

**Certification Body:** 

CM

Type and/or use of product:

Non-structural wall system.

ABN: 81 663 250 815 JAS-ANZ Accreditation

No. Z4450210AK

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# **Certificate of Conformity**

### Certificate number: CM40261

**BCA 2022 (Amdt.1)** 

#### THIS IS TO CERTIFY THAT

### **OzHemp Tradical® Hempcrete**

#### **Description of product:**

OzHemp Tradical® Hempcrete is a combination of water, hemp aggregate and lime-based binder mixed together to produce a bio-composite material that is packed against formwork, either by hand placing or mechanical projection. Refer A2 for further information.

#### COMPLIES WITH THE FOLLOWING BCA PROVISIONS AND STATE OR TERRITORY VARIATION(S)

office@cmicert.com.au					ч <i>г</i>			
		Volume One	2	Volume Two				
Certificate Holder:	Performance Requirement(s):	Not applicable		Not applicable				
<b>OzHemp Pty Ltd</b> ABN: 57 118 727 898	Deemed-to-Satisfy Provision(s):	C2D2(2)	Fire-resistance of building elements - Refer Limitation and Condition 3	H3D3(2)	FRL - Construction of external walls. Refer Limitation and Condition 3			
43 Gillett Drive,		G5D3	Bushfire – up to BAL–FZ subject to Limitation and Condition 6	H7D4	Bushfire – up to BAL–FZ subject to Limitation and Condition 6			
Kardinya WA 6163	State or territory variation(s):	G5D3 (NSW)	Refer Limitation and Condition 16	H7D4 (NSW,	Defending testerien and Condition 40			
Australia					Refer Limitation and Condition 16			
Ph: (08) 6424 8262		(14344)		QLD)				
www.ozhemp.com.au				QLDJ				

#### SUBJECT TO THE FOLLOWING LIMITATIONS AND CONDITIONS AND THE PRODUCT TECHNICAL DATA IN APPENDIX A AND EVALUATION STATEMENTS IN APPENDIX B

Lim	itations and conditions:			Building classification	/s:		
1.	This Certificate only applies to the OzHemp Tradical <sup>®</sup> Hempcrete. All other components and materials used to cre this certification.	of the scope of	Class 1,2,3,4,5,6,7,8,9 & 1	10			
2.	In relation to 'Fire separation' and 'Fire-resistance of building elements' clause C2D2 and H3D3 is limited to the O Applicable where FRL up to 60/60/60 is required in accordance with the Building Code of Australia (BCA), and only Section A3. Variations to the tested specimen is outside the scope of this Certificate of Conformity and must be su Solution.	y where the wall construction is	as detailed in				
3.	The use of the OzHemp Tradical <sup>®</sup> Hempcrete product must be supported by a site specific Performance Solution ( Clause C2D10 and C2D14, requires building elements and/or ancillary elements to be non-combustible in type A a		A, inclusive of				
4.	Assessment of the adequacy of weatherproofing under F3P1 & H2P2 of the Building Code of Australia (BCA) as a roof or wall cladding is outside the scope of this Certificate of Conformity.						
5.	Only to be installed by a suitably qualified tradesperson in accordance with the OzHemp Tradical HC Install Manual	al ver05 May2025					
	H	Date of issue:	18/06/2025	۲	JAS-ANZ		
I	Don Grehan – Unrestricted Building Certifier	Date of expiry:	21/06/2028	ABCB	WWW.JAS-ANZ CRG/REDISTER		

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- 6. Compliance with BAL should be reviewed with the respective BAL requirements of AS 3959 by Building Designers & Authorities having jurisdiction as each building may require specific design or construction requirements outside of the specific wall material. Compliance with BAL-FZ is limited to the requirements of Section 9.1 of AS 3959:2018 and requires a minimum distance of 10m from the edge of any classified vegetation. This product is not suitable to be installed where the 10m setback distance between the building and the edge of the classified vegetation cannot be achieved
- 7. The OzHemp Tradical® Hempcrete Wall System is non-structural in vertical load bearing capacity and racking resistance.
- If OzHemp Tradical® Hempcrete is used in conjunction with a steel frame, it must be treated against corrosion in accordance with the <u>OzHemp Tradical HC Install</u> <u>Manual ver05 May2025</u>
- 9. All structural design and detailing for the load bearing steel/timber frame, including the possibility of disproportionate collapse, bracing and tiedown, must be carried out by, or under the direct supervision of, a suitably qualified Structural Engineer, in accordance with the requirements of the BCA.
- 10. Moisture changes will vary within the overall OzHemp Tradical<sup>®</sup> Hempcrete matrix due to the external and internal environment and the building's geographical location.
- 11. The OzHemp Tradical<sup>®</sup> Hempcrete Wall System is a vapour permeable system and care must be taken to avoid trapped moisture through the inappropriate use or positioning of Vapour Control Layers (VCL), low vapour permeability or vapour impermeable materials in the construction or the use of external or internal finishes.
- 12. The location of the steel/timber frame within the overall wall construction must be carefully assessed by the building designer in considering the structural, hydrothermal and in-service considerations.
- 13. The designer must consider any additional framing, brackets or fixing plates required for attaching internal and external finishes, ancillary items and loads (such as cupboards) and incorporate these when constructing the frame.
- 14. Other than the items and information listed, the remainder of the information contained in the product's literature is outside the Scope of Certification
- 15. The use of the certified product/system is subject to these Limitations and Conditions and must be read in conjunction with the Scope of Certification below.
- 16. In order to comply with the NSW provisions of G5D3, a site-specific performance solution is to be prepared in line with the Planning for Bush Fire Protection 2019 guidance document.

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.

Only criteria as identified within this Certificate of Conformity can be used for CodeMark certification claims. Where other claims are made in a client's Installation Manual, Website or other documents that are outside the criteria on this Certificate of Conformity, such criteria cannot be used or claimed to meet the requirements of this CodeMark certification.

The NCC defines a Performance Solution as one that complies with the Performance Requirements by means other than a Deemed-to-Satisfy Solution. A Building Solution that relies on a CodeMark Certificate of Conformity that certifies a product against the Performance Requirements cannot be considered as Deemed-to-Satisfy Solution.

This Certificate of Conformity may only relate to a part of a Performance Solution. In these circumstances other evidence of suitability is needed to demonstrate that the relevant Performance Requirements have been met. The relevant provisions of the Governing Requirements in Part A of the NCC will also need to be satisfied.

This Certificate of Conformity is issued based on the evidence of compliance as detailed herein. Any deviation from the specifications contained in this Certificate of Conformity is outside of this document's scope and the installation of the certified product will not be covered by this Certificate of Conformity.

**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.

When using the CodeMark logo in relation to or on the product/system, the Certificate Holder makes a declaration of compliance with the Scope of Certification and confirms that the product is identical to the product certified herein. In issuing this Certificate of Conformity, CMI Certification Pty Ltd (CMI) has relied on the experience and expertise of external bodies (laboratories and technical experts).

Nothing in this document should be construed as a warranty or guarantee by CMI, and the only applicable warranties will be those provided by the Certificate Holder.



## Certificate of Conformity

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

#### A1 Type and intended use of product

As per page 1.

#### A2 Description of product

OzHemp Tradical<sup>®</sup> Hempcrete is a combination of water, hemp aggregate and lime-based binder mixed together to produce a bio-composite material that is packed against formwork, either by hand placing or mechanical projection.



Source: Certificate Holder.

The following materials are supplied by OzHemp, and therefore these products only are included in the conformity and certification of the product:

- The Binder; Tradical<sup>®</sup> PF70 / Tradical<sup>®</sup> Thermo.
- The Render Binder; Tradical<sup>®</sup> PF80 / Tradical<sup>®</sup> Batir / Tradical<sup>®</sup> Décor.
- The Hemp Shiv; Hempflax<sup>®</sup> / Tradical<sup>®</sup> Chanvribat<sup>®</sup>/Building Grade Hemp/ Kanabat<sup>®</sup> Building Grade Hemp.

The binder consists of products based on non-hydraulic lime (in accordance with Standard NF EN 459-1 to 3), hydraulic lime (in accordance with Standard NF EN 459-1 to 3) and pozzolan (in accordance with Standard NF 18-308 and Australian Standard AS 1672.1-1997).



#### A3 Product specification

Tested Specimen for FRL 60/60/60 & Construction of Buildings in Bushfire prone area requirements.

WALL SPECIMEN COMPONENTS REFERENCED IN BRE GLOBAL							
Wall Specimen	Components of the Tested System	Wall Width (mm)	Wall Height (mm)	Wall Depth (mm)	FRL		
Tradical <sup>®</sup> Hempcrete <sup>®</sup>	Softwood timber frame comprising of eight 100 mm by 50 mm by 3,000 mm timber studs fixed at 430 mm nominal centres to 100 mm by 50 mm timber top and bottom plates. Hempcrete Mixture, mixed with a pan mixer at a ratio of 43 L of water to 2 bags of Tradical® PF70 lime binder to one bale of hemp shiv ("Tradical® Chanvribat®" or "Kanabat"). It had a measured density of 459 kg/m <sup>3</sup> . It was located on both the exposed and unexposed faces of the specimen either side of the timber frame.	3,000	3,000	300	60/60/60		
	Thermal Ceramic Superwool 607 used to fill the casting holes (additional Hempcrete mix to be used in practice). Sealed with gypsum plaster.						
Evidence Basis	BRE Global Test Report 250990						

The report provided by Assurance Construction Laboratories evaluates the performance of the Tradical Hempcrete Wall system in accordance with the criteria set forth in AS 1530.4:2014. The findings indicate that there is sufficient evidence to predict the wall system's performance in terms of structural adequacy, integrity, and insulation. Based on the report's conclusions, the system achieves an equivalent Fire Resistance Level (FRL) of **60/60/60** as per AS 1530.4:2014. Consequently, the wall system complies with the requirements outlined in BCA 2022 Volume 1, Clause C2D2, and Volume 2, Clause H3D3.

The Tradical<sup>®</sup> Hempcrete<sup>®</sup> Wall System is a mixture of Tradical<sup>®</sup> PF70 (lime-based binder), Tradical<sup>®</sup> Chanvribat<sup>®</sup> plus water and a lime-based render finish. The lime-based binder of the tested systems is with Tradical<sup>®</sup> PF70. Tradical<sup>®</sup> Thermo with shorter dying time is suitable for use. The hemp shiv of the tested system includes the trade names of "Tradical<sup>®</sup> Chanvribat<sup>®</sup>" and "Kanabat", with both products having identical composition and being manufactured by La Chanvriere. Both products, being identical, are suitable for use and are representative of the tested system.

As per Clause 9.4.1 (c) of AS 3959: 2018, A system with an FRL of 30/30/30 or –/30/30 or greater when tested from the outside achieves the requirements of BAL-FZ. As per the Assurance Construction Laboratories and Certification report, the The Tradical<sup>®</sup> Hempcrete<sup>®</sup> Wall System achieves a FRL of 60/60/60, therefore compliance with BAL-FZ has been met.

Compliance with BAL-FZ is limited to the requirements of Section 9.1 of AS 3959:2018 and requires a minimum distance of 10m from the edge of any classified vegetation. This product is not suitable to be installed where the 10m setback distance between the building and the edge of the classified vegetation cannot be achieved.

Source: Assurance Construction Laboratories and Certification; IGNL-8206-99-01R I01R02 FRL Assessment; Dated 11/07/2024 & AS 3959:2018 Construction of buildings in bushfire prone areas.

#### A4 Manufacturer and manufacturing plant(s)

This field is optional. Contact the Certificate Holder for details.

#### A5 Installation requirements

OzHemp Tradical® Hempcrete is only to be installed by a suitably qualified tradesperson in accordance with project specific engineering advice and the OzHemp Tradical HC Install Manual ver05 May2025

#### A6 Other relevant technical data

No other relevant technical data.

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

#### **B1** Evaluation methods

**1.** Fire Safety Provisions A5G3(1)(e). Reports from a professional engineer.

#### B2 Reports

- Assurance Construction Laboratories and Certification; IGNL-8206-99-01R I01R02 FRL Assessment; Dated 11/07/2024. Provides confirmation of FRLs as evidence of compliance of with C2D2(2), G5D3, H3D3(2) and H7D4 based on the test report prepared by BRE Global.
  - a. BRE Global Test Report 250990, dated 13th May 2009.

The Certificate Holder has chosen not to make the above evidence of compliance publicly available, due to the documents being considered commercial in confidence.