RINELL WOOD SYSTEMS, INC.
650 Kakoi Street, Unit 200 · Honolulu, HI 96819 · Phone: 808 834-1344 · Fax: 808 834-1409

Longboard®

PREMIUM SOFFIT & SIDING

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SECTION 07460

ALUMINUM SIDING AND SOFFITS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Aluminum Siding.

B. Aluminum Soffits.

C. Aluminum Thermally Broken Backframing System.

D. Aluminum trim and accessories.

1.2 RELATED SECTIONS

A. Section 05400 - Cold-Formed Metal Framing: Metal framing for support of aluminum soffits.

B. Section 06100 - Rough Carpentry: Wood stud framing, furring, and sheathing for support of aluminum soffits.

C. Section 07210 - Building Insulation: Rigid thermal insulation installed behind siding.

D. Section 07600 - Flashing and Sheet Metal: Sheet metal gutters and downspouts.

E. Section 07900 - Joint Sealers: Sealants used in conjunction with aluminum siding installation.

1.3 REFERENCES

A. ASTM D 958 - Practice for Determining Temperatures of Standard ASTM Molds for Test Specimens of Plastics.

B. AAMA 2605-05 - Voluntary Specification, Performance requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels.

C. AAMA 2604 - Voluntary Specification, Performance requirements and Test Procedures for High Performing Organic Coatings on Aluminum Extrusions and Panels.

D. AAMA 2603 - Voluntary Specification, Performance requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels.

1.4 PERFORMANCE REQUIREMENTS

A. 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.

B. 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.

C. Drainage: Provide positive drainage to exterior for moisture entering or condensation occurring within panel system.

1.5 SUBMITTALS

A. Submit under provisions of Section 01300.

B. Product Data: Manufacturer's data sheets on each product to be used, including:
1. Preparation instructions and recommendations.
2. Storage and handling requirements and recommendations.
3. Installation methods.

C. Shop Drawings: Indicate dimensions, layout, joints, expansion joints, construction details, methods of anchorage, and interface with adjacent materials.

D. LEED Submittals: Provide documentation of how the requirements of Credit will be met:
1. EAc1 Energy & Atmosphere: Provide documentation on how the aluminum siding back framing system can reduce the design energy consumption and/or cost. (LEED Form).
2. MRc2 Construction Waste Management: For products being recycled, documentation of total weight of project waste diverted from landfill. (LEED Form).
3. MRc5 Local and Regional Materials: Product Data for Credit MR 5.1 and Credit MR 5.2. Submit data, including location and distance from project of material manufacturer and point of extraction, harvest or recovery for main raw material. (LEED Form).
4. MRc8 Durable Building: Provide documentation on how the use of aluminum siding/soffit will help increase the building's service life. (LEED Form).
5. EQc4.2 Low Emitting Materials - Provide documentation on how the powder coating on the aluminum siding/soffit indoors has no VOC's and will not contribute to air pollution/ozone depletion. (VOC Certification Letter).
6. EQc7.1 Thermal Comfort: Provide documentation on how the aluminum siding backframing system, which allows for external insulation, helps the building to maintain an indoor level of comfort at greater energy efficiency. (LEED Form).
7. IDc1.1 Innovation in Design: Provide documentation on how the use of aluminum siding/soffit with a powder coated finish supports innovation in design. (LEED Form).

E. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.

F. 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.

G. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

H. Closeout Submittals: Provide manufacturer's maintenance instructions that include recommendations for periodic cleaning and maintenance of components.

1.6 QUALITY ASSURANCE

A. Manufacturer Qualifications: Minimum five years experience producing aluminum finishes of the types specified and AkzoNobel, AAMA 2605 and 2605 Certified.

B. Installer: Company specializing in performing Work of this section with minimum three years documented experience.

C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
   1. Finish areas designated by Architect.
   2. Do not proceed with remaining work until workmanship, color, and gloss are approved by Architect.
   3. Refinish mock-up area as required to produce acceptable work.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Package and store products under cover in manufacturer's unopened packaging until ready for transport and installation.

B. Protect panels from accelerated weathering by removing or venting sheet plastic shipping wrap.

C. Store prefinished material off ground protected from weather, to prevent twisting, bending, or abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.

D. Prevent contact with materials capable of causing discoloration or staining.

1.8 PROJECT CONDITIONS

A. 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 COORDINATION

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

1.10 WARRANTY

A. Mayne Coatings Corp. limited warranty against cracking, peeling and gloss/color retention within the guidelines stated by the American Aluminum Manufactures Association (AAMA).
   1. Standard Colors:
      a. D2000 - AAMA 2604 (5 Year Florida) 15 Year manufacturer's Warranty
      b. D3000 - AAMA 2605 (10 Year Florida) 20 Year manufacturer's Warranty
   2. Woodgrains
      a. AAMA 2604 (5 Year Florida) 15 Year manufacture's Warranty

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: Mayne Coatings Corp., which is located at: 27575-50th Ave. ; Langley, BC; Canada V4W 0A2; Tel: 604-607-6630; Fax: 604-607-6680; Email: request info (info@maynecoatings.com); Web: www.maynecoatings.com

B. Substitutions: Not permitted.

C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 MATERIALS

A. Extruded Aluminum Siding and Soffits: Longboard Wood Grain Aluminum Siding and Soffits with Alluminate bonded film finish is extruded aluminum with integrated venting system.
1. Size:
   a. Width:
      1) 4 inch V Groove Siding and Soffit.
      2) 6 inch V Groove Siding and Soffit.
      3) 6 inch Channel Siding and Soffit.
   b. Length:
      1) 12 feet.
      2) 24 feet.

B. Accessories: Prefinished aluminum: Provide with matching accessories and starter strips as required.
1. J Track.
2. J Track Non-Tempered.
3. Craftsman Single J Trim.
4. Craftsman Double J Trim.
5. Wide Starter Strip.
6. U Cap (pc 1 of 2) used with mill finish 102001 Base.
7. Flat Cap (pc 1 of 2) used with mill finish 102001 Base.
8. Inside Corner.
9. Outside Corner.
10. Closer Trim (pc 1 of 2) used with mill finish 102312 Closer Base.
11. Craftsman Closer Trim (pc 1 of 2) used with mill finish 102312 Closer Base.
12. Base (pc 2 of 2) used with Profile 102002 and 102315.
13. Closer Base (pc 2 of 2) used with Profile 102313 and 102314.
14. Rain Screen.

C. Thermally Broken Backframing system: Provide clip sizes and girt lengths required.
1. Thermally Broken Clip for external insulation:
   a. 2 inch Clip System.
   b. 3 inch Clip System.
   c. 4 inch Clip System.
   d. 5 inch Clip System.
   e. 6 inch Clip System.
2. Girts: Extruded aluminum:.
   a. 12 foot Standard Length.

2.3 FINISHES

A. 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.

B. Akzo Nobel Interpon D2000 Series electrostatically applied Architectural Powder Coatings are approved to AAMA 2604 Performance Standard.
   1. Gloss Level: Standard Gloss is 30 percent, plus or minus 5 percent.
   2. Solid Colors:
      a. Bone White.
      b. Milk White.
      c. Sandstone.
      d. Ivory.
      e. Light Gray.
      f. Summer Yellow.
      g. Dove Gray.
      h. Seawolf.
      i. Medium Bronze.
      j. Antique Bronze.
      k. Smoke Gray.
      l. Night Hawk Gray.
      m. Black.
      n. Charcoal.
      o. Atlantic Gray.
      p. Classic Brown.
      q. Hartford Green.
      r. Dark Ivy.
      s. Dark Green.
      t. Sepia Brown.
      u. Interstate Green.
      v. Light Green.
      w. Java Brown.
      x. Redwood.
      y. Brick Red.
      z. Claret Red.
      aa. Boysenberry.
      bb. Military Blue.
      cc. Medium Blue.
      dd. Deep Blue.
      ee. Midnight Blue.
      ff. Custom Color as selected by the Architect.
   3. Architectural Metallics:
      a. Anodic Ice.
      b. Venus.
      c. Slate.
      d. Seafoam Mist.
      e. Saturn.
      f. Platinum Ice.
      g. Vega.
      h. Sapphire Ice.
      i. Panther.
      j. Moon Stone.
      k. Hartford Mist.
      l. Patina.
      m. Burgundy Mist.
      n. Bronze.

o. Azurite Copper.
p. Custom Color as selected by the Architect.

C. Akzo Nobel Interpon D3000 Series electrostatically applied Fluromax Architectural Powder Coatings are approved to AAMA 2605 Superior Performance Standard.
1. Gloss Level: Standard Gloss is 30 percent, plus or minus 5 percent.
2. Solid Colors:
a. Bone White.
b. Milk White.
c. Sandstone.
d. Ivory.
e. Light Gray.
f. Summer Yellow.
g. Dove Gray.
h. Seawolf.
i. Medium Bronze.
j. Antique Bronze.
k. Smoke Gray.
l. Night Hawk Gray.
m. Black.
n. Charcoal.
o. Atlantic Gray.
p. Classic Brown.
q. Hartford Green.
r. Dark Ivy.
s. Dark Green.
t. Sepia Brown.
u. Interstate Green.
v. Light Green.
w. Java Brown.
x. Redwood.
y. Brick Red.
z. Claret Red.
aa. Boysenberry.
bb. Military Blue.
cc. Medium Blue.
dd. Deep Blue.
ee. Midnight Blue.
ff. Custom Color as selected by the Architect.
3. Architectural Metallics:
a. Fluoromax Silver.
b. Fluoromax Aluminum.
c. Fluoromax Slate.
d. Fluoromax Surf.
e. Fluoromax Steel.
f. Fluoromax Quartz.
g. Fluoromax Vega.
h. Fluoromax Azure.
i. Fluoromax Panther.
j. Fluoromax Carbon.
k. Fluoromax Moss.
l. Fluoromax Patina.
m. Fluoromax Burgundy.
n. Fluoromax Bronze.

o. Fluoromax Copper.
p. Custom Color as selected by the Architect.

D. Super Durable Powder Coatings: Alluminate Premium Wood Finishes use a polyurethane powder coat with ink based wood grain patterns sublimated into the base powder effectively tattooing the powder. The combined effect creates all the aesthetic aspects of real wood while offering the same environmental advantages of powder coated finishes.
1. Wood Grained
a. National Mahogany.
b. Light Natural Walnut
c. Dark Natural Walnut.
d. Table Walnut
e. Dark Teak.
f. Light Teak.
g. Light Cedar.
h. Dark Fir.
i. Light Fir.
j. Dark Ash.
k. Light Ash.
l. Dark Cherry.
m. Light Cherry.
n. Dark Knotty Pine.
o. Light Knotty Pine.

2.4 FABRICATION

A. Prepare surfaces, pre-treat and coat components in accordance with AAMA 2604 and 2605 Quality Standards and applicable European standards for the coating material specified.

B. Wrap and package coated components using methods suitable for transit and covered site storage without damage.

PART 3 EXECUTION

3.1 EXAMINATION

A. Do not begin installation until colors have been verified.

B. Verify framing members are ready to receive panel system.

C. If preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the material under the project conditions.

3.3 INSTALLATION

A. Install in accordance with manufacturer's installation instructions.

B. Barrier Protection: Do not install over cementitious materials, dissimilar metals or pressure treated material without adequate barrier protection.
   1. Install building paper horizontally on walls to receive metal siding.
   2. Weather lap edges 6 inches (150 mm) and ends minimum 6 inches (150 mm).
   3. Stagger vertical joints of each layer.
   4. Securely staple, nail in place.

C. Fasten siding to structural supports; aligned, level, and plumb.

D. Locate joints over supports.

E. Install expansion control joints where indicated.

F. Use concealed fasteners unless otherwise approved by Architect.

G. Install soffits, and accessories in accordance with best practice, with all joint members plumb and true.

3.4 FIELD QUALITY CONTROL

A. After installation of soffits, check entire surface for obvious flaws or defects.

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

3.5 CLEANING

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

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

3.6 PROTECTION

A. Protect installed products until completion of project.

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

END OF SECTION