

TECHNICAL BULLETIN

To: Architects, Builders, Regulatory Bodies
The Building Agency Technical Team
The Building Agency Sales Team
The Building Agency Approved Applicators (Cladding)

From: Product Development Manager – Technical

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Topic: ALUCOLUX – Design & Fabrication Considerations

The ALUCOLUX® Solid Aluminium Cladding System is supplied for use as an external cladding system and rain screen. The following is a guide to the main points from our literature, for more information, refer to www.thebuildingagency.co.nz

Before starting the fabrication process, ensure the temperature of ALUCOLUX® is between 30°C to 40°C. This could be done by using electric blankets, heating films, pouring warm water onto the panel, or dipping it in the warm water bath. Failure to warm the sheets before folding could potentially risk the coating cracking along the fold.

To protect ALUCOLUX® pre-coated solid aluminium panels from mechanical damage and weather, please follow the instructions thoroughly:

- Handle the pallets with utmost care during transportation and loading.
- Upon delivery, examine the pallets for any damage due to transportation or moisture.
- Any panels that are exposed to moisture must be dried to avoid spots or corrosion.
- Store the pallets away from moisture, rain, or any other form of contact with water or liquids.
- Avoid condensation when moving the panels from colder to warmer rooms.
- Stack only three pallets of similar dimensions horizontally above one another with the heaviest at the bottom. Do not let the panels stand vertically.
- While lifting, do not slide the panels over each other to avoid scratches. Two people must carry the panels securely holding all four corners with gloves to avoid staining.
- Do not put anything between two panels while stacking, to avoid markings.

To ensure optimum care from the protective film please follow the instructions thoroughly:

- Storing the panels for more than three months may render the protective film tough to remove.
- Exposure to direct sunlight or temperature fluctuations could reduce the film's durability.
- Do not mark the protective film with inks (markers), tapes, or labels. The solvent or plasticiser may penetrate the film and affect the lacquered surface.
- Partial peeling of the protective film may cause dirtying of the edges that could affect its bounding property.
- Remove the protective film not longer than 45 days after the assembly. Exposure to natural elements may make it difficult to remove later.
- Do not remove the protective film at temperatures under 0°C.

Design considerations:

- If the wall is within 1 m of the relevant boundary, non-combustible packers must be used.
- If adverse microclimatic conditions apply (refer to paragraph 4.2.4 of NZS 3604:2011), contact The Building Agency for technical advice.
- 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 5.0kPa maximum design wind pressure, the DAB extrusion system may be used.
- Where the maximum wind design pressure exceeds 2.1 kPa, the DAB extrusion system's wall assembly must follow the tested assembly.
- 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. › 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. › 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.

When installed within a rainscreen cladding installation the cladding panels and supporting components must be sufficient to resist any loads imposed on the cladding system. Examples of the typical types of loads applied to the cladding system would include but are not limited to, self-weight, wind loading, & seismic loading.

For further product information please refer to www.thebuildingagency.co.nz/all-products/alucolux-solid-a1/