

SECTION - 07411 PREFORMED (MANUFACTURED) ROOF & WALL PANELS

All work shall conform to the Drawings, MDOT Standard Specifications and the following:

**PART 1 – GENERAL**

**1.01 DESCRIPTION**

This work includes, but is not necessarily limited to, furnishing and installation of all preformed metal roofing and walls, and accessories as indicated Pier 2 Berth 2 Gangway drawings and specifications herein.

**1.02 SUBMITTALS**

- A. Product Data:
  - 1. Submit Manufacturer's technical product data, installation instructions and recommendations for each type of roofing panel required. include data substantiating that material comply with requirement.
- B. Samples:
  - 1. Prior to ordering products, submit Manufacturer's standard color Samples for Resident's selection.
  - 2. Prior to starting work, submit (one) 12" long Panel Sample showing shape and a representative color chip for Resident's acceptance.
- C. Shop Drawings:
  - 1. Show panel layout, trim installation, and panel attachment.
- D. Site Conditions:
  - 1. Provide completed site condition form for the specified finish to suit project conditions.

**1.03 QUALITY ASSURANCE**

- A. Installer's Qualifications:
  - 1. Installation of panels and accessories by installers with a minimum of 5 years experience on panel installation of this nature.
- B. Manufacturer's Qualifications
  - 1. Manufacturer shall have a minimum of 10 years experience supplying metal roofing to the region where the work is to be done.
  - 2. Manufacturer shall provide proof of \$2,000,000 liability insurance for their metal roof system and comply with current independent testing and certification as specified. See specific product literature for testing information.
  - 3. Panel manufacturers without full supporting literature, Flashing & Details Guides, Guide Specifications and Technical Support shall not be considered equal to the specified product.
- C. Regulatory Agency Requirements
  - 1. Comply with UBC and local Building Code requirements if more restrictive than those specified herein.

**1.04 PRODUCT DELIVERY, STORAGE AND HANDLING**

- A. Protect against damage and discoloration.
- B. Handle panels with non-marring slings.

- C. Do not bend panels.
- D. Store panels above ground, with one end elevated for drainage.
- E. Protect panels against standing water and condensation between adjacent sheets.
- F. If panel becomes wet, immediately separate sheets, wipe dry with clean cloth, and allow to air dry.
- G. Remove and strippable film coating prior to installation and do not allow it to remain on the panels in extreme cold, heat of direct sunlight.

#### 1.05 WARRANTY

- A. Manufacturers Product Warranty
  - 1. Manufacturer's standard coating performance warranty, as available for specified installation and environmental conditions.
- B. Contractor's Warranty
  - 1. Warrant panels, flashing, sealant, fasteners and accessories against defective materials and/or workmanship, to remain watertight and weatherproof with normal usage for two (2) years following Project Substantial Completion.

### PART 2 – PRODUCTS

#### 2.01 ACCEPTABLE MANUFACTURER

- A. ASC Profiles Inc. or approved equal, 2110 Enterprise Boulevard, West Sacramento, California 95691-3493, 800-726-2727, 916-372-6851, Fax: 916-372-7606
- B. Panel Designation:
  - 1. HR-36™ Roof and Wall. Net coverage 36", rib depth 1-1/2" @7.2" o.c. or approved equal.

#### 2.02 MATERIALS

- A. Panels
  - 1. Base Material:
    - a. Material:
      - (1) Steel conforming to ASTM A792 Zincolume®, minimum yield 40,000 psi, thickness 24 gauge or approved equal.
    - b. Protective Coating:
      - (1) Conform to ASTM A792, AZ50 (Zincolume®) or approved equal.
  - 2. Exterior Finish:
    - a. DURANAR XL PLUS coating or approved equal.
  - 3. Interior Finish:
    - a. Primer Coat Material: Corrosion-resistant primer; primer coat dry film thickness: 0.15 mils; finish coat material: polyester paint, finish coat dry film thickness: 0.35 mils.
    - b. Total Interior Dry Film Thickness: 0.50 mils.
    - c. Color: Off-White.
  - 4. Color:
    - a. As selected by Resident from manufacturer's standard selection of colors.
- B. Fabrication
  - 1. Unless otherwise shown on drawings or specified herein, panels shall be full length. Fabricate flashings and accessories in longest practical lengths.

2. Roofing panels shall be factory formed. Field formed panels are not acceptable.

### **PART 3 – EXECUTION**

#### **3.01 EXAMINATION**

- A. Existing Conditions
  1. Inspect installed work of other trades and verify that such work is complete to a point where this work may continue.
  2. Verify that installation may be made in accordance with approved shop drawings and manufacturer's instructions.

#### **3.02 PREPARATION**

- A. Field Measurements
  1. Verify prior to fabrication.
  2. If field measurements differ from drawing dimensions, notify Resident prior to fabrication.
- B. Protection
  1. Treat, or isolate with protective material, and contacting surfaces of dissimilar materials to prevent electrolytic corrosion.
  2. Require workmen who will be walking on Roofing Panels to wear clean, soft-soled work shoes that will not pick up stones or other abrasive material, which could cause damage or discoloration.
  3. Protect work of other trades against damage and discoloration.
- C. Surface Preparation
  1. Clean and dry surfaces prior to applying sealant.

#### **3.03 INSTALLATION**

- A. Panels
  1. Follow roof panel manufacturer's directions.
  2. Install panel seams (choose one) vertically or horizontally.
  3. Lap panels away from prevailing wind direction.
  4. Do not stretch or compress panel side-laps.
  5. Secure panels without warp or deflection.
- B. Allowable Erection Tolerances
  1. Maximum Alignment Variation: 1/4 inch in 40 feet.
- C. Flashing
  1. Follow manufacturer's directions and approved Shop Drawings.
  2. Overlap roof panels at least 6 inches.
  3. Install flashings to allow for thermal movement.
  4. Remove strippable protective film, if used, immediately preceding flashing installation.
- D. Cutting and Fitting
  1. Neat, square and true. Torch cutting is prohibited where cut is exposed to final view.
  2. Openings 6 inches and larger in any direction: Shop fabricate and reinforce to maintain original load capacity.
  3. Where necessary to saw-cut panels, debur cut edges.

**3.04 CLEAN UP AND CLOSE OUT**

- A. Panel Damage and Finish Scratches
  - 1. Do not apply touch-up paint to damaged paint areas that involve minor scratches.
  - 2. Panels or flashings that have severe paint and/or substrate damage shall be replaced as directed by the RESIDENT.
- B. Cleaning and Repairing
  - 1. At completion of each day's work and at work completion, sweep panels, flashings and gutters clean. Do not allow fasteners, cuttings, filings or scraps to accumulate.
  - 2. Remove debris from project site upon work completion or sooner, if directed.

\*\*\* END OF SECTION \*\*\*