

## DESIGNS WALL PANELS

### CLASS A or C FIRE RATING PER ASTM E-84 and CAN/ULC-S102-10 TESTED

#### PRODUCT CODE: IPSA, IPSC, IPCN

#### PRODUCT

The DESIGNS fiberglass reinforced plastic (FRP) panel with a unique, decorative image is a durable, flexible building material and will not mold, mildew, rot or corrode. It exhibits excellent resistance to mild chemicals and moisture. The panel is available in a Class A or Class C fire rating per ASTM E-84 or a panel tested per CAN/ULC-S102-M for use in Canada.

#### PURPOSE

DESIGNS wall panels are designed for INTERIOR USE ONLY where a sanitary, easy-to-clean panel is desired. The decorative image enhances any area where the features and benefits of an FRP panel are required but a more cosmetically appealing finish is desired.

#### NOTE

Due to the specialty custom nature of the DESIGNS production process, color variance from lot to lot production will occur. Panels will not be the exact same color from run to run. ORDER ENOUGH PANELS TO COMPLETE A ROOM INSTALLATION.

### DESIGN PROPERTIES

PRODUCT CODE	FIRE RATING	NOMINAL THICKNESS	AVAILABLE PATTERNS & COLORS		AVAILABLE SIZES
IPSA	Class A	0.075" 1.9 mm	Sierra Ash   010SA Maryland Maple   009MM Washington Wood   008WW True Terrazzo   005TT Corn Silk Canvas   008C Chrome Canvas   011C Cactus Canvas   009C Sculptured Stone   007SS Caramel Crosshatch   013CH Piri Blue Stripe   023PBS	Baton Rouge Bamboo   001BRB Carolina Cherry   002CC Tennessee Timber   003TT Colonial Canvas   012C Camel Canvas   010C Coastal Canvas   007C Scattered Stone   004SS Maui Marble   006MM Brushed Metal   025BM Graystone   024GS	4' x 8'   4' x 10' 1.2 m x 2.4 m   1.2 m x 3.0 m
IPSC	Class C		DESIGNS Custom		
IPCN	CAN/ULC-S102-M				

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.

### PHYSICAL PROPERTIES

PROPERTY	IPSA	IPSC	IPCN	TEST METHOD
FLEXURAL STRENGTH	18 x 10 <sup>3</sup> psi   124 MPa	12 x 10 <sup>3</sup> psi   83 MPa	13 x 10 <sup>3</sup> psi   90 MPa	ASTM - D790
FLEXURAL MODULUS	0.6 x 10 <sup>6</sup> psi   4137 MPa	0.5 x 10 <sup>6</sup> psi   3447 MPa	13 x 10 <sup>3</sup> psi   90 MPa	ASTM - D790
TENSILE STRENGTH	10 x 10 <sup>3</sup> psi   69 MPa	7 x 10 <sup>3</sup> psi   48 MPa	6 x 10 <sup>3</sup> psi   41 MPa	ASTM - D638
TENSILE MODULUS	0.8 x 10 <sup>6</sup> psi   5516 MPa	0.9 x 10 <sup>6</sup> psi   6205 MPa	0.7 x 10 <sup>6</sup> psi   4826 MPa	ASTM - D638
BARCOL HARDNESS	45	35	40	ASTM - D2583
IZOD IMPACT	8.0 ft-lb/in notched   0.43 J/mm	5.0 ft-lb/in notched   0.27 J/mm	5.0 ft-lb/in notched   0.32 J/mm	ASTM - D256
COEFFICIENT OF LINEAR THERMAL EXPANSION	2 x 10 <sup>-5</sup> 10/10°F   36 μm/m°C	2 x 10 <sup>-5</sup> 10/10°F   36 μm/m°C	N/A	ASTM - D696
WATER ABSORPTION	0.16%/24hrs@77°F   25°C	0.16%/24hrs@77°F   25°C	N/A	ASTM - D570
SURFACE BURNING CHARACTERISTICS	Class A	Class C	CAN/ULC-S102-M	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 smooth 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:  $\pm 1/8"$  ( $\pm 3.2$  mm)  
 LENGTH:  $\pm 1/8"$  ( $\pm 3.2$  mm) up to 12' (3.7 m)  
 SQUARENESS:  $\pm 1/8"$  (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 A interior wall and ceiling finishes of flame spread  $\leq 25$ , smoke developed  $\leq 450$  (per ASTM E-84).
5. 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).
6. Meeting certification requirements for CAN/ULC-S102.
7. This panel has earned GREENGUARD® Indoor Air Quality Certification (Certificate #16350-410) [greenguard.org](http://greenguard.org).



## 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)

## STORAGE REQUIREMENTS

All Crane Composites FRP products should be stored indoors.

## 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.

## 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.

## RELATED INFORMATION

For scratch touch ups see document #7507

## 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).

[cranecomposites.com](http://cranecomposites.com) | 1.800.435.0080 | 1.815.467.8666 [fax] | [sales@cranecomposites.com](mailto:sales@cranecomposites.com)

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.

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