

SECTION 07610 - METAL STANDING SEAM ROOFING

PART I - GENERAL

1.01 DESCRIPTION

- A. Work includes steel standing seam roofing and accessories.

1.02 QUALITY ASSURANCE

- A. All panels and accessories are to be factory formed, finished and packaged.
- B. Applicator shall have five years minimum experience applying this type of roofing system.
- C. Comply with local codes for installation of standing seam-roofing system.
- D. Provide systems complying with ASTM E 1680 (air infiltration), ASTM E 1646 (water infiltration) and rated for UL 90 wind uplift, UL 263 fire resistance, UL 790 Class A fire.
- E. Do not install on roof pitch less than 2:12.

1.03 WARRANTY

- A. Provide manufacturers standard twenty year finish warranty.
- B. Panel installer shall issue a five year weather tight and workmanship guaranty.

1.04 SUBMITTALS

- A. Submit complete shop drawings, details, product data and material sample to Architect of Record. Show expansion joint details and waterproof connections to adjoining work and at obstructions and penetrations.

PART II - PRODUCTS

2.01 STANDING SEAM ROOFING

Manufacturers: ATAS International, Inc., "Dutch Seam System".
Berridge, "Cee-Lock".
Dimensional Metals, Inc. (DMI) IL-20 "Inter-Lock Panel System".
Englert, S2000 "Integral Snap-Lock Panel" System.
McElroy Metal, "Medallion-Lok".
Peterson Aluminum, PAC-CLAD "Snap-Clad" Standing Seam system.

- A. Panel: Nominal 12", 15" or 18" wide G-90, Grade C, ASTM A-653-03 & ASTM A-924-99, hot dipped galvanized steel panel, ASTM-A653-03 or ASTM AZ50 Galvalume steel, with minimum 1 inch high standing seam.
 - 1. Material Thickness: 24 gauge.

2. Color: Kynar 500® (0.80 to 0.90 mil dry film thickness) "Forest Green" by Atas, Berridge Manufacturing, Englert and Pac-Clad, smooth texture, "Evergreen" by DMI and McElroy Metal. Total dry film coating thickness with primer to be 1.0 to 1.25 mils. Provide strippable protective film. Provide reverse side backer coating with 0.25-mil dry film thickness.
Note: The color of the tote enclosure roof of the Southern Prototype shall be or match Una-Clad "Almond" or Dyna-Clad (DMI) "Putty".
 3. Length: Manufacturers standard 40 ft. or less in one continuous length.
- B. Fabrication: Fabricate panels, trim and accessories to allow controlled expansion in running lengths in relation to system components, adjoining materials, flashing and wall construction.

2.02 TRIM & ACCESSORIES

- A. General:
1. Metal flashings, gutters, and trim shall be from the same manufacturer and of the same material and gauge as panels. Exposed components shall be formed in longest possible lengths. Color to match panels.
 2. Manufacturers standard fasteners, brackets, clips, furring strips, spacers, flashings, closures, weather-stripping, joint sealers, sealants, expansion control, etc. as required for complete weathertight installation.
 3. Anchorage: Provided by the manufacturer. Comply with manufacturer instructions. Use cadmium plated screws with attaching to treated lumber.
 4. For downspouts adjacent to brick, see Section 07600.

2.03 MISCELLANEOUS MATERIALS

- A. Bituminous Coating: Cold applied asphaltic, complying with FS TT-C-494, Type II, 12 mils min. dry film thickness.
- B. Underlayment: 30 lb. unperforated organic asphalt saturated roofing felt, complying with ASTM D-226, 36 " wide.
- C. Paper Slip-Sheet: 5-lb. rosin sized building paper.
- D. Snow-Guards: Clear polycarbonate with UV stabilizers, adhesive mounting. Provide Real-Tool® CL model #RTCLSM by Berger Bros. Co., Sno-Gem™ by Sno-Gem, Inc. or SNOJAX by SNOJAX, Inc. Used on roofs when the slope is flatter than a 1/1 slope.

2.04 SHOP FABRICATED UNITS

- A. Expansion Provisions: Where lapped or bayonet-type provisions cannot be used, form expansion joints of intermeshing hooked flanges not less than 1" deep, filled with mastic sealant.
- B. Sealant Joints: Where movable, non-expansion joints are indicated, form metal to provide for proper installation of elastomeric sealant in compliance with SMACNA standards.

PART III - EXECUTION

3.01 INSTALLATION

- A. System shall be installed straight and true to line, in compliance with manufacturers instructions.
- B. Panel system shall not come in contact with dissimilar materials, which will cause harmful reactions between the metals and/or finish.
- C. Separate dissimilar metals with coat of bituminous paint, concealed on one or both sides.
- D. Install underlayment and slip-sheet on solid substrate.
- E. Panels shall be fully interlocked with its adjacent panel.
- F. Fabricate sheets, seams, strips, cleats, valleys, ridges, edge treatments, flashings, etc. to allow drainage. Seal joints as required. Provide leakproof construction.
- G. Sealant Joints: Embed hooked flanges not less than 1" into sealant. Completely conceal sealant.
- H. Install system to prevent bending, buckling, twisting, abrasion, scratching, denting, etc. Only minor scratches may be touched-up in field.
- I. Anchor components securely in place. Use fasteners recommended by panel manufacturer. Accommodate thermal and structural movement. Use gasketed fasteners to prevent electrolytic action between metals. Conceal all fasteners and anchors.
- J. Snow-Guards shall be installed on roofs and awnings with slopes less than 1.1 in regions where snow or ice build-up is likely. Snow-guards shall be centered between standing seams and installed in compliance with manufacturer's instructions. Provide not less than one row, located not closer than 15 inches to the roof eave. Provide additional staggered rows as recommended by manufacturer to suit local snow and ice conditions.
- K. Install ridge vents and soffit vents at all gabled and hip roofs. Provide ridge and soffit venting at a ratio of 1sf of free vent area for each 150 sf of area below roof.

3.02 CLEANING

- A. Remove protective film upon completion without damaging finish.
- B. Completed system shall be clean and free from grease, stains and finger marks.

3.03 PROTECTION

- A. Protect work to be free from damage at time of Walgreens acceptance and completion of entire project.

END OF SECTION

