

ARCHITECTURAL SPECIFICATION FOR LUMAGARD™ FIBERGLASS ARMOR SHEETS

PART 1 – GENERAL

- 1.1 Specification includes
 - A. LUMAgard™ bullet-resistant fiberglass sheets.
- 1.2 Related sections
 - A. 13070 Bullet-resistant protection.
- 1.3 Submittals
 - A. Manufacturer's printed product information, including product performance and installation.
 - B. Material safety data sheet (MSDS), including guidelines for safe fabrication and handling.

PART 2 – PRODUCTS

- 2.1 Manufacturer
 - A. American Acrylic Corporation manufactures LUMAgard™ fiberglass armor sheets.
 - B. Contact information – Address: 400 Sheffield Avenue
West Babylon, New York 11704
Phone: 800-627-9025 or 631-422-2200
Fax: 631-422-2811
Email: lumasite@aol.com
- 2.2 Opaque bullet-resistant sheets for walls, partitions and millwork
 - A. Material: fiberglass structural armor (non-transparent)
 - B. Standard sheet sizes: 3' x 8', 4' x 8', and 4' x 10' (custom sizes up to 5' x 12' can be supplied in some products)
 - C. Protection levels: UL752 levels 1, 2, 3, 4, and 6.
- 2.3 Material specification by level of protection
 - A. LUMAgard™ AG-1.5
Protection level: UL752 level 1
Thickness: 5/16" (nom.)
Weight: 2.7lbs per square foot
 - B. LUMAgard™ AG-200
Protection level: UL752 level 2 and 6
Thickness: 3/8" (nom.)
Weight: 3.3lbs per square foot
 - C. LUMAgard™ AG-300
Protection level: UL752 level 3
Thickness: 7/16" (nom.)
Weight: 4.5lbs per square foot

- D. LUMAgard™ AG-475
 - Protection level: UL752 level 4
 - Thickness: 1-3/8" (nom.)
 - Weight: 14.5lbs per square foot

PART 3 – APPLICATION

3.1 Installation

- A. Bullet-resistant sheets are ordinarily mechanically fastened to the side of the supporting structure that the threat is expected to come from. Install the largest continuous panel that is practical. Reinforce joints (in front or behind) with 4-inch wide strips of the same material.
- B. LUMAgard™ sheets expand slightly upon impact as part of the normal dissipation of energy from incoming bullets. When installing against masonry block or other very hard surfaces, leave a 1/4-inch (minimum) gap by shimming the sheets.
- C. If installed outdoors, LUMAgard™ sheets must be covered or painted. A marine urethane paint is recommended (follow the manufacturer's instructions for painting fiberglass).

3.2 Fabrication

- A. Fiberglass armor sheets are readily cut using abrasive blades of the kind used to cut masonry. Use a high-speed twist drill to drill smaller holes, and an abrasive hole saw for larger holes. Wear eye protection. Dust generated can be hazardous. Wear a protective mask to avoid inhaling the dust. Refer to the material safety data sheet (MSDS) for other important safety information.
- B. Finishing materials (including sheet rock and decorative laminates) are readily bonded to fiberglass armor sheets using construction-grade contact adhesives or urethane adhesives. Epoxy adhesives may require that the surface be sanded.

3.3 Maintenance

- A. LUMAgard™ sheets can be cleaned using detergent and water.