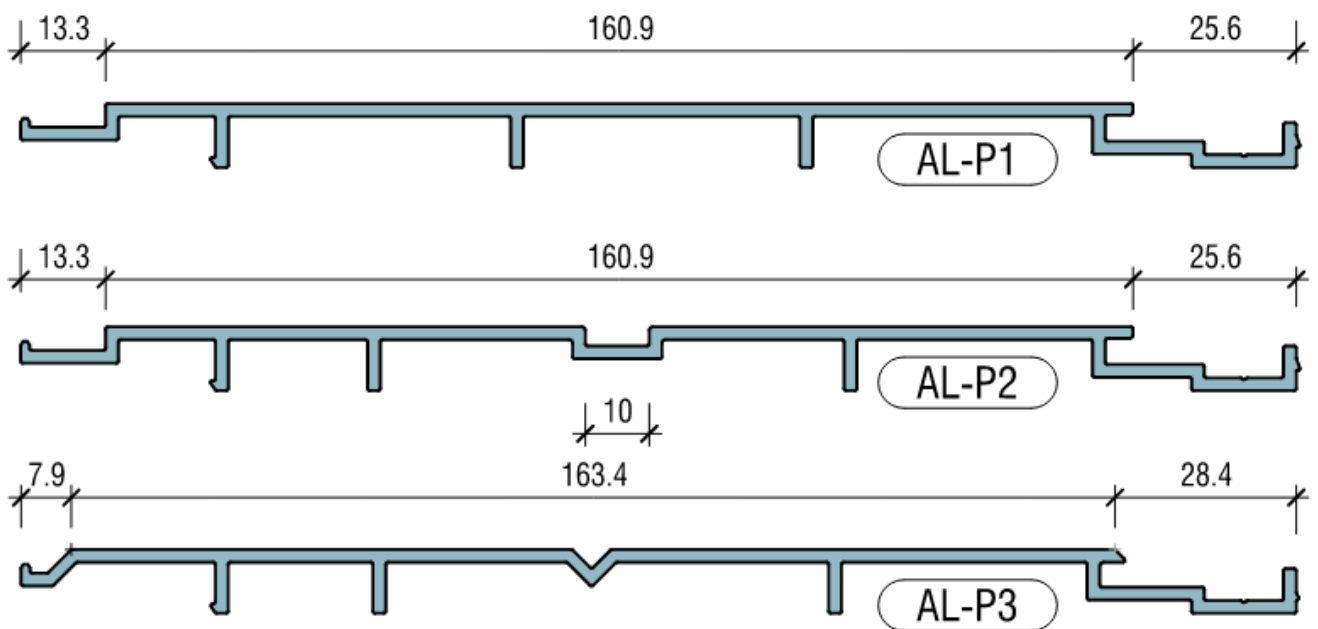


ALICLAD

Product Technical Statement (v2- 0824)

Product Description: The ALICLAD Cladding & Soffit System is an extruded aluminium profile that comprised of 2.2mm thick interlocking boards in 5800 mm lengths. The cladding, soffit boards including the components (mouldings) are manufactured from 6063-T6 aluminium and are locally powder or available in a natural wood grain finish by Metwood®. There are three cladding and soffit profiles available:

ALICLAD Profiles:



The ALICLAD Cladding & Soffit System incorporates a hidden fixing system, and a two-face extruded flashing system. When used as a cladding system, the boards must be installed vertically.

Features and Benefits:

- Prefinished powder-coated, minimal maintenance.
- Non-combustible, impervious to moisture.
- Easy and fast to install.
- Powder coating warranty of up to 25-years, with an expected aluminium service life of 60+ years
- Metwood Woodgrain, 25 years for the underlying powder coating and 10-year warranty on the sublimation finish. *(Subject to Interpon and Memphis terms & conditions. Note that finishes may exhibit some shifting in colour over time).*

Supporting Information: When specifying or installing any of The Building Agency products, please ensure that you have all the current literature. If you're not sure or need more information, visit www.thebuildingagency.co.nz or email info@buildingagency.co.nz

The specifier or other responsible party for the project must ensure the information and details in all of the current literature are appropriate for the intended application and specific design and detailing is undertaken for areas which fall outside the scope of this document.

Limitations:

- A thermal break with an R-value of not less than 0.25 is required when used with lightweight steel framing.
- Where adverse microclimatic conditions apply (refer to paragraph 4.2.4 of NZS 3604:2011).
- If the timber batten treatment is copper based (for example CCA, copper azole or ACQ), the battens must not be in direct contact with metal wall cladding. This may cause corrosion of the cladding. A suitable separation layer must be used, such as an additional layer of paper-based underlay over the cavity battens or strips of paper-based underlay on the face of the cavity battens.
- ALICLAD Cladding was tested in accordance with AS/NZS4284:2008 when installed vertically only.
- E2/AS1 does not require a separation layer when timber has been treated with the less corrosive CuN treatment, it is prudent to still use a separation layer.
- Any proximity to a relevant boundary and where fire code obligations for proximity to the boundary apply, the external wall installation must be subject to specific fire engineering design.
- Aluminium expansion and contraction will occur by 1 mm per 1000 mm due to seasonal weather changes. Please allow for this movement at all junctions.
- The system must be installed with a flexible building wrap or rigid underlay that meets the requirements Table 23 of E2/AS1.

Scope of Use: The ALICLAD Cladding & Soffit System is suitable for use as Internal or external weatherboard, soffit & eaves lining for residential/commercial new builds, renovations, and extensions. The product can be used for eaves, soffits for large carports and verandahs.

The ALICLAD Cladding & Soffit System can be fixed on the proprietary ALPHARAIL20 Aluminum Support Rail System or Timber Castellated Battens H3.2 Treated (as per the AS/NZS4284:2008 test report SWTL-R0061), and/or OMEGA Zinacalume Top Hat. The Building Agency recommends referring to the Northerly Consulting soffit fixing and board span chart prior to the design of the project

<https://thebuildingagency.co.nz/all-products/aliclad-aluminium-weatherboards/>

ALICLAD Cladding & Soffit System

Maximum Spans:

Pressure	Maximum Span Between Fixings
Low	1100 mm
Medium	1050 mm
High	1000 mm
Very High	900 mm
Extra High	890 mm

Fixings recommendations - Refer Northerly Consulting fixing and board span chart

- Fixings must be minimum 8g, and of the appropriate threading to fix to the structural substrate.
- Fixings to timber studs, minimum 35mm embedment, fixed centre of stud.
- Fixings to light gauge steel framing (steel stud), full thread engagement to steel is required. Minimum strength of steel stud, 330MPa (ultimate strength)
- Fixings to aluminum battens, minimum full penetration of screw to batten. Minim 2.5mm thick aluminium batten. Batten material: 6060 T5 aluminium or better.
- Wind pressures stated in the engineer's report are as per NZS3604 wind zones.

Compliance with the NZBC: The following clauses of the NZBC are applicable to the ALICLAD Cladding & Soffit System and it complies with these requirements as explained below.

Structure - B1: Clause B1.3.1, B1.3.2, B1.3.3 (a, f, h, j, q), B1.3.4 Alternative Solution

- ALICLAD Cladding & Soffit System tested in accordance with AS/NZS4284:2008 “Testing of Building Facades” with a ULS2.5kPa by a IANZ accredited test facility (Shelby Wright Test Lab - Report SWTL-R0061 - Date 19/08/24).
- The ALICLAD Cladding & Soffit System may be used in all building wind zones of NZS3604, including Very High. Refer Engineer Report - Fixing and Span Charts - Northerly Consulting report 18/01/2023.

Durability - B2: Clause B2.3.1 (b), B2.3.2 Acceptable Solution B2/AS1

- The ALICLAD Cladding & Soffit System including the components (moldings) are manufactured from 6063-T6 grade aluminium alloy and locally powder coated or Metwood sublimated finished. The ALICLAD Cladding & Soffit System will meet the 15-year durability requirements of B.2.3.1(b). The scope and limitations for the powder coating, including maintenance and warranties refer to www.powdercoating.co.nz/warranties. Note that finishes may exhibit some shifting in colour over time).
- The ALICLAD Cladding & Soffit System is aluminium and would expect to have a serviceable life of up to 60 years provided the system is designed, installed, and maintained in accordance with all current literature.

Fire Performance – C3: Clause C3.4 (a), C3.7 (a) Acceptable Solution C/AS1 AND C/AS2

- Aluminium is deemed non-combustible.
- The ALICLAD MAX Cladding System has been tested and complies with the requirements of ISO5660.1 2015 (refer test AWTA 22-000683 Group Number Assessment). Both the ALICLAD Cladding & Soffit System and ALICLAD MAX are 2.2 mm thick aluminium.
- Metwood® (Polyester Resin Powder on Aluminum) tested to AS/NZS1530.3.1999 (refer test AWTA 20-006280).

External Moisture – E2: Clause E2.3.2, E2.3.5, E2.3.7 Alternative Solution

- The ALICLAD Cladding (vertical installation) & Soffit System were tested by a IANZ accredited test facility in accordance with AS/NZS4284:2008 “Testing of Building Facades” with a ULS2.5kPa (Shelby Wright Test Lab - Report SWTL-R0061 - Date 19/08/24).

Hazardous Building Materials - F2: Clause F2.3.1. Alternative Solution

- The ALICLAD Cladding & Soffit System meets this requirement and will not present a health hazard when managed as detailed in the ALICLAD Cladding & Soffit System, Design, Specification, and Installation Guides. Aluminium is an inert metal. Visit the Work Safe website for further safety instructions www.worksafe.govt.nz

Sources of Information

- Shelby Wright Test Lab – Report - SWTL-R0061 - Date 19/08/24 ALICLAD Cladding and Soffit System in accordance with AS/NZS4284:2008 “Testing of Building Facades”
- AWTA 22-000683 – Test ISO5660.1 2015 Group Number Assessment
- Northerly Consulting Fixing and Board Span Chart – Engineer Report January 2024
- Dulux, Interpon, and Metwood Powder Coating Warranties www.powdercoating.co.nz/warranties
- BRANZ Build 145 article December 2015 H3.1 cavity battens <https://www.buildmagazine.org.nz/assets/PDF/Build-145-34-Build-Right-H3.1-Cavity-Battens.pdf>
- Metwood® (Polyester Resin Powder on Aluminum) tested to AS/NZS1530.3.1999 (refer test AWTA 20-006280)