



Exterior Safety Window Films

Safety S40 Exterior : Safety S70 Exterior

1. Product Description

3M™ Safety S40 exterior and Safety S70 exterior window films are transparent and weather stable polyester films with a durable scratch resistant surface and a strong acrylic adhesive.

2. Applications

3M™ Exterior Safety films are intended for exterior application on flat glass substrates.

3. Typical Properties

Technical information provided consists of typical product data and should not be used for specification purposes. Unless otherwise noted, all tests are performed at room temperature.

3M™ Safety S40 and S70 exterior have been tested and classified according to EN 12600 Pendulum impact resistance.

Product construction	
Material base	Transparent polyester
Adhesive	Pressure sensitive acrylic
Protective liner	Siliconized PET

Typical Performance Properties according to EN 410			
Film Type	Film Thickness	Visible Light Transmission (on 6mm clear glass)	UV Block (on 6mm clear glass)
	Micron (µm)	%	%
Safety S40 Ext	100	89	99.9
Safety S70 Ext	175	88	99.9

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Typical Performance Properties							
Film Type	Tensile Strength according to EN 527-2/1B/50		Elongation according to EN 527-2/1B/50		Tear resistance according to EN 34-1/B1		Abrasion resistance according to D1003 and ASTM D1044
	MPa	MPa	%	%	Nmm	Nmm	Delta Haze
	Machine direction	Transverse direction	Machine direction	Transverse direction	Machine direction	Transverse direction	%
Safety S40 Ext	135	170	165	125	155	150	<5
Safety S70 Ext	140	154	175	140	410	430	<5

4. User Information

4.1 Shelf Life & Storage (prior to application)

Shelf life is 5 years from the manufacturing date. Material should be stored in its original packaging, laying in a horizontal orientation, away from direct sunlight. Heavy objects should not be placed on top of it to avoid damaging the product. Recommended storage conditions are 21°C and 40 – 50% relative humidity. Avoid extreme temperature ranges in storage.

4.2 Application

Recommended substrate	Glass (as described in EN 15755-1)
Recommended surface	Flat to simple curved
Application method	Suitable for wet application or dry semi-automatic lamination
Application temperature	From + 8°C to +45°C
Application guidelines	Check weather forecast when planning the application. Do not install film during precipitation or if the exterior temperature will drop below 0°C within 15 days after installation
Service temperature	From - 40°C to +70°C
Edge sealing	Necessary on all edges
Drying time	Final adhesion is dependent on film thickness and prevailing drying conditions. Typical cure times for films > 100µm = 30 days Typical cure times for films >100µm < 200µm = 60 days Please refer to local instructions for details

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4.3 Maintenance and Cleaning

Use a cleaning agent designed for high quality glass surfaces. The cleaning agent must be wet and non-abrasive with a pH value between 6 and 8 (neither strongly acidic nor strongly alkaline).

5. Additional Information

To request additional product information see address below.

Important Notice

All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluates the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method or application.

Values presented have been determined by standard test methods and are average values not meant to be used for specification purposes.

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