

# ALPOLIC® FR

## PURPOSE

ALPOLIC® FR is supplied by PSP for use as part of an external wall cladding system or as an internal wall lining, including in wet areas.

## EXPLANATION

ALPOLIC® FR is an aluminium composite panel, composed of a 70% mineral and 30% polyethylene filled core, sandwiched between two skins of 0.5 mm thick aluminium. The front is coated with fluorocarbon paint and the back with a primer coating.

ALPOLIC® FR is available in panels of:

- › thickness (mm) 3, 4, 6
- › width (mm) 965, 1270, 1575, 1800, 2000
- › length (mm) 2498, 3099, 4000, 5000 (special sheet lengths, between 1800 mm and 7200 mm, on request).

The manufacture of ALPOLIC® FR uses some recycled materials. Following its use as an external cladding, the aluminium and core material can be reutilised.

# ALPOLIC® /fr



For further assistance please contact:

- ☎ 09 415 2800
- ✉ customerservices@psp.co.nz
- 🌐 [www.psp.co.nz](http://www.psp.co.nz)



## SCOPE AND LIMITATIONS OF USE

Scope	Limitations
<b>Location</b> <i>(only applies where used as an external cladding)</i> In wind zones up to and including extra high as defined in NZS 3604:2011 or calculated design wind pressure (ULS) of 2.5 kPa. In all exposure zones as defined in NZS 3604:2011. On buildings at least 1 m from the relevant boundary.	› The system cannot be used where adverse microclimatic conditions apply as set out in paragraph 4.2.4 of NZS 3604:2011.
<b>Building</b> In conjunction with a primary structure that complies with the NZ Building Code or where the designer has established that the existing structure is suitable for the intended building work. As an external wall cladding, on buildings up to 10 m in building height and in conjunction with a drained and ventilated cavity.	› In accordance with the fixing method used in façadelab E2/VM1 test or subject to specific design for supporting structural system. › With a building wrap that meets the performance characteristics of Table 23, E2/AS1 and has an airflow resistance greater than 0.1 MNs/M³. › Where design wind pressure is greater than 1.55 kPa, a rigid air barrier is required. › Metal flashings and stainless steel fixings complying with Table 7 and Table 20 of E2/AS1 must be used. › Where the building height is >10 m, the upper level must not contain sleeping areas or be other property (not held under the same allotment or same ownership).
As an internal lining.	› The panel must be earthed where surrounding or touching an electric installation or power source. › In wet areas, installation must be in accordance with E3/AS1. › Where material with a fire rating Material Group Number 1 or greater is required.

## USEFUL INFORMATION

For information on the design, installation and maintenance of ALPOLIC® FR and for our warranty refer to [www.psp.co.nz](http://www.psp.co.nz).



## PERFORMANCE CLAIMS

If designed, installed and maintained in accordance with all PSP requirements, ALPOLIC® FR will comply with or contribute to compliance with the following performance claims:

NZ Building Code clauses	BASIS OF COMPLIANCE <sup>1</sup>	
	Compliance statement	Demonstrated by
<b>B1 Structure</b> B1.3.1, B1.3.2 B1.3.3 (a, b, c, e, f, h, j, m) B1.3.4 (a, b, c, d, e)	VERIFICATION METHOD B1/VM1	<ul style="list-style-type: none"> <li>➤ Tested by James Cook University to AS/NZS 4040:1996 for serviceability and cyclic strength wind loading [James Cook University School of Engineering and Physical Sciences, 24/02/2011].</li> <li>➤ AS/NZS 4040:1996 is cited in AS/NZS 1170.2:2011.</li> <li>➤ James Cook University is NATA accredited.</li> <li>➤ Manufacturer's Summary of Technical Datasheet [Mitsubishi Chemical Infratec, 2020].</li> </ul>
<b>B2 Durability</b> B2.3.2 (b)	ALTERNATIVE SOLUTION	<ul style="list-style-type: none"> <li>➤ Manufacturer's Summary of Technical Datasheet [Mitsubishi Chemical Infratec, 2020].</li> </ul>
<b>C3 Fire affecting areas beyond the source</b> C3.4 (a)	ACCEPTABLE SOLUTION C/AS1, C/AS2 1 <sup>st</sup> edition June 2019	<ul style="list-style-type: none"> <li>➤ Tested to EN 13501-1:2007 by AFITI LICOF achieving B-s1, d0 classification, equivalent to Group 1-S as provided for by MBIE guidance [AFITI LICOF, 28/08/2017].</li> <li>➤ AFITI LICOF Centre for Fire Testing and Research is ILAC accredited.</li> <li>➤ Tested in accordance with NFPA 285 by Thomas Bell-Wright International Consultants [Thomas Bell-Wright International Consultants, 22/08/2017].</li> </ul>
<b>E2 External moisture</b> E2.3.2, E2.3.3, E2.3.5, E2.3.7 (a, b, c)	VERIFICATION METHOD E2/VM1	<ul style="list-style-type: none"> <li>➤ Tested in accordance with AS/NZS 4284:2008 by façadelab [façadelab, 07/2017].</li> <li>➤ façadelab is IANZ accredited.</li> </ul>
<b>E3 Internal moisture</b> E3.3.4, E3.3.5, E3.3.6	ALTERNATIVE SOLUTION	<ul style="list-style-type: none"> <li>➤ Aluminium is impervious to moisture.</li> <li>➤ Manufacturer's Summary of Technical Datasheet [Mitsubishi Chemical Infratec, 2020].</li> </ul>
<b>F2 Hazardous building materials</b> F2.3.1	ALTERNATIVE SOLUTION	<ul style="list-style-type: none"> <li>➤ Material is inert and passed combustion toxicity testing.</li> <li>➤ Manufacturer's Summary of Technical Datasheet [Mitsubishi Chemical Infratec, 2020].</li> <li>➤ Manufacturer's Material Safety Datasheet [Mitsubishi Chemical Infratec, 23/04/2008].</li> </ul>
<b>G3 Food preparation and prevention of contamination</b> G3.3.2(a)	ALTERNATIVE SOLUTION	<ul style="list-style-type: none"> <li>➤ The coating system does not support the growth of bacteria or fungi.</li> <li>➤ Manufacturer's Summary of Technical Datasheet [Mitsubishi Chemical Infratec, 2020].</li> </ul>

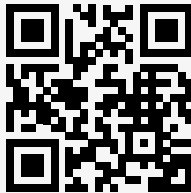
1. The Compliance Statement is the pass holder's statement that they have met their obligations under s14G(2) of the Building Act 2004.

## SOURCES OF INFORMATION

- AFITI LICOF. [28/08/2017] Reaction to fire classification according to standard UNE-EN 13501-1:2007+A1:2010. Report number 3243T17-2.
- BRE Global. [4/04/2018] BRE Global Test Report: BS 8414-1:2015 + A1:2017 test on ventilated façade system with Rockwool thermal insulation and ACM (ALPOLIC/fr) Cassette panels BML 100 Hook On. Report no: P109975-1000 Issue:2.
- BRE Global. [4/04/2018] BRE Global Test Report: BS 8414-1:2015 + A1:2017 test on ventilated façade system with Rockwool thermal insulation and ACM (ALPOLIC/fr) BML rivet fixed panels.
- James Cook University School of Engineering and Physical Sciences. [24/02/2011] *Serviceability and Cyclic Strength Wind Load Testing of ALPOLIC/fr 4 mm Wall Cladding*. Report No. TS805.
- façadelab. [07/2017] *Performance tests on cavity cladding façade mock-up for Mainfreight Building, Hamilton, in accordance with the method of AS/NZS 4284: 2008 Testing of Building Facades, excluding the deflection test*. Test Report No. 15/02.
- Mitsubishi Plastics. [23/04/2008] *Material safety data sheet MSDS No: LL75-0002*. Retrieved from [https://www.alpolic.com/alpolic-intl/wp-content/uploads/2019/10/msds\\_alpolicfr.pdf](https://www.alpolic.com/alpolic-intl/wp-content/uploads/2019/10/msds_alpolicfr.pdf). [Accessed 24/11/2020].
- Mitsubishi Chemical Infratec. [2020] Summary of Technical Data Sheet – Alpolic/fr. Retrieved from [https://www.alpolic.com/alpolic-intl/wp-content/uploads/2019/10/specs\\_alpolicfr.pdf](https://www.alpolic.com/alpolic-intl/wp-content/uploads/2019/10/specs_alpolicfr.pdf). [Accessed 24/11/2020]
- Thomas Bell-Wright International Consultants. [22/08/2017] *Test Report For Fire Propagation Characteristics Of Exterior Non-Loadbearing Wall Assemblies*. Test Reference No. RD007-1.

**Scan or click this QR code for a full download of Compliance Documentation for this pass™.**

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2. Sources of information also include the Building Act 2004 and its regulations, including the Building Code (Schedule 1 of the Building Regulations 1992), Acceptable Solutions and Verification Methods, and relevant cited standards.

<b>NAME:</b>	Vaughan Brown
<b>POSITION:</b>	Business Unit Manager
<b>DATE OF FIRST ISSUE:</b>	
<b>DATE OF NEXT ASSURANCE:</b>	

Signed on behalf of PSP Ltd

By signing this pass™ the signatory confirms that, in respect of the subject of this pass™, the company has met their s14G obligations under the Building Act 2004.



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