



SECTION 13070

BULLET-RESISTANT STEEL DOORS AND CLAMP-STYLE STEEL DOORFRAMES

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 steel doors and doorframes to be located as shown on the construction drawings or as noted in the door and window schedules.
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 doors/frames in wood crates for shipment. Glazing should be crated separately, unless doors 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 components 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 frame 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 opening dimensions correspond to the established dimensions.

1.06 WARRANTY

- A. Warranty Period: Bullet-resistant components 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 cost is 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 Steel Doors and Clamp-style Doorframes:
 - 1. Model - Shotgard® Series Bullet-Resistant SDR Primed-Finish Steel Door and Primed-Finish Steel Doorframe
 - 2. Frames, doors, and [glazing] shall be supplied to provide a complete assembly.
 - 3. Ballistic Resistance Performance Level: U.L. 752 Level [1-8]
 - 4. SDR integral door/frame system to provide ballistic overlap protection.
 - 5. SDR Primed-Finish Steel Door to be constructed of 10-gauge steel skins over tube-steel skeleton with mitered, continuously welded corners.
 - 6. SDR Primed-Finish Steel Doorframe to be constructed of 12-gauge steel with mitered, continuously welded corners.
 - 7. Frame Profile: 2" clamp-style frame (depth of frame, to be determined by wall thickness, from 4½ to 12¾ inches), lined with steel as required for ballistic protection level.
 - 8. [Viewlite to be a [4" x 22"] [10" x 10"] [9" x 15"] [22" x 34"] [22" x 60"] visual opening; performance level of the glazing to match the performance level of the door.]
 - 9. Door to be pre-hung with 1100-lb. rated continuous-gear hinge with security pins.
 - 10. Door and frame to be prepped for mortise lock and standard strike.
 - 11. Testing: Independently tested to U.L. 752 to level specified.

2.03 SDR COMPONENTS

- A. Hinge: The SDR steel door shall be supplied pre-hung, with an 1100-lb. rated continuous-gear hinge with tamper-resistant dogging pins.
- B. Silencers: Silencers shall be provided at the strike-jamb stop.
- C. [Viewlite Glazing: Glazing material shall be factory-fabricated units designed to be bullet-resistant to the specified test standard. Glazing material shall be [glass-clad polycarbonate] [laminated glass] [acrylic] with a low-spall protected interior face. Low-spall interior face shall meet or exceed requirements for spall resistance defined in U.L. 752.]
- D. Setting Blocks: provide ¼" x 1" x 4" rubber setting blocks for installation at the sill.

- E. Anchor-hole Plugs: Provide decorative plugs to cover anchor-access holes.
- F. Anchors and Sealants to be provided by installer.

2.04 FABRICATION

- A. General: Fabricate bullet-resistant components to comply with indicated standards. Include a complete system for assembly and installation of bullet-resistant components.
 - 1. Provide doors that are capable of being reglazed from the secure side without dismantling the threat side of the frame.
 - 2. Prepare doors for glazing in the field, unless preglazing at the factory is indicated.
 - 3. Steel shall be free of scale, pitting, coil breaks, and finish work shall be neat and free of defects.
- B. Framing: Miter corners the full depth of the frame. Continuously weld and dress smooth. No body fillers to be used.
 - 1. Install armor inside the frame in the thickness necessary for the ballistic resistance level indicated.
 - 2. Prep frame for standard 4/8" ANSI strike at 40 inches above finished floor.
 - 3. Provide spreader at bottom of doorframe for protection during shipping, and for easier, cleaner installation.
- C. [Viewlite Stops: Provide a one-piece removable glazing stop, two-inch depth, made from 12-gauge steel, 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 door finish.
 - 4. The threat-side glazing stop shall be [(level 1-3) fixed-in-place 12-gauge steel] [(level 4-8) welded-in-place 3/8" ballistic steel.]
- D. SDR: Fabricate steel doors with 10 gauge steel door skins.
 - 1. Proprietary adhesive to be used to bond door skins to door structure.
 - 2. Prep door for [mortise] [cylinder] lockset to line-up with strike.
 - 3. Hinge reinforcement: Provide 3/16" steel continuous hinge reinforcement, welded to door edge.
- E. Hardware: Templates are to be provided to the door manufacturer by the hardware contractor. The installing contractor shall perform drilling and tapping for surface mounted hardware at the jobsite.
- 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 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.

2.05 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]

2.06 LABELING

- A. Bullet-resistant components 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, 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, examine all areas to receive the bullet-resistant doors and 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. Verify that the doors and 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. SDR clamp-style frames must be installed in a plumb, level, and square rough opening. The rough opening must be 3/4" smaller in width and 1 5/8" smaller in height than the doorframe dimension

3.03 INSTALLATION

- A. Install: Place the frame in the opening. Mark the anchor holes. Remove the frame and drill the anchor holes. Install the frame and shim for plumb/level. Install fasteners between the anchor holes and the adjustable frame. Place the clamp frame/door in the opening and check for proper fit. Adjust the shims as needed for plumb/level and fit. Install the clamp frame and secure with anchors. Note - all anchors provided by installer.
- B. Test: Test the door for proper fit and operation. If required, remove the unit, adjust the shims, and reinstall. Install the anchor-hole plugs.
- C. Finish: Seal all joints in and around the frame. Sand and paint the frame and door. Wait until all sealants and paint are cured before operating.
- D. [Glazing: (Best done by professional glass installer) identify the secure and threat sides of the glass. Remove any protective cover from the glazing. Apply butyl tape to the viewlite stops. Place the rubber setting blocks in the opening (sill only). Install glazing, making sure it fits properly. Install the removable stop using the screws provided with the window. Apply sealant over butyl tape (sealant by installer).]

3.04 ADJUST AND CLEAN

A. Use care and follow instructions for cleaning the glazing.

END OF SECTION