



Duralite | DL

Product

Duralite (DL) translucent and opaque Fiberglass Reinforced Plastic (FRP) panels are produced with acrylic modified resin combined with random chopped fiberglass for reinforcement. This panel contains UV stabilizers.

Purpose

Duralite panels are used where standard weathering characteristics are required. This panel offers light transmission, standard chemical resistance, and is suitable for a variety of applications.

Table One: Physical Properties

Typical Values   DL			
Property	8oz./ft <sup>2</sup>	12oz./ft <sup>2</sup>	Test Method
Tensile Strength	20 x 10 <sup>3</sup> psi	20 x 10 <sup>3</sup> psi	ASTM - D638
Tensile Modulus	1.3 x 10 <sup>6</sup> psi	1.5 x 10 <sup>6</sup> psi	ASTM - D638
Flexural Strength	40 x 10 <sup>3</sup> psi	40 x 10 <sup>3</sup> psi	ASTM - D790
Flexural Modulus	1.2 x 10 <sup>6</sup> psi	1.2 x 10 <sup>6</sup> psi	ASTM - D790
Coefficient of Linear Thermal Expansion	1.6 x 10 <sup>-5</sup> in/in/°F	1.6 x 10 <sup>-5</sup> in/in/°F	ASTM - D696
Thermal Transmittance (U Value)	0.78 BTU/in/hr/ft <sup>2</sup> /°F	0.78 BTU/in/hr/ft <sup>2</sup> /°F	ASTM - C1363
Thermal Conductivity (k)	1.2 BTU-in/(hr-ft <sup>2</sup> -°F)	1.2 BTU-in/(hr-ft <sup>2</sup> -°F)	ASTM - C177
Average Burn Rate	≤2.5in/min	≤2.5in/min	ASTM - D635
International Building Code Plastic Classification	NA	NA	ASTM - D635
Self Ignition Temperature	≥650 °F	≥650 °F	ASTM - D1929
Flash Ignition Temperature	≥650 °F	≥650 °F	ASTM - D1929
Solar Heat Gain	NA	NA	NA

Table Two: Design

Product Code	Type	Color	Size	Weight	Light Transmission
XXXDL xxx = Profile Number	Translucent	401 Solar White 405 Snowflake White 502 Clear	As defined by tooling and approved drawing	8oz. 12oz.	40% 80%
	Opaque	865 Beige 675 Gray			NA

Percentages of light transmission shown are nominal values with a tolerance of + or - 5%  
Methods of test: Light Transmission per ASTM D1494

## TESTING

Crane Composites panels meet or exceed applicable requirements of the following standards:

1. ASTM D3841-97, Standard Specification for Glass Fiber Reinforced Polyester Plastic Panels.
2. Code requirements of most state, county and municipal building departments.
3. Crane Composites is a recognized UL90 component manufacturer.

## SPECIFICATIONS

These panels are manufactured by a continuous laminating process in lengths as required.

## COMPOSITION

Reinforcement: random chopped fiberglass roving.  
Resin mix: modified polyester copolymer and pigments.

## FINISHED PANEL QUALITY

1. Panels shall have a wear side with a smooth or textured finish. Color shall be uniform throughout. The backside shall be smooth. Backside imperfections which do not affect functional properties are not cause for rejection.
2. Physical properties shall be as set forth in Table 1.
3. Product quality standards and tolerances for panel weight and thickness shall be as set forth in Crane Composites' Quality Control Procedures/Standards which are available on request.
4. Dimensions shall be as specified on purchase order, subject to the following tolerances:

Width:	±1/8" (3.2 mm)
Length:	±1/8" (3.2 mm) up to 12' (3.7 m)
Squareness:	not more than 1/8" (3.2 mm) out of square
Pitch (over-all):	± 1/8"
Rib Height:	± 1/16"
5. The nominal light transmission factor shall have a tolerance of ± 5% when tested in accordance to ASTM D1494.
6. Tolerance on the specified weight of panels shall be ± 10%, unless otherwise specified.

## FABRICATING RECOMMENDATIONS:

**Note:** Protect your eyes with goggles and cover your nose and mouth with a filter mask when cutting FRP panels.

**Hand fabrication:** Drilling-high speed drill bit (60° cutting angle, with 12°-15° clearance) or hole saw.

**Cutting:** Sheet metal shears or circular saw with reinforced carborundum or carbide-tipped blade.

**Production fabrication:** Use carbide-tipped tools. Straight cuts can be sheared (90° cutting edge with 0.002" (0.05 mm) clearance) or sawed. For irregular cuts, use die punch or band saw.

## STORAGE RECOMMENDATIONS:

Store panels properly. While a single panel is engineered to withstand exposure to sunlight and the elements, a stack of panels will trap heat and moisture, causing internal clouding in the panels. To avoid this irreversible effect, panels must be stored in a dry, shaded, well ventilated area. Skids should be elevated at one end by wood spacers. Failure to comply with recommended storage procedures will void the warranty on the panels.

## CAUTIONS AND SAFETY WARNINGS:

**DO NOT WALK ON PANELS.** Crane Composites panels are not intended to support the undistributed weight of workers. Roofing ladders or 1" x 12" planks, or equivalent means of protection must be used during any work on roofs. Provide fall protection in accordance with OSHA standard 29 CFR 1910 [see paragraph 1910.23(a)(4) AND (e)(8)]. Compliance with this regulation as well as any other local, state or federal safety requirements is the responsibility of the building owner, contractor and/or erector.

## MAINTENANCE:

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 material does not provide an acceptable appearance, Crane Composites should be notified at once. Upon verification of unacceptability, that portion of material will be replaced by Crane Composites. Crane Composites' sole responsibility is for the replacement of defective materials but not for labor or other handling or installation expenses.

For other product formulations see technical data sheets: General Purpose #7062, General Purpose High Strength #7082, Duralite High Strength #6448, SolarStrong #2776, SolarStrong High Strength #2782, SunStrong #6874, SunStrong High Strength #6875.

## FLAME SPREAD AND SMOKE DEVELOPMENT RATINGS

The numerical flame spread and smoke development ratings are not intended to reflect alleged hazards presented by Crane Composites products under actual fire conditions and this product has not been tested by Crane Composites except as set forth below. 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"). CRANE COMPOSITES 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. We believe all information given is accurate, 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. [www.astm.org/Standards/E84.htm](http://www.astm.org/Standards/E84.htm).

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Crane Composites is the maker of Glasbord, Sequentia, Sanigrad II and a variety of other fiberglass reinforced plastic (frp) composite wall panels. Inspired by the Kemlite tradition, Crane Composites has over 50 years of experience in commercial building products and is a recognized industry leader in frp applications.



**CRANE** Composites