



SECTION 13070

BULLET-RESISTANT, BOLT-IN STYLE, STEEL FIXED-VIEW WINDOW FRAMES

PART 1 - GENERAL

1.01 DESCRIPTION

A. WORK INCLUDED:

1. All labor, material, equipment, and services necessary to furnish and install bullet-resistant [primed-finish] [stainless] steel glazing frames to be located as shown on the construction drawings or as noted in the window schedule.
2. Related sections:
 - a.

B. RELATED DOCUMENTS:

1. Underwriters Laboratory, UL 752, Current Edition, Standard for Bullet-Resisting Equipment

1.02 QUALITY ASSURANCE

- A. Ballistic Performance: Certification shall be furnished indicating that all materials have been tested in accordance with the appropriate test procedures.
- B. Obtain bullet-resistant components through one source from a single manufacturer.

1.03 SUBMITTALS

- A. Shop Drawings shall be submitted for approval prior to the fabrication of materials. The drawings shall include plan views, elevations, sections, and details of the proposed installation including attachment methods.
- B. Drawings shall indicate dimensions, component profiles, and material finishes.
- C. Manufacturer's warranty and product data, glazing product information, and installation instructions shall be included with the submittal package.

1.04 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Pack bullet-resistant glazing frames in wood crates for shipment. Glazing should be crated separately, unless frames are factory glazed.
- B. All items shall be delivered, stored, and handled in a manner that will not damage or deform.
- C. Abraded, scarred, or rusty areas shall be cleaned, repaired, or replaced immediately upon detection. Damaged items that cannot be restored to like-new condition shall be replaced.
- D. Store crated glazing frames in a dry location on platforms or pallets that are adequately ventilated, free of dust, water, and other contaminants, and stored in a manner that permits easy access for inspection and handling.

1.05 JOB CONDITIONS

- A. Field Measurements: Contractor shall verify finished openings by field measurement prior to fabrication and indicate measurements on Shop Drawings.
 - 1. Established Dimensions: If field measurements cannot be made without causing a delay, establish opening dimensions and proceed with fabrication of bullet-resistant frames without field measurements. Coordinate construction to insure that the actual finished-opening dimensions correspond to the established dimensions.

1.06 WARRANTY

- A. Warranty Period: Glazing frames shall be warranted for a period of 12 months from the date of substantial completion.
- B. Warranty is limited to material defects or workmanship and offered to North American Bullet Proof direct customers. Warranty is limited to replacement of product or refund of invoice price at North American Bullet Proof's discretion. Installation, shipping or other costs are not included in this warranty.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. North American Bullet Proof, 106 Guadalupe Drive, P.O. Box 628, Cibolo, TX 78108. Phone 888.746.8427, Fax 210.225.0984

2.02 MATERIALS

- A. Bullet-Resistant [Primed-Finish] [Stainless] Steel Glazing Frames:
 - 1. Model - Shotgard® Series Bullet-Resistant [EXVW-P] EXVW-SS], [Primed-Finish] [Stainless] Steel Fixed-View Window
 - 2. Frames and glazing shall be supplied to provide a complete assembly.
 - 3. Ballistic Resistance Performance Level: U.L. 752 Level [1-8]
 - 4. [EXVW-P] EXVW-SS] [Primed-Finish] [Stainless] Steel Fixed-View Window to be constructed of [12-gauge primed-finish] [14-gauge stainless] steel with mitered, continuously welded corners.
 - 5. Frame Profile: 2" x 5½" bolt-in frame, lined with steel as required for ballistic protection level, with 1¼" x 1¼" removable stop.
 - 6. [Mullions: 2½" profile, constructed of [12-gauge primed-finish] [14-gauge stainless] steel.]
 - 7. Testing: Independently tested to U.L. 752 for specified level.

2.03 COMPONENTS

- A. Glazing: Glazing shall be field installed. Glazing material shall be factory-fabricated units designed to be bullet-resistant to the specified level. Glazing material shall be [glass-clad polycarbonate] [laminated glass] [acrylic] with a no-spall protected interior face. No-spall interior face shall meet or exceed requirements for spall resistance defined in U.L. 752
- B. Setting Blocks: provide ¼" x 1" x 4" rubber setting blocks for installation at the sill.
- C. Glazing Tape: Provide [1/16"] [3/8"] [¼"] butyl tape to be field-applied to frame and removable stop.
- D. Anchor-hole Plugs: Provide decorative plugs to cover anchor-access holes.
- E. Anchors and Silicone Sealants to be provided by installer.

2.04 [ACCESSORIES]

- A. [Speaker: NASD-6 Series Stainless Steel Speak-Thru Device
 - 1. Made from cast and polished stainless steel

2. Provide Mylar® draft shield for exterior applications.
3. Speaker to provide U.L. 752 Level [1-4/6] protection.
4. Provide [stainless steel] [powder coated steel] backing plate with spacers for Level [1-3/6] [4] protection.]

2.05 FABRICATION

- A. General: Fabricate bullet-resistant glazing frames to comply with indicated standards. Include a complete system for assembly and installation of bullet-resistant glazing frames.
 1. Provide frames that are capable of being reglazed from the secure side without dismantling the threat side of the frame.
 2. Prepare frames for glazing for field glazing.
 3. Steel shall be free of scale, pitting, coil breaks, and finish work shall be neat and free of defects.
- B. Framing: Miter the corners the full depth of the frame. Weld and dress smooth.
 1. Install armor inside the frame in the thickness necessary for the ballistic resistance level indicated.
 2. Weld [12 gauge. steel] [14 gauge stainless steel] anchor plates, evenly spaced along each side of frame, not to exceed 24 inches O.C.
- C. [Mullions: Weld steel mullions in place at sill and head with continuous weld.]
- D. Glazing Stops: Provide a one-piece removable glazing stop, .120-inch minimum wall thickness, on the secure side of the frame attached with machine screws.
 1. Corners are to be mitered, welded, and dressed smooth.
 2. Stops shall be installed in a location appropriate for the glazing thickness.
 3. Finish glazing stops to match frame finish.
 4. The threat-side glazing stop shall be integral to the glazing frame.
- E. Welding: Miter-cut corners to receive full weld and finish. No body filler to be used.
- F. Metal Protection: Separate dissimilar metals to protect against galvanic action by painting contact surfaces with primer or by applying sealant or tape recommended by manufacturer for this purpose.
- G. Any openings in glazing for speak-thru devices are to be factory-cut.
- H. No field alterations to the construction of the units fabricated under the specified standards shall be allowed unless approved by the manufacturer.

2.06 FINISHES

- A. [Provide shop-applied primer after fabrication:
 1. Primer: Rust inhibitive paint suitable as a base for finish paints.
 2. Prior to shop painting, surfaces shall be cleaned with solvents to remove any grease or oil, and with power wire-brushing or sandblasting to remove loose rust, loose mill scale and other foreign substances.
 3. Field paint and finish in accordance with, and as directed in, the Finish Section 9 of these Specifications]or
[All stainless steel components to be finished to No.3 brushed finish.]

2.07 LABELING

- A. Bullet-resistant glazing frames shall be plainly and permanently labeled. The label shall be compatible with finishes. The label shall be visible only on the secure side, after installation, and shall include:
 1. Manufacturer's name or identifying symbol
 2. Model Number

3. Date of manufacture by month and year. This may be done through use of lot number or other traceable code.
4. Correct mounting position including threat side and secure side (by removable label on glazing material).
5. Code indicating bullet-resistant rating and test standard used (by removable label on glazing material).

PART 3 - EXECUTION

3.01 INSPECTION

- A. Upon delivery, the contractor shall open the crate and inspect the contents for freight damage. If damaged, notify the freight company of the claim. Check the packing list to make sure all items are present. If any items are missing, notify North American Bullet Proof.
- B. Prior to commencing installation, the contractor shall examine all areas to receive the bullet-resistant glazing frames to ensure that they are ready for installation. Components shall be checked and corrected for racking, twisting, and other malformation prior to installation. All surfaces and connections shall be examined for damage prior to installation.
- C. The contractor shall verify that the glazing frames comply with indicated requirements for type, size, and location.
- D. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. The Contractor shall field verify dimensions of the finished openings. EXVW bolt-in frames must be installed in a plumb, level, and square finished opening. The finished opening must be ¼" larger in width and height than the window frame.

3.03 INSTALLATION

- A. Install: Place the glazing frame unit in the opening, centered on wall. Mark the anchor holes. Remove the frame and drill the anchor holes. Install the frame and shim for plumb/level. Secure with anchors. Note: all anchors provided by installer. Install the anchor-hole plugs.
- B. Finish: Seal all joints in and around the frame (sealant by installer). Sand and finish the frame. Wait until all sealants and paint are cured before the next step.
- C. Glazing: (Best done by professional glass installer). Identify the secure and threat sides of the glazing. Remove any protective cover from the glazing. Apply butyl tape to the frame and the stop. Place the rubber setting blocks in the frame (at the sill only). Install glazing, making sure it fits properly. Install the removable stop using the screws provided with the window. Apply silicone sealant over butyl tape (sealant by installer).

3.04 CLEAN

- A. Provide glass cleaning kit and instructions.
- B. Use care and strictly follow instructions included with shipment for cleaning the glazing.

END OF SECTION