

G global-mark						Certificate	number: CM30094 Rev1		
giobac mark		THIS TO CERTIFY THAT							
<b>Global-Mark Pty Ltd,</b> Suite 4.07, 32 Delhi Road, North Ryde NSW 2113, Australia		Earthwool <sup>®</sup> Glasswool Insulation							
Tel: +61 (0)2 9886 0222 -	Type and/or use of product:			Description	n of product:				
www.Global-Mark.com.au Certificate Holder:	Non-combustible thermal insulation	on for residential and o	Earthwool <sup>®</sup> is a mineral fibre type bulk insulation supplied as batts or rolls, and thickr between 50 mm and 275 mm, and nominal density between 8 kg/m <sup>3</sup> and 30 kg/m <sup>3</sup> .						
Knauf Insulation Pty Ltd Unit 2 44 Borthwick Avenue		COMPLIES WITH THE FOLLOWING BCA PROVISIO				VARIATION(S)	BCA (2016)		
44 Borthwick Avenue Murarrie, QLD, 4172		Volume One – including Amendment 1			Volume Two				
Tel: +61 7 3393 7300	Performance Requirement(s)	FP1.4	Weatherproofing		P2.2.2	Weatherproofi	ng		
Web: <u>www.knaufinsulation.com.au</u>		FP1.5	Rising damp		P2.2.3	Rising damp			
		GP2.1	Combustion appliance		P2.3.3	Heating appliar	nces		
		GP5.1	Construction in Bushfire Prone A	reas	P2.3.4	Buildings in bus	shfire areas		
	Deemed-to-Satisfy Provision(s):	A1.1	Non-combustible		1.1.1.2	Non-combustible			
		C1.9	Non-combustible building elements		3.7.1.8	Separating walls			
		C1.14	Ancillary elements		3.12.1.1	Building fabric	thermal insulation		
		11.2	Thermal construction – general						

Scope of certification: The CodeMark Scheme is a building product certification scheme. The rules of the Scheme are available at the ABCB website www.abcb.gov.au. This Certificate of Conformity is to confirm that the relevant requirements of the Building Code of Australia (BCA) as claimed against have been met. The responsibility for the product performance and its fitness for the intended use remain with the certificate holder. The certification is not transferrable to a manufacturer not listed on Appendix A of this certificate.

**Disclaimer:** The Scheme Owner, Scheme Administrator and Scheme Accreditation Body do not make any representations, warranties or guarantees, and accept no legal liability whatsoever arising from or connected to, the accuracy, reliability, currency or completeness of any material contained within this certificate; and the Scheme Owner, Scheme Administrator and Scheme Accreditation Body disclaim to the extent permitted by law, all liability (including negligence) for claims of losses, expenses, damages and costs arising as a result of the use of the product(s) referred to in this certificate. The purpose of Global-Mark construction site audits is to confirm the practicability of installing the product; and to confirm the appropriateness and accuracy of installation instructions

In placing the CodeMark mark on the product/system, the certificate holder makes a declaration of compliance with the certification standard(s) and confirms that the product is identical to the product certified herein. In issuing this Certificate of Approval Global-Mark has relied on the expertise of external bodies (laboratories, and technical experts).

Herve Michoux

P. Cardwor

Peter Gardner Unrestricted Building Certifier

Date of issue: 06/07/2018 Date of expiry: 06/07/2021



Certificate number: CM30094 Rev1

**Global-Mark Managing Director** 

This certificate is only valid when reproduced in its entirety. Page 1 of 10



State or territory variation(s):	SA FP1.5	NSW P2.2.3	
	NSW GP5.1	SA P2.2.3	
	Qld GP5.1	Tas P2.3.3(c)	
	Tas GP5.1	Tas P2.3.4	
	NSW J(A)1	NSW 3.7.1.8(b)	
	NT Section J	NSW 3.12	
	Qld Section J	NT 3.12	
SUBJECT TO THE FOLLOW	ING LIMITATIONS AND CONDITION	DNS AND THE PRODUCT TECHNICAL DATA IN APPENDIX A	AND EVALUATION STATEMENTS IN APPENDIX B
Limitations and conditions:			
<ol> <li>Installation shall be car guide as specified in sec</li> </ol>	tion Building classification/s: All classes		
	ried out only after the building is v gree that moisture is not transport	vaterproof, and after the materials within the building have ed into the insulation material.	



### **APPENDIX A – PRODUCT TECHNICAL DATA**

### A1 Type and intended use of product

Bulk thermal insulation for roofs, ceilings, external walls, internal walls and floors.

### A2 Description of product

Earthwool<sup>®</sup> is a mineral fibre type bulk insulation complying with AS/NZS 4859.1:2002 (incorporating Amendment No.1). It is manufactured with recycled glass and ECOSE<sup>®</sup> Technology binder which is created from renewable materials. The product types and special characteristics are listed below:

- Earthwool<sup>®</sup> Acoustic Batts Basic at 11 kg/m<sup>3</sup>, Ultra at 14 kg/m<sup>3</sup>, High-Density at 17 kg/m<sup>3</sup>, 20 kg/m<sup>3</sup> and 27 kg/m<sup>3</sup>
- Earthwool<sup>®</sup> Acoustic Roll Basic at 11 kg/m<sup>3</sup>, High-Density at 24 kg/m<sup>3</sup>
- Earthwool<sup>®</sup> Ceiling Batts
- Earthwool<sup>®</sup> Multi-Use Rolls
- Earthwool<sup>®</sup> Roof Blanket has optional foil backing
- Earthwool<sup>®</sup> Underfloor Roll faced with a black glass wind wash barrier
- Earthwool<sup>®</sup> Wall Batts

#### A3 Product specification

#### Binder content no greater than 8%

Specification of Earthwool® glasswool insulation shall be in accordance with the following documents:

- Knauf Insulation Earthwool<sup>®</sup> Product Price List, Ref.: KIAU1115282BR, 2014
- Knauf Insulation Earthwool<sup>®</sup> Product Datasheets as follows:
  - Earthwool<sup>®</sup> Acoustic Batts, Ref.: KIAU0315172DS, October 2015
  - Earthwool<sup>®</sup> Acoustic Roll, Ref.: KIAU0315172DS, October 2017
  - Earthwool<sup>®</sup> Ceiling Batts, Ref.: KIAU0315174DS, January 2017
  - Earthwool<sup>®</sup> Multi-Use Rolls, Ref.: KIAU0616395DS, May 2017
  - Earthwool<sup>®</sup> Roof Blanket, Ref.: KIAU0515198DS, January 2017
  - Earthwool<sup>®</sup> Underfloor Roll, Ref.: KIAU0115154DS, October 2015
  - Earthwool<sup>®</sup> Wall Batts, Ref.: KIAU0315172DS, January 2017

Also refer to Knauf Insulation Material Safety Datasheet – Glass Mineral Wool with ECOSE® Technology [October 2014].

Table A1 provides a summary of the specification information for the relevant Earthwool products.



Table A1: Product Specification Summary

## Acoustic Batts 11kg/m<sup>3</sup>

Material Code	Thickness (mm)	Density (kg/m³)	Est.R-value (m <sup>2</sup> K/W)	Width (mm)	Length (mm)
290594	50	11	1.2	430	1160
248352	50	11	1.2	580	1160
290599	- 75	11	1.8	430	1160
290600				580	1160
248361	50	11	1.2	450	2700
248360	50		1.2	600	2700
248362	75	44	1.0	450	2700
2437819	/5	11	1.8	600	2700
546373	110	11	2.5	600	1160

# Acoustic Batts 14 kg/m<sup>3</sup>

Material Code	Thickness (mm)	Density (kg/m³)	Est.R-value (m²K/W)	Width (mm)	Length (mm)
2437822	FO	14	1.3	430	1160
2438637	50			580	1160
2438916	- 75	14	1.9	430	1160
2438638				580	1160
2437560	50	14	1.3	450	1160
2437561	50			600	1160
2437562	75	4.4	1.9	450	1160
2437563	75	14	1.9	600	1160

#### High Density Acoustic Batts

Material Code	Thickness (mm)	Density (kg/m³)	Est.R-value (m <sup>2</sup> K/W)	Width (mm)	Length (mm)
244462	- 75	17.0	2.0	430	1160
2438626				580	1160
2437532	90	20.0	2.5	430	1160

Certificate number: CM30094 Rev1



2437533				580	1160
248357	50	24.0	1.4	580	1160
256736	00	27.0	27	430	1160
251511	90	27.0	2.7	580	1160

#### Wall Batts

Material Code	Thickness (mm)	Density (kg/m³)	R-value (m <sup>2</sup> K/W)	Width (mm)	Length (mm)
243521	75	0.1	1.5	430	1160
243523	75	8.1	1.5	580	1160
244462	75	17.0	2.0	430	1160
2438626	- 75	17.0	2.0	580	1160
2437523	90	9.5	2.0	430	1160
2437528	90			580	1160
2437532	90	20.0	2.5	430	1160
2437533	90			580	1160
256735	90	27.0	2.7	430	1160
252511	50	27.0	2.1	580	1160

## Wall Batts - Metal Frame

Material Code	Thickness (mm)	Density (kg/m³)	R-value (m <sup>2</sup> K/W)	Width (mm)	Length (mm)
2437522	- 75	8.1	1.5	450	1200
2437524				600	1200
2438628	75	17.0	2.0	450	1200
2438629	- 75			600	1200
2437526	90	0.5	2.0	450	1200
2437529	90	9.5	2.0	600	1200

# **Ceiling Batts**

Material Code	Thickness (mm)	Density (kg/m³)	R-value (m <sup>2</sup> K/W)	Width (mm)	Length (mm)
2437530	125	7.4	2 5	430	1160
2437531	125	7.4	2.5	580	1160

Certificate number: CM30094 Rev1



2437530				430	1160
2437535	145	8.0	3.0	580	1160
2437538				430	1160
2437539	175	7.3	3.5	580	1160
2437542				430	1160
2437541	195	7.8	4.0	580	1160
2437544				580	1160
2437543	210	11.4	5.0	430	1160
2437546				580	1160
2437545	275	9.0	6.0	430	1160
of Blanket Material Code	Thickness (mm)	Density (kg/m³)	R-value (m <sup>2</sup> K/W)	Width (mm)	Length (mm)
	Thickness (mm)	Density (kg/m³) 12.0	R-value (m <sup>2</sup> K/W)	<b>Width (mm)</b> 1200	Length (mm) 37000
Material Code					
Material Code 461848	55	12.0	1.3	1200	37000
Material Code 461848 497338	55 60	12.0 12.8	1.3 1.5	1200 1200	37000 28000
Material Code           461848           497338           472959	55 60 75	12.0 12.8 11.6	1.3 1.5 1.8	1200 1200 1200	37000 28000 23000
Material Code           461848           497338           472959           474347	55 60 75 100	12.0 12.8 11.6 10.0	1.3           1.5           1.8           2.3	1200 1200 1200 1200	37000 28000 23000 17500

#### Multi-Use Roll

Material Code	Thickness (mm)	Density (kg/m³)	R-value (m <sup>2</sup> K/W)	Width (mm)	Length (mm)
253095	90	9.5	2.0	430	19000
253093				580	19000
432158	00	20.0	2.5	430	12500
432159	90		2.5	580	12500



## A4 Manufacturer and manufacturing plant(s)

- St Helens, PO Box 10, Stafford Road, Merseyside WA 10 3NS, UK
- Cwmbran NP44 2YQ, TOF, UK
- 3100 Ashby Road, Shasta Lake, California, 96019, USA
- 75. Yıl Mahallesi 1. Cadde 1/G Küçük Organize, Sanayi 26250 Eskişehir Turkey

### **A5 Installation requirements**

Installation shall be carried out in accordance with AS3999:2015 and the relevant Knauf Earthwool installation instruction documents listed below and which are available at <a href="http://www.knaufinsulation.com.au/resources">www.knaufinsulation.com.au/resources</a> :

- Installation Instructions Earthwool® Ceiling Batts
- Installation Instructions Earthwool<sup>®</sup> Ceiling Rolls
- Installation Instructions Earthwool® Glasswool Insulation Underfloor Batts
- Installation Instructions Earthwool® Insulation Underfloor Roll
- Installation Instructions Earthwool<sup>®</sup> Wall Batts

### A6 Other relevant technical data

Any referenced documents within the technical literature identified in Appendix A, A3 and Appendix A, A5.



### **APPENDIX B – EVALUATION STATEMENTS**

## **B1** Evaluation methods

The following assessment methods have been used to determine compliance with NCC 2016 (+A1):

Code Clause	Assessment Method(s)	Evidence of suitability	Evidence reference in B2
Volume One A1.1	Volume One A05(a)	Volume One A2.2(a)(iv) – Report issued by a registered testing authority	Items 1 to 4
Volume One C1.9	Volume One A05(a)	Volume One A2.2(a)(iv) – Report issued by a registered testing authority	Items 1 to 4
Volume One C1.14	Volume One A05(a)	Volume One A2.2(a)(iv) – Report issued by a registered testing authority	Items 1 to 4
Volume One FP1.4	Volume One A05(a)	Volume One A2.2(a)(vi) – Another form of documentary evidence	Item 12and item 13
Volume One FP1.5	Volume One A05(a)	Volume One A2.2(a)(vi) – Another form of documentary evidence	Item 12
Volume One FP1.5	Volume One A0.5(d)	Comparison with the Deemed-to-Satisfy Provisions	Item 13
Volume One GP2.1	Volume One A05(a)	Volume One A2.2(a)(iv) – Report issued by a registered testing authority	Items 1 to 4
Volume One GP5.1	Volume One A05(a)	Volume One A2.2(a)(iv) – Report issued by a registered testing authority	Items 1 to 4
Volume One J1.2	Volume One A05(a)	Volume One A2.2(a)(iv) – Report issued by a registered testing authority	Items 5 to 11
Volume Two 1.1.1.2	Volume Two 1.0.5(a)	Volume Two 1.2.2(a)(i) – Report issued by a registered testing authority	Items 1 to 4
	Volume Two 1.0.5(d)	Comparison with the Deemed-to-Satisfy Provisions	ltem 12
Volume Two P2.2.2	Volume Two 1.0.5(a)	Volume Two 1.2.2(a)(vi) – Another form of documentary evidence	Item 13
Volume Two P2.2.3	Volume Two 1.0.5(d)	Comparison with the Deemed-to-Satisfy Provisions	Item 13
Volume Two P2.2.3	Volume Two 1.0.5(a)	Volume Two 1.2.2(a)(vi) – Another form of documentary evidence	ltem 12
Volume Two P2.3.1	Volume Two 1.0.5(a)	Volume Two 1.2.2(a)(i) – Report issued by a registered testing authority	Items 1 to 4
Volume Two P2.3.3	Volume Two 1.0.5(a)	Volume Two 1.2.2(a)(i) – Report issued by a registered testing authority	Items 1 to 4
Volume Two P2.3.4	Volume Two 1.0.5(a)	Volume Two 1.2.2(a)(i) – Report issued by a registered testing authority	Items 1 to 4
Volume Two 3.7.1.8	Volume Two 1.0.5(a)	Volume Two 1.2.2(a)(i) – Report issued by a registered testing authority	Items 1 to 4
Volume Two 3.12.1.1	Volume Two 1.0.5(a)	Volume Two 1.2.2(a)(i) – Report issued by a registered testing authority	Items 5 to 11



# **B2** Reports

The following reports have been used as evidence to determine compliance with NCC 2016 (+A1):

Ref	Author	Reference	Date	Description	NATA Registration
1	Exova Warringtonfire, UK	Report No. WF 388511	7/09/2017	Classification of reaction to fire performance in accordance with	ilac-MRA via. UKAS –
				EN 13501:2007+A1:2009 – product reference "SK Dritherm Cavity	Accreditation Number 0249
				Slab 100mm"	
2	Exova Warringtonfire, UK	Document Reference: 311313	27/09/2011	Fire Test For Non-Combustibility Of Building Products – product	ilac-MRA via. UKAS –
				reference "HD-32-8-ET", 80mm thickness, 32 kg/m <sup>3</sup> density	Accreditation Number 0249
3	Exova Warringtonfire, UK	Document Reference: 311316	27/09/2011	Determination Of The Heat Of Combustion For Building Products –	ilac-MRA via. UKAS –
				product reference "HD-32-8-ET", 80mm thickness, 32 kg/m <sup>3</sup>	Accreditation Number 0249
				density	
4	CSIRO	Assessment Number: FCO-3073	28/08/2014	Likely fire performance of Knauf Earthwool glass mineral wool	Accreditation Number 165
		(Revision A)		insulation	
5	BRANZ	Project Number: DI0367		Thermal Resistance of Earthwool Australia products as follows:	ilac-MRA via. IANZ –
		Test Reference: DU02	27/08/2013	Earthwool roll – 60mm R1.5	Accreditation Number 37
		Test Reference: DU03	28/08/2013	Earthwool roll – 75mm R1.8	
		Test Reference: DU04	18/10/2013	Earthwool roll – 90mm R2.5	
		Test Reference: DU05	8/10/2013	Earthwool roll – 90mm R2.1	
		Test Reference: DU06	19/09/2013	Earthwool roll – 100mm R2.3	
		Test Reference: DU07	4/09/2013	Earthwool roll – 120mm R3.0	
		Test Reference: DU08	30/08/2013	Earthwool roll – 130mm R3.2	
6	BRANZ	Project Number: DI0450		Thermal Resistance of Earthwool products as follows:	ilac-MRA via. IANZ –
		Test Reference: DU05	16/04/2014	Earthwool batts – 90mm R2.1	Accreditation Number 37
		Test Reference: DU06	17/04/2014	Earthwool batts – 90mm R2.5	
7	BRANZ	Project Number: DI0463		Thermal Resistance of Earthwool products as follows:	ilac-MRA via. IANZ –
		Test Reference: DU01	14/05/2014	Earthwool batts – 90mm R2.7	Accreditation Number 37
		Test Reference: DU02	14/05/2014	Earthwool batts – 90mm R2.6	
		Test Reference: DU04	20/05/2014	Earthwool batts – Sound Control 75mm R1.9	
		Test Reference: DU05	29/05/2014	Earthwool batts – Sound Control 50mm R1.2	
8	BRANZ	Project Number: DI0490		Thermal Resistance of Earthwool products as follows:	ilac-MRA via. IANZ –
		Test Reference: DU02	1/10/2014	Earthwool batts – Sound Absorbing 50mm R1.3	Accreditation Number 37
9	BRANZ	Project Number: DI0436		Thermal Resistance of Earthwool products as follows:	ilac-MRA via. IANZ –
		Test Reference: DU01	1/04/2014	Earthwool batts – 210mm R5.0	Accreditation Number 37
		Test Reference: DU02	7/04/2014	Earthwool batts – 195mm R4.0	
		Test Reference: DU03	3/04/2014	Earthwool batts – 175mm R3.5	

Certificate number: CM30094 Rev1



Ref	Author	Reference	Date	Description	NATA Registration
10	BRANZ	Project Number: DI0448		Thermal Resistance of Earthwool products as follows:	ilac-MRA via. IANZ –
		Test Reference: DU01	1/04/2014	Earthwool batts – 75mm R2.0	Accreditation Number 37
		Test Reference: DU02	1/04/2014	Earthwool batts – 90mm R2.0	
		Test Reference: DU04	11/04/2014	Earthwool batts – 145mm R3.0	
11	BRANZ	Project Number: DI0450		Thermal Resistance of Earthwool products as follows:	ilac-MRA via. IANZ –
		Test Reference: DU01	10/04/2014	Earthwool batts – 75mm R1.5	Accreditation Number 37
		Test Reference: DU03	22/04/2014	Earthwool batts – 275mm R6.0	
12	Standards Australia	AS/NZS 4859.1:2002 (Incorporating	2006	Materials for the thermal insulation of buildings – Part 1: General	Not applicable
		Amendment No. 1)		criteria and technical provisions	
13	Standards Australia	AS 3999:2015	2015	Bulk thermal insulation - Installation	Not applicable