## 3M ™ Safety & Security Film ULTRA S400

#### Description

3M™ Safety Film Ultra S400 is designed for use on the inside surface of windows. This film has a unique multilayer polyester construction. Ultra Safety Films are 32 times more resistant against tearing than other safety films of the same thickness. This results in a significant increase in the resistance against break-ins through the filmed glazing system. Additionally, 3M™ Safety Films reduce the amount of UV rays being transmitted, which are the main cause of fading.

**3M™ Safety Films** provide an effective protection against injuries to persons or damage to items caused by the fragments of broken glass. In the case of glass breakage, the fragments are held on the film by the strong acrylic adhesive system.

3M <sup>™</sup> Safety Film Ultra S 400 has been tested and approved according to EN 12600 (Pendulum test). It is classed as 2B2 on 4 and 6 mm float glass.

The 3M<sup>™</sup> Safety Film Ultra S 400 is approved for use in vehicles according to ABG No.D-5235 in Germany and CH-K01-06132 in Switzerland.

Features (on 6 mm clear glass)

Glare reduction: 2 % UV rays blocked: 98 % Fire classification according to ASTM E84, Class A

#### Film properties:

Thickness: 0.10 mm / 100 µm

Colour: Clear Material: Polyester

Adhesive: Pressure sensitive acrylic Top coating: Scratch resistant hard coat

### Installation

**3M Window films** are installed using a water and 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 products. Do not use rough sponges, cloths or brushes. Synthetic sponges, soft wipes or rubber squeegee cleaners are recommended.

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Glass type	Film Type	Visible Light Transmitted %	Visible Light Reflected interior %	Tensile Strength ASTM D882-95a	Elongation at break ASTM D882-95a	Break strength ASTM D882-95a	Puncture Propagation ASTM D2582-03	Tear Resistance ASTM D 1004-95a
Single Pane				N/ 25,4 mm	N/25,4 mm	N/25,4mm		
	No Film	89	9					
Clear	Ultra S400	86	11	206 N/mm²	140%	54 kg	3,4kg	>353 kg
Tinted	No Film	47	9					
	Ultra S400	47	6	206 N/mm²	140%	54 kg	3,4kg	>353 kg
Double Pane								
Clear	No Film	79	15					
	Ultra S400	75	18	206 N/mm²	140%	54 kg	3,4kg	>353 kg
Tinted	No Film	47	13					
	Ultra S400	42	8	206 N/mm²	140%	54 kg	3,4kg	>353 kg

General notes: 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:											



# 3M <sup>™</sup> Safety & Security Film ULTRA S400

- Increases protection from broken and flying glass.
- o Deters smash and grab burglaries.
- Reduces fading which is caused UV light.
- Helps preserve the appearance of furniture and fabrics.
- The abrasion resistant surface maintains a good looking appearance longer.



