CRANE Composites

TECHNICAL DATA

7062

Rev. 06 | 3.13

General Purpose | GP

Product

General Purpose (GP) translucent and opaque Fiberglass Reinforced Plastic (FRP) panels are produced with general purpose resin combined with random chopped fiberglass for reinforcement.

Note

For panels with U.V. resistance and improved weathering characteristics, please use Duralite, Solarstrong, or Sunstrong.

Table One: Physical Properties

Typcial Values | GP						
Property	**5oz./ft²**	**6oz./ft²**	**8oz./ft²**	**10oz./ft²**	**12oz./ft²**	**Test Method**
Tensile Strength	11,000 psi	15,000 psi	18,500 psi	17,000 psi	19,000 psi	ASTM - D638
Tensile Modulus	1.0 x 10^6 psi	1.2 x 10^6 psi	1.3 x 10^6 psi	1.5 x 10^6 psi	1.5 x 10^6 psi	ASTM - D638
Flexural Strength	25,000 psi	30,000 psi	38,000 psi	33,000 psi	35,000 psi	ASTM - D790
Flexural Modulus	0.8 x 10^6 psi	1.0 x 10^6 psi	1.0 x 10^6 psi	1.0 x 10^6 psi	1.0 x 10^6 psi	ASTM - D790
Coefficient of Linear Thermal Expansion	1.6 x 10^{-5} in/in/°F	1.6 x 10^{-5} in/in/°F	1.6 x 10^{-5} in/in/°F	1.6 x 10^{-5} in/in/°F	1.6 x 10^{-5} in/in/°F	ASTM - D696
Thermal Transmittance (U Value)	NA	NA	0.8 BTU/(hr-ft²-°F)	NA	NA	ASTM - C1363
Thermal Conductivity (k)	1.2 BTU-in/(hr-ft²-°F)	1.2 BTU-in/(hr-ft²-°F)	1.2 BTU-in/(hr-ft²-°F)	1.2 BTU-in/(hr-ft²-°F)	1.2 BTU-in/(hr-ft²-°F)	ASTM - C177
Average Burn Rate	N/A	≤2.5 in/min	NA	NA	NA	ASTM - D635
International Building Code Plastic Classification	N/A	CC2	NA	NA	NA	ASTM - D635
Self Ignition Temperature	>650 °F	>650 °F	>650 °F	>650 °F	>650 °F	ASTM - D1929
Flash Ignition Temperature	>650 °F	>650 °F	>650 °F	>650 °F	>650 °F	ASTM - D1929
Solar Heat Gain	NA	NA	NA	NA	NA	NA

Table Two: Design

Product Code	Type	Color	Light Transmission	Size	Weight
XXX**GP** xxx = Profile Number	Translucent	502 Clear 467 White 405 Snowflake White	80% 50-60% 40-50%	As defined by tooling and approved drawing	5oz. 6oz. 8oz. 10oz. 12oz.
	Opaque	856 Beige 675 Gray 945 Stone White	N/A		

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 Reinforded 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:
1. Reinforcement: random chopped fiberglass roving.
2. 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 Structoglas 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 panls 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 High Strength #7082, Duralite #6456, Duralite High Strength #6448, Solar-Strong #2776, SolarStrong High Strength #2782, SunStrong #6874, or SunStrong High Strength #6875.

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Form 7062 | Rev. 06 | 3.13 | (6520)