

SECTION 13070

BULLET RESISTANT FIBERGLASS

1/8" FLEXIBLE PANELS FOR RADIUS APPLICATIONS

PART 1 GENERAL

1.1 REFERENCE

The publications listed below form a part of this specification.

NATIONAL INSTITUTE OF JUSTICE STANDARD 0108.01-STANDARD FOR BALLISTIC RESISTANT PROTECTIVE MATERIALS (September, 1985).
UNDERWRITERS LABORATORY UL 752 9th Edition, Standard for Bullet Resisting Equipment (January 27, 1995).

1.2 SUBMITTALS

The following shall be submitted in accordance with Sections 01340 and the SPECIAL CONTRACT REQUIREMENTS: Submit for approval prior to fabrication samples, brochures, and specifications. Manufacturer's instructions for installation of Bullet Resistant Fiberglass.

1.3 DESIGN

Through the design, manufacturing technique and material application the Bullet Resistant Fiberglass shall be of the "non ricochet type". This design is intended to permit the encapture and retention of an attacking projectile lessening the potential of a random injury or lateral penetration.

1.4 DELIVERY, STORAGE AND HANDLING

Deliver the materials to the project with the manufacturer's designation labels intact and legible. Handle the material with care to prevent damage. Store the materials inside under cover; stack flat and off the floor.

1.5 WARRANTY

All materials and workmanship shall be warranted against defects for a period of 2 (two) years from the date of receipt at the project site.

PART 2 PRODUCTS

2.1 BULLET RESISTANT FIBERGLASS MATERIAL

The panels shall be made of multiple layers of woven roving ballistic grade fiberglass cloth impregnated with the thermoset polyester resin and compressed into flat rigid sheets. The production technique and materials used shall provide the controlled internal delamination to permit the encapture of a penetrating projectile. Bullet Resistant Fiberglass panel: 1/8" inch maximum thickness, and 1.4 pounds per square foot maximum weight. Material shall be SecureAll™ FlexiGlass (PSSF-1/8"), by Protective Structures. Ltd., 7565 Industrial Court, Alpharetta, GA. 30004, (toll free) 888.521.8666, (fax) 770.521.2299, email: info@protectivestructures.com, Website: www.protectivestructures.com.

2.2 SECURITY LEVEL

The Bullet Resistant Fiberglass must have two layers with to meet UL752 Level I ballistic requirements. (2 layers of 1/8" thick panels to make total thickness of 1/4")

PART 3 EXECUTION

3.1 SUPPORTING MEMBERS

Prior to installing the bullet resistive material the contractor shall verify that all supports have been installed as required by the contract documents and the architectural drawings.

3.2 JOINTS

All joints shall be reinforced by a back-up layer of bullet resistive material. The bullet resistance of the joint, as reinforced, shall be at least equal to that of the panel. Minimum width of reinforcing layer at joint shall be 4-inches (2" on each panel or a 2" minimum overlap).

3.3 APPLICATION

Armor shall be installed in accordance with the manufacturer's printed recommendations. Armor panels shall be adhered using an industrial adhesive, mastic, screws or bolts. Method of application shall maintain the bullet resistive rating at junctures with the concrete floor slab, the concrete roof slab, the bullet resistive doorframes, the bullet resistive window frames, and all required penetrations.

****End of Section****

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