

# STRATCO ALUMINIUM PANEL SYSTEMS

## BUILDING PRODUCT INFORMATION SHEET—CLASS 2



### COMPANY NAME AND ADDRESS:

Stratco (N.Z.) Limited, 55 Hands Road, Middleton, Christchurch, 8024—NZBN 9429040814629

**ADDRESS FOR SERVICE:** Nexia Christchurch Limited, Level 4, 123 Victoria Street, Christchurch, 8013

**WEBSITE:** [www.stratco.co.nz](http://www.stratco.co.nz)

**EMAIL:** [technical@stratco.co.nz](mailto:technical@stratco.co.nz)

**PRODUCT:** Stratco Aluminium Panel Systems



### DESCRIPTION

Stratco Aluminium Panel Systems are high quality, lightweight cladding systems that offer versatility and style, broadening the design options available to builders, designers and architects. Stratco Aluminium Panel Systems are easy to install, extremely durable and low maintenance, making them a cost effective architectural cladding solution.

Suitable for both internal and external applications, Stratco Aluminium Panel Systems include ACP (Aluminium Composite Panels), ALP (Aluminium Laminated Panels) and Solid Aluminium Panels.

ACP consists of two 0.5mm Aluminium Skins that sit outside a fire rated Mineral Core, producing a perfectly flat and smooth sheet material with highly versatile characteristics. ACP is suitable for both internal and external cladding applications.

ALP appears exactly the same as traditional composite aluminium panels (ACP). It consists of two aluminium skins with the profiled core being constructed from a completely aluminium stamped structure resulting in a lightweight, non-combustible panel system.

As the name suggests, Solid Aluminium Panels are made from 3mm thick solid aluminium that is lightweight and is non-combustible.

Stratco Aluminium Panel Systems deliver the rigidity and robustness of heavier sheet metal in a lightweight material that is easily machined and produced in a cost effective manner.

Stratco is one of the largest manufacturers of quality building and home improvement products across New Zealand and Australia. With over 75 years experience in manufacturing and engineering, Stratco is committed to innovation that meets customer needs with high standards, superior design and practical value. Stratco Aluminium Panel Systems provide a one stop solution for all your Aluminium Panel Systems needs throughout New Zealand, combining highly skilled installers with precision CNC machining and CAD technology that delivers a millimetre accurate Aluminium Panel Systems product.

Our certified Aluminium Panel Systems have been tested for strength, durability and weather-tightness by IANZ qualified engineers to ensure compliance across all New Zealand and International Standards (AS/NZS, E2/VM1 and AS/NZS 4284:2008).

### PLACE OF MANUFACTURE—ALUMINIUM PANEL SYSTEMS

- Indurabond—China, United Arab Emirates
- Induracore G2—China, United Arab Emirates
- Induraplate —China, United Arab Emirates
- Alpolic FR —Japan
- Alpolic NC/A1—Japan
- Alucobond Plus—China, bespoke colours Germany, India, USA
- Alucodual® - China
- Alucolux Solid A1—China
- Panelux —China

### PLACE OF MANUFACTURE—SYSTEM ACCESSORIES

Refer accessory items as listed for place of manufacture

### DESIGN CONSIDERATIONS

- Depending on the Panel System selected, Stratco Aluminium Panel Systems are suitable for High and Low Rise Applications, Re-Cladding or refurbishing, Public and Health Care Buildings, Public offices and civic centres and Residential Applications
- Specify material coating to suit building location/environment
- Wide range of finishes available including metallic colours, solid colours, patterns and matte
- Range of system options available include rout and return, open joint, metal leg and top hat
- Stratco Aluminium Panel Systems design details to be used to meet NZ Building Code, E2 as an Alternative Solution (E2/VM1) and tested to AS/NZS 4284:2008— refer [www.stratco.co.nz/nz/aluminium-composite-panel-aps/](http://www.stratco.co.nz/nz/aluminium-composite-panel-aps/)
- When used as a wall cladding in residential applications, Stratco Aluminium Panel Systems design details must be used to ensure a drainage cavity is provided for
- Stratco Aluminium Panel Systems are fire tested to meet NZ Building Code requirements
- Ensure compatibility when using Aluminium Panel Systems with other metal products such as copper
- Contact the Stratco Aluminium Panel Systems Sales Team for further information or at [www.stratco.co.nz/nz/aluminium-composite-panel-aps/](http://www.stratco.co.nz/nz/aluminium-composite-panel-aps/)

### MATERIAL COMPOSITION & COATINGS

Depending on project and specification requirements, Stratco Aluminium Panel Systems use the following Aluminium panel systems:

- Indurabond—[paneltec.wpengine.com/wp-content/uploads/2022/02/INDURABOND-Technical-Manual-ver.2.0.pdf](https://paneltec.wpengine.com/wp-content/uploads/2022/02/INDURABOND-Technical-Manual-ver.2.0.pdf)
- Induracore G2—[paneltec.co.nz/project/induracore-g2/](https://paneltec.co.nz/project/induracore-g2/)
- Alpolic FR—[www.psp.co.nz/product/alpolic-fr-2](https://www.psp.co.nz/product/alpolic-fr-2)
- Alpolic NC/A1—[www.psp.co.nz/product/alpolic-r-nc-a1](https://www.psp.co.nz/product/alpolic-r-nc-a1)
- Alucobond Plus—[thebuildingagency.co.nz/all-products/alucobond-plus/](https://thebuildingagency.co.nz/all-products/alucobond-plus/)
- Alucodual® - [Alucodual by Alucobond - available in NZ | The Building Agency](https://thebuildingagency.co.nz/all-products/alucodual/)
- Alucolux Solid A1—[thebuildingagency.co.nz/all-products/alucolux-solid-a1/](https://thebuildingagency.co.nz/all-products/alucolux-solid-a1/)
- Panelux—[www.mulfordplastics.co.nz/products/panelux/](https://www.mulfordplastics.co.nz/products/panelux/)

### BUILDING CODE COMPLIANCE

The product will, if used in accordance with Stratco's installation and maintenance requirements, assist with meeting the following provisions of the building code:

- **Clause B1 Structure:** B1.3.1, B1.3.2, B1.3.3 (a, e, f, h, j, q)
- **Clause B2 Durability:** B2.3.1 (b)
- **Clause C Fire:** C3.4 (a)
- **Clause E2 External Moisture:** E2.3.2,
- **Clause E3—Internal moisture:** E3.3.4
- **Clause F2 Hazardous building materials:** F2.3.1

Building Code Compliance and performance claims are available by product as follows through the respective links:

- Indurabond—[paneltec.wpengine.com/wp-content/uploads/2022/02/INDURABOND-Technical-Manual-ver.2.0.pdf](https://paneltec.wpengine.com/wp-content/uploads/2022/02/INDURABOND-Technical-Manual-ver.2.0.pdf)
- Induracore G2—[paneltec.co.nz/project/induracore-g2/](https://paneltec.co.nz/project/induracore-g2/)
- Alpolic FR—[www.psp.co.nz/product/alpolic-fr-2](https://www.psp.co.nz/product/alpolic-fr-2)
- Alpolic NC/A1—[www.psp.co.nz/product/alpolic-r-nc-a1](https://www.psp.co.nz/product/alpolic-r-nc-a1)
- Alucobond Plus—[thebuildingagency.co.nz/all-products/alucobond-plus/](https://thebuildingagency.co.nz/all-products/alucobond-plus/)
- Alucodual® - [Alucodual by Alucobond - available in NZ | The Building Agency](https://thebuildingagency.co.nz/all-products/alucodual/)
- Alucolux Solid A1—[thebuildingagency.co.nz/all-products/alucolux-solid-a1/](https://thebuildingagency.co.nz/all-products/alucolux-solid-a1/)
- Panelux—[www.mulfordplastics.co.nz/products/panelux/](https://www.mulfordplastics.co.nz/products/panelux/)

### STRATCO ALUMINIUM PANEL SYSTEM SYSTEM ACCESSORIES

#### Sealants

Sika Façade—[nzl.sika.com/en/diy-trade/sealants-fillers/exterior-joints/walls-and-facades/sikaflex-at-facade.html](https://nzl.sika.com/en/diy-trade/sealants-fillers/exterior-joints/walls-and-facades/sikaflex-at-facade.html)

Place of manufacture—New Zealand

#### Aluminium Channels, Top Hats, Brackets, Etc

Inex Metals—[www.inexmetals.co.nz/wp-content/uploads/2018/10/Technical\\_information.pdf](https://www.inexmetals.co.nz/wp-content/uploads/2018/10/Technical_information.pdf)

McKechnie Aluminium—[www.mckechnie.co.nz/capabilities/aluminium-extrusion.html](https://www.mckechnie.co.nz/capabilities/aluminium-extrusion.html)

Ullrich Aluminium—[vulcan.co/product/aluminium/#vulcan-ua-catalogue](https://vulcan.co/product/aluminium/#vulcan-ua-catalogue)

Altus Aluminium—[altus.co.nz/industrial-aluminium/](https://altus.co.nz/industrial-aluminium/)

Place of manufacture—New Zealand

### INSTALLATION

Installation of Stratco Aluminium Panel Systems is undertaken by Stratco approved installers only.

### MAINTENANCE

All cladding products are subject to the cumulative effects of weather, dust and other deposits so the performance and durability of Stratco Aluminium Panel Systems over time depends on its correct maintenance.

Depending on the local environment, Aluminium Panel Systems require cleaning annually at a minimum to prevent build up of dirt, debris or other material that is not otherwise removed by rain washing. The surfaces should be cleaned either manually using a soft brush or by means of high-pressure cleaner (maximum 50 bar) with clean water.

If necessary, a mild cleaning agent (pH 6–7) may be added, up to maximum 10%. Cleaning should take place from top to bottom. After cleaning, rinse with water to remove any cleaning agent residue. Do not clean surfaces heated by the sun (>40° C)

Areas that do not receive adequate rain washing (known as unwashed areas) require more extensive manual washing. These areas include soffits, wall cladding under eaves, undersides of gutters, fascias, sheltered areas of doors or in sites prone to mould, lichen, bird droppings or debris.

### SECTION 26 OF THE BUILDING ACT

Stratco Aluminium Panel Systems are not subject to any warnings or bans under Section 26 of the Building Act.

### ENVIRONMENT

Stratco has Toitu Enviromark Gold Certification plus, as approved partners with New Zealand Steel, Stratco are licensed to use the Eco Choice Aotearoa Label for products formed in Colorsteel®, Zinalume® and Galvsteel® as made by New Zealand Steel Ltd. Refer [Eco Choice Aotearoa](#)

Stratco sites recycle their steel and aluminium scrap/offcuts. Steel and aluminium are infinitely recyclable so at the end of its useful life they can be recycled and remelted for use in other steel/aluminium products.

### Appendix

As reference, this appendix contains the full descriptions of all building performance clauses listed in this document.

#### B1 Structure

##### B1.3.1

*Buildings, building elements* and *sitework* shall have a low probability of rupturing, becoming unstable, losing equilibrium, or collapsing during *construction* or *alteration* and throughout their lives.

##### B1.3.2

*Buildings, building elements* and *sitework* shall have a low probability of causing loss of amenity through undue deformation, vibratory response, degradation, or other physical characteristics throughout their lives, or during *construction* or *alteration* when the *building* is in use.

##### B1.3.3

Account shall be taken of all physical conditions likely to affect the stability of *buildings, building elements* and *sitework*, including:

- (a) self-weight,
- (e) water and other liquids
- (f) earthquake
- (h) wind
- (j) Impact
- (q) time dependent effects including creep and shrinkage

##### B1.3.4

Due allowances shall be made for:

1. the consequences of failure,
2. the intended use of the *building*,
3. effects of uncertainties resulting from *construction* activities, or the sequence in which *construction* activities occur,
4. variation in the properties of materials and the characteristics of the site, and
5. accuracy limitations inherent in the methods used to predict the stability of *buildings*

#### B2 Durability

##### B2.3.1

*Building elements* must, with only normal maintenance, continue to satisfy the performance requirements of this code for the lesser of the *specified intended life* of the *building*, if stated, or:

- (b) 15 years if:
  - i. those *building elements* (including the *building* envelope, exposed plumbing in the subfloor space, and in-built chimneys and flues) are moderately difficult to access or replace, or
  - ii. failure of those *building elements* to comply with the *building code* would go undetected during normal use of the *building*, but would be easily detected during normal maintenance.

#### C3 Fire affecting areas beyond the fire source

##### C3.4 (a)

Materials used as internal surface linings in the following areas of *buildings* must meet the performance criteria specified below:

Area of <i>building</i>	Performance determined under conditions described in ISO 9705: 1993	
	<i>Buildings</i> not protected with an automatic <i>fire</i> sprinkler system	<i>Buildings</i> protected with an automatic <i>fire</i> sprinkler system
Wall/ceiling materials in sleeping areas where care or detention is provided	Material Group Number 1-S	Material Group Number 1 or 2

### Appendix

Area of building	Performance determined under conditions described in ISO 9705: 1993	
	Buildings not protected with an automatic fire sprinkler system	Buildings protected with an automatic fire sprinkler system
Wall/ceiling materials in exitways	Material Group Number 1-S	Material Group Number 1 or 2
Wall/ceiling materials in all <i>occupied spaces</i> in importance level 4 <i>buildings</i>	Material Group Number 1-S	Material Group Number 1 or 2
Internal surfaces of ducts for HVAC systems	Material Group Number 1-S	Material Group Number 1 or 2
Ceiling materials in crowd and sleeping uses except <i>household units</i> and where care or detention is provided	Material Group Number 1-S or 2-S	Material Group Number 1 or 2
Wall materials in crowd and sleeping uses except <i>household units</i> and where care or detention is provided	Material Group Number 1-S or 2-S	Material Group Number 1, 2, or 3
Wall/ceiling materials in occupied spaces in all other locations in <i>buildings</i> , including <i>household units</i>	Material Group Number 1, 2, or 3	Material Group Number 1, 2, or 3
External surfaces of ducts for HVAC systems	Material Group Number 1, 2, or 3	Material Group Number 1, 2, or 3
Acoustic treatment and pipe insulation within airhandling plenums in sleeping uses	Material Group Number 1, 2, or 3	Material Group Number 1, 2, or 3

### E2 External moisture

#### E2.3.2

Roofs and exterior walls must prevent the penetration of water that could cause undue dampness, damage to *building elements*, or both.

### E3 Internal moisture

#### E3.3.4

Wall surfaces adjacent to *sanitary fixtures* or *sanitary appliances* must be *impervious* and easily cleaned.

### F2 Hazardous building materials

#### F2.3.1

The quantities of gas, liquid, radiation or solid particles emitted by materials used in the *construction of buildings*, shall not give rise to harmful concentrations at the surface of the material where the material is exposed, or in the atmosphere of any space.