

Certificate number: CM40390

#### **Certification Body:**



ABN: 81 663 250 815

JAS-ANZ Accreditation

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#### **Certificate Holder:**



James Hardie Australia Pty Ltd ABN: 12 084 635 558 10 Colquhoun St, Rosehill NSW 2142 Australia P: 13 11 03 www.jameshardie.com.au

#### THIS IS TO CERTIFY THAT

### Hardie™ Smart Intertenancy Wall System

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

For use as a separating wall between Class 1 buildings, or a wall that separates a Class 1 building from a Class 10a building. The system is designed for use in timber framed buildings with a fire resistance level (FRL) requirement of 60/60/60 or less.

The Hardie™ Smart Intertenancy Wall System is comprised of twin 90mm timber framed walls with a 30mm cavity separation, insulated with 60mm Hardie™ Fire Insulation to both frames within the stud bays. The walls are lined with Villaboard™ to both interior sides.

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

**BCA 2022** 

	Volume One	Volume Tw	0
Performance Requirement(s):	Not Applicable	Not Applica	ıble
Deemed-to-Satisfy Provision(s):	Not Applicable	H3D2(d)	Non-combustible building elements – Fibre-reinforced cement sheeting – Panel Only
		H3D4	Fire protection of separating walls – Subject to Limitation and Condition No. 2
		H4D8	Sound insulation – Must be used in conjunction with other building elements. Refer A3 for values.
State or territory variation(s):	Not Applicable	Not Applica	able

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. Hardie™ Smart Intertenancy Wall System must only to be installed in accordance with the Design Guide Hardie™ Smart Intertenancy Wall System Class 1 & 10a Timber Frame Building November 2023. Class 1 and 10a
- 2. Compliance with H3D4 is dependent on the system that achieved the FRL outlined in A3. Any deviation from the tested specimen does not form part of this certificate of conformity.
- 3. Hardie™ Smart Intertenancy Wall System can be considered to constitute discontinuous construction and is not otherwise penetrated by any building services when installed in accordance with <u>Design Guide Hardie™ Smart Intertenancy Wall System Class 1 & 10a Timber Frame Building November 2023</u>. For the purpose of this certificate, discontinuous construction is defined in the BCA as a wall system having a minimum 20 mm cavity between two separate leaves.

Richard Donarski – CMI

Don Grehan – Unrestricted Building Certifier

**Date of issue:** 01/12/2023

01/12/2026

Date of expiry:





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# **Certificate of Conformity**

- 4. The structural support members are designed and engineered separately as per project requirements by building designers and engineers.
- 5. The timber framing must be in accordance with AS 1684 as applicable.
- 6. Fire rating requirements of the subfloor, when required by the BCA, must be assessed by the authority having jurisdiction.
- 7. The footing and slab system is to comply with AS 2870:2011 or AS 3600:2018, as applicable.
- 8. 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, 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.



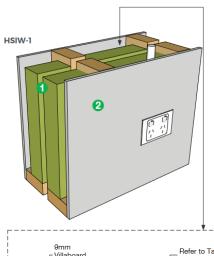
#### APPENDIX A – PRODUCT TECHNICAL DATA

#### A1 Type and intended use of product

The Hardie™ Smart Intertenancy Wall System is intended for use as a separating wall between Class 1 buildings, or a wall that separates a Class 1 building from a Class 10a building. The system is designed for use in timber framed buildings with a fire resistance level (FRL) requirement of 60/60/60 or less.

#### **A2** Description of product

The Hardie™ Smart Intertenancy Wall System is comprised of twin 90mm timber framed walls with a 30mm cavity separation, insulated with 60mm Hardie™ Fire Insulation to both frames within the stud bays. The walls are lined with Villaboard™ to both interior sides.



9mm Villaboard Lining	Refer to Table 1 & 2
	min. 30mm frame separation  30mm service cavity
60mm Hardie™ Fire — Insulation	Services refer to Design Considerions

HSIW-2	FRL (min)	Acoustic (Rw   Rw+Ctr)				
Callet Street	60/60/60	63   54				
Components						
Linings on	6mm Villaboard™ lining					
both sides	10mm plasterboard (min. 5.7kg/m²)					
Insulation	60mm Hardie™ Fire Insulation					

HSIW-3	FRL (min)	Acoustic (Rw   Rw+Ctr)			
	60/60/60	65   57			
Components					
Linings on	9mm Villaboard™ lining				
both sides	10mm plasterboard (min. 5.7kg/m²)				
Insulation	60mm Hardie™ Fire Insulation				

NOTE: The above is a common configuration of the system



### **System Components:**

Mineral wool insulati	on	Product Code	Length (m)	Width (mm)	Thick (mm)	Coverage (mm²)			
		305903	1160	560	60	5.1			
60mm Hardie™ Fire Insulation	lation	305902	1160	420	60	3.8			
		305909	1320	420	60	4.3			
Wall lining for system variation HSIW-1		Leng	gth (m)	Width (mm)	Thick (mm)	Density (kg/m²)			
Villah aard™ Omma Lini	Villah a and TM One on Lining		0, 3000, 3600	1200	9 8.3				
Villaboard™ 9mm Lini	rig	3	000	1350	9	8.3			
Wall lining for system variation	Wall lining for system variation HSIW-2		gth (m)	Width (mm)	Thick (mm)	Density (kg/m²)			
		2	400	900	6	8.3			
Villaboard™ 6mm Lining bo	Villaboard™ 6mm Lining both sides		0, 3000, 3600, 4200	1200	6	8.3			
			0, 3600, 4200	1350	6	8.3			
10mm standard plasterboard	10mm standard plasterboard both sides		To be used in dry areas only as internal lining. The product must comply to the requirements of AS/NZS 2588 - Gypsum Plasterboard.						
Wall lining for system variation	Wall lining for system variation HSIW-3		gth (m)	Width (mm)	Width (mm) Thick (mm)				
Villah a and IM One or Lini	Villaboard™ 9mm Lining		0, 3000, 3600	1200	9	8.3			
Villaboard 9mm Lini			000	1350 9		8.3			
10mm standard plasterboard	10mm standard plasterboard both sides		To be used in dry areas only as internal lining. The product must comply to the requirements of AS/NZS 2588 - Gypsum Plasterboard.						
Other Components									
Factorers	Fibre Cement Nail for fixing Villaboard™ lining.								
Fasteners 2	2.8 x 30mm min. Min. Class 3 corrosion resistant fibre cement nail. 2.5 x 50mm gun nails are also suitable.								
Fire and Acoustic-Rated Sealant B	ostik FireBan One	or an equivalent sealant i	t must be tested in accord	ance with AS 1530.4 and achieve a	minimum 60 minute fire rating.				



#### A3 Product specification

#### Material

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'. The Villaboard™ lining is classified Type B, Category 3 in accordance with AS/NZS 2908.2:2000.

#### Non-combustible

The James Hardie fibre-reinforced cement sheeting and board products are suitable where non-combustible materials are required in accordance with as it compliance with H3D2(1)(d)of the Building Code of Australia as fibre-reinforced cement sheeting and boards that complies with AS/NZS 2908.2:2000. Non-combustible does not extend to include the joiners.

### Fire Resistance

(FRLs)

Assessment of the Hardie™ Smart Intertenancy Wall System has determined that the system achieves FRLs of 60/60/60 and -/60/60. E Exposure from either side as shown in the figure below. Installation must be in accordance with the Design Guide - Hardie™ Smart Intertenancy Wall System Class 1 & 10a Timber Frame Building November 2023

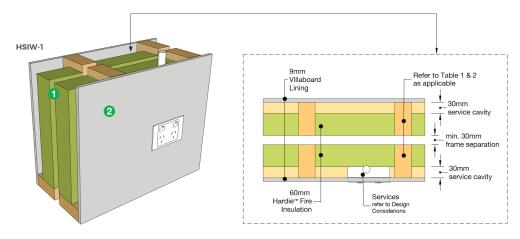


Figure 1 - [HSIW 601] HardieSmart InterTenancy 60 wall system

**Source:** CSIRO Report No. FCO-3222 Revision L dated 25/05/2021.

#### Acoustic

#### System HSIW-1:

Intertenancy wall with twin 90 mm timber stud frames at 450 mm centres with a single row of noggins, each fitted with 60 mm thick 80 kg/m³ Hardie™ Fire Insulation batts, and clad with a single layer of Villaboard™ 9mm Lining separated by 30mm cavity achieved the following results.

Rw(C; Ctr) = 60(-3; -9) dB

Source: CSIRO, Test Report TL591-01-1 Acoustic Measurement Report dated 26/10/2016



#### **Predicted Acoustic Performance**

Source: Renzo Tonn & Associates, Report TJ284-01F03 dated 11/11/2016

Wall Configuration		Predicted Ratings		Wall Configuration Wall System 2 – Nominal wall width 228mm		Predicted Ratings		
Wall System 1 – Nominal wall width 228mm			R <sub>w</sub> +C			Ctr	R <sub>w</sub> +C	
<ul> <li>1 layer of 9mm James Hardie Villaboard, 13.94kg/m² screw fixed to timber stud frame</li> <li>90mm timber studs at 600mm centres</li> <li>60mm thick Rockwool insulation, 80kg/m3 install in cavity between studs</li> <li>30mm separation gap between the independent 90mm timber stud framing</li> <li>90mm timber studs at 600mm centres</li> <li>60mm thick Rockwool insulation, 80kg/m3 install in cavity between studs</li> <li>1 layer of 9mm James Hardie Villaboard, 13.94kg/m² screw fixed to timber studs</li> </ul>				<ul> <li>1 layer of 9mm James Hardie Villaboard, 13.94kg/m² screw fixed to timber stud frame</li> <li>90mm timber studs at 450mm centres</li> <li>60mm thick Rockwool insulation, 80kg/m3 install in cavity between studs</li> <li>30mm separation gap between the independent 90mm timber stud framing</li> <li>90mm timber studs at 450mm centres</li> <li>60mm thick Rockwool insulation, 80kg/m3 install in cavity between studs</li> <li>1 layer of 9mm James Hardie Villaboard, 13.94kg/m² screw fixed to timber studs</li> </ul>			51	
Wall System 3 – Nominal wall width 242mm	$R_w$	$C_{tr}$	R <sub>w</sub> +C	Wall System 4 – Nominal wall width 242mm	$R_{w}$	$C_{tr}$	R <sub>w</sub> +C	
<ul> <li>1 layer of 10mm standard plasterboard, 5.7kg/m² and 1 layer of 6mm James</li> <li>Hardie Villaboard, 9.54kg/m² screw fixed to timber stud frame</li> <li>90mm timber studs at 600mm centres</li> <li>60mm thick Rockwool insulation, 80kg/m3 install in cavity between studs</li> <li>30mm separation gap between the independent 90mm timber stud framing</li> <li>90mm timber studs at 600mm centres</li> <li>60mm thick Rockwool insulation, 80kg/m3 install in cavity between studs</li> <li>1 layer of 10mm standard plasterboard, 5.7kg/m² and 1 layer of 6mm James Hardie Villaboard, 9.54kg/m² screw fixed to timber stud frame</li> </ul>	63	-9	54	<ul> <li>1 layer of 10mm standard plasterboard, 5.7kg/m² and 1 layer of 6mm James</li> <li>Hardie Villaboard, 9.54kg/m² screw fixed to timber stud frame</li> <li>90mm timber studs at 450mm centres</li> <li>60mm thick Rockwool insulation, 80kg/m3 install in cavity between studs</li> <li>30mm separation gap between the independent 90mm timber stud framing</li> <li>90mm timber studs at 450mm centres</li> <li>60mm thick Rockwool insulation, 80kg/m3 install in cavity between studs</li> <li>1 layer of 10mm standard plasterboard, 5.7kg/m² and 1 layer of 6mm James Hardie Villaboard, 9.54kg/m² screw fixed to timber stud frame</li> </ul>	62	-9	53	
Wall System 5 – Nominal wall width 248mm	$R_w$	$C_{tr}$	R <sub>w</sub> +C	Wall System 6 – Nominal wall width 248mm	$R_w$	$C_{tr}$	R <sub>w</sub> +C	
<ul> <li>1 layer of 10mm standard plasterboard, 5.7kg/m² and 1 layer of 9mm James Hardie Villaboard, 13.94kg/m² screw fixed to timber stud frame</li> <li>90mm timber studs at 600mm centres</li> <li>60mm thick Rockwool insulation, 80kg/m3 install in cavity between studs</li> <li>30mm separation gap between the independent 90mm timber stud framing</li> <li>90mm timber studs at 600mm centres</li> <li>60mm thick Rockwool insulation, 80kg/m3 install in cavity between studs</li> <li>1 layer of 10mm standard plasterboard, 5.7kg/m² and 1 layer of 9mm James Hardie Villaboard, 13.94kg/m² screw fixed to timber stud frame</li> </ul>	65	-8	57	<ul> <li>1 layer of 10mm standard plasterboard, 5.7kg/m² and 1 layer of 9mm James Hardie Villaboard, 13.94kg/m² screw fixed to timber stud frame</li> <li>90mm timber studs at 450mm centres</li> <li>60mm thick Rockwool insulation, 80kg/m3 install in cavity between studs</li> <li>30mm separation gap between the independent 90mm timber stud framing</li> <li>90mm timber studs at 450mm centres</li> <li>60mm thick Rockwool insulation, 80kg/m3 install in cavity between studs</li> <li>1 layer of 10mm standard plasterboard, 5.7kg/m² and 1 layer of 9mm James Hardie Villaboard, 13.94kg/m² screw fixed to timber stud frame</li> </ul>	64	-8	56	

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

Certificate number: CM40390-I01-R00

Hardie™ Smart Intertenancy Wall System is manufactured in Australia by James Hardie Australia Pty Ltd. Contact Certificate Holder for details.

#### A5 Installation requirements

Hardie™ Smart Intertenancy Wall System must only to be installed in accordance with the Design Guide - Hardie™ Smart Intertenancy Wall System Class 1 & 10a Timber Frame Building November 2023.

#### A6 Other relevant technical data

No other relevant technical data.

#### APPENDIX B – EVALUATION STATEMENTS

#### **B1** Evaluation methods

- 1. Acoustic and Sound Provisions A5G3(1)(e). A certificate or report from a professional engineer or other appropriately qualified person.
- 2. Fire Safety Provisions A5G3(1)(c)&(d). A current certificate issued by a certification body stating the properties and performance of a product fulfil specific requirements of the BCA and a report issued by an Accredited Testing Laboratory.

#### **B2** Reports

- 1. CSIRO; NATA Accreditation No. 165; Reference No. FCO-3222 Revision L; The fire resistance performance of various load- bearing timber framed walls lined with various James Hardie fibre cement products; Dated 25/05/2021. Report provides supporting evidence of FRLs in compliance with H3D4.
- 2. CSIRO, NATA Accreditation No. 165; Test Report TL591-01-1 Acoustic Measurement Report; Dated 26/10/2016. Report provides acoustic performance of the system validating compliance with H4D8.
- 3. Renzo Tonn & Associates Pty Ltd; Report TJ284-01F03; James Hardie Villaboard Wall Systems Acoustic Opinions; Dated 11/11/2016. Report provides acoustic performance of the system validating compliance with H4D8.
- 4. SAI Global; StandardsMark Licence Certificate No. SMK02107/1; Manufactured to the requirements of AS/NZS 2908.2:2000 Cellulose-cement products Flat sheet; Dated 19/10/2021. This certificate provides evidence in compliance with H3D2(d).
- 5. SAI Global; StandardsMark Licence Certificate No. SMK02107/2; Manufactured to the requirements of AS/NZS 2908.2:2000 Cellulose-cement products Flat sheet; Dated 25/11/2022. This certificate provides evidence in compliance with H3D2(d).

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