



## SAFETY & SECURITY FILM

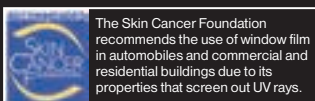
### S140 Safety Series

#### Product Features & Benefits:

- Mitigates hazards from shattered glass due to natural and human causes
- Increases security and provides added protection against smash and grab burglaries
- Helps provide protection to people and property from flying glass in natural disasters
- Increases anti-spall protection for laminated glass
- Can be combined with 3M™ IPA Systems for additional safety and security
- Helps extend the life of furnishings by significantly reducing harmful UV rays

#### Applications:

- Bomb Blast Mitigation
- Safety Glazing
- Helping to Deter Break & Entry
- Building Envelope Protection
- Spontaneous Glass Breakage
- Seismic Preparedness



## Product Specifications

Solar Heat Gain Coefficient	.78
Visible Light Transmitted	85%
Visible Light Reflected Interior	10%
Visible Light Reflected Exterior	10%
U Value	1.03

UV Block	99%
Total Solar Energy Rejected	22%
Glare Reduction	4%
Heat Loss Reduction	0%
Heat Gain Reduction	4%

## Film Properties

Film Thickness	14 mils
Film Construction	3 ply
<b>TENSILE PROPERTIES</b>	
Tensile Strength	25,000 psi
Break Strength	350 lbs/in
Elongation at Break	>125%
Peel Strength	>2 lbs/in (9 N/25mm)
Abrasion Resistance	<5% haze increase



**3M Authorized Dealer & Applicator**

**Willoughby:**

2174 Lost Nation Road  
Willoughby, Ohio 44094

**Independence:**

5005 Rockside Road, Suite 600  
Cleveland, Ohio 44131

**Toll Free: 800-295-8468**

[www.sunrayfilms.com](http://www.sunrayfilms.com)

Warranty and Limited Remedy: 3M warrants that each 3M product meets the applicable 3M product specifications at the time 3M ships the product. **3M MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES OR CONDITIONS, INCLUDING ANY IMPLIED WARRANTY OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If the 3M product does not conform to this warranty, the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price. **Limitation of Liability:** Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted.



Commercial Solutions Division  
3M Center, Building 220-12E-04  
St. Paul, MN 55144 USA  
[3M.com/windowfilm](http://3M.com/windowfilm)

