

Renewable Energy Division
3M™ Automotive Window Film Black Shade



Look **Hot**
Feel Cool

3M™ Automotive Window Film Black Shade

- Low cost dyed heat gain reduction technology
- Protect vehicle occupants from uncomfortable heat and glare
- Sun Protection Factor of 100
- Reduce reliance on air conditioning reducing fuel consumption



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Description

3M's Black Shade Series is a range of low cost non-metallised, dyed polyester films. These are easy to maintain films that won't interfere with mobile phone, GPS and satellite radio reception. Additionally, the films block almost the entire amount of UVA and UVB rays which are the main cause of fading and skin damage. The Black Shade Series rejects up to 43% of the total solar energy coming through your windows, providing a "cool effect" in more ways than one. The films have a scratch resistant coating, and several different shading levels in an attractive charcoal hue.

- Entry level durability performance
- Non-metallised for no communications or network interference
- Customise vehicles with tinted glass aesthetics
- Solar energy rejection stabilises in-car temperature
- Optimal temperatures make vehicle occupants feel more comfortable
- Feel secure with privacy from the outside world

Application

The Black Shade 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 (BS 5)	0.059mm/ 59µm
Thickness (all others)	0.046mm/ 46µm
Colour	Black to slightly tinted
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
BS 5	6%	5%	43%	30%	99%	94%
BS 15	14%	5%	40%	26%	99%	86%
BS 30	31%	6%	35%	20%	99%	69%
BS 45	44%	5%	32%	16%	99%	56%

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