



# INDURABOND FR ALUMINIUM **COMPOSITE PANELS**

## **PURPOSE**

Paneltec New Zealand Ltd supplies Indurabond FR aluminium composite panels (Indurabond FR) for use as an external or internal wall panel.

## **EXPLANATION**

Indurabond FR panels are 4 mm thick composite panels comprising a 3 mm fire-retardant (FR) core (minimum 70 % non-combustible mineral fibre) sandwiched between two 0.5 mm aluminium layers (minimum 3003 series grade). A coat of PVDF KYNAR 500® FSF® or FEVE paint is applied to the Indurabond FR.

The panels are supplied in three widths (1250 mm, 1500 mm and 1570 mm) and three lengths (2500 mm, 3200 mm, 4000 mm) and with different coating finishes and colours.





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## **SCOPE AND LIMITATIONS OF USE**

Scope	Limitations
<b>Location</b> (where used as an external wall panel)	
In all wind zones up to and including extra high as defined in NZS 3604:2011 or to a calculated design wind pressure (ULS) of 4.15 kPa.	
In all exposure zones as defined in NZS 3604:2011.	➤ The system is not suitable for use where adverse microclimatic conditions apply (refer to paragraph 4.2.4, NZS 3604:2011).
Proximity to relevant boundary.	> The panel may not be installed within 1 m of a relevant boundary.
Building	
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.	> Up to a maximum building height of 10 m unless subject to specific fire engineering.
	➤ Installation must be in accordance with façadelab AS/NZS 4284:2008, testing assembly.
	➤ Up to a maximum design wind pressure (ULS) of 4.0 kPa.
	➤ 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 (very high wind zone), 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.
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 a fire rating performance of Material Group Number 2-S or less is required.
CONDITIONS OF USE	USEFUL INFORMATION
Where compliance for a project or site conditions is based on specific testing, particularly in respect of external moisture, installation must be in accordance with the applicable test.	For design, installation and maintenance information, refer to <b>paneltec.co.nz</b> .

**VERSION:** 

2.6



#### **PERFORMANCE CLAIMS**

If designed, installed and maintained in accordance with all Paneltec New Zealand Ltd requirements, Indurabond FR will comply with or contribute to compliance with the following performance claims:

NZ Building	BASIS OF COMPLIANCE	
Code clauses	Compliance statement	Demonstrated by
B1 STRUCTURE B1.3.1, B1.3.2, B1.3.3 (a), (b), (c), (e), (f), (h), (i), (j), (q) & (m) B1.3.4 (a), (b), (c), (e)	ALTERNATIVE SOLUTION	<ul> <li>Engineering specification and wind calculations [Enertren Pty Ltd, 14/02/2013].</li> <li>Tested for tensile, flexural and shead strength to ASTM D638-10, D790-10 and D792.10 [SGS, 24/02/2012].</li> </ul>
<b>B2 DURABILITY</b> B2.3.1 (b), B2.3.2 (a)	ALTERNATIVE SOLUTION	➤ Indurabond Technical information, PVDF KYNAR 500® FSF® or FEVE paint coating.
C3 FIRE AFFECTING AREAS BEYOND THE FIRE SOURCE C3.4 (a)	VERIFICATION METHOD C/VM2	<ul><li>Achieves Material Group Number 2-S.</li><li>EN 13501-1:2007+A1:2009. BRE Global Ltd. [29/10/2015].</li></ul>
<b>E2 EXTERNAL MOISTURE</b> E2.3.2, E2.3.5, E2.3.7(a, b, c)	ALTERNATIVE SOLUTION	> Tested to AS/NZS 4284:2008 [Façadelab, 20/04/2018].
F2 HAZARDOUS BUILDING MATERIALS F2.3.1	ALTERNATIVE SOLUTION	<ul> <li>Paneltec MSDS. V1.1, [12/3/2020].</li> <li>AS 4964:2004. Envirolab Group. [19/8/2016].</li> </ul>

#### **SOURCES OF INFORMATION**

- ▶ BRE Global Ltd. [29/10/2015] BRE Global Classification Report. EN 13501-1:2007+A1:2009. Report no. P101111-1000-3 Issue 1.
- ➤ Envirolab. [19/08/2016] AS 4964:2004 Method for the qualitative identification of asbestos in bulk samples. Report no. 152090 Rev 00.
- Façadelab. [20/04/2018] AS/NZS 4284:2008 Testing of Building Facades. Test report no. 18-02.
- ➤ How, A. [9/08/2019] Authority to rebrand Vitrabond to Indurabond. Fairview Ltd.
- ➤ Paneltec Industries Ltd. [12/03/2020] Material Safety Data Sheet. Indurabond FR. V1.1.
- > Paneltec Industries Ltd [n.d.] Indurational Technical Manual.
- ➤ SGS. [24/02/2012] ASTM D638-10 Standard test method for tensile properties of plastics, ASTM D790-10 Standard test methods for flexural properties of unreinforced and reinforced plastics and electrical insulating materials, ASTM D732-10 Standard test method for shear strength of plastics by punch tool. Sample no. SHMR120201013, SGS Ref. no. SP120200572.
- ➤ Enertren Pty Ltd [14/2/2013] Vitrabond 4 mm Aluminium Composite Panel (ACP): Engineering Specifications for Cyclonic Regions. Ref: FAR-002.

1. Where a standard is referenced it is to be read as amended by the acceptable solution or verification method as applicable. 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. 3. The product is not subject to a warning or ban under section 26 of the Building Act. 4. For overseas manufacturer details, where applicable, refer to the company that is the holder of this pass™. 5. The quality and assurance that the supplied products meet the performance claims stated in this pass™ are the responsibility of the company that is the holder of this pass™. 6. The availability of the information about the supplied products required to be disclosed under s14G(3) is the responsibility of the company that is the holder of this pass™.

Paneltec New Zealand Ltd confirms that if Indurabond FR Composite Aluminium panels are used in accordance with the requirements of this pass  $^{\mathtt{M}}$  the product will comply with the NZ Building Code and other performance claims set out in this pass  $^{\mathtt{M}}$  and the company has met all of its obligations under s14G(2) of the Building Act.

Date of first issue:	03/12/2020
Date of current issue:	31/03/2025
NZBN:	9429048397919

SCAN OR CLICK THIS QR CODE TO ACCESS OR REQUEST THE RELEVANT SUPPORTING DOCUMENTATION FOR THIS PASS™.

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# Kevin Brunton

Kevin Brunton, Technical Director, TBB confirms that the process used to prepare this pass™ on behalf of Paneltec New Zealand Ltd has been undertaken in accordance with MBIE PTS guidelines and in accordance with the TBB pass™ process which is within the scope of TBB's ISO 9001 certification.

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2.6