

Montgomery County Public Schools Facilities Guide
DIVISION 7 - THERMAL AND MOISTURE PROTECTION

SECTION 07411

MANUFACTURED ROOFING & SIDING

PART 1 GENERAL

1.01 GUIDE INCLUDES

- A. Metal standing seam roofing only in locations and configurations approved by MCPS Division of Construction. Avoid use of metal roofing material.

1.02 SUBMITTALS

- A. Submit shop drawings and 2'-0" samples, showing size, location and placement of product. Coordinate field measurements with shop drawings. Colors available to be a part of submission.
- B. Submit location of manufacturer and, if available, extraction/ recovery of roofing materials.
- C. Submit recycled-content data, designating percentages of post-consumer and pre-consumer
- D. Submit MSDS for any applicable products used.
- E. If applicable, submit manufacturer data on Solar Reflectance Index (SRI).

1.03 WARRANTY

- A. Provide written manufacturer 20 years side joint project warranty.
- B. Provide written 20 year warranty on finish against any color change (fade) greater than 6NBS as measured per ASTM D2244 and against sealant in excess of a rating of 7 per ASTM D659.
- C. Provide 20 year roof guarantee against leaks due to perforation or deterioration of substrate.

1.04 INSTALLER QUALIFICATIONS

- A. Firm with not less than 5 years of successful experience in installation of standing seam roofing.
- B. Installer shall submit written certification from standing seam systems manufacturer that they are approved for installation of specified system. Certification to be provided prior to award of roofing work.
- C. Installer shall maintain a full-time supervisor/foreman with 5 years of experience in similar roofing as specified on the job site during times roofing work is in progress.
- D. Comply with OSHA requirements to include fall protection and scaffolding.

1.05 ROOFING CONFERENCE

- A. Preliminary: Soon after the award of standing seam roofing and siding work contract, Contractor shall schedule a meeting with substrate, roofing and other adjoining materials subcontractors, Architect and Owner to review requirements necessary for proper installation of roofing system. Meeting, including agreements, shall be documented and distributed by Contractor.
- B. Pre-application Conference: Contractor shall schedule a meeting at site approximately two weeks before scheduled commencement of standing seam roofing installation. Attending shall be Contractor, standing seam roofing subcontractor, adjoining work contractors, Architect and Owner representatives. Issues discussed and agreed to shall be recorded by Contractor and distributed to parties attending.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Peterson Aluminum Corporation PAC-CLAD Redi Roof, Annapolis Junction, MD.
- B. Atas Aluminum Corp. PC Standing Seam, Allentown, PA.
- C. Roofing contractors showing written verification they have proper equipment and are certified to apply any one of above systems will be permitted to shop manufacture materials provided they meet requirements of these specifications.

2.02 MATERIALS

- A. Roofing materials including trim to be 24 gauge ASTM A446 Grade A, hot dip galvanized G-90 steel. Exterior finish shall be 20 years guaranteed fluoropolymer Kynar 500.
 - 1. Roof Coating: If necessary to contribute to 75 percent of total available roof area, roof shingles shall have a minimum Solar Reflectance Index (SRI) of 29 for steep sloped roofs (>2:12) or SRI of 78 for low-sloped roofs (2:12 or less).
- B. Underlayment of 30# asphalt-saturated rag felts to be placed under surfaces to be covered with standing seam material.
- C. Paper slip sheet shall be 5 lb rosin - sized building paper.
- D. Valley flashing shall be 0.045 inch single ply EPDM Membrane.
- E. Fasteners and nails shall be in accordance with manufacturer recommendations.
- F. Snow guards shall be clear plexiglas as made by Snowjax and attached with screws and manufacturer's specified sealant. Provide 2 guards per roof panel, and placed in staggered on center of flat sections of panel.
- G. Roof Insulation shall be HCFC-free rigid polyisocyanurate foam with glass fiber reinforcing facing boards of thickness required to achieve R-30 value.

PART 3 EXECUTION

3.01 INSPECTION OF SUBSTRATE

- A. Examine substrate surfaces and adjacent work in preparation of installing standing seam roofing system. Installation shall not proceed until unsatisfactory conditions have been corrected to satisfaction of installer.

3.02 INSTALLATION

- A. Comply with insulation manufacturer's instructions and recommendations for handling, installation and bonding or anchorage of insulation to substrate for a windstorm resistance classification I-60.
- B. Install treated wood blocking on perimeter of insulation where shown on drawings.
- C. Secure 1/2 inch CDX plywood roof sheathing over roof insulation with metal clips, secured to substrate.
- D. Install 30# felt membrane over plywood deck. Lay horizontally and capped toward eaves minimum of 6" and 12" over hips and ridges.
- E. Install 0.045 inch EPDM membrane at all roof valleys, extending 3 feet beyond the valley in each direction. Fully adhere to roof sheathing.
- F. Install rosin coated slip sheets as shown or required by roofing manufacturer.
- G. Install steel standing seam roofing system, using fasteners, accessories and installation procedures as recommended by manufacturer.
- H. Install two (2) snow guards per panel.

3.03 PROTECTION OF ROOFING

- A. Upon completion, installer shall advise contractor of recommended procedures for surveillance and protection of roof during the remainder of construction period. At end of construction period, an inspection by the roofing installer, Architect, Owner and Contractor shall be made. Deteriorated or defective work shall be repaired or replaced to satisfaction of Architect and Owner at no cost to Owner and prior to Contractors final project payment.

3.04 WASTE MANAGEMENT

- A. Recycle waste roofing materials in accordance with Division 1 Construction Waste Management requirements.

END OF SECTION