Geolam
Architectural Eco-Technology

architectural trim | cladding | decking

SECTION 07464 (07 46 43)

COMPOSITE CLADDING

Display hidden notes to specifier. (Don't know how? Click Here)

** NOTE TO SPECIFIER ** Geolam; sustainable wood-plastic composite products.
This section is based on the products of Geolam, which is located at:
9 Shorncliffe Ave.
Toronto, ON, Canada M4V 1S9
Toll Free Tel: 877-627-3530
Tel: 416-548-7450
Fax: 416-548-7894
Email:request info (info@geolaminc.com)
Web:www.usageolaminc.com

[Click Here] for additional information.
Geolam® is a sustainable hybrid wood-plastic/aluminum composite used primarily for architectural elements, cladding and decking. Made of 70 to 80 percent recycled materials and 100 percent recyclable, Geolam is an ecofriendly wood alternative and a sophisticated life cycle choice. Geolam technology reduces moisture content of wood fibers to 0 percent, producing an enduring and durable board protected from warping, mold, mildew and color fading.

Thanks to its quality and exceptional lifespan, Geolam has become the leading global brand in the field of hybrid aluminum wood-plastic products and offers the most durable, aesthetically pleasing and eco-friendly building material available. It has been used in thousands of installations around the world over the past 35 years.

PART 1 GENERAL

1.1 SECTION INCLUDES

** NOTE TO SPECIFIER ** Delete, add items below not required for project.

A. Hybrid Aluminum/WPC Cladding/Soffit

1.2 RELATED SECTIONS

** NOTE TO SPECIFIER ** Delete any sections below not relevant to this project; add others as required.

A. Section 06100 - Rough Carpentry.

B. Section 06160 - Sheathing.

1.3 REFERENCES

** NOTE TO SPECIFIER ** Delete references from the list below that are not actually required by the text of the edited section.

A. ASTM International (ASTM):

B. ASTM E136 - Standard Test Method for Assessing Combustibility of Materials Using a Vertical Tube Furnace at 750 degrees C

C. JIS Japanese International Standards (JIS).

D. DIN German Institute for Standardization (DIN).

1.4 SUBMITTALS

A. Submit under provisions of Section 01300.

B. Product Data: Manufacturer's data sheets on each product to be used, including:
1. Manufacturer's printed installation instructions, showing required preparation and installation procedures.
2. Storage and handling requirements and recommendations.
3. Installation methods including anchorage details.
4. Cleaning and maintenance instructions.

C. Shop Drawings: Provide shop drawings indicating details of construction, anchorage and installation. Include statement that anchorage methods comply with applicable building codes and loadings for the type of framing and condition of the supporting construction and details.

D. Verification Samples: For each product specified, two samples 6 inches in length, representing materials, colors, patterns, textures, and finishes to be installed.
1. Closeout Submittals: Documentation of manufacturer's warranty.

1.5 QUALITY ASSURANCE

A. Installer: Minimum 2 years' experience with similar technologies

** NOTE TO SPECIFIER ** Include a mock-up if the project size and/or quality warrant the precaution. When deciding on the extent of the mock-up, consider the major different types of work on the project.

B. 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 and appearance are approved by Architect.
3. Subject to approval by Architect, mock-up may be retained as part of finish work.

C. Pre-Installation Meetings: Conduct pre-installation meetings to verify project requirements, substrate conditions, construction documents, details and manufacturer's warranty requirements.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Delivery: Deliver materials in manufacturer's original, unopened, undamaged rolls/pallets with identification labels intact.

B. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.

1.7 PROJECT CONDITIONS

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

1.8 WARRANTY

A. Manufacturer's Warranty: Manufacturer's standard limited 10-year non-prorated warranty.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: Geolam, which is located at: 9 Shorncliffe Ave.; Toronto, ON, Canada M4V 1S9; ASD Toll Free Tel: 877-627-3530; Tel: 416-548-7450; Fax: 416-548-7894; Email: request info (info@geolaminc.com); Web: www.geolaminc.com.

** NOTE TO SPECIFIER ** Delete one of the following two paragraphs: coordinate with requirements of Division 1 section on product options and substitutions.

B. Substitutions: Not permitted.

B. Requests for Substitutions: Considered in accordance with provisions of Section 01600.

** NOTE TO SPECIFIER ** Delete article if not required.

2.2 HYBRID ALUMINUM/WPC CLADDING

** NOTE TO SPECIFIER ** Delete paragraphs not required.

A. Basis of Design: Vertigo 5010 Wood Hybrid Cladding as manufactured by Geolam.
1. Hot co-extrusion of aluminum and wood composite.
2. Physical Properties:
   a. Meets IBC 2018 Code Section 703.5.2 definition of “composite noncombustible” and ASTM E136 Appendix Section X1.2 Criteria B.
   b. Aluminum Type: A60636 Per JISH4100.
   c. Surface Finish: AA10 Per JIS H8601.
   d. Tensile Strength: 150 N/mm2 or better.
   e. Load Bearing Capacity: 110 N/mm2 or better.
   f. Bonding Layer: Olefin Resin.
   g. Surface Layer: Regenerated wood flour resin containing PP based Non-halogenated flame retardant.
   h. Accelerated Weathering Test: DIN ISO 16474-2 Passed.
   i. Accelerated Weathering Test: JIS A 1415 5000 hours. 2.1 DE.
   j. Salt Spray Test: DIN EN ISO 9227 NSS.
   k. Sulfur Dioxide Corrosion Testing: DIN EN ISO 3221.
   l. Color Stability Test: JIS K5400.
   m. Aging Test: JIS K1571-2010.
   n. Core in Anodized Aluminum Alloy: A60635S-T5.
3. Width: 7-1/4 inches (184 mm). Exposure: 6-1/2 (165 mm).
4. Depth: 1/2 inches (13 mm).

** NOTE TO SPECIFIER ** Delete length option not required.

5. Length: 12 ft (3658 mm).

** NOTE TO SPECIFIER ** Custom lengths up to 19 ft 8 inches ft (5992 mm) based on quantity.

6. Length (ft / mm): _____.
7. Weight: 0.080 lbs. per ft.

** NOTE TO SPECIFIER ** Delete colors not required.

8. Color: Teak.
9. Color: Rosewood.
10. Color: Ebony.
11. Color: Moleskin.

B. Basis of Design: Vertigo 5011 Wood Hybrid Cladding as manufactured by Geolam.
1. Hot co-extrusion of aluminum and wood composite.
2. Physical Properties:
   a. Meets IBC 2018 Code Section 703.5.2 definition of “composite noncombustible” and ASTM E136 Appendix Section X1.2 Criteria B.

b. Aluminum Type: A60636 Per JISH4100.
c. Surface Finish: AA10 Per JIS H8601.
d. Tensile Strength: 150 N/mm2 or better.
e. Load Bearing Capacity: 110 N/mm2 or better.
f. Bonding Layer: Olefin Resin.
g. Surface Layer: Regenerated wood flour resin containing PP based Non-halogenated flame retardant.
h. Accelerated Weathering Test: DIN ISO 16474-2 Passed.
i. Accelerated Weathering Test: JIS A 1415 5000 hours. 2.1 DE.
j. Salt Spray Test: DIN EN ISO 9227 NSS.
k. Sulfur Dioxide Corrosion Testing: DIN EN ISO 3221.
l. Color Stability Test: JIS K5400.
m. Aging Test: JIS K1571-2010.
n. Core in Anodized Aluminum Alloy: A60635S-T5.

3. Width: 5-1/8 inches (130 mm).
4. Depth: 1/2 inches (13 mm).

** NOTE TO SPECIFIER ** Delete length option not required.

5. Length: 12 ft (3658 mm).

** NOTE TO SPECIFIER ** Custom lengths available up to 19’ 8” (5992 mm). based on quantity

6. Length (ft / mm): _____.
7. Weight: 0.52 pounds plf.

** NOTE TO SPECIFIER **Delete colors not required.

8. Color: Teak.
9. Color: Rosewood.
10. Color: Ebony.
11. Color: Moleskin.

PART 3 EXECUTION

3.1 EXAMINATION AND PREPARATION

A. Examine existing conditions and do not proceed with installation until substrates have been properly prepared and deviations from manufacturer's recommended tolerances are corrected. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

B. If preparation is the responsibility of another installer, notify Architect in writing of deviations from manufacturer's recommended installation tolerances and conditions.

C. Commencement of installation constitutes acceptance of conditions.

3.2 INSTALLATION

A. Install in accordance with manufacturer's written instructions and recommendations including but not limited to the following.

B. Protect installed work from damage due to subsequent construction activity on the site.

C. Clean using materials recommended by the manufacturer to remove stains, dirt and debris prior to final acceptance.

END OF SECTION