



Reefer Roof with 1% Light Transmission

Kemlite Reefer Roof | RISC/RISCW

Product:

Kemlite Reefer Roof panels by Crane Composites are high strength, fiberglass reinforced panel available full size for seamless, one-piece installation on refrigerated trailers and truck bodies. The topside gets extra protection from the elements with LumaShield® surface guard.

Purpose:

Use instead of aluminum roofs on refrigerated trailers and truck bodies to provide better thermal efficiencies when exposed to solar radiation.



Table One: Physical Properties

Property	Typical Values		Test Method
Flexural Strength	23.0 x 10 ³ psi	159 MPa	ASTM - D790
Flexural Modulus	0.90 x 10 ⁶ psi	6,205 MPa	ASTM - D790
Tensile Strength	12.0 x 10 ³ psi	83 MPa	ASTM - D638
Tensile Modulus	1.2 x 10 ⁶ psi	8,274 MPa	ASTM - D638
Impact Strength (IZOD)	12 ft-lb/in	0.64 J/mm	ASTM - D256
Barcol Hardness	40	40	ASTM - D2583
Coefficient of Linear Thermal Expansion	1.5 x 10 ⁻⁵ in/in•°F	27 µm/m•°C	ASTM - D696
Thermal Conductivity	0.4 Btu•in/hr•ft ² °F	5.0 cal•cm/hr•m ² °C	ASTM - C177
Water Absorption	0.3%/24 hrs @ 77°F	0.3%/24 hrs @ 25°C	ASTM - D570
Specific Gravity	1.5	1.5	ASTM - D792

Table Two: Design Data

Product Number Identifier	Wear Finish	Nominal Thickness	Nominal Weight	Size	Color
RISC	Embossed	0.06" (1.5 mm) 0.075" (1.9 mm) 0.12" (3.1 mm)	0.36 lb/ft ² (1.76 kg/m ²) 0.46 lb/ft ² (2.25 kg/m ²) 0.80 lb/ft ² (3.91 kg/m ²)	Up to 700' (213m) Coils Up to 103" (2.62m) Wide	White (85) 1% - 3% Light transmission
RISCW		0.075" (1.9mm)	0.46 lb/ft ²		
Aluminum Roof Panel		0.032" (0.8 mm) 0.04" (1.0 mm)	0.46 lb/ft ² (2.25 kg/m ²) 0.57 lb/ft ² (2.79 kg/m ²)	N/A	

SPECIFICATIONS

These panels are manufactured by a continuous laminating process in lengths as required.

COMPOSITION

1. Reinforcement: Random chopped fiberglass roving.
2. Resin mix: Polyester/styrene copolymer and inorganic fillers and pigments.

FINISHED PANEL QUALITY

1. Panels shall have a wear side with a pebble-like embossed finish. Color shall be uniform throughout, as specified. The backside shall be smooth. Backside imperfections that 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 Composite's Quality Control Procedures/Standards that are available on request.

Dimensions shall be as specified on purchase order, subject to the following tolerances:

- Width: $\pm 1/8"$ (3.2 mm)
- Length: $\pm 1/8"$ (3.2 mm) up to 12' (3.7 m)
- Squareness: $\pm 1/8"$ (3.2 mm) out of square
48" x 96" panel (1.22 m x 2.44m).
- 4. Average Thickness: ± 0.25 mm
- 5. Bulk Coil policy #6207 applies.

CERTIFICATION

Meets USDA/FSIS requirements.

FABRICATING RECOMMENDATIONS

Note: Protect your eyes with goggles; cover your nose and mouth with a filter mask when cutting Crane Composite 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.

DESIGN COILS NOTES

1. Bulk coil 200 linear feet (61.0 m) minimum. Bulk coils may be ordered in long lengths or in specific cut-to-size pieces. Crane Composites reserves the right to manufacture and ship total linear footage of long length bulk coils ordered within the following parameter lengths per piece:
Min. 200' (61.0 m)
Max. 700' (213.4 m)
Cut-to-size lengths 12' (3.7 m) and over of the same width will be interlapped (18"-36" [457.2 mm-914.4 mm] interlap per panel) into a coil for ease of handling and shipping. Total length tolerance - 0" and +6" (-0 mm and +152.4 mm).
2. Thread on the back of the panel identifies Crane Composites frp panel.

STAINING STATEMENT

Some staining/discoloration may occur to frp liner panels after they have been in service for several years. This is a normal wear condition. As long as acceptable cleaning methods (i.e., steam cleaning) are used, the surface should remain sanitary and acceptable.

STORAGE

All Crane Composite products should be stored indoors. When outside storage is necessary, cover and protect from the weather and exposure to sunlight.

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 will 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 Composite's sole responsibility is for the replacement of defective material but not for labor or other handling or installation expenses.

NONWARRANTY

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.

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