

ALUCOLUX® SOLID ALUMINIUM CLADDING SYSTEM

PURPOSE

The ALUCOLUX® Solid Aluminium Cladding System (ALUCOLUX®) is supplied for use as an external cladding system and rainscreen.

EXPLANATION

ALUCOLUX® is a 3 mm thick, prefinished solid aluminium panel which is coil coated using an in-line, 3-coat fluorocarbon PVDF system. The coating is applied through a reverse roller coating process. The coating achieves a quality label Category 1, in accordance with AAMA 2605.

The panels are supplied with a 70 micron self-adhesive foil which provides 6 months protection against construction-related damage.

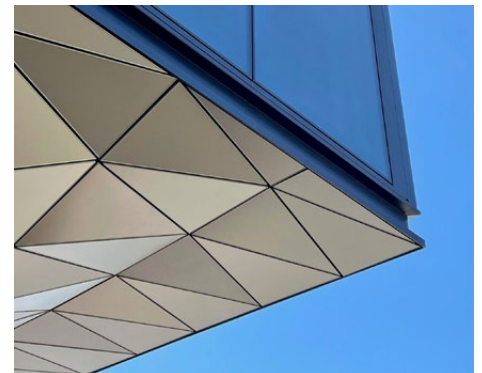
ALUCOLUX® is available in a range of colours, embossed surfaces and the reverse side has a mill finish or service coat.

The sheets are supplied as follows:

- Length (mm): 3500 (standard), up to 6000 (indent)
- Widths (mm): 1500 (standard), 1000, 1250, 1575 (indent).

The sheets may be installed using the following systems:

- WAB extrusion
- Open Joint (Hook and Pin) (H&P)
- DAB extrusion.



For further assistance please contact:

- ☎ 09 415 2669
- ✉ info@buildingagency.co.nz
- 🌐 thebuildingagency.co.nz

SCOPE AND LIMITATIONS OF USE

Scope	Limitations
Location In wind zones up to and including Extra High as defined in NZS 3604:2011, or a maximum wind design pressure (ULS) of 5.0 kPa.	<ul style="list-style-type: none"> ➤ Where the wind zone is up to and including High or maximum 1.5 kPa maximum design wind pressure, the H&P system may be used. ➤ Where the wind zone is up to and including Very High or maximum 1.9 kPa maximum design wind pressure, the WAB extrusion system may be used. ➤ Where the wind zone is up to and including Extra High or maximum 5.0 kPa maximum design wind pressure, the DAB extrusion system may be used. Where the maximum wind design pressure exceeds 2.1 kPa, the wall assembly for the DAB extrusion system must be in accordance with the tested assembly.
In all exposure zones, as defined in NZS 3604:2011.	<ul style="list-style-type: none"> ➤ Where adverse microclimatic conditions apply (refer to paragraph 4.2.4 of NZS 3604:2011), contact The Building Agency for technical advice.
Any proximity to a relevant boundary.	<ul style="list-style-type: none"> ➤ Where the wall is within 1 m of the relevant boundary, non-combustible packers must be used.
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.	
On buildings ≤ 10 m in building height.	<ul style="list-style-type: none"> ➤ On buildings with building height ≤ 10 m, the WAB extrusion system or H&P may be used.
On buildings > 10 m and ≤ 25 m in building height.	<ul style="list-style-type: none"> ➤ On buildings with building height > 10 m and ≤ 25 m, the WAB or DAB extrusion system must be used. ➤ The WAB extrusion system must be installed in accordance with the NFPA 285 Intermediate Scale tested system details. ➤ The DAB extrusion system must be installed in accordance with the BS8414-2 BR135 tested system details.
On buildings > 25 m in building height.	<ul style="list-style-type: none"> ➤ On buildings with building height > 25 m, the DAB extrusion system must be used. ➤ The DAB extrusion system must be installed in accordance with the BS8414-2 BR135 tested system details.

CONDITIONS OF USE

Fabrication and installation must be carried out by accredited parties. Refer to <https://thebuildingagency.co.nz/find-an-installer/> for a list of accredited fabrication/installation companies.

USEFUL INFORMATION

For design, installation and maintenance information, refer to thebuildingagency.co.nz.

PERFORMANCE CLAIMS

If designed, installed and maintained in accordance with all The Building Agency requirements, the ALUCOLUX® will comply with or contribute to compliance with the following performance claims:

NZ Building Code clauses	Compliance statement	BASIS OF COMPLIANCE Demonstrated by
B1 STRUCTURE B1.3.1, B1.3.2, B1.3.3 (a, f, h, j, q), B1.3.4 (a, b, c, d, e)	ALTERNATIVE SOLUTION	<ul style="list-style-type: none"> Expert evaluation of compliance by façade engineer considering wind (AS/NZS 4284 testing) and seismic loading [Oculus, n.d.]
B2 DURABILITY B2.3.1 (b), B2.3.2 (b)	ACCEPTABLE SOLUTION B2/AS1	<ul style="list-style-type: none"> System componentry materials in accordance with Table 20 of Acceptable Solution E2/AS1 and section 4 NZS 3604:2011 and Table 1 of Acceptable Solution B2/AS1. Expert evaluation of compliance by façade engineer of aluminium, stainless steel and PVDF coating [Oculus, n.d.]
C3 FIRE AFFECTING AREAS BEYOND THE FIRE SOURCE C3.5, C3.6, C3.7	ACCEPTABLE SOLUTION C/AS1 and C/AS2	<ul style="list-style-type: none"> Aluminium is non-combustible (refer to definitions in C/AS2). ALUCOLUX® material tested in accordance with ISO 5660-Part 1:2015(E) [CSIRO, 14/02/2020]. ALUCOLUX® material tested to EN 13501-1:2007 and classified as class A1 [Intertek, 11/06/2019]. DAB extrusion system tested in accordance with BS 8414-2 and BR 135 Annex B, passed for internal and external fire spread [BRANZ, 26/03/2021]. WAB extrusion system tested in accordance with NFPA285-12 and engineering opinion about product substitution by a fire engineer [Intertek, 2/07/2019; Intertek, 2/12/2019].
E2 EXTERNAL MOISTURE E2.3.2, E2.3.5, E2.3.7	ALTERNATIVE SOLUTION	<ul style="list-style-type: none"> WAB extrusion system tested in accordance with AS/NZS 4284:2008 [Façadelab, 25/07/2014]. H&P system tested in accordance with AS/NZS 4284:2008 [FMI Research Ltd, 27/07/2012]. DAB extrusion system tested in accordance with AS/NZS 4284:2008 [Façadelab, 22/09/2020].
F2 HAZARDOUS BUILDING MATERIALS F2.3.1	ALTERNATIVE SOLUTION	<ul style="list-style-type: none"> Aluminium is inert and coating system is inert once dry.

SOURCES OF INFORMATION

- BRANZ. [26/03/2021] FF12829-001-C1 BR 135 Fire Performance.
- CSIRO. [14/02/2020] Test on a prefinished aluminium sheet at 50-kW/m2 irradiance in accordance with ISO 5660-Part 1:2015. Report number: FNKI 12514.
- Façadelab. [25/07/2014] Performance tests on Symonite composite Aluminium cladding system in accordance AS/NZS 4284:2008 Testing of Building Facades. Report No. 14/06A.
- Façadelab. [22/09/2020] Testing of Alucolux system in accordance with AS/NZS 4284:2008 'Testing of Building Facades'. Report No. 20-09a.
- FMI Research Ltd. [27/07/2012] *Test Report No. 12/16.*
- Intertek. [11/06/2019] *Alucobond Composites (Jiangsu) Ltd. Test Report.* Report number 190605005SHF-001-R1.
- Intertek, [2/07/2019] NFPA 285 Testing on Exterior nonloadbearing wall assembly containing Symonite exterior cladding. Report Number I7576.03-121-24-R1. Test number I8506.01
- Intertek. [2/12/2019] NFPA 285 Data extension for a wood framed wall with a Solid Aluminium Panel.
- Oculus. [n.d.] Alucolux Cladding Systems.



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

thebuildingagency.co.nz/products/



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™.

The Building Agency Ltd confirms that if ALUCOLUX® is used in accordance with the requirements of this pass™ the product will comply with the NZ Building Code and other performance claims set out in this pass™ and the company has met all of its obligations under s14G(2) of the Building Act.

Date of first issue: 16/12/2019

Date of current issue: 24/10/2023

NZBN: 9429042373131

Kevin Brunton

Kevin Brunton, Technical Director, TBB confirms that the process used to prepare this pass™ on behalf of The Building Agency 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.

9606D66ADE51EA6CCC25850D00239F99