

SECTION 07 4213

FORMED METAL WALL PANELS

PART 1 GENERAL

1.1 SUMMARY

- A. The work includes, but is not necessarily limited to, preformed metal wall panels and accessories as indicated on the Drawings in mechanical spaces.
- B. Related Documents and Sections: Examine Contract Documents for requirements that directly affect or are affected by Work of this Section. A list of those Documents and Sections include, but is not limited to the following:
 - 1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and General Requirements.
 - 2. Section 07 4113 - FORMED METAL ROOF PANELS.
 - 3. Section 07 4210.11 - COMPOSITE FRAMING SUPPORT SYSTEM
 - 4. Section 07 4213.16 - METAL PLATE WALL PANELS
 - 5. Section 07 4243 - COMPOSITE METAL WALL PANELS
 - 6. Section 07 4247 - HIGH PERFORMANCE GFRC WALL PANELS
 - 7. Section 07 6200 - SHEET METAL FLASHING AND TRIM.

1.2 SUBMITTALS

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

1.3 QUALITY ASSURANCE

- A. Installer's Qualifications: Installation of panels and accessories by installers with a minimum of 5 years experience on panel projects of this nature.
- B. Manufacturer's Qualifications
 - 1. Manufacturer shall have a minimum of 10 years experience supplying metal roofing/siding 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, Flashings & Details Guides, Guide

Specifications and Technical Support shall not be considered equal to the specified product.

- C. Regulatory Agency Requirements: Comply with local Building Code requirements if more restrictive than those specified herein.

1.4 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 surfaces.
- F. If panels become wet, immediately separate sheets, wipe dry with clean cloth, and allow to air dry.
- G. Remove any strippable film coating prior to installation and do not allow it to remain on the panels in extreme cold, heat or in direct sunlight.

1.5 WARRANTY

- A. Manufacturer's Product Warranty: Manufacturer's standard coating performance warranty, as available for specified installation and environmental conditions.
- B. Contractor's Warranty: Warrant panels, flashings, sealants, 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 date.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Basis-of-Design:
 - 1. Manufacturer: AEP Span, A Division of ASC Profiles Inc, West Sacramento, CA
 - 2. Product: Box Rib Wall. Net coverage 36", rib depth 1-1/2" 7-13/64" o.c.
- B. Provide basis-of-Design product, or equivalent acceptable to the Architect by one of the following:
 - 1. ATAS International, Inc.
 - 2. CENTRIA Architectural Systems.
 - 3. Englert, Inc.
 - 4. Metal Sales Manufacturing Corporation.
 - 5. Acceptable equivalent.

2.2 MATERIALS

- A. Base Metal:
 - 1. Material: Steel conforming to ASTM A792 Zinalume®/Galvalume®, minimum yield 50,000 psi, thickness 24 gauge.
 - 2. Protective Coating: Conform to ASTM A792, AZ50 (Zinalume/Galvalume).
- B. Exterior Finish: DuraTech® 5000 (Polyvinylidene Fluoride), full 70% Kynar® 500/Hylar 5000®

consisting of a baked-on 0.15-0.20 mil corrosion resistant primer and a baked-on 0.70-0.80 mil finish coat with a specular gloss of 10-30% when tested in accordance with ASTM D-523- 89 at 60°.

1. Color: As selected by the Architect from manufacturer's full line of standard colors.
- C. Interior Finish: Corrosion-resistant primer; primer coat dry film thickness: 0.15 mils; finish coat material: polyester paint, finish coat dry film thickness: 0.35 mils.
- D. Fabrication
1. Unless otherwise shown on Drawings or specified herein, panels shall be full length. Fabricate flashings and accessories in longest practical lengths.
 2. Panels shall be factory formed. Field formed panels are not acceptable.

PART 3 EXECUTION

3.1 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.

3.2 PREPARATION

A. Field Measurements

1. Verify prior to fabrication.
2. If field measurements differ from drawing dimensions, notify Architect/Engineer 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: Clean and dry surfaces prior to applying sealant.

3.3 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 Tolerance: Maximum Alignment Variation: 1/4 inch in 40 feet.

C. Flashing

1. Follow manufacturer's directions and architect 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.

3.4 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 Architect's or Owner's representative.

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