FIRMASOFT[®] BATTS: CEILING THERMAL INSULATION FOR RESIDENTIAL CEILING APPLICATIONS

Description

FirmaSoft[®] Batts are made from flexible and resilient glasswool for thermal and acoustic insulation of residential ceilings. FirmaSoft[®] Batts are available in various sizes and densities to fit standard timber spacings.

Application

FirmaSoft[®] Batts are the trusted choice when it comes to constructing new homes or retrofitting existing buildings for increased thermal efficiency. The FirmaSoft[®] Batts insulation range is available in various thermal R-values and dimensions, ensuring there is an effective and efficient product solution for every application. FirmaSoft[®] Batts, renowned for their firmness, are low itch, easy to cut and friction fit standard studs to make homes feel cooler in summer, warmer in winter and provide energy savings all year round.

Features and Benefits

Firm to fit	Friction fitted to remain in place without slumping for continual thermal performance.
Softer to touch	Comfortable to handle during installation.
Low dust formula	Reduced dustiness and mess during installation.
Recover to their natural thickness quickly	To meet required thermal performance.
Australian Made	Made in Australia for Australian conditions.

Product Data

Material R-value m ² K/W	Thickness mm	Width mm	Length mm	Batts per pack	m² per pack	Coverage per pack m ²	Packs per Bale	Product Code
R3.5 175	175	430	1160	16	8.0	9.0	4	900286
	175	580	1160	10	6.7	7.6	6	900287
R4.1 215	015	430	1160	10	5.0	5.6	5	900288
	215	580	1160	10	6.7	7.6	6	900289
R5.0	000	430	1160	8	4.0	4.5	5	900290
	220	580	1160	8	5.4	6.1	5	900291

Physical Properties

Property	Test Method/Standard	Result	Unit
Thermal Resistance R-value	AS/NZS 4859.1	Complies	m ² K/W
Moisture Absorption	When exposed to environmental conditions of 50°C and 95% relative humidity for four days	< 0.2	% by volume
Maximum Service Temperature	ASTM C411/C447	350	°C
рН	ASTM C871	9 (does not contribute to the corrosion of steel structures)	-

Fire Hazard Properties

FirmaSoft[®] Batts exhibit the following characteristics when tested in accordance with the following standards:

Property	Test Method/Standard	Result
Combustibility	AS 1530.1	Non-combustible
Early Fire Hazard Indices Ignitability Index Spread of Flame Index Heat Evolved Index Smoked Developed Index	AS/NZS 1530.3	0 0 0 0–1
BAL Compliance	AS 3959	Low-FZ

Acoustic Performance

Sound Absorption

The performance of sound absorption for insulation is described by the Noise Reduction Coefficient (NRC). In sound absorption application, the NRC is used as an acoustic performance measure. The higher the NRC, the greater the sound absorption at the representative frequencies.

The Noise Reduction Coefficient (NRC) is calculated according to ASTM C423-90A and the average result of four frequencies: 250Hz, 500Hz, 1000Hz, 2000Hz.

FirmaSoft[®] Batts achieves the following sound absorption results when tested in accordance with AS ISO 354:

		Sound absorption coefficients at frequencies (Hz) of:							
Product	Thickness mm	125	250	500	1000	2000	4000	NRC	αw
FirmaSoft® Batts: Ceiling R3.5	175	0.55	1.0	1.0	1.0	1.0	1.1	0.95	1.0

Flow Resistivity

Acoustic performance of FirmaSoft[®] Batts products used in sound absorption applications can be measured by their resistance to air flow, this is recognised as flow resistivity.

Flow resistivity performance is valuable when evaluating products of the same thickness and density that have varying fibre attributes.

Tested in accordance with ASTM Standard C522-03 Standard Test method for Airflow Resistance of Acoustic Materials. The following table rates the flow resistivity of FirmaSoft[®] Batts products:

Product	Thickness mm	RAYLS/m
FirmaSoft® Batts: Ceiling R3.5	175	2,700
FirmaSoft® Batts: Ceiling R4.1	215	3,160
FirmaSoft® Batts: Ceiling R5.0	220	4,500



Health and Safety

Fletcher Insulation glasswool products are manufactured from FBS-1 Glasswool Bio-Soluble Insulation[®]. FBS-1 Glasswool Bio-Soluble Insulation[®] is safe to use and is classified as non-hazardous according to the criteria of Safe Work Australia. Fletcher Insulation glasswool insulation can be used with confidence in any residential, commercial or industrial application.

Environmental Properties

Fletcher Insulation avoids the use of Ozone Depleting Potential (ODP) substances in the manufacture or composition of its FBS-1 Glasswool Bio-Soluble Insulation[®].

The use of these Fletcher Insulation products guarantees the use of Zero ODP insulation while also ensuring that no harmful levels of Volatile Organic Compounds (VOCs) are released. This allows the incorporation of environmentally preferable insulation whilst also maintaining indoor air quality.

Technical Specification

When specifying, state	the following:		
The insulation material	shall be Fletcher Insulation	FirmaSoft® Batts: Ceilin	g Rm² K/W
(Material R-value)	(thickness) x	(width) x	(length) mm.

© Fletcher Insulation Pty Limited 2023. Fletcher Insulation reserves the right to change product specifications without prior notification. Information in this publication and otherwise supplied to users as to the subject product is based on our general experience and is given in good faith, but because of the many particular factors which are outside our knowledge and control and affect the use of products, no warranty is given or is to be implied with respect to either such information or the product itself, in particular the suitability of the product for any particular purpose. The purchaser should independently determine the suitability of the product for the intended application. The colour PINK, Pink* and Pink* Batts are registered trademarks of Owens Corning used under licence by Fletcher Insulation. FBS-1 Glasswool Bio-Soluble Insulation* is a registered trademark of ICANZ. Unless otherwise stated all TM and [®] are trademarks and registered trademarks of Fletcher Insulation Pty Limited ABN 72 001 175 355. RTDS11_Revision_3_lssue Date 13022023.

