

FEATURES

Fiberglass Armor is a reinforced structural polyester laminate that exhibits unique bullet resisting characteristics. These flat, opaque panels are press molded between plates at high pressure and elevated temperature. Fiberglass structural armor is designed to progressively delaminate as a bullet penetrates. The hard surface and toughness of the material cause the bullet to distort and flatten. As the bullet penetrates, the layers of (fiberglass) reinforcement within the laminate pull apart in a controlled manner such that the energy of the bullet is dissipated within the laminate. More energy is consumed as the bullet penetrates the high-strength glass fibers. No spalling occurs.

MARKETS SERVED

| Teller Counters | Gas Station | Convenience Store | Pay Counters | Remote Electronic Building | Secure Rooms and Buildings | Judge Benches | Reception Areas |

INSTALLATION

- For cutting, carbide or ceramic grit saw blades are recommended. Use carbide tooling when drilling, spot facing, or counter boring
- Butt joints are weak. To reinforce, use 4" strip of same material. No rigid high-density material should be used adjacent to panel's inner surface. Allow a minimum gap of 1/4"

BALLISTIC RATING

- U.L 752 / Level 4
- Class IV Forced Entry ASTM F1233-98

STANDARDS

- UL-94 V0 Flame Rating
- Sound Insulation Rating ASTM E413-87
- One Hour Fire Rating ASTM E119-98

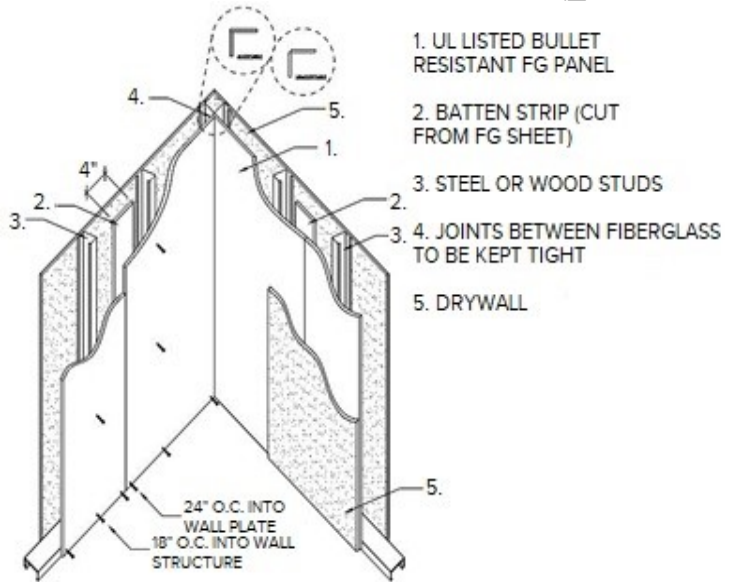
AVAILABLE SHEET SIZES

| 4' X 8' |

Consult TSS representative for custom sheet

FIBERGLASS BR OPAQUE ARMOR

PRODUCT: BB-4



PROPERTIES & SPECIFICATIONS

Nominal Thickness	LBS/SQ FT	Ballistic Data
1 3/8"	13.9	.30-06 180 Gram LC Vel. 1 = 2540 FT/S Vel. 2 = 2794 FT/S

Properties	
Standard Color	White
Tensile Strength LW @ 25°C	45K PSI
Tensile Strength CW @ 25°C	40K PSI
Tensile Modulus AVG @ 25°C	3.75 X 10 ⁶ PSI
Flexural Strength LW @ 25°C	16.8K PSI
Flexural Modulus LW @ 25°C	2.7 X 10 ⁶ PSI
Compressive Strength @ 25°C	70K PSI
IZOD Impact Strength	52 ft.lb/in
Water Absorption	<1.4 % by wt
Specific Gravity	2
Barcol Hardness	50
Coefficient of Thermal Expansion	2in/in/°Cx10 ⁻⁵
Thermal Conductivity	2 BTU/HR/ft ² /in/°F

TOTAL SECURITY SOLUTIONS

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