SEVES GLASS BLOCK LightWise® Architectural Systems

SECTION 08 88 56
BALLISTIC-RESISTANT GLASS BLOCK WINDOWS/PANELS

PART 1 - GENERAL

1.1 SECTION INCLUDES
A. Prefabricated Ballistic-Resistant Laminated 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 A123 - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
B. ASTM E283 - 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.
C. ASTM E330 - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.
D. ASTM E547 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Cyclic Static Air Pressure Difference.
E. ASTM A1011 - Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon. Structural, High-Strength Low-Alloy with improved Formability, and Ultra-High Strength.
F. ASTM C920 - Standard Specification for Elastomeric Joint Sealants.
G. UL 752 - Standard for bullet-resisting equipment. Passed UL 752 Levels 1 through 6.

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 provide a direct representative, not a manufacturer's representative, with full knowledge and experience of the products and systems incorporated in this project, to verify the installation of the contractor's work. Note: if applicable to the job.

1.5 SUBMITTALS
A. Submit under provisions of Section 01 30 00.
B. Product Data: Manufacturers 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.
D. Test Reports
   1. Submittal of test reports from independent laboratories indicating conformance to regulatory requirements UL 752 ballistic levels 1 through 6 shall be made available if required by architect.

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 5-year warranty.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. Seves Glass Block Inc.
10576 Broadview Rd, Cleveland, Ohio 44147
440-627-6257 or 877-SEVES11 (877-738-3711)
www.sevesglassblockinc.com inquiry@sevesglassblock.com

2.2 GLASS BLOCK PREFABRICATED SYSTEM

A. Glass Block: General.
1. Finish: PolyVinylButyral or Latex Based Edgecoating material
2. Framing: Steel grid system.

B. Glass Block: Seves Laminated VISTABRIK® solid glass block.
1. Pattern: Clear or Stippled
2. All sizes available; thickness, 3.15 inches (80 mm)

C. Basis for Design
1. Seves Glass Block LightWise® Architectural Ballistic-Resistant Series Prefabricated Glass Block System.

D. Performance Requirements
1. UL 752 level of ballistic resistance as required for project, Levels 1 through 6.
2. Tested resistance to UV light transmission: 99%
3. Visible Light Transmission of 50% to 80%.
4. Sound Transmission class (STC) of 53% minima! (with mortar)
5. Thermal Conductance (U-value) of 0.87 Btu/hr. sq. ft. deg. /F (with mortar).
6. Thermal Resistance (R-value) of 1.15 deg. F/hr. sq. ft./Btu
7. Solar Heat Gain Coefficient (SHGC) of 0.75 to 0.78

2.3 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 Ballistic-Resistant Glass Block System in strict compliance with the manufacturer's 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 08 88 56