**PART 1 - GENERAL**

**1.01 SUMMARY**

A. Provisions of Division 01 apply to this section.

B. Section Includes:

1. Preformed roof and wall panels as indicated.

2. Accessories, supplementary or miscellaneous items, appurtenances and devices incidental to or necessary for a waterproof installation.

C. Related Sections:

1. Section 05 10 00: Structural Steel.

2. Section 05 41 00: Structural Metal Studs.

3. Section 07 60 00: Flashing and Sheet Metal.

4. Section 07 70 00: Roof Specialties and Accessories.

5. Section 07 90 00: Joint Sealants

**1.02 SUBMITTALS**

A. Shop Drawings: Submit Shop Drawings, indicating panel and fastener layout, joints, corners, supports, anchorages, trim, flashing, closures and special details.

B. Product Data:

1. Submit catalog cuts, technical data sheets and descriptive literature on sheets, panels, accessories and fasteners.

2. Submit complete installation recommendations.

C. Material Samples: Submit Samples showing full range of manufacturer's standard colors, minimum 3 inch x 5 inch size.

**1.03 QUALITY ASSURANCE**

A. Comply with the following as a minimum requirement:

1. AISC - Steel Construction Manual.

2. AISI - Cold Form Steel Design Manual.

3. ASTM A 653 - Steel Sheet, Zinc Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

4. ASTM A 792 - Steel Sheet, 55% Aluminum-Zinc Alloy Coated by the Hot-Dip Process.

5. ASTM A 924 - Steel Sheet, Metallic- Coated by the Hot-Dip Process.

6. SMACNA – Architectural Sheet Metal Manual.

1. Qualifications of Installer: Minimum 2 years experience in the installation of roof and wall panel systems of similar complexity as required by this section.
2. Trained and certified by manufacturer to install the specified products.

**1.04 DELIVERY, STORAGE AND HANDLING**

A. Delivery: Deliver panels to the Project site without damage.

B. Storage: Store materials and accessories above ground on skidded platforms. Store under waterproof covering. Provide proper ventilation to panels to prevent condensation build-up.

C. Handling: The bending, warping, or twisting of panels is not permitted during unloading, storing or installation.

**1.05 WARRANTY**

A. Manufacturer shall provide a 20 year material warranty.

B. Installer shall provide a 5 year labor warranty.

**PART 2 - PRODUCTS**

**2.01 MANUFACTURERS**

A. Berridge Manufacturing Company, 1720 Maury Street, Houston, TX

B. IMETCO, 2070 Steel Drive, Tucker, GA.

C. AEP-Span, 5100 East Grand Avenue, P.O. Box 150449, Dallas, TX

D. Peterson Aluminum Corporation, 1005 Tonne Road, Elk Grove Village, IL.

E. Una-Clad Copper Sales, Inc., 1001 Lund Boulevard, Anoka MN

F. McElroy Metal Inc. 1500 Hamilton Rd., Bossier City, LA 1-800-950-6531.

**2.02 PANEL DESIGN**

A. Roofing and Wall Panel style and configuration:

1. Integral standing seam.

2. Snap-on standing seam.

3. Batten.

**2.03 MATERIALS**

A. Roof and wall panel materials:

1. Galvanized Steel: ASTM A 653, Coating Class G90.

2. Galvalume (Zincalume): Steel sheets coated with 55 percent aluminum and 45 percent zinc/mischmetal by weight, conforming to ASTM A 792, 0.55 ounces per square foot.

3. Aluminum: ASTM B 209, for sheets, alloy 3003-H14 aluminum not less than 0.040 inch thick. For fasteners, clips, and accessories, alloy 6063-T5 extruded aluminum, 0.051 inch minimum thickness.

B. Accessory materials:

1. Clips, flashings, ridge sections, closures and other accessories: Manufacturer's standard, finished to match roof sheets where exposed.

2. Underlayment: Vycor Ultra, manufactured by W.R. Grace, or equal, high temperature resistant, butyl rubber-based adhesive-backed, high-density cross laminated polyethylene sheet, 30 mils thick, furnished in 34" wide rolls.

3. Slip sheet: Unsaturated building paper weighing not less than 5 pounds per 100 square feet.

4. Sealant: Elastomeric type containing no oil or asphalt. Exposed sealant shall be colored to match the applicable building color and shall cure to a rubber-like consistency. Sealant placed in the roof panel standing seam ribs shall be provided in accordance with the manufacturer's recommendations.

5. Gaskets and insulating compounds: Non-absorptive and suitable for insulating contact points of incompatible materials. Insulating compounds shall be non-running after drying.

**2.04 FABRICATION**

A. Roll form panels in continuous lengths, full length of detailed runs.

B. Fabricate trim, flashing and accessories to detailed profiles.

C. Fabricate trim and flashing from same material as panel.

**PART 3 - EXECUTION**

**3.01 SURFACE CONDITIONS**

A. Examination: Examine substrates and other installed item to verify suitability for installation. Do not proceed until unsuitable conditions have been corrected.

**3.02 INSTALLATION**

A. Install panels weathertight, without waves, wraps, buckles, fastening stresses or distortion, allowing for expansion and contraction.

B. Install panels in accordance with manufacturer's installation instructions and Shop Drawings.

C. Provide concealed anchors at all panel attachment locations.

D. Install panels plumb, level and straight with seams and ribs/battens parallel, conforming to design indicated on Drawings.

**3.03 CLEANING**

A. Remove rubbish, debris, and waste materials and legally dispose of off the Project site.

**3.04 PROTECTION**

A. Protect the Work of this section until Substantial Completion.

**END OF SECTION**