Safety and Security Window Film

Product Selection Guide and Performance Measurements

Safety In A Better Light.

MADICO®

Clear 4 Mil

Type: Safety | Color: Clear
Product Code: CL 400 PS SR

Visible Light:

Transmitted %	87.0
Reflected Exterior %	9.0
Reflected Interior %	9.0
Glare Reduction %	2.0

Total Solar Energy:

Transmitted %	75.0
Reflected %	8.0
Absorbed %	18.0

Other Solar Properties:

Shading Coefficient	0.92
Solar Heat Gain Coefficient	0.80
U-Factor	1.03
Ultraviolet Rejection %	≥ 99.0
Emissivity	0.86
Light to Solar Gain	1.08
Total Solar Energy Rejection %	20.0
Infrared Rejection %*	31.0
Infrared Energy Rejection %	23.0

Physical Properties

Film Thickness	0.0045"
Structural Component	0.004"
Structure	Single Ply
Adhesive Type	Acrylic Pressure Sensitive
Tensile Strength	25,000 PSI Avg. MD/TD
Break Strength	100 Pounds Per Inch (Width)
Peel Strength	5 to 6 pounds Per Inch

** IR Rejection based on average transmission from 780-2500nm.*
Note: *Please refer to the last page for further detail regarding testing and performance data.*

Clear 7 Mil

Type: Safety | Color: Clear
Product Code: CL 700 PS SR

Visible Light:

Transmitted %	88.0
Reflected Exterior %	9.0
Reflected Interior %	9.0
Glare Reduction %	1.0

Total Solar Energy:

Transmitted %	75.0
Reflected %	7.0
Absorbed %	18.0

Other Solar Properties:

Shading Coefficient	0.93
Solar Heat Gain Coefficient	0.81
U-Factor	1.05
Ultraviolet Rejection %	≥ 99.0
Emissivity	0.91
Light to Solar Gain	1.09
Total Solar Energy Rejection %	20.0
Infrared Rejection %*	32.0
Infrared Energy Rejection %	23.0

Physical Properties

Film Thickness	0.008"
Structural Component	0.007"
Structure	Single Ply
Adhesive Type	Acrylic Pressure Sensitive
Tensile Strength	25,000 PSI Avg. MD/TD
Break Strength	175 Pounds Per Inch (Width)
Peel Strength	5 to 6 pounds Per Inch

Clear 7 Mil Performance on Installed Windows as Certified by the NFRC**

Type	Default Glazing Reference	SHGC w/o Film	SHGC with Film	VLT w/o Film	VLT with Film	U-Factor with Film
Residential	3 mm (1/8") clear	0.72	0.71	0.74	0.73	1.11
Residential †	3 mm (1/8") clear 3 mm (1/8") clear	0.64	0.64	0.67	0.66	0.72
Non Residential	6 mm (1/4") clear	0.73	0.73	0.78	0.76	1.04
Non Residential	6 mm (1/4") grey	0.52	0.53	0.39	0.39	1.04
Non Residential †	6 mm (1/4") clear 6 mm (1/4") clear	0.63	0.65	0.69	0.68	0.59
Non Residential †	6 mm (1/4") grey 6 mm (1/4") clear	0.41	0.43	0.35	0.35	0.59

** IR Rejection based on average transmission from 780-2500nm. ** As certified by the National Fenestration Rating council (NFRC).*
† Dual pane window. ***Note:*** *Please refer to the last page for further detail regarding testing and performance data.*

Clear 8 Mil

Type: Safety | Color: Clear
Product Code: CL 800 PS SR

Visible Light:

Transmitted %	86.0
Reflected Exterior %	9.0
Reflected Interior %	9.0
Glare Reduction %	3.0

Total Solar Energy:

Transmitted %	73.0
Reflected %	8.0
Absorbed %	20.0

Other Solar Properties:

Shading Coefficient	0.90
Solar Heat Gain Coefficient	0.79
U-Factor	1.05
Ultraviolet Rejection %	≥ 99.0
Emissivity	0.90
Light to Solar Gain	1.09
Total Solar Energy Rejection %	21.0
Infrared Rejection %*	36.0
Infrared Energy Rejection %	26.0

Physical Properties

Film Thickness	0.0095"
Structural Component	0.008"
Structure	Multi-Ply Laminate
Adhesive Type	Acrylic Pressure Sensitive
Tensile Strength	25,000 PSI Avg. MD/TD
Break Strength	200 Pounds Per Inch (Width)
Peel Strength	5 to 6 pounds Per Inch

Clear 8 Mil Performance on Installed Windows as Certified by the NFRC**

Type	Default Glazing Reference	SHGC w/o Film	SHGC with Film	VLT w/o Film	VLT with Film	U-Factor with Film
Residential	3 mm (1/8") clear	0.72	0.68	0.74	0.71	1.10
Residential †	3 mm (1/8") clear 3 mm (1/8") clear	0.64	0.62	0.67	0.64	0.72
Non Residential	6 mm (1/4") clear	0.73	0.70	0.78	0.75	1.04
Non Residential	6 mm (1/4") grey	0.52	0.52	0.39	0.37	1.04
Non Residential †	6 mm (1/4") clear 6 mm (1/4") clear	0.63	0.62	0.69	0.67	0.59
Non Residential †	6 mm (1/4") grey 6 mm (1/4") clear	0.41	0.41	0.35	0.33	0.59

** IR Rejection based on average transmission from 780-2500nm. ** As certified by the National Fenestration Rating council (NFRC).*
† Dual pane window. ***Note:*** *Please refer to the last page for further detail regarding testing and performance data.*

Clear 14 Mil

Type: Safety | Color: Clear
Product Code: CL 1400 PS SR

Visible Light:

Transmitted %	87.0
Reflected Exterior %	9.0
Reflected Interior %	9.0
Glare Reduction %	3.0

Total Solar Energy:

Transmitted %	75.0
Reflected %	8.0
Absorbed %	18.0

Other Solar Properties:

Shading Coefficient	0.92
Solar Heat Gain Coefficient	0.80
U-Factor	1.03
Ultraviolet Rejection %	≥ 99.0
Emissivity	0.87
Light to Solar Gain	1.08
Total Solar Energy Rejection %	20.0
Infrared Rejection %*	33.0
Infrared Energy Rejection %	23.0

Physical Properties

Film Thickness	0.014″
Structural Component	0.0135″
Structure	Multi-Ply Laminate
Adhesive Type	Acrylic Pressure Sensitive
Tensile Strength	25,000 PSI Avg. MD/TD
Break Strength	325 Pounds Per Inch (Width)
Peel Strength	5 to 6 pounds Per Inch

** IR Rejection based on average transmission from 780-2500nm.*
Note: *Please refer to the last page for further detail regarding testing and performance data.*

Silver 20 4 Mil

Type: Safety | Color: Silver

Product Code: RS 20 PS SR 4 Mil

Visible Light:

Transmitted %	18.0
Reflected Exterior %	55.0
Reflected Interior %	57.0
Glare Reduction %	80.0

Total Solar Energy:

Transmitted %	12.0
Reflected %	45.0
Absorbed %	43.0

Other Solar Properties:

Shading Coefficient	0.27
Solar Heat Gain Coefficient	0.24
U-Factor	0.90
Ultraviolet Rejection %	≥ 99.0
Emissivity	0.60
Light to Solar Gain	0.75
Total Solar Energy Rejection %	76.0
Infrared Rejection %*	95.0
Infrared Energy Rejection %	78.0

Physical Properties

Film Thickness	0.005"
Structural Component	0.0045"
Structure	Multi-Ply Laminate
Adhesive Type	Acrylic Pressure Sensitive
Tensile Strength	25,000 PSI Avg. MD/TD
Break Strength	100 Pounds Per Inch (Width)
Peel Strength	5 to 6 pounds Per Inch

Silver 20 4 Mil Performance on Installed Windows as Certified by the NFRC**

Type	Default Glazing Reference	SHGC w/o Film	SHGC with Film	VLT w/o Film	VLT with Film	U-Factor with Film
Residential	3 mm (1/8") clear	0.72	0.20	0.74	0.15	0.99
Residential †	3 mm (1/8") clear 3 mm (1/8") clear	0.64	0.26	0.67	0.14	0.67
Non Residential	6 mm (1/4") clear	0.73	0.23	0.78	0.15	0.92
Non Residential	6 mm (1/4") grey	0.52	0.26	0.39	0.07	0.92
Non Residential †	6 mm (1/4") clear 6 mm (1/4") clear	0.63	0.31	0.69	0.14	0.56
Non Residential †	6 mm (1/4") grey 6 mm (1/4") clear	0.41	0.25	0.35	0.07	0.56

** IR Rejection based on average transmission from 780-2500nm. ** As certified by the National Fenestration Rating council (NFRC).*
† Dual pane window. ***Note:*** *Please refer to the last page for further detail regarding testing and performance data.*

Silver 40 4 Mil

Type: Safety | Color: Silver

Product Code: RS 40 PS SR 4 Mil

Visible Light:

Transmitted %	44.0
Reflected Exterior %	27.0
Reflected Interior %	26.0
Glare Reduction %	51.0

Total Solar Energy:

Transmitted %	32.0
Reflected %	24.0
Absorbed %	44.0

Other Solar Properties:

Shading Coefficient	0.51
Solar Heat Gain Coefficient	0.44
U-Factor	0.94
Ultraviolet Rejection %	≥ 99.0
Emissivity	0.68
Light to Solar Gain	0.99
Total Solar Energy Rejection %	56.0
Infrared Rejection %*	82.0
Infrared Energy Rejection %	62.0

Physical Properties

Film Thickness	0.005"
Structural Component	0.0045"
Structure	Multi-Ply Laminate
Adhesive Type	Acrylic Pressure Sensitive
Tensile Strength	25,000 PSI Avg. MD/TD
Break Strength	100 Pounds Per Inch (Width)
Peel Strength	5 to 6 pounds Per Inch

Silver 40 4 Mil Performance on Installed Windows as Certified by the NFRC**

Type	Default Glazing Reference	SHGC w/o Film	SHGC with Film	VLT w/o Film	VLT with Film	U-Factor with Film
Residential	3 mm (1/8") clear	0.72	0.38	0.74	0.36	1.02
Residential †	3 mm (1/8") clear 3 mm (1/8") clear	0.64	0.42	0.67	0.33	0.69
Non Residential	6 mm (1/4") clear	0.73	0.40	0.78	0.38	0.95
Non Residential	6 mm (1/4") grey	0.52	0.35	0.39	0.19	0.95
Non Residential †	6 mm (1/4") clear 6 mm (1/4") clear	0.63	0.45	0.69	0.35	0.57
Non Residential †	6 mm (1/4") grey 6 mm (1/4") clear	0.41	0.32	0.35	0.17	0.57

** IR Rejection based on average transmission from 780-2500nm. ** As certified by the National Fenestration Rating council (NFRC).*
† Dual pane window. ***Note:*** *Please refer to the last page for further detail regarding testing and performance data.*

Silver 20 8 Mil

Type: Safety | Color: Silver

Product Code: RS 20 PS SR 8 Mil

Visible Light:

Transmitted %	17.0
Reflected Exterior %	56.0
Reflected Interior %	58.0
Glare Reduction %	81.0

Total Solar Energy:

Transmitted %	12.0
Reflected %	45.0
Absorbed %	43.0

Other Solar Properties:

Shading Coefficient	0.27
Solar Heat Gain Coefficient	0.23
U-Factor	0.88
Ultraviolet Rejection %	≥ 99.0
Emissivity	0.58
Light to Solar Gain	0.74
Total Solar Energy Rejection %	77.0
Infrared Rejection %*	95.0
Infrared Energy Rejection %	78.0

Physical Properties

Film Thickness	0.010"
Structural Component	0.0085"
Structure	Multi-Ply Laminate
Adhesive Type	Acrylic Pressure Sensitive
Tensile Strength	25,000 PSI Avg. MD/TD
Break Strength	200 Pounds Per Inch (Width)
Peel Strength	5 to 6 pounds Per Inch

Silver 20 8 Mil Performance on Installed Windows as Certified by the NFRC**

Type	Default Glazing Reference	SHGC w/o Film	SHGC with Film	VLT w/o Film	VLT with Film	U-Factor with Film
Residential	3 mm (1/8") clear	0.72	0.19	0.74	0.14	0.98
Residential †	3 mm (1/8") clear 3 mm (1/8") clear	0.64	0.26	0.67	0.13	0.67
Non Residential	6 mm (1/4") clear	0.73	0.22	0.78	0.15	0.90
Non Residential	6 mm (1/4") grey	0.52	0.26	0.39	0.07	0.90
Non Residential †	6 mm (1/4") clear 6 mm (1/4") clear	0.63	0.31	0.69	0.14	0.55
Non Residential †	6 mm (1/4") grey 6 mm (1/4") clear	0.41	0.24	0.35	0.07	0.55

** IR Rejection based on average transmission from 780-2500nm. ** As certified by the National Fenestration Rating council (NFRC).*
† Dual pane window. ***Note:*** *Please refer to the last page for further detail regarding testing and performance data.*

Silver 40 8 Mil

Type: Safety | Color: Silver

Product Code: RS 40 PS SR 8 Mil

Visible Light:

Transmitted %	44.0
Reflected Exterior %	28.0
Reflected Interior %	27.0
Glare Reduction %	51.0

Total Solar Energy:

Transmitted %	31.0
Reflected %	24.0
Absorbed %	45.0

Other Solar Properties:

Shading Coefficient	0.51
Solar Heat Gain Coefficient	0.44
U-Factor	0.95
Ultraviolet Rejection %	≥ 99.0
Emissivity	0.70
Light to Solar Gain	0.99
Total Solar Energy Rejection %	56.0
Infrared Rejection %*	83.0
Infrared Energy Rejection %	62.0

Physical Properties

Film Thickness	0.010"
Structural Component	0.0085"
Structure	Multi-Ply Laminate
Adhesive Type	Acrylic Pressure Sensitive
Tensile Strength	25,000 PSI Avg. MD/TD
Break Strength	200 Pounds Per Inch (Width)
Peel Strength	5 to 6 pounds Per Inch

Silver 40 8 Mil Performance on Installed Windows as Certified by the NFRC**

Type	Default Glazing Reference	SHGC w/o Film	SHGC with Film	VLT w/o Film	VLT with Film	U-Factor with Film
Residential	3 mm (1/8") clear	0.72	0.38	0.74	0.36	1.03
Residential †	3 mm (1/8") clear 3 mm (1/8") clear	0.64	0.42	0.67	0.33	0.69
Non Residential	6 mm (1/4") clear	0.73	0.40	0.78	0.38	0.96
Non Residential	6 mm (1/4") grey	0.52	0.35	0.39	0.19	0.96
Non Residential †	6 mm (1/4") clear 6 mm (1/4") clear	0.63	0.45	0.69	0.34	0.57
Non Residential †	6 mm (1/4") grey 6 mm (1/4") clear	0.41	0.32	0.35	0.17	0.57

** IR Rejection based on average transmission from 780-2500nm. ** As certified by the National Fenestration Rating council (NFRC).*
† Dual pane window. ***Note:*** *Please refer to the last page for further detail regarding testing and performance data.*

Neutral Grey 35 8 Mil

Type: Safety | Color: Neutral Grey
Product Code: NG 35 PS SR 8 Mil

Visible Light:

Transmitted %	36.0
Reflected Exterior %	15.0
Reflected Interior %	22.0
Glare Reduction %	60.0

Total Solar Energy:

Transmitted %	28.0
Reflected %	15.0
Absorbed %	57.0

Other Solar Properties:

Shading Coefficient	0.51
Solar Heat Gain Coefficient	0.45
U-Factor	0.96
Ultraviolet Rejection %	≥ 99.0
Emissivity	0.73
Light to Solar Gain	0.80
Total Solar Energy Rejection %	55.0
Infrared Rejection %*	82.0
Infrared Energy Rejection %	59.0

Physical Properties

Film Thickness	0.010"
Structural Component	0.0085"
Structure	Multi-Ply Laminate
Adhesive Type	Acrylic Pressure Sensitive
Tensile Strength	25,000 PSI Avg. MD/TD
Break Strength	200 Pounds Per Inch (Width)
Peel Strength	5 to 6 pounds Per Inch

Neutral Grey 35 8 Mil Performance on Installed Windows as Certified by the NFRC**

Type	Default Glazing Reference	SHGC w/o Film	SHGC with Film	VLT w/o Film	VLT with Film	U-Factor with Film
Residential	3 mm (1/8") clear	0.72	0.38	0.74	0.29	1.03
Residential †	3 mm (1/8") clear 3 mm (1/8") clear	0.64	0.44	0.67	0.27	0.69
Non Residential	6 mm (1/4") clear	0.73	0.40	0.78	0.31	0.97
Non Residential	6 mm (1/4") grey	0.52	0.35	0.39	0.15	0.97
Non Residential †	6 mm (1/4") clear 6 mm (1/4") clear	0.63	0.47	0.69	0.28	0.57
Non Residential †	6 mm (1/4") grey 6 mm (1/4") clear	0.41	0.33	0.35	0.14	0.57

** IR Rejection based on average transmission from 780-2500nm. ** As certified by the National Fenestration Rating council (NFRC).*
† Dual pane window. ***Note:*** *Please refer to the last page for further detail regarding testing and performance data.*

Neutral Grey 45 8 Mil

Type: Safety | Color: Neutral Grey
Product Code: NG 45 PS SR 8 Mil

Visible Light:

Transmitted %	43.0
Reflected Exterior %	14.0
Reflected Interior %	17.0
Glare Reduction %	51.0

Total Solar Energy:

Transmitted %	34.0
Reflected %	14.0
Absorbed %	52.0

Other Solar Properties:

Shading Coefficient	0.57
Solar Heat Gain Coefficient	0.49
U-Factor	0.95
Ultraviolet Rejection %	≥ 99.0
Emissivity	0.71
Light to Solar Gain	0.88
Total Solar Energy Rejection %	51.0
Infrared Rejection %*	76.0
Infrared Energy Rejection %	55.0

Physical Properties

Film Thickness	0.010"
Structural Component	0.0085"
Structure	Multi-Ply Laminate
Adhesive Type	Acrylic Pressure Sensitive
Tensile Strength	25,000 PSI Avg. MD/TD
Break Strength	200 Pounds Per Inch (Width)
Peel Strength	5 to 6 pounds Per Inch

Neutral Grey 45 8 Mil Performance on Installed Windows as Certified by the NFRC**

Type	Default Glazing Reference	SHGC w/o Film	SHGC with Film	VLT w/o Film	VLT with Film	U-Factor with Film
Residential	3 mm (1/8") clear	0.72	0.42	0.74	0.36	1.02
Residential †	3 mm (1/8") clear 3 mm (1/8") clear	0.64	0.47	0.67	0.33	0.69
Non Residential	6 mm (1/4") clear	0.73	0.45	0.78	0.38	0.96
Non Residential	6 mm (1/4") grey	0.52	0.37	0.39	0.19	0.96
Non Residential †	6 mm (1/4") clear 6 mm (1/4") clear	0.63	0.49	0.69	0.34	0.57
Non Residential †	6 mm (1/4") grey 6 mm (1/4") clear	0.41	0.34	0.35	0.17	0.57

** IR Rejection based on average transmission from 780-2500nm. ** As certified by the National Fenestration Rating council (NFRC).*
† Dual pane window. ***Note:*** *Please refer to the last page for further detail regarding testing and performance data.*

Clear 7 Mil Exterior

Type: Safety | Color: Clear

Product Code: CL 700 E PS SR

Visible Light:

Transmitted %	88.0
Reflected Exterior %	8.0
Reflected Interior %	8.0
Glare Reduction %	1.0

Total Solar Energy:

Transmitted %	76.0
Reflected %	7.0
Absorbed %	18.0

Other Solar Properties:

Shading Coefficient	0.93
Solar Heat Gain Coefficient	0.81
U-Factor	1.02
Ultraviolet Rejection %	≥ 99.0
Emissivity	0.87
Light to Solar Gain	1.09
Total Solar Energy Rejection %	19.0
Infrared Rejection %*	32.0
Infrared Energy Rejection %	23.0

Physical Properties

Film Thickness	0.008"
Structural Component	0.007"
Structure	Single Ply
Adhesive Type	Acrylic Pressure Sensitive
Tensile Strength	25,000 PSI Avg. MD/TD
Break Strength	175 Pounds Per Inch (Width)
Peel Strength	5 to 6 pounds Per Inch

** IR Rejection based on average transmission from 780-2500nm.*

Note: *Please refer to the last page for further detail regarding testing and performance data.*

Graffiti Free® 4 Mil

Type: Anti-Graffiti | Color: Clear

Product Code: Graffiti Free 400 PS SR

Visible Light:

Transmitted %	89.0
Reflected Exterior %	9.0
Reflected Interior %	9.0
Glare Reduction %	1.0

Total Solar Energy:

Transmitted %	77.0
Reflected %	8.0
Absorbed %	15.0

Other Solar Properties:

Shading Coefficient	0.94
Solar Heat Gain Coefficient	0.82
U-Factor	1.02
Ultraviolet Rejection %	≥ 99.0
Emissivity	0.84
Light to Solar Gain	1.08
Total Solar Energy Rejection %	18.0
Infrared Rejection %*	28.0
Infrared Energy Rejection %	21.0

Physical Properties

Film Thickness	0.004"
Structural Component	0.004"
Structure	Single Ply
Adhesive Type	Acrylic Pressure Sensitive
Tensile Strength	25,000 PSI Avg. MD/TD
Break Strength	100 Pounds Per Inch (Width)
Peel Strength	3 to 4 pounds Per Inch

** IR Rejection based on average transmission from 780-2500nm.*

Note: *Please refer to the last page for further detail regarding testing and performance data.*

Graffiti Free® 6 Mil

Type: Anti-Graffiti | Color: Clear

Product Code: Graffiti Free 600 PS SR

Visible Light:

Transmitted %	87.0
Reflected Exterior %	10.0
Reflected Interior %	10.0
Glare Reduction %	3.0

Total Solar Energy:

Transmitted %	76.0
Reflected %	9.0
Absorbed %	15.0

Other Solar Properties:

Shading Coefficient	0.93
Solar Heat Gain Coefficient	0.81
U-Factor	1.02
Ultraviolet Rejection %	≥ 99.0
Emissivity	0.84
Light to Solar Gain	1.07
Total Solar Energy Rejection %	19.0
Infrared Rejection %*	29.0
Infrared Energy Rejection %	22.0

Physical Properties

Film Thickness	0.007"
Structural Component	0.006"
Structure	Multi-Ply Laminate
Adhesive Type	Acrylic Pressure Sensitive
Tensile Strength	25,000 PSI Avg. MD/TD
Break Strength	150 Pounds Per Inch (Width)
Peel Strength	3 to 4 pounds Per Inch

** IR Rejection based on average transmission from 780-2500nm.*

Note: *Please refer to the last page for further detail regarding testing and performance data.*

Film Performance Measurements

GLOSSARY

VISIBLE LIGHT TRANSMISSION % is the ratio of visible solar energy in the range (380–780 nm) that passes through a given glazing system to the total visible solar energy falling on the system.

VISIBLE LIGHT REFLECTION % is the ratio of visible solar energy in the range (380–780 nm) that is reflected by a given glazing system to the total visible solar energy falling on the system.

GLARE REDUCTION is the reduction in visible light transmitted compared to clear, unfilmed glass.

SOLAR TRANSMISSION % is the ratio of the amount of solar energy in the full solar wavelength range (300–2,500 nm) that passes directly through a glazing system to the amount of solar energy falling on that glazing system.

SOLAR REFLECTION % is the ratio of the amount of solar energy in the full solar wavelength range (300–2,500 nm) that is directly reflected by the glazing system to the amount of solar energy falling on that glazing system.

SOLAR ABSORPTION % is the ratio of the amount of solar energy in the full solar wavelength range (300–2,500 nm) that is directly absorbed by the glazing system to the amount of solar energy falling on that glazing system.

SHADING COEFFICIENT is the ratio of solar heat gain through a given glazing system to that of a standard glass pane under the same test conditions. It is a measure of the sun control capability. The lower the shading coefficient, the more efficient the glazing system.

SOLAR HEAT GAIN COEFFICIENT is similar to the shading coefficient, except this value also takes into account energy that is reradiated back into the room from the glass heating up due to absorption. A lower number means better heat rejection.

U-FACTOR is a measure of the rate of heat conductivity of a glazing system and is independent of solar radiation. When multiplied by the difference between indoor and outdoor temperatures in Fahrenheit (F), it gives the amount of heat conducted in BTUs/hour/square foot of glazing. The lower the U-Factor, the better the heat loss reduction.

Film Performance Measurements

GLOSSARY

ULTRAVIOLET REJECTION % is the ratio of solar energy in the range (300–380 nm) that is rejected by a glazing system to the total solar UV energy falling on the glazing.

EMISSIVITY is a measure of the ability of a product to reflect long wave room radiant energy. The lower the emissivity, the higher the ability of the material in question to retain the room's heat.

LIGHT-TO-SOLAR-GAIN RATIO provides a gauge of the relative efficiency of different film types in transmitting daylight while blocking heat gains. It is determined by the ratio between visible light transmittance and the solar heat gain coefficient. The higher the number, the more light transmitted without adding excessive amounts of heat.

TOTAL SOLAR ENERGY REJECTION % is the ratio of the amount of total solar energy in the full solar wavelength range (300–2,500 nm) that is prevented from passing through a glazing system to the amount of total solar energy falling on that glazing system.

INFRARED REJECTION % is the amount of total solar infrared radiation in the range (780–2500 nm) prevented from passing through a glazing system.

INFRARED ENERGY REJECTION is a measurement of infrared rejection over the IR range of 780-2500 nm. IRER takes into account that a portion of absorbed IR energy will be reradiated into a car or building. Similar to Total Solar Energy Rejection, but only involves the solar infrared range.

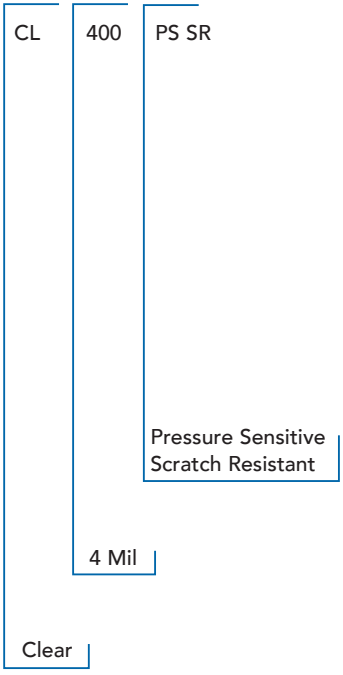
TENSILE STRENGTH is the value of a 1" x 1" square of film being pulled apart in the same manner as the film break strength test. It is generally calculated up from the break strength and reported in pounds per square inch, (PSI).

BREAK STRENGTH is the actual load or force at which fracture occurs measured in pounds per inch (width). Break strength is a function of tensile strength.

PEEL STRENGTH is the force necessary to remove a coated material adhered to a prescribed surface from that surface measured in pounds per inch.

Madico Architectural Films Nomenclature

The Product Code System consists of alternate groups of letters and numbers identifying the characteristics of the composites of our films.



Product Nomenclature

CL	Clear
NG	Neutral Grey
RS	Reflective Silver
E	Exterior
PS	Pressure Sensitive
SR	Scratch Resistant
400	4 Mil
600	6 Mil
700	7 Mil
800	8 Mil
1400	14 Mil

MADICO®

The Clear Choice for Safety & Security Film

Madico Safety & Security Film Performance Measurement Data:

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

Reported values are typical properties and should not be used as a specification. Since 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 intended use. If you need verification regarding specific use or additional information, please contact Madico or your local Madico Authorized Dealer. Since there can be variations in published data between printed materials, please visit madico.com for the latest reported performance measurements.

AIMCAL ASSOCIATION OF INDUSTRIAL METALLIZERS, COATERS AND LAMINATORS

NFRC MEMBER

ARCAT

AIA Continuing Education Provider

Quality safety and security film for commercial and residential applications

- Holds shattered glass in place when impacted
- Less expensive to replace than safety glass
- Protects against crime and smash-grab theft
- Extensively tested to meet or exceed safety glazing criteria
- Stands up to severe winds and storms
- Rejects more than 99% of UV rays

Madico products are warranted for production quality. Contact Madico or your authorized Madico agent for applicable warranty terms and conditions in your region.

INTERNATIONAL WINDOW FILM ASSOCIATION

RECOMMENDED SKIN CANCER FOUNDATION

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