

Certificate number: CM40221 Rev3

Certification Body:



Certificate Holder:



James Hardie Australia Pty Ltd ABN: 12 084 635 558 10 Colquhoun St, Rosehill NSW 2142 www.jameshardie.com.au

THIS IS TO CERTIFY THAT

Exotec™ Facade Panel and Fixing System

Type and/or use of product:

External Façade Panel and Fixing System.

Description of product:

The James Hardie Exotec™ Facade Panel and Fixing System is an express joint façade system comprising of compressed fibre cement (CFC) panels and the proprietary James Hardie top hat system. Panels are supplied as paintable or pre-finished.

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

BCA 2019

	Volume One		Volume Two	
Performance Requirement(s):	FP1.4	Roof and external walls must prevent the penetration of water	P2.2.2	Weatherproofing
Deemed-to-Satisfy Provision(s):	B1.2	Determination of individual actions	3.5.4.3(a)	Wall cladding boards – Fibre-cement
	B1.4	Determination of structural resistance of materials and forms of construction	3.5.4.4(a)	Sheet wall cladding
	C1.9(a)(i), (d)&(e)(iv) &(vi)	Non-combustible building elements	3.5.4.5	Eaves and soffit linings
	G5.2	Construction in bushfire prone areas (BAL Low-40)	3.10.5.0	Bushfire areas (BAL Low-40)
	J1.5	Walls (9mm - R-Value 0.015 - Contributes to the overall performance of the building envelope)	3.11.2	Resistance to actions
			3.11.3	Determination of individual actions
			3.11.6	Determination of structural resistance of materials and forms of construction
			3.12.1.4	Building fabric thermal insulation (9mm - R-Value 0.015 - Contributes to the overall performance of the building envelope)
State or territory variation(s):	G5.2 (NSW & SA	G5.2 (NSW & SA), G5.3 (SA), J1.5(QLD)		& QLD)

John Thorpe - CMI

Date of issue: 02/07/2019

Date of expiry: 13/04/2021





Don Grehan - Unrestricted Building Certifier



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Certificate of Conformity

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

Limitations and conditions:

Building classification/s:

1. A qualified Structural Engineer must design the substructure and the connection between the substructure and the top hats.

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

- 2. The ExoTec™ Façade Panel and Fixing system must be installed in accordance with the relevant James Hardie technical literature. Where ExoTec™ Façade Panel is to be painted on-site or finished with a factory applied coating, the panels must be specified and installed in accordance with the ExoTec™ Façade Panel and Fixing System Installation Guide (May 2019) and ExoTec™ Façade Panel and Fixing System Technical Specification (May 2019). Where the ExoTec™ RAW Façade Panel is to be used, refer to the ExoTec™ RAW Façade Panel and Fixing System (May 2019).
- 3. It is the responsibility of the Project Engineer to determine the appropriate wind pressure for the project and specify the fixing of the top hats to the structure. The Engineer must limit deflection of the supporting structure to span/250 for Serviceability Wind Load in accordance with AS 1170.2:2011 'Structural design actions Wind actions'.
- 4. The Exotec™ Façade Panel, as certified, will contribute to the overall thermal performance of the building; however, the performance values are for guidance only and must be verified by a suitably qualified person(s). It is the responsibility of the building designer to ensure the minimum thermal requirements for the building envelope is achieved.
- 5. A suitable weather barrier must be installed behind Exotec™ Façade Panel and Fixing System in accordance with the relevant requirements of the BCA and AS/NZS 4200.2:2017 'Pliable building membranes and underlays Installation. Where a combustible weather barrier is proposed, it must be assessed independent of this certificate. Refer A6 Other relevant technical data.
- 6. 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.

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

Components

Product	Description		Quantity / Size (Nominal)		
Exotec™ facade panel	Dense compressed panel. Square edge. Factory sealed on all six sides. The Nominal density of the 9mm board	Thickness (mm)	Width (mm)	Lengths (mm)	
	is 1550kg/m³.	9	900	1800, 2100,	
	The Paintable panel has a distinctive white face, which accepts a wide range of paint finishes. The panel must		200	2400, 2700 and	
	be installed with the white side facing the exterior of the structure.			3000	
	The Pre-Finished Panel is pre-sealed by James Hardie to create a natural "raw" fibre-cement aesthetic with	12	1200	2400 and 3000	
	an optional pre-finish using factory applied coating via a third-party supplier.				
Exotec™ Top Hat	A rolled metal section, for use with Exotec™ façade panel and fixing system, designed to span vertically		124 wide x 35	6000 and 7200	
	across the building structure to support façade panels and isolate different movement of the panels from		deep		
	those of the structure.				
James Hardie Intermediate Top Hat	A metal top hat installed vertically for use with Exotec™ and ComTex façade panel and fixing system, for	0.75 gauge	50 wide x 35	6000 and 7200	
	intermediate sheet support.		deep		
Exotec™ Gasket Snap Strip	For use with the Exotec™ façade panel fixing system, this gasket snap strip is specially designed to clip into	-	-	3620	
	the Exotec™ Top Hat at vertical façade panel joins to cover fixings to the structure and to provide an initial				
	weather seal and drainage using a neoprene gasket.				
James Hardie Backing Strip	A weather seal at horizontal panel joints for use with Exotec™ façade panel and fixing system.	-	-	1190, 2390 and	
				2990	
James Hardie Façade Washers	Façade washers used for exposed fastener fixing with Exotec™ façade panel and fixing system.	-	-	-	
James Hardie Base Coat	A water-resistant base coat compound used to finish over countersunk fasteners with epoxy.	-	-	-	
James Hardie Joint Sealant	A general purpose, paintable, exterior grade polyurethane joint sealant.	-	-	-	
HardieEdge™ Trim	An architectural slab edge solution fabricated from high-quality powder coated aluminium.	-	-	3950	
HardieWrap™ Weather Barrier	A non-perforated, highly breathable and reflective safe-glare weather barrier.	<1mm	2750	30000/roll	



A3 Product specification

Physical Property	Saturated Condition	Equilibrium Condition 23ºC – 50% RH	Standard	
Average Bending Strength	> 7.0MPa	<u> </u>	AS/NZS 2908.2:2000	
Category	3			
Туре	A			
Density in kg/m³ (Oven Dry)	1490	-	AS/NZS 2908.2:2000	
Watertightness	-	Passes	AS/NZS 4284:2008 & AS/NZS 2908.2:2000	
Dimensional Conformance	-	Passes	AS/NZS 2908.2:2000	
Heat-Rain Durability				
Warm Water Resistance		Decease		
Freeze-Thaw Resistance		Passes		
Soak-dry				
Combustibility	Suitable where non-combus of the BCA	tible materials are required in accordance with C1.9	Deemed to comply with BCA	

Bushfire

Provided any joints are no greater than 3mm or appropriately sealed, compliance with AS 3959-2009 as well as the National Construction Code of Australia 2019 Volumes 1 and 2 for BAL-Low to BAL-40. BAL-FZ construction requires the ExoTec™ Façade Panel and Fixing System to be installed in conjunction with a suitable fire rated wall system with minimum 30 minute FRL − refer to the James Hardie Bush Fire Prone Areas Technical Supplement for more information, and James Hardie™ Fire and Acoustically Rated Walls Application Guide.

Thermal Properties

The ExoTec[™] facade 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.

When tested in accordance with ASTM C518, the 9mm panel achieves an R-Value of 0.015. It is the responsibility of the building designer to ensure the minimum R-Value for the building envelope is achieved.

A4 Manufacturer and manufacturing plant(s)

James Hardie Australia 1-35 Cobalt Street Carole Park QLD 4300 Australia.



A5 Installation requirements

The ExoTec™ Façade Panel and Fixing system must be installed in accordance with the relevant James Hardie technical literature. Where ExoTec™ Façade Panel is to be painted on-site or finished with a factory applied coating, the panels must be specified and installed in accordance with the ExoTec™ Façade Panel and Fixing System Installation Guide (May 2019) and ExoTec™ Façade Panel and Fixing System Technical Specification (May 2019). Where the ExoTec™ RAW Façade Panel is to be used, refer to the ExoTec™ RAW Façade Panel and Fixing System (May 2019).

Failure to install, finish or maintain this product in accordance with applicable building codes, regulations, standards and James Hardie's written application instructions may lead to personal injury, affect system performance, violate local building codes, and void James Hardie's product warranty.

The builder must ensure the product meets aesthetic requirements before installation. James Hardie will not be responsible for rectifying aesthetic surface variations following installation.

A6 Other relevant technical data

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Fire

Testing conducted by CSIRO on the James Hardie Cladding materials in accordance with AS/NZS 3837:1998 and are classified as conforming to Group 1 material. (Average Specific Extinction Area 55.1m²/Kg).

APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

- Structural Provision A5.2(1)(e). Reports from a professional engineer.
- 2. Characteristic Type Testing A5.2(1)(d). Reports from Accredited Testing Laboratories.
- 3. Bushfire Assessment A5.2(1)(e). Reports from a professional engineer.
- 4. Fire Assessment A5.2(1)(d). Reports from Accredited Testing Laboratories.
- 5. Weatherproofing Assessment A5.2(1)(d). Reports from Accredited Testing Laboratories.
- 6. Thermal Properties A5.2(1)(e). Reports from an appropriately qualified person.

B2 Reports

- 1. Cardno; Engineering Report S11713-LO-44A; Certification of James Hardie ExoTec™ Façade Panel and Fixing System compliance to AS/NZS 1170.2-2002 Clause 2.5.5 & AS 4040.3-1992; Dated 18/08/2009.
- 2. David Beneke Consulting Pty Ltd; Report No. 2011-45-LO-05; Certification of James Hardie ExoTec™ Façade Systems in High Wind Applications; Dated 19/04/2011.
- 3. David Beneke Consulting Pty Ltd; Report No. 2011-45-LO-83; Structural Certification of the James Hardie Exotec™ Facade System Revision 4; Dated 02/08/2018.
- 4. David Beneke Consulting Pty Ltd; Report No. 2011-45-LO-84; Structural Certification of The James Hardie Exotec™ Facade System used in Soffit Applications Revision 2; Dated 02/08/2018.
- James Hardie Australia Pty Ltd; NATA Accreditation No. 14220; Compliance Certificate ExoTec™ Façade Panel Characteristic Type Tests required by AS/NZS 2908.2:2000; Dated July 2010.
- 6. CSIRO; NATA Accreditation No. 165; Certificate No.: 1126; Certificate of Assessment in accordance with AS/NZS 3837 Group Number 1 and Average specific extinction area: 55.1m²/kg; Dated 28/08/2008.
- 7. Acronem Consulting Australia Pty Ltd; Thermal break requirements for Exotec™ on Metal Frames Single Stud; Dated 28/11/2017.
- 8. Facade Testing NZ Limited; IANZ Accreditation No. 1259; Report No. FT-R1005a; Testing in accordance with AS/NZS 4284:2008; Dated 08-09/05/2017.
- 9. BRANZ, Project Number: EC0712; Thermal Conductivity Measurement of Six Samples of Fibre Cement Board Products; Dated 17/10/2003.
- 10. Ignis Solutions Pty Ltd; Evaluation No. IGNS-6690-01 Issue 01 Revision 00[2018]; Compliance with AS 3959-2009 BAL Low-40; Dated 31/03/2018.

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