

# Specifications and Warranty

## Part I General

### 1.01 Scope

- A. Structural design, engineering, and fabrication of the entire Skylight System to include extruded aluminum framing, integral closures, trim, and perimeter flashing.
- B. Fasteners, anchors, and related reinforcement of the framing system as required to resist design loads.
- C. Glass and glazing materials including gaskets, sealants, setting blocks, backer rods, and related materials.
- D. Installation of the entire metal framed skylight system.

### 1.02 Related Work

- A. Section 05120: Structural Steel
- B. Section 05500: Metal Fabrications
- C. Section 07600: Flashing and Steel Metal
- D. Section 08800: Glazing
- E. Section 08900: Glazed Curtain Walls

### 1.03 References

- A. Aluminum Association (AA): Specifications for Aluminum Structures SAS-30
- B. American Architectural Manufacturers Association (AAMA)
- C. American Society for Testing and Materials (ASTM)
- D. American Institute of Steel Construction (AISC)
- E. American National Standards Institute (ANSI)

### 1.04 Performance Criteria

- A. Framing system including glazing material shall be designed to support design loads as prescribed by the governing building code.
- B. Thermal load of +/- 60 degrees F from ambient temperature without causing buckling, stresses on glass, failure of seals, undue stress on structural elements, reduction of performance or other detrimental effects.
- C. The maximum allowable deflection of any framing member normal to the plane of the glass

shall not exceed L/175. For spans 20'-0" or greater the maximum allowable deflection shall not exceed L/240.

**D.** The maximum allowable deflection of any framing member parallel to the plane of the glass shall exceed/8".

**E.** Allowable air infiltration shall not exceed 0.06 CFM of the total glazed surface area when tested in accordance with ASTM E283 at static pressure of 6.24 PSF.

**F.** No uncontrolled water leakage shall occur when the system is tested in accordance with ASTM E331 at a static pressure of 6.24 PSF.

**G.** Uniform load structural according to ASTM E330 +40/-40 PSF, +60/-60 PSF.

### 1.05 Submittals

**A.** Product Data: Submit manufacturer's product data, installation instructions, use limitations and recommendations for the entire system, including both published data and specific data prepared for this project.

**B.** Shop Drawings: Submit shop drawings for approval prior to fabrication, include detailed plans, elevations, and details of framing members, glazing materials, sealants, fasteners, anchors, and thickness and types of formed flashing and closures. Indicate relationship of adjacent materials.

**C.** Samples: Submit the following samples.

1. Aluminum Finish: Submit color charts or range samples for initial color selection.
2. Glazing Materials: Submit verification sample of specified glass, including any integral color, coatings or frit pattern specified.

### 1.06 Quality Assurance

**A.** Work of this Section, including design, engineering, fabrication, finishing, preparation at the job site, erection and glazing of the skylight system shall be the responsibility of the skylight manufacturer. The manufacturer shall be regularly engaged in the preceding phases of construction of skylights and be able to demonstrate that he has successfully performed on comparable projects over the prior 5 years.

**B.** Contract documents are based on products manufactured by FIORE SKYLIGHTS, Inc. 700 Grace Street, Somerdale, NJ 08083.

### 1.07 Warranty

**A.** Skylight Manufacturer shall warrant that the framing system will be free of defects in materials and workmanship for period of five (5) years from date of completion.

**B.** Finish shall be warranted for a period of one (1) year from date of application.

**C.** All flouropolymer (kynar) finishes shall be warranted for color and film integrity for a period of five (5) years from date of application.

**D.** Glazing materials shall be warranted against defective materials, delamination, seal failure, and defects in manufacturing per the glazing manufacturer's standard warranties, but not less than five(5) years.

**E.** Skylight Manufacturer/Installer shall guarantee that the installation will remain weather tight for a period of five (5) years from the date of substantial completion.

## **Part II** Products

### 2.01 Framing system

**A.** Extruded aluminum framing members to be 6063-T5, 6063-T6, or 6063T6 alloy and temper. Other alloys and tempers may be used provided they do not void the warranties required in paragraph 1.07. Any substituted alloys and tempers must be clearly indicated on the Shop Drawings and in the structural calculations.

**B.** Thickness of structural framing members shall depend on the design loading, cross sectional configuration, and fabrication requirements.

**C.** Provide rafters and purlin framing members with tubular profiles and flush condensation gutters.

**D.** All formed aluminum flashing and closures to be a minimum of 0.060 inches in thickness.

**E.** Snap on covers and miscellaneous nonstructural trim shall be the minimum thickness recommended by the Aluminum Extruder.

### 2.02 Aluminum Finish

All exposed aluminum shall receive one or more of the following finishes. (Architect to select)

**A.** Clear anodized complying with AAMA 607.1.

**B.** Medium Bronze, Dark Bronze, or Black anodized complying with AAMA 606.1.

**C.** Baked enamel paint complying with AAMA 603.8. Color to be selected by the Architect.

**D.** Two coat or three coat fluoropolymer (Kynar 500) finish complying with AAMA 605.2. Color to be selected by the Architect.

### 2.03 Glazing

**A.** Continuous extruded black E.P.D.M. or silicone compatible gasket.  
Hardness (Shore A) 50+/- durometer  
Tensile Strength 2000 psi  
Elongation 50%

### 2.04 Anchors and Fasteners

**A.** Aluminum or stainless steel of a type which will not cause electrolytic action or corrosion.

**B.** All exposed fasteners to be finished to match aluminum frame.

### 2.05 Glazing Material

(See Specification Section 08800

Type of glazing is determined by the designer based on project requirements.

## 2.06 Sealants

- A.** Skylight manufacturer shall be responsible for the selection of all sealants.
- B.** All surfaces shall be cleaned in accordance with the sealant manufacturers' guidelines. Skylight Manufacturer shall be responsible for compliance to sealant manufacturer guidelines.
- C.** All exterior seals shall be black in color. (Or standard color sealants as available)

## Part III Installation

- A.** Strictly comply with manufacturer's instructions and recommendations. Match profiles, sizes and spacing indicated on approved shop drawings. Ensure that weep and condensation control system operates properly. Do not perform structural silicone sealant work when the air temperature is below 32 degrees F.
- B.** All materials shall be delivered, stored, and covered to protect factory finishes from weather damage and construction dirt until installed.
- C.** Glazing materials shall be packaged to prevent breakage.

## Part IV Warranty

FIORE Skylights, Inc. guarantees our structural and standard skylight products against defects in the workmanship, materials and water leakage for a certain amount of time depending on the project.

Our warranty is contingent upon the proper installations in strict accordance with standard instructions. Our liability under this guarantee shall not exceed the original purchase price of the defective item, exclusive of shipping and installation costs.