

Filon® Exterior Smooth Sunguard® Flexroof

Part Number/Identifier: RVSR
Application: RV ROOF PANEL

PRODUCT: The acrylic modified RVSR Sunguard® Flexroof panel is a smooth, gelcoat finished fiberglass reinforced polyester resin (frp) material, formulated with controlled flexibility. The gelcoat surface is designed for ease of repair and excellent weathering characteristics.

PURPOSE: The Flexroof panel is designed to be a gelcoated, flexible, one piece roof panel for recreational vehicles and campers. Its flexibility allows the panel to bend around the radius that is created where the sidewall and roof meet. This results in a seamless, no leak roof panel.

PHYSICAL PROPERTIES: TABLE 1*

PROPERTY	TYPICAL VALUE		TEST METHOD
Flexural Strength	18.5 x 10 ³ psi	128 MPa	ASTM D790
Flexural Modulus	0.47 x 10 ⁶ psi	3241 MPa	ASTM D790
Tensile Strength	11.7 x 10 ³ psi	81 MPa	ASTM D638
Tensile Modulus	0.64 x 10 ⁶ psi	4413 MPa	ASTM D638
Barcol Hardness	37	37	ASTM D2583
Izod Impact Strength	9.0 ft-lbs/in	0.48 J/mm	ASTM D256
Coefficient of Linear Thermal Expansion	1.7 x 10 ⁻⁵ in/in°F	30.60 µm/m°C	ASTM D696
Water Absorption	0.30%/24 hrs @ 77°F	0.30%/24 hrs @ 25°C	ASTM D570

* Fiberglass reinforced plastic panels are low pressure composites and are not true homogeneous panels. Therefore, multiple samples are tested to arrive at the average value that is suitable for a general evaluation of the product and its anticipated performance.

DESIGN DATA: TABLE 2

PART NUMBER IDENTIFIER	NOMINAL THICKNESS	FINISH	NOMINAL WEIGHT	WIDTH	MINIMUM BEND RADIUS <small>* see illustration 1</small>
RVSR (366 FL)	0.040" (1.0 mm)	smooth gelcoat	0.30 lb/ft ² (1.47 kg/m ²)	70" - 110" (1.8 m - 2.8 m)	4" (101.6 mm)

Available in cut-to-length and continuous lengths.

SPECIFICATIONS: These panels are manufactured by a continuous compounding process in lengths and widths as required.

Composition:

1. Reinforcement: random chopped fiberglass roving.
2. Resin mix: Polyester/styrene copolymer and inorganic fillers and pigments modified for maximum weatherability.

Finished panel quality:

1. Panels shall have a smooth finish on the front side. Color shall be uniform throughout. The back side shall be smooth. Back side imperfections which do not affect functional properties are not cause for rejection.
2. Physical properties shall be as set forth in Table 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 8' (2.4 m)
±1/4" (±6.4 mm) up to 40' (12.2 m)
Squareness: 1/8" (3.2 mm) in 4' (1.2 m) of width
Ex: 96" x 40' (2.4 m x 12.2 m) maximum out of square - 1/4" (6.4 mm)
48" x 40' (1.2 m x 12.2 m) maximum out of square - 1/8" (3.2mm)
4. Kemlite does not make any claims to the combustibility rating of the products listed on this data sheet. Not intended for interior applications.

FABRICATING RECOMMENDATIONS:

Note: Protect your eyes with goggles; cover your nose and mouth with a filter mask when cutting Filon 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 carbide-tipped blade.

Production fabricating: Use carbide-tipped tools. Straight cuts can be sheared (90° cutting edge with .002" [.05 mm] clearance) or sawed. For irregular cuts, use die punch or band saw. Materials can be easily stapled.

Painting Preparation: Sanding or roughening of the panel surface is not required to achieve acceptable paint adhesion, and may contribute to other paint film defects by abrading the exterior surface. Panels must be clean, dry, and free of all oils, dust, and contaminants before paint application. If additional surface preparation is required, Kemlite recommends that the frp surface is either primer washed or solvent wiped to remove oils, dust, and contaminants.

RV Cleaning Instructions: Available from Kemlite.

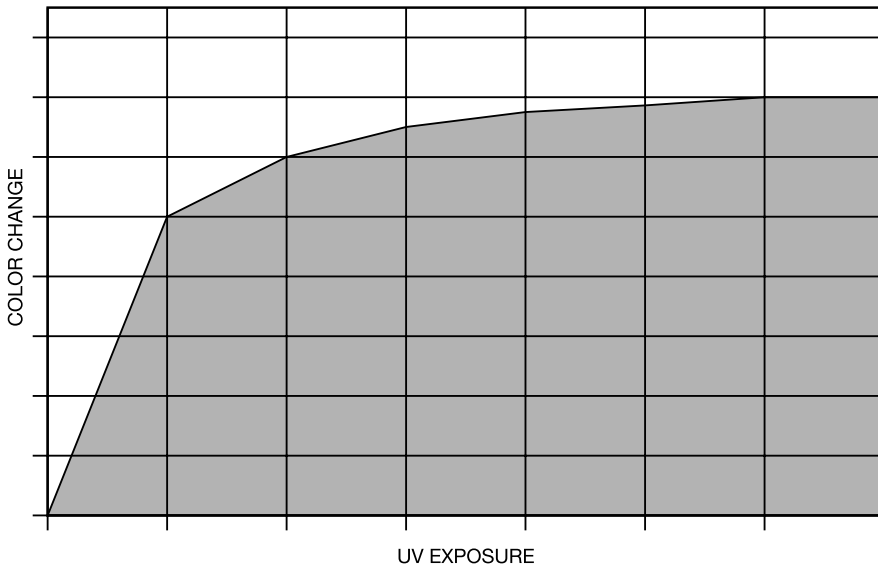
APPLYING COLORS:

Be aware that the application of certain paint or decal film color, normally those with a darker appearance, may cause excessive heat build-up on the Filon product resulting in possible sidewall rippling, delamination, or cracking. Be sure to thoroughly test the colors in application prior to writing them into the design specification.

When applying graphics, the use of a heat gun will cause cracking of the Filon gelcoat finish and is not recommended.

All products when exposed to weathering and sunlight change color over time as part of the aging process. The rate of color change with frp is generally greatest during the initial years of exposure then leveling off as pictorially shown below:

FIBERGLASS PANEL COLOR CHANGE



Note: the above graph is a generalization and not a representation of how individual frp products and colors may perform under real time weathering exposure.

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, Kemlite should be notified at once. Upon verification of unacceptability, that portion of material will be replaced by Kemlite. Kemlite's sole responsibility is for the replacement of defective material but not for labor or other handling or installation expenses.

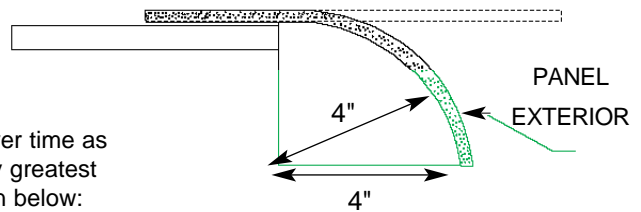
STORAGE:

All Kemlite products should be stored indoors. When outside storage is necessary, cover and protect from the weather and exposure to sunlight. Prolonged exposure to the outdoor elements during storage could lead to product damage.

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 that infringe on valid patents or as extending a license under valid patents.

ILLUSTRATION 1.



BEND RADIUS:

Kemlite recommends all radius bends be supported by a solid substrate.

Additional Information Available:

- #6290 RV Packet
- #6424 Care & Maintenance/Warranty
- #65000 RV Repair manual
- RV Repair Video
- Color chart available on filon.com