

Manage energy costs
& improve

occupant **comfort**



3M™ Prestige Series Window Films

3M Prestige Sun Control Films are 3M's premium solar window film product. Its technical advantage stems from its multi-layer and metal-free film construction based on nanotechnology. It has a unique high visual light transmission, whilst offering high heat reduction capabilities.

With Prestige Window Films, you can enjoy the benefits of a world-class window film while leaving the beauty of your windows virtually unchanged, and their reflectivity is lower than glass.

- Clear, non reflective appearance maintains the original look of building
- Reduce solar heat and air conditioning costs
- High transparency and light transmission



3M™ Night Vision Series

3M Night Vision Films have low internal reflectance that enhances viewing, especially at night. Higher external reflectance provides privacy against prying eyes looking in (light condition dependent).

Better sight at night. Night Vision window films help block the sun's damaging UV rays, reduce glare and reject up to 71% of the sun's heat. These darker shaded films are designed to reject solar heat that is produced from visible light, while providing significant glare relief. Night Vision films allow 15% to 35% of the natural light into your rooms by day, and thanks to a low interior reflectivity, you can still enjoy the view out by night. Plus, higher exterior reflectivity means you can enjoy enhanced privacy with your windows both day and night.

- Low interior and exterior reflectivity, especially at night
- Reduce solar heat gain
- Reduce air conditioning costs



3M™ Silver P18

Silver high performance sun control film is our most efficient sun control film. Used where solar heat reduction is the major concern. Commonly installed behind tinted and clear glass, it is a popular commercial market product. This high performance silver reflective architectural film is the most efficient 3M Sun Control Film.

This film also offers 3M's unique abrasion resistant coating for added durability. With 17% visible light transmission and 77% of solar heat reduction, this film will augment the colour of the existing glass.

- High heat rejection provides energy savings and improved comfort.
- Reduces fading and helps to protect furnishings.
- Reduces glare and eye discomfort.
- Increases personal safety from flying glass.



3M™ Color Stable Series

3M developed a patented Nano-carbon polyester technology to bring you our revolutionary color stable film. This technology allows the film to retain its integrity and never fade to purple. We guarantee it !

Color Stable rejects upto 57% of the total solar energy coming through your windows providing a 'cool effect' in more ways than one.

- Reduce solar heat which provides energy savings.
- Reduces fading and helps to protect furnishings.
- Stay Cooler in warmer months.
- Reduce injury risk from flying glass.



High transparency &
light transmission

3M™ Solar Films

3M is a leading manufacturer in solar window films. 3M's extensive range includes Prestige, Night Vision, and Low-Energy Films which, can help you **reduce your energy bill**.

3M Solar Films can be applied to windows in offices, schools, hospitals and government buildings to help overcome the problems associated with solar heat gain.

Energy costs typically represent 30% of a building's annual budget. Rising energy bills and the introduction of carbon reduction targets, have focused building owners on finding ways to reduce their energy bills. Within commercial and public buildings, these energy costs are often driven by HVAC costs, as it costs 3 to 4 times more to cool a building by 1 degree Celsius than to heat it.

3M Sun Control Films can **reduce solar heat gain** and help to create a balanced environment in buildings, especially in the summer months, when the films can help to reduce the workload of cooling systems and **save energy costs**.

If a building does not have air conditioning, solar films can help with heat gain management to reduce the temperature inside buildings, improving occupant comfort. 3M Sun Control Films are **highly transparent** and have a **high light transmission**, maintaining the natural light within the building.

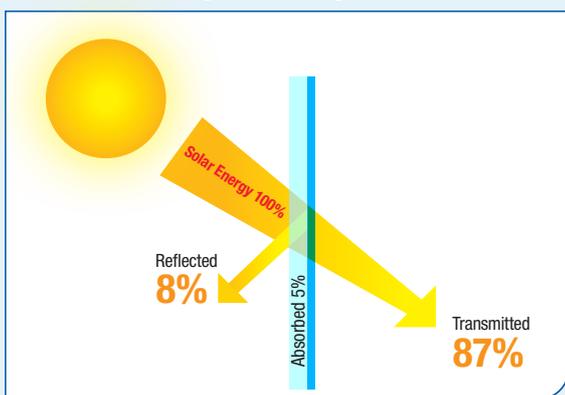


Free Glazing Assessment

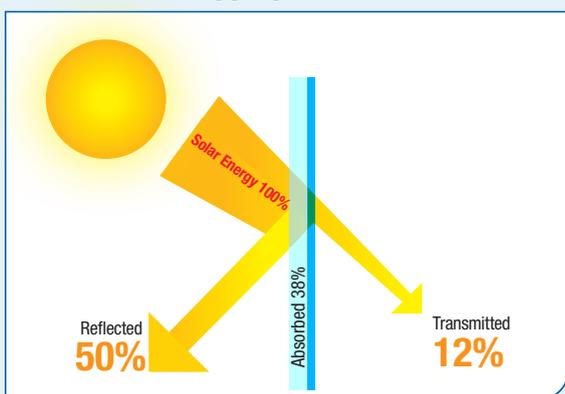
See how applying window film to your building can help to enhance safety and security, increase energy reduction and occupant comfort. Contact us at:

Tel: 021-35839016
Email: inovation.pk@mmm.com
3M.com/windowfilm

Unprotected glass



Glass with appropriate window film



Reduce the heat inside your building



Reduce the need for air conditioning
(prolong HVAC life)



Reduce your energy bill



Improve occupant comfort



Improve productivity



Increase profit



Reduce buildings CO2 footprint

Film Properties

Glass type	Film Type	Shading Coefficient	Visible Reflection Exterior	Visible Reflection Interior	Visible Light Transmission	U-value	G-value	Total Solar Energy Rejected	UV Light Rejected
Single Pane									
Clear	CS - 35	0.70	NA	8%	38%	1.06	0.39	40%	99%
Clear	Night Vision 25	0.46	19%	7%	24%	1	0.4	61%	99%
Clear	Prestige 70	0.58	9%	7%	69%	0.99	0.5	50%	99%
Clear	Silver P18	0.26	58%	40%	19%	0.95	0.6	77%	99%
Single Pane									
Tinted	CS - 35	0.59	NA	8%	22%	1.06	0.39	49%	99%
Tinted	Night Vision 25	0.43	10%	7%	14%	1	0.38	64%	99%
Tinted	Prestige 70	0.5	6%	9%	42%	0.99	0.43	57%	99%
Tinted	Silver P18	0.30	20%	40%	10%	0.95	0.6	74%	99%
Double Pane									
Clear	CS - 35	0.71	NA	13%	34%	0.50	0.51	39%	99%
Clear	Night Vision 25	0.57	24%	8%	22%	0.47	0.49	51%	99%
Clear	Prestige 70	0.64	15%	13%	62%	0.47	0.56	44%	99%
Clear	Silver P18	0.26	55%	41%	17%	0.47	0.43	67%	99%
Double Pane									
Tinted	CS - 35	0.54	NA	7%	19%	NA	NA	53%	99%
Tinted	Night Vision 25	0.43	12%	8%	13%	0.47	0.37	63%	99%
Tinted	Prestige 70	0.48	12%	12%	37%	0.47	58%	20%	99%
Tinted	Silver P18	0.28	20%	41%	9%	0.47	0.33	73%	99%

U-value: The ability to prevent thermal energy loss

G-value: Solar Heat Gain Coefficient



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