



Be on the  
safe side



## 3M™ Safety and Security Window Film - Safety Exterior Product Family

- Spontaneous Glass Breakage anti-shatter and retention
- Impact protection against flying or broken glass
- Resistance against graffiti, vandalism, scratches and abrasions
- High performance durability and weatherability
- Clear film that blocks 99% of UV to reduce fading

# Safety Exterior Product Family

## Description

**3M™ Safety and Security Window Films** are composed of a transparent and weather stable polyester film, scratch resistant surface and a strong acrylic adhesive. The films high tensile strength and elongation at break increases resistance of the glazing system to impact and pressure. The films also significantly reduce the transmission of UVA and UVB rays which are the main cause of fading.

**3M™ Safety S40 Exterior** and **3M™ Safety S70 Exterior**, part of the Safety Series, are designed for use on the exterior surface of windows, but can also be used for interior applications. They provide effective protection from injuries to persons or damage to items caused by fragments of broken glass. In the case of glass breakage the fragments are held together by the strong acrylic adhesive.

In the case of Spontaneous Glass Breakage of toughened glass which can occur due to the expansion of nickel sulphide inclusions present in the glass, 3M's Safety Exterior Product Family provides protection to pedestrians by retaining the shattered glass in the frame (some situations may require frame attachment). Additionally, the films offer superior protection against vandalism on glass such as scratching and graffiti attacks.

**3M Safety Exterior** films are certified impact resistant according to EN 12600.

## Features (on 6 mm clear glass)

Visible Light Transmission	89%
UV rays blocked	99%

## Film properties

Colour	Clear
Material	Polyester
Adhesive	Pressure sensitive 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.

Film Type	Film Thickness	Visible Light Transmitted (on clear 6mm glass)	Tensile Strength and Elongation according to ISO EN 527-3/2/50		Tear Resistance according to ISO EN 34-1	Abrasion Resistance according to ASTM D1003 and ASTM D1044
			T&S @ Break DW (N/mm <sup>2</sup> )	Elongation @ Break DW (%)		
	Micron (µm)	(%)			Tear Resistance DW (N/mm)	Delta Haze (%)
<b>Safety S40 Exterior</b>	100	89	>100	>100	>7	<5
<b>Safety S70 Exterior</b>	175	89	>100	>100	>12	<5

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