



# Composites

## GLASBORD® embossed panels for exterior

PRODUCT CODE: REI

### CLASS C FIRE RATING PER ASTM E-84

Glasbord REI is a proprietary product and requires approval to quote

#### PRODUCT

REI with Surfaseal is a durable, semi-rigid material of fiberglass reinforced plastic (FRP). It is tough, hard, dimensionally stable and modified for exterior use. It will not mildew, rot, or corrode. REI exhibits a high strength-to-weight ratio. It is easy to install and highly bondable.

#### SURFASEAL FINISH

Surfaseal is a unique surface treatment that, when compared to ordinary FRP, exhibits up to ten times cleanability, six times the stain resistance and twice the abrasion resistance.

#### PURPOSE

Glasbord REI is suitable as a general all-purpose exterior panel in a variety of architectural applications, such as, doors, fascias, soffits and facades, walkway coverings and wall panels.

DESIGN PROPERTIES				
PRODUCT CODE	NOMINAL THICKNESS	FINISH	COLOR	AVAILABLE SIZES
REI	0.12"   3.0 mm	Embossed	White   29 Green   35 Blue   46 Gray   60 Gray   65 Bronze   72 Red   92 Black   96 Beige   68 Hartford Green   38 Military Blue   41 Slate Gray   59 Sandstone   66 Seawolf   59 Boysenberry   93	36"-48" and 80"-96" x 5' - 500' 0.9m-1.2m and 2.0m-2.4m x 1.5m-152.4m

Additional lengths, widths and colors available by quotation. 12,000 sq. ft. per product, weight and colors required to manufacture. Orders from different customers may be batched to obtain manufacturing minimums, however lead time may be affected.

TYPICAL PHYSICAL PROPERTIES		
PROPERTY	REI	TEST METHOD
FLEXURAL STRENGTH	20.5 x 10 <sup>3</sup> psi   141 MPa	ASTM - D790
FLEXURAL MODULUS	0.7 x 10 <sup>6</sup> psi   4826 MPa	ASTM - D790
TENSILE STRENGTH	13.2 x 10 <sup>3</sup> psi   91 MPa	ASTM - D638
TENSILE MODULUS	1.3 x 10 <sup>6</sup> psi   8963 MPa	ASTM - D638
BARCOL HARDNESS	45	ASTM - D2583
IZOD IMPACT	15.5 ft-lb/in notched   0.83 J/mm	ASTM - D256
COEFFICIENT OF LINEAR THERMAL EXPANSION	1.3 x 10 <sup>-5</sup> in/in/°F   23 µm/m/°C	ASTM - D696
GARDNER IMPACT STRENGTH	120 in-lb   13.6 J	ASTM - D5420
WATER ABSORPTION	0.20%/24hrs @77°F   25°C	ASTM - D570
SURFACE BURNING CHARACTERISTICS	Class C	ASTM - E84

## SPECIFICATIONS

Crane Composites, Inc. (CCI) panels are manufactured by a continuous laminating process in lengths as required.

## COMPOSITION

Reinforcement: Random chopped fiberglass.

Resin Mix: Polyester/styrene copolymer, inorganic fillers, and pigments.

## FINISHED PANEL QUALITY

1. Panels shall have a wear side with a matte embossed finish. Color shall be uniform throughout as specified. The backside shall be smooth. The backside surface may have some variations which do not affect functional properties and are not cause for rejection.
2. Physical properties shall be as set forth on Page 1.
3. 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: ±1/8" (3.2 mm) in 48" (1.2 m) of width
4. 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.
5. Panels shall be installed in accordance with manufacturer's guidelines as set forth in the Crane Composites Installation Guide (Form #6876).

## CERTIFICATIONS

1. Meets USDA/FSIS requirements.
2. Some products have been tested and meet the requirements FMVSS 302. For a list products that have been tested to this requirement, see our test reports on our website at [www.cranecomposites.com/testreports.html](http://www.cranecomposites.com/testreports.html)
3. FRP does not support mold or mildew (per ASTM D3273 and ASTM D3274).
4. Meets minimum requirements of major model building codes for Class C interior wall and ceiling finishes of flame spread  $\leq$  200, smoke developed  $\leq$  450 (per ASTM E-84).
5. This panel has earned GREENGUARD® Indoor Air Quality Certification (Certificate #16349-410, 16364-410, 16351-410) [greenguard.org](http://greenguard.org). (Certificate #15955-410) [greenguard.org](http://greenguard.org).



## IDENTIFICATION

Product identified by 1 red thread on the back.

## STORAGE REQUIREMENTS

All Crane Composites FRP products should be stored indoors.

### 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).

A global leading provider of resilient wall and ceiling coverings. Kemlite® was established in 1954 and the company changed names to Crane Composites in 2007. Crane Composites is headquartered in Channahon, IL and all our products are manufactured in the United States. We work with hundreds of distributors, ensuring our products are easily accessible and readily available to our customers.

The following are trademarks of Crane Composites, Inc. or a related company: Glasbord, Kemlite, Kemply, Surfaseal, Sanigridd, Silhouette Trims and Varietex

## FABRICATING RECOMMENDATIONS

NOTE: Protect your eyes with goggles; cover your nose and mouth with a filter mask; cover exposed skin when cutting CCI panels.

HAND FABRICATING: 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 FABRICATING: 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.

CLEANING INSTRUCTIONS: Available from CCI.

SDS: Prior to working with our products, see our most current SDS at [cranecomposites.com/sds.html](http://cranecomposites.com/sds.html)

## SERVICEABLE TEMPERATURE RANGE

Panels will perform in temperatures from -40°F (-40°C) to 130°F (55°C). For use in environments beyond this range contact Crane Composites for recommendations.

## LIMITATIONS

Near Heat Source: Crane Composites panels will discolor when installed behind or near any heat source which radiates temperatures exceeding 130°F (55°C), such as cookers, ovens, and deep fryers. Do not install near a heat source.

Uneven Surface: Installation over uneven concrete block walls may result in areas of delamination and bulging.

## CRANE COMPOSITES TESTING

CLEANABILITY TEST: When Glasbord with Surfaseal and an ordinary FRP panel are heavily soiled, the Glasbord panel exhibits up to 10 times more cleanability per MacBeth Computer Colorimeter.

Stain Resistance Test: Prolonged direct contact to concentrated ammonia-based cleaner exhibited no color change per MacBeth Colorimeter.

## NOTICE

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.

