

# Nexwood Test Results

We know that our Nexwood products are resilient and strong. Here are the test results to prove it.

## Mechanical Properties Chart for Nexwood Deck Board

Mechanical Properties	Test Method	Test Result
Self Ignition Temperature (Spontaneous)	ASTM D1929	450 <sup>0</sup> C / 842 <sup>0</sup> F
Flame Spread Index <sup>1</sup>	ASTM E84	65
Smoke Developed Index <sup>2</sup>	ASTM E84	340
		<b>Class B (Class II)</b>
Rate of Burning	ASTM D635	0.68"/min
Static Coefficient of Friction (dry)	ASTM C1028	0.58
Static Coefficient of Friction (wet)	ASTM C1028	0.64
Fungus Resistance Rating	ASTM D2017	< 3% (high resistant)
Resistance of Termites Block Evaluation Rating	ASTM D3345	< 10 (no damage)
Weathering test 2000 hour Xenon Arc Exposure:	ASTM D2565	color change
• Flexural strength after accelerated weathering	ASTM D790	loss 0.5-4%(<10%)
Coefficient of Linear Expansion	ASTM D6341	2.70x10 <sup>-5</sup> in/in/1 <sup>0</sup> F 4.87x10 <sup>-5</sup> in/in/1 <sup>0</sup> C
Hygrothermal Cycles (-20 <sup>0</sup> F):	ASTM D6662	
• Flexural strength after hygrothermal cycle	ASTM D6109	-0.4%
Solubility in water		Negligible
Water Absorption	ASTM D1037	< 0.8%
Bulk Density	ASTM D6111	0.579 g/cm <sup>3</sup>
Specific Gravity	ASTM D6111	0.581
Relative Density	ASTM D792	1.175 g/cm <sup>3</sup>
Specific Gravity	ASTM D792	1.178
Toxicity		No harmful material
Notch Impact Resistance (parallel to length)	ASTM D256	0.52 ft.lb/in
Notch Impact Resistance (perpendicular to length)	ASTM D256	0.46 ft.lb/in
Compressive Strength (parallel to the length)	ASTM D6108	1,970 psi
Ultimate Tensile Strength of the Beam	ASTM D638	2,230 psi
Ultimate Tensile Strength of the Material	ASTM D638	2,840 psi
Ultimate Modulus of Elasticity (2x6)	ASTM D6109	403,068 psi
Ultimate Modulus of Rupture (2x6)	ASTM D6109	2,923 psi
Ultimate Modulus of Elasticity (5/4x6 REB)	ASTM D6109	445,000 psi
Ultimate Modulus of Rupture (5/4x6 REB)	ASTM D6109	3,240 psi
Ultimate Modulus of Elasticity (5/4 T&G)	ASTM D6109	331,588 psi
Ultimate Modulus of Rupture (5/4 T&G)	ASTM D6109	2,710 psi
Screw Uplift	ASTM D2047	312 lbs
Direct Screw Withdrawal	ASTM D6117	392 lbs

**Note:**

1. 0 being the Flame Spread for asbestos cement board and 100 for red oak flooring.
2. Not greater than 450 when tested on manner intended for use in accordance with ASTM E84.

Nexwood Fire Rating: **Class B (Class II)** with a 26-75 FSR.