MANUFACTURER'S INSTALLATION RECOMMENDATION FOR ARMORCORE (BGAA-) BULLET RESISTANT FIBERGLASS PANELS

Health & Safety Precautions

ArmoreCore Bullet resistant panels come under the category of laminated FRP (Fiber Reinforced plastic) products. It is important for installers of fiberglass products to be properly supplied with basic health & safety equipment such as:

- 1. Gloves-cotton or leather to provide protection from cuts and abrasions associated with handling, drilling or cutting fiberglass materials.
- Dust Particle masks or respirators to provide respiratory protection against dust associated with cutting or drilling fiberglass materials. Two good products on the market is Moldex 2300 Dust and Mist Respirators and Drager-Picco 20 Respirator Filter for dust and mist.
- 3. Protective wear to be worn over clothing to provide protection from fibrous dust that can settle in the clothing or on the skin when cutting, sanding or drilling fiberglass materials. DuPont makes an excellent protective wear product called Tyvek Protective Wear.
- 4. Protective eyewear, especially when cutting, sanding or drilling fiberglass materials.

The above listed items should be worn if workers will be cutting, sanding or drilling fiberglass materials.

Storage Precautions

We recommend that ArmoreCore panels be stored at inside under cover, stacked flat and off the floor. If moving materials with a forklift is needed, please keep panels stored on the pallets that they were originally received with to avoid cracking, chipping or abrading the panels.

Installation

ArmoreCore panels can be cut, drilled or sanded with the following recommendations:

1. Cutting

Skill saw is recommended. Material should be cut slowly with either masonry concrete cutting blade or diamond tip blade. Cut at a medium speed and don't force the blade or put side pressure on the blade. If dry cutting, please remove blade from cut every minute for a few seconds to cool. A panel or saber saw can be used with a "grit edge" blade that is designed for cutting composites. One excellent blade for skill saw cutting is a Hilti Dry-cutting Diamond Disc (DC 7 x .085 x DM/MC) for use with skill saws at 8500 rpm. These are available at many specialty saw supply stores.

2. **Drilling**

When pre-drilling ArmorCore Panels it is recommended to use a carbide or cobalt tip drill bit at medium speed and with medium pressure. A counter-sinking drill hole is acceptable when a flush surface is desired. 1 ³/₄" wood screws are commonly used to secure panels to wood studs. Self-tapping drywall screws work well when affixing drywall to fiberglass panels or when affixing the fiberglass panels to steel studs. *Note: You can use any self-drilling screw or you can use any drywall screw, if it is not self-tapping you will have to pre-drill. You have to counter sink screw no matter which screw you use.*

3. Sanding

If you will be laminating materials against the fiberglass panel it is recommended to lightly "rough-up" the panel surface with a sander using 120 grit paper and medium pressure. If we are notified at the time of your order that you will be laminating, we can sand the panels prior to shipment.

4. Laminating

If laminating or gluing to the panels is a requirement, there are many commercial grade adhesives available. We recommend a two-component acrylic, water-based adhesive. H.B. Fuller Company manufacturers a product (RK-3850, X-PB), (XR-1392) that works well for fiberglass to wood applications. Their phone number is 800-328-7307.

5. **Painting**

Fiberglass panels can be painted directly provided the surface is lightly sanded and a primer base-coat is applied. Either oil or water base may be applied. Surface must be wiped clean of all dust, dirt or grime.

For further information or technical assistance, please phone, fax or email to us. We thank you for choosing Bullet Guard Corp. products and we hope to serve your bullet resistant needs again in the future.