

## Appalachian Testing Data, and Load Specifications

### Properties

<b>Property</b>	<b>Requirement</b>	<b>Results</b>
Weight		4.76 lbs / linear foot
Density		144 lb / cubic foot
Temperature/Moisture Effect	ICC-ES AC174	Meets Code
Creep Relaxation	ICC-ES AC174	Meets Code
UV Resistance	ICC-ES AC174	Meets Code
Resistance to surface abrasion	ASTM C1027	Class 4
Scratch Resistance	ASTM C1895	Class 7
Breaking Strength	ASTM C648	2555 lbf
Water Absorption	ASTM C370	< 0.1%
Chemical resistance	ASTM C650	Class A
COF of Linear Thermal Expansion	ASTM C372	$5,5 \times 10^{-6} \text{ } ^\circ\text{C}^{-1}$
Resistance to stains	ASTM C1378	Class A
Dynamic coefficient of friction	ANSI 326.3	0.7 (R11)
	ASTM C373	< 0.2%
Freeze-Thaw Resistance	ASTM C1026	No Damage
Reaction to fire	UNE-EN 13501-1	A1 (No reaction)

## Tolerances

Property	Requirement	Results
Width	ASTM C499	± 0.04 <sup>mm</sup> (1 mm)
Length	ASTM C499	± 0.04 <sup>mm</sup> (1 mm)
Thickness	ASTM C499	± 0.04 <sup>mm</sup> (1 mm)
Straightness of sides	ASTM C502	± 0.08 <sup>mm</sup> (2 mm)
Rectangularity	ASTM C502	± 0.06 <sup>mm</sup> (1.5 mm)
Lateral curvature	ASTM C485	± 0.06 <sup>mm</sup> (1.5 mm)
Warpage	ASTM C485	± 0.08 <sup>mm</sup> (2 mm)

## Solar Reflective Index (SRI) - ASTM E1980-11

Color	Solar Reflectance	Solar Absorptance
Silver Maple	0.48	0.52
American Walnut	0.32	0.68

## Live Load Limits

	Load	Span
Maximum Capacity	400 lbf	12" O.C.
Maximum Capacity	300 lbf	16" O.C.

## Use on stairs

Concentrated load	300 lbf	12" O.C.
Concentrated load	300 lbf	16" O.C.