Bradford™
optimo™ sub-floor

OPTIMO™ SUB-FLOOR INSULATION

Product Description

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

Applications

Product	Applications	Sound Reduction
R2.0	Suspended timber sub-floor areas	Closed sub-floor area 1dB, up to 6dB Open sub-floor area 3dB

SKU Table

Thickness (mm)	Standard size (mm)	Items per pack	M^2 per pack	Coverage per pack (m^2)
Optimo™ R2.0 sub-floor 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

Physical Properties

Maximum Service Temperature		350°C
Fire Hazard Properties	When tested in accordance to AS1530 Part 3 – 1999	• 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™ segment with a thermal rating of 2.0, as manufactured by Bradford Insulation. For installation specifications refer to the relevant application brochure, available from www.bradfordinsulation.co.nz	

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Acoustic Performance

The potential acoustic benefits of Optimo™ sub-floor insulation are outlined below (NB: the terms "dB" and "Rw" are used interchangeably in this context)

• When Bradford Optimo™ is installed beneath a timber floor, a small increase in acoustic absorption in the room above is expected. This increase will very slightly reduce the "boominess" of the room. Using Bradford Optimo™, 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 Optimo™ is non hazardous. 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 AS/NZS 4859.1 – "Materials for the thermal insulation of buildings".

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Publish date: 07/09 Doc ref: J11109 OPTIMO SUBF

Bradford™
for smarter environments

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