

Certificate number: CM40223 Rev1

Certification Body:



ABN: 80 111 217 568

JAS-ANZ Accreditation

No. Z4450210AK

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Certificate Holder:



James Hardie Australia Pty Ltd

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THIS IS TO CERTIFY THAT

Hardie™ Oblique™ & Stria™ Cladding

Type and/or use of product: Description of product:

External cladding on residential and commercial facades. Hardie™ Oblique™ & Stria™ Cladding are fibre-cement wall cladding boards featuring shiplap joints that can be installed in a horizontal or vertical orientation.

COMPLIES WITH THE FOLLOWING BCA PROVISIONS AND STATE OR TERRITORY VARIATION(S) BCA 2019 (Amdt. 1)

Volume One		Volume Two		
Performance Requirement(s):	BP1.1(b)(i) & (iii)	Structural reliability – Permanent and wind actions	P2.1.1(b)(i) & (iii)	Structural reliability – Permanent and wind actions
	FP1.4	Weatherproofing - External walls subject to <i>Limitation and Condition No. 2</i> .	P2.2.2	Weatherproofing – External walls subject to <i>Limitation and Condition No. 2</i> .
Deemed-to-Satisfy Provision(s):	C1.9(e)(iv)	Non-combustible materials	3.5.4.3(a)	Wall cladding boards – Fibre-cement boards
	G5.2	Construction in bushfire prone areas (BAL Low-40)	3.7.1.1(d)	Non-combustible materials
			3.10.5.0	Construction in bushfire prone areas (BAL Low-40)
State or territory variation(s):	G5.2 NSW		3.10.5.0 NSW	1

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

1. Hardie™ Oblique™ & Stria™ Cladding Horizontal and Vertical must be installed in accordance with the Hardie™ Oblique™ & Stria™ Cladding Installation Guide

Building classification/s: Classes 1,2,3,4,5,6,7,8,9 & 10

November 2022.

2. To satisfy FP1.4 & P2.2.2 via verification requires the site specific evaluation of the relevant design against FV1.1 and/or V2.2.1 to the satisfaction of the

Appropriate Authority as defined by the NCC:
(a)(i) has a risk score of 20 or less, when the sum of all risk factor scores are determined in accordance with Table FV1.1/V2.2.1a; and

(a)(ii) is not subjected to an ultimate limit state wind pressure of more than 2.5kPa; and

(a)(iii) includes only windows that comply with AS 2047.

Limitations and conditions:

Richard Donarski - CMI

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Date of issue:

01/12/2022





Don Grehan – Unrestricted Building Certifier

Date of expiry: 20/08/2024



Compliance with Weatherproofing is limited to the tested specimen detailed in A3, deviations from this specimen, is subject to site specific design and approval by the regulatory authority.

- 3. The project designer or specifier must ensure the product is appropriate for the intended application and that additional detailing is performed for specific designs or applications that fall outside the scope of the manual and/or certification. It is the responsibility of the builder to ensure the product meets aesthetic requirements prior to installation.
- 4. No assessment has been undertaken on the product for Part F6 of Vol 1 or Part 3.8.7 of Vol 2 of the 2019 BCA for Condensation management. A pliable building membrane complying with AS/NZS 4200.1:2017 must be installed in accordance with AS/NZS 4200.2:2017 to separate the wall cladding panels from any water sensitive materials.
- 5. Compliance with BP1.1(b)(iii) & P2.1.1(b)(iii) excludes resistance to impact loading from windborne debris.
- 6. Hardie™ Oblique™ & Stria™ Cladding boards must be fixed to a structurally adequate external wall frame in accordance with the appropriate tables in the Hardie™ Oblique™ & Stria™ Cladding Installation Guide November 2022.
- 7. The structural certification is limited to the wall cladding boards only and does not include the sub-structure. The structural support members are designed and engineered separately as per project requirements by building designers and engineers.
- 8. In order to maintain compliance with BAL 40, it is the responsibility of the Building Designer to ensure compliance is achieved in accordance with AS 3959-2018.
- 9. In all installations the minimum clearance between the underside of panel and the adjoining ground surface level below must comply with the specifications in Part 3.5.4.7 of Volume 2 of the NCC.
- 10. 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.

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

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Hardie™ Oblique™ and Stria™ Cladding are installed in a horizontal or vertical orientation.

A2 Description of product

Hardie™ Oblique™ Cladding	Description	Product Code	Length (mm)	Width (mm)	Mass (kg)
	Factor and all discourse of the	405300	2750	200	9.5
Note: All dimensions and masses are approximate and subject to manufacturing tolerances	Factory sealed 14mm profile — featuring a unique bevel — groove profile. —	405302	2750	300	14.5
		405301	4200	200	14.6
	groove profile.	405303	4200	300	22.1
Stria™ Cladding Note: All dimensions and masses are approximate and subject to manufacturing tolerances	Description	Product Code	Length (mm)	Width (mm)	Mass (kg)
	Pre-primed 14mm weatherboard that features a	Stria™ Standard 404063	4200	325	26
	deep square groove and wider profile.	Stria™ Wide 404413	4200	405	33

Physical Property		Saturated Condition	Equilibrium Condition 23°C – 50% RH	Standard
	Minimum Bending Strength	>7.0 Mpa		AS/NZS 2908.2:2000
	Category	3		
	Type	A		
	Average Density in kg/m³ (Oven Dry)	1150		AS/NZS 2908.2:2000
	Watertightness	Watertightness Passes AS/NZS 2908.2:2000	Passes	AS/NZS 2908.2:2000
	Dimensional Conformance		Passes	AS/NZS 2908.2:2000
	Heat-Rain Durability			
	Warm Water Resistance	- Dans	AS/NZS 2908.2:2000	
	Freeze-Thaw Resistance	- Pass		
	Soak-Dry			
	Combustibility	Suitable where non-combustible materials are requ	Deemed to comply with BCA	
laterial		The basic composition is Portland cement, ground sand, cellulose fibre and water. James Hardie building products are manufactured to Australian/New Zealand Standard AS/NZS 2908.2:2000 'Cellulose-cement products-Flat sheet'. Hardie™ Oblique™ & Stria™ Cladding panels are classified Type A, Category 3 in accordance with AS/NZS 2908.2:2000.		



A3 Product specification

Non-Combustibility

Hardie™ Oblique™ & Stria™ Cladding panels are suitable where non-combustible materials are required in accordance with C1.9(e)(iv) of the Building Code of Australia.

Bushfire

The Hardie™ Oblique™ & Stria™ cladding panels 14mm in thickness and has been deemed to comply with AS 3959-2018 with DtS is achieved to BAL – 40.

Source: Ignis Labs Pty Ltd Report No. IGNL-6249-16-01 IO1 RO2 dated 09/11/2022.

Weatherproofing

Results tabled below of the weathertightness testing of the Hardie™ Oblique™ & Stria™ Cladding have been confirmed to be in accordance with the Verification Method FV1.1 'Weatherproofing' (Volume 1) and V2.2.1 'Weatherproofing' (Volume 2) test procedure as contained within National Construction Code of Australia subject to *Limitation and Condition No. 2*.

Horizontal Cladding Orientation – Fixed Direct-to-Frame

Test Type		Result	
Structural Test	100% Serviceability Limit State Pressure of 2	Pass	
Static Water Penetration	30% Servi	ceability Limit State Pressure	
	4	55Pa for 15 minutes	Pass
	Pass Criteria: No presence	of water on the inside surface of the façade.	
Cyclic Water Penetration	Cyclic @ 15-30% SLS – 227 to 455 Pa	Duration: 5 minutes	
	Cyclic @ 20-40% SLS – 303 to 606 Pa	Duration: 5 minutes	Dana
	Cyclic @ 30-60% SLS – 455 to 910 Pa	Duration: 5 minutes	Pass
	Pass Criteria: No presence of water on the insid		

Source: Test Report No. TS011-18, Weathertightness – Stria™ Fibre Cement Cladding Direct Fix dated 1 May 2018.

Horizontal Cladding Orientation - Fixed on Cavity Battens or timber battens

Test Type	Criteria	Result
Structural Test	100% Serviceability Limit State Pressure of 1.515 kPa for 1 minute in both positive and negative directions.	Pass
Series 1	455 Pa for 15 minutes	Pass
Static Water Penetration	Pass Criteria: No presence of water on the building wrap.	No leak observed
Series 1 Cyclic Water Penetration	Cyclic @ 455 to 910 Pa Duration 5 minutes Pass Criteria: No presence of water on the building wrap	Pass No leak observed
Series 2 Water Management Test	455 Pa for 15 minutes Pass Criteria: No presence of water on the building wrap.	Pass No leak observed
Series 2 Water Management Test	Cyclic @ 455 to 910 Pa Duration 5 minutes Pass Criteria: No presence of water on the building wrap	Pass No leak observed
Series 3 "Wetwall Test"	Static pressure of 50Pa Duration: 15 minutes Pass Criteria: No presence of water on the building wrap	Pass Water bubbling in through defects and running down the back of the cladding sheets, but not reaching the timber frame, nor building wrap.

Source: Test Report No. TS003-13, Weathertightness - Horizontal Cladding Orientation - Fixed on Cavity Battens dated 04/12/2013.



Vertical Cladding Orientation – Fixed on Castellated Battens

Test Type	Criteria	Result
Structural Test	100% Serviceability Limit State Pressure of 1.515 kPa for 1 minute in both positive and negative directions.	Pass
Series 1 Static Water Penetration	30% Serviceability Limit State Pressure 460Pa for 15 minutes Pass Criteria: No presence of water on the building wrap.	Pass No leak observed
Series 1 Cyclic Water Penetration	Cyclic @ 30-60% SLS – 460 to 920 Pa Duration 5 minutes Pass Criteria: No presence of water on the building wrap	Pass No leak observed
Series 2 Water Management Test (Static Pressure)	30% Serviceability Limit State Pressure 460Pa for 15 minutes Pass Criteria: No presence of water on the building wrap.	Pass No leak observed
Series 2 Water Management Test (Cyclic Pressure)	Cyclic @ 30-60% SLS – 460 to 920 Pa Duration 5 minutes Pass Criteria: No presence of water on the building wrap	Pass No leak observed
Series 3 "Wetwall Test" (Statis Pressure)	Static pressure of 50Pa Duration: 15 minutes Pass Criteria: No presence of water on the building wrap	Pass No leak observed

Source: Test Report No. TS003-22, Weathertightness - Vertical Cladding Orientation - Fixed on Castellated Battens dated 15/09/2022.

A4 Manufacturer and manufacturing plant(s)

This field is optional. Contact Certificate Holder for details.

A5 Installation requirements

Hardie™ Oblique™ & Stria™ Cladding must be installed in accordance with the Hardie™ Oblique™ & Stria™ Cladding Installation Guide November 2022. Refer to the appropriate tables for the Stud Spacings and fixing requirements for installation.

When installing horizontally, this can be done over a timber or steel frame and either direct fixed to frame or to Hardie™ Cavity Battens or timber battens. When installing in a vertical orientation, this must be only done over timber frames and using the Hardie™ Castellated Battens.

A suitable weather barrier must be installed behind Hardie™ Oblique™ & Stria™ Cladding in accordance with the relevant requirements of the BCA and the AS/NZS 4200.2:2017 'Pliable building membranes and underlays – Installation. James Hardie recommends Hardie™ Weather Barrier – refer to the building designer, certifier, or other relevant expert, for suitability.

A6 Other relevant technical data

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Thermal	Stria™ Cladding panels will contribute to the overall thermal performance of the building; however, it is the responsibility of the building designer to ensure the minimum thermal requirements for the building envelope is achieved.
Resistance to fire	Testing has been conducted by CSIRO on the Hardie™ Cladding materials in accordance with AS/NZS 3837:1998 and are classified as conforming to Group 1 material. (Average Specific Extinction Area 9.3m²/Kg). For further details, contact the Certificate Holder.

Source: CSIRO Testing certificate in accordance with AS/NZS 3837:1998 dated 28/08/2008



APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

- 1. Fire Safety Provision A5.2(1)(d) & (e). Reports from Accredited Testing Laboratories and a professional engineer.
- 2. Structural Provision A5.2(1)(e). Reports from a professional engineer.
- 3. Weatherproofing Provisions A5.2(1)(d). Reports from Accredited Testing Laboratories.

B2 Reports

- 1. CSIRO, NATA Accreditation No. 165; Testing certificate in accordance with AS/NZS 3837:1998; Dated 28/08/2008
- 2. James Hardie Research Pty Ltd; NATA Accreditation No. 14220; Testing in accordance with AS/NZS 2908.2:2000 Products Part 2: Flat Sheets; Dated 19/10/2022.
- 3. James Hardie Research Pty Ltd; NATA Accreditation No. 14220; Test Report Number TS011-18; Weathertightness compliance report; Dated 01/05/2018.
- 4. James Hardie Research Pty Ltd, NATA Accreditation No. 14220; Test Report Number TS003-22; Cavity Fix Weathertightness; Dated 15/09/2022.
- 5. James Hardie Research Pty Ltd, NATA Accreditation No. 14220; Test Report Number TS003-13; Cavity Fix Weathertightness; Dated 04/12/2013.
- 6. James Hardie Research Pty Ltd, NATA Accreditation No.14220; Advice Note Compliance Notification; Dated 27/10/2022.
- 7. Ignis Labs Pty Ltd, NATA Accreditation No. 20534; Bushfire product evaluation external cladding system; 09/11/2022.
- 8. Stantec Australia Pty Ltd; Reference No. 304000276; Structural Certification of James Hardie 14mm Oblique™ & Stria™ Weatherboards dated 27/10/2022.

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