



PRODUCT CERTIFICATE

Formance Structural Insulated Panel (SIP) System and Formance Ready™



CERTIFICATE NO: CM70079

Date of issue: 15 July 2020

1 CERTIFICATE HOLDER DETAILS

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2 PRODUCT CERTIFICATION BODY

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Bureau Veritas Australia Pty Ltd

The complaints process for this certificate can be found here:
www.bureauveritas.com.au/your-feedback

KEY INFORMATION

3 SUMMARY OF DESCRIPTION OF BUILDING METHOD OR PRODUCT

The Formance Panels SIP Building System consists of a composite panel wall and roof system, utilising a flame-retardant expanded polystyrene (EPS) core between layers of oriented strand board (OSB) facing material. The Formance Ready system utilises the same EPS core and OSB facing material as the Formance Panels SIP system, to form 150 mm thick wall and ceiling panels.

*Continuation of description can be found in item 9. Supporting Information about Description of Building Product or Method.
Matters that should be taken into account in the use or application of the building method or product can be found in item 6. Conditions and Limitations of Use.*

4 SUMMARY OF INTENDED USE OF BUILDING METHOD OR PRODUCT

The Formance Panels SIP Building System is a structural system of internal and external walls and panels beneath roofing. The Formance Ready system consists of wall and ceiling panels with provision for a trussed roof on top of the ceiling panels. The OSB facing may serve as an internal lining or provide a substrate for attachment of an alternative lining. The exterior facing OSB provides a substrate for attachment of exterior wall or roof cladding.

Continuation of intended use can be found in item 8. Supporting Information about Intended use of Building Product or Method.

5 BUILDING CODE PROVISIONS

The performance clauses of the New Zealand Building Code that are relevant to the intended use and with which the building method or product complies or contributes to (where used as part of a system).

B1 Structure - B1.3.1, B1.3.2, B1.3.3 (a, b, f, g, h, j, q), B1.3.4
B2 Durability - B2.3.1(a), B2.3.2
C3 Fire affecting areas beyond the fire source - C3.4(a)
F2 Hazardous building materials - F2.3.1
H1 Energy efficiency - H1.3.1, H1.3.2E (contributes to)

How the building method or product complies or contributes can be found in item 12. Basis for Certification. Any qualifications on the extent of that compliance can be found in item 6. Conditions and limitations of use.



This certificate is issued by an independent certification body accredited by JAS-ANZ, the product certification accreditation body appointed by the Chief Executive of the Ministry of Business, Innovation and Employment under the Building Act 2004. The Ministry does not in any way warrant, guarantee, or represent that the building method or product that is the subject of this certificate conforms with the New Zealand Building Code, nor accept any liability arising out of the use of the building method or product. The Ministry disclaims 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 building method(s) or product(s) referred to in this certificate.

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6 CONDITIONS AND LIMITATIONS OF USE

The Formance Panels SIPS Building System shall only be used for:

- buildings within the scope of NZS3604 para 1.1, and:
- max 2kPa snow load
- up to and including heavy roof (as in NZS3604)
- up to and including Extra High wind zone (as in NZS3604)

The Formance Panels SIP Building System shall be designed and installed in accordance with the Formance Design Guide V1.1, 26 June 2018

The Formance Ready system shall only be used for buildings within the scope of NZS3604 para 1.1, and:

- max roof loaded dimension is 6m
- max height of Formance Ready Wall is 3m
- max 1kPa snow load
- up to and including Very High Wind zone.
- Max floor joist span bearing on lower of two story walls 5.2m

The Formance Ready system shall be designed and installed in accordance with the Formance Ready Guide V1.0, 26 June 2018.

For both systems:

- Exterior SIPS panels shall be protected by a cladding or roofing system incorporating building underlay, and for walls, a minimum 18mm drained ventilated cavity as described in E2/AS1.
- Panels shall not be used where the risk score is greater than 20.
- Panels used in wet areas shall be protected from water by a supplementary wall lining or applied coating system.
- If electric cables are run inside the panel core that come in contact with EPS, they shall have an insulation sheathing made from plasticizer migration- resistant material.
- For buildings where the use requires a Material Group Number less than 3 (as specified by NZBC Clause C3.4 (a)), a supplementary wall lining or other treatment or surface finish with a Material Group Number less than 3 shall be fixed to the internal OSB facing.

NOTE: Together, items 3, 4, 5 and 6 define scope of use.

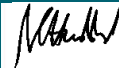
7 HEALTH AND SAFETY INFORMATION

The compliance with any manufacturer's installation instructions, maintenance, OH & S statements, MSDS's and other Health and Safety declarations will provide the necessary Health and Safety Information pertaining to the product. Refer to section 12 for specific detail of compliance with the performance requirements of clauses F1 to F9 of the Building code.

8 SIGNATURES



Sam Guindi
Product Certification Manager
For and on behalf of
Bureau Veritas Australia Pty Ltd



Nick Hubbard
CEO & Technical
For and on behalf of
Method Building Systems Ltd



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SCHEDULE: INFORMATION THAT SUPPORTS KEY INFORMATION

9 SUPPORTING INFORMATION ABOUT DESCRIPTION

The Formance Panels SIP Building System panels are available in a range of thickness, and R-value

- 115mm SIP: 15.2 kg/m²: R2.8
- 165mm SIP: 16.2 kg/m²: R4.3
- 215mm SIP: 17.2 kg/m²: R5.7
- 265mm SIP: 18.2 kg/m²: R7.2
- 315mm SIP: 19.2 kg/m²: R8.6

Formance Ready uses only one thickness of panel 150mm, for walls and ceilings, under timber trusses.

- 150mm SIP: 15.2 kg/m²: R3.8

10 SUPPORTING INFORMATION ABOUT INTENDED USE

Further details regarding the intended use of the product can be found in Formance Design Guide V1.1, 26 June 2018 and Formance Ready Guide V1.0, 26 June 2018.

11 SUPPORTING INFORMATION ABOUT CONDITIONS AND LIMITATIONS OF USE

Further details regarding the conditions and limitations use of the product can be found in Formance Design Guide V1.1, 26 June 2018 and Formance Ready Guide V1.0, 26 June 2018.



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12 BASIS FOR CERTIFICATION

- B1 Structure - By testing and comparison with Acceptable Solution B1/AS1 and referenced standard NZS3604
- B2 Durability - By analysis and comparison with Verification Method B2/VM1
- C3 Fire affecting areas beyond the fire source - By testing and comparison with Verification Method C/VM1 and Acceptable Solution C/AS2
- F2 Hazardous building materials - By testing and comparison with the Building Code Clause F2.3.1
- H1 Energy efficiency - By testing and comparison with Verification Method H1/VM1

13 SUPPORTING DOCUMENTATION FOR CERTIFICATION

1. Acceptable Solutions and Verification Methods For New Zealand Building Code Clause B1 Structure (Amendment 19), 28 November 2019
2. Acceptable Solutions and Verification Methods For New Zealand Building Code Clause B2 Durability (Amendment 12), 28 November 2019
3. C/AS2 Acceptable Solution for Buildings other than Risk Group SH For New Zealand Building Code Clauses C1-C6 Protection from Fire (First Edition), 27 June 2019
4. C/VM2 Verification Method: Framework for Fire Safety Design For New Zealand Building Code Clauses C1-C6 Protection from Fire (Amendment 5), 24 November 2017
5. Acceptable Solutions and Verification Methods For New Zealand Building Code Clause H1 Energy Efficiency (Amendment 4), 28 November 2019
6. Constructure Letter 12 February 2020, Formance OSB Minimum Characteristic Design Values
7. NZWTA Report No. 1231866.3R ASTM C518-2017 Steady State Thermal Transmission Properties by Means of the Heat Flow Apparatus, 1 August 2018
8. Durability of Formance Panels, Nino Kozlevcar and Nick Hubbard, June 2018
9. SCION SIP Bending Testing, 17 June 2013
10. SCION Series of P21:2010 bracing tests on SIPs panels of various configurations, Oct - Dec 2016
11. NZWTA Test Report No. 1173125.4 Determination of Flame Propagation, 7 April 2017
12. APA Product Report PR-N610 Qualified OSB Facing Materials for Structural Insulated Panels, August 2019
13. Material Safety Data Sheet XIFA Expandable Polystyrene July 2013
14. Formance Design Guide V1.1, 26 June 2018
15. Formance Ready Guide V1.0, 26 June 2018



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14 CONDITIONS RELATING TO NOTIFICATION

- (a) the certificate holder notifies the product certification body in writing of any intended change to any of the following particulars:
- (i) the name, address, or contact details of the certificate holder;
 - (ii) any address of a location where a certified product is produced or manufactured;
- (b) the certificate holder notifies the product certification body in writing of any intended change, modification, or alteration to any of the following:
- (i) the certified building method or product;
 - (ii) the method of its production or manufacture;
 - (iii) the product quality plan prepared in respect of the certified building method or product;
 - (iv) the application or installation instructions for the certified building method or product;
 - (v) any documentation relating to the use and maintenance of the certified building method or product;
- (c) if the certificate holder has any reason to suspect that the certified building method or product does not comply with the Building Code, the certificate holder notifies the product certification body in writing of the reason for that suspicion:
- (d) if the certificate holder or the product certification body finds that a certified building method or product that has been released on the market does not comply with the Building Code, the certificate holder discloses that fact in disclosure statements published in a form that is acceptable to the product certification body and to the chief executive:
- (e) if the certificate is suspended or revoked, the certificate holder—
- (i) notifies all customers to whom the building method or product is regularly supplied; and
 - (ii) immediately ceases using the certificate, the mark of conformity, and any reference to the number of the certificate.



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