**SECTION 07 42 13**

**Extruded Plank System**

**PART 1 - GENERA**L

**1.1 RELATED SECTIONS**

1. Section 05 40 00 – Cold-formed Metal Framing: Metal framing for support of plank.
2. Section 01 74 21 – Construction/Demolition Waste Management and Disposal
3. Section 06 10 00 – Rough Carpentry
4. Section 07 62 00 – Sheet Metal Flashing and Trim
5. Section 07 92 00 – Joint Sealants

**1.2 REFERENCES**

1. The publications listed below form a part of this specification to the extent referenced. Publications are referenced within the text by the basic designation only.
2. American Welding Society (AWS):
3. Standard D1.2 – Structural Welding Code – Aluminum
4. American Architectural Manufacturers Association (AAMA):
5. Aluminum finishes AAMA 2604 Powder Coat: High-performance super durable polyester resin
6. Aluminum finishes AAMA 2605 Superior-performance coating in either 70% (Polyvinylidene Fluoride) liquid paint coating, 70% PVDF 2 coat FEVE (Fluoroethylene Vinyl Ether) powder coating

**1.3 QUALITY ASSURANCE**

A. Applicable standards:

1. SMACNA: Architectural Sheet Metal Manual

2. AAMA 2604: Voluntary specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels

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

4. ASTM B209: Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate

5. ASTM C423: Standard Test Method for Surface Burning Characteristics Building Materials

6. ASTM E2768-11: Standard Test Method for Extended Duration Surface Burning Characteristics for Building Materials (30 min test tunnel). Results: Zero Flame Spread, Smoke Developed Index of 5. Meets Criteria for Class A Fire Rating.

B. Manufacturer's qualifications:

1. Manufacturer has a minimum of 5 years of experience in manufacturing extruded plank systems of this nature. The aluminum planks specified in this section shall be produced in a professional factory environment.

**1.4 LEED**

1. Category – Material & Resources
   1. MR Credit 2.1, 2.2 – Construction Waste Management Divert 50% or 75% from Disposal
2. Category – Innovation and Design Process
   1. ID Credit – Biophilic Design (Wood Grain Powder Coating Only)

**1.5 PRODUCT DELIVERY, STORAGE AND HANDLING**

A. Delivery: Deliver extruded plank system to job site properly packaged to provide protection against transportation damage.

B. Handling: Exercise extreme care in unloading, storing, and erecting extruded plank system to prevent bending, warping, twisting, scratches, and surface damage.

C. Storage: Store all materials and accessories above ground on well skidded platforms or crates.

**1.5 WARRANTY**

1. A guaranteed warranty of 15 (fifteen) years is to be signed and issued in the name of the owner to cover the extruded plank material. This warranty is limited to replacement of defective material only. This warranty does not cover faulty installation which is to be rectified by the installing contractor. The manufacturer is not liable for incidental expenses or consequential damages. See warranty details for more information.

**PART 2 - PRODUCTS**

**2.1 APPROVED MANUFACTURERS**

1. Specifications are based on Extruded Plank System – Alumination Architectural Products is located at 2108 E. Richmond Avenue, Fort Worth, TX 76104. 817.678.4440. [www.alumination-ap.com](http://www.alumination-ap.com)
2. Specifications are acceptable assuming they comply with these specifications, are submitted based on 01XXXX - Substitution Requirements and have a minimum of 5 years’ experience.

**2.2 MATERIALS**

A. Extruded Aluminum Plank. Nominal 0.50” depth extruded aluminum, 4” width plank. .063 nominal thickness, 6063-T5 alloy.

B. Metal plank system style: Vertical or Horizontal Plank system. Interlocking extruded plank with concealed fasteners.

C. Optional - Planks to have mechanically fastened end caps attached to extruded screw bosses with provided concealed fasteners.

D. Extruded Plank gauge: .063” nominal thickness in aluminum extrusion 6063 alloy

E. Trim: Standards are two-piece extruded j-trim and/or corner trim with nominal thickness between .024”- .050”. Options available.

F. Finish: Electrostatically apply powder coating to 2 to 4 mil thickness per manufacturers recommendations.

**PART 3 – EXECUTION**

**3.1 FABRICATION**

1. Fabricate and finish extruded plank.
2. Package and deliver with proper packaging to prevent damage and handle with care. Store materials if needed once on site.

**3.2 SURFACE CONDITIONS**

A. Examination:

1. Inspect installed work of other trades and verify that such work is complete to a point where this work may continue. Ensure all waterproofing components that will be covered have been completed.
2. Verify that installation may be made in accordance with approved shop drawings and manufacturer's instructions.

**3.3 INSTALLATION**

A. Install extruded plank system so that it is without waves, warps, buckles, fastening stresses or distortion.

B. Install extruded plank system in accordance with manufacturer's instructions.

C. Provide concealed anchors whenever possible. Rivets may be used where concealed anchors are not feasible.

D. Install planks plumb, level and straight with seams parallel but not adjoining, conforming to design as indicated.

**3.4 CLEANING AND PROTECTION**

1. Dispose of excess materials and remove debris from site.
2. Clean work in accordance with manufacturer's recommendations.
3. Protect work against damage until final acceptance. Replace or repair to the satisfaction of the architect and work that becomes damaged prior to final acceptance.

1. Upon completion of installation, maintain life of product by properly cleaning annually. Refer to warranty details for more information.

**END OF SECTION**