

3M™ Scotchshield™ Safety and Security Window Film

Ultra S800

Technical Data

Product Features & Benefits

- Micro-layered film designed 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
- 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	
Missile Impact and Pressure Cycling				
ASTMs E1886 / E1996	¼" tempered	IPA	Large Missile C, +/- 75 psf	
ASTM E330	3/16" tempered		+/- 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
Tensile Properties (ASTM D882)	
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% Δ haze
Peel Strength (ASTM D3330)	6.1 lb/in
Flammability (ASTM E84)	Class A
Solar Properties – film applied to ¼" clear glass	
Visible Light Transmitted	87%
UV Light Rejected	99.9%

*not for specification purposes

Important:

This product is not approved in the State of Florida for use as hurricane, windstorm, or impact protection from wind-borne debris from a hurricane or windstorm. In compliance with Florida Statute 553.842, this product may not be advertised, sold, offered, provided, distributed, or marketed in the State of Florida as hurricane, windstorm, or impact protection from wind-borne debris from a hurricane or windstorm.

The information provided in this report is believed to be reliable; however, due to the wide variety of intervening factors, 3M does not warrant that the results will necessarily be obtained. All details concerning product specifications and terms of sale are available from 3M.



Renewable Energy Division

St. Paul, MN 55144-1000
1-866-499-8857

www.3M.com/windowfilm

3M is a trademark of 3M Company.
© 3M 2015. All rights reserved.