

DATA SHEET

STORM IMPACT & BALLISTIC WINDOW USAW 650 FEMA



- The USAW 650 FEMA Window System is a high-security fixed and ribbon aluminum window system designed for the exterior envelope to provide multi-threat protection against tornadoes, hurricanes and extreme storm conditions, as well as high power rifles.
- Frame size: 2-1/2" x 6-1/2"
- Frame Construction thermally broken with pour and debridge system
- Glazing: 2-1/4" Nominal thickness
- Glazing Thermal Makeup: Solarban® 90 low-e coated glass with Argon gas fill
- Standard Finish: Clear or dark bronze anodized (Custom: Fluoropolymer paint available)

PROTECTION, TESTING & STANDARDS

- **Storm Impact:** ICC 500 (2023), FEMA P-361 (2024) Ed. 5
 - **Design Tornado Pressure:** +248 / -312 psf
 - **Design Hurricane Pressure:** +167 / -223 psf
 - **Impact Rating:** 15lb @ 100mph
- **Ballistics:** UL 752 (11th and 12th Editions) Level 5 and UL-RF-B, protects one shot from a 7.62 x 51mm NATO Full Metal Jacket round.
- **Air Infiltration / Exfiltration and Water Penetration:** ASTM E283/E283M-19, ASTM E331-00 (2023)
- **Thermal Performance:** NFRC 102-2026, U-Factor 0.44 Btu/hr-ft²-°F

PRODUCT SPECIFICATION INFORMATION

- Aluminum extrusions to be 6063-T6 extruded aluminum
- Interior glazing gaskets comprised of Thermoplastic Elastomer (TPE 65AB) and Polyolefin Foam Concentrate (resulting in 55 to 65 Shore "A" durometer) or wet glazed as needed.
- Glazing Composition: Laminated heat strengthened annealed glass and polycarbonate composition provides missile impact and ballistic resistance in a single unit.
- Glazing set with 70 Duro black EPDM setting blocks and retained with Dowsil® 795 structural silicone with an aluminum pressure plate and steel fasteners.
- Anchoring designed by registered design professional for pull-out and shear per ICC 500 (2023) Section 304. Adequacy of supporting structure outside of scope for the listing of this product.

OTHER IMPORTANT INFORMATION

- Shipped factory assembled, non-factory glazed.

It is recommended that the window system be used in conjunction with protected wall and door areas. Each end user should determine the appropriate threat and protection level required to ensure the product selected meets the building security needs.