

Renewable Energy Division
3M™ Scotchshield™ Automotive Security



Look **Hot**
Feel Cool

3M™ Scotchshield™ Automotive Security

- Glass shatter and impact protection
- Protect vehicle occupants from uncomfortable heat and glare
- Sun Protection Factor of over 100
- Reduce reliance on air conditioning reducing fuel consumption

3M

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Description

3M's Scotchshield Automotive Security Series is a range of combination safety and sun control films. For the first time 3M have combined sun control technology in a 100 micron safety film. This hybrid helps shield occupants and valuables by rejecting heat from the sun, increasing privacy, and holding shattered glass together. This increases the amount of time and effort it takes a thief to enter your vehicle, providing a powerful deterrent to smash and grab theft.

- Provides glass shatter protection
- Increased impact resistance for additional safety and security
- Helps protect valuable assets inside vehicle from damage and theft
- Feel secure with physical protection from the outside world
- Non-metallised for no communications or network interference
- Solar energy rejection stabilises in-car temperature

Application

The SAS Series is intended for use on the inside surface of vehicle windows. 3M Automotive Window Film is to be professionally applied by skilled, well-trained, 3M authorised installers. Windows can be considered operational after 24 hours.

Physical Properties

Thickness	0.102mm/ 102µm/ 4 mil
Colour	Black to clear
Film material	Polyester
Adhesive	Permanent, pressure sensitive acrylic
Top coating	Abrasive resistant hard coat

Cleaning

3M Automotive Window Films may be cleaned 14 days after installation using ordinary automotive window cleaning agents and avoiding the use of abrasive particles. Do not use rough sponges, cloths or brushes. Synthetic sponges, soft wipes or rubber squeegee cleaners are recommended.

Shelf Life

To ensure the longest shelf life possible, be sure to store the film according to the guidelines given in each box. Recommended storage conditions for all films are 21°C and 40 – 50 % relative humidity. Films should be kept in the original packaging and not exposed to heat, light or relative humidity above 50%. When stored according to these recommendations, a shelf life of at least 5 years can be expected.

Film Type on 6mm Glass	Visible Light Transmitted	Visible Light Reflected	Total Solar Energy Rejected	Heat Gain Reduction	UV Rejection	Glare Reduction
No film	89%	8%	19%	N/A	38%	N/A
SAS 5	6%	5%	41%	30%	99%	94%
SAS 20	20%	5%	39%	28%	98%	80%
SAS 35	33%	6%	36%	24%	99%	67%
SAS 50	50%	6%	30%	18%	97%	50%
SAS Clear	89%	9%	19%	3%	96%	N/A

Film Properties (nominal, not for specification purposes)

Tensile Strength	Break Strength	Elongation at break	Abrasion Resistance
25,000 psi	7 kg/cm ²	>125%	<5% haze increase

Impact Resistance for Burglary Resistant Glazing (modified method of UL 972, Burglarly Resisting Glazing Material)

Glass Substrate	Test Type	Impact Energy	# of Impacts
4.8mm Toughened	High Impact	88 J	1
	High Impact (after centre punch)	27 J	1
	Multiple Impact	17 J	5

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