

VERSAROC

DATA SHEET

PHYSICAL PROPERTIES	VALUES	TEST STANDARD
Thermal Conductivity (12mm / ½" panel)	K' value 1.054 BTU/hr-ft2 – °F 'R' value 0.447 hr-ft2 -°F/BTU	ASTM C518
Coefficient of Linear Thermal Expansion (12mm / ½")	0.589 x 10-5 per °F 1.06 x 10-5 per °C	ASTM D696
Density - Oven Dry	77 lbs. per cu. ft.	ASTM D1037
Moisture Content	6.8%	ASTM D1037
Linear Variation with Change in Moisture 50% to 90% relative humidity: Parallel to fibers – Perpendicular to fibers –	0.06% 0.09%	ASTM D1037
Saturated Thickness Swelling (24 hour water immersion)	0.51%	ASTM D1037
PH Value	11-13	As per Manufacturer
Water Vapor Permeance	3.93 Perm-Inches 6.342 US Perms	ASTM E96
Formaldehyde Content	Zero	EN 120
Asbestos Content	Zero	EN 120
Silica Content	Zero	EN 120
Frost Resistance	No Effect after 50 cycles Freeze/Thaw	EN 112
Rot & Termite Resistance	Resilient to destruction	100% Resistant

MECHANICAL PROPERTIES	VALUES	TEST STANDARD
Concentrated load 19mm (¾") Dry/Wet	854 lb. (3.79 kN) static 0.033" (0.8382 mm) max. deflection @ 200 lb. (0.89 kN)	ASTM E661 (550 lbs., 0.108")
Modulus of Elasticity, psi	717,800	ASTM C120
Modulus of Rupture, psi	1,840	ASTM C120
Shear Strength, psi	1,424	ASTM D732
Tensile Strength, psi	667	ASTM D1037
Compressive Strength, psi	4,852	ASTM D1037
Impact Strength, Izod Method	0.4607	ASTM D256
Permissible Design Value, psi	326	Manufacturer
Shear Diaphragm (19mm, ultimate shear value)	2,185 lbf with adhesive 1,210 lbf without adhesive	ASTM E455

COMBUSTION CHARACTERISTICS	VALUES	TEST STANDARD
Flame Spread / Smoke Development	Zero / Zero	ASTM E84*
Fire Resistance Ratings	1 & 2 hour Floor/Ceiling Assemblies	ASTM E119
Fire Resistance Ratings	1&1 ½ Hr. Rated roof assemblies	ANSI/UL 263†

- Underwriters Laboratories tested in accordance with ASTM E84 and ANSI / UL 723
- UL listed Filed # R25239
- UL Assembly BXUV.P523 acceptable alternate for roof sheathing