

TOTAL SECURITY SOLUTIONS BL-550 BULLET RESISTANT ALUMINUM WINDOW FRAMING SYSTEM

PART 1 – GENERAL

1.1 REFERENCE

The publication below forms a part of this specification.

UNDERWRITERS LABORATORY UL 752 11th Edition dated Sept. 5, 2005
Standard for Bullet Resistant Equipment

1.2 DESIGN

Extruded aluminum sash frames shall have a 1 ¾" face and 5 ½" depth. Frames shall be designed to defeat ballistic assaults from .30 cal rifle tested in accordance with UL 752 Level 4.

1.3 SUBMITTALS

The following shall be submitted in accordance with Division 1 and the SPECIAL CONTRACT REQUIREMENTS. Submit for approval prior to fabrication: catalog cuts, shop drawings, specifications, frame profiles, size, type and spacing of frame anchors, reinforcement size and locations, details of joints and connections, and printed data in sufficient detail to indicate compliance with the contract documents. Manufacturer's instructions for installation and cleaning.

1.4 WARRANTY

All materials and workmanship shall be warranted against defects for a period of one (1) year from date of receipt at job site.

PART 2 – PRODUCTS

2.1 FRAMES

Bullet Resistant frames and glazing assemblies shall be furnished by Total Security Solutions of Fowlerville, MI, phone (517) 223-7807. (866) 930-7807, Fax (517) 223-0805. All components will be constructed from extruded aluminum in 6061-T6 alloy / temper, or equal.

Sill will be one piece extrusion with no integral weep system at the sill. Jambs will be two piece extrusion with removable faces to allow for reglazing. Mullions will be three piece extrusion with removable faces to allow for glazing and individual lite replacement. All aluminum extrusions shall be 6061-T6 alloy temper or equal with a minimum tensile strength of 38.0 ksi yield. There shall be no exposed fasteners. The exterior glazing gaskets shall be solid neoprene (65-75 Shore "A" Durometer). Setting blocks shall be solid neoprene (80-90 shore "A" Durometer). All neoprene shall be in strict compliance with ASTM C-509-89 Type II option 1 and C-864-89. All joints and connections shall be tight, providing hairline joints and true alignment of adjacent members.

It is imperative that tight hairline joints be maintained to assure the ballistic integrity of the system. Field cutting may be required to compensate for individual building variations and tolerances. The system shall be capable of accepting various glazing products ranging in thickness from 1.5" to 1.688".

2.2 GLAZING

Glazing shall be UL Listed Levels 4, 5 and 8 glass clad polycarbonate

2.3 FINISH

Finish shall be clear anodized or bronze duranodic

PART 3 – EXECUTION

3.1 INSTALLATION

Set frames and glaze in accordance with manufacturer's instructions. Repair damaged units (if approved by the manufacturer and the architect) or replace with new units.

3.2 PROTECTION

Properly store all the frames, glazing material etc. in a dry location and covered to protect from damage before and after installation.

3.3 CLEANING

Upon completion, clean exposed surfaces of frames and glazing products thoroughly in accordance with manufacturer's instructions. Remove mastic smears and other unsightly marks.

**** END OF SECTION ****