3M ™ Safety & Security Film ULTRA Neutral S50

Description

3M™ Safety Film Ultra Neutral S50 is designed for use on the inside surface of windows. This film has a unique multilayer construction based on nanotechnologies. Ultra Safety Films are 40 times more resistant against tearing than ordinary safety films of the same thickness. Therefore the resistance of glass / film to penetration and failure is significantly increased.

As the film has many sun protection layers, the sun's rays are observed and reflected. 3M Safety Films Ultra are highly resistant to obsolescence, and the elastic adhesive retains long lasting transparency.

3M™ Safety Film Ultra Neutral S50 significantly reduces heat and creates the balanced environment of the premises. Especially in summer months they help to reduce the workload of air conditioners.

3M™ Safety Films Ultra provide an effective protection from injuries or damage to items caused the fragments of broken glass. In case of glass breakage the fragments are hold due to the system of the adhesive.

Features (on 6 mm clear glass)

Total Solar Energy reduction:	43 %
G-value	0.57
Reduction of Glare:	42 %
Reduction of UV rays:	99 %

Structure of the film

Thickness:	0,125 mm / 125 µ
Colour:	Neutral
Material of the film:	Polyester
Adhesive:	Special Acrylic
Top coating:	Scratch resistant hard coat

Installation

3M Window films are installed using water and a soap solution. Full adhesion is reached after approximately 20 days at 18°C (in dry conditions).

Cleaning

3M Window films may be cleaned 30 days after installation using ordinary 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. Do not clean 3M films dry

Glass type	Film Type	SC	VLR %	VLT %	Emissivity	u-value	g-value	TSER
Single Pane								
Clear	No Film	0.94	8 %	88 %	0.84	1.06	0.82	18 %
Tinted	Ultra Neutral S50	0.66	15 %	51 %	0.84	10.6	0.57	43 %
Clear	No Film	0.69	5 %	50 %	0.84	1.06	0.60	40 %
Tinted	Ultra Neutral S50	0.48	6 %	25 %	0.84	1.06	0.42	58 %
Douple Pane								
Clear	No Film	0.81	14 %	78 %	0.84	0.50	0.70	30 %
Tinted	Ultra Neutral S50	0.65	20 %	45 %	0.84	0.50	0.57	43 %
Clear	No Film	0.55	8 %	45 %	0.84	0.50	0.48	52 %
Tinted	Ultra Neutral S50	0.43	9 %	28 %	0.84	0.50	0.42	58 %

General notes:
All 3M Safety films have been tested to EN12600 and/or EN356 as appropriate. For detailed information and relevant certification for any specific project, please contact your local 3M specialist.
All technical data is based on a combination of relevant European test methods and/or US test methods. Before using this product the customer / applicator must ensure the product is suitable to be used for the intended purpose. If there is any uncertainty, please check with your local 3M Window Film specialist. All issues regarding warranty and liability for the product and the effect of its use are governed in accordance with the provisions of the appropriate contract of sale unless local laws dictate otherwise.

Renewable energy Division
Window Films
www.3M.com/windowfilms

Your local Window Film Dealer:

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3M ™ Safety & Security Film

ULTRA Neutral S50

- Reduces air conditioning costs.
- Savings on heating costs.
- Increases protection from flying or broken glass.
- Deters smash and grab burglaries.
- Helps preserve the appearance of furniture and fabrics.
- Has an abrasion resistant surface to maintain a good appearance for longer.
- Easy to remove without adhesive residues.

window films made by 3M

3M