

KEMLITE® MONSTER SCUFF® Heavy Duty Scuff Plate

EMBOSSED WITH RANDOM CHOPPED FIBERGLASS

PRODUCT CODE: STI

PRODUCT

KEMLITE Monster Scuff, STI, is a high impact, semi-rigid, durable, fiberglass reinforced plastic (frp) panel. Kemlite heavy duty liner & scuff plate is more cleanable, more stain resistant, and more abrasion resistant than competitive frp panels.

PURPOSE

KEMLITE Monster Scuff, STI, is specifically designed and formulated for use as a strong liner and scuff plate to protect the trailer interior in refrigerated and dry van trailers and truck bodies.



DESIGN PROPERTIES

PRODUCT CODE	NOMINAL THICKNESS	NOMINAL WEIGHT	FINISH	MAXIMUM LENGTH	MINIMUM WIDTH	MAXIMUM WIDTH	COLOR
STI	0.12" 3.0 mm 0.24" 6.0 mm	0.7 lbs/ft² 3.47 kg/m² 1.6 lbs/ft² 7.81 kg/m²	Embossed	Available up to 600' 182.8 m Available up to 275' 83.8 m	11" 0.3 m	120" 2.6 m 72" 1.8 m	White 85

TYPICAL PHYSICAL PROPERTIES

PROPERTY	STI 0.12"	STI 0.24"	TEST METHOD
FLEXURAL STRENGTH	22.0 x 10³ psi 151 MPa	21.5 x 10³ psi 148 MPa	ASTM - D790
FLEXURAL MODULUS	0.7 x 10⁹ psi 4826 Mpa	0.9 x 10⁹ psi 6205 Mpa	ASTM - D790
TENSILE STRENGTH	10.8 x 10³ psi 75 MPa	14 x 10³ psi 97 MPa	ASTM - D638
TENSILE MODULUS	1.0 x 10⁶ psi 6895 MPa	1.0 x 10⁶ psi 6895 MPa	ASTM - D638
BARCOL HARDNESS	50	50	ASTM - D2583
COEFFICIENT OF LINEAR THERMAL EXPANSION	1.5 x 10⁻⁵ in/in/°F 27 µm/m/°C	1.5 x 10⁻⁵ in/in/°F 27 µm/m/°C	ASTM - D696
THERMAL CONDUCTIVITY	0.4 Btu·in/hr·ft² °f 5.0 cal·cm/hr·m² °C	0.4 Btu·in/hr·ft² °f 5.0 cal·cm/hr·m² °C	ASTM - C177
WATER ABSORPTION	0.3%/24hrs @77°F 25°C	0.3%/24hrs @77°F 25°C	ASTM - D570
SPECIFIC GRAVITY	1.6	1.6	ASTM - D792
PUNCTURE STRENGTH	200 lbs 91 kgs	620 lbs 281 kgs	Internal

SPECIFICATIONS

VALTO panels are manufactured in lengths and widths as required.

COMPOSITION

Reinforcement: Random chopped fiberglass.

Resin Mix: Modified polyester copolymer, inorganic fillers, and pigments

FINISHED PANEL QUALITY

- The frontside of the panel shall have a pebble-like embossed finish. The backside of the panel shall have a smooth finish. The backside surface may have some variations which do not affect functional properties and are not cause for rejection. The backside of the panel is comprised of a polyester copolymer surface that is commonly bonded with adhesives or to foam in lamination processes. Typically, no additional preparation is required as long as the surface is dirt and oil free.
- Physical properties shall be as set forth on Page 1.
- 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) in 48" (1.2 m) of width
 4. Average thickness: For thickness $\leq 0.100"$, $\pm 0.010"$
 For thickness $> 0.100"$, $\pm 10\%$
- Bulk Coil policy #6207 applies

CERTIFICATIONS

- Meets USDA/FSIS requirements.
- Meets FMVSS 302 requirements

IDENTIFICATION

Product identified by 1 green thread on back

DESIGN DATA NOTES

- Bulk coil may be ordered in long lengths or in specific cut-to-size pieces. Standard coil lengths are 250' and 500', custom sizes are available. VALTO reserves the right to manufacture and ship total linear footage of long length bulk coils ordered within the following parameter lengths per piece:
 Min. 250' | 61.0 m
 Max. 275' | 83.8 m (for 0.240" thickness)
 600' | 182.9 m (for 0.120" thickness)
 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).

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.

FABRICATING RECOMMENDATIONS

NOTE: Protect your eyes with goggles; cover your nose and mouth with a filter mask; cover exposed skin when cutting VALTO 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: You should always test and validate the selected paint system with the frp panel prior to application. 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. Common practices for preparation before painting include using alkaline detergents or clean water. Sanding or roughening of the panel surface is recommended to promote paint adhesion. 600 grit or finer sand paper or a 3M "Ultrafine" Scotch-Brite® pad are commonly used to roughen the surface.

CLEANING INSTRUCTIONS: Contact us for cleaning instructions.

SDS: Prior to working with our products, see our most current SDS at valtoem.com/sds.html.

STORAGE REQUIREMENTS

VALTO panels are designed for peak performance prior to and after the panels have been applied. Careful handling during the manufacturing process is important. Avoid excessive clamping, dropping and scraping. Keep contents dry. Store indoors in a well ventilated area. When outside storage is necessary, cover and protect from the weather and exposure to sunlight.

PLEASE NOTE THE FOLLOWING PRODUCT USE INFORMATION:

Products manufactured by VALTO will provide a clean, aesthetically pleasing finished installation. However, by nature, fiberglass reinforced plastic panels may occasionally have small areas that are aesthetically unacceptable for use. Panels should be inspected on-site prior to installation or lamination and original VALTO skid tag/ticket number removed and retained. If any portion of material will not provide an acceptable appearance, VALTO should be notified at once. Please report the non-conforming product utilizing the retained skid tag/ticket number. Upon verification of unacceptability, VALTO will replace or refund the purchase price of the non-conforming product.

At Valto, we partner with our customers, and through innovation, deliver advanced materials that enhance everyday environments. We succeed through a culture of collaboration, continuous improvement, and excellence. With integrity at our core, we challenge the status quo and pursue innovative approaches that benefit our customers and associates.

Since 1954, Valto Engineered Materials has provided innovative products and services and is a leading provider of FRP composite panels. Our lightweight composite products deliver unsurpassed strength and durability; and we continue to pioneer next level performance in building materials, recreational vehicles, and transportation.