



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

### **ELITE™ FACTORY PREFABRICATED HOLLOW GLASS BLOCK AND INTERNAL ALUMINUM GRID PANEL**

#### **PART 1 - GENERAL**

##### **1.1 DESCRIPTION OF WORK**

- A. Extent of glass block panels is indicated on the drawings
- B. Principal Work of this section includes:
  - 1. Aluminum framed glass block panels.
  - 2. Reinforcements, anchors, fasteners and similar items.
  - 3. Glazing materials and sealant in panels.
  - 4. Flashings

##### **1.2 DESCRIPTION OF PANELS**

- A. Panels shall be factory fabricated ELITE™ Panels as manufactured by Light Penetrating Systems, LLC dba Circle Redmont®, 1213 Medina Rd, Medina OH 44256 (800-358-3888 / 321-259-7374) using standard hermetically sealed hollow glass block units. Glass units shall be initially factory installed and insulated in respective cell openings of structural aluminum grids using manufacturer's standard thermofil. Panels shall be weather sealed on their top surfaces with manufacturer's standard sealant.

##### **1.3 QUALITY ASSURANCE**

- A. Structural: Design, engineer and fabricate panels to provide a live load capacity up to severe wind load requirements.
- B. Thermal Movement: Design the framing system to provide for expansion and contraction of component materials caused by surface temperature range of -10 degrees F to 120 degrees F, without causing buckling stresses on glass blocks, failure of joint seals, undue stress on structural elements, reduction in performance or other adverse effects.
- C. Water Penetration: Water penetration is the appearance of damage from water, other than condensation, on the underside of the panels. The panels shall be totally watertight.
- D. Manufacturer of Panels: The manufacturer of the factory prefabricated glass block panels shall be a firm with not less than ten (10) years of successful experience in supplying the same type of panels required for the project and solely employs and is responsible for all the personnel required for all facets of production in manufacturing the units required.
- E. 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, appearance and performance history are minor and do not materially detract from the design concept or intended performances, as judged solely by the Architect.

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 five (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 bidder's 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.

- F. Warranties: Furnish a written warranty from the manufacturer covering defective materials and workmanship for a period of five years from the date of shipment. The manufacturer must be able to document its warranty based upon at least fifty (50) projects with at least five (5) years of successful field performance of the product of the type specified.

Defective materials and workmanship in manufacture include abnormal deterioration, aging or weathering of work, leakage of water (except at perimeter), structural failure, deterioration of finishes in excess of normal weathering and aging.

The manufacture shall warranty 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 included glass breakage, damage caused by improper handling or use, improper installation, vandalism, abuse or natural conditions exceeding standard performance requirements.

Where the manufacture is contacted and upon inspection finds that performance failure is due to defective materials of fabrication of the factory prefabricated **Elite™ Hollow Glass Block and Hidden Internal Metal Frame Panels**, all materials necessary to repair will be provided by the manufacture at no extra cost to the customer. Freight and related charges not included.

The manufacturer's liability is limited to materials in the factory prefabricated panels only and manufacture 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 date of installation. 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 drawings at large scale clearly showing sections of glass block panels with all fasteners, joinery techniques, and profiles. Identify all materials including alloys and fasteners. Locate and identify shop and field sealants on drawing and show adjacent structural elements

## PART 2 - PRODUCTS

### 2.1 MATERIALS/SYSTEMS

- A. Panels: Factory prefabricated **Elite™ Hollow Glass Block and Hidden Internal Metal Frame Panels** by Light Penetrating Systems, LLC dba Circle Redmont®, 1213 Medina Rd, Medina OH 44256, (800-358-3888 / 321-259-7374), consisting of sealed hollow glass block units installed in structural aluminum grids.

### 2.2 FABRICATION AND WORKMANSHIP

- A. Maintain the visual design concept shown, including member sizes, profile and alignment of components. Coordinate work with other trades.
- B. Factory assemble each panel in the manufacturing facility employing qualified personnel solely engaged in prefabricated panel production.
- C. Fit joints accurately in exposed metal work, secure rigidly.
- D. Fabricate and fasten metal work so that the work will not be distorted nor the fasteners over stressed from expansion and contraction.
- E. Grid exposed welds and finish to metals and blend with adjacent metal.

- F. Do not use exposed fasteners.

## **PART 3 - EXECUTION**

### **3.1 INSPECTION**

- A. Contractor shall inspect adjacent construction and make sure that conditions detrimental to the proper or timely installation of this work are corrected before proceeding with installation. Coordinate panel installation with adjacent construction to assure a watertight installation.

### **3.2 STORAGE AND HANDLING**

- A. Handle panels in a manner which will prevent undue stress on component parts, sealants and structural members. Do not rack, torque, or cause load forces in an inappropriate manner. Lift panels from top only unless specifically instructed by manufacture.
- B. Store Panels in a dry place, off the ground. Bear fully along all supported edges on level and true structural supports.

### **3.3 PANEL INSTALLATION**

- A. Contractor shall not install defective components. Remove and replace components damaged during installation or thereafter before final acceptance.
- B. Do not cut, trim, or weld components during erection in any manner which would damage the finish, decrease their strength or result in a visual imperfection or a failure in performance of the work. Return components which require alteration to the shop for re-fabrication or replacement.
- C. Install components level, plumb, true to line and with uniform joints. Attach to structure with non-staining and non-corrosive shims, anchors, fasteners, and spacers. Provide all accessories such as fastenings, sealants and concealed anchorage needed for a complete weatherproof installation.
- D. Assembly and anchorage: Anchor components securely by bolting, welding or other permanent mechanical attachment system which will comply with specified requirements and permit movements which are intended or necessary.
- E. Provide tape separator between contact surfaces of dissimilar materials where there is a possibility or corrosive or electrolytic action.
- F. Sealants: Seal all joints between panels, and panels and adjacent construction, as needed for a complete weatherproof installation.

## **END OF SECTION**