## **SECTION 08 34 53**

## **BULLET RESISTANT WOOD DOORS**

# **PART 1GENERAL**

#### 1.1 SUMMARY

- Α. Section Includes:
  - Bullet-resistant wood door and steel frame assemblies.
- B. Related Sections:
  - Division 01: Administrative, procedural, and temporary work requirements. 1.
  - Section [08 7100 Door Hardware.] [\_\_ \_\_\_.]
    Section [09 9100 Painting.] [\_\_ \_\_.] 2.
  - 3.

### **REFERENCES** 1.2

- A. American Welding Society (AWS) 1.3/D1.3M - Structural Welding Code - Sheet Steel.
- В ASTM International (ASTM) www.astm.orgA1008/A1008M - Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability.
- C. Underwriters Laboratories (UL) 52 - Bullet Resisting Equipment.

### 1.3 SYSTEM DESCRIPTION

Design Requirements: Provide door and frame assemblies of "non-ricochet type" intended to permit A. capture and retention of attacking projectile, lessening potential of random injury or lateral penetration.

### ADMINISTRATIVE REQUIREMENTS 1.4

Provide hardware templates to door and frame assembly manufacturer for preparation of door and A. frame units to receive hardware other than hinges.

### **SUBMITTALS** 1.5

- A. Submittals for Review:
  - Shop Drawings: Include door and frame profiles and sizes, type and spacing of frame anchors, reinforcement size and locations, details of joints and connections, and welding details.
  - 2. Product Data: Include product description for door and frame assemblies including bulletresistant ratings.
- B. Closeout Submittals:
  - Maintenance Data: Include instructions for cleaning of glazed panels.

### **QUALITY ASSURANCE** 1.6

- A. Door and Frame Assemblies: Ballistic Level [[1,] [2,] [3,] [4,] [5,] [6,] [7,] [8,] tested to UL 752.
- B. Doors and frames manufactured by same firm.

### 1.7 DELIVERY, STORAGE AND HANDLING

A. Store door and frame assemblies upright in protected, dry area, off ground or floor, with at least 1/4 inch space between individual units.

- B. Do not cover with non vented coverings that create excessive humidity.
- C. Remove wet coverings immediately.

# PART 2 PRODUCTS

## 2.1 MANUFACTURERS

- A. Contract Documents are based on products by ARMORTEX, 5926 Corridor Parkway, Schertz, Texas, 800-880-8306, www.armortex.com.
- B. Substitutions: [Under provisions of Division 01.] [Not permitted.]

## 2.2 MATERIALS

A. Wood: [Red Oak,] [\_\_\_\_\_,] of quality suitable for transparent finish [, certified to FSC STD-04-004].

\*\*\*\* OR \*\*\*\*

- B. Wood: Close grain hardwood, of quality suitable for opaque finish [, certified to FSC STD-04-004].
- C. Steel Sheet:
  - 1. ASTM A1008/1008M, cold rolled, free from scale, pitting, coil breaks, and other surface defects.
  - Recycled content: Minimum [\_\_] percent, with minimum [\_\_] percent classified as post consumer.
- D. Bullet-Resistant Composite: UL Listed Bullet Resistant Composite by ARMORTEX, of UL level equal to specified door and frame ballistic protection level.

# 2.3 ACCESSORIES

A. Hinges: Aluminum continuous gear type.

# 2.4 FABRICATION

- A. Doors:
  - 1. Solid core construction wood veneer faces, bullet-resistant composite core and solid 3/8 inch thick wood stile and rail edges of same species as veneer.
  - 2. Factory hang doors in frames using specified hinges.
  - 3. Mortise and reinforce doors and frames at factory to receive hardware in accordance with approved hardware schedule.
  - 4. Vision Panels: Clear glazing material of same ballistic level as door and frame assembly.
- B. Frames:
  - Same ballistic protection as doors.
  - 2. Fabricate from 16 gage steel lined with bullet-resistant composite.
  - 3. Weld frame corners; knock-down and mechanical joints not acceptable.
- C. Welding: In accordance with AWS D1.3/D1.3M. Grind exposed welds flush and smooth.
- D. Finish work neat and free from defects.
- E. Allowable Tolerances: Plus or minus 1/16 inch for frame opening width, height, diagonal dimensions, and overall width and height (outside to outside).

# 2.5 FINISHES

A. Wood: Unfinished, for field-applied finish specified in Section [09 9100.] [\_\_\_\_\_.]

- B. Steel:
  - 1. Dress tool marks and surface imperfections to smooth surfaces.
  - 2. Clean and chemically treat steel surfaces.
  - 3. Apply manufacturer's standard rust inhibiting gray primer paint.
- C. Aluminum: Clear anodized.

# PART 3 EXECUTION

# 3.1 INSTALLATION

- A. Install door and frame assemblies in accordance with manufacturer's instructions and approved Shop Drawings.
- B. Set plumb, square, and level.
- C. Secure to adjacent construction using fastener type best suited to application.
- D. Drill and tap for surface-mounted hardware in field. Install hardware in accordance with Section [08 7100.] [\_\_\_\_\_.]
- E. Field alterations to door and frame assemblies other than drilling and tapping for surface-mounted hardware not permitted unless approved in advance by manufacturer and Architect.

# 3.2 ADJUSTING

- A. Touch up minor scratches and abrasions in primer paint to match factory finish.
- B. Adjust doors to swing freely, without sticking or binding.

END OF SECTION