

# 3M™ Scotchshield™ Safety and Security Window Film

## Ultra S800

### Technical Data

#### Product Features & Benefits

- Micro-layered film for tear resistance
- Optically clear
- Applies to interior glass surfaces
- Helps protect from broken glass hazards
- Helps protect against damaging effects of UV light

#### Suggested Applications

- Bomb Blast Mitigation
- Deterring Break and Entry
- Windstorm Protection
- Safety Glazing
- Spontaneous Glass Breakage
- Seismic Preparedness

#### Performance Testing\*

Method	Glass Substrate	Film Attachment	Rating	
Safety Glazing / Impact Resistance				
16 CFR 1201	¼" & 1/8" annealed	--	Category 2, 400 ft-lbs	
ANSI Z97.1			Class A (Unlimited), 400 ft-lbs	
Windstorm Protection				
ASTM E330	3/16" tempered	IPA	+/- 100 psf	
Blast Mitigation			Blast Load	Rating
GSA TS01-2003 / ASTM F1642	¼" annealed	IPA	6 psi, 42 psi*msec	GSA Level 2 / ASTM "Minimal Hazard"
		IPP	7 psi, 42 psi*msec	GSA Level 2 / ASTM "Minimal Hazard"
	¼" tempered	IPA	6 psi, 42 psi*msec	GSA Level 2 / ASTM "No Hazard"
		IPP	7 psi, 42 psi*msec	GSA Level 2 / ASTM "Minimal Hazard"
	1" double pane (annealed)	IPA	10 psi, 80 psi*msec	GSA Level 2 / ASTM "No Hazard"
		IPP	9 psi, 60 psi*msec	GSA Level 2 / ASTM "Minimal Hazard"

#### Film Properties\* (nominal)

Film Thickness	8 mils
Film Construction	Micro-layered
<b>Tensile Properties (ASTM D882)</b>	
Tensile Strength	27,000 psi
Break Strength	215 lbs/in
Elongation at Break	95%
Yield Strength	15,000 psi
Elongation at Yield	8%
Modulus	575 kpsi

Graves Area Tear Resistance (ASTM D1004)	1,200 lbs%
Puncture-Propagation-Tear Resistance (ASTM D2582)	9.5 lbf
Puncture Strength (ASTM D4830)	185 lbf
Abrasion Resistance (ASTM D1044)	3%
Peel Strength (ASTM D3330)	6.1 lb/in
Flammability (ASTM E84)	Class A
<b>Solar Properties – film applied to ¼" clear glass</b>	
Visible Light Transmitted	87%
UV Light Rejected	99.9%

\*not for specification purposes

#### Important:

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