

#### **Commercial Solutions Division**

# 3M<sup>™</sup> Exterior Safety Window Film Safety S40 Exterior

**Product Bulletin** 

# 1. Product Description

3M™ Exterior Safety Window Film Safety S40 Exterior is a transparent and weather stable polyester film with a durable scratch resistant surface and a strong acrylic adhesive.

## 2. Applications

3M™ Exterior Safety Window Film is intended for exterior application on flat glass substrates.

# 3. Typical Properties

Exterior Safety Window Film S40 Exterior has been tested and classified according to EN 12600 Pendulum impact resistance and EN 13501 Behaviour on exposure to fire in buildings.

These are indicative values for 3M™ Window Film products.

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 6 mm clear glass)	UV Block	
	Micron (μm)	%	%	
Safety S40 Ext	100	89	99.9	

Typical Performance Properties							
Film Type		th according to EN 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

The values above are the results of illustrative lab test measurements and shall not be considered as a commitment from 3M.

## 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.

The shelf life as defined above remains an indicative and maximum data, subject to many external and non-controllable factors. It may never be interpreted as warranty.

#### 4.2 Application

These are indicative values for 3M™ Window Film products.

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 during precipitation or if the exterior temperature should drop below 0°C within 15 days after installation.
Service temperature	From - 40°C to + 70°C
Edge sealing	Not necessary
Drying Time	Final adhesion is reached after approximately 30 days at +18°C and dry conditions. Please refer to local instructions for details

## 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. Remarks

This bulletin provides technical information only.

To request additional product information see address below.

# **Important Notice**

All questions of warranty and liability relating to this product are governed by the terms and conditions of the sale, subject, where applicable, to the prevailing law.

Before using, the user must determine the suitability of the product for its required or intended use, and the user assumes all risk and liability whatsoever in connection therewith.

Responsible for this technical bulletin:



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