

## **SECTION 086200 - UNIT SKYLIGHTS**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### **1.2 SUMMARY**

- A. Section Includes:
  - 1. Unit skylights mounted on prefabricated or site-erected curbs.

#### **1.3 ACTION SUBMITTALS**

- A. Product Data: For each type of unit skylight.
  - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for unit skylights.
- B. Shop Drawings: For unit skylight work.
  - 1. Include plans, elevations, sections, details, and connections to supporting structure and other adjoining work.
  - 2. Multiple Units: Methods of connection and structural support for multiple units clustered together.

#### **1.4 INFORMATIONAL SUBMITTALS**

- A. Qualification Data: For qualified Installer and manufacturer.
- B. Product Test Reports: For each type and size of unit skylight, for tests performed within the last four years by a qualified testing agency. Test results based on testing of smaller unit skylights than specified will not be accepted.
- C. Sample Warranty: For special warranty.

#### **1.5 CLOSEOUT SUBMITTALS**

- A. Maintenance Data: For unit skylights to include in maintenance manuals.

## **1.6 QUALITY ASSURANCE**

- A. **Manufacturer Qualifications:** A manufacturer capable of fabricating unit skylights that meet or exceed performance requirements indicated and of documenting this performance by inclusion in lists and by labels, test reports, and calculations.
- B. **Installer Qualifications:** An installer acceptable to unit skylight manufacturer for installation of units required for this Project.

## **1.7 WARRANTY**

- A. **Special Warranty:** Manufacturer agrees to repair or replace components of unit skylights that fail in materials or workmanship within specified warranty period.
  - 1. Failures include, but are not limited to, the following:
    - a. Uncontrolled water leakage.
    - b. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
    - c. Yellowing of acrylic glazing.
  - 2. Warranty Period: Five years from date of Substantial Completion.

## **PART 2 - PRODUCTS**

### **2.1 MANUFACTURERS**

- A. **Basis-of-Design Product:** Subject to compliance with requirements, provide Wasco (Part of VELUX Commercial); Thermal In-Tandem Curb Mount TSSTDD, or comparable product by one of the following:
  - 1. C/S Groups.
  - 2. CPI International.
  - 3. Kalwall Corporation.
  - 4. Kingspan Light + Air, North America.
  - 5. Velux America, LLC.

### **2.2 UNIT SKYLIGHTS**

- A. **General:** Provide factory-assembled unit skylights that include glazing, extruded-aluminum glazing retainers, gaskets, and inner frames and that are capable of withstanding performance requirements indicated.
- B. **Unit Shape and Size:** Six (6) equally spaced tandem units as indicated, with approximate dimensions of 5'-0" wide by 25'-6" long.

- C. Acrylic Glazing: ASTM D 4802, thermoformable, monolithic sheet, category as standard with manufacturer, Finish 1 (smooth or polished), Type UVF (formulated with UV absorber).
  - 1. Double-Glazing Profile: Dome, 25 percent rise.
    - a. Thicknesses: Manufacturer's standard.
    - b. Outer Glazing Color: Colorless, transparent.
    - c. Inner Glazing Color: White, translucent.
  - 2. Self-Ignition Temperature: 650 deg F or more for plastic sheets in thickness indicated when tested according to ASTM D 1929.
  - 3. Smoke-Production Characteristics: Smoke-developed index of 450 or less when tested according to ASTM E 84, and smoke density of 75 or less when tested according to ASTM D 2843
  - 4. Burning Characteristics: Tested according to ASTM D 635. Class CC2, burning rate of 2-1/2 inches per minute or less for nominal thickness of 0.060 inch or thickness indicated for use.
- D. Glazing Gaskets: Manufacturer's standard EPDM, neoprene, partially vulcanized butyl tape, or liquid-applied elastomeric sealant.
- E. Thermal Break: Fabricate unit skylights with thermal barrier separating exterior and interior metal framing.

### **2.3 ACCESSORY MATERIALS**

- A. Fasteners: Same metal as metal being fastened, nonmagnetic stainless steel, or other noncorrosive metal as recommended by manufacturer. Finish exposed fasteners to match material being fastened.
- B. Bituminous Coating: Cold-applied asphalt mastic, compounded for 15-mil dry film thickness per coat.

### **2.4 ALUMINUM FINISHES**

- A. Mill Finish: Manufacturer's standard.

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION**

- A. Examine openings, substrates, structural support, anchorage, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### **3.2 INSTALLATION**

- A. Coordinate installation of unit skylight with installation of substrates, vapor retarders, roof insulation, roofing membrane, and flashing as required to ensure that each element of the Work performs properly and that combined elements are waterproof and weathertight.
- B. Comply with recommendations in AAMA 1607 and with manufacturer's written instructions for installing unit skylights.
- C. Install unit skylights level, plumb, and true to line, without distortion.
- D. Anchor unit skylights securely to supporting substrates.
- E. Where aluminum surfaces of unit skylights will contact another metal or corrosive substrates, such as preservative-treated wood, apply bituminous coating on concealed metal surfaces or provide other approved permanent separation recommended in writing by unit skylight manufacturer.

### **3.3 CLEANING**

- A. Clean exposed unit skylight surfaces according to manufacturer's written instructions. Touch up damaged metal coatings and finishes.
- B. Remove excess sealants, glazing materials, dirt, and other substances.
- C. Remove and replace glazing that has been broken, chipped, cracked, abraded, or damaged during construction period.
- D. Protect unit skylight surfaces from contact with contaminating substances resulting from construction operations.

**END OF SECTION 086200**