

# Pe2 PC Aluminium Cassette Panel

## General

This specification document describes supply and fixing of Pe2 Powder-Coated Aluminium Cassette Panel System

### 1.0 SUPPLIER

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## Reference Document

### 1.1 REFERENCE DOCUMENTS

Documents of reference relevant to this product are;

- NZBC E2/AS1 External moisture
- NZBC B2/AS1 Durability
- AS/NZS 1170.2 Structural design actions - Wind actions
- AS/NZS 2728 Prepainted sheet metal products, Interior/exterior performance
- NZS 2295 Pliable permeable building underlays
- NZS 3604 Timber-framed buildings
- AS/NZS 2484, E2 VM1
- NZMRM NZ Metal roof and wall cladding - Code of practice
- BRANZ BU 467 Principles of Flashing Design
- BRANZ BU 519 Fastener Selection

### 1.2 MANUFACTURERS DOCUMENTS

**ARCHITECTURAL ENVELOPES** Installation Guide

## Warranty

### 1.3 WARRANTY

Warrant work under normal environmental and use conditions against failure of workmanship, materials, fixing, waterproofing, weatherproofing and surface coatings.

- INSTALLATION WARRANTY**  
Period: 5 years against  
workmanship From:  
Date of completion.
- MANUFACTURERS/INSTALLERS WARRANTY**  
Period: 15 years against Perforation  
From: Date of completion. Requirements

#### 1.4 INSTALLATION OPERATIVES

All installation operatives must be approved ARCHITECTURAL ENVELOPES trained installers, who are specifically trained in the installation and handling of Pe2 Panel Systems

#### 1.5 FIXINGS - WIND

Refer to Specific Design by Structural Engineer

#### 1.6 PERFORMANCE

Accept responsibility for the performance of the panel system including penetrations and associated flashings

## Products

#### 2.0 UNDERLAY

Separation layer between the Pe2 panel and the building structure. To NZBC E2/AS1; Table 23 and NZS 2295.  
Contact: [www.proclima.co.nz](http://www.proclima.co.nz)

#### 2.1 PANEL

The Pe2 cassette panel will be fabricated to the panel sizes indicated on the plans and will be fixed to the main structure using an extruded clip and stainless-steel fixings.

The alloy itself is an electrolytic high grade 5005, H34 aluminium, strain hardened, stabilized magnesium alloy, half hard that complies with international standards.

The Duralloy and Duratec powdercoat finishes are proven products that comply with B2 durability requirements The finish coatings are suitable for an ISO category 3 environment. The panel itself is fabricated of 2mm thick aluminium.

#### 2.2 FABRICATION

**2.3** The aluminium panels will be fabricated in our Cromwell factory, and then sent to a specialist powder coater for the finished colour application.

#### 2.4 HANDLING

Finished Pe2 cassette panels must be stored in well ventilated conditions that guard against condensation separated from the ground by a pallet which allows air space sufficient to permit ventilation whilst not allowing deformation of the items. Panels to be stored flat on a clean, smooth surface.

## 2.6 FLASHINGS

Finished As required from a nominal 0.9mm aluminium formable grade flashings, Colour and finish to match Pe2 panel. To E2/AS1; 4 and AS/NZS 2904, supplied purpose made for the project. Flashings to be installed to allow expansion of metal.

## 2.7 EXTRUDED CLIPS

Clips shall comply with NZBC E2/AS1: 8.4.9, Clips to suit the material and panel system. Clips to fixed using stainless steel fixings.

## 2.8 SEALANT

100% natural cure non-acid based silicone rubber to match panels. Use in accordance with manufacturer's instructions.

## 2.9 DELIVERY / STORAGE

Accept delivery of undamaged panels.

Reject all damaged materials. Store in a location on site that is protected from weather and damage, on a firm, level base. Maintain good ventilation between packs.

## 3.0 HANDLING

Lift each panel carefully, do not drag or distort. Protect surface finish and edges.

## 3.1 EXAMINE CLADDING STRUCTURE

Examine panel structure with installer present.

Ensure panel structure is in place, complete, and to the required standard to carry out installation works.

## 3.2 PANEL SET OUT

Consider the position of side laps, and set out panels making sure They are square and neatly placed. Do not allow creep and spread during fixing.

## 3.6 FIXING IN GENERAL

Fixing in accordance with ARCHITECTURAL ENVELOPES recommendations, and in accordance with NZBC E2/AS1 and NZMRM NZ Metal Roof and Wall Cladding Code of Practice requirements.

## 3.7 CUTTING AND MARKING

Use metal cutting shears. Do not use black lead pencils for marking.

## 3.8 SHEARED EDGE SEALING

Cut edge sealing is not required, the substrate is self-protecting.

## 3.9 FIX UNDERLAY

Lay underlay and drainage mat to NZBC E2/AS1.8.1.5

Cladding underlays over the substrate, in accordance with Pro Clima Solitex Mento 1000 recommendations. Make all necessary laps and joints.

Refer to [www.proclima.co.nz](http://www.proclima.co.nz) for further information.

### **3.10 FIX PANELS**

Fix panels directly in accordance with ARCHITECTURAL ENVELOPES instructions using fixing method specified.

### **FLASHINGS - GENERALLY**

Flash up-stands, junctions and abutments to ARCHITECTURAL ENVELOPES details, and in accordance with NZBC E2/AS1; Pre-form required shapes wherever possible. Cut neatly and precisely, notch, scribe, flute or dress down as required and fix to form a weatherproof cover and to suit profile.

### **3.12 FLASHINGS**

Cut neatly and precisely and fasten to purlins through the leading edge of the panels to NZBC E2/AS1.

### **3.13 FLASHING TO PANEL PENETRATIONS**

Flash all panel penetrations to NZBC E2/AS1: 8.1.7 to provide a weather-tight seal. Use two-part flashings, (base and cover), fit pipe flashings with manufacturers proprietary collar flashings.

### **3.14 DISSIMILAR MATERIALS**

Prevent direct contact between incompatible metals, and between chemically treated timber and coated steel or aluminium. Position isolators where necessary when dissimilar materials are close together. Use separation strips or a low transmission coating between surfaces. Use neoprene washers on screws where necessary.

### **3.15 FINISH**

Finish installation work with all elements correctly and permanently installed.

### **3.16 CLEAN CLADDING**

Clean cladding daily, pay attention to metal filings, swarf, etc., and remove as soon as possible. Do not under any circumstances allow this material to remain on the panels overnight, or during inclement weather.

Remove all general rubbish, surplus materials, wrappings etc. associated with this trade and leave in a clean and tidy condition.

