

## 1 GENERAL

### 1.1 SECTION INCLUDES

- 1.1.1.1 Aluminum Siding.
- 1.1.1.2 Aluminum Soffits.
- 1.1.1.3 Thermally Broken Façade Sub-structure.
- 1.1.1.4 Aluminum trim and accessories.

### 1.2 RELATED SECTIONS

- 1.2.1 Section 05 40 00 - Cold-Formed Metal Framing: Metal framing for support of aluminum soffits.
- 1.2.2 Section 06 10 00 - Rough Carpentry: Wood stud framing, furring, and sheathing for support of aluminum soffits.
- 1.2.3 Section 07 21 00 - Building Insulation: Rigid thermal insulation installed behind siding.
- 1.2.4 Section 07600 - Flashing and Sheet Metal: Sheet metal gutters and downspouts.
- 1.2.5 Section 07900 - Joint Sealers: Sealants used in conjunction with aluminum siding installation.

### 1.3 REFERENCES

- 1.3.1 ASTM D 958 - Practice for Determining Temperatures of Standard ASTM Molds for Test Specimens of Plastics.
- 1.3.2 AAMA 2605-05 - Voluntary Specification, Performance requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels.
- 1.3.3 AAMA 2604 - Voluntary Specification, Performance requirements and Test Procedures for High Performing Organic Coatings on Aluminum Extrusions and Panels.
- 1.3.4 AAMA 2603 - Voluntary Specification, Performance requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels.
- 1.3.5 ASTM E2768-11 – Standard Test Method for Extended Duration Surface Burning Characteristics for Building Materials (30 min Tunnel Test). Results:

Zero Flame Spread, Smoke Developed Index of 5. Meets criteria for Class A fire rating.

- 1.3.6. ASTM E136 - Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C
- 1.3.7. CAN/ULC S114 – Standard method of test for determination of non-combustibility in building materials.

#### 1.4 PERFORMANCE REQUIREMENTS

- 1.4.1 Components: Design and size components to withstand dead and live loads caused by positive and negative wind pressure acting normal to plane of wall as calculated in accordance with applicable code.
- 1.4.2. Movement: Accommodate movement within system without damage to components or movement within system; movement between system and perimeter components when subject to seasonal temperature cycling; dynamic loading and release of loads; deflection of structural support framing.
- 1.4.3. Drainage: Provide positive drainage to exterior for moisture entering or condensation occurring within panel system.

#### 1.5 SUBMITTALS

- 1.5.1 Submit under provisions of Section 01300.
- 1.5.2 Product Data: Manufacturer's data sheets on each product to be used, including:
  - 1.5.2.1 Preparation instructions and recommendations.
  - 1.5.2.2 Storage and handling requirements and recommendations.
  - 1.5.2.3 Installation methods.
- 1.5.3 Shop Drawings: Indicate dimensions, layout, joints, expansion joints, construction details, methods of anchorage, and interface with adjacent materials.

- 1.5.4 LEED Submittals: Provide documentation of how the requirements of Credit will be met. In LEED v4 the use of aluminum extrusions can help buildings earn LEED points in the following categories:
- 1.5.4.1 Materials and Resources (MR)  
Building Product Disclosure and Optimization: Environmental Product Declaration Multi-Attribute Optimization (1 Point)  
[Life Cycle Assessment Report The Aluminum Association InterNACHI's Estimated Life Expectancy Chart](#)
  - 1.5.4.2 Indoor Environmental Quality (EQ)  
Low-emitting materials (EQ)  
[Mayne Coatings Corp., "Aluminum Powder Coatings VOC Free Certification Letter"](#)
  - 1.5.5.3 Innovation (IN)  
[Biophilic Design: Natural Design elements help create a calming environment Easing Minds and Boosting Facade Performance Article](#)
  - 1.5.5.4 Energy and Atmosphere (EA)  
Minimum Energy Performance Optimized Energy Performance  
[Thermal Performance of Longboard® Architectural Sub-Girt System Cladding Clips](#)
- 1.5.5 Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- 1.5.6 Verification Samples: For each finish product specified, two samples, minimum size 2 inches (51 mm) by 3-1/2 inches (89 mm), representing actual product, color, and gloss.
- 1.5.7 Manufacturer's Certificates: Certify products meet or exceed specified requirements.
- 1.5.8 Closeout Submittals: Provide manufacturer's maintenance instructions that include recommendations for periodic cleaning and maintenance of components.

## 1.6 QUALITY ASSURANCE

- 1.6.1 Manufacturer Qualifications: Minimum five years experience producing aluminum finishes of the types specified and AkzoNobel, AAMA 2604 and 2605 Certified.
- 1.6.2 Installer: Company specializing in performing Work of this section with minimum three years documented experience.
- 1.6.3 Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
  - 1.6.3.1 Finish areas designated by Architect.
  - 1.6.3.2 Do not proceed with remaining work until workmanship, color, and gloss are approved by Architect.
  - 1.6.3.3 Refinish mock-up area as required to produce acceptable work.

## 1.7 DELIVERY, STORAGE, AND HANDLING

- 1.7.1 Package and store products under cover in manufacturer's unopened packaging until ready for transport and installation.
- 1.7.2 Protect panels from accelerated weathering by removing or venting sheet plastic shipping wrap.
- 1.7.3 Store prefinished material off ground protected from weather, to prevent twisting, bending, or abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.
- 1.7.4 Prevent contact with materials capable of causing discoloration or staining.

## 1.8 PROJECT CONDITIONS

- 1.8.1 Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not fabricate products under environmental conditions outside manufacturer's absolute limits.

## 1.9 SEQUENCING

- 1.9.1 Coordinate Work with installation of windows, louvers, and adjacent components or materials.

## 2 WARRANTY

2.1 Mayne Coatings Corp. limited warranty against cracking, peeling and gloss/color retention within the guidelines stated by the American Architectural Manufacturers Association (AAMA).

2.1.1 Standard Colors:

2.1.1.1 D2000 - AAMA 2604 (5 Year Florida) 15 Year manufacturer's Warranty

2.1.1.2 D3000 - AAMA 2605 (10 Year Florida) 20 Year manufacturer's Warranty

2.1.2 Woodgrains

2.1.2.1 AAMA 2604 (5 Year Florida) 15 Year manufacturer's Warranty

### 3 PRODUCTS

#### 3.1 MANUFACTURERS

3.1.1 ACCEPTABLE MANUFACTURE: Mayne Coatings Corp., which is located at: 27575-50th Ave. ; Langley, BC; Canada V4W 0A2; Tel: 604-607-6630; Fax: 604-607-6680; Email: [requestinfo \(info@longboardproducts.com\)](mailto:requestinfo@longboardproducts.com); Web: [www.longboardproducts.com](http://www.longboardproducts.com)

ACCEPTABLE SUPPLIER: PLEASE ENTER SUPPLIER INFO

3.1.2 Substitutions: Not permitted.

3.1.3 Requests for substitutions will be considered in accordance with provisions of Section 01 60 00.

#### 3.2 MATERIALS

3.2.1 Extruded Aluminum Siding and Soffits: Longboard Wood Grain Aluminum Siding and Soffits with Alluminate bonded film finish is extruded aluminum with integrated venting system.

3.2.1.1 Stock# 101802 – 4" V-Groove Siding & Soffit – 12 pieces per box in 24' lengths

3.2.1.2 Stock# 101973 – 6" Channel Siding & Soffit – 8 pieces per box in 24' lengths

3.2.1.3 Stock# 102311 – 6" V Groove Siding & Soffits – 8 pieces per box in 24' lengths

3.2.2 Accessories: Prefinished aluminum: Provide with matching accessories and starter strips as required.

- 3.2.2.1 Stock# 101957 - 2.5 inch perforated vent strip 12' length
  - 3.2.2.2 Stock# 102304 - 2.5 inch V groove siding and soffit 12' length
  - 3.2.2.3 Stock# 102000 - J track 12' length
  - 3.2.2.4 Stock# 102044 - Wide Starter Strip 12' length
  - 3.2.2.5 Stock# 102324 - Inside Corner 12' length
  - 3.2.2.6 Stock# 102305 - Outside Corner 12' length
  - 3.2.2.7 Stock# 102611 - Finish Base & Cap (2pc set) 12' length
  - 3.2.2.8 Stock# 102612 - Base & U Cap (2pc set) 12' length
  - 3.2.2.9 Stock# 102613 - Base & Flat Cap (2pc set) 12' length
  - 3.2.3.0 Stock# 102044 - Powder Coated Wide Starter Strip 12' length
  - 3.2.3.1 Stock# 102355 - Quick Screen Clip Stainless Steel
- 3.2.4 Thermally Broken façade sub-structure for external continuous insulation: Provide clip sizes and girt lengths required.
- 3.2.4.1 Stock# 102510 – 3" L-Clip
  - 3.2.4.2 Stock# 102323 – 4" L-Clip
  - 3.2.4.3 Stock# 102511 – 5" L-Clip
  - 3.2.4.4 Custom Request – 6" L-Clip
- Stock# 102322 – Aluminum T-Girt 12'
- 3.2 FINISHES
- 3.3.1 Lead time varies based on colour and supply. Please check with manufacture for anticipated lead time for wood grain, solid and shimmer colours.
- 3.3.2 Custom Colours: designer specified custom colour finish.
- 3.3.3 Pretreatment: E-CLPS Chrome Free five stage aluminum pretreatment system. Complies with AAMA 2603 AAMA 2604 and AAMA 2605 Superior Performance Standard and meets EPA, OSHA, State and Local environmental requirements and contains no chromates, cyanides or other heavy metals. Waste treatment is usually a simple pH neutralization and disposal to the sanitary sewer.
- 3.3.4 Akzo Nobel Interpon D2000 Series electrostatically applied Architectural Powder Coatings are approved to AAMA 2604 Performance Standard.
- 3.3.4.1 Gloss Level: Standard Gloss is 30 percent, plus or minus 5 percent.
  - 3.3.4.2 Solid Colors:
- 3.3.5 Akzo Nobel Interpon D3000 Series electrostatically applied Fluromax Architectural Powder Coatings are approved to AAMA 2605 Superior Performance Standard. PLEASE NOTE: D3000 POWDER COATINGS MAY HAVE EXTENDED LEAD TIMES. CONTACT MANUFACTURER FOR DETAILS.

- 3.3.5.1 Gloss Level: Standard Gloss is 30 percent, plus or minus 5 percent.
- 3.3.5.2 Solid Colors
- 3.3.5.3 Architectural Metallics (D3000 series)
- 3.3.5.4 Architectural Wood Grains

## 4 EXECUTION

### 4.1 EXAMINATION

- 4.1.1 Do not begin installation until colors have been verified.
- 4.1.2 Verify framing members are ready to receive panel system.
- 4.1.3 If preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

### 4.2 PREPARATION

- 4.2.1 Clean surfaces thoroughly prior to installation.
- 4.2.2 Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the material under the project conditions.

### 4.3 INSTALLATION

- 4.3.1 Install in accordance with manufacturer's installation instructions.
- 4.3.2 Barrier Protection: Do not install over cementitious materials, dissimilar metals or pressure treated material without adequate barrier protection.
  - 4.3.2.1 Install building paper horizontally on walls to receive metal siding.
  - 4.3.2.2 Weather lap edges 6 inches (150 mm) and ends minimum 6 inches (150 mm).
  - 4.3.2.3 Stagger vertical joints of each layer.
  - 4.3.2.4 Securely staple, nail in place.
- 4.3.3 Fasten siding to structural supports; aligned, level, and plumb.
- 4.3.4 Locate joints over supports.
- 4.3.5 Install expansion control joints where indicated.
- 4.3.6 Use concealed fasteners unless otherwise approved by Architect.
- 4.3.7 Install siding, and accessories in accordance with best practice, with all joint members plumb and true.

4.3.8 Horizontal/Compression Joints are required for multi-story installations locate joints at floor lines. Joints are flashed minimum 1/2" (12.7 mm) breaks. Do not caulk.

4.3.8.1 Wood framed buildings of three or more floors require a compression joint or through-wall flashing at each floor.

4.3.8.2 Steel framed buildings (including reinforced concrete core with LGMF exterior walls) of more than three floors (or 45 feet/14 m) require a compression joint every 25 feet at a floor line.

#### 4.4 FIELD QUALITY CONTROL

4.4.1 After installation of cladding, check entire surface for obvious flaws or defects.

4.4.2 Replace and repair any problem areas, paying close attention to the substrate for causes of the problem.

#### 4.5 CLEANING

4.5.1 After application of soffits, clean as necessary to remove all fingerprints and soiled areas.

4.5.2 Upon completion of soffit application, clean entire area, removing all scrap, packaging, and unused materials related to this work.

#### 4.6 PROTECTION

4.6.1 Protect installed products until completion of project.

4.6.2 Touch-up, repair or replace damaged products before Substantial Completion.

#### 4.7 SCHEDULES

4.7.1 :

4.7.2 :

END OF SECTION