



**SECTION 08 88 65  
TORNADO RESISTANT WINDOW**

**PART 1 – GENERAL**

**1.1 SECTION INCLUDES**

- A. Tornado Resistant Prefabricated Laminated Glass Block Window System

**1.2 RELATED SECTIONS**

- A. Section 04 20 00 – Unit Masonry
- B. Section 05 50 00 - Metal Fabrications: Steel channels, sills, lintels, and jambs.
- C. Section 00 79 00 - Joint Sealants

**1.3 REFERENCES**

- A. ASTM A123 - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
- B. ASTM A1011 - 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.
- C. ASTM C920 - Standard Specification for Joint Sealants.

**1.4 TEST METHODS**

- A. FEMA 361, Section 6 Performance Criteria for Debris. Federal Emergency Management Agency. Second Edition, August 2008.
- B. ICC/NSSA 500-2008, Standard for the Design and Construction of Storm Shelters.
- 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 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.
- E. ASTM E547 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Cyclic Static Air Pressure Difference.

**1.5 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.

**1.6 SUBMITTALS**

- A. Submit under provisions of Section 01 30 00.
- B. Manufacturer's literature on each product used
- C. Verification Samples:
  - 1. Two glass block units of each type specified, showing size, design, and pattern of faces as required for project.
  - 2. Representative samples of assembly as required for project.
- D. Test Reports
  - 1. Test report from certified lab documenting testing of air pressures and missile impact for windows as described in FEMA 361, Section 6 Second Edition, August 2008, ICC/NSSA 500-2014 and ASTM E 330-02 - Pass

### **1.7 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.

### **1.8 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.

### **1.9 WARRANTY**

- A. Provide manufacturers limited 5-year warranty.

## **PART 2 – PRODUCTS**

### **2.1 ACCEPTABLE MANUFACTURERS**

- A. Seves Glass Block s.r.o.  
Bilinská 782/42 Duchcov, 419 01, Czech Republic  
440-627-6257 or 877-SEVES11 (877-738-3711)  
[www.sevesglassblockinc.com](http://www.sevesglassblockinc.com) [leads@sevesglassblock.com](mailto:leads@sevesglassblock.com)

### **2.2 GLASS BLOCK PREFABRICATED SYSTEM**

- A. Glass Block: Seves Laminated VISTABRIK® solid glass block.
  - 1. Pattern: Sandblasted on Both Faces for Obscurity and Disbursed Light Transmission
  - 2. Size: 8 inch by 8 inch nominal (standard)
- B. Basis for Design
  - 1. Seves LightWise® Architectural Tornado Resistant Glass Block Window
- C. Performance Requirements
  - 1. Resistance to UV light transmission: 99%
  - 2. Visible Light Transmission of 50% to 80%

### **2.3 STEEL GRID**

- A. Stainless or Carbon steel 0.25" thick face plate; 11 gage (0.120") stainless or carbon steel fins welded to face plate.

### **2.3 ACCESSORIES**

- A. Sealant: Type meeting requirements of ASTM C920.
- B. Fasteners and anchors: Per current manufacturer's recommendations.

## **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 the opening is plumb and square and meets dimensional requirements.

### **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. result for the substrate under the project conditions.

### **3.3 INSTALLATION**

- A. Install Tornado Resistant Prefabricated Laminated Glass Block Window 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 and frame immediately following application.

### **3.5 PROTECTION**

A. Protect installed products until completion of project.

**END OF SECTION 08 88 65**