

# String Theory Interweave

## Technical Specifications

SIT-TS-20210305-02-EN

Name	Standard	Symbol	Result														
CE / DOP	EN 14041		CPR/A1/O15														
Usage Classification	EN 1307		23, 33														
Luxury Class	EN 1307		LC2														
Size	EN 994		609.6 x 609.6mm (24" x 24")														
Construction Gauge	ISO 2424		Textured Patterned Loop 1/10*														
Fibre Composition	-		String Theory Nylon 6,6 (50% post-production recycled)														
Dye Method	-		Yarn & Solution Dyed														
Primary Backing	-		Non-Woven Polyester/Polyamide														
Secondary Backing	-		PVC														
Stitches per 10cm	-		43														
Total Thickness (mm)	ISO 1765		7.0 mm (+15%/-10%)														
Total Mass Per Unit Area (g/m <sup>2</sup> )	ISO 8543		4773 g/m <sup>2</sup> (±15%)														
Effective Pile Thickness (mm)	ISO 1766		2.78 mm														
Pile Mass Total/Effective (g/m <sup>2</sup> )	ISO 8543		610/413 g/m <sup>2</sup>														
Surface Pile Density (g/cm <sup>3</sup> )	ISO 8543		0.15 g/cm <sup>3</sup>														
Number of Tufts/Loops (calculated per m <sup>2</sup> )	ISO 1763		181,930														
Fire Resistance	EN 13501-1		B <sub>fl</sub> -s1														
Slip Resistance	EN 13893		Class DS														
Dimension Stability	EN 986		≤ 0,2 %														
Anti-Static Body Voltage (kV @25%rh)	ISO 6356		≤ 2.0 kV														
Vertical Electric Resistance	EN 10965		≥ 10 <sup>10</sup> Ω														
Horizontal Electric Resistance	EN 10965		≥ 10 <sup>10</sup> Ω														
Castor Chair Suitability	EN 985		r ≥ 2.4 / Intensive Use														
Light Colour Fastness	EN ISO 105: B02		≥ 6														
Colour Fastness to Rubbing	EN ISO 105: X12		4/5														
Colour Fastness to Water	EN ISO 105: E01		5														
Resistance to Fraying	EN 1814		Pass														
Impact Sound Insulation ΔL <sub>w</sub>	EN ISO 717-2		25 dB														
Sound Absorption	EN ISO 11654 / ISO 354		$\alpha_w = 0.15$ <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>Hz</td><td>125</td><td>250</td><td>500</td><td>1000</td><td>2000</td><td>4000</td></tr><tr><td><math>\alpha_s</math></td><td>0.00</td><td>0.03</td><td>0.02</td><td>0.18</td><td>0.33</td><td>0.46</td></tr></table>	Hz	125	250	500	1000	2000	4000	$\alpha_s$	0.00	0.03	0.02	0.18	0.33	0.46
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$\alpha_s$	0.00	0.03	0.02	0.18	0.33	0.46											
Thermal Resistance (m <sup>2</sup> K/W)	ISO 8302		0.065 m <sup>2</sup> K/W														
Emissions COV			A+														
Emissions	M1		Certified / <a href="https://cer.rts.fi/en/m1">https://cer.rts.fi/en/m1</a>														
Emissions	IAC Gold		Pass														
Environment	ISO 14025		Mannington decl. no EPD 10269														