

3M Science.
Applied to Life.™

Exterior Safety

Long-lasting protection you and your tenants can count on — 3M™ Safety & Security Window Film.

- ▶ Designed for both exterior and interior applications
- ▶ Exterior durability gives you an extended warranty from the most trusted global brand in window films
- ▶ Glass fragment retention film helps hold shattered glass together to protect people, property and possessions from:
 - Spontaneous glass breakage
 - Seismic events
 - Low-force glass impacts
- ▶ Can be combined with 3M™ Impact Protection Adhesive Attachment Systems for additional safety and security
- ▶ Helps extend the life of furnishings by significantly reducing harmful UV rays, the largest cause of fading

	S20X	S40X	S70X
Exterior Use	★★★★★	★★★★★	★★★★★
Spontaneous Glass Breakage	★★★★★	★★★★★	★★★★★
Seismic	★★★★	★★★★★	★★★★★
Safety Glazing	★★	★★	★★★
Anti-Graffiti	★	★★★	★★★★

Best ★★★★★
 Better ★★★★
 Good ★★★
 Fair ★★
 Not Recommended ★

In comparison to other 3M™ Safety Window Films.

Superior protection inside and out.



Valued Associations and Alliances:



CLINTON CLIMATE INITIATIVE





Exterior Safety and Security Window Film

- ▶ 3M's extensive weathering knowledge and technical innovations enable durable exterior safety films

Common Applications

- ▶ Tempered glass
- ▶ Curtain walls
- ▶ Balcony glass
- ▶ Glass railing systems, guards and balustrades
- ▶ Skylights
- ▶ Safety glazing



Seismic and Spontaneous Glass Breakage

- ▶ Help keep glass fragments from falling from your windows, protecting people and potentially reducing injuries on your property

Completed Testing

- ▶ ANSI Z97.1
- ▶ 16 CFR CPSC 1201
- ▶ EN 12600
- ▶ JIS A5759



Safety Glazing and Human Impact

- ▶ Upgrade your glass to meet safety glazing codes*
- ▶ Help protect occupants from broken glass hazards

Completed Testing

- ▶ ANSI Z97.1
- ▶ 16 CFR CPSC 1201
- ▶ EN 12600
- ▶ JIS A5759



Anti-Graffiti

- ▶ Protect your glass and your image from vandalism caused by scratching, gouging, tagging or acid etching
- ▶ Less costly and less disruptive than replacing new windows

Completed Testing

- ▶ ASTM G151
- ▶ ASTM D4830 (puncture strength)
- ▶ ASTM D1044 (abrasion resistance)
- ▶ ASTM D3330 (peel strength)

Film Properties — Nominal

Note: The following technical information and data are based upon 3M testing conditions and should not be used for specification purposes.

Film Type	Film Thickness	Construction	Tensile Strength	Break Strength	Elongation at Break	Peel Strength	Abrasion Resistance
Safety S20X	2 mil (0.05mm)	Single ply	25,000 psi (172 MPa)	50 lbs/in (223 N/25mm)	>88%	>4 lbs/in (18 N/25mm)	5%
Safety S40X	4 mil (0.1mm)	Single ply	25,000 psi (172 MPa)	100 lbs/in (445 N/25mm)	>115%	>5 lbs/in (22 N/25mm)	5%
Safety S70X	7 mil (0.18mm)	Single ply	25,000 psi (172 MPa)	178 lbs/in (792 N/25mm)	>150%	>5 lbs/in (22 N/25mm)	5%

*Building codes vary, please consult with 3M and your local code official.

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