<table>
<thead>
<tr>
<th>Product</th>
<th>Test Criteria / Performance Level</th>
<th>Ballistic Data</th>
<th>Nominal Thickness</th>
<th>Lin.</th>
<th>Sr.</th>
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<tr>
<td>BB-A</td>
<td>U.L. 752 / LEVEL 1, (U.L. LISTED)</td>
<td>.38 Spr., 158 Gr., 850 F. Sec., Lead</td>
<td>1/8&quot;</td>
<td>1.2</td>
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<td></td>
<td>N.J. 0108.01 / Level I</td>
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<td>BB-1</td>
<td>U.L. 752 / LEVEL 1, (U.L. LISTED)</td>
<td>9MM, 124 Gr., 1175 F. Sec., FMJ</td>
<td>1/4&quot;</td>
<td>2.4</td>
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<td>N.J. 0108.01 / Level IA</td>
<td>9MM, 124 Gr., 1090 F. Sec., FMJ</td>
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<td>BB-2/6</td>
<td>U.L. 752 / LEVEL 2, (U.L. LISTED)</td>
<td>.357 Mag., 158 Gr., 1250 F. Sec., LSP</td>
<td>5/16&quot;</td>
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<td>U.L. 752 / LEVEL 5, (U.L. LISTED)</td>
<td>9MM, 124 Gr., 1400 F. Sec., FMJ</td>
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<td>N.J. 0108.01 / Level II</td>
<td>.357 Mag., 158 Gr., 1395 F. Sec., JSP</td>
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<td>BB-3</td>
<td>U.L. 752 / LEVEL 3, (U.L. LISTED)</td>
<td>.44 Mag., 240 Gr., 1350 F. Sec., SWC</td>
<td>7/16&quot;</td>
<td>4.0</td>
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<td>N.J. 0108.01 / Level IA</td>
<td>.44 Mag., 240 Gr., 1400 F. Sec., SWC</td>
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<td>BB-4/5</td>
<td>U.L. 752 / LEVEL 4, (U.L. LISTED)</td>
<td>.30 Cal., 180 Gr., 2540 F. Sec., JSP</td>
<td>1-1/4&quot;</td>
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<td>U.L. 752 / LEVEL 5, (U.L. LISTED)</td>
<td>7.62MM, 150 Gr., 2750 F. Sec., FMJ</td>
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<td>N.J. 0108.01 / Level III</td>
<td>7.62MM, 150 Gr., 2750 F. Sec., FMJ</td>
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<td>BB-7</td>
<td>U.L. 752 / LEVEL 7, (U.L. LISTED)</td>
<td>5.56MM, 55 Gr., 3080 F. Sec., FMJ</td>
<td>1-3/16&quot;</td>
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**FIBERGLASS BALLISTIC CHART**
GENERAL

FIBERGLASS is a reinforced fiberglass laminate produced from ballistic fiberglass and reinforced with a thermoset polyester resin binder. The multifunctional performance provides resistance to fire, water, and impact. The material is flexible and can be formed to fit into irregular spaces. It is lightweight and easy to install. It can be cut, drilled, and fastened with conventional carpentry tools. It is also fireproof and resistant to mold and mildew.

Fiberglass is a fraction of the weight of steel armor for identical performance levels, it can be cut, drilled, and worked using conventional carpentry tools. No reinforcing of traditional stud wall construction is needed. Attachment to new walls is easy, as it is bonded application to existing walls or under counter supports.

Fiberglass is compatible with most common construction adhesives. This means fiberglass fasteners are incorporated in wood door and millwork panels.

Cutting and Drilling

Fiberglass can be cut or drilled using a conventional circular saw, saber saw, and/or drill motor.

Cutting is to be performed using an abrasive carbide-tipped blade. A diamond blade intended for fiberglass is also acceptable. Fiberglass can be cut using a circular saw connected to a gas extinction cord as recommended. The saw operator cuts while an assistant sprays water on the saw blade with a spray bottle to create a steam of water. The tenon on the saw is cut and develops a non-hazardous cut.

Drilling can be accomplished using a high-speed twist drill bit. Bits are available upon request.

INSTALLATION

Always drill pilot holes in fiberglass to accommodate hanging the material on stud walls. Never screw directly into fiberglass as this will cause delamination around the screw holes can occur. The use of drywall screws at 18" O.C. is desirable.

To ensure complete protection at seams, reinforce incorporating 4" nominal width, located at seams.

For maximum protection, the batts are fast installed on studs. Then fibrous sheets of fiberglass are installed over the batts to create a smooth finish. Drywall or other wall finishes can be applied over the fiberglass with construction adhesives.

NOTES

1. Metal or wood stud framing @ 18" O.C. (by others)
2. Fiberglass batt strips, 4" nominal width, located at seams
3. Furrowing strips (by others)
4. Fiberglass bullet resistant fiberglass panel
5. Drywall or other wall finish (by others)

BATTEN-ON-STUD METHOD
BATTEN-OFF-STUD METHOD

**B **HORIZONTAL WALL SECTION

**GENERAL**
PORCELAIN is a multi-laminate, fire-resistant, fireproof laminate from which the fireproof laminate is impregnated with a refractory polymer resin sheet. The multi-laminate construction provides a delaminating effect when subjected to heat. Fire-resistant materials are therefore inscribed with its flue rather than being reinforced with steel or aluminum armor.

SIDE WALLS are a fraction of the height of steel armor for chemical performance levels, it can be cut, drilled, and worked using conventional carpentry tools. Reinforcement of traditional stud wall construction is needed. Attachment to new walls is easy, as is bonding application to existing walls or under counter subracks.

FIBERGLASS is compatible with contact or construction adhesives. This makes fiber glass ideal to incorporate within wood door and metalwork panels.

**CUTTING AND DRILLING**
FIBERGLASS CANNOT BE CUT OR DRILLED USING A CONVENTIONAL CIRCULAR SAW, SABRE SAW, AND/OR DRILL MOTOR.

**CUTTING** IS TO BE CONDUCED USING AN AIR-REFER DRY CUTTING, A DIAMOND BLADE METHOD FOR FIREPROOF GLASS IS ALSO ACCEPTABLE. FIREGLASS CAN BE CUTOFF, HOWEVER, DRY CUTTING DEVELOPS SEMI-PLASTIC DUST; USING A CIRCULAR SAW CONNECTED TO A SHOP EXTRACTOR CORE IS RECOMMENDED. THE BAR OPERATOR CUTS WALLS IN AN AREA SPRAYED WITH WATER OR THE BAR FLOOR WITH SPRAY BOTTLE TO DEVELOP A FLOOD OF WATER. THE TECHNICIAN BANSHEE THE DUST AND DEVELOPS A NONHAZARDOUS SURRY.

DRILLING CAN BE ACCOMPLISHED USING A HIGH-SPEED TWIST DRILL BITS; BITS ARE AVAILABLE UPON REQUEST.

**INSTALLATION**
ALWAYS STAY PRIMARY IN FIREGLASS TO ACCOMMODATE HANGING THE MATERIAL ON STUD WALLS. NEVER SAW B Rigidly INTO THE FIREGLASS AS THIS WILL CAUSE DELAMINATION AROUND THE SCREW AND VOID THE WARRANTY. THE USE OF DRYWALL SCREWS AT 12" O.C. IS DESIRABLE.

TO ENSURE COMPLETE PROTECTION AT SEAMS, WE RECOMMEND INCORPORATING 4" INDEPENDENT BATTEN STRIPS OF FIREGLASS; THESE BATTEN STRIPS ARE FIRST INSTALLED TO ONE SHEET. THEN THE FULL-LENGTH SHEETS OF FIREGLASS ARE INSTALLED OVER THE BATTENS TO CREATE A SMOOTH FINISH. DRYWALL OR OTHER WALL FINISH MUST THEN BE BONDED OVER THE FIREGLASS WITH CONSTRUCTION ADHESIVE.

**NOTES**
1. STAINLESS-STEEL FRAMING @ 16" O.C. (BY OTHERS)
2. FIREGLASS BATTEN STRIPS, 4" Nominal Width, located at SEAMS
3. FIREGLASS BATTEN STRIPS, 4" Nominal Width, located at SEAMS
4. DRYWALL OR OTHER WALL FINISH (BY OTHERS)
TYPES OF INSTALLATION:

1. BATTEN-OVER METHOD
2. WOOD OR STEEL FRAMING @ 16 OC (BY OTHERS)
3. FIREGLASS BATTEN STRIPS, 4" X 12" X 1/4" (BY OTHERS)
4. FIREGLASS BATTERY-RESISTANT FIREGLASS PANEL
5. DRYWALL OR OTHER WALL MATERIAL (BY OTHERS)

NOTES:

- FIREGLASS IS A MULTIPLY BULLETPROOF FIREGLASS PANEL MADE FROM BULLETPROOF FIREGLASS AND IMMERSED WITH A THERMOSET POLYURETHANE RESIN. THE MULTIPLY CONFIGURATION PROVIDES A DIADEM EFFECT WHEN BULLETPROOF ATTACHED. BULLETS ARE THEREFORE MOPENED WITHIN ITS PLYS RATHER THAN RETAINED AS WITH STEEL OR ALUMINUM ARMOR.
- FIREGLASS IS A FRACTION OF THE WEIGHT OF STEEL ARMOR FOR EQUIPMENT PERFORMANCE LEVEL, IT CAN BE CUT, DRILLED, AND WORKED USING CONVENTIONAL CARPENTRY TOOLS. INSTALLING DECOY STEEL ARMOR IS NEEDED, ATTACHMENT TO NEW WALLS IS EASY, AS IS BONDED APPLICATION TO EXISTING WALLS OR UNDER COUNTER INSERTS.
- FIREGLASS IS COMPATIBLE WITH CONCRETE OR CONSTRUCTION ADHEARSIVES. THIS MAKES FIREGLASS IDEAL TO INTEGRATE WITHIN WOOD DOOR AND MILLWORK PANELS.

- CUTTING AND DRILLING
   FIREGLASS CAN BE CUT OR DRILLED USING A CONVENTIONAL CIRCULAR SAW, SABRE SAW, AND/OR DRILL MOTOR.

- INSTALLATION
   AVOID INSTALLATION IN WET AND DRY WALLS, UNDER SCREEN OR OTHERS. FIREGLASS HAS THE FOLLOWING CODES:
   1. FOR WALLS @ 16 OC (BY OTHERS)
   2. FIREGLASS BATTEN STRIPS, 4" X 12" X 1/4" (BY OTHERS)
   3. DRYWALL OR OTHER WALL MATERIAL (BY OTHERS)

- INSTALLATION:
   FIREGLASS IS A MULTIPLY BULLETPROOF FIREGLASS PANEL MADE FROM BULLETPROOF FIREGLASS AND IMMERSED WITH A THERMOSET POLYURETHANE RESIN. THE MULTIPLY CONFIGURATION PROVIDES A DIADEM EFFECT WHEN BULLETPROOF ATTACHED. BULLETS ARE THEREFORE MOPENED WITHIN ITS PLYS RATHER THAN RETAINED AS WITH STEEL OR ALUMINUM ARMOR.
- FIREGLASS IS A FRACTION OF THE WEIGHT OF STEEL ARMOR FOR EQUIPMENT PERFORMANCE LEVEL, IT CAN BE CUT, DRILLED, AND WORKED USING CONVENTIONAL CARPENTRY TOOLS. INSTALLING DECOY STEEL ARMOR IS NEEDED, ATTACHMENT TO NEW WALLS IS EASY, AS IS BONDED APPLICATION TO EXISTING WALLS OR UNDER COUNTER INSERTS.
- FIREGLASS IS COMPATIBLE WITH CONCRETE OR CONSTRUCTION ADHEARSIVES. THIS MAKES FIREGLASS IDEAL TO INTEGRATE WITHIN WOOD DOOR AND MILLWORK PANELS.

- CUTTING AND DRILLING
   FIREGLASS CAN BE CUT OR DRILLED USING A CONVENTIONAL CIRCULAR SAW, SABRE SAW, AND/OR DRILL MOTOR.

- INSTALLATION:
   AVOID INSTALLATION IN WET AND DRY WALLS, UNDER SCREEN OR OTHERS. FIREGLASS HAS THE FOLLOWING CODES:
   1. FOR WALLS @ 16 OC (BY OTHERS)
   2. FIREGLASS BATTEN STRIPS, 4" X 12" X 1/4" (BY OTHERS)
   3. DRYWALL OR OTHER WALL MATERIAL (BY OTHERS)
BATTEN-OVER-FIBERGLASS FLOATING-AT-BATTENS METHOD