Certificate of Conformity

Certification Body:

CertMark International
ABN: 80 111 217 568
JAS-ANZ Accreditation
No. Z4450210AK
PO Box 7144, Sippy
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Certificate Holder:

OzHemp Pty Ltd
ABN: 57 118 727 898
43 Gillett Drive,
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Certificate number: CM40261 Rev1

THIS IS TO CERTIFY THAT

OzHemp Tradical® Hempcrete

Type and/or use of product:

Non-structural wall system.

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) **BCA 2019 (Amdt. 1)**

	Volume One		Volume Two	
Performance Requirement(s):	Not applicable		Not applicable	
	C1.1(b)	Fire-resistance of building elements - Refer Limitation and Condition 3	3.7.2.4(b)	FRL - Construction of external walls. Refer Limitation and Condition 3
Deemed-to-Satisfy Provision(s):	G5.2	Bushfire – up to BAL–FZ (Achieved in compliance with FRL)	3.10.5.0	Bushfire – up to BAL–FZ (Achieved in compliance with FRL)
State or territory variation(s):	G5.2 (NSW)		3.10.5.0 (NSW, QLD)	

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

Limitations and conditions:

1. This Certificate only applies to the OzHemp Tradical® Hempcrete. All other components and materials used to create the wall system are outside of the scope of this certification.
2. It is the responsibility of the building designer to ensure the OzHemp Tradical® Hempcrete product is fit for purpose. This certification is limited to clauses as detailed herein.
3. In relation to 'Fire separation' and 'Fire-resistance of building elements' clause C1.1(b) and 3.7.2.4(b) is limited to the OzHemp Tradical® Hempcrete product - Applicable where FRL up to 60/60/60 is required in accordance with the Building Code of Australia (BCA), and only where the wall construction is as detailed in Section A3. Variations to the tested specimen is outside the scope of this Certificate of Conformity and must be supported by a site specific Performance Solution.
4. The use of the OzHemp Tradical® Hempcrete product must be supported by a site specific Performance Solution (other than CV3) where the BCA, inclusive of Clause C1.9 and C1.14, requires building elements and/or ancillary elements to be non-combustible in type A and B construction.
5. Assessment of the adequacy of weatherproofing under P2.2.2 and FP1.4 of the Building Code of Australia (BCA) as a roof or wall cladding is outside the scope of this Certificate of Conformity.

Building classification/s:

Class 1,2,3,4,5,6,7,8,9 & 10

Richard Donarski - CMI

Don Grehan – Unrestricted Building Certifier

Date of issue: 28/09/2020

Date of expiry: 21/06/2022

ABCB JAS-ANZ

6. Only to be installed by a suitably qualified tradesperson in accordance with OzHemp Tradical® Hempcrete Installation Manual Ver03 082020.
7. In order to maintain compliance with BAL FZ, the building must be designed and constructed in accordance with AS 3959:2009.
8. The OzHemp Tradical® Hempcrete Wall System is non-structural in vertical load bearing capacity and racking resistance.
9. If OzHemp Tradical® Hempcrete is used in conjunction with a steel frame, it must be treated against corrosion in accordance with the Ozhemp Tradical® Hempcrete Installation Manual Ver03 082020.
10. 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 Building Code of Australia (BCA).
11. Moisture changes will vary within the overall OzHemp Tradical® Hempcrete matrix due to the external and internal environment and the building's geographical location.
12. The OzHemp Tradical® 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.
13. 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.
14. 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.
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.

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. This may result in the product being classified as a non-conforming building product.

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, CertMark International 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.

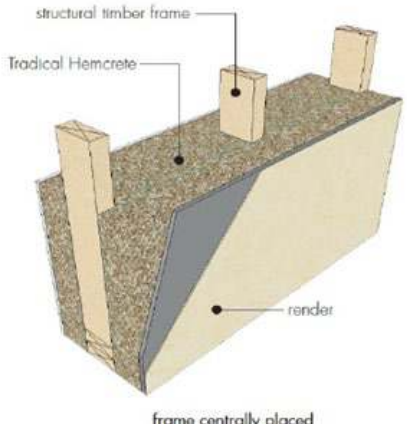
APPENDIX A – PRODUCT TECHNICAL DATA

A1 Type and intended use of product

As per page 1.

A2 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.



frame centrally placed

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®PF70 / Tradical® Thermo.
- The Render Binder; Tradical®PF80 / Tradical® Batir / Tradical® Décor.
- The Hemp Shiv; Hempflax® / Chanvribat® 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 NFP 18-308 and Australian Standard AS 1672.1-1997).

A3 Product specification

Tested Specimen for FRL 60/60/60 & Bushfire

A softwood timber frame was erected on an 18mm-thick plywood base and was located centrally within the 300mm-thick Hempcrete wall. The frame was constructed from 100mm wide x 50mm thick x 3000mm tall softwood timber, comprising eight timber studs (six internal, two on the outer edges), with top and bottom plates. The plywood baseplate was included for offsite fabrication, specimen conditioning (cure) and transportation to the test facility. The baseplate remained in place throughout testing but is not typical of a normal construction.

A plastic shuttering system was placed against the baseplate, encasing the timber frame on all four sides. The shuttering, nominally 600mm high x 1210mm wide x 80mm thick was applied in stages with each individual section clamped to the adjoining sections. The shuttering was spaced off the baseplate via temporary spacers, removed after the addition of the Hempcrete mix. The composition of the Hempcrete mix is described in section 2.2. The mixture was poured between the faces of the plastic shuttering from the unexposed face (non-fireside) of the wall and gently compacted to ensure no sizeable voids were present in the casting. As a shutter was filled, the next level of shuttering was clamped in place on top of the preceding layer and the build sequence continued to the top of the specimen.

To prevent the exposed specimen face (fireside) shuttering from spreading during casting of the wall, bolts were inserted through the wall and attached to the shuttering. Approximately 200 – 300 lifts (in numerous layers of mixture) were required to cast the specimen. Once casting of the wall was complete, the plastic shuttering was removed, and the specimen allowed to dry out. In normal practice the through bolt holes left in a freshly cast sample are filled with Hempcrete mixture after removal of the shuttering.

A4 Manufacturer and manufacturing plant(s)

This filed is voluntary. 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® Hempcrete Installation Manual Ver03 082020.

A6 Other relevant technical data

No other relevant technical data.

APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

1. Fire Safety Provisions A5.2(1)(e). Reports from a professional engineer.

B2 Reports

1. Fire Check Consultants; Report FCC. 200826 CA version 02; Consultants Advice - Fire Engineering; Dated 26/08/2020.

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