



1 | Product Description and Application

A lightweight, abrasion and puncture resistant, engineered thermoplastic composite floorboard sandwich panel with VGS, a variable grip surface for anti-slip. The panel is engineered with high glass content skins optimized to provide durability and stiffness at the lowest weight possible. The product is hydrophobic, resists corrosion, mildew, degradation, can be easily cleaned, and provides an insulating value. The top surface features VGS, a variable grip surface for anti-slip, the bottom side features the patent pending Surlok® bondable surface for adhering to other substrates using a variety of adhesives. The Surlok® not only contains BioStat™ technology but is optimized for adhering to polyurethane foam and adhesive systems. The unbalanced skin layup provides exceptional durability on the top surface, maximum stiffness, and adequate screw retention to save weight and outperform traditional FRP/plywood and other flooring solutions.

2 | Physical and Technical Data

Property (Test Method)	Units	VW01901512B192ML
Layup Description	-	A standard duty, unbalanced skinned structural panel. The top skin consists of Series 60 liner with variable grip surface coating, VGS. The structural panel includes a thermoplastic foamed core and a Series 50 unidirectional bottom skin.
Nominal Thickness	in	0.621
Nominal Weight	lbs/ft ²	1.46
Nominal Skin Thickness	in	0.11 (top)/ 0.029 (bottom)
Core Density	lbs/ft ³	12.5
Skin Fiber Content (ASTM D3171)	% _{mass}	65% Nominal *Excluding surface treatments
Skin Color	-	Black Anti Slip / White Glossy Composite
½" Ball Puncture Strength (Internal RTM0001- 12"x12" Span)	lbs	1022 lbs (top)
Flatwise Compression Strength (ASTM C365)	psi	162
Flexural Modulus (ASTM D3043 3PT 22" Span, 3"x24")	psi	632,438 <i>(maximum stiffness direction)</i>
Flexural Strength – Max Load, Deflection (ASTM D3043 3PT 22" Span, 3"x24")	Lbs., in	170 lbs, 1.43 in (length) <i>(maximum stiffness direction)</i>
Insulating Value	R-Value	1.44



3 | Material Specifications and Information

3.1 Part Number Specification | Cut Sheet: VW01901512C192ML-HHHHLLLL

Examples: VW01901512C192ML-092D1560

HHHH ₂	Width/Height Code	i.e., 48.25"=048D , 110"=1100
LLLL	Length Code	i.e., 76"=0760 , 228.5"=228H

Note 2: Last character in these segments of the part number reference a fraction code below

A=1/16", B=1/8", C=3/16", D=1/4", E=5/16", F=3/8", G=7/16", H=1/2", J=9/16", K=5/8", L=11/16", M=3/4", N=13/16", P=7/8", Q=15/16", O=0"

3.2 Composition | TransCore® composite panels consist of continuous E-glass fiber reinforcement saturated in a polypropylene copolymer thermoplastic resin matrix contained within our proprietary Surlok® engineered surface treatment for adhesion on the bottom. The top surface features an VGS, variable grip surface, anti-slip coating. The core is comprised of a thermoplastic closed cell foam. The TransCore® surface composition meets the FDA and USDA/FSIS requirements for direct food contact.

3.3 Finished Panel Quality | Panels have a gray antislip coating on top and a glossy white finished side with Surlok® technology. Finished panel sizes are subject to the following tolerances unless otherwise specified:

Thickness (t):	+0.015/-0.045
Areal Weight:	± 0.14 lb/ft ²
Width (w):	•w ≤ 48" ± 1/16" • w > 48" ± 1/8"
Length (L):	•L ≤ 12' ± 1/8" • 12' ≤ L < 24' ± 1/4" • L ≥ 24' ± 1/2"
Squareness:	•1/8" in 48" of width • 1/4" Diagonal variation up to 24' • 1/2" Diagonal variation over 24' • ± 3/8" Bow over length
Standards:	•Flat sheet widths up to 118" •Custom CNC Profiles up to 118" x 60"

3.4 Packaging and Shipping | Depending on the nature of the order and required shipping method, TransCore® products are provided cut to size. Product is shipped flat on wood pallets or flatbed wrapped by protective plastic and reinforced occasionally with Styrofoam and wood dunnage.

3.5 Fabrication and Installation Recommendations | Safety: Always use safety glasses during fabrication of TransCore®. Wear gloves and dust masks where applicable. Cutting/Drilling: Use carbide tipped and coated saw blades, router bits, and drill bits for best results. Cleaning: TransCore® materials can be cleaned with mild detergents, water, and isopropyl alcohol mixtures. Other solvents may be used, but it is recommended to test their effects on the surface of the material. Power washers can be utilized with a minimum 40° fan wash tip with 2800 psi or less units. Adhesion to TransCore® can be affected by the cleanliness of the Surlok® surface. Clean surface with above guidance for best results.

3.6 Storage | It is recommended to store TransCore® materials indoors and keep clean and dry for proper installation. Take care when handling and processing TransCore®.

3.7 Product Use and Liability | TransCore® composite structural panels provide a clean, smooth, appearance, however, due to process limitations some small imperfections may be present. Most surface defects do not affect the functionality of the product. If an unacceptable defect, blemish, or contamination is found that falls outside the standard non-conforming specifications or agreed upon terms, contact Ridge Corporation immediately for verification of unacceptability. Ridge Corporation can only be held liable for the material and workmanship of the product and freight, but not any labor, handling, or installation costs incurred.

All information included herein is believed to be accurate and is supported by sound engineering testing and development. Ridge Corporation recommends the user test the material for their specific application in order to determine if the product will be functional. Ridge Corporation cannot be found liable for the use of the product or the information presented herein for any infringement by a third party as to the intellectual or industrial property or rights of others by the purchaser.