



CRANE Composites



Fiberglass Reinforced Plastic Panels for Trailers and Truck Bodies



WHERE TRADITION & INNOVATION CONVERGE



Crane Composites is headquartered in Channahon, Illinois

Crane Composites, Inc.

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.

Where FRP Tradition & Innovation Converge

The tradition of Kemlite provides a solid foundation for the service and quality our organization provides the customer. The resources of Crane Composites allows our company to improve our operations and our products every day. The end result is quality FRP products your customers and projects demand, backed by the service and support you deserve.

Manufactured in the USA

Crane Composites, Inc., a Crane Co. (NYSE:CR) company, certifies that FRP panels sold under the names of ArmorTuf and Kemlite are domestic end products, manufactured or produced in the United States.

Our Parent Company | Crane Co. (NYSE:CR)

Founded in 1855 by Richard Teller Crane, Crane Co. is composed of 26 businesses in six industry segments including: Fluid Handling, Electronics, Merchandising Systems, Engineered Materials, Controls and Aerospace. www.craneco.com



Manufacturing Plants

The bulk of our transportation products are manufactured at facilities in **Joliet, Illinois** and **Jonesboro, Arkansas**.

Crane Composites has additional manufacturing facilities in Florence, Kentucky; Goshen, Indiana; and Alton, England.

Crane Composites Cares About the Environment

- State of the art Regenerative Thermal Oxidizers (RTO) are utilized to eliminate the emission of VOC's (Volatile Organic Compounds), making CCI manufacturing facilities Title V (air permit) Compliant
- Materials used in packaging are recyclable – plastics, wood, cardboard and aluminum pallets and cores are returned from customers and reused
- Less than A-grade quality product is saved and reworked or sold as B-grade to avoid landfill
- Water used to cut product on the continuous manufacturing line is reused in a closed loop system and does not introduce contaminated H2O into the waste system
- Formaldehyde free products and processes
- Rags and acetone cleaners are recycled
- All products made with non-lead based pigments
- Carrier film is reused
- Office paper is recycled as well as printer ink and toner cartridges
- Buildings are non-smoking facilities with designated smoke areas
- Crane Composites complies with all local, state and federal regulations regarding pollution prevention of land, water and air and we are focused on waste minimization in all areas





Fiberglass Reinforced Plastic Solutions

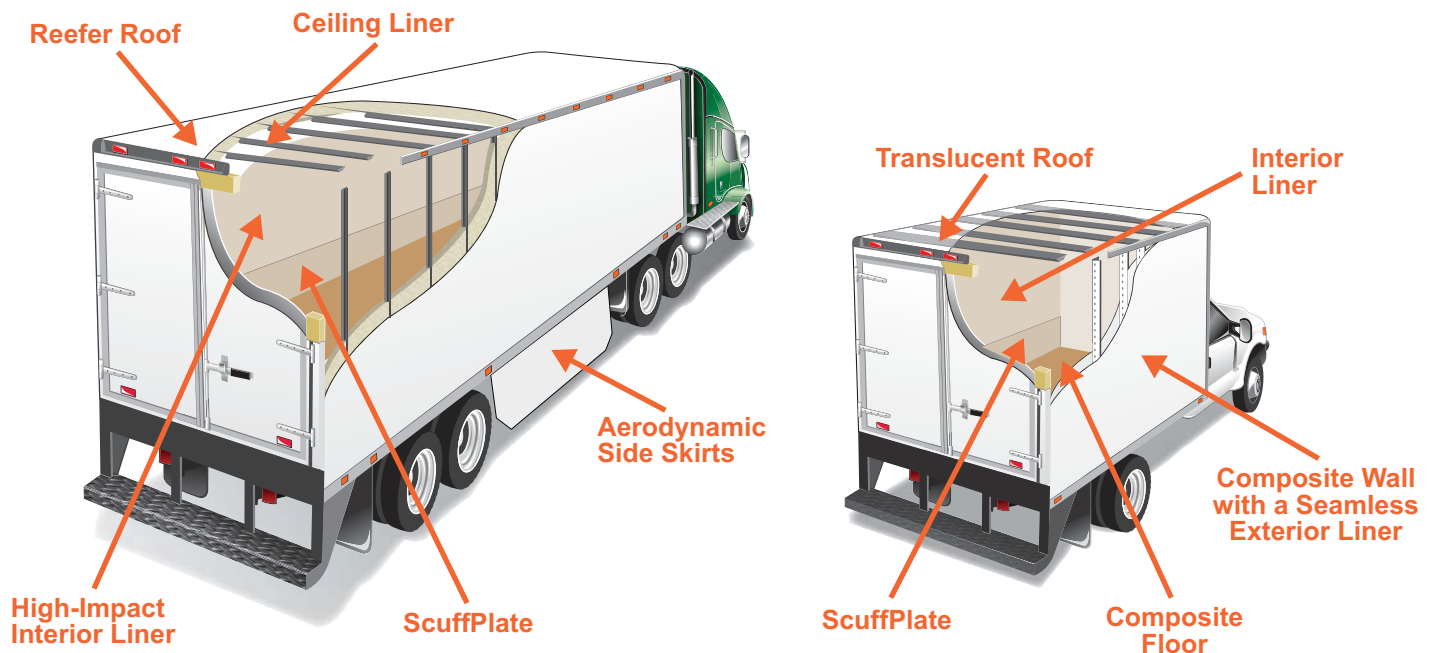
Founded as Kemlite Company in 1954, Crane Composites is the leading manufacturer of fiberglass reinforced plastic (FRP) panels. We offer reliable premium composite products and are passionate about partnering with our customers to provide them with innovative solutions that will enhance their business and allow us to service them with a wide array of options that will suit a specific requirement or application.

Crane Composites has contributed to the transportation market for over 55 years with innovative solutions. Crane Composites was the first to introduce FRP liners to the truck trailer market, first to introduce full seamless light-weight liners, first to introduce translucent roofs and first to introduce liners with integral scuff. We offer superior support with products readily available in the aftermarket channels and provide a dedicated team of engineers and technical resources to serve the market.



We've Got You Covered

Crane Composites offers superior panel choices for all types of vehicles. The advantage of using all Crane Composites products is the operational cost savings that can be obtained during the life of the unit.



INTERIOR LINERS

Crane Composites offers high-impact and standard interior sidewall liners that are lighter and more cleanable, more stain resistant, and more abrasion resistant than competitive FRP panels. Also, they are ideal as ceiling liners to prevent damage caused by load restraints.






Resists Damage

- Engineered matrix of glass reinforcement
- Robust resin system engineered for surface hardness and durability
- Time-tested embossed surface minimizes scratches and damage

Liners Look Better Longer

- Consistent white appearance that is easy to clean and maintain
- Does not absorb moisture which can cause weight gain and discoloration
- Very low vapor transmission rate

Choose the Right Liner Product

Unit	Application	Product	Generic	Thickness
Refrigerated Trailer 	Sidewall Liners	ArmorTuf®	ANXT	0.075"
		Kemlite®	LTR	0.09" and 0.120"
			L	0.06" - 0.10" 6710C
	Ceiling Liners	ArmorTuf®	ANXT	0.075"
		Kemlite®	LTR	0.06" and 0.075"
			LIC	0.06"
Subpan	Kemlite®	LTR	0.06" SP	
Drv Van Trailer 	Sidewall Liners	ArmorTuf®	ANXT	0.075"
		Kemlite®	LTR	0.09"
	Subpan	Kemlite®	LTR	0.06" SP
Refrigerated Truck Body 	Sidewall and Ceiling Liners	ArmorTuf®	ANXT	0.075"
			ARMT	0.06" and 0.075"
		Kemlite®	LTR	0.09" and 0.120"
			AFL	0.09"
	Subpan	Kemlite®	LTR	0.06" SP

NEW



ArmorTuf-NXT

High-Impact Interior Liner

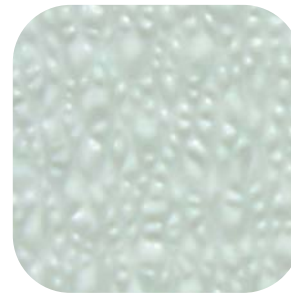
ArmorTuf is a high-impact resistant composite panel which out-performs reinforced thermoplastic products and standard chopped glass thermoset products. Since 2002, ArmorTuf has been the standard for high performance liners. New ArmorTuf-NXT is built on the customer's needs as a value engineered product for maximum strength with comparable ArmorTuf performance.

Product Comparison

ArmorTuf-NXT has been value-engineered for maximum strength with comparable ArmorTuf performance.

Surface Finish

ArmorTuf-NXT's surface is more stain resistant and easier to clean than thermoplastic panels. This is due to the chemically bonded, crosslinked resins, resulting in a harder, more robust panel surface. Thermoplastic panels are heat bonded and result in a softer surface with surface voids that attract dirt and moisture.

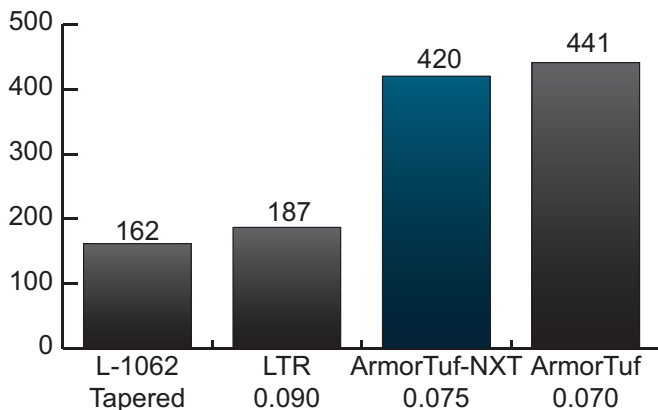


ArmorTuf-NXT with a resin rich surface



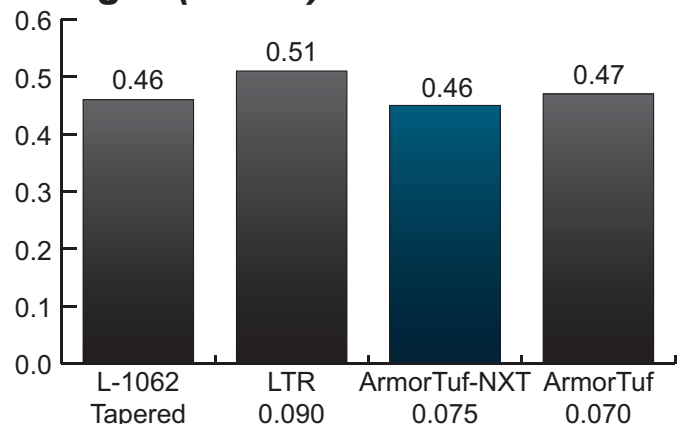
Thermoplastic with a porous surface which can trap dirt and moisture

Puncture Load (lbs)



ArmorTuf-NXT has double the impact resistance of a standard liner

Weight (lbs/ft²)



ArmorTuf-NXT is lighter than a standard liner

ROOF PRODUCTS

Translucent Roof Panels

Kemlite translucent roofs improve visibility for safer loading and unloading of cargo. They offer enhanced tear and puncture resistance when compared to other FRP products. The panels are acrylic modified and UV stabilized for resistance to weather and chemicals.

Improved Productivity and Safety

- Increases visibility inside of the unit
- Safer and more efficient loading of cargo

Superior Impact and Tear Resistance

- Engineered fabric panel is stronger than other FRP panels
- Can be repaired faster and more effectively than aluminum

Lighter Weight than Aluminum Roofs

- Increased payload and back haul flexibility
- Average weight savings of 15% versus aluminum roofs



Reefer Roof Panels

Kemlite Reefer Roof is a high-impact, durable, semi-rigid panel that is specifically designed and formulated to improve thermal efficiencies.

Reflects Heat-Generating UV Rays

- Reflects up to 2x the solar radiation and is 1000x less heat conductive than aluminum roof panels

Impact Resistant Panels

- Strong, durable, and puncture resistant



SCUFF PRODUCTS

Liners with Integral Scuff

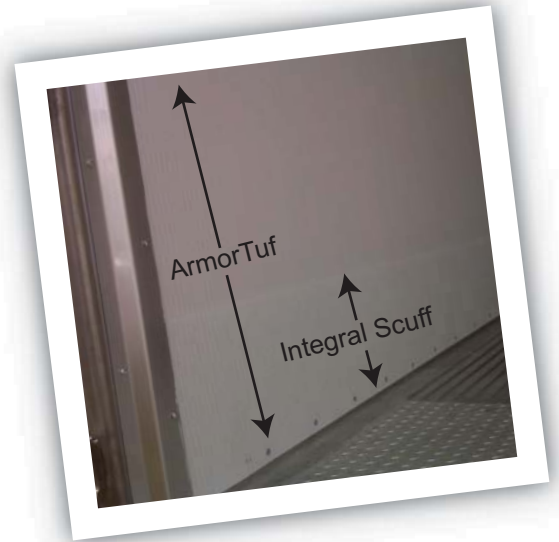
ArmorTuf with Integral Scuff has all the benefits of our high-impact liner panel - plus a heavy duty, built-in, protective scuff.

One-Piece Construction

- Reduces the potential for moisture to penetrate between the scuff and liner
- Eliminates the need for scuff fasteners
- Reduces maintenance costs

High Strength to Weight Ratio

- Provides greater protection against dents and tears versus aluminum
- Typical weight savings of 125 lbs. per trailer versus aluminum scuff



Scuff Plate Panels

Kemlite Scuff is a fiberglass reinforced plastic (FRP) panel that is high-impact, durable, semi-rigid panel and is more cleanable, more stain resistant, and more abrasion resistant than competitive FRP panels. Kemlite Scuff is specifically designed and formulated for the use as a scuffplate to protect the lower portion of sidewall panels for refrigerated and dry van trailers and truck bodies.



High Impact Panel

- Minimizes damage caused by forklift and pallets
- Protects against dents and tears

Available in Three Thicknesses

- 0.120", 0.145", and 0.240"

Aerodynamic Side Skirts

NEW

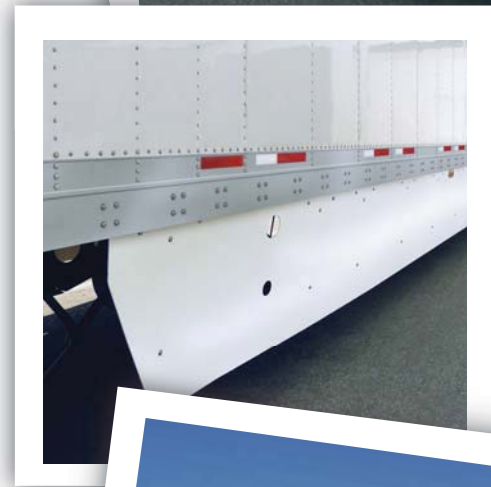
Crane Composites Aerodynamic Side Skirt products are made from composite materials, offering high strength-to-weight characteristics for structural applications.

Designed to Improve Fuel Efficiency

Light Weight and Resistant to Dents and Scratches

Available in Two Thicknesses

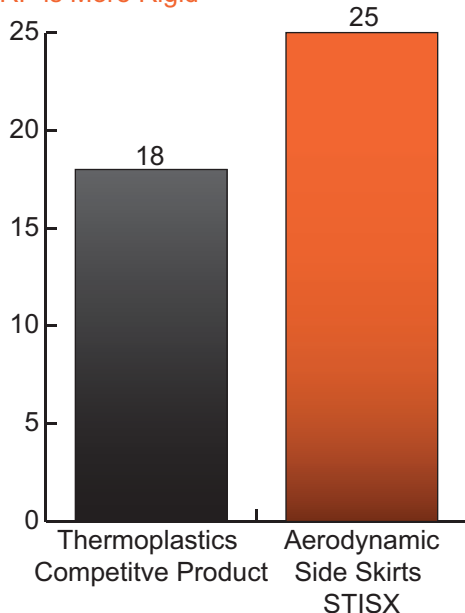
- 0.120" and 0.135"



Compare the Results

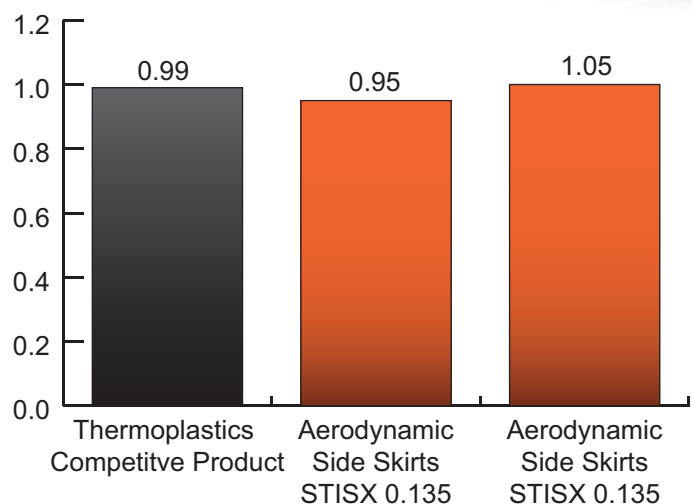
Flexural Strength (PSI)

FRP is More Rigid



Weight (lbs/ft²)

Light Weight Composite Solution!



Refrigerated Containers

NEW

Interior Liner Panels

Crane Composites is pleased to introduce the use of fiberglass reinforced plastic panels as interior liner panels for refrigerated seagoing containers. To date, there are over 8,000 composite lined containers in the field, some of which have been in service for over five years.

Lower Weight

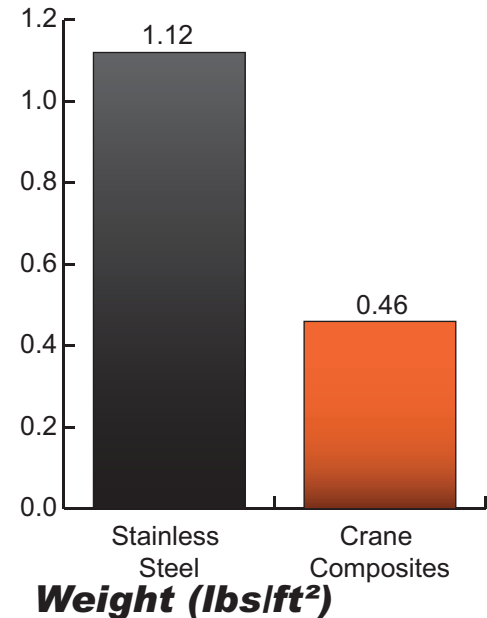
- Better fuel efficiency and lower emissions
- Weight savings as much as 575 kg. versus stainless steel
- Increased payload and back haul flexibility

Resists Damage

- Robust resin system engineered for surface hardness and durability
- High-impact resistance due to engineered matrix of glass reinforcement
- High durable liner that bends and recovers from impact rather than denting

Cosmetically Appealing

- Consistent white appearance that is easy to clean and maintain
- Durable surface is impact and abrasion resistant
- Does not absorb moisture which can cause weight gain and discoloration



Weight (lbs/ft²)

FRP is on Average 60% Lighter than Stainless Steel!



Applications

Interior Liners for Walls and Ceilings

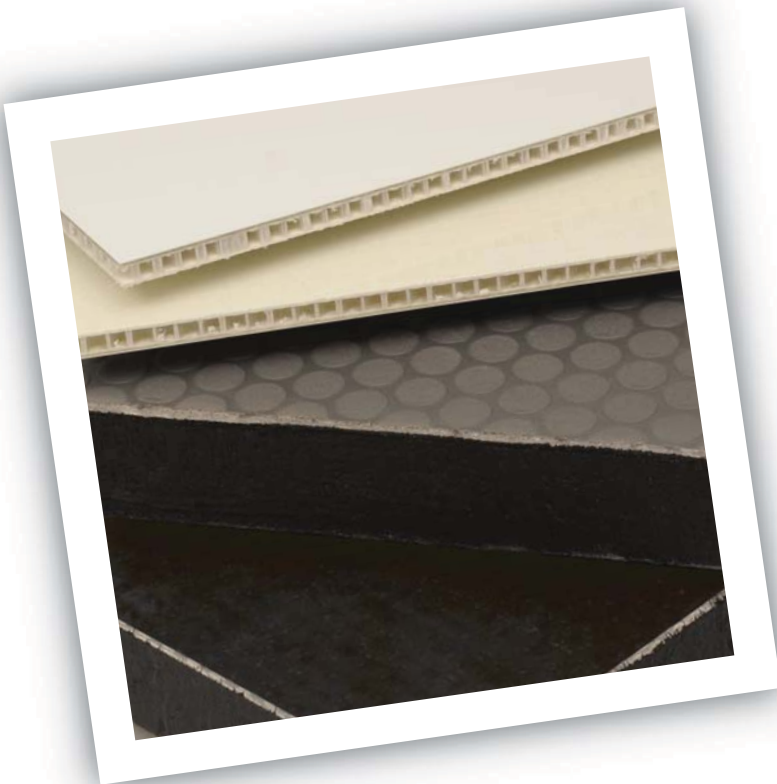
Interior Door Skins

COMPOSITE SOLUTIONS

Composite wall and floor panels for truck bodies and delivery vans 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, reinforcement and resins and utilizes a light-weight core. It provides stiffness, insulative properties and weight savings compared to traditional materials.



New High Strength-to-Weight Composite Materials



Light Weight Design

- Weight reduction of 15%-50% over traditional materials results in improved fuel efficiency

Long Lasting Appearance

- Composite Walls have a seamless automotive-like gel-coat finish for improved weathering performance that is corrosion and dent resistant

Developed and Tested to be Durable and Reliable

- Highly-engineered by the Crane innovation team with over 1,000 units already in service

NEW

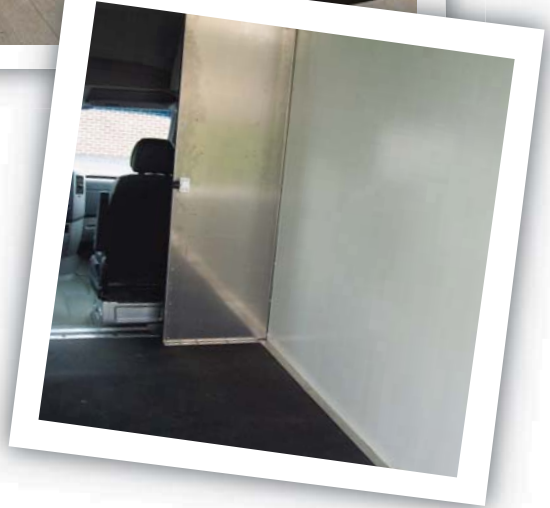
Applications

Composite Floors

Composite Floors for step vans and delivery vans utilize an integrated core system to produce a lightweight yet effective load-bearing structure. It provides stiffness, insulative properties and weight savings compared to traditional materials such as aluminum.

Composite Walls

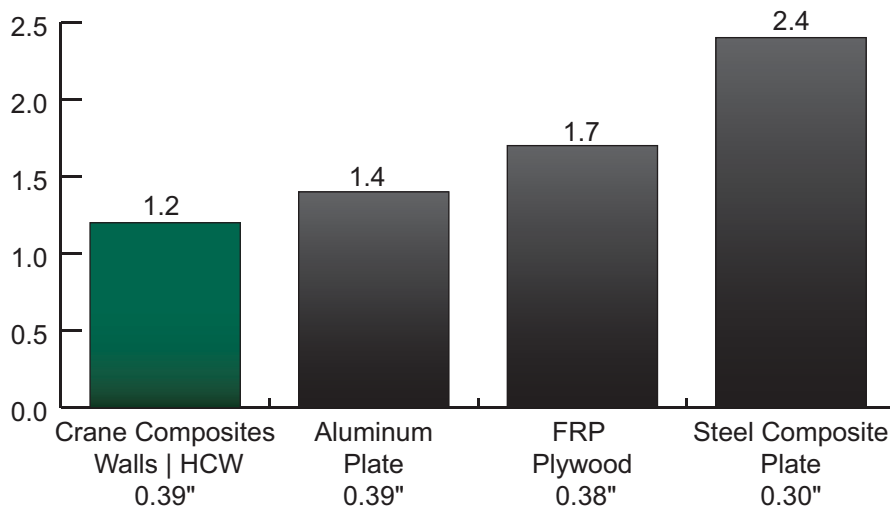
Composite Walls are wood-free panel that offers high strength-to-weight characteristics for structural applications. They are comprised of a high performance gel-coat, fiberglass reinforcement, and resins combined with a light-weight core. These walls provide stiffness, insulative properties, corrosion and dent resistance, and weight savings compared to traditional materials such as aluminum, steel, and wood.



Compare the Results

Weight (lbs/ft²)

Light Weight Composite Solution!



Aftermarket Support

At Crane Composites, we know that customer satisfaction is the foundation for business success and growth. We view our customers as partners and we strive to deliver quality products on time, every time. We are technically innovative and develop new products that customers need. As a customer of Crane Composites, you will come to know and rely on the trained staff for your product information and technical needs.

Dependable Service

Replacement Interior Liners and Translucent Roof Repair Kits



More Information

We have recently added a complete Resource Center to our website. Please visit for additional information including Product Literature, Technical Data Sheets and more.

If you are still not finding what you need, please contact us at **1.800.435.0080** or sales@cranecomposites.com

