

# Vitrabond Aluminium Composite Panel Facade System Specification Template

## **1 GENERAL**

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### **1.1 CROSS REFERENCES**

#### **General**

Refer to the General requirements worksection.

#### **Related worksections**

Refer to the following worksections:

- Light Timber Framing
- Light Steel Framing
- Shop Front Framing

## **2 QUALITY**

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### **2.1 INSPECTION**

#### **Panel approval**

Submit a sample panel in each selected colour to the Superintendent for approval and signature prior to commencement of production. Return the signed sample panel to the manufacturer to implement the warranty.

Label each sample giving brand name, product name and manufacture's code reference.

#### **Witness points**

Give sufficient notice to the Superintendent so that inspection may be made of framing complete with sarking and flashings ready to receive cladding.

#### **Hold points>**

## **3 MATERIALS AND COMPONENTS**

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### **3.1 ALUMINIUM COMPOSITE PANELS**

Standard: To AS 2924.1

#### **Description**

Prefabricated panels shall consist of:

- 3mm polyethylene core
- Two surface layers of 0.5mm thick (3000 or 5000 grade alloy)

Propriety Item: VITRABOND ACP by FAIRVIEW ARCHITECTURAL, Ph: 1800 007 175



### **Thickness**

Total panel thickness: 4mm

### **Finish**

Standard Colours/codes: \_\_\_\_\_

Custom Colours/codes: \_\_\_\_\_

((Guide Note: Delete option not required.)))

### **Flashings/Cappings**

Standard: To AS/NZS 2904

Materials: Aluminium/zinc coated steel – colour matched to cladding with Vitraflon- 700 fluoropolymer.

## **4 EXECUTION**

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### **4.1 CONSTRUCTION GENERALLY**

#### **Substrates and framing**

Before fixing cladding, check and, if necessary, adjust the alignment of substrates and framing.

#### **Fixing**

Method shall be either:

- (a) Adhesive and double sided tape.
- (b) Prefabricated cassettes fastened with rivets, bolts, screws.
- (c) Curtain wall type facades and shop-front systems.

((Guide Note: Delete options not required.)))

#### **4.3 Preparation (Adhesive and Direct fix method)**

Refer to manufacturers specific instructions.

((Guide Note: Delete option not required.)))

#### **4.5 Fixing (Adhesive and Direct fix method)**

Refer to manufacturers specific instructions.

((Guide Note: Delete option not required.)))

#### **4.2 Preparation (Cassette method)**

- (a) All cladding panels shall be factory fabricated and assembled to the highest standard of workmanship under experienced factory supervision and control.
- (b) All panels shall be fabricated into cassettes complete with aluminium subframe.
- (c) All seams of mitred joints of the subframe shall be sealed with an approved sealant.
- (d) The finished cassette panels shall be delivered to site complete with component markings for easy identification and assembly.

#### **4.4 Fixing (Cassette Method)**

- (a) Fasteners including concealed screws, nuts, bolts, and other items required for connection of aluminium components shall be of non-magnetic stainless steel.
- (b) Rivets used for fastening the composite panels to aluminium subframes shall be aluminium, large flange head type with stainless steel mandrel.
- (c) All fixing anchors, brackets and similar attachments shall be of aluminium or galvanised steel as specified.

#### **4.6 Drainage**

A complete drainage system is to be incorporated into the external facade system. All water collected by the drainage system is to be discharged at ground level in a controlled manner.

#### **4.7 Expansion and contraction**

The cladding shall be fabricated and erected so as to provide for all expansion and contraction of the components. Any temperature change due to climatic conditions shall not cause harmful buckling, opening of joints, undue stress on fastenings and anchors, noise of any kind or other defects.

#### **4.8 Installation**

- (a) Component parts which are observed to be defective in any way, including warped, bowed, dented, abraded and broken members, must not be installed. Members or parts which have been damaged during installation or thereafter before the time of practical completion shall be removed and replaced.
- (b) No cutting, trimming, welding or brazing of components which could in any manner damage the finish, decrease the strength, or result in visual imperfections or failure in performance shall be executed during installation. Components which require alteration shall be returned to the factory. If necessary, replace with new components.
- (c) All components shall be installed level, true to line with uniform joints and reveals.  
Maximum deviation for vertical member: 3mm maximum over 5.2m and 5mm maximum over 11.0m.  
Maximum deviation for horizontal members: 3mm maximum over 8.5m.
- (d) Anchorage of the cladding substructure to the building structure shall be by approved methods in strict accordance with the specification and approved shop and/or installation drawings. Supporting brackets shall be so designed as to provide three-dimensional adjustments and accurate location of wall components.
- (e) All joints between panels shall be set at widths as shown on the drawings with a tolerance of  $\pm 2.0\text{mm}$  No two adjacent or perpendicular joints shall have a difference in width of more than 2.5mm. In addition, the tolerance between adjacent panels across any joint shall not exceed 1.5mm locally.
- (f) The whole of the installation shall be in strict accordance with the manufacturer's instructions.

### **5 COMPLETION**

#### **5.1 WARRANTIES**

General: Name the Principal as warrantee. Register with manufacturers as necessary. Retain copies of paperwork delivered to site with components.

Commencement: Commence warranty periods at practical completion or at acceptance of installation, if acceptance is not concurrent with practical completion.

Approval of installer: If installation is not by manufacturer, and product warranty is conditional on the manufacturer's approval of the installer, submit the manufacturer's written approval of the installing firm.

Warranty term:                                      Materials:                                      10 - 15 years (by Manufacturer)

#### **5.2 Maintenance manual**

Contents: Submit a maintenance manual containing technical specification of the cladding system setting out the manufacturer's recommendations on maintenance, to the Principal at Practical Completion. Include the names and addresses of the suppliers, manufacturers and installers of each component

#### **5.3 Cleaning**

Final Cleaning: When installation is complete, remove extraneous matter and marks off the facade components in a manner which leaves the completed installation free of any streaking, spotting or non-uniform appearance.  
Protection: Protect as necessary and leave the finished work undamaged on completion.

