

Filon® Exterior Gelcoated Smooth Panel

Part Number/Identifier: RVF/RVP2
Application: RV SIDEWALL PANEL

PRODUCT:

Gelcoated exterior products are a durable, semi-rigid fiberglass reinforced polyester resin (frp) material. The exclusive Filoplated® gelcoated surface is highly scratch and abrasion resistant with excellent weathering characteristics.

PURPOSE:

Gelcoated exterior products are especially designed for exterior use on recreational vehicle sidewalls. Also, suitable for use as roofs, doors, subflooring, and for luggage compartments. **Attention:** The backside finish is conducive to laminating operations. Follow adhesive manufacturer's instructions carefully.

PHYSICAL PROPERTIES: TABLE 1*

PROPERTY	TYPICAL VALUE				TEST METHOD
	0.045"	1.1mm	.06"	1.5mm	
Flexural Strength	19.1 x 10 ³ psi	132 MPa	19.1 x 10 ³ psi	132 MPa	ASTM D790
Flexural Modulus	.60 x 10 ⁵ psi	4137 MPa	.60 x 10 ⁵ psi	4137 MPa	ASTM D790
Tensile Strength	12.0 x 10 ³ psi	83 MPa	12.0 x 10 ³ psi	83 MPa	ASTM D638
Tensile Modulus	1.0 x 10 ⁸ psi	6895 MPa	1.0 x 10 ⁸ psi	6895 MPa	ASTM D638
Barcol Hardness	45	45	45	45	ASTM D2583
Izod Impact	4.5 ft-lb/in	0.24 J/mm	4.5 ft-lb/in	0.24 J/mm	ASTM D256
Coefficient of Linear Expansion	1.7 x 10 ⁻⁵ in/in•°F	30.60µm/m•°C	1.7 x 10 ⁻⁵ in/in•°F	30.60µm/m•°C	ASTM D696
Water Absorption	.20%/24hrs @77°F	.20%/24hrs @25°F	.20%/24hrs @77°F	.20%/24hrs @25°F	ASTM D570

* Fiberglass reinforced plastic panels are low pressure composites and are not true homogeneous panels. Therefore, multiple samples are tested to arrive at an 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	MINIMUM BEND RADIUS	WIDTHS	COLORS
RVF	0.045" (1.1mm)	Smooth	.33 lbs/ft ² (1.61 kg/m ²)	7" (178mm)	36"-108" (.9m - 2.7m)	See www.filon.com for color availability
RVF	0.06" (1.5mm)	Smooth	.44 lbs/ft ² (2.15 kg/m ²)	7" (178mm)	36"-108" (.9m - 2.7m)	
RVP2	0.045" (1.1mm)	Smooth	.33 lbs/ft ² (1.61 kg/m ²)	7" (178mm)	36"-108" (.9m - 2.7m)	
RVP2	0.06" (1.5mm)	Smooth	.44 lbs/ft ² (2.15 kg/m ²)	7" (178mm)	36"-108" (.9m - 2.7m)	

Available in cut-to-length and continuous lengths.

SPECIFICATIONS:

Filon panels are manufactured by a continuous laminating process in lengths and widths as required.

COMPOSITION:

1. **Reinforcement:** Random chopped fiberglass roving.
2. **Resin mix:** Polyester resin and inorganic fillers and pigments modified for maximum weatherability.

FINISHED PANEL QUALITY:

1. Panels shall have smooth finish on the front side. Color shall be uniform throughout. The backside shall be smooth. Backside 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: $\pm 1/8"$ (± 3.2 mm)
Length: $\pm 1/8"$ (± 3.2 mm) up to 8' (2.4 m)
 $\pm 1/4"$ (± 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 is $1/4"$ (6.4 mm)
48" x 40' (1.2 m x 12.2 m) maximum out of square is $1/8"$ (3.2 mm)
4. **Disclaimer:** 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; cover exposed skin 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 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: 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 gel-coated 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 gel coat finish and is not recommended.

STORAGE REQUIREMENTS:

Keep contents dry. Store indoors in a well ventilated area. Exposure to moisture will cause discoloration and lead to poor adhesive bonding.

NOTICE

Panels will provide a clean, aesthetically-pleasing finished installation. However, by nature, fiberglass reinforced plastic 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 repair or replacement of defective material but not for labor or other handling, incidental or installation expenses. See detailed warranty.

BEND RADIUS

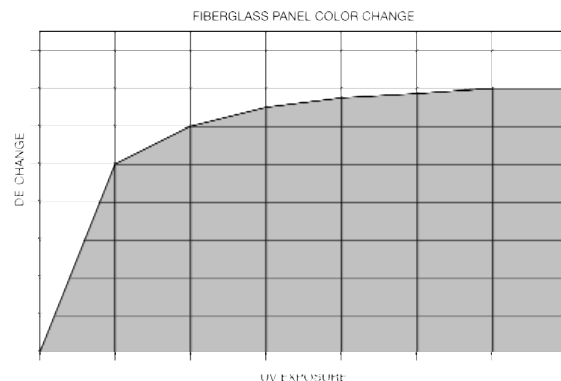
Kemlite recommends all radius bends be supported by a solid substrate.

COLOR CHANGE

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.

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.



Additional Information Available:

- #6290 RV Packet
- #6242 Care And Maintenance/Warranty
- #65000 RV Repair Manual
- RV Repair Video
- Color Chart Available on www.filon.com