



Filon® Exterior Gelcoated Smooth Panel

Part Number/Identifier:

RVF -STANDARD FILON
RVP2 -STANDARD FILON WITH ENHANCED SURFACE
RBP -FILON G-III
RBP2 -FILON G-III WITH ENHANCED SURFACE

Application: RV SIDEWALL PANEL

PRODUCT:

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

PURPOSE:

Filon Gelcoated exterior products are 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	0.05"	mm	0.06"	1.5mm	0.07"	mm	
Flexural Strength	19.1 x10 ³ psi	132 MPa	25.3 x10 ³ psi	174 MPa	19.1 x10 ³ psi	132 MPa	26.4 x10 ³ psi	182 MPa	ASTM D790
Flexural Modulus	6.0 x 10 ⁵ psi	4137 MPa	6.7 x 10 ⁵ psi	4619 MPa	6.0 x 10 ⁵ psi	4137 MPa	8.3 x 10 ⁵ psi	5723 MPa	ASTM D790
Tensile Strength	12.0 x 10 ³ psi	83 MPa	13.0 x 10 ³ psi	90 MPa	12.0 x 10 ³ psi	83 MPa	14.5 x 10 ³ psi	100 MPa	ASTM D638
Tensile Modulus	9.0 x 10 ⁵ psi	6205 MPa	7.8 x 10 ⁵ psi	5378 MPa	9.0 x 10 ⁵ psi	6205 MPa	9.1 x 10 ⁵ psi	6274 MPa	ASTM D638
Izod Impact	4.5 ft-lb/in	0.24 J/mm	4.5 ft-lb/in	0.24 J/mm	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 in/in•°F	30.6 µm/m•°C	1.7 x 10 ⁻⁵ in/in•°F	30.60µm/m•°C	1.7 x 10 ⁻⁵ in/in•°F	30.6 µm/m•°C	ASTM D696
Water Absorption	.20%/24hrs @77°F	.20%/24hrs @25°F	.30%/24hrs @77°F	30%/24hrs @25°F	.20%/24hrs @77°F	.20%/24hrs @25°F	.30%/24hrs @77°F	.30%/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/RBP	0.045" (1.1mm)	Smooth	.33 lbs/ft ² (1.61 kg/m ²)	7" (178mm)	36"-108" (.9m - 2.7m)	www.filoncolors.com
	0.05" (1.27 mm)		0.34 lbs/ft ² (1.66 kg/m ²)			
	0.06" (1.5mm)		.44 lbs/ft ² (2.15 kg/m ²)			
	0.07" (1.78 mm)		0.49 lbs/ft ² (2.39 kg/m ²)			

filon flexroof panels exterior sidewalls

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: Modified polyester resin and inorganic fillers and pigments.

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 48' (1.2 m) of width
4. **Disclaimer:** Crane Composites 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: 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.

RV Cleaning Instructions: Available from Crane Composites, Inc.

STORAGE REQUIREMENTS

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

Additional Information Available:

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

PLEASE NOTE THE FOLLOWING PRODUCT USE INFORMATION:

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 or lamination and original Crane Composites skid tag/ticket number removed and retained. If any portion of material will not provide an acceptable appearance, Crane Composites, Inc. should be notified at once. Please report the non-conforming claim utilizing the retained skid tag/ticket number. Upon verification of unacceptability, Crane Composites will pay the cost of parts/materials to either repair or replace the failed panels only. For the purpose of this original equipment manufacturer, parts are defined strictly as either the materials necessary to repair the panel finish or in case of replacement, the Crane Composites panel and its immediate laminated substrate.

LAMINATION

Crane Composites recommends that the moisture content of any wood based substrate be no greater than 12% at the time of lamination and that the glue coverage between the Crane Composites panel and the substrate be 100% coverage. Testing has indicated that non-wood based substrates, such as layered paper based products do not perform well and may cause failure between the panel and the substrate. Crane Composites recommends the use of only wood-based substrates in lamination.

SIDEWALL CONSTRUCTION WITHOUT SUBSTRATES

Crane Composites recommends that in sidewall construction without the use of a substrate, the FRP panel thickness should be a minimum of 0.085".

DARK COLORS

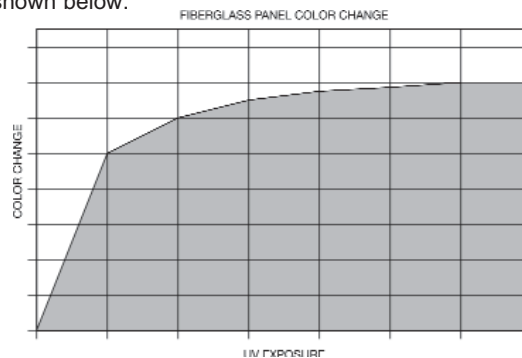
Dark colors, whether gelcoated or painted, will affect panel performance. Dark colored panels should be tested under all appropriate conditions to make sure such colors will meet the requirements of the application.

APPLYING DECALS & PAINT FINISHES

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 panel resulting in possible sidewall rippling, delamination, or cracking. Be sure to thoroughly test the colors in application prior to applying graphics. The use of a heat gun to apply or remove decals will cause cracking of the gelcoat finish and is not recommended.

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.



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