



OPTIMO™ UNDERFLOOR INSULATION

Product Description

Bradford Optimo underfloor is a lightweight insulation material manufactured from a molten mixture of natural rock and recycled blast furnace waste products, bonded with a thermosetting resin. The product is sometimes referred to as Rockwool insulation. Optimo™ underfloor is manufactured to a specification which enables friction fitting of the product. The product is light brown in colour, and comes in two sizes designed to suit the standard floor joist spacing of 450mm and 600mm.

Optimo™ underfloor is supplied in strong polythene packaging for ease of transport and handling and is especially recommended where thermal underfloor insulation is required. Optimo™ underfloor also provides an additional acoustic benefit to absorb foot fall noise and external sound transmission through suspended timber flooring.

Bradford Optimo™ underfloor range passes the AS1530.1 criteria for making them non-combustible material suitable for use in BCA BAL 29 to 40 flooring applications. AS 3959-2009 requires a fire resistance level of 30 minutes for suspended timber floors. Please consult with your fire engineer with regards to Optimo's suitability for your suspended timber floor system.

Applications

Product	Applications	Sound Reduction
R2.0	* Suspended timber underfloor areas	Closed underfloor area 1dB, up to 6dB Open underfloor area 3dB
R2.5	* Suspended timber underfloor areas	Closed underfloor area 1dB, up to 6dB Open underfloor area 3dB

SKU Table

Thickness (mm)	Standard size (mm)	Items per pack	M ² per pack	Coverage per pack (m ²)
Optimo™ R2.0 underfloor insulation for suspended timber floors, nominal density 40kg/m ³				
75	1500 x 410	4	2.5	2.8
75	1500 x 560	4	3.4	3.8
Optimo™ R2.5 underfloor insulation for suspended timber floors, nominal density 40kg/m ³				
95	1500 x 410	4	2.5	2.8
95	1500 x 560	4	3.4	3.8

Physical Properties

Maximum Service Temperature	350°C	
Fire Hazard Properties	When tested in accordance to AS1530 Part 3 – 1999	<ul style="list-style-type: none"> • Ignitability: 0 • Spread of flame 0 • Heat Evolved 0 • Smoke Developed 0
Moisture Absorption	When placed in a controlled atmosphere of 50°C and 95% relative humidity	Less than 0.2% by volume
Flow Resistivity		0.5 x 10 ⁴ mks Rayls/m
Sample Specification	The insulation material shall be non-combustible, Bradford Optimo™ underfloor batts with a thermal rating of m ² K/W, as manufactured by Bradford Insulation. For installation specifications refer to the relevant application brochure, available from www.bradfordinsulation.com.au	

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Acoustic Performance

The potential acoustic benefits of Optimo™ underfloor insulation are outlined below (NB: the terms “dB” and “Rw” are used interchangeably in this context)

- When insulation batts are added underneath a timber floor there is likely to be a small increase in acoustic absorption in the room. This increase will very slightly reduce the “boominess” of the room. Using Bradford Rockwool batts, an improvement for a typical furnished room in a timber-framed house of 1dB can be expected.
- If a house with an elevated floor is constructed near to a source of transportation noise (traffic or aircraft or rail) then noise intrusion to the home via the floor can potentially be an issue. Newly constructed houses are often constructed with the underfloor void enclosed on at least one side. Older properties and many new properties are constructed with the underfloor completely open. In situations where noise intrusion to the home via the suspended floor is a relevant component of overall noise intrusion to the residence then underfloor insulation will provide enhanced noise reduction. In these situations, the improvement is expected to be 3dB (or 3Rw) for buildings where the underfloor space is open on at least three sides.
- In cases where the underfloor space is completely enclosed then the elevated floor is probably not going to be a significant sound transmission path into the residence. Even so, underfloor insulation can provide up to 6dB additional noise reduction performance for this sound transmission path.
- Most of the time, noise intrusion to a residence will be controlled by external windows and doors. If steps have been taken to address these noise ingress paths then providing underfloor insulation may be desirable or even necessary in order to control noise entering the house via the elevated floor.

Health & Safety

Bradford Rockwool is not classified as hazardous according to the criteria of the ASCC (formally NOHSC) guidelines. The International Agency for Research into Cancer (IACR) has determined that Rockwool insulation products are not classed as carcinogenic.

Bradford Insulation Rockwool products have been endorsed by the National Asthma Council Australia “Sensitive Choice” Program as safe for asthma and allergy sufferers and are suitable for homes of asthma and allergy sufferers.

This product complies with AS4859.1 – “Materials for the thermal insulation of buildings”.

For properties where dampness is an issue, Bradford recommends the use of an Edmonds ecoFAN, to improve ventilation. For more information refer to www.edmonds.com.au. If water is regularly present in a underfloor area additional drainage may be required.
