

3M Science.
Applied to Life.™

Safety Series

Protect tenants and your property even on a budget with 3M™ Safety & Security Window Film.

- ▶ Mitigates hazards from shattered glass due to natural and human causes
- ▶ Increases security and provides added protection against smash and grab burglaries
- ▶ Helps provide protection to people and property from flying glass in natural disasters
- ▶ Increases anti-spall protection for laminated glass
- ▶ Can be combined with 3M™ Impact Protection Attachment Systems for additional safety and security
- ▶ Helps extend the life of furnishings by significantly reducing harmful UV rays, the largest cause of fading

	S40	S70	S80	S140
Break and Entry	★	★★★	★★★	★★★★★
Safety Glazing	★★★	★★★★★	★★★★★	★★★★★
Seismic	★★★★	★★★★★	★★★★★	★★★★★
Blast Mitigation	★	★★★★	★★★★	★★★★
Anti-Graffiti	★★	★★★	★★★	★★★★

Best ★★★★★
 Better ★★★★
 Good ★★★
 Fair ★★
 Not Recommended ★

Valued Associations and Alliances:



CLINTON
CLIMATE
INITIATIVE





Break and Entry

- ▶ Provides precious time by helping to deter unwanted individuals from entering your building or home
- ▶ Help protect occupants and assets

Completed Testing

- ▶ EN 356
- ▶ UL 972
- ▶ ULC 332

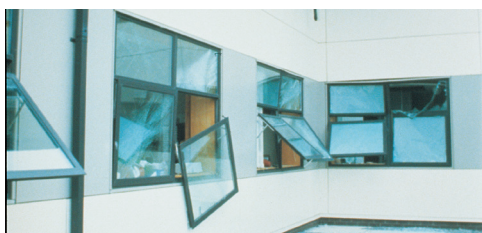


Safety Glazing and Human Impact

- ▶ Upgrade your glass to meet safety glazing codes*
- ▶ Help protect your occupants from broken glass hazards

Completed Testing

- ▶ ANSI Z97.1
- ▶ 16 CFR CPSC 1201
- ▶ EN 12600



Seismic and Spontaneous Glass Breakage

- ▶ Glass fragment retention film for increased protection for people, property and possessions

Completed Testing

- ▶ ANSI Z97.1
- ▶ 16 CFR CPSC 1201
- ▶ EN 12600



Bomb Blast and Explosion Protection

- ▶ Help protect people from flying glass shards, one of the most common causes of blast related injuries and fatalities

Completed Testing

- ▶ ASTM F1642
- ▶ GSA TS01-2003
- ▶ ISO 16933

Film Properties (nominal) — not for specification purposes

Film Type	Film Thickness	Construction	Tensile Strength	Break Strength	Elongation at Break	Peel Strength	Abrasion Resistance
Safety S40	4 mil (0.10mm)	Single ply	25,000 psi (172 MPa)	100 lbs/in (445 N / 25mm)	>125%	> 4 lbs/in (18 N / 25mm)	<5%
Safety S70	7 mil (0.18mm)	Single ply	25,000 psi (172 MPa)	175 lbs/in (778 N / 25mm)	>125%	> 5 lbs/in (22 N / 25mm)	<5%
Safety S80	8 mil (0.20mm)	2-ply	25,000 psi (172 MPa)	200 lbs/in (890 N / 25mm)	>125%	> 2 lbs/in (9 N / 25mm)	<5%
Safety S140	14 mil (0.36mm)	3-ply	25,000 psi (172 MPa)	350 lbs/in (1,557 N / 25mm)	>125%	> 2 lbs/in (9 N / 25mm)	<5%

3M products are tested to multiple industry standards. Glazing systems vary. Contact 3M for more information.

*Building codes vary, please consult with 3M and your local code official.

Warranty, Limited Remedy and Disclaimer: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. User is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application. Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. **3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE.** If the 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price. **Limitation of Liability:** Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.



3M Commercial Solutions Division
 3M Center, Building 220-12E-04
 St. Paul, MN 55144-1000
 3M.com/windowfilm

3M is a trademark of 3M.
 Used under license in Canada.

Please recycle. Printed in the U.S.A.
 © 3M 2017. All rights reserved.
 98-0150-0748-1



Enjoy enhanced views, savings and comfort with 3M™ Sun Control Window Film Night Vision™ Series.

- ▶ Great heat rejection helps provide energy savings and improved comfort
- ▶ Enhanced views with low interior reflectivity, especially at night
- ▶ Helps reduce glare and eye discomfort
- ▶ Helps extend the life of furnishings by significantly reducing harmful UV rays, the largest cause of fading
- ▶ Excellent scratch-resistant coating
- ▶ 3M nano-technology enhances color stability
- ▶ Comprehensive warranty from 3M

Energy Savings ★★★★★

Heat Rejection ★★★★★

Glare Reduction ★★★★★

Interior Visible Reflection ★★★★★

Best ★★★★★

Better ★★★★☆

Good ★★★☆☆

Fair ★★☆☆☆

Not Recommended ★☆☆☆☆

In comparison to other 3M™ Sun Control Window Films.

**Save energy by day.
Enhance views by night.**



3M™ Sun Control Window Film Night Vision™ 25 Case Study — Embarcadero Center Climate Zone 3

345,000 sq ft installation of Night Vision 25

Payback period — less than 1 year

Customer issues:

- ▶ High energy costs and consumption
- ▶ Tenant comfort due to direct sun



Product Performance and Technical Data

Glass Type (All 1/4")	Film Type	Visible Light			Total Solar Energy Rejected	Solar Heat Gain Coefficient (G Value)	U Value		Solar Heat Reduction	UV Light Rejected	Glare Reduction	Visible Light to Solar Heat Gain Ratio
		Reflected (Interior)	Reflected (Exterior)	Transmitted			btu/ hft²F	w/ m²K				
Clear	Night Vision 15	9%	35%	13%	72%	0.28	0.99	5.6	66%	99.9%	85%	0.5
	Night Vision 25	9%	24%	24%	63%	0.37	1.01	5.7	52%	99.9%	73%	0.6
	Night Vision 35	7%	14%	33%	54%	0.46	1.03	5.8	41%	99.9%	63%	0.7
Tinted	Night Vision 15	9%	16%	8%	69%	0.31	0.99	5.6	52%	99.9%	85%	0.3
	Night Vision 25	9%	12%	14%	64%	0.36	1.01	5.7	43%	99.9%	73%	0.4
	Night Vision 35	7%	8%	20%	59%	0.41	1.03	5.8	33%	99.9%	63%	0.5
Double Clear	Night Vision 15	9%	37%	12%	60%	0.40	0.47	2.6	43%	99.9%	85%	0.3
	Night Vision 25	10%	28%	22%	53%	0.47	0.47	2.7	29%	99.9%	73%	0.5
	Night Vision 35	8%	19%	30%	46%	0.54	0.47	2.7	21%	99.9%	63%	0.6
Double Tinted	Night Vision 15	9%	16%	7%	68%	0.32	0.47	2.6	37%	99.9%	85%	0.2
	Night Vision 25	10%	13%	13%	64%	0.36	0.47	2.7	27%	99.9%	73%	0.4
	Night Vision 35	8%	10%	18%	59%	0.41	0.47	2.7	19%	99.9%	63%	0.4

LEED Certification

Window films may be used toward the following LEED credits:

▶ SS-8	▶ MR 1.1-1.2	▶ EQ-7.1	▶ EQ-8.1-8.2
▶ EA-1	▶ MR 5.1-5.2	▶ EQ-7.2	▶ ID

Warranty and Limited Remedy: 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. **3M MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES OR CONDITIONS, INCLUDING ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If the 3M product does not conform to this warranty, the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price. **Limitation of Liability:** Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted.



3M Commercial Solutions Division
3M Center, Building 220-12E-04
St. Paul, MN 55144-1000
3M.com/windowfilm

3M and Night Vision are trademarks of 3M.
Used under license by 3M subsidiaries and affiliates.

Please recycle.
© 3M 2021. All rights reserved.
98-0150-0739-0

3M Science.
Applied to Life.™

3M™ Sun Control Window Film Prestige Series

Comfort and protection — all in a day's work.

Enjoy the benefits of putting
3M™ Window Films to work for you.



Protected by 3M™ Window Film

Optimize views and your bottom line.


Aesthetics. Comfort. Energy savings. Protection.
3M™ Sun Control Window Film Prestige Series can
take sun control to a whole new level for your building.

Need sun protection for challenging applications?
Or safety, security and sun protection combined?

Our films deliver superior performance while leaving
the beauty of your building virtually unchanged.

You'll enjoy all the advantages of a top-performing
window film with none of the disadvantages.





Sunlight streaming through windows can create excessive heat, uncomfortable hot spots and glare. These issues may impact energy costs, tenant comfort and retention and, ultimately, your bottom line.

Slash energy costs. Enhance comfort.

Our clear, spectrally selective Prestige Series films have a patented design that significantly reflects the sun's energy in the infrared range reducing up to 60% of the heat coming through windows.

By significantly reducing glare, they also help reduce uncomfortable brightness.

The result?

- ▶ Greater energy savings for you
- ▶ A cooler, more comfortable environment for tenants
- ▶ A beautiful building, inside and out

DID YOU KNOW? 3M™ Window Films are proven to save energy in all climate zones and may also be used toward LEED credits.

Solutions for even the most challenging areas.

Atriums, skylights, conservatory roofs — where sun control and appearance are important, but interior film application is difficult, turn to 3M™ Sun Control Window Film Prestige Exterior Series for ultimate performance.

Excellent heat rejection without the reflection: Prestige exterior films offer a range of 20% visible light transmission (VLT), yet their clear, translucent appearance keeps the beauty of your building virtually unchanged.

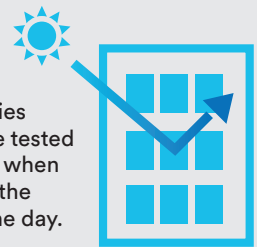
Prestige Series window films do not contain metal. That means they won't corrode over time or interfere with wireless and cellular signals that tenants depend on every day.

Unsurpassed sun control capabilities.

What sets our films apart is the precision with which light waves are controlled as they pass through or reflect off of hundreds of layers of film. Compared to other films, 3M™ Window Films increase performance at a faster rate as the sun's angle increases. That means greater protection and comfort when you need it the most.

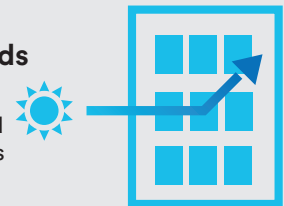
3M

3M™ Prestige Series Window Films are tested and perform best when the sun is high at the hottest parts of the day.



Other brands

All window films are tested when the sun is perpendicular to the window.



Iconic Rock and Roll Hall of Fame trusts 3M™ Prestige Exterior Series for long-lasting performance.

3M™ Sun Control Window Film Prestige Series has been approved for use on historic registered buildings and museums.

Not only can they reject heat while maintaining existing aesthetics, they also reject up to 99% of damaging UV Rays.



Performance that metallic films can't match.

The Prestige Series are the first non-metallized window films engineered to offer superior performance without interfering with device signals or changing your building's aesthetics. The Prestige Series films utilize a truly unique 3M technology known as a multi-layer optical film, which allows us to create a window film with hundreds of layers of non-metallized material in less than the thickness of a Post-it® Note. Each layer is designed to reflect the sun's IR rays without compromising on visible light.

That allows us to create a film that delivers the highest performance possible without metal, which may corrode and look reflective. Other metal-free films just can't offer the performance and clarity available in the Prestige Series.

Get the best of both worlds: solar protection and safety.

Glass doors and windows are among the most vulnerable points in your building.

3M™ Scotchshield™ Safety & Security Window Film Ultra Prestige Series can give you all the benefits of superior sun control combined with remarkable strength to help deter crimes and reduce potential injury from flying shards of glass.

The micro-layer construction of 3M™ Scotchshield™ Safety & Security Window Film Ultra Prestige Series films allows them to stretch more to resist tearing — offering more protection to your property and tenants.

The films allow 50 to 70% of the natural light into your building yet reject up to 60% of the heat coming through your windows. Views? Virtually unchanged. Protection? Superior.



Proven. Trusted. Guaranteed.

Proven: 3M™ Window Films resist peeling, bubbling, scratching and abrasion for long-lasting beauty and clarity. We push beyond industry standards, testing our films to extremes — subjecting them to severe impacts, rigorous durability testing, bomb blasts and more, so you can count on our films to continue performing.

Trusted: 3M was issued the first patent for sun control window film in 1966. Today, there are millions of buildings with 3M™ Window Films installed all around the world. Combining technologies in imaginative ways, our scientists continue to develop revolutionary solutions that keep homes and buildings comfortable and protected.

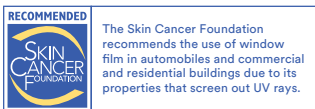
Guaranteed: When you choose 3M, you choose peace of mind. That's because we have one of the most comprehensive warranties you can get. 3M™ Window Films are backed by a warranty directly from a company you trust.

Put 3M Science to work for you.

Turn to our professionals. 3M™ Preferred Dealer Installers are proven experts in helping solve problems like excessive glare, temperature imbalances, issues with fading and safety and security needs.

**Contact your local 3M™ Preferred Installer
for a free estimate.**

**For more information or to find a dealer
installer, please call 1-866-499-8857
or visit us at [3M.com/WindowFilm](https://www.3M.com/WindowFilm).**



Warranty and Limited Remedy: 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. **3M MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES OR CONDITIONS, INCLUDING ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If the 3M product does not conform to this warranty, the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price. Limitation of Liability: Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted.



Commercial Solutions Division
3M Center, Building 235-2S-27
St. Paul, MN 55144-1000
[3M.com/windowfilm](https://www.3M.com/windowfilm)

Please recycle.
© 3M 2022. All rights reserved.
3M and Post-it are trademarks
of 3M Company.
Used under license by 3M
subsidiaries and affiliates.
98-0150-0712-7