

Stretch & Recovery Properties for Coated Upholstery Fabrics

- KnollTextiles requires all vinyl and polyurethane upholstery fabrics to be tested for stretch and recovery properties, using ASTM D3107 test methods. Silicone fabrics are tested using CFFA 15 test methods.
- While there is no standard requirement, KnollTextiles requires 95% recovery in warp and/or fill directions of the fabric.
- The ability of a fabric to return to its initial state is strongly impacted by factors that are attributed to furniture construction and fabrication, such as the density of foam.

Polyurethane Stretch & Recovery Test Results

Pattern	Stretch		Recovery	
	Length (%)	Width (%)	Length (%)	Width (%)
Atlas	3.0%	20.3%	100%	98.0%
Chameleon	34%	63%	99%	95%
Color Field	1.2%	10.6%	99.31%	98.97%
Groovy	15.0%	55.0%	99.0%	95.0%
It's Complicated	19.3%	15.3%	99.0%	99.3%
Nature Walk	1.0%	8.3%	100%	100%
Palisade	1.2%	10.6%	99.3%	98.9%
Smart	17.0%	84.0%	99.3%	94.0%
Tight Rope	17.0%	95.0%	98.0%	85.0%
Vibe II	8.97%	41.64%	99.3%	96.3%
Westwood	1.2%	10.6%	99.3%	98.9%
Whip	2.0%	19.0%	100%	97.7%

Vinyl Stretch & Recovery Test Results

Pattern	Stretch		Recovery	
	Length (%)	Width (%)	Length (%)	Width (%)
Axiom	12.0%	71.3%	99.0%	93.0%
Brigadoon	15.45%	68.5%	99.32%	92.84%
Forza	8.0%	69.0%	100%	94.3%
Melody	15.4%	68.5%	99.3%	92.8%
Petal Pusher	4.7%	56.7%	99.0%	94.7%
Prairie	16.0%	57.0%	99.0%	96.0%
Theory	11.0%	50.7%	99.0%	94.7%
Tilden	14.0%	111%	99.0%	90.0%
Tinge	20.0%	43.7%	99.3%	97.2%
Vinyl	16.7%	58.7%	99.0%	95.3%

Silicone Stretch & Recovery Test Results

Pattern	Stretch		Recovery	
	Length (%)	Width (%)	Length (%)	Width (%)
Premier	8.8%	24.1%	100%	99.7%