SECTION 08 55 00 – PRESSURE RESISTANT WINDOWS
SECTION 08 56 53 13 – WIND AND IMPACT SECURITY WINDOWS

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes: Impact, wind, and bullet-resistant fixed window assemblies.

B. Related Documents: Division 01 - General Requirements: Administrative, procedural, and temporary work requirements.

1.2 ADMINISTRATIVE REQUIREMENTS

A. Pre-Installation Conference:
1. Attendance: [Architect,] [Owner,] [Contractor,] [Construction Manager,] [Design/Builder] installer, and related trades.
2. Review: Project conditions, manufacturer requirements, delivery and storage, staging and sequencing, and protection of completed work.

1.3 SUBMITTALS

A. Action Submittals:
1. Shop Drawings: Illustrate products, installation, and relationship to adjacent construction.
2. Product Data: Manufacturer's descriptive data and product attributes.
3. Samples: [Selection samples,] [Verification samples,] on aluminum extrusions.

B. Informational Submittals:
1. Certified test results indicating product compliance with ICC 500-23 and FEMA P-361-24.

C. Closeout Submittals:
1. Operation and Maintenance Data: Product data and related information required for Owner's maintenance and operation of products furnished.

1.4 QUALITY ASSURANCE

A. Window assembly attachment to building structure to be designed by registered professional engineer licensed in State in which Project is located.

B. Window Assembly: Window, frame, and hardware factory assembled into single unit.

1.5 DELIVERY, STORAGE AND HANDLING

A. Deliver, store, and handle products in accordance with manufacturer's instructions.

1.6 PROJECT CONDITIONS

A. Do not install products when environmental conditions are outside of manufacturer's recommended limits.

PART 2 PRODUCTS

Commented [Au1]: United States Bullet Proofing has developed this guide specification to assist design professionals in preparing a project specification on USAW650ICC s fixed windows for use in FEMA/ICC 500 storm shelters and similar applications.

The following should be noted in using this document:

Optional text requiring a selection by the user is enclosed within brackets and as red text, e.g.: "Color: [Red.] [Black.]"

Items requiring user input are enclosed within brackets and as red text, e.g.: "Section [__ __ __ - _____]."

Optional paragraphs are separated by an "OR" statement included as red text, e.g.:

**** OR ****

For assistance on the use of the products in this section, contact United States Bullet Proofing by calling 800-363-8328 or visit their website at www.usbulletproofing.com.

Commented [Au2]: Retain for a pre-installation conference. Delete for smaller, less complex projects.

2.1 MANUFACTURERS

A. Product Basis: USAW650ICC window assembly by United States Bullet Proofing, www.usbulletproofing.com.

2.2 SYSTEMS

A. System Description:
1. Aluminum pressure plate, thermally broken, pour and skip debridge system.
2. System performance requirements; tested and classified to ICC 500-23 and FEMA P-361-24:
   a. Design tornado pressure: Plus 248 MPH, minus 312 MPH.
   b. Design hurricane pressure: Plus 167 MPH, minus 223 MPH.
   c. Impact rating: 15 pounds at 100 MPH.
3. Air infiltration and exfiltration: Maximum 0.05 CFM, tested to ASTM E283/E283M-19 at static pressure differential of 1.57 PSF.
4. Water infiltration; storefront: No uncontrolled water leakage, tested to ASTM E331-23 at minimum static air pressure differential of 15.04 PSF.
5. Thermal resistance: U-factor of 0.44 BTU, tested to NFRC 102.
6. Ballistics resistance: Tested to UL 752:
   a. 11th Edition: Level 5.
   b. 12th Edition: UL RF-B at ambient temperature.

2.3 MATERIALS

A. Aluminum Extrusions: ASTM B221, alloy and temper best suited to application.

B. Glazing: Laminated glass-clad polycarbonate glazing system incorporating an insulating air space, a solar-protective interlayer, and a 90% argon gas fill.

Commented [Au3]: This glass was used in the tested window assembly to achieve the specified results. Contact United States Bullet Proofing for other glass types.

2.4 FINISHES

A. Aluminum: AAMA 611, Architectural Class I anodized, [clear.] [dark bronze.]

Commented [Au4]: Anodized finishes are standard.

**** OR ****

B. Aluminum: AAMA 2605, fluoropolymer coating, minimum 70 percent PVDF resins, [____] [custom] color [to be selected].

Commented [Au5]: Custom color fluoropolymer coatings are optional. Contact United States Bullet Proofing for availability.

PART 3 EXECUTION

3.1 INSTALLATION

A. Install in accordance with manufacturer's instructions and approved Shop Drawings.

END OF SECTION