

Certification Body:



SAI Global Certification Services Pty Limited

(ACN 108 716 669) Trading as "SAI Global"

JAS-ANZ Accreditation No. Z1440295AS

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THIS TO CERTIFY THAT

CEMINTEL® SURROUND Walling System

Type and/or use of product:

CEMINTEL® Surround is an external walling system for residential and commercial buildings. Suitable for use on all building classes where metal top hats can be fixed either to steel stud framing, timber stud framing, or to masonry and concrete substrates.

For Class 2 to Class 9 buildings, CEMINTEL® Surround walling system is suitable for only Type C Fire-Resisting Construction when fixed to timber stud framing.

CEMINTEL® Surround panels are also used as internal wall lining.

Description of product:

CEMINTEL® Surround panels are prefinished, fibre cement panels trimmed and sealed in a standard 1200mm x 3000mm x 8mm size. The panels are colour bodied and available in a range of colours and textures featuring a matte finish.

The wall system components & accessories are detailed in the Cemintel Design and Installation Guide – Surround Series – External Installation dated 03/2020 and for internal applications Design and Installation Guide – Internal Installation dated 03/2020.

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

BCA 2019

Certificate number: CM20199 Rev 1

	Volume One		Volume Two		
Performance Requirement(s)	BP1.1(a) limited to (b)(i)(ii) & (iii)	Structural reliability	P2.1.1(a) limited to (b)(i), (ii), & (iii)	Structural stability and resistance	
	FP1.4	Weatherproofing	P2.2.2	Weatherproofing	
Deemed-to-Satisfy	C1.1(b) &	Fire Resistance – Type A Fire-Resisting	3.7.1.1(d)	General concession — non-combustible materials	
Provision(s):	Spec C1.1 Clause 3	Construction (120/120/120, or -/180/180 when used in a system with Fyrchek MR	3.7.2.4(b)(i)	Fire separation of external walls – Construction of external walls (FRL 60/60/60)	

SAI Global Certification Services

Heather Mahon Global Head of Technical Services

SAI Global Assurance

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Quintin Kleyn - Unrestricted Building Certifier

Date of issue: 17 March 2020

Date of expiry: 27 February 2023







			plasterboard, refer to the Design and Installation Guide)	3.10.5.0(c)	Construction in bushfire prone areas
		C1.9(e)(iv)	General concession — Materials deemed to be non-combustible		
		C1.10(a)(ii) & Spec C1.10 Clause 4	Fire hazard properties – Wall and ceiling linings		
		G5.1 & G5.2	Construction in bushfire prone areas – (up to and including BAL 29)		
	State or territory	NSW G5.2	Construction in Bushfire Prone Areas –	NSW 3.10.5.0	Construction in bushfire prone areas
ľ	variation(s):		Protection.	QLD 3.10.5.0	Construction in bushfire prone areas
		QLD G5.1	Construction in Bushfire Prone Areas – Construction Requirements		

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

Limitations and conditions:

Surround Walling System with Fyrchek MR Plasterboard can be used where the required Fire Resistance Levels (FRLs) does not exceed 120/120/120, or -/180/180 as specified in the NCC 2019 BCA Volume One specification C1.1. The installation must be in accordance with the relevant details contained within the System Engineering section of Cemintel Design and Installation Guide – Surround Series – External Installation dated 03/2020 for system No. CSR5874 (FRL 120/120/120) and system No. CSR5349 (120/120/120, or -/180/180)

- 2. For Class 2 to Class 9 buildings, CEMINTEL® Surround walling system is suitable for only Type C Fire-Resisting Construction when fixed to timber stud framing.
- 3. For type C Fire-Resisting Construction, Surround Walling System has not been assessed against the requirements of Specification C1.1 Clause 5.1(c) of a fire wall or an internal wall bounding a sole-occupancy unit or separating adjoining units.
- Surround Walling System achieves a Group Number 1 and Smoke Growth Rate Index (SMOGRA_{RC} 0.2 m²s²x1000) as determined in accordance with AS 5637.1:2015
- 5. The following were the only wall wraps assessed against the requirements of C1.9(e)(vi) for sarking-type material:
 - a) Bradford Thermoseal™ Wall Wrap
 - b) Enviroseal ProctorWrap Commercial Wall (CW)
 - c) Enviroseal ProctorWrap Residential Wall (RW)

Building classification/s:

Volume 1 – Class 2 to Class 9 buildings

Volume 2 – Class 1 and Class 10(a)

buildings



- 5. The following were the only insulations assessed against the requirements of C1.9(a) for non-combustible building elements:
 - a) 75 Gold Batts R1.5 at 8.76kg/m³ density
 - b) 75 Gold Batts R2.0 at 6.3kg/m³ density
 - c) 90 Gold Batts R2.0 at 10.5kg/m³ density
 - d) 90 Gold Batts R2.5 at 21.2kg/m³ density
 - e) 75 Acoustigard R1.7 at 11.0kg/m³ density
 - f) 90 Acoustigard R2.2 at 14.0kg/m³ density
 - g) 90 Acoustigard R2.5 at 20.0kg/m³ density
- 7. Surround Walling System shall be used for its intended purpose. For further information on limited applications of the product, refer to Cemintel Design and Installation Guide Surround Series as relevant:
 - a) External Installation dated 03/2020
 - b) Internal Installation dated 03/2020
- Surround Walling System has been tested for weatherproofing requirements and achieved serviceability limit state wind pressures up to ±2.5kPa water penetration for the cavity system using Cemintel rigid air barrier (typically 6mm thick fibre cement sheet). Construction details and fixing must follow the relevant details contained within the System Engineering section of Cemintel Design and Installation Guide – Surround Series – External Installation dated 03/2020.
- Surround Walling System has been evaluated for use in all Australian wind zones up to and including N6 and Cyclonic C4 in accordance with AS 4055 and for ultimate wind pressures up to 7.0 kPa under AS 1170.2 including cyclonic zones when fixed to steel framing with Cemintel Rigid Air Barrier.
- 10. The Surround Walling System is not certified for either energy efficiency or acoustic performance.
- 11. Site environmental factors such as wind and corrosivity zones need to be considered to determine its suitability for a particular environment.
- 12. Surround Walling System is suitable for use on buildings constructed in accordance with AS 3959:2018 that are have a Bushfire Fire Attack Level up to and including BAL 29
- 13. All flashing including inter-storey junction must be metal flashing.

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.

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.



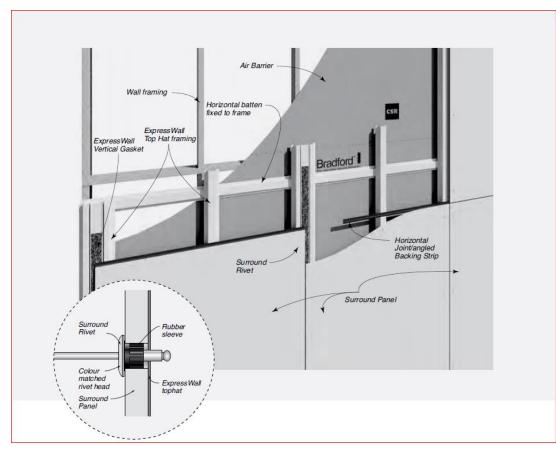
APPENDIX A – PRODUCT TECHNICAL DATA

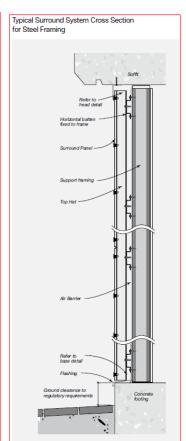
A1 Type and intended use of product

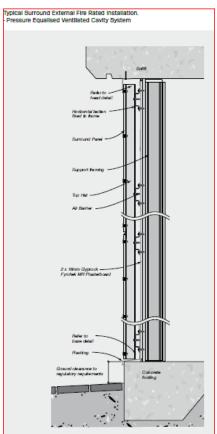
Refer to Page 1 of this certificate.

A2 Description of product

Refer to Page 1 of this certificate and the below diagrams.









A3 Product specification

Below are some physical properties of fibre cement and system specifications

Product Specifications/System Solutions					
Dimensional/Geometrical Characteristic	Specification (trimmed panel)	Manufacturing Tolerance	Relevant Standard		
Panel Width	1200mm	+ / - 1.5mm	EN 12467		
Panel Length	3000mm*	+ / - 1.5mm	EN 12467		
Panel Thickness	8mm	+ / - 0.8mm	EN 12467		
Panel Mass (EMC)	15.7kg/m²				
Fire Resistance Limits (FRLs)	Up to 120/120/120, -/180/180		Refer to System Engineering section or Gyprock® The Red Book™		
Bushfire Construction	BAL 29 (Construction for Bushfire Attack Level 29 for an external wall)		AS 3959 - 8		
Weatherproofing	Has passed testing at a serviceability wind pressure of +2.5kPa and -2.7kPa, and an ultimate wind pressure of +7kPa and -7kPa (Rigid Air Barrier required for pressures above 1.5kPa)		AS 4284		
Cyclonic Conditions	Passed at 7kPa		AS 4040.3		

A4 Manufacturer and manufacturing plant(s)

A5 Installation requirements

Refer to Page 3 of this certificate and the following:

- 1. Cemintel Design and Installation Guide Surround Series External Installation dated 03/2020
- 2. Cemintel Design and Installation Guide Surround Series Internal Installation dated 03/2020

A6 Other relevant technical data

- Technical Datasheets for Bradford Thermoseal™ Wall Wrap, Enviroseal ProctorWrap (CW) Wall Wrap, and Enviroseal ProctorWrap (RW) Wall Wrap with nominal thickness <1.0mm for all three products.
- Technical Datasheet for Bradford Acoustigard partition rolls



APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

The system has been assessed as complying with the identified Performance Requirements of the NCC 2019 BCA Volumes 1 and 2. This involved a review of product specifications, test reports, installation manuals, and associated documentation.

1. Structural assessment:

• Volumes 1 & 2 – A2.2(2) / A5.2(1)(d) & (e) – A report issued by an Accredited testing Laboratory – Cyclone Testing Station, James Cook University (NATA accreditation No. 14937) and a report from a professional engineer

2. Weatherproofing assessment:

• Volumes 1 & 2 – A2.2(2) / A5.2(1)(d) & (e) – A report issued by an Accredited testing Laboratory – Ian Bennie and Associates (NATA accreditation No. 2371) and a report from an appropriately qualified person

3. Fire Resistance assessment:

Volumes 1 & 2 - A2.3(2) / A5.2(1)(d) - An assessment report issued by an Accredited testing Laboratory - BRANZ Ltd (IANZ accreditation No. 37)

4. Non-Combustibility (General Concessions):

A. Sarking-type material

- Volumes 1 & 2 A2.3(2) / A5.2(1)(d) A report issued by an Accredited testing Laboratory Insulation Research Laboratory (NATA accreditation No. 993)
- Volumes 1 & 2 A2.3(2) / A5.2(1)(d) A report issued by an Accredited testing Laboratory AWTA Product Testing (NATA accreditation No. 1356)

B. Insulation material

- Volumes 1 & 2 A2.3(2) / A5.2(1)(e) An assessment report from an appropriately qualified person CSIRO
- Volumes 1 & 2 A2.2(2) / A5.2(1)(d) A report issued by an Accredited testing Laboratory Insulation Research Laboratory (NATA accreditation No. 993)

5. Fire Hazard Properties assessment:

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- Volume 1 A2.3(2) / A5.2(1)(e) An assessment report from an appropriately qualified person Warrington Australia Pty Ltd
- Volume 1 A2.3(2) / A5.2(1)(d) A report issued by an Accredited testing Laboratory Insulation Research Laboratory (NATA accreditation No. 993)
- Volume 1 A2.3(2) / A5.2(1)(d) A report issued by an Accredited testing Laboratory AWTA Product Testing (NATA accreditation No. 1356)

6. Resistance to Bushfire Attack assessment:

• Volumes 1 & 2 – A2.3(2) / A5.2(1)(f) – Another form of documentary evidence (assessment against specifications in referenced document – AS 3959:2018)



B2 Reports

Evaluation methods	Related Supporting Evidence as listed below
Structural Assessment	Numbers 1, 2, 3, & 4
Weatherproofing Assessment	Numbers 5 & 6
Fire Resistance assessment	Numbers 7 & 8
Non-Combustibility (General Concession)	Numbers 9, 10, 11, 12, & 13
Fire Hazard Properties assessment	Number 14
Resistance to Bushfire Construction	Number 15
assessment	

Structure

- 1. Test Report from a NATA accredited testing laboratory (Accreditation No: 14937) for Connection Testing Cyclic Simulated Wind Load Strength Testing and Assessment of the Cyclic Wind Load Capacity of CSR Cemintel Creative Façade System from James Cook University, Report No. TS1055 Revision A (dated: 26 April 2017)

 This document contains the test results of a Cemintel Creative Façade (8mm & 9mm nominal thickness) sample for resistance to simulated cyclic wind load, carried out in accordance with AS 4040.3.
- 2. Test Report from a NATA accredited testing laboratory (Accreditation No: 14937) for Assessment of the Cyclonic Wind Load Capacity of CSR Express Wall Façade System from James Cook University, Report No. TS584 (dated 4 August 2003)
 - This document contains the test results of a Cemintel Creative Façade (9mm nominal thickness) sample for resistance to simulated cyclic wind load, carried out in accordance with AS 4040.3. Reappraisal Test Report Summary from a NATA accredited testing laboratory (Accreditation No: 14937) for Assessment of the Cyclonic Wind Load Capacity of CSR Express Wall Façade System from James Cook University, Report No. TS584 (dated 31 December 2016). This document contains the re appraisal test results of a CSR ExpressWall Façade (9mm nominal thickness) sample for resistance to simulated cyclic wind load, carried out in accordance with AS 4040.3.
- 3. Certification of CSR Surround Façade System by David Beneke Consulting, Report 2013-28-LO-1002 (dated 17 July 2019)

 This document certifies the maximum top hat spans and spacings of Surround façade system in accordance with normal engineering practice and principals, test methods and the relevant Australian Standards.
- 4. Durability opinion of CSR ExpressWall Metal Components from Branz, Report No. DZ0073 (dated 20 September 2004)

 This document contains the opinion of the likely resistance of the ExpressWall system components in relation to durability and Category 4 (Severe Marine) or less, for a minimum service life of 15 years.



Weatherproofing

- 5. Test Report for Air Infiltration, Water Penetration and Structural ULS of Cemintel Creative Façade System, Report No. 2016-108-S1 (dated 24 February 2017 amended 28 March 2017)
 - This document contains the test results of the Cemintel Creative Façade System for Water Penetration, carried out in accordance with AS 4284:2008.
- 6. Report from AECOM consultancy advice pertaining to the Cemintel Creative (now known as Surround) Facade System (dated 07 June 2019).

 This advice confirms the compliance of this product with AS 4284:2008, based on the test results of Report No. 2016-108-S1, by Ian Bennie and Associates.

Fire Resistance

- 7. Test Report for Fire Resistance of CSR Steel Framed Wall Systems from Branz, Report No. FAR 2357 Issue 12 (dated: 06 July 2017)

 This document contains the test results of the CSR steel framed system for resistance to fire, carried out in accordance with AS 1530.4:2014.
- 8. Test Report for Fire Resistance of CSR Timber Framed Walls from Branz, Report No. FAR 2303 Issue 3 (dated: 24 December 2015)

 This document contains the test results of the CSR timber framed system for resistance to fire, carried out in accordance with AS 1530.4:1997.

Non-Combustibility (General Concession)

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A. Sarking-type material

- 9. Test Report for Flammability Index of Bradford Thermoseal™ Wall Wrap from Insulation Research Laboratory, Report No. NR-17201 (dated: 1 May 2017)

 This document contains the test results of the Bradford Thermoseal™ Wall Wrap carried out in accordance with AS 1530.2:1993 for flammability index.
- 10. Test Report for Flammability Index of Enviroseal ProctorWrap (CW) Wall Wrap from AWTA, test No. 16-006359 (dated: 12 December 2016)

 This document contains the test results of the Bradford Thermoseal™ Wall Wrap carried out in accordance with AS 1530.2:1993 for flammability index.
- 11. Test Report for Flammability Index of Enviroseal ProctorWrap (RW) Wall Wrap from AWTA, test No. 17-000553 (dated: 17 February 2017)

 This document contains the test results of the Bradford Thermoseal™ Wall Wrap carried out in accordance with AS 1530.2:1993 for flammability index.

B. <u>Insulation</u>

- 12. Assessment Report for combustibility of Bradford Glasswool insulation batts from CSIRO, Report No. FCO-2812a (dated: 19 November 2015)

 This document provides an assessment of Bradford Glasswool insulation batts and were not deemed combustible when tested to the requirements of AS 1530.1:1994.
- 13. Test Report for combustibility of Bradford Acoustigard from Insulation Research Laboratory, Report No. NR-17002 (dated: 22 March 2017)

 This report contains the results of Bradford Acoustigard insulation batts carried out in accordance with AS 1530.1:1994 and were not deemed combustible.



Fire Hazard Properties

14. Assessment Report for Group Number and Smoke Growth Rate Index (SMOGRARC) from Exova Warrington, Report No. 45759 Revision 10.1 (dated 15 November 2019)

This report shows the assessment undertaken to determine the likely fire hazard properties of the CSR wall and ceiling lining products if tested in accordance with AS ISO 9705:2003 (R2016) and AS5637.1:2015

Resistance to Bushfire Attack

15. Cemintel® Construction Guide for Bushire Areas (dated October 2019)

This guide provides information on Cemintel® wall cladding products and systems to meet the requirements of each BAL when assessed against specifications in AS 3959:2018