























### PHYSICAL PROPERTIES & PACKAGING

<b>Collection</b>	AquaSense
<b>Construction</b>	
<i>Core</i>	5mm
<i>Top Layer</i>	1.5mm
<i>Underlayment</i>	2mm Cork
<b>Uses or Applications</b>	Floors & Walls
<b>Width &amp; Length</b>	7" x 48"
<b>Overall Thickness</b>	6.5mm
<b>Wear Layer</b>	12mil
<b>Overall Density</b>	1300 kg/m <sup>3</sup>
<b>Edges</b>	Painted Micro Bevel
<b>Finish</b>	Ceramic Bead
<b>Coverage Per Carton</b>	23.5 sf
<b>Warranty</b>	Lifetime Structural   Lifetime Residential   10 Years Light Commercial

### CERTIFICATIONS & TESTING RESULTS

Description	Standard	Symbol	Requirements	Results
CE Certification	EN 14041		Refer to Standards Below	Passes Requirements
Reaction to Fire	EN 13501-1 ASTM 648			B <sub>fl</sub> - s1 Classification Class I
Formaldehyde Emission	EN 717-1		Class NA	Passes Requirements
VOC	FloorScore® GREENGUARD GOLD			Passes Requirements
Emission DANs L'Air Interieur	ISO 16000			A+
	Ortho-phalates			Not Detected
	Lead/Metals	N/A		Not Detected
REACH	Benzene/Xylene	N/A		Not Detected
	Tributyltin	N/A		Not Detected
	PCP (pentachlorophenol)	N/A		Not Detected
Classification (Level of Use)	EN 16511 EN ISO 10874		Commercial - Heavy (Class 33)	Passes Requirements
Micro-Scratch Resistance	EN16094:2012	N/A	≤ MSR-B2	Passes Requirements

Description	Standard	Symbol	Requirements	Results
Castor Chair Resistance	EN 425 NALFA LF 01-2011 SECTION 3.9		After 25000 cycles	No disturbance to the surface; No delamination, cracks or visible damages
Effect of Furniture Leg	EN 424		No Visible Damage	Passes Requirements
Residual Indentation	ASTM F1914-07(2011)		Average $\leq 8\%$ Maximum $\leq 10\%$	Passes Requirements
Dimensional Stability	ASTM F2199-09(2014)		$\leq 0.51\text{MM}/305\text{MM}$ (0.17%)	Passes Requirements
Resistance to Staining	ASTM F925			Passes Requirements
Locking Strength	EN 16511 ISO 24334		Long Side $\geq 1.0\text{kN/m}$ Short Side $\geq 1.5\text{kN/m}$	Passes Requirements
Dimensional Stability (Changing Temp)	EN ISO 23999		$\leq 0.25\%$	Passes Requirements
Dimension Length ( $l$ ) Width ( $w$ ) Thickness ( $t$ )	ASTM F2055-17 ASTM F2055-17 ASTM F386-17		Tolerance of $\pm 0.4\text{mm}/305\text{mm}$ Tolerance of $\pm 0.4\text{mm}/305\text{mm}$ Tolerance $\pm 0.13\text{mm}$	Passes Requirements
Dimensional Variance Straightness ( $s$ ) Flatness ( $f$ ) Height Difference ( $h$ ) Squareness ( $q$ ) Openings ( $o$ )	ISO 24337		$s_{\text{max}} \leq 0.30\text{mm/m}$ $f_{w,\text{concave}} \leq 0.15\%$ , $f_{w,\text{convex}} \leq 0.2\%$ $f_{i,\text{concave}} \leq 0.5\%$ , $f_{i,\text{convex}} \leq 1\%$ $h_{\text{avg}} \leq 0.1\text{mm}$ , $h_{\text{max}} \leq 0.15\text{mm}$ $q_{\text{max}} \leq 0.2\text{mm}$ $o_{\text{avg}} \leq 0.15\text{mm}$ , $o_{\text{max}} \leq 0.2\text{mm}$	Passes Requirements
Thickness Swell	NALFA LF 01-2011 SECTION 3.2		Heavy Commercial $\leq 12\%$	Mean 0.1%
Impact Resistance Big Ball Small Ball	NALFA LF 01-2011 SECTION 3.5 SECTION 3.6		Heavy Commercial $> 1400\text{mm}$ Heavy Commercial $> 500\text{mm}$	No crack at 2600mm drop No crack at 750mm drop
Static Load Resistance	ASTM F970-15	N/A	Applied Load: 250lb	Residual Indentation: 0.02mm
Static Coefficient of Friction	ASTM D2047-11	N/A		Dry: 0.34
Slip Resistance AMD Dry Condition AMD Wet Condition	ASTM D2394-2011 ASTM D2394-2011			Coefficient: .59 (Static); .42 (Slide) Coefficient: .59 (Static); .49 (Slide)
Oil-wet ramp Test	DIN 51130:2014	N/A	R10: $10^\circ < X \leq 19^\circ$	R10. Passes Requirements.
Color fastness to artificial light	ISO 105-B02:2014			Above Grade 6
Sound Testing	ASTM E90 ASTM E492 ASTM E2179		Concrete Slab 203mm	STC: 55 IIC: 55 Delta : 22
Heat Resistance	ASTM F1514-03 (2013)		7 Days Exposure to $70^\circ\text{C}$	Delta E = 0.66 Passes Requirements