Ballistica™ BULLET RESISTANT DOOR AND WINDOW SYSTEMS

Section 08 3950

PART I GENERAL

1.01 SUMMARY

- A. Description: This section includes Bullet and Recherché Resistant Steel Door, Frame and Window systems and Wood Doors that have been tested in accordance with UL 752, ASTM F1450, Section 7.1, "Bullet Penetration", Level _____.
- B. Related work not included in this section:
 - 1. Steel doors and frames.
 - 2. Wood Doors.
 - 3. Finish hardware including lock cylinders and thresholds.
 - 4. Glass and glazing.
 - 5. Caulking between frames and masonry.
 - 6. Structural members.

1.02 QUALITY ASSURANCE

- A. Applicable standards of the following as referenced herein:
 - 1. AAMA, American Architectural Manufacturers Association.
 - 2. ASTM, American Society for Testing and Materials.
 - 3. ADA, Americans with Disabilities Act.
 - 4. NAAMM/HMMA, National Association of Architectural Metals Manufacturers.
 - 5. TM5-855-1 Fundamentals of Design for Conventional Weapons; Department of the Army.
 - 6. UL 752 Bullet Resistant Equipment.
 - 7. WDMA, Wood Door Manufacturers Association
- B. Quality is based on the Ballistica[™] products manufactured by Stiles Custom Metal, Inc. www.stilesdoor.com
- C. Manufacturer shall have been regularly engaged in manufacturing bullet resistant doors and frames for a period of ten years. Door and frame shall be fabricated by a single manufacturer. The manufacturer must have an effective quality control system in place.
- D. Allowable Tolerances as stated in NAAMM/HMMA Technical Manual and WDMA.
- **1.03 SUBMITTALS:** Shop drawings: Indicate in elevation with sections and details to scale. Include UL Protection Level with independent test report, glass and metal thicknesses, joining details, field connections, anchorage, concealed and exposed fastening methods, door and framing reinforcement, and metal finishes. Indicate compliance with specified design criteria.
- **1.04 WARRANTY:** Warrant Doors, Frames and Window assemblies against defect in materials and workmanship for three (3) years from date of shipment when handled, stored, and installed in accordance with manufactures instruction and NAAMM/HMMA Technical Manual.

PART 2 - PRODUCTS

2.01 DOORS

- A. Steel Doors shall be Ballistica[™] Bullet and Recherché Resistant Doors, Level _____ as manufactured by Stiles Custom Metal, Inc. www.stilesdoor.com
 - 1. Construction: Face sheets shall be minimum 16 gauge steel. All doors shall be of the types and sizes shown on the approved submittal drawings and shall be constructed in accordance with the specifications.
 - 2. Door Core: The door shall be stiffened by continuous, vertical, formed steel sections supporting the bullet resistant core. Spaces between stiffeners shall be filled with sound deadening material.
 - 3. Door thickness shall be 1-3/4". Doors shall be neat in appearance and free from warp-age or buckle. Edge bends shall be true and straight.

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- 4. Vertical Edges: Door face sheets shall be joined at center of vertical edges and continuously welded full height of door with no visible seams on faces or vertical edges. Welds shall be finished smooth. Single acting doors beveled 1/8" in 2" profile.
- 5. The top and bottom edges shall be closed with a continuous channel. Openings shall be provided in the bottom channel of exterior doors to permit the escape of entrapped moisture. Top of exterior doors shall be fitted with an additional flush closing channel and sealed water-tight.
- 6. Glazed Lite Kits (if applicable) shall be furnished complete with removable glass stops and glazing gasket seals designed and tested to meet required level.
- 7. Finish: After fabrication, all tool marks & surface imperfections shall be removed and faces of all weld joints shall be dressed smooth. Doors and frames shall be treated to insure maximum paint adhesion and shall be painted on all accessible surfaces with one coat of a rust inhibitive, modified Alkyd, Zinc compound, gray primer that meets or exceeds all ANSI A250.10-98 performance criteria. Primer coat shall be fully cured prior to shipment. Red or brown colored primers shall not be permitted.
- B. Wood Doors shall be based on Ballistica[™] Bullet and Recherché Resistant Doors, Level _____ as manufactured by Stiles Custom Metal, Inc. www.stilesdoor.com
 - 1. Construction: All doors shall be of the types and sizes shown on approved shop drawings.
 - 2. Visible seams or joints on door faces are NOT permitted.
 - 3. Veneer thickness, internal bullet resistant core and perimeter door edge construction to be manufacturers standard for the specified model.
 - 4. Face veneer species, cut and color shall match that specified in "Wood Door" section.
 - 5. Glazed Lite Kits (if applicable) shall be furnished complete with removable glass stops and glazing gasket seals designed and tested to meet required level.
 - 6. Factory finishing of doors shall comply with AWI standards and the Wood Door Section.
- **2.02 FRAMES:** Construction: Frames shall be a protection level equal to the door. Frames shall be constructed of minimum 16 ga. steel. Finish work shall be neat and free of defects. Corners shall be mitered and continuously welded full length of intersection. Knocked down, mechanical joints are not acceptable. All exposed welds shall be ground flush, finished smooth and free of defects.

2.03 BULLET / RECHERCHÉ RESISTANT FIXED WINDOWS

- A. Acceptable products shall be Ballistica[™] Bullet and Recherché Resistant Protection Level _____ as manufactured by Stiles Custom Metal, Inc. <u>www.stilesdoor.com</u>
- B. Window Frame Constructed: minimum 16 ga. steel. Finish work shall be neat and free of defects. Corners shall be mitered and continuously welded full length of intersection. Knocked down, mechanical joints are not acceptable. All exposed welds shall be ground flush, finished smooth and free of defects.
- C. Glass molding shall be furnished complete with fixed and loose glass stop system designed and tested to meet required bullet resistant level.

2.04 BULLET RESISTANT GLASS

A. Bullet Resistant Glass for Door Lites and Windows: (choose) [Glass shall be furnished and installed by the Bullet Resistant door / window manufacturer in type and thickness required to meet the bullet resistant level.]

[Glass shall be furnished by the Bullet Resistant door / window manufacturer in type and thickness required to meet the bullet resistant level. Glass installation shall be done in the field by glazing contractor in accordance with the Bullet Resistant door/window manufacturers instructions.]

[Glass shall be furnished and installed in the field by glazing contractor. Glass type, thickness and installation method in accordance with the bullet resistant door/window manufacturer's instructions.]

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2.05 FINISH HARDWARE: Doors and frames shall be mortised, reinforced, drilled and tapped at the factory for completely templated mortised hardware only, in accordance with the final approved hardware schedule and templates provided by the hardware supplier. Where surface mounted, anchor hinges, or non-template mortise hardware is to be applied, doors shall be reinforced, with all drilling and tapping done by others in the field. Reinforcement steel shall comply with NAAMM/HMMA 830 and 861.

PART 3 - EXECUTION

3.01 CLEARANCES AND TOLERANCES shall be in compliance with NAAMM / HMMA standards.

3.02 SITE STORAGE AND PROTECTION OF MATERIALS

- A. Deliver and store materials to prevent damaging and marring finishes.
- B. Protection: Protect metal surfaces from contact with lime, mortar, cement, acids, and other harmful surfaces and from careless handling, storage or machining.

3.03 INSTALLATION:

- A. Framing systems shall be installed per Stiles instructions and NAAMM / HMMA 840. Install frames without use of exposed fasteners, except where indicated on shop drawings.
- B. Door Installation: Install doors and hardware in accordance with manufacturer's product data. Adjust hardware for proper operation. Adjust door closers for smooth operation throughout swing.
- **3.04 CLEANING**: Clean doors and frames in accordance with manufacturer's special instructions.
- **3.05 MAINTENANCE**: Instruct the Owner's Maintenance Personnel regarding the operation and maintenance of these doors.

End of Section