

SPECIFIER NOTE:

The purpose of this guide specification is to assist the specifier in correctly specifying aluminum siding with a digitally printed finish and their installation. The specifier needs to edit the guide specifications to fit the needs of specific projects. Contact DIZAL to assist in appropriate product selections and for detailing assistance. Throughout the guide specification, there are Specifier Notes to assist in the editing of the file. Green text relates to sustainability and red text in brackets indicates a selection needs to be made



**DIGITALLY PRINTED
ARCHITECTURAL PRODUCTS**

SECTION 07 46 16

ALUMINUM SIDING

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Aluminum siding [and soffits] with digitally printed finish
- B. Accessory products including
 1. [Starter Strips]
 2. [Two-Piece Corners and Trims]
 3. [Ventilated Soffits]

1.2 PREINSTALLATION MEETING

- A. Preinstallation Meeting: Conduct meeting at Project Site

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product, include the following
 1. Technical data
 2. Installation Instructions
 3. Aluminum material information
 4. UV Fade Test Reports, by a 3rd Party Testing Agency.
 5. Siding and accessory dimension of components and profiles
- B. Digital Color and Texture Card showing the variation within selected color and texture
- C. Samples: Printed siding plank (or printed carton) to match digital color and texture card



1.4 INFORMATIONAL SUBMITTALS

- A. Product certificates: For each type of aluminum siding [and soffit].

SPECIFIER NOTE:

When project is pursuing a sustainable rating system, retain Sustainable Design Submittal paragraph and edit to correspond to the specific Project requirements. Modify based on rating system being pursued.

- B. Sustainable Design Submittals:
1. Sourcing of Raw materials: Building Product Disclosure and Optimization indicating source and extraction.

SPECIFIER NOTE:

Retain "Florida Building Code Certificate" for Florida projects or where FBC qualification is used as a standard for high wind design areas.

- A. [Florida Building Code Supplement: Documentation indicating that products comply with requirements of the Florida Building Code.]
- B. Sample warranty: For special finish

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance data: For each type of product, including related accessories. Include in Maintenance manuals.
- B. Warranty: Executed copy of the manufacturer's warranty.

1.6 QUALITY ASSURANCE

- A. Mockups: Build mockups to verify selections made and to demonstrate aesthetic effects and to set quality standards for fabrication and installation.
1. Build mockups for siding [and soffit] including accessories
 - a. Size: 72 square feet, from sample carton, unless noted otherwise.
 - b. Include outside corner on one end of mockup and inside corner on opposite end.
 2. [Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.]

SPECIFIER NOTE:

Retain "Florida State Building Code Certificate" for Florida projects or where FSBC qualification is used as a standard. The Florida Product Approval numbers indicated are specific to DIZAL.

- B. [Florida Building Code Compliance: Provide siding complying with Florida Building Code product and installation requirements for locations outside of high velocity wind zone.]
1. [Florida Product Approval No. FL 22530 – DIZAL Inc.]
- C. Surface Burning Characteristics: In accordance with ASTM E84
1. Flame Spread Index: 0
 2. Smoke Developed Index: 0

1.7 WARRANTY

- A. Special Warranty: Manufacturer warrants its aluminum siding and soffits are free of defects in material and workmanship, and when applied and maintained according the manufacturer's instructions, the products are guaranteed against
 - 1. Buckling
 - 2. Corrosion

- B. Finish Warranty: Manufacturer includes the primer, high definition printed layer and clear protective coating. Finish is warranted to have the following properties
 - 1. Resistance to Cracking and Crazing
 - 2. Color Retention: No change in the color of the finish on the building – greater than 5 units
 - 3. Gloss Retention of a least 30 percent of the original
 - 4. Adhesion: Digital printed finish will not peel from substrate.

- C. Warranty Period: 15 years from date of Substantial Completion, non-prorated. Pending maintenance of the material and finishes as recommended by the manufacturer.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Dizal Inc., 4000 Jean-Marchand Street, Unit 108, Quebec City, Quebec Canada G2C 1Y6. www.DIZAL.com

2.2 ALUMINUM MATERIAL

- A. Extruded Aluminum 6063-T5 alloy

2.3 ALUMINUM SIDING [AND SOFFIT] PLANKS

SPECIFIER NOTE:

Select the desired profile specific to project and delete the other indicated profiles. Where more than one profile or size is selected coordinate with drawings for clarity. Not all profiles are available in all exposed face dimensions. Select accordingly.

- A. Profile F: Flat
 - 1. [Exposed Face: 4 inches; minimum metal thickness: 0.062 inch]
 - 2. [Exposed Face: 6 inches; minimum metal thickness: 0.062 inch]
 - 3. [Exposed Face: 8 inches; minimum metal thickness: 0.090 inch]
 - 4. Plank Length: 16 feet

- B. Profile V: V Groove
 - 1. [Exposed Face: 3 inches; minimum metal thickness: 0.055 inch]
 - 2. [Exposed Face: 4 inches; minimum metal thickness: 0.062 inch]
 - 3. [Exposed Face: 6 inches; minimum metal thickness: 0.062 inch]
 - 4. Plank Length: 16 feet

- C. Profile C: Channel
 - 1. [Exposed Face: 6 inches; minimum metal thickness: 0.062 inch]
 - 2. Plank Length: 16 feet

For Profiles F, V and C - extrusion with a set of two 1" x 0,125" oblong holes separated by 2", which are repeated every 4" (for fixing to the wall). The same extrusion has a strip of perforated aluminum (behind the part) for air circulation and water flow. Panel reinforced by an extruded "T" shape on the back.

2.4 ACCESSORIES

- A. Siding Accessories, General: Provide starter strips, J-trims, H-trims, outside corners and, and other items as recommended by siding manufacturer for building configuration.
 - 1. Provide accessories made from same material and matching finish of adjacent siding unless otherwise indicated.
- B. Aluminum Accessories: Where aluminum accessories are indicated, provide two-piece trim pieces (*) including.
 - 1. Starter Strip

SPECIFIER NOTE:

For inside corners both the 1 and 13/4 inch J-Trim is required to provide a uniform appearance. Contact DIZAL representative for assistance.

- 2. J-Trim [1] [and] [1-3/4] inch*
- 3. H-Trim*
- 4. Outside Corner*

SPECIFIER NOTE:

Ventilated planks provide air circulation for soffits. The 4 inches exposed face ventilated plank provides 1.5 percent free area and the 6 inch exposed face provides 1 percent per 8 foot length. Soffit Vents by other manufacturers can be utilized to meet greater free area requirements.

- 5. Ventilated Plank [4] [6] inches

Soffit type sheet with holes drilled in factory with same composition and coming from the same manufacturer.

- C. Fasteners: Stainless Steel screws. Clip fasteners are not acceptable.

2.5 DIGITALLY PRINTED FINISH

- A. Three-layer color and texture finish including
 - 1. Primer coat: for applied to aluminum for adhesion between ink and aluminum
 - 2. High-Definition digital inkjet printing to create photographic reproductions of colors and textures. Printing to be continuous to aluminum profile edge.
 - 3. UV Barrier: Protective Clear Coat for UV protection against fading.
 - a. UV Fade Test: No change in 1000 hours when tested in accordance with ASTM G155 – Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials, when tested by a 3rd Party Testing Agency.

SPECIFIER NOTE:

DIZAL has more than 100 color and texture options available. The color listed below is an example of how to list the color and texture for inclusion in a project specific specification. Refer to the DIZAL Website www.dizal.com for a current listing of color and texture options

- B. Color to match DIZAL [CUMARU Variegated Light / 101-01] with a minimum of (6 to 9) differing planks to reduce repetition of print.
- C. Acceptable products: "DIZAL" digitally printed aluminum siding or architect approved equivalent prior to bid

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting performance of aluminum siding [and soffit] and related accessories.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Clean substrates of projections and substances detrimental to application.

3.3 INSTALLATION

- A. General: Comply with manufacturer's written installation instructions applicable to products and applications indicated unless more stringent requirements apply.
 - 1. Screw in the center of the slot while leaving a 1/16" (0,16 cm) gap between screw head and plank to allow thermal movement.
- B. Install aluminum siding [and soffit] and related accessories according to manufacturer recommendations

SPECIFIER NOTE:

Wind Load Testing is performed with fasteners spaced at 16 inches on center, other fastener space may be appropriate for a specific project. Contact a DIZAL Representative to determine what is appropriate.

- 1. Install fasteners no more than 16 inches o.c.
Where plank ends butt together (fasten each plank with 1 set screw, fastened through the metal) locate set screw so that plank movement is allowed at ends opposite the butt joint.
 - 2. Allow 3/16 inch for expansion and contraction between trim and planks.
- C. Where aluminum siding contacts dissimilar metals, protect against galvanic action by painting contact surfaces with primer or by applying sealant or tape or installing nonconductive spacers as recommended by manufacturer for this purpose.

3.4 ADJUSTING AND CLEANING

- A. Remove damaged, improperly installed, or otherwise defective materials and replace with new materials complying with specified requirements.
- B. Clean finished surfaces according to manufacturer's written instructions and maintain in a clean condition during construction.

END OF SECTION

DISCLAIMER:

This Specification have been written as an aid to the professionally qualified Specifier and Design Professional. The use of this Guide requires the sole professional judgment and expertise of the qualified Specifier and Design Professional to adapt the information to the specific needs for the Building Owner and the Project, to coordinate with their Construction Document Process, and to meet all the applicable building codes, regulations and laws. DIZAL INC. EXPRESSLY DISCLAIMS ANY WARRANTY, EXPRESSED OR IMPLIED, INCLUDING THE WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE OF THIS PRODUCT FOR THE PROJECT.