

# Safety & Security Film Performance Measurements



Film	 % Visible Light				 % Total Solar Energy							U Factor	UV Rejection	Emissivity	Light to Solar Gain	Total Solar Energy Rejected (TSER)	IR Rejection*	Infrared Energy Rejection (IRER)
	Trans.	Reflected External	Reflected Internal	Glare Reduction	Trans.	Reflected External	Absorbed	Shading Coefficient (SC)	Solar Heat Gain Coefficient (SHGC)									
Clear 4 Mil	87%	9%	9%	2%	75%	8%	18%	0.92	0.80	1.03	≥ 99%	0.86	1.08	20%	31%	23%		
Clear 7 Mil	88%	9%	9%	1%	75%	7%	18%	0.93	0.81	1.05	≥ 99%	0.91	1.09	20%	32%	23%		
Clear 8 Mil	86%	9%	9%	3%	73%	8%	20%	0.90	0.79	1.05	≥ 99%	0.90	1.09	21%	36%	26%		
Clear 14 Mil	87%	9%	9%	3%	75%	8%	18%	0.92	0.80	1.03	≥ 99%	0.87	1.08	20%	33%	23%		
Silver 20 4 Mil	18%	55%	57%	80%	12%	45%	43%	0.27	0.24	0.90	≥ 99%	0.60	0.75	76%	95%	78%		
Silver 40 4 Mil	44%	27%	26%	51%	32%	24%	44%	0.51	0.44	0.94	≥ 99%	0.68	0.99	56%	82%	62%		
Silver 20 8 Mil	17%	56%	58%	81%	12%	45%	43%	0.27	0.23	0.88	≥ 99%	0.58	0.74	77%	95%	78%		
Silver 40 8 Mil	44%	28%	27%	51%	31%	24%	45%	0.51	0.44	0.95	≥ 99%	0.70	0.99	56%	83%	62%		
Neutral Grey 35 8 Mil	36%	15%	22%	60%	28%	15%	57%	0.51	0.45	0.96	≥ 99%	0.73	0.80	55%	82%	59%		
Neutral Grey 45 8 Mil	43%	14%	17%	51%	34%	14%	52%	0.57	0.49	0.95	≥ 99%	0.71	0.88	51%	76%	55%		
Clear 7 Mil Exterior	88%	8%	8%	1%	76%	7%	18%	0.93	0.81	1.02	≥ 99%	0.87	1.09	19%	32%	23%		
Graffiti-Free® 4 Mil	89%	9%	9%	1%	77%	8%	15%	0.94	0.82	1.02	≥ 99%	0.84	1.08	18%	28%	21%		
Graffiti-Free® 6 Mil	87%	10%	10%	3%	76%	9%	15%	0.93	0.81	1.02	≥ 99%	0.84	1.07	19%	29%	22%		
12 Mil Frost Matte	66%	20%	20%	26%	60%	16%	24%	0.78	0.68	1.01	≥ 99%	0.83	0.98	32%	44%	32%		





Read in accordance with National Fenestration Rating Council (NFRC) standards and calculated on single pane 6mm (1/4") clear glass.

\*IR Rejection is tested in the IR range of 780 to 2500 nanometers.

Reported values are typical properties and should not be used as a specification. Since only the user is aware of the specific conditions in which the product is to be used, it is the user's responsibility to determine whether the product is suitable for that intended use. If the specific conditions of use are critically dependent on any of the properties of the product, or if you need further information, contact Madico, Inc. or your local Madico film dealer.

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Physical Properties	Film Thickness	Structural Component	Structure	Adhesive Type	Tensile Strength	Break Strength	Peel Strength	
Clear 4 Mil	0.0045"	0.004"	Single Ply	 Acrylic Pressure Sensitive	 25,000 PSI Avg. MD/TD	100 lbs. Per Inch (Width)	 5 to 6 lbs. Per Inch	
Clear 7 Mil	0.008"	0.007"	Single Ply			175 lbs. Per Inch (Width)		
Clear 8 Mil	0.0095"	0.008"	Multi-Ply Laminate			200 lbs. Per Inch (Width)		
Clear 14 Mil	0.014"	0.0135"	Multi-Ply Laminate			325 lbs. Per Inch (Width)		
Silver 20 4 Mil	0.005"	0.0045"	Multi-Ply Laminate			100 lbs. Per Inch (Width)		
Silver 40 4 Mil	0.005"	0.0045"	Multi-Ply Laminate			100 lbs. Per Inch (Width)		
Silver 20 8 Mil	0.010"	0.0085"	Multi-Ply Laminate			200 lbs. Per Inch (Width)		
Silver 40 8 Mil	0.010"	0.0085"	Multi-Ply Laminate			200 lbs. Per Inch (Width)		
Neutral Grey 35 8 Mil	0.010"	0.0085"	Multi-Ply Laminate			200 lbs. Per Inch (Width)		
Neutral Grey 45 8 Mil	0.010"	0.0085"	Multi-Ply Laminate			200 lbs. Per Inch (Width)		
Clear 7 Mil Exterior	0.008"	0.007"	Single Ply			175 lbs. Per Inch (Width)		
Graffiti-Free® 4 Mil	0.004"	0.004"	Single Ply			100 lbs. Per Inch (Width)		 3 to 4 lbs. Per Inch
Graffiti-Free® 6 Mil	0.007"	0.006"	Multi-Ply Laminate			150 lbs. Per Inch (Width)		
12 Mil Frost Matte	0.013"	0.012"	Multi-Ply Laminate			250 lbs. Per Inch (Width)		5 to 6 lbs. Per Inch

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