



Composite Wall Panels | HCW | Preliminary Information

Product:

Composite Walls are all-composite, wood-free panels that offer high strength-to-weight characteristics for structural applications. The all-composite panel is comprised of various layers of high performance, gel-coat, reinforcement and resins and utilizes a light-weight core. It provides stiffness, insulative properties and weight savings compared to traditional materials such as aluminum, steel, and wood.

Purpose:

Composite Walls are specifically designed and formulated for use as structural wall panels for dry van truck bodies and delivery vans.



Table One: Physical Properties

Typical Values			
Property	HCW   0.39"	HCW   0.89"	Test Method
Flexural Strength	5.53 x 10 <sup>3</sup> psi 38.1 Mpa	4.87 x 10 <sup>3</sup> psi 33.6 Mpa	ASTM - D790
Flexural Modulus	5.48 x 10 <sup>5</sup> psi 3780 Mpa	4.27 x 10 <sup>5</sup> psi 2942 Mpa	ASTM - D790
Bending Stiffness	2.71 x 10 <sup>3</sup> lbf-in 306 N-m	15.22 x 10 <sup>3</sup> lbf-in 1719 N-m	Calculated

Table Two: Physical Properties

Product Code	Nominal Thickness	Nominal Weight	Size
HCW	0.39"   10 mm	1.2 lbs/ft <sup>2</sup>   5.9 kg/m <sup>2</sup>	Up to 8' Wide Up to 40' in Length
	0.89"   22.5 mm	1.3 lbs/ft <sup>2</sup>   6.3 kg/m <sup>2</sup>	

## SPECIFICATIONS

Crane Composites panels are manufactured in lengths and widths as required.

## COMPOSITION

Reinforcement: Fiberglass  
Resin Mix: Polyester/styrene copolymer

## FINISHED PANEL QUALITY

Panels shall have a facing layer on each side of the core.  
Physical properties shall be as set forth in Table 1.  
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  
Average thickness: ±10mils  
Bulk Coil policy #6207 applies

## CERTIFICATIONS

Meets FMVSS 302 requirements.

## 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.

**Stapling:** Standard pneumatic stapler.

**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.

**Painting Preparation:** To properly prepare the panel surface for painting, make sure the surface is clean, dry, and free from all oils, grease, silicones, dust, and other contaminants. Alkaline detergents or clean water may be used for this purpose. Sanding or roughening of the panel surface is recommended to achieve acceptable paint adhesion. Use 600 grit or finer sand paper or a 3M® "Ultrafine" Scotch-Brite® pad should be used.

**Cleaning Instructions:** Available from CCI.

## STORAGE REQUIREMENTS

Crane Composites panels are designed for peak performance prior to and after the panels have been applied. Careful handling during the manufacturing process is important. Avoid excessive clamping, dropping and scraping. Keep contents dry. Store indoors in a well ventilated area. When outside storage is necessary, cover and protect from the weather and exposure to sunlight.

## PLEASE NOTE THE FOLLOWING PRODUCT USE INFORMATION:

Products manufactured by CCI will provide a clean, aesthetically pleasing finished installation. However, by nature, fiberglass reinforced plastic panels may occasionally have small areas that are aesthetically unacceptable for use. Panels should be inspected on-site prior to installation or lamination and original CCI skid tag/ticket number removed and retained. If any portion of material will not provide an acceptable appearance, CCI should be notified at once. Please report the non-conforming product utilizing the retained skid tag/ticket number. Upon verification of unacceptability, CCI will replace or refund the purchase price of the non-conforming product.

This product is not intended for Interior use that requires a Class C fire rating.

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

Crane Composites is the manufacturer of ArmorTuf, Kemlite and a variety of other fiberglass reinforced plastic (FRP) composite panels. Inspired by the Kemlite tradition, Crane Composites has over 55 years of experience in Transportation Products and is a recognized industry leader in FRP applications.



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.

Kemlite is a registered trademark and ArmorTuf is a trademark of Crane Composites, Inc. | 3M and Scotch-Brite are trademarks of 3M.

Form 65157 | Rev. 3 | 9.11 | (5874)