



Certificate of Conformity

Certification Body:



Global-Mark Pty Ltd,
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www.global-mark.com.au

Certificate Holder:

FVA Group Pty Ltd
18-20 Donald St
Lithgow NSW 2790
Ph: +61 2 6352 2355
www.fv.com.au

Certificate number: CM 30117 Rev 1

THIS TO CERTIFY THAT

VITRADUAL

Type and/or use of product:

VITRADUAL panels are used in external wall cladding, in all building types (NCC Volume 1 & 2)

Description of product:

VITRADUAL panels are 3 mm thick PVDF coil coated solid Aluminium panels installed with metal fixing system. Standard panel sizes include width of 1,250mm & 1,500mm and length of 2,500mm, 3,200mm & 4,000mm. Custom panel sizes up to 1,500mm x 4,000mm.

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

BCA 2019 A1

	Volume One including Amendment 1		Volume Two including Amendment 1	
Performance Requirement(s)	BP1.1	Structural Provisions	P2.1.1	Structural stability and resistance to actions
	BP1.2	Structural Provisions		
	FP1.4	Damp and Weatherproofing	P2.2.2	Weatherproofing
Deemed-to-Satisfy Provision(s):	B1.4 (e)	Structural Resistance	3.0.4 (j)	Structural Resistance
	C1.9 (e) (v)	Non-Combustible Material		
State or territory variation(s):	None			

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.

The purpose of Global-Mark **construction site audits** is to confirm the practicability of installing the product; and to confirm the appropriateness and accuracy of installation instructions

In placing the **CodeMark mark** on the product/system, the certificate holder makes a declaration of compliance with the certification standard(s) and confirms that the product is identical to the product certified herein. In issuing this Certificate of Approval Global-Mark has relied on the **expertise of external bodies** (laboratories, and technical experts).

Herve Michoux
Global-Mark Managing Director

Peter Gardner
Unrestricted Building Certifier

Date of issue: 28/8/2020

Date of expiry: 28/8/2023



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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:
<p>Volume 1 – BP1.1 & Volume 2 – P2.1.1</p> <p>Vitradual panel system as described has maximum design wind load limits documented within the Vitradual Technical Manual, dated March 2020. Wind load limits, construction detail and fixing must follow the relevant details contained within the Vitradual Technical Manual, dated March 2020. Supporting structures & connections (including stud frame & sub framing members) must be designed / specified to withstand project loads including but not limited to ULS & SLS wind loads.</p>	1, 2, 3, 4, 5, 6, 7, 8, 9 & 10
<p>Volume 1 – BP1.1 (b) (v) (vi) and (ix) & Volume 2 – P2.1.1 (b) (v) (vi) and (ix)</p> <p>Snow, liquid pressure and earth pressure actions are excluded.</p>	1, 2, 3, 4, 5, 6, 7, 8, 9 & 10
<p>Volume 1 – BP1.4 & Volume 2 – P2.1.2</p> <p>Compliance for flood hazard areas is excluded.</p>	1, 2, 3, 4, 5, 6, 7, 8, 9 & 10
<p>Volume 1 FP1.4 & Volume 2 P2.2.2</p> <p>When a Flexible wall wrap (Water Barrier) is used, the system remains weatherproof up to Serviceability wind loads of +1.5 kPa & -1.8 kPa, and when a Rigid Air Barrier is used for a wall wrap, the system remains weatherproof up to Serviceability wind loads of +3.5 kPa & - 4.0 kPa, when:</p> <ol style="list-style-type: none"> 1. Design & installation complies fully with Vitradual Technical Manual, dated March 2020, and. 2. Design accommodates deflection movements due to all design loads & temperature variations, and 3. Installation Contractor complies with manufacturer’s instructions for sealants, shop drawings & project specifications, and 4. Fixings are installed in accordance with manufacturer’s instructions & procedures, fixings to be weathertight and not restrict thermal or wind movements of the façade, and 5. Perforated “Breather” wall wrap membranes must not be used. 	1, 2, 3, 4, 5, 6 & 9
<p>Volume 1 – C1.9</p> <p>This Certification is based upon the system being installed using components & accessories specified in the “System Components” section of the Vitradual Technical Manual, dated March 2020 & the Vitrafix Accessories Brochure dated March 2020 (refer Appendix B2). Substitution of such components & / or accessories may be permitted; however the general performance specifications of components & / or accessories must be maintained for this certificate to remain valid.</p>	2, 3, 4, 5, 6, 7, 8 & 9
<p>Volume 1 – C1.9 (d)</p> <p>Isolation tapes, sealing tapes, backing rods as detailed in the Vitradual Technical Manual, dated March 2020 (refer Appendix B2) may be considered gaskets, caulking and sealants as defined in Clause C1.9 (d) of NCC Volume 1.</p>	2, 3, 4, 5, 6, 7, 8 & 9
<p>Volume 1 – C1.9 (e)</p>	2, 3, 4, 5, 6, 7, 8 & 9



Certificate of Conformity

	Flexible membrane "Sarking-type materials" must not exceed 1mm in thickness and must have a Flammability index not greater than 5.	
	General The supporting structures including stud frame & cavity sub framing, plus internal linings shall be designed & specified by a suitably qualified design professional in accordance with manufacturer guidelines and installed by suitably qualified and trained building professionals, in accordance with the Vitradual Technical Manual, dated March 2020 (refer Appendix B2)..	1, 2, 3, 4, 5, 6, 7, 8, 9 & 10



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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.

This product is NOT an Aluminium Composite Panel (ACP).

A3 Product specification

Refer to items 1 & 2 listed in Appendix B2:

- VITRADUAL Technical Manual, dated March 2020.
- VITRAFIX Accessories Brochure, dated March 2020.

A4 Manufacturer and manufacturing plant(s)

FVA Group Pty Ltd

18-20 Donald Street

Lithgow NSW 2790

Ph: + 61 2 6352 2355

www.fv.com.au

A5 Installation requirements

Refer to items 1 & 2 listed in Appendix B2:

- VITRADUAL Technical Manual, dated March 2020.
- VITRAFIX Accessories Brochure, dated March 2020.

A6 Other relevant technical data

Refer to items 1 & 2 listed in Appendix B2:

- VITRADUAL Technical Manual, dated March 2020,
- VITRAFIX Accessories Brochure, dated March 2020, and

Any referenced documents within the technical literature identified in Appendices A3 & A5.

APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

The following assessment methods have been used to determine compliance with NCC 2019:

Code Clause	Assessment Method(s)	Evidence of suitability	Evidence reference in B2
NCC Volume One BP1.1	Combination of A2.2 (2) (a), (b) & (c)	Combination of A5.2 (1) (d), (e) & (f) – Test Report, Expert judgement & Other documentary evidence	Items 1, 2, 3, 4 & 5
NCC Volume Two P2.1.1	Combination of A2.2 (2) (a), (b) & (c)	Combination of A5.2 (1) (d), (e) & (f) – Test Report, Expert judgement & Other documentary evidence	Items 1, 2, 3, 4 & 5
NCC Volume One BP1.2	Combination of A2.2 (2) (a), (b) & (c)	Combination of A5.2 (1) (d), (e) & (f) – Test Report, Expert judgement & Other documentary evidence	Items 1, 2, 3, 4 & 5
NCC Volume One FP1.4	Combination of A2.2 (2) (a), (b) & (c)	Combination of A5.2 (1) (d) & (e) – Test Report & Expert judgement	Items 10, 11, 12 & 13
NCC Volume Two P2.2.2	Combination of A2.2 (2) (a), (b) & (c)	Combination of A5.2 (1) (d) & (e) – Test Report & Expert judgement	Items 10, 11, 12 & 13
NCC Volume One B1.4 (e)	Combination of A2.3 (2) (a) & (b)	Combination of A5.2 (1) (e) & (f) – Expert judgement & Other documentary evidence	Items 1, 2, 3, 4 & 5
NCC Volume Two 3.0.4 (j)	Combination of A2.3 (2) (a) & (b)	Combination of A5.2 (1) (e) & (f) – Expert judgement & Other documentary evidence	Items 1, 2, 3, 4 & 5
NCC Volume One C1.9	Combination of A2.3 (2) (a) & (b)	Combination of A5.2 (1) (d) & (e) – Test Report & Expert judgement	Items 6, 7, 8 & 9

B2 Reports

The following reports have been used as evidence to determine compliance with NCC 2019:

Ref	Author	Reference	Date / Rev	Description	NATA Registration
1	FVA	VITRADUAL Technical Manual	March 2020	Client published technical & installation manual	-
2	FVA	VITRAFIX Accessories Brochure	March 2020	Client published approved accessories	-
3	ENERTREN	FAR-106 Vitradual Structural Design	12 Dec 2019	Structural design report	-
4	ENERTREN	FAR 092 Span Tables	23 Jan 2019	Product span tables	-
5	SGS, LMATS & MechTest	N-0519-921 / LW19-1851CA / RB19-1970-01	25 Oct 2019	Chemical & Mechanical test reports	-
6	CSIRO	FNC 11690	21 Jun 2016	Fire test report	165
7	AWTA	16-002875	7 Jun 2016	Fire test report	1356
8	RED Fire Consultants	JV19-00103-v2	27 Mar 2020	Fire compliance report	-
9	WarringtonFire UK	WF 400695v2	5 Jun 2018	Fire classification report	UKAS – 0249
10	BG&E Facades	FVA Cladding Products – Vitradual	27 Aug 2018	Weathertightness assessment report	-
11	FacadeLab	Test report: 18-02	20 Apr 2018	Weathertightness test report	IANZ – 1091
12	VIPAC	30B-19-0059-TRP-6774697-1	1 Apr 2020	Weathertightness test report	676
13	VIPAC	30B-19-0059-TRP-6774698-0	2 Apr 2020	Weathertightness test report	676

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

End of Certificate.

Certificate of Test

Quote No.: NC7536

REPORT No.: FNC11690

COMBUSTIBILITY TEST FOR MATERIALS IN ACCORDANCE WITH AS 1530.1-1994

TRADE NAME: Vitradual

SPONSOR: Fairview Architectural Pty Ltd
18-20 Donald St
LITHGOW NSW 2790
AUSTRALIA

DESCRIPTION OF TEST SAMPLE:

The sponsor described the tested specimen as an uncoated solid aluminium panel. The 45-mm diameter aluminium discs were loose laid on each other and stacked up without adhesive to form the 50-mm height suitable for testing.

Nominal total thickness: 3-mm
Nominal mass: 7.9 kg/m²
Nominal total density: 2380 kg/m³
Colour: silver (mill finish)

TEST PROCEDURE:

Five (5) samples were tested in accordance with Australian Standard 1530 Methods for fire tests on building materials, components and structures, Part 1- 1994: Combustibility Test for Materials.

An alternative suitable insulating material was used to fill the annular space between the furnace tubes, as specified in Clause 4.2 of ISO 1182:2010.

RESULTS:

Mean furnace thermocouple temperature rise..... 9.6°C
Mean specimen centre thermocouple temperature rise 5.8°C
Mean specimen surface thermocouple temperature rise..... 6.4°C
Mean duration of sustained flaming..... 0 seconds
Mean mass loss..... 0.3%

DESIGNATION:

The material is NOT deemed COMBUSTIBLE according to the test criteria specified in Clause 3.4 of AS 1530.1-1994.

These test results relate only to the behaviour of the test specimens of the material under the particular conditions of the test and they are not intended to be the sole criterion for assessing the potential fire hazard of the material in use.

DATE OF TEST: 21 June 2016

Issued on the 16th day of August 2016 without alterations or additions.



Heherson Alarde
Testing Officer



Brett Roddy
Team Leader, Fire Testing and Assessments

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NATA Accredited Laboratory

Number: 165

Corporate Site No 3625

Accredited for compliance with ISO/IEC 17025.

CSIRO INFRASTRUCTURE TECHNOLOGIES

14 Julius Avenue, Riverside Corporate Park, North Ryde NSW 2113 AUSTRALIA
Telephone: 61 2 9490 5444 Facsimile: 61 2 9490 5555 www.csiro.au



Certificate of Test

QUOTE No.: NE8296

REPORT No.: FNE12495

AS/NZS 1530.3:1999 SIMULTANEOUS DETERMINATION OF IGNITABILITY, FLAME PROPAGATION, HEAT RELEASE AND SMOKE RELEASE

TRADE NAME: Vitradual
SPONSOR: Fairview Architectural Pty Limited
18-20 Donald Street
LITHGOW NSW 2790
AUSTRALIA

DESCRIPTION OF

SAMPLE: The sponsor described the tested specimen as a prefinished solid aluminium panel with a polyvinylidene fluoride (PVDF) coating on one face.

Nominal thickness of coating: 35 µm
Nominal thickness of aluminium: 3 mm
Nominal total thickness: 3.035 mm
Nominal mass: 8.1 kg/m²
Colour: range of colours (white, red, black)

Note: The samples were tested with the coating as the exposed face.

TEST PROCEDURE: Six samples were tested in accordance with AS/NZS 1530, Method for fire tests on building components and structures, Part 3: Simultaneous determination of ignitability, flame propagation, heat release and smoke release, 1999. For the test, each sample was clamped to the specimen holder in four places. As per clause 2.2.1 of the standard where a result is required to cover a range of colours, the laboratory tested the lightest and darkest colours of the range as prescribed by the sponsor.

RESULTS: The following means and standard errors were obtained:

Parameter	Mean	Standard Error
Ignition Time (min)	N/A	N/A
Flame Spread Time (s)	N/A	N/A
Heat Release Integral (kJ/m ²)	N/A	N/A
Smoke Release (log ₁₀ D)	-2.097	0.124

For regulatory purposes these figures correspond to the following indices:

Ignitability Index	Spread of Flame Index	Heat Evolved Index	Smoke Developed Index
(0-20)	(0-10)	(0-10)	(0-10)
0	0	0	1

The results only apply to the specimen mounted as described in this report. The results of this fire test may be used to directly assess fire hazard, but it should be recognised that a single test method will not provide a full assessment of fire hazard under all fire conditions.

DATE OF TEST: 21 November 2019

Issued on the 6th day of December 2019 without alterations or additions.



Shaw Tran
Testing Officer



Brett Roddy
Team Leader, Fire Testing and Assessments

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