SECTION 077253 - SNOW GUARDS

1. GENERAL
   * + 1. RELATED DOCUMENTS

Retain or delete this article in all Sections of Project Manual.

* + - * 1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
      1. SUMMARY
         1. Section Includes:

Pad-type, flat-mounted metal snow guards.

* + - 1. SUBMITTALS
         1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
         2. Manufacturer’s installation instructions shall be provided along with product data.
         3. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
         4. Product Data: For each type of product, include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
         5. Shop Drawings: Include roof plans showing layouts and attachment details of snow guards.

Include details of rail-type snow guards.

* + - * 1. Samples:

Pad-Type Snow Guards: Full-size unit with installation hardware.

Retain "Delegated-Design Submittal" Paragraph below if design services have been delegated to Contractor.

* + - * 1. Delegated-Design Submittal: For snow guards, include analysis reports signed and sealed by the qualified professional engineer responsible for their preparation.

Include calculation of number and location of snow guards.

* + - * 1. Quality Control Submittals:

Qualification Data: For professional engineer experience with providing delegated design engineering services of the kind indicated, including documentation that the Director’s Representative is licensed in the jurisdiction in which the Project is located.

Product Test Reports: For each type of snow guard, for tests performed by a qualified testing agency, indicating load at failure of attachment to roof system identical to roof system used on this Project.

* + - 1. FIELD CONDITIONS
         1. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit adhesive-mounted snow guards to be installed, and adhesive cured, according to adhesive manufacturer's written instructions.

1. PRODUCTS
   * + 1. PERFORMANCE REQUIREMENTS
          1. Performance Requirements: Provide snow guards that withstand exposure to weather and resist thermally induced movement without failure, rattling, or fastener disengagement due to defective manufacture, fabrication, installation, or other defects in construction.

Temperature Change: 120 deg F, ambient; 180 deg F, material surfaces.

Retain "Structural Performance" Paragraph below if detailed design is assigned to manufacturer.

* + - * 1. Structural Performance: Snow guards shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated.

Snow Loads: As indicated on Drawings.

* + - 1. PAD-TYPE SNOW GUARDS

Flat-mounted metal systems may be recommended by manufacturers for slate, clay, or concrete tile; wood shake; asphalt shingle; and metal roofing. Consult manufacturer's literature for specific applications.

Slate Roof: Model No. 4 snow guard.

Asphalt Shingle Roof: Model No. 4 snow guard with hook tab removed and drilled for nailing.

Tile Roof: Model No. 6 snow guard.

Copper Roof: Model No. 7 snow guard. Must be adhered to roof.

* + - * 1. Pad-Type, Flat-Mounted Metal Snow Guards:

Products: Subject to compliance with requirements, provide the following:

Zaleski Snow-Guard and Roofing Specialties Inc.; [**Model No. 4.][Model No. 4 with hook tab removed for drilled for nailing][Model No. 6][Model No. 7**].

Approved equivalent.

Material:

Retain “aluminum sheet” for Model No. 6. Retain “copper sheet” for Model No. 4 and No. 7.

ASTM B209 aluminum sheet, not less than 0.040 inch thick.

Finish: Mill.

ASTM B370 copper sheet, not less than 16 oz./sq. ft.

Attachment: Manufacturer's tested system, capable of resisting design loads.

1. EXECUTION
   * + 1. EXAMINATION
          1. Examine substrates and conditions, with Installer present, for compliance with requirements for installation tolerances, snow guard attachment, and other conditions affecting performance of the Work.

Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.

* + - * 1. Proceed with installation only after unsatisfactory conditions have been corrected.
      1. PREPARATION

Retain this article for adhesively attached snow guards.

* + - * 1. Clean and prepare substrates for bonding snow guards.
        2. Prime substrates according to snow guard manufacturer's written instructions.
      1. INSTALLATION
         1. Install snow guards according to manufacturer's written instructions.

Retain one of two subparagraphs below as applicable to Project.

Space rows as indicated on [**Shop Drawings**].

Space rows as recommended by manufacturer.

Retain paragraph(s) below for roofing and snow guard types used for Project.

* + - * 1. Attachment for Asphalt Shingle Roofing:

Pad-Type, Flat-Mounted Snow Guards: Mechanically anchored through each factory-prepared hole with fasteners concealed by the shingles.

* + - * 1. Attachment for Slate Shingle Roofing:

Pad-Type, Flat-Mounted Snow Guards: Hook over the head edge or slate, concealed by shingles.

* + - * 1. Attachment for Tile Roofing:

Pad-Type, Flat-Mounted Snow Guards: Hooked to tile and roof batten with head of snow guard positioned over headlap of tile.

* + - * 1. Attachment for Exposed Fastened Metal Roofing:

Do not use fasteners that will void metal roofing finish warranty.

Pad-Type, Flat-Mounted Snow Guards:

Adhere to metal roofing according to manufacturer's instructions.

END OF SECTION 077253