

3M™ Scotchshield™ Safety & Security Window Film Ultra Series.

- Micro-layered film designed for tear resistance and glass fragment retention
- ▶ Optically clear
- For application only to interior glass surfaces of windows and doors
- ► Engineered to help hold broken glass in place
- Helps prevent flying glass shards from harming occupants and damaging property
- ▶ Blocks up to 99% of the sun's harmful UV rays, the largest single cause of fading
- Product must be installed with the 3M[™] Impact Protection Attachment (IPA) Sealant for all windstorm, break & entry, and explosion mitigation applications and for all spontaneous glass breakage applications on single pane tempered glass. (The product is <u>not</u> bulletproof and is <u>not</u> designed to stop intruders)
- ► Comprehensive warranty from 3M

Blast Mitigation	****			
Break and Entry	****			
Safety Glazing	****			
Saismic	****			

Best ★★★★ Better ★★★ Good ★★ Fair ★★

Ratings in comparison to other $3M^{\sim}$ Safety & Security Window Films

Ultra S800







Blast Mitigation

 Helps protect people from the risk of flying glass shards, one of the most common causes of blast-related injuries and fatalities

Performance Testing

- ► ASTM F1642
- ► GSA TS01-2003
- ▶ ISO 16933



Safety Glazing

- ► Can be used in certain instances to help upgrade facilities to building codes
- Help prevent flying shards of glass from harming building occupants or damaging property

Performance Testing

- ► ANSI Z97.1
- ► EN 12600



Break and Entry

 Can help delay intruders and help provide extra response time by slowing the intruder down

Performance Testing

3M proprietary tests



Seismic and Spontaneous Glass Breakage

 Help retain the broken glass within the frame and help prevent glass fragments from falling from windows, balconies and guardrails

Performance Testing

- ► ASTM E 1886
- ► ANSI Z97.1

Film Properties (nominal) — not for specification purposes

Film Type	Film Thickness	Construction	Graves Tear Resistance	Tensile Strength	Break Strength	Elongation at Break	Peel Strength	Abrasion Resistance
Ultra S800	8 mil (0.20mm)	Micro-layered	1,075 lbs%	31,500 psi (220 MPa)	253 lbs/in (934 N / 25mm)	135%	> 6 lbs/in (27 N / 25mm)	<3%

IMPORTANT PRODUCT AND APPLICATION LIMITATIONS: Many factors can contribute to potential hazards and damages arising from wind, impact, seismic, explosion, or break and entry incidents, including the window film selected, type and thickness of glass, building construction, exterior pressure, proximity of impact occurrence, quality of window or door frames, intruder size and strength, and type of tools used to gain entry. Certain 3M™ Window Films require the use of 3M™ Impact Protection Attachment (IPA) Sealant on glass window and door frames for windstorm, break & entry, and explosion mitigation applications and for spontaneous glass breakage applications on single pane tempered glass. The sealant may also be recommended for certain other spontaneous glass breakage, safety glazing, and seismic applications. Always refer to the 3M Technical Data Sheets and 3M Technical Specifications to determine whether these combinations are required. CAUTION: Whindow Films, when applied in accordance with 3M instructions, may help reduce the impact of flying glass shards under certain conditions and potentially delay intruders, these films do not prevent property damage, personal injury, or death. CAUTION: Window films are not bulletproof and not designed to stop intruders. Always consult with security professionals and a 3M Authorized Window Film Dealer prior to selecting any window films to determine suitability for the intended application.

IMPORTANT STATE OF FLORIDA NOTICE: 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, solid, 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.

Warranty, Limited Remedy, and Disclaimer: Please refer to the Warranty Bulletin for 3M™ Window Films (Flat Glass Applications) and 3M™ Impact Protection Attachment (IPA) Sealant for complete details on warranty coverage, which can be obtained by contacting your 3M Authorized Window Film Dealer or your local 3M sales representative. If a 3M product does not conform to the warranties described in this Warranty Bulletin, the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price. Except to the extent prohibited by law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.

