



## SECTION \_\_\_\_\_

### PSG2000™ INSULATED SAFETY GLASS AND METAL SKYLIGHT PANELS

#### PART 1 - GENERAL

##### 1.1 DESCRIPTION OF WORK

- A. Extent of the Glass and Metal Panels as indicated on the drawings.
- B. Principal Work in this section includes:
  - 1. PSG2000™ Metal Framed Insulated Glass Skylight Panels
  - 2. Reinforcement, anchors, fasteners and similar items
  - 3. Glazing materials and sealant for panels
  - 4. Fasteners at perimeter of panels

##### 1.2 DESCRIPTION OF PANELS

- A. Panels shall be Circle Redmont® factory fabricated and glazed PSG2000™ Skylight Panels manufactured at Circle Redmont® production facility, Melbourne, Florida. Panels shall be of overall sizes as detailed on the drawings. Metal framework shall be designed and produced to meet or exceed the specified structural performance. Glass units shall be Circle Redmont® standard, 1" overall tempered, insulated safety glass units. Glass units may be initially factory installed in respective cell openings using Circle Redmont® standard waterproof sealant and bedding material.

##### 1.3 QUALITY ASSURANCE

- A. Structural: Design, engineer and fabricate the skylight panels to provide roof load capacity as required.
- B. Water Penetration: Water penetration is defined as the appearance or damage from water, other than condensation, on the underside of the panels. The panels shall be totally watertight.
- C. Manufacturer of Panels: The manufacturer of the shop fabricated panels shall be a firm with not less than ten (10) years of successful experience in supplying the same type of insulated glass skylight panels as required for this project and solely employs and is responsible for all of the personnel required for all facets of production required in manufacturing the units required at its production facility.
- D. Design Criteria: The drawings and specifications are based on a specific type of panel by a single manufacturer. Equivalent type panels by another manufacturer may be acceptable only if deviations in dimension, profile, manufacturing tolerance, appearance and performance history are minor and do not materially detract from the design concept of intended performances, as judged solely by the Architect.
- E. In addition, if a substitute is being offered as an "Or Equal" to the specified products, in order to be considered, the Contractor will notify the Architect within 5 business days of such intent of substitution and upon notification by the Architect the Contractor will have three business days to provide adequate proof of equivalency, i.e.; documentation that the "Or Equal" meets the minimum characteristics of the ordering description or specification. Submission of proof of equivalency and samples shall be at the bidders expense and no compensation shall be offered by Architect or Owner.

Failure to provide this documentation which must include Substitute's [Manufacturer History, Technical Specifications, Specifications, Brochures, Samples, Catalogues, Etc.] will render your substitution non responsive and ineligible for award.

- G. Warranty: Submit written warranties signed by the manufacturer, installer and contractor, agreeing to repair or replace defective materials and workmanship during the warranty period. Manufacturer must be able to document its warranty based upon at least 50 projects with at least 5 years of successful field performance.

Defective materials and workmanship include abnormal deterioration, aging or weathering of work, leakage of water, structural failure, deterioration of finishes in excess of normal weathering and aging.

The manufacturer shall warrant the panels to be free from manufacturing defects in either materials or workmanship for a period of five (5) years from the date of shipment. The manufacturer's warranty does not include damage caused by improper handling or use, vandalism, abuse or natural conditions exceeding standard performance requirements.

Where manufacturer is contacted and upon inspection finds that performance failure is due to defective materials of fabrication of the factory prefabricated **PSG2000™ Tempered Insulated Safety Glass & Metal Skylight Panels**, all materials necessary to repair will be provided by the manufacturer at not extra cost to the customer.

The manufacturer's liability is limited to materials in the factory prefabricated panels only and manufacturer shall not be liable for handling by contractor and installer, installation procedures, and consequential damages or expenses.

The contractor and installer shall furnish a written warranty covering defects in handling, installation procedures, materials and workmanship and field applied perimeter sealant work for a period of five (5) years from the date of final acceptance. The contractor and installer's liability shall be limited to the prompt repair or replacement of panels, materials and/or perimeter sealant work.

#### 1.4 SUBMITTALS:

- A. Shop Drawings: Submit shop and erection drawings at large scale clearly showing sections of panels with all fasteners, joinery techniques, provisions for expansion/contraction, metal thickness and profiles. Identify all materials including metal alloys and fasteners. Locate and identify shop and field sealants on drawings. Show adjacent structural elements.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Panels shall be factory fabricated Circle Redmont ® PSG2000™ Insulated Safety Glass and Metal Skylight Panels as manufactured by Circle Redmont, Inc. ®, 2760 Business Center Blvd., Melbourne, Florida, 32940 (321-259-7374) (800-358-3888). Panels by other manufacturers will be considered only if the manufacturer and the panels comply fully with this specification and the drawings.
- B. The factory prefabricated panels shall consist of the following:
1. Circle Redmont ® standard 1" o.a. tempered, insulated safety glass properly spaced according to Circle Redmont standard dimensions and not exceeding (25) twenty-five square feet per glass unit.
  2. Finish of exposed structural metal framework with Circle Redmont ® standard factory applied painted finish.
  3. Exposed top glass joints weather sealed with sealant of a type recommended and warranted by the panel manufacturer.
  4. Panel joint caps, metal cap flashings, frame and accessories as shown, or as recommended by the panel manufacturer where not indicated.

## **PART 3 - EXECUTION**

### **3.1 STORAGE AND HANDLING**

- A. Handle panels in a manner that will prevent undue stress on component parts, sealants and structural members. Do not rack, torque, or cause load forces in an inappropriate manner. Prevent damage to finished surfaces. Do not install components that have been damaged or stained.
- B. Store panels in a dry place, off the ground. Bear fully along all supported edges on level and true structural supports.

### **3.2 PANEL INSTALLATION**

- A. Contractor shall set panels into prepared openings and shall bear fully along all supported edges on structural framing supports. Top of panels shall finish in plane with adjoining surfaces unless shown otherwise on drawings. Panels shall be set to proper pitch and crossfalls to ensure proper drainage of surface water and avoid ponding and fastened as indicated on shop drawings.
- B. Allow 1/2" spacing between panels and adjacent surfaces and between adjoining panels to permit installation of backer rods and sealants. All joints which are exposed to the weather shall be sealed with manufacturer's recommended sealant.
- C. Protect installed panels from damage during ensuing construction operations.

### **3.3 FIELD TESTING**

- A. After panel installations are completed they shall be field tested for leakage. Test shall be conducted by flooding the surface of panels with a sprinkler hose for a period of 15 minutes while observations are made of the undersides. Correct any deficiencies that are found in a manner to make panels completely watertight. Conduct testing in the presence of the Architect or the Architect's designated representative.

### **3.4 CLEANING**

- A. Maintain installed panels, including glazing, in reasonable clean condition during construction operations. Remove any stains or materials that may have an adverse effect on panel materials and finishes. Remove any excess glazing compound and sealants.
- B. Immediately prior to date of substantial completion clean glazing units to remove any accumulations of dirt, paint stains, etc. Glazing shall be cleaned on both inside and outside surfaces.

## **END OF SECTION**