



SECTION 13070

BULLET-RESISTANT ALUMINUM DOORS AND DOORFRAMES

PART 1 - GENERAL

1.01 DESCRIPTION

A. WORK INCLUDED:

1. All labor, material, equipment, and services necessary to furnish and install bullet-resistant aluminum doors and doorframes to be located as shown on the construction drawings or as noted in the door 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 frames are factory glazed.
- B. All items shall be delivered, stored, and handled in a manner that will not damage or deform.
- C. Abraded or scarred 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 Doorframes:
 - 1. Model - Shotgard® Series Bullet-Resistant ADR Aluminum Door and Aluminum 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. ADR integral door/frame system to provide ballistic overlap protection.
 - 5. ADR Aluminum Door to be constructed of anodized aluminum extrusions consisting of 3¾" top rail and stiles, and 9½" bottom rail [with 3¾" horizontal rail].
 - 6. ADR Aluminum Doorframe to be constructed of anodized aluminum frame, snap covers, and stop extrusions.
 - 7. Frame Profile: 2" x 4½" non-thermal frame, lined with steel as required for ballistic protection level.
 - 8. Full[Half]-Lite 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 ADR COMPONENTS

- A. Hinge: The ADR steel door shall be supplied pre-hung, with an 1100-lb. rated continuous-gear hinge with tamper-resistant dogging pins.
- B. Weatherstrip:
 - 1. Perimeter gasket shall be provided at frame stops.
 - 2. Brush weatherstrip shall be provided at strike-edge of door.
 - 3. Rubber door bottom shall be provided along length of bottom edge of door.
- C. Threshold: provide ¼" aluminum saddle threshold.
- D. Viewlite Glazing: Field-installed 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.

- E. Setting Blocks: provide ¼" x 1" x 4" rubber setting blocks for installation at the sill.
- F. Wedges and Gaskets: Provide interior wedge and exterior gasket in sizes appropriate for glazing thickness
- G. 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.
 3. Aluminum shall be free of scratches....., and finish work shall be neat and free of defects.
- B. Framing: Straight-cut aluminum extrusions, fastened with no. 14 stainless steel screws into frames at corners (extruded screw boss)
 1. Install armor inside the frame in the thickness necessary for the ballistic resistance level indicated.
 2. Install snap covers over armor pocket.
 3. Install perimeter gasket at stops.
 4. Prep frame for standard 4⅞" ANSI strike at 40 inches above finished floor.
- C. ADR: Fabricate from integral system of aluminum extrusions including:
 1. Top rail, strike-edge stile with beveled edge and brush weatherstip, hinge-edge stile, [intermediate rail,] and bottom rail with rubber door bottom.
 2. Components are to be straight-cut and fastened together with shear blocks, torsion bolts and welds.
 3. Prep door for Adams Rite MS1850SN Series door lock.
- D. Viewlite Stops: Provide straight-cut, snap-in-place, removable glazing stops on the secure side of the door.
 1. Stops shall be installed in a location appropriate for the glazing thickness.
 2. Glazing stop finish to match door finish.
 3. The secure-side glazing stop shall be locked in place with interior drive-in wedge.
 4. The threat-side glazing stop shall be screwed in place.
- 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

1. [Provide aluminum components with a [clear] [dark bronze] anodized finish]
or
[Provide aluminum components with a fluoropolymer finish.
 - a. Color selection:]

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. ADR aluminum 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 doorframe.

3.03 INSTALLATION

- A. Install: Place the frame 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.
- B. Test: Test the door for proper fit and operation. If required, remove the unit, adjust the shims, and reinstall.
- C. Finish: Seal all joints around the frame (sealant by installer). Wait until all sealants are cured before the next step.
- D. Glazing: (Best done by professional glass installer) identify the secure and threat sides of the glass. Remove any protective cover from the glazing. Install exterior push-in wedge at fixed stop. Place the rubber setting blocks in the opening (sill only). Install glazing, making sure it fits properly. Install the removable stop. Lock removable stop in place with interior drive-in wedge.

3.04 ADJUST AND 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