<table>
<thead>
<tr>
<th>Shotgard® Product</th>
<th>Test Criteria / Performance Level</th>
<th>Ballistic Data</th>
<th>Nominal Thickness</th>
<th>Lbs. / Sq. Ft.</th>
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<tbody>
<tr>
<td>BB-A</td>
<td>N.I.J. 0108.01 / Level I</td>
<td>.38 Spl., 158 Gr., 850 Ft. Sec., Lead</td>
<td>1/8&quot;</td>
<td>1.2</td>
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<tr>
<td>BB-1</td>
<td>U.L. 752 / LEVEL 1, (U.L. LISTED)</td>
<td>9MM, 124 Gr., 1175 Ft. Sec., FMJ</td>
<td>1/4&quot;</td>
<td>2.6</td>
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<tr>
<td></td>
<td>N.I.J. 0108.01 / Level IIA</td>
<td>9MM, 124 Gr., 1090 Ft. 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 Ft. Sec., LSP</td>
<td>5/16&quot;</td>
<td>3.6</td>
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<td></td>
<td>U.L. 752 / LEVEL 6, (U.L. LISTED)</td>
<td>9MM, 124 Gr., 1400 Ft. Sec., FMJ</td>
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<td>N.I.J. 0108.01 / Level II</td>
<td>.357 Mag., 158 Gr., 1395 Ft. Sec., JSP</td>
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<tr>
<td>BB-3</td>
<td>U.L. 752 / LEVEL 3, (U.L. LISTED)</td>
<td>.44 Mag., 240 Gr., 1350 Ft. Sec., SWC</td>
<td>7/16&quot;</td>
<td>4.9</td>
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<td>N.I.J. 0108.01 / Level IIIA</td>
<td>.44 Mag., 240 Gr., 1400 Ft. Sec., SWC</td>
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<td>BB-4</td>
<td>U.L. 752 / LEVEL 4, (U.L. LISTED)</td>
<td>.30 Cal., 180 Gr., 2540 Ft. Sec., JSP</td>
<td>1-3/8&quot;</td>
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<td>N.I.J. 0108.01 / Level III</td>
<td>7.62MM, 150 Gr., 2750 Ft. Sec., FMJ</td>
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<tr>
<td>BB-8</td>
<td>U.L. 752 / LEVEL 8, (U.L. LISTED)</td>
<td>7.62MM, 150 Gr., 2750 Ft. Sec., FMJ (5 SHOT)</td>
<td>1-7/16&quot;</td>
<td>14.9</td>
</tr>
</tbody>
</table>

**SHOTGARD® FIBERGLASS BALLISTIC CHART**
**BATTEN-ON-STUD METHOD**

**SECURE SIDE**

- **WOOD-OR-STEEL STUD FRAMING** (BY OTHERS)
- **WALL FINISH MATERIAL** (BY OTHERS)
- **WOOD OR STEEL STUD**
- **DRYWALL SCREWS AT 12", 24" O.C.** (BY OTHERS)
- **FURRING STRIP** (BY OTHERS)
- **NOMINAL 4" SHOTGARD® BATTEN, EVERY 48", AT SEAMS**
- **SHOTGARD® BULLET-RESISTANT FIBERGLASS WALL ARMOR**

**THREAT SIDE**

**HORIZONTAL WALL SECTION**

**GENERAL**

SHOTGARD® is a multi-ply ballistic fiberglass laminate produced from ballistic fiberglass and impregnated with a thermoset polyester-resin binder. The multi-ply configuration provides a delamination effect when ballistically attacked. Bullets are therefore imbedded within its plies rather than being ricocheted as with steel or aluminum armor.

SHOTGARD® 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 retrofits.

SHOTGARD® is compatible with contact or construction adhesives. This makes SHOTGARD® ideal to incorporate within wood door and millwork panels.

**CUTTING AND DRILLING**

SHOTGARD® can be cut or drilled using a conventional circular saw, sabre saw, and/or drill motor.

Cutting is to be done using an abrasive carbide-grit edge blade. A diamond blade intended for fiberglass is also acceptable. SHOTGARD® can be cut dry. However, dry cutting develops significant dust. Using a circular saw connected to a GFCI extension cord is recommended. The saw operator cuts while an assistant sprays water on the saw blade with a spray bottle to develop a stream of water. This technique minimizes the dust and develops a non-hazardous slurry.

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

**INSTALLATION**

Always drill pilot holes in SHOTGARD® to accommodate hanging the material on stud walls. Never screw directly into the fiberglass as this will cause delamination around the screw and void the warranty. The use of drywall screws at 12"-24" O.C. is desirable.

To ensure complete protection at seams, we recommend incorporating 4" (nominal) batten strips of SHOTGARD®. These batten strips are first installed on studs, then full-size sheets of SHOTGARD® are installed over the battens to create a smooth finish. Drywall or other wall finishes can then be bonded over the SHOTGARD® with construction adhesive.

**NOTES**

1. **Metal-Or-Wood-Stud Framing @ 16" O.C. (By Others)**
2. **SHOTGARD® BATTEN STRIPS, 4" NOMINAL WIDTH, LOCATED AT SEAMS**
3. **FURRING STRIPS (BY OTHERS)**
4. **SHOTGARD® BULLET-RESISTANT FIBERGLASS PANEL**
5. **DRYWALL OR OTHER WALL FINISH (BY OTHERS)**
BATTEN-OFF-STUD METHOD

HORIZONTAL WALL SECTION

SCALE: 3" = 1'-0"

WOOD-OR STEEL-STUD FRAMING
(BY OTHERS)

WALL FINISH MATERIAL
(BY OTHERS)

WOOD-OR STEEL-STUD FRAMING
(BY OTHERS)

SECURE SIDE

DryfallScrews:
AT 12" - 24" O.C.
(BY OTHERS)

SHOTGARD® BULLET-RESISTANT FIBERGLASS WALL ARMOR

NOMINAL 4" SHOTGARD® BATTEN. EVERY 48" AT SEAMS

SHOTGARD® IS A MULTIPLE-PLY BALLISTIC FIBERGLASS LAMINATE PRODUCED FROM BALLISTIC FIBERGLASS AND IMPELLERATED WITH A THERMOSET POLYESTER-RESIN BINDER. THE MULTIPLE-PLY CONFIGURATION PROVIDES A DELLAMINATION EFFECT WHEN BULLISTICALLY ATTACKED. BULLETS ARE THEREFORE IMBEDDED WITHIN ITS PLIES RATHER THAN BEEN RICOCHETED AS WITH STEEL OR ALUMINUM ARMOR.

SHOTGARD® 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 IS BONDED APPLICATION TO EXISTING WALLS OR UNDER COUNTER RETROITS.

SHOTGARD® IS COMPATIBLE WITH CONTACT OR CONSTRUCTION ADHESIVES. THIS MAKES SHOTGARD® IDEAL TO INCORPORATE WITHIN WOOD DOOR AND MILLWORK PANELS.

CUTTING AND DRILLING

SHOTGARD® CAN BE CUT OR DRILLED USING A CONVENTIONAL CIRCULAR SAW, SABRE SAW, AND/OR DRILL MOTOR.

CUTTING IS TO BE DONE USING AN ABRASIVE CARBIDE-GRIT EDGE BLADE. A DIAMOND BLADE INTENDED FOR FIBERGLASS IS ALSO ACCEPTABLE. SHOTGARD® CAN BE CUT DRY. HOWEVER, DRY CUTTING DEVELOPS SIGNIFICANT DUST. USING A CIRCULAR SAW CONNECTED TO A GFCI EXTENSION CORD IS RECOMMENDED. THE SAW OPERATOR CUTS WHILE AN ASSISTANT SPRAYS WATER ON THE SAW BLADE WITH SPRAY BOTTLE TO DEVELOP A STREAM OF WATER. THIS TECHNIQUE MINIMIZES THE DUST AND DEVELOPS A NON-HAZARDOUS SLURRY.

DRILLING CAN BE ACCOMPLISHED USING A HIGH-SPEED Twist Drill Bit. Bits Are Available Upon Request.

INSTALLATION

ALWAYS DRILL Pilot HOLES IN SHOTGARD® TO ACCOMMODATE HANGING THE MATERIAL ON STUD WALLS. NEVER SCREW DIRECTLY INTO THE FIBERGLASS AS THIS WILL CAUSE DELAMINATION AROUND THE SCREW AND VOID THE WARRANTY. THE USE OF DRYWALL SCREWS AT 12-24" O.C. IS DESIRABLE.

TO INSURE COMPLETE PROTECTION AT SEAMS, WE RECOMMEND INCORPORATING 4" (NOMINAL) BATTEN STRIPS OF SHOTGARD®. THESE BATTEN STRIPS ARE FIRST INSTALLED TO ONE SHEET, THEN FULL-SIZE SHEETS OF SHOTGARD® ARE INSTALLED OVER THE BATTENS TO CREATE A SMOOTH FINISH. DRYWALL OR OTHER WALL FINISHES CAN THEN BE BONDED OVER THE SHOTGARD® WITH CONSTRUCTION ADHESIVE.

NOTES

- METAL- OR WOOD-STUD FRAMING @ 16" O.C. (BY OTHERS)
- SHOTGARD® BATTEN STRIPS, 4" NOMINAL WIDTH, LOCATED AT SEAMS
- SHOTGARD® BULLET-RESISTANT FIBERGLASS PANEL
- DRYWALL OR OTHER WALL FINISH (BY OTHERS)
**BATTEN-OVER-SHOTGARD® METHOD**

**GENERAL**

SHOTGARD® is a multiple-ply ballistic fiberglass laminate produced from ballistic fiberglass and impregnated with a thermoset polyester-resin binder. The multiple-ply configuration provides a delamination effect when ballistically attacked. Bullets are therefore imbedded within its plies rather than ricocheted as with steel or aluminum armor.

SHOTGARD® 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 is bonded application to existing walls or under counter retrofits.

SHOTGARD® is compatible with contact or construction adhesives. This makes SHOTGARD® ideal to incorporate within wood door and millwork panels.

**CUTTING AND DRILLING**

SHOTGARD® can be cut or drilled using a conventional circular saw, sabre saw, and/or drill motor.

**CUTTING IS TO BE DONE USING AN ABRASIVE CARBIDE-GRIT EDGE BLADE. A DIAMOND BLADE INTENDED FOR FIBERGLASS IS ALSO ACCEPTABLE. SHOTGARD® CAN BE CUT DRY; HOWEVER, DRY CUTTING PRODUCES SIGNIFICANT DUST. USING A CIRCULAR SAW CONNECTED TO A GFCI EXTENSION CORD IS RECOMMENDED. THE SAW OPERATOR CUTS WHILE AN ASSISTANT SPRAYS WATER ON THE SAW BLADE WITH A SPRAY BOTTLE TO DEVELOP A STREAM OF WATER. THIS TECHNIQUE MINIMIZES THE DUST AND DEVELOPS A NON-HAZARDOUS EBULLY.**

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

**INSTALLATION**

Always drill pilot holes in SHOTGARD® to accommodate hanging the material on stud walls. Never screw directly into the fiberglass as this will cause delamination around the screw and void the warranty. The use of drywall screws at 12-24" O.C. is desirable.

To insure complete protection at seams, we recommend incorporating 4" (nominal) batten strips of SHOTGARD®. First, full-size sheets of SHOTGARD® are installed on the studs, then the batten strips are installed to cover the seams. Drywall or other wall finishes can then be installed over the SHOTGARD® battens.

**NOTES**

- *Metal- or Wood-Stud Framing @ 16" O.C. (by others)*
- *SHOTGARD® Batten Strips, 4" Nominal Width, Located at Seams*
- *Furring Strips (by others)*
- *SHOTGARD® Bullet-Resistant Fiberglass Panel*
- *Drywall or Other Wall Finish (by others)*

**THREAT SIDE**

**HORIZONTAL WALL SECTION**

Scale: 1" = 1/2"
SHOTGARD® is a multiple-PLY ballistic fiberglass laminate produced from ballistic fiberglass and impregnated with a thermoset polyester-resin binder. The multiple-PLY configuration provides a delamination effect when ballistically attacked. Bullets are therefore imbedded within its plies rather than ricocheted as with steel or aluminum armor.

SHOTGARD® 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 as easy as is bonded application to existing walls or under counter retrofits.

SHOTGARD® is compatible with contact or construction adhesives. This makes SHOTGARD® ideal to incorporate within wood door and millwork panels.

CUTTING AND DRILLING
SHOTGARD® can be cut or drilled using a conventional circular saw, sabre saw, and/or drill motor.

Cutting is to be done using an abrasive carbide-grit edge blade. A diamond blade intended for fiberglass is also acceptable. SHOTGARD® can be cut dry. However, dry cutting develops significant dust. Using a circular saw connected to a dust control cord is recommended. The saw operator cuts while an assistant sprays water on the saw blade with a spray bottle to develop a stream of water. This technique minimizes the dust and develops a non-hazardous slurry.

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

INSTALLATION
Always drill pilot holes in SHOTGARD® to accommodate hanging the material on stud walls. Never screw directly into the fiberglass as this will cause delamination around the screw and void the warranty. The use of drywall screws at 1/2-24" O.C. is desirable.

To insure complete protection at seams, we recommend incorporating 4" (nominal) batten strips of SHOTGARD®. First, full-size sheets of SHOTGARD® are installed on the studs. Then the batten strips are installed to cover the seams. Drywall or other wall finishes can then be bonded over the SHOTGARD®. Between the battens, with construction adhesive. Any gap created by the difference in the thickness of the finish material and the battens should be filled to create a smooth finish.

NOTES
- Metal- or wood-stud framing @ 16" O.C. (by others)
- SHOTGARD® Batten Strips, 4" nominal width, located at seams
- SHOTGARD® Bullet-Resistant Fiberglass Panel
- Drywall or other wall finish (by others)
- Gypsum taping mud float

BATTEN-OVER-SHOTGARD®
FLOATING-AT-BATTENS METHOD
**SHOTGARD®** is a multi-ply ballistic fiberglass laminate produced from ballistic fiberglass and impregnated with a thermoset polyester-resin binder. The multiple-ply configuration provides a delamination effect when ballistically attacked. Bullets are therefore imbedded within its plies rather than richocheted as with steel or aluminum armor.

**SHOTGARD®** 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 is bonded application to existing walls or under counter retrofits.

**SHOTGARD®** is compatible with contact or construction adhesives. This makes **SHOTGARD®** ideal to incorporate within wood door and millwork panels.

**Cutting and Drilling**

**SHOTGARD®** can be cut or drilled using a conventional circular saw, sabre saw, and/or drill motor.

**Cutting** is to be done using an abrasive carbide-grit edge blade. A diamond blade intended for fiberglass is also acceptable. **SHOTGARD®** can be cut dry, however, **Dry Cutting Develops Significant Dust. Using a Circular Saw Connected to a GFCI Extension Cord Is Recommended.** The saw operator cuts while an assistant sprays water on the saw blade with a spry bottle to develop a stream of water. This technique minimizes the dust and develops a non-hazardous smoke.

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

**Installation**

Always drill pilot holes in **SHOTGARD®** to accommodate hanging material on stud walls. Never screw directly into the fiberglass as this will cause delamination around the screw and void the warranty. The use of drywall screws at 12-24" O.C. is desirable.

To insure complete protection at seams, we recommend incorporating 4" (nominal) batten strips of **SHOTGARD®**. First, full-size sheets of **SHOTGARD®** are installed on the studs, then the batten strips are installed to cover the seams. Drywall or other wall finishes can then be bonded over the **SHOTGARD®** between the battens, with construction adhesive. Any gap created by the difference in the thickness of the finish material and the battens should be filled to create a smooth finish.