# TECHNICAL BULLETIN



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## SLP

### STRUCTOGLAS LAMINATED PANEL PRODUCT LINE

#### **PRODUCT**

Structoply is made by laminating a Structoglas frp panel to a substrate, such as oriented strand board (OSB), plywood, or fluted polypropylene.

#### FINISHED PANEL QUALITY, FABRICATING AND STORAGE

- 1. The Structoply frp laminate shall not delaminate from the substrate when edges are securely fastened to an adequate structural system, and when joints and edges are protected with a permanently flexible thiokol or silicone-like caulking compound and suitable vinyl or metal (aluminum or stainless steel) division bars.
- 2. The Structoply frp laminate shall be uniform and in good contact over the surface of the substrate.
- 3. Alignment between Structoply frp laminate and substrate will be to ±1/16" on any edge.
- 4. Adhesive squeeze-out on any panel will not exceed 1/16" on any edge.
- 5. The color of the Structoply frp laminate shall be a uniform white or as specified.
- 6. Panel weight will vary as a function of substrate thickness, density, and moisture content.
- 7. Frp dimensional tolerances\* will be:

Width: +0"-1/8" Length: ±1/8"

Squareness: 1/8" in 48"

- \* dimensional tolerances of substrates vary and may not match frp tolerances.
- 8. Tests show that variation in panel integrity will be due to the substrate, not laminate or adhesive bond, even after exposure of the composite to temperature and humidity ranges form -40°F to 120°F and from 10% RH to water immersion.
- 9. Panels can be fabricated with the same tools and techniques as ordinary wood panels. Carbide-tipped tools are recommended. Eye protection and filter mask should be worn during cutting and trimming operation.
- 10. All laminated panels should be stored in a dry place indoors. Exposure to humid or wet conditions prior to installation can cause panel warping. Efforts to limit this exposure during storage can reduce this warpage. Standing water on the surface laminate during storage can cause discoloration.

#### **PRODUCT LIMITATIONS**

**Near heat source:** Structoply products may discolor when installed behind or near a heat source which radiates temperatures exceeding 130°F such as cookers, ovens, and deep fryers. In areas of extreme temperature fluctuation (over ±20°F), Structoply polypropylene panels must be laminated on both sides with Structoply frp to avoid warping, and installed with mechanical fasteners. Lay-in ceiling panels should be laminated on both sides for all installations. Panels with a smooth frp face (FSQ) are shipped with a tack film to protect the frp face during shipment. Panels will provide a clean, aesthetically-pleasing finished installation. However, by nature, fiberglass reinforced plastic paneling may occasionally have small areas that are aesthetically unacceptable for use. Panels should be inspected on-site prior to installation. If any portion of the material will not provide an acceptable appearance, Kemlite Company should be notified at once. Upon verification of unacceptability, that portion of material will be replaced by Kemlite Company. Kemlite Company's sole responsibility is for the replacement of defective material but not the labor or other handling or installation expenses.

With variation in substrates, the composite panels quoted are not tested for physical properties or fire resistance. All of the Kemlite Company finishes have been tested for surface burning characteristics (see appropriate Structoglas Technical Bulletin). Physical properties and fire resistance data on the substrate are available from the specific substrate manufacturer. Kemlite Company makes no representation or warranty as to the composite panel fitness for any specific application, overall physical properties, fire resistance, or burning characteristics. The intended use of laminated panels that use fluted polypropylene as a substrate, is to line the walls or ceilings of car washes and agricultural buildings. Installation of these panels in any application should be approved by the local building code official before panels are ordered. Kemlite Company cannot ensure code compliance in all situations.

We believe all information given is accurate. It is offered in good faith, but without guarantee. Since conditions of use are beyond our control, all risks are assumed by the user. Nothing herein shall be construed as a recommendation for uses which infringe on valid patents or as extending a license under valid patents.

#### FLAME SPREAD AND SMOKE DEVELOPMENT RATINGS

The numerical flame spread and smoke development ratings are not intended to reflect hazards presented by Kemlite Company products or any other material under actual fire conditions. These ratings are determined by small-scale tests conducted by Underwriters Laboratories and other independent testing facilities using the American Society for Testing and Materials E-84 test standard (commonly referred to as the "Tunnel Test"). KEMLITE COMPANY PROVIDES THESE RATINGS FOR MATERIAL COMPARISON PURPOSES ONLY. Like other organic building materials (e.g. wood), panels made of fiberglass reinforced plastic resins will burn. When ignited, frp may produce dense smoke very rapidly. All smoke is toxic. Fire safety requires proper design of facilities and fire suppression systems, as well as precautions during construction and occupancy. Local codes, insurance requirements and any special needs of the product user will determine the correct fire-rated interior finish and fire suppression system necessary for a specific installation.

