



Safety Window Film: Data Sheet

# Solar Gard® Graffitigard® 4 Mil

## Physical Characteristics

PERFORMANCE	VALUE	METHOD
Caliper, film only	100µm	Mitutoyo® Series Micrometer 293
Caliper, film & adhesive	115µm	
Tensile Strength (without liner)		ASTM D 882
Transverse direction (TD)	175 N/mm <sup>2</sup>	
Machine direction (MD)	150 N/mm <sup>2</sup>	
Adhesion, Ultimate (applied to glass)	45 N/m (20 minutes) 92 N/m (24 hours) 164 N/m (30 Days)	ASTM D903-98
Scratch Resistance	7.50%	ASTM D 1044 (Taber Abrasion)
Shrinkage without liner	1mm maximum	30 minutes, 120°C
Removability from glass	No residual left on glass	

### Adhesion

Adhesion is measured by peeling specimens at a 180° angle from the substrate. Peel adhesion is the average result for the strips tested in Newtons per meter. Specimens are applied to substrate using standard application practices. Initial adhesion is measured 20 minutes after application followed by 24 hours.

### Scratch Resistance

Scratch resistance is measured testing using the Taber Haze 5130 Abraser. Specimens are subjected to 100 cycles with two 500g weights. Abrasive damage is visually judged and numerically quantified by calculating the difference in haze percentage in accordance with Test Method ASTM D1003 between an abraded and unabraded specimens.

### Storage

Window film should be stored in a dry, controlled environment. The temperature should not exceed 95° F (35° C) nor go below 50° F (10° C). The film should always be stored in the original packaging with the end plugs securely placed on the core.

### Disclaimer

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