v
Determination of flame propagation surface ignition Medium flame duration (max) Eighth vale	AS2122.1-1993	 2 sec 3 sec
Fire behavior Spread of flame index (0 – 10) Smoke developed index (0 – 10)	AS/NZS 1530.3:1999	 0 5
Recycled Content	0%	
Recyclability	EPS is 100% recyclable	
Environmental Statement	EPS is inert and non-toxic. There are no chemicals or gases harmful to the environment emitted from EPS either during manufacture or within use.	
Ozone Depleting Potential	EPS does not contain ozone-depleting CFC or HCFC gases, nor use them in its manufacture. As a result, EPS has zero ozone depletion potential.	
Vermin Resistance	EPS does not offer any nutritive value.	