EXPOL X – TECHNICAL DATA SHEET

1.0 - Product Overview

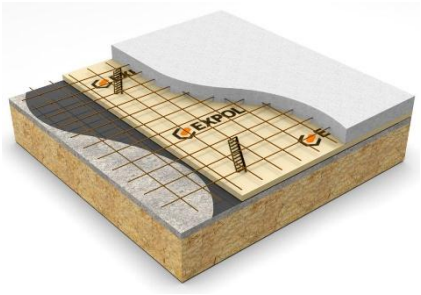
EXPOL X (XPS) is rigid and provides optimal insulation for high and low temperatures.

EXPOL X displays excellent strength and water resistance when used in retaining wall insulation. A thin, lightweight insulation board, **EXPOL X** is easy to handle and quick to install. It is preferred by specifiers because of its durability and superior thermal insulation properties, that will last the life of the building.

EXPOL X can be used in:

- Retaining Walls
- Masonry Walls
- Skillion Roof Insulation
- Concrete Floor Insulation
- Cladding Insulation





2.0 - Installation

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

2.2 When transporting, storing or installing, ensure the XPS 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 XPS.

2.4 XPS 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 50-year warranty on our XPS Foam Insulation Products – for full warranty details visit www.expol.co.nz/expol-xps-warranty/

5.0 - Compliance with the New Zealand Building Code

XPS, 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 XPS 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	Extruded Polystyrene	
Density	30 kg / m3	
Sheet Size	2500 mm x 600 mm	
Thickness / R Value	10mm	R 0.36
	30mm	R 1.10
	40mm	R 1.45
	50mm	R1.80
	75mm	R 2.70
	100mm	R 3.60
Thermal Conductivity	ATSM 168	K – Value 0.028
Rate of water vapour transmission (max) measured parallel to rise at 23 deg C	AS 2498.5	- 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	101 KPA 207 KPA 234 KPA 250 KPA
Youngs Modulus	-	- MPA
Cross breaking strength KPA	AS 2498.4	- KPA
Dimensional stability of length, width & thickness (max) at 70 deg C for 7 days	AS2498.6	-%
Long term water absorption by immersion	ASTM C72	0.028 %v / v
Determination of flame propagation surface ignition Medium flame duration (max) Eighth vale	AS2122.1-1993	- sec - sec
Fire behavior Spread of flame index (0 – 10) Smoke developed index (0 – 10)	AS/NZS 1530.3:1999	 0 3
Recycled Content	0%	
Recyclability	XPS is 100% recyclable	
Environmental Statement	XPS 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	XPS does not contain ozone-depleting CFC or HCFC gases, nor use them in its manufacture. As a result, XPS has zero ozone depletion potential.	
Vermin Resistance	XPS does not offer any nutritive value.	