

EXPOL R2.5 UNDERFLOOR INSULATION – TECHNICAL DATA SHEET

1.0 - Product Overview

Trusted by Kiwis for more than 25 years, **EXPOL UnderFloor** Insulation (UnderFloor) is easy-to-install and is available in 4 convenient joist widths 360, 410, 470, 560 (mm). It is the DIY solution that will keep your home warm, dry and healthy.

Suitable for use in both new and existing homes, **EXPOL UnderFloor** Insulation comes with a 50-year product warranty and requires no maintenance.

EXPOL provides EXPOL R1.4 White, EXPOL R1.8 Black, R2.5 and R3.1 Black UnderFloor Insulation for insulating between the joists under timber floors. **EXPOL UnderFloor** is specifically designed for both new and existing floors.



2.0 - Installation

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

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

2.4 UnderFloor is compatible with all common construction products.

3.0 - Maintenance

3.1 No maintenance required

For further technical information please contact us.

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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 UnderFloor Foam Insulation Products – for full warranty details visit www.expol.co.nz/expol-underfloor-warranty/

5.0 - Compliance with the New Zealand Building Code

UnderFloor, 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 F2 Hazardous building materials performance F2.3.1(a)
- 5.3 Clause H1 Energy Efficiency, Performance H1.3.1 (a) and H1.3.2 E.

EXPOL UnderFloor 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)

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7.0 - Technical Data

| Properties | Test / Method / Standard | Test Results |
|---|--|--|
| Material | Expanded Polystyrene | |
| Density | 12 kg / m ³ | |
| Sheet Size | 1200 mm x 100 mm x 360 mm 1200 mm x 100 mm x 470 mm | 1200 mm x 100 mm x 410 mm 1200 mm x 100 mm x 560 mm |
| Thickness / R Value | 100mm | R 2.5 |
| Thermal Conductivity | ATSM 168 | K – Value 0.043 |
| Rate of water vapour transmission (max) measured parallel to rise at 23 deg C | AS 2498.5 | 630 mg/m ² s |
| Permeability m/s | - | |
| Compressive Resistance KPA at 1% | AS 2498.3 | - KPA |
| Compressive Resistance KPA at 2% | | - KPA |
| Compressive Resistance KPA at 5% | | - KPA |
| Compressive Resistance KPA at 10% | | 70 KPA |
| Youngs Modulus | - | - MPA |
| Cross breaking strength KPA | AS 2498.4 | 135 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 | AS2122.1-1993 | 2 sec |
| Medium flame duration (max) | | 3 sec |
| Eighth vale | | |
| Fire behavior | AS/NZS 1530.3:1999 | |
| Spread of flame index (0 – 10) | | 0 |
| Smoke developed index (0 – 10) | | 5 |
| Recycled Content | 30% | |
| Recyclability | UnderFloor is 100% recyclable | |
| Environmental Statement | UnderFloor is inert and non-toxic. There are no chemicals or gases harmful to the environment emitted from UnderFloor either during manufacture or within use. | |
| Ozone Depleting Potential | UnderFloor does not contain ozone-depleting CFC or HCFC gases, nor use them in its manufacture. As a result, UnderFloor has zero ozone depletion potential. | |
| Vermin Resistance | UnderFloor does not offer any nutritive value. | |

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