

## SECTION 10 2641

### BULLET-RESISTANT FIBERGLASS SHEET

This section includes editing notes to assist the user in editing the section to suit project requirements. These notes are included as hidden text, and can be revealed or hidden by one of the following methods:

Microsoft Word 2013: Display the FILE tab on the ribbon, click OPTIONS, then DISPLAY. Select or deselect HIDDEN TEXT.

Microsoft Word 2010: Display the FILE tab on the ribbon, click OPTIONS, then on left menu click on DISPLAY. Under ALWAYS SHOW THESE select or deselect HIDDEN TEXT.

Corel WordPerfect: From the pull-down menus select VIEW, then select or deselect the HIDDEN TEXT option.

#### PART 1 GENERAL

##### 1.1 SUMMARY

###### A. Section Includes:

1. Bullet-resistant fiberglass sheet for use in [partition] [casework] [ ] assemblies.

###### B. Related Sections:

1. Division 01: Administrative, procedural, and temporary work requirements.
2. Section [06 1100 - Framing and Sheathing] [ ] - Wood framing to receive bullet-resistant sheet.
3. Section [06 4100 - Architectural Wood Casework] [ ] - Casework to receive bullet-resistant sheet.
4. Section [09 2200 - Metal Support Assemblies] [ ] - Metal framing to receive bullet-resistant sheet.

##### 1.2 REFERENCES

- A. ASTM International (ASTM) E119 - Standard Test Methods for Fire Tests of Building Construction and Materials.
- B. Underwriters Laboratories (UL) 752 - Bullet Resisting Equipment.

##### 1.3 SYSTEM DESCRIPTION

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

##### 1.4 SUBMITTALS

###### A. Submittals for Review:

1. Product Data: Include product description for bullet-resistant sheet including bullet-resistant ratings.

###### B. Sustainable Design Submittals:

1. Regional Materials: Indicate cost of products harvested, extracted, recovered, or manufactured within 500 mile radius of Project site.

##### 1.5 WARRANTIES

- A. Provide manufacturer's 2 year warranty providing coverage against defects in materials and workmanship.

## **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. Bullet-Resistant Fiberglass Sheet:
  - 1. Source: ARMORTEX Opaque Fiberglass.
  - 2. Description:
    - a. Manufactured from multiple layers of woven roving ballistic grade fiberglass cloth impregnated with thermoset polyester resin, compressed into flat rigid sheets.
    - b. Provide controlled internal delaminating to permit capture of penetrating projectile.
  - 3. Ballistic Level: [1,] [2,] [3,] [4,] [5,] [6,] [7,] [8,] tested to UL 752.
  - 4. Fire rating: 1 hour, tested to ASTM E119.

### **2.3 ACCESSORIES**

- A. Adhesives and Fasteners: Type recommended by bullet-resistant sheet manufacturer for specific application.

## **PART 3 EXECUTION**

### **3.1 INSTALLATION**

- A. Install in accordance with manufacturer's instructions.
- B. Cut panels to fit at perimeter and around penetrations.
- C. Reinforce joints between sheets with minimum 4 inch wide backup layer of bullet-resistant sheet, centered on joint. Bullet-resistance of reinforced joint at least equal to ballistic level of panel.
- D. Fasten or adhere panels to supports in manner to maintain bullet-resistive rating at perimeter, junctures with other materials, and penetrations.

END OF SECTION