



SECTION 08 56 63

DETENTION AND SECURITY WINDOWS / PANELS

PART 1 – GENERAL

1.1 SECTION INCLUDES

A. Glass Block

1. Prefabricated Detention and Security Glass Block System

1.2 RELATED SECTIONS

- A. Section 05500 - Metal Fabrications: Steel channels, sills, lintels, and jambs.
- B. Section 07900 - Joint Sealers.

1.3 REFERENCES

- A. ASTM E283 – 04 Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure and Temperature Differences Across the Specimen.
- B. ASTM E330 – 02 Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.
- C. ASTM E547 – 00 Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Cyclic Static Air pressure Difference.
- D. ASTM A1011 – 10 Standard Specification for Steel, Sheet and Strip, Hot-rolled, Carbon, Structural, High-strength, Low-alloy, High-strength Low-alloy with Improved Formability, and Ultra-high Strength.
- E. ASTM C920 – 08 Standard Specification for Elastomeric Joint Sealants.
- F. ANSI Z97.1 - American National Standard for Safety Glazing Materials
- G. 16 CFR Part 1202 - Consumer Product Safety Commission Architectural Glazing Materials

1.4 QUALITY ASSURANCE

A. Manufacturer

1. Minimum of 10 years specialized experience in the manufacture of windows.

B. Direct Representation

1. The manufacturer shall have available a direct representative with full knowledge and experience of the product and systems for technical assistance.

1.5 SUBMITTALS

A. Submit under provisions of Section 01 30 00.

B. Product Data: Manufacturer's literature on each product to be used, including:

1. Preparation instructions and recommendations.
2. Storage and handling requirements and recommendations.
3. Written installation instructions.

C. Verification Samples:

1. Two glass block units of each type specified, showing size, design, and pattern of faces.
2. Representative samples of assembly as required for project.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Handle panels in a manner which will prevent undue stress on component parts, sealants and structural members. Do not rack or torque, or cause load forces in an inappropriate manner.

1.7 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.8 WARRANTY

A. Provide manufacturers limited 10-year warranty.

1.9 CERTIFICATION

A. Manufacturer will provide a "Certificate of Compliance" upon completion of installation attesting that all components and installation conforms to the requirements on drawings and in specifications. [Note if applicable to the job.](#)

PART 2 – PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Pittsburgh Corning Corporation which is located at: 800 Presque Isle Drive, Pittsburgh, PA 15239-2799; Toll-free Tel: 800-245-1217 Tel: 724-327-6100; Fax: 724-387-3806 ; E-mail: request info; Web: www.pittsburghcorning.com
- B. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00.

2.2 GLASS BLOCK PREFABRICATED SYSTEM

- A. Glass Block: General.
 - 1. Finish: Polyvinyl butyral edge coating or latex paint.
 - 2. Framing: Steel framed grid system.
- B. Glass Block: PC VISTABRIK®
 - 1. Physical Properties:
 - a. Weight Installed With Mortar: 40 lbs/sq ft (195 kg/sq m).
 - b. Thermal Conductance (U Value): 0.87 Btu/hr sq ft deg F (5 W/sq m K); winter night.
 - c. Thermal Resistance (R Value): 1.15 deg F hr sq ft/Btu (0.2 (K sq m)/W).
 - d. Visible Light Transmission: 80 percent.
 - 2. Pattern: Clear or Stippled
 - a. All sizes available; thickness, 3.25 inches (83 mm)
- C. Basis for Design.
 - 1. Pittsburgh Corning's LightWise Architectural Detention Series Prefabricated Glass Block System

2.3 STEEL FRAMED "T" GRIDS

- A. Grids shall be fabricated using pre-painted A-36 quality carbon steel.

2.4 ACCESSORIES

- A. Sealant (caulk): Non-staining; waterproof mastic; silicone type meeting the requirements of ASTM C920.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. Notify architect of unsatisfactory preparation before proceeding.
- C. Verify that channels for support at head, jambs and sills are properly installed.

3.2 PREPARATION

A. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

A. Install Detention & Security Glass Block System in strict compliance with the manufacturers' specifications, sizing, anchorage charts and installation instructions including all materials, accessories, workmanship and cleaning.

3.4 CLEANING

A. Remove excess sealant from glass surfaces immediately following application.

3.5 PROTECTION

A. Protect installed products until completion of project.

B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION