

SECTION 07415
PREFORMED METAL SIDING

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. The provisions of the general Conditions, Supplementary Conditions, and the Sections included under Division 1, General Requirements, are included as a part of this Section.

1.2 SECTION INCLUDES:

- A. Preformed metal siding system for walls, soffits, and fascia, with insulation, related flashings and accessory components.

1.3 REFERENCES

- A. ASTM A167 – Standard Specification for Stainless and Heat-Resisting Chromium Nickel Steel Plate, Sheet, and Strip.
- B. ASTM A606 – Standard Specification for Steel Sheet and Strip, Hot-Rolled and Cold-Rolled, High-Strength, Low-Alloy, with Improved Corrosion Resistance.
- C. ASTM A653/A653M – Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- D. ASTM A755/A755M – Standard Specification for Steel Sheet, Metallic Coated by the Hot-Dip Process and Pre-painted by the Coil Coating Process For Exterior Exposed Building Products.
- E. ASTM A792/A792M - Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process.
- F. ASTM C665 – Standard Specification for Mineral Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing
- G. ASTM D226 – Standard Specification for Asphalt-Saturated Roofing Felt for use in Waterproofing and in Constructing Built-up Roofs.
- H. Florida Building Code.

1.4 DESIGN REQUIREMENTS

- A. Components: Design and size components to withstand dead and live loads in accordance with the Current ASCE Minimum Design Standards.
- B. Drainage: Provide positive drainage to exterior for moisture entering or condensation occurring within panel system.
- C. Products: Provide continuity of thermal barrier at building enclosure elements in conjunction with thermal insulating materials.
- D. Vapor Retarder: provide continuity of vapor retarder at building enclosure elements in conjunction with vapor retarders specified.
- E. Air Seal: Provide continuity of air barrier seal at building enclosure elements in conjunction with air seal materials specified.

1.5 SUBMITTALS FOR REVIEW

- A. Section 01300: Submittals: Procedures for submittals.

- B. Shop Drawings: Indicate dimensions, layout, joints, construction details, and methods of anchorage.
- C. Samples: Submit two samples of siding, 24" x 24" in size illustrating finish color, sheen, and texture.

1.6 QUALITY ASSURANCE

- A. Manufacturer: Company specializing in manufacturing the products specified in this section with minimum three-years documented experience.
- B. Installer: Company specializing in performing the work of this section with minimum five-years documented experience and approved by manufacturer.
- C. Manufacturer's Installation Instructions: Indicate special handling criteria, installation sequence, and cleaning procedures.

1.7 DELIVERY, STORAGE, AND PROTECTION

- A. Material and Equipment: Transport, handle, store, and protect products.
- B. Protect panels from accelerated weathering by removing or venting sheet plastic shipping wrap.
- C. Store pre-finished material off ground protected from weather, to prevent twisting, bending, or abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.
- D. Prevent contact with materials that may cause discoloration or staining.

1.8 COORDINATION

- A. Coordinate work with other trades..
- B. Coordinate the Work for installation of vapor retarder and air barrier seals.
- C. Coordinate the Work with installation doors, windows, louvers, and other components or materials.

1.9 WARRANTY

- A. Warranties and Bonds as noted herein.
- B. Correct defective Work within a five-year period after Substantial Completion for degradation of panel finish including color fading caused by exposure to weather.
- C. Correct defective Work within a five-year period after Substantial Completion for water tightness, integrity of seals, and air infiltration.
- D. Warranty shall include coverage for damage to building resulting from failure of metal siding system to resist penetration of water with no dollar limit to the value of repairs or replacements covered.

PART 2 PRODUCTS

2.1 EXTERIOR SHEET MATERIALS

- A. Pre-coated Galvanized Steel: ASTM A755; Grade D, Coating Designation G-90; shop pre-coated with silicone polyester coating. Exposed Exterior Surfaces: color as selected from manufacturer's standard range.

2.2 PANEL INTERIOR AND OTHER SHEET MATERIALS

- A. Galvanized Steel: ASTM A653, Grade D, Coating Designation G-90. Pre-coated Surfaces: Color as selected from manufacturer standard range.

2.3 INSULATION

- A. Insulation: Foamed-in-place urethane type; thermal resistance R-Value as shown on the drawings.

2.4 ACCESSORIES

- A. Gaskets: Manufacturer's standard type suitable for use with panel system, permanently resilient; ultraviolet and ozone resistant; color as selected.
- B. Sealants: Manufacturer's standard type suitable for use with installation of panel system; non-staining, skinning, non-shrinking and non-sagging; ultra-violet and ozone resistant; color as selected.
- C. Fasteners: Manufacturer's standard type to suit application.
- D. Field Touch-up Paint: As recommended by panel manufacturer.
- E. Bituminous Paint: Asphalt base.

2.5 COMPONENTS

- A. Expansion Joints: Same material, thickness and finish as exterior sheets; manufacturer's standard brake formed type, of profile to suit system. Exposed fasteners same finish as panel system.
- B. Trim, Closure Pieces, Caps, Flashings, Fascias, and Infills: Same material, thickness and finish as exterior sheets; brake formed to required profiles.
- C. Anchors: Stainless steel.

2.6 FABRICATION

- A. Fabrication of component profiles on site is not permitted.
- B. Form sections true to shape, accurate in size, square, and free from distortion or defects.
- C. Form pieces in longest practicable lengths.
- D. Fabricate corners in one continuous piece with minimum 18" returns.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify substrate framing is ready for installation.
- B. Verify that framing members are ready to receive panel system.

3.2 INSTALLATION

- A. Install composite metal building panel system on walls and soffits in accordance with manufacturer's instructions.
- B. Protect panel surfaces in contact with cementitious materials and dissimilar metals with bituminous paint. Allow to dry prior to installation.
- C. Permanently fasten panel system to structural supports; aligned, level, and plumb, within specified tolerances.
- D. Locate panel joints over supports.

- E. Provide expansion and control joints where indicated.
- F. Use concealed fasteners unless otherwise approved by the Architect.
- G. Seal and place gaskets to prevent weather penetration. Maintain neat appearance.

3.3 TOLERANCES

- A. Maximum Offset from True Alignment between Adjacent Members Butting or In Line: 1/16".
- B. Maximum Variation from Plane or Location Indicated on Drawings: 1/4".

3.4 CLEANING

- A. Keep work area clean. Clean area upon completion of the work.
- B. Remove site cuttings from finish surfaces.
- C. Clean and wash pre-finished surfaces with mild soap and water; rinse with clean water.

END OF SECTION