SECTION 08620
E-CLASS HURRICANE RESISTANT FIXED DECK MOUNT SkyWindow®

**PART 1-GENERAL**

1.1 SUMMARY

A. This section includes the following:
   1. Model EFHR: E-Class deck mount self-flashing fixed hurricane resistant glass unit skylights.

1.2 PERFORMANCE REQUIREMENTS

A. Structural Performance: Provide metal-framed skylights, including anchorage, capable of withstanding test pressure indicated without material and deflection failures and permanent deformation of structural members.
   1. Large Missile Impact Resistance: Insulating glass glazed skylight system must meet the requirements of ASTM E 1886 / ASTM E 1996
   2. Static Air Pressure / Structural Loads: Insulating glass glazed skylight system must meet a Design Pressure of +/- 80 PSF when tested per Protocol TAS-202-94.
   3. Cyclic Wind Pressure Loading: Insulating glass glazed skylight system must meet a Design Pressure of +/- 80 PSF when tested per ASTM E 1886 / ASTM E 1996.
B. Air Infiltration: Provide metal-framed skylights with maximum air leakage of 0.01 scfm/sq. ft. (0.01 L/sec/sq. m) of surface when tested according to ASTM E 283 at a minimum static-air-pressure differential of 1.6 lb/sq. ft.
C. Water Penetration: Provide metal-framed skylights that do not evidence water penetration when tested according to ASTM E 331 at a minimum differential static pressure of 15.75 lbs/sq. ft.
D. Units shall be tested to compliance with AAMA\WDMA\CSA\101\I.S.2\A440 as required by the International Building Code.

1.4 SUBMITTALS

A. Product Data Sheet: For each type of skylight specified, include details of construction and installation, relative to applicable roofing materials.
B. Samples for Selection: Manufacturer's color charts showing a full range of colors available for each type of skylight glazing and aluminum finish.

1.5 WARRANTY

A. General: Warranties specified in this section shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to and run concurrent with other warranties made by the Contractor under requirements of the Contract Documents.
B. Skylight Warranty: Provide written warranty signed by manufacturer, agreeing to repair or replace work that exhibits defects in materials or workmanship and guaranteeing weather-tight and leak-free performance. "Defects" is defined as uncontrolled leakage of water and abnormal aging or deterioration.
   1. Warranty Period: 10 years from original date of purchase.
C. Glass Warranty: Provide written warranty signed by manufacturer agreeing to repair or replace work that has or develops defects in the insulating glass. "Defects" is defined as seal failure.

1. Warranty Period for Insulating Glass: 20 years from date of original purchase.

D. Finish Warranty: Provide written warranty signed by manufacturer agreeing to repair or replace work with finish defects. "Defects" is defined as peeling, chipping, chalking, fading, abnormal aging or deterioration, and failure to perform as required.
   1. Warranty Period for Powder Coat Finish: 10 years from date of Substantial Completion.

**PART 2- PRODUCTS**

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by Wasco Skylights part of the Velux Group, Wells, ME 04090, (800-388-0293).
B. Substitutions: Not Permitted.

2.2 MATERIALS

A. Curb Frame: Bright white high performance ridge PVC with Bronze cap stock, coextruded with soft vinyl flashing. Provide integral condensation gutter system with corners fully welded for waterproof quality.
B. Retainer Frame: Extruded aluminum alloy 6063-T5 (min). ASTM B 221 (ASTM B 221 M) with minimum effective thickness of 0.060 inch (1.5 mm). The aluminum retaining frame is mitered and secured using an aluminum staking corner key.
C. Thermal Break: Fabricate skylight units with thermal chambered PVC frame.
D. Fasteners: Non-magnetic stainless steel or other non-corrosive metal as recommended by manufacturer.
E. Insulating Glass:
   1. Florida Product Approval: 7/8" IG consisting of 1/8" (clear or tinted) tempered outer lite, argon air space, and 11/16" clear HS inner lite laminated with .090 SGP.

2.3 FABRICATION

A. Framing Components: As follows:
   1. Factory fit and assemble components.
   2. Fabricate components that, when assembled, will have accurately fitted joints with ends coped or mitered.
   3. Fabricate components to accommodate expansion, contraction, and field adjustment, and to provide for minimum clearance and shimming at skylight perimeter.
   4. Fit and secure PVC frame joints by thermal welding.
   5. Fit and secure aluminum retainer joints with corner keys.
   6. No site fabrication required.

2.4 ALUMINUM FINISHES (EDIT AS REQUIRED)

A. General: Comply with NAAMM "Metal Finishes Manual" recommendations for application and designations of finishes.
B. Finish designations prefixed by AA conform to the system for designations of aluminum finishes established by the Aluminum Association.
   1. Powder Coat High-Performance Architectural Coating: comply with AAMA 2604. Color:_____ (contact manufacturer for color options)
   2. Copper Cladding

**PART 3- EXECUTION**

3.1 EXAMINATION

A. Examine substrates and conditions, with installer present, for compliance with requirements for installation tolerances and other conditions affecting skylight performance.
   1. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. General: Comply with manufacturer's written instructions for protecting, handling, and installing skylight components.

3.3 CLEANING AND PROTECTION

A. Clean exposed metal and glass surfaces according to manufacturer's instructions. Touch up damaged metal coatings.
B. Protect skylight surfaces from ongoing construction.
C. Final cleaning by others.

END OF SECTION