



## PROTECTIVE PANELS FOR FOAMED STRUCTURES

Product Code: VR Series

### APPLICATION:

Panels for Refrigerated-Container Walls and Other Foam-Backed Applications

### PRODUCT DESCRIPTION:

**VERSITEX VR Series** is a cost-effective thermoplastic composite backed by a thin sheet of fabric to help promote adhesion of injected or poured foam systems. These high impact resistant panels are comprised of polypropylene resin reinforced with continuous bi-directional glass fibers. Versitex resists rot, corrosion, mildew, and is not affected by cleaning-related chemicals. Versitex VR Series panels provide significant energy absorption over traditional FRP panels and exhibit thermal expansion similar to aluminum. The bi-directional nature of Versitex provides consistent physical properties throughout the entire panel. Versitex is easily repaired by applying low heat.

### TECHNICAL DATA:

Property	Units	Versitex VR1 Typical value	Versitex VR2 Typical value	Versitex VR3 Typical value	Test Method
Multi-Axial Impact Strength	ft-lbs	4.5	6.8	9.4	ASTM D3763
Tensile Strength	KSI	33.5	33.5	33.5	ISO-R527
Tensile Modulus	MSI	1.5	1.5	1.5	ISO-R527
Tensile Elongation	%	2.5	2.6	2.6	ISO-R527
Specific Gravity		1.4	1.4	1.4	
Coefficient of Linear Thermal Expansion	10 <sup>-6</sup> /°F	10	10	10	
Thermal Conductivity (K)	Btu-in/hr-ft <sup>2</sup> -°F	0.54	0.54	0.54	
Standard Thickness	in.	0.040	0.065	0.085	
Nominal Weight	lbs/sq. ft.	0.19	0.34	0.50	
Standard Width	in.	96 & 108	96 & 108	96 & 108	
Length		Cut to size* or coils to 1200'	Cut to size* or coils to 600'	Cut to size* or coils to 600'	
Finish		Smooth White	Smooth White	Smooth White	

\*Subject to minimum order quantities.

## MATERIAL SPECIFICATIONS:

**VERSITEX VR Series** is a bi-directional thermoplastic composite manufactured by a continuous laminating process in lengths as specified. Technical data are presented in the table on the front of this sheet. Finished panel quality shall consist of a smooth finish on one side and a fabric-like appearance on the side to be exposed to foam.

1. All surface glass areas of Versitex VR Series panels are sealed and not exposed and have been approved for the following FDA regulations:
  - a. FDA Title 21 CFS 177.1520 Olefin polymers for food contact use.
  - b. FDA Title 21 CFR 178.2010 Anti-oxidants and stabilizers for food contact use.
  - c. FDA Title 21 CFR 175.300 Resinous and Polymer coatings for contact use.
2. Dimensions shall be as specified on the purchase order, subject to the following tolerances:
  - Width: +/-1/8"
  - Length: +/-1/8" up to 12'; +1/4" from 12' to 53'; bulk coil -0"/+ 1%
  - Thickness: -0/+0.010"
  - Squareness: 1/8" in 4'

## PACKAGING AND SHIPPING:

1. Shipped in cut sheets or coils up to 1200' on cardboard or plastic cores, wrapped in plastic and shipped on pallets.
2. US Liner identifies all pieces of Versitex VR Series with a label indicating which side faces foam.

## FABRICATION AND INSTALLATION RECOMMENDATIONS:

Versitex VR Series can be sheared, sawed, routed and drilled.

*Cutting:* Versitex VR Series can be cut with a circular saw with a carbide-tipped blade.

*Production Fabricating:* Use carbide-tipped tools. Straight cuts can be sheared or sawed. For irregular cuts, use a die punch or band saw.

**Note:** Caution must be used when cutting banding off coil due to spring-back of material. Always protect eyes with goggles; cover nose and mouth with a filter mask when cutting Versitex panels.

## STORAGE:

It is recommended that all Versitex products be stored indoors. If outdoor storage is necessary, US Liner recommends covering to protect from weather.

## NOTICE OF ACCEPTABILITY:

Versitex VR Series provides a smooth, clean, aesthetically pleasing finished installation. Occasional processing marks are a common manufacturing occurrence and do not affect the quality or functionality of the product. Foam-side imperfections, which do not affect functional properties, are not cause for rejection. US Liner must be notified within one (1) business day of any Versitex panels deemed unacceptable in appearance. Upon verification of unacceptability, US Liner will replace that portion of the material and related freight, but not labor, handling or installation expenses.

## NON-WARRANTY:

All information supplied by or on behalf of USLCO in relation to its products, whether in the nature of date, recommendations or otherwise, is supported by research and believed reliable, but USLCO assumes no liability whatsoever in respect of application, processing or use made of the aforementioned information or products, or any consequence thereof. The buyer undertakes all liability and USLCO recommends conducting real-world tests to verify the suitability of its products before using them in any application. No liability whatsoever shall attach to USLCO for any infringement of the rights owned or controlled by a third party in intellectual, industrial or other property by reason of the application, processing or use of the aforementioned information or products by the buyer.



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