# ALUCOLUX 3mm SOLID ALUMINIUM CLADDING

## 1. GENERAL

 This section relates to the design, fabrication, supply and installation of **Alucobond (Far East) Pte Ltd** ALUCOLUX 3mm solid aluminium pre-finished cladding. It is suitable for use as a non-load bearing drained and ventilated cladding system fixed to timber framed/strapped buildings.

 **Documents**

### 1.1 DOCUMENTS

 Refer to the general section 1233 REFERENCED DOCUMENTS. The following documents are specifically referred to in this section:

 [NZBC C](http://www.masterspec.co.nz/redirect.aspx?pl=224)/AS1/AS7 Protection from fire

 [NZS 1170.5](http://www.masterspec.co.nz/redirect.aspx?pl=872) Structural design actions - Earthquake actions - New Zealand

### 1.2 MANUFACTURER/SUPPLIER DOCUMENTS

 Manufacturer's and supplier's documents relating to this part of the work:
ALUCOLUX product information

 ALUCOLUX tray panel system

 Manufacturer/supplier contact details

 Company: **Alucobond (Far East) Pte Ltd**

 Web: [www.alucobond.com.sg](http://www.alucobond.com.sg)

 Email: sales@alucobond.com.sg; jan@kaneba.nz

 Telephone: +65 6303 9750, +6421447564

 **Warranties**

### 1.3 WARRANTY - MANUFACTURER/SUPPLIER

 Provide a material manufacturer/supplier warranty:

 15 years For ALUCOLUX

 - Provide this warranty on the Alucobond (Far East) Pte Ltd standard form.

 - Commence the warranty from the date of practical completion of the contract works.

### 1.4 WARRANTY - INSTALLER/APPLICATOR

 Provide an installer/applicator warranty:

 5 years For installation of ALUCOLUX cladding system

 - Provide this warranty on the installer standard form.

 - Commence the warranty from the date of practical completion of the contract works.

 **Requirements**

### 1.5 ACCEPTABLE PRODUCT/MATERIAL SUPPLIERS

 Where a product or material supplier is named in section 4 of this document, the product/material must be provided by the named supplier.

### 1.6 NO SUBSTITUTIONS

 Substitutions are not permitted to any of the specified systems, components and associated products listed in this section.

|  |  |
| --- | --- |
| Sample description: | Describe the sample, size etc. |
| Sample type: | Portable sample for reviewPortable control sampleFixed sample for reviewFixed control sampleControl samples define requirements for type and quality and are used for comparison purposes throughout the contract.A "portable" sample is a sample that is easily movable, convenient for carrying. A "fixed" sample is a sample (semi) permanently placed. Expand on these terms as necessary. |
| Number: | State number of samples required, e.g. a minimum of three control samples - portable allow a sample to be retained on site with the other samples retained by the contract administrator and contractor. |
| Location: | Identify location of fixed samples, e.g. off site, on site, in situ |
| Supporting documentation: | Describe any additional documents required to support the review. |
| Reviewer: | Modify to suit the project, add additional reviewers if required. |
| Time for review: | Alter time if required. Expand to state timing in relation to when and where the sample is provided, e.g. at first site meeting. |
| Review criteria: | For example:- Appearance- Texture- ColourAdd any critical items. Provide clarity for work that is not dependent on the review to continue. |

### 1.7 SHOP DRAWINGS

 Refer to the general section of the project specification for the requirements for submission and review and the provision of final shop drawings.
Provide shop drawings to show the general arrangement including, but not be limited to:

 - Design calculations

 - Fully dimensioned elevations of all Alucobond elements (minimum scale1:50)

 - Complete details of construction, connections and all support systems including stiffening members (minimum scale 1:10).

 - Dimensions of all typical elements and of any special sizes and shapes

 - Provision for the exclusion, deflection and/or drainage of moisture

 - Jointing details and method of fixing between individual elements and between the Alucolux installation and adjacent work, including adjustment

 - Type, gauge, length, position and number of fixings

 - Adjustment of fixings to ensure accurate alignment of composite cladding

 - Sealant types and full size sections of all sealants and backing rods

 - Provision for thermal movement

 - Provision for seismic movement and movement under wind loads

 - Sequence of installation

 - Co-ordination requirements with other work

 - A schedule of materials, finishes, componentry, hardware and fittings

 - Complete shop drawing review before commencing fabrication.

### 1.8 INFORMATION FOR OPERATION AND MAINTENANCE

 Refer to the general project specification for the provision of maintenance information that may have to be provided.

 **Compliance information**

### 1.9 INFORMATION REQUIRED FOR CODE COMPLIANCE

 Provide the following compliance documentation:

 - Manufacturer's, importers or distributors warranty

 - Installer's / applicator's warranty

 - Producer Statement - Construction from the applicator / installer

 - Other information required by the BCA in the Building Consent Approval documents.

 **Performance - general**

### 1.10 COMPLIANCE - ALUCOLUX

 Alucolux Tray Panel System achieves compliance with NZBC as follows:

 - [NZBC B1](http://www.masterspec.co.nz/redirect.aspx?pl=222).3.1, B1.3.2

 - [NZBC B2](http://www.masterspec.co.nz/redirect.aspx?pl=223).3.1(b)

 - [NZBC C](http://www.masterspec.co.nz/redirect.aspx?pl=224)3.4(a), C3.5

 - [NZBC E2](http://www.masterspec.co.nz/redirect.aspx?pl=347).3.2, E2.3.3, E2.3.5

 - [NZBC F2](http://www.masterspec.co.nz/redirect.aspx?pl=236).3.1

### 1.11 FIXINGS, EARTHQUAKE

 Use fixings and methods capable of sustaining the loads appropriate to the area as required by [NZS 1170.5](http://www.masterspec.co.nz/redirect.aspx?pl=872).

### 1.12 FIXINGS, WIND

 Use fixings and methods capable of sustaining the loads appropriate to the site-specific wind zone parameters.

### 1.13 FABRICATION

 Fabricate and assemble all cladding panels to Alucobond (Far East) Pte Ltd Technical requirements.

### 1.14 WEATHER-TIGHT PERFORMANCE

 Accept responsibility for the weather-tight performance of the completed cladding system, including all penetrations.

 **Performance - fire**

### 1.15 EXTERIOR SURFACE FINISHES

 Alucolux is a non-combustible 3mm solid aluminium sheet meeting the requirements for exterior surface finishes set by the Acceptable Solution C/AS2-C/AS7.

 Alucolux can also be used with the Tray Panel System tested to NFPA285 if a total system test is required.

## 2. PRODUCTS

 **Materials**

### 2.1 WALL UNDERLAY

 For flexible wall underlays, rigid wall underlays and rigid air barriers, refer to the appropriate separate section(s).

 **Alucolux**

### 2.2 ALUCOLUX PANEL – 3mm SOLID ALUMINIUM PANEL

 Alucolux panel, 3mm thick prefinished aluminium, with a lacquer on the visible surface and a protective peel off foil with Alucolux branding. Refer to section 4 of this document for width, length, finish and colour.

### 2.3 FLASHING

 Refer to section 4 of this document.

### 2.4 SOAKERS

 Soakers to Alucobond Tray Panel System Manual requirements.

### 2.5 CONTINUOUS FIXING ANGLE

 Formed of solid aluminium.

### 2.6 FASTENERS

 Stainless steel to requirements of Alucolux Tray Panel System Manual.

### 2.7 FIRE SEALANT

 BOSS Firemastic 300 acrylic sealant.

### 2.8 BOND BREAKER TAPE

 Tesa Bond Breaker Tape.

## 3. EXECUTION

 **Conditions**

### 3.1 DELIVERY, STORAGE & HANDLING OF PRODUCTS

 Refer to the project specification for requirements relating to delivery, storage and handling of products.

### 3.2 ROUTINE MATTERS

 Refer to project specification for temporary works and services for protection requirements.
Refer to project specification for requirements relating to defective or damaged work, removal of protection and cleaning.

### 3.3 BATCH

 Order all panel product from the same batch.

### 3.4 COMPATIBILITY

 Ensure all elements and accessories are compatible on the electrochemical scale of metals so that no excessive sacrificial corrosion will occur.

 **Assembly**

### 3.5 FABRICATION

 Do not start fabrication until the shop drawings have been reviewed and samples approved. Fabricate Alucolux panels and elements in the workshop wherever possible, ready for assembly and erection on the building site.

 **Installation**

### 3.6 PRE-INSTALLATION REQUIREMENTS

 Check work previously carried out and confirm it is of the required standard for this part of the work, including moisture content of framing to [NZS 3602](http://www.masterspec.co.nz/redirect.aspx?pl=299) requirements and Alucolux Site Check requirements.

### 3.7 TOLERANCES

 Refer to Alucolux Tray Panel System Manual for permitted tolerances.

### 3.8 PENETRATIONS

 Confirm that exterior wall openings have been prepared and window and door frames installed. Required preparatory work includes the following:

 - wall underlay finished and dressed off ready for the installation of penetrations

 - installation of flashings and soakers (those required to be installed prior to installation of penetrating elements).

### 3.9 PROTECTIVE FOIL

 Retain protective foil during installation. Remove foil after joint sealants have cured.

### 3.10 INSTALL PANELS

 Install Alucolux panels in accordance with reviewed shop drawings, samples, installation details and Alucobond Tray Panel System Manual. Consult and co-ordinate as necessary with installers of adjoining and related work, including window and door installations.

### 3.11 THERMAL EXPANSION

 Install aluminium composite panels to accommodate thermal expansion

### 3.12 DO NOT ALTER

 Return any component parts that require alteration to the shop for correction or replacement with new parts.

### 3.13 COMPONENTS

 Ensure all components are level, true to line with uniform joints and reveals.

### 3.14 ANCHORAGE

 Ensure anchorage of the cladding structure to the building structure is to Alucobond (Far East) Pte Ltd approved methods and requirements and reviewed shop drawings.

### 3.15 TOUCH-UP

 In situ touch-up of factory applied finishes is not permitted unless a trial repair is subsequently approved in writing by the contract administrator.

### 3.16 COMPLETE

 Ensure the work is complete with all flashings, finishing and trim properly installed so the cladding system is completely weathertight.

 **Completion & Commissioning**

### 3.17 COMPLETION MATTERS

 Refer to the project specification for completion requirements and if required commissioning requirements.

### 3.18 COMPLETION - TESTS & CERTIFICATION

 Refer to the project specification for general test and certification requirements at completion.

## 4. SELECTIONS

 For further details on selections go to [www.alucobond.com.sg](http://www.alucobond.com.sg)

 Substitutions are not permitted to the following, unless stated otherwise.

 **Materials**

### 4.1 ALUCOLUX 3mm SOLID ALUMINIUM PANEL

 Location:

 Supplier: Alucobond (Far East) Pte Ltd

 Panel type: Alucolux

 Panel thickness: 3mm

 Panel width: ~

 Panel length: ~

 Joint width: ~

 External surface finish: PVDF Coating

 Colour: ~

### 4.2 FLASHING

 Location: ~

 Supplier: ~

 Type: ~

 **Components**