

## SECTION 07 46 16

### LINEAR METAL PLANKS

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. Extent of Wall Panels System is shown on drawings and schedules
- B. Drawings and general provisions of the Contract Documents apply to work of this section.

##### 1.2 SUMMARY

- A. Section include:
  - a. Aluminum Siding
  - b. Aluminum Soffits
  - c. Accessories including starter trim, perimeter molding, inside corners, outside corners
- B. Related sections
  - a. Section 05 40 00 – Cold Formed Metal Framing
  - b. Section 06 10 00 – Rough Carpentry
  - c. Section 07 21 00 – Building Insulation
  - d. Section 07 62 00 – Sheet Metal Flashing and Trim
  - e. Section 07 92 00 – Joint Sealants
- C. Alternates
  - a. Prior Approval: Unless otherwise provided for in the contract documents, proposed product substitutes may be submitted no later than 10 working days prior to the date established for receipt of bids. Approval of a proposed substitution is contingent upon the Architect's review of the proposal for acceptability and approved products will be set forth by addenda
    - i. If substitute products that have not been approved by Addenda are included in a bid, the specified products shall be provided without additional compensation.
  - b. Submittals: That do not provide adequate information for the product evaluation will not be considered. The proposed substitution must meet all requirements of this section, including but not limited to: Single source materials supplier (if specified in section 1.05); panel design, size, composition, color and finish; suspension system component profiles and sizes; compliance with the referenced standards

##### 1.3 REFERENCES

- A. AAMA 2605-05 - Voluntary Specification, Performance requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels
- B. AAMA 2604 – Voluntary Specification, Performance requirements and Test Procedures for High Performing Organic Coatings on Aluminum Extrusions and Panels
- C. AAMA 2603 – Voluntary Specification, Performance requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels
- D. CAN/ULC S114 – Standard method of test for determination of non-combustibility in building materials
- E. ASTM E 84 “Standard Test Method for Surface Burning Characteristics of Building Materials”
- F. ASTM B 117 “Standard Practice for Operating Salt Spray (fog) Apparatus”.
- G. ASTM B 221 “Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes”
- H. ASTM D 659 “Method of evaluating degree of chalking of Exterior Paints”

- I. ASTM D 968 “Standard Test Methods for Abrasion Resistance of Organic coating by Falling Abrasive”
- J. ASTM D 2244 “Standard Practice for Calculation of color Tolerance and Color Differences from Instrumentally measured Color Coordinates”

## 1.4 SUBMITTALS

- A. Product Data: Manufacturer’s product data and installation instructions
- B. LEED Data: Product complies with use for achieving LEED Green Building Rating System credits. Metal Ceiling Pan products are manufactured with recycled material content that comply with credit systems available in various States / Provinces. Contact the Manufacturer for a project specific LEED letter.
- C. Shop Drawings: Submit shop drawings for wall elevations, drawn to scale and coordinating penetrations and wall mounted items. Show the following details:
  - a. Wall elevation plan layout including joint patterns and details.
  - b. Metal wall suspension system plan with appropriate components, suggested support locations and details.
  - c. Method of attachment for suspension system to building structure.
  - d. Wall coordination with light fixtures, air outlets and inlets, speakers, railings and other interfaces.
  - e. Special moldings at perimeters, rail attachments and other junctures with adjoining construction.
  - f. List of materials, dimensions, fastenings and any special details.
- D. Samples for Verification: Submit for each type of wall assembly indicated below: in sets for each color, and pattern specified, showing the full range of variations expected in these characteristics.
  - a. 12-inch long samples of each exposed molding or trim.

## 1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications:
  - a. Manufacturer shall have a minimum of 5 years’ experience in manufacturing architectural metal working
- B. Installer Qualifications:
  - a. Installation work to be performed by a firm whose personnel have no less than three (3) years of successful experience on projects of similar size, requirements and complexity.
- C. Mock-Up:
  - a. If requested, provide a mock-up for each form of construction and finish required to verify selections made under sample submittals and to demonstrate aesthetic effects and qualities of materials and execution. Build mock-up to comply with the following minimum requirements, using materials indicated for completed work:
    - i. Locate mock-up in the location and the size as directed by the Architect. Minimum mock-up size to be 10’x10’ unless otherwise specified.
    - ii. Notify Architect at least seven days in advance of dates when the mock-ups will be constructed.
    - iii. Do not proceed with remaining work until workmanship, color and sheen are approved by the Architect.
    - iv. Refinish mock-up area as required to produce acceptable work.

## 1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to the project site in manufacturer’s original crating, properly labeled for identification and installation purposes.
- B. Store products in manufacturer’s unopened packaging until ready for installation clearly labelled with the following information: project number, item number and quantity, manufacturer’s name and address, client name and address and site address.
- C. Store components in a fully enclosed dry space where they will be protected against damage from moisture, direct sunlight, surface contamination and other construction activities.

- D. Comply with prescribed stacking instructions to prevent damage to the components.
- E. Handle components in a manner to prevent damage to the surfaces and edges and prevent distortion and other physical damage.

## 1.7 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity and ventilation) within limits recommended by manufacturer for optimum results.
- B. Allow materials to reach ambient temperature and humidity for a minimum of 24 hours (48 hours recommended), prior to starting installation.
- C. Do not install products in exterior space unless the system has been specifically designed and approved for exterior application.

## 1.8 WARRANTY (LIMITED)

- A. Metal Wall Panels: Submit a written warranty executed by the manufacture agreeing to repair or replacement of acoustical panels that fail within the warranty period, Failures include but are not limited to:
  - a. Metal Panels: Sagging, warping, rusting and manufacturer's defects
  - b. Metal Suspension Standard: Rusting and manufacturer's defects
- B. Warranty period for Metal Wall Panels is 1 year from date of Substantial Completion

## 1.9 MAINTENANCE & EXTRA MATERIALS

- A. Maintenance Instructions: Provide manufacturers standard maintenance and cleaning instructions for finishes provided.
- B. Extra Materials: Furnish extra materials described below matching products installed and are to be packaged with protective covering for storage and are identified with labels with labels describing contents.
  - a. Metal Wall Panel Units: Full size units equal to 1.5% of total amount installed.
  - b. Suspension System Components: Quantity of each grid and exposed component equal to 1.5% of amount installed

# PART 2 - PRODUCTS

## 2.1 MANUFACTURER

- A. Subject to compliance with requirements, provide products from the following manufacturer:  
**CARRITEC**  
575 boul. Morgan, Baie-d'Urfé, QC H9X 3T6  
Phone 514-457-7779 • Fax 514-457-5559  
Contact: [info@carritec.com](mailto:info@carritec.com)
- B. Carritec BARRANCA Series Linear Planks

## 2.2 MATERIALS AND FABRICATION

- A. **LINEAR PLANKS**
  - a. Extruded Aluminum Siding and Soffits: Carritec Planks Series Siding and Soffits with transfer of image finish is extruded aluminum with integrated venting system.
  - b. Material: Aluminum Z extrusion comply with ASTM B 221 , Alloy 6061-T5
    - i. Thickness: 0.032" OR 0.060"
    - ii. Finish: Standard: polyester baked enamel, selected from manufacturer's standard colors; Transfer of Image Wood Grain; Polyvinylidene fluoride resin (Kynar 500) Paint; Duranar, XLI; Clear Anodized. Please contact Carritec to learn more on our special high end finishes.
    - iii. Color: Custom color selected by Architect
  - c. Flame Rating: All metal pans and associated suspension systems are made entirely of noncombustible materials and to comply and meet with ASTM E 1264 for Class A materials as determined by testing identical products as per ASTM E 84.

## B. FABRICATION

- a. Planks: Planks are extruded aluminum.
- b. Plank sizes: To be extruded as a one piece unit to a maximum size of 228 inches (5791mm) in width and 4 inches (101mm) or 6 inches (152mm) in width. Field cut panels at non modular perimeter conditions, or column interfaces or as detailed specified.
- c. Accessories: All accessories are to be extruded aluminum in a finish to match Planks.
- d. Joints: Joints between Planks are watertight and without gasket. All other details including base and other termination points shall be fabricated in accordance with the architectural drawings.
- e. Tolerance: Panels shall be manufactured true to geometry as shown on plan view of architectural drawings with tolerance of  $\pm 1/16$  inch (1.5mm).
- f. Installation & Accessibility:
  - i. Plank Series: Layout panel locations and fix vertical omega channel to the building envelope substrate making plumb true and square. Planks are screwed on omega channel. Plank installation is progressive and is normally starting from lower panels and working upwards, depending on job site conditions.
- g. Accessories & Insert: Fasteners shall be concealed, non-corrosive type, as recommended by the wall panel manufacturer.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine job-site conditions for conditions that may adversely affect installation of the planks.
- B. Verify dimensions of the wall panels prior to installation to assure compatibility with job-site conditions.
- C. Verify building substrate is sound, level, and parallel prior to installation of the planks.
- D. Planks shall be inspected before installation to be free of dents, scratches and other defects prior to installation finished surfaces to assure that blemished or dented surfaces are not present prior to installation.

### 3.2 INSTALLATION

- A. Install wall panels in accordance with manufacture's written instructions and approved shop drawings.
- B. All support blocking structures to be supplied by general contractor.
- C. Wall panels shall be erected plumb, level, square, true to line, secured and in proper alignment and relationship to other work of other trades.

### 3.3 PRODUCT HANDLING

- A. Delivery: Deliver wall components to job site in unopened containers designed to protect product on site as well as in transit, properly identified with product manufacturer's name, trade name and other applicable identification.
- B. Storage: Store all materials in dry and protected locations until installation.
- C. Clean, cotton white gloves shall be used for final installation.
- D. Remove and replace units that have been damaged or cannot be satisfactorily cleaned to the owner's or architect's acceptance, at no additional cost to the owner. To clean materials follow manufacturer's written cleaning procedures.

**- END OF SECTION -**