

SECTION 07 40 00

ALUMINUM PLATE TRIM

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes
 - 1. Preformed, pre-finished aluminum plate panels.
 - 2. Accessories.
- B. Related Sections
 - 1. Section 05 12 00 - Structural Steel
 - 2. Section 06 10 00 - Rough Carpentry
 - 3. Section 07 92 00 - Joint Sealants

1.02 REFERENCES

- A. Aluminum Association (AA)
- B. American Society for Testing and Materials (ASTM)
 - 2. ASTM B209: Specification for Aluminum and Aluminum-Alloy Sheet and Plate

1.03 DESIGN REQUIREMENTS

- A. Design panels with maximum allowable deflection of support members not exceeding L/180 of the unsupported span when exposed to wind load of 40 psf and/ or the Building Code in effect.
- B. Panel support system shall allow for free-floating panel installation.
- C. Design the system to effect a positive mechanically fastened assembly to substructure, not dependent on adhesives.
- D. Sealed joints shall allow free and silent movement of panels during expansion and contraction while preventing uncontrolled penetration of moisture.
- E. Manufacture, installation, and sealing shall prevent deformation of exposed surfaces.
- F. Design panel system to accommodate substructure tolerance of +0 to -1/8 inch.

1.03 SUBMITTALS

- A. Submit the following in accordance with Section 01330 [Other]:
 - 1. Product Data: Manufacturer's product literature for the panel specified.
 - 2. Shop Drawings: Indicate thickness and dimension of parts, fastening and anchoring methods, and detail and location of joints and gaskets; including joints necessary to accommodate thermal movement.
 - 3. Samples
 - a. 2 samples of each finish in color or colors selected, 3 inch by 5 inch minimum.
 - 4. Affidavit certifying that the material meets the requirements specified.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Minimum of 5 years experience in manufacturing panels similar to those specified.
- B. Installer Qualifications: Acceptable to panel manufacturer.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to the project site in manufacturer's original crating, properly labeled for identification and installation purposes. Store materials in accordance with panel manufacturer's recommendations. Handle materials carefully to avoid damage to panels and finishes.

1.06 WARRANTY

- A. The Contractor shall warrant the materials to be free of faults and defects in accordance with the General Conditions, except that the warranty shall be extended by paint manufacturer's standard multi-year warranty. The warranty shall be in writing and shall be signed by the manufacturer.

PART 2 – PRODUCTS

2.01 MANUFACTURER

- A. Firestone Metal Products / UNACLAD
- B. Other manufacturers seeking approval of their products must comply with requirements of Section 01 00 00 during construction.

2.02 PANEL TYPE

- A. UNA-FAB Aluminum Plate Panel System Series 3000.

2.03 MATERIALS AND FABRICATION

- A. Aluminum Plate: ASTM B209, Aluminum Association specification sheet 3003-H14/3105-H14 for painted finish.
 - 1. Thickness: 0.90 inch.
- B. Break-form edges at right angles to the wall plane, and weld and grind corners smooth to ensure watertightness.
- C. Reinforce panels with stiffeners where applicable to meet design criteria.
- D. Tolerances
 - 1. Panel lines, breaks, and angles shall be sharp and true, and surfaces shall be free from warp or buckle.

2.04 ACCESSORIES

- A. Clip Angles/Channels: 1/8 inch thick formed metal, compatible with the panel skin.

- B. Fasteners: As recommended by the panel manufacturer.

2.05 FINISHES

- A. Spray-Applied Fluorocarbon Resin: Hylar 5000™/Kynar 500®.
 - 1. Custom Color: Selected by Architect/Engineer.
 - 2. Number of Coats: 2-coat.
 - 3. Provide factory applied strippable plastic film for protection during fabrication and installation.

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Examine the areas and conditions under which materials are to be installed and notify the Contractor/Construction Manager in writing of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected.
- B. Surfaces to receive panels shall be even, smooth, sound, clean, dry, and free from defects.

3.02 PREPARATION

- A. Obtain field measurements prior to completion of manufacturing and finishing. When field measurements are not possible, provide method of installation which will allow minor adjustment in the field.

3.03 INSTALLATION

- A. Erect panels plumb, level, and true.
- B. Anchor panels securely in place, in accordance with final approved shop drawings.
- C. Comply with panel manufacturer's instructions for installation of concealed fasteners.
- D. Maximum deviation from vertical-horizontal alignment of installed panels shall be 1/4 inch in 20 feet.

3.04 ADJUSTING AND CLEANING

- A. Repair panels with minor damage.
- B. Remove panels damaged beyond repair and replace with new panels to match adjacent undamaged panels.
- C. Clean exposed panel surfaces promptly after installation in accordance with recommendations of panel and coating manufacturers.
- D. Remove protective film immediately after installation.

END OF SECTION 07 40 00