

# Get ultimate tear-resistant protection with enhanced views at night with 3M™ Scotchshield™ Safety & Security Window Film Ultra Series.

- Combines the safety and security benefits of 3M<sup>™</sup> Scotchshield<sup>™</sup> Safety & Security Window Film with the sun control benefits of 3M<sup>™</sup> Sun Control Night Vision<sup>™</sup> Series
- Micro-layered film designed for tear-resistance and enhanced protection of people, property and possessions
- ► Helps to increase security and provide added protection against smash-and-grab burglaries
- ► Great heat rejection helps generate energy savings and improved comfort
- Enhanced views with low interior reflectivity, especially at night
- ▶ Helps reduce glare and eye discomfort
- Can be combined with 3M<sup>™</sup> Impact Protection attachment systems for additional safety and security
- Helps extend the life of furnishings by significantly reducing harmful UV rays, the largest cause of fading
- Comprehensive warranty from 3M

Ultimate	protection
and enha	nced views.

Break and Entry	****
Safety Glazing	****
Seismic	****
Blast Mitigation	****
Energy Savings	***
Heat Rejection	***
Glare Reduction	***
Interior Visible Reflection	****

Best ★★★★
Better ★★★
Good ★★
Fair ★★

Not Recommended ★

In comparison to other  $3M^{\text{\tiny M}}$  Safety & Security Window Films.



















### **Break and Entry**

- Provides precious time by helping to deter unwanted individuals from entering your building or home
- Protect occupants and assets

#### Completed Testing — Ultra S600

- ► EN 356
- Forced entry demonstration at third-party test facility



## 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 ► EN 12600
- ▶ 16 CFR CPSC 1201



# Bomb Blast and Explosion Protection

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

#### **Completed Testing**

- ► ASTM F1642
- ▶ GSA TS01-2003

#### **Product Performance and Technical Data**

		Visible Light			Total	Solar Heat Gain	U Value					Visible Light
Glass Type (All 1/4")	Film Type	Reflected (Interior)	Reflected (Exterior)	Transmitted	Solar Energy Rejected	Coefficient (G Value)	btu/ hft²F	w/ m²K	Solar Heat Reduction	UV Light Rejected	Glare Reduction	to Solar Heat Gain Ratio
<u>L</u> Clear	Ultra NV S25	7%	19%	24%	60%	0.40	1.02	5.8	51%	99.9%	73%	0.6
Zinted	Ultra NV S25	7%	10%	15%	62%	0.38	1.02	5.8	40%	99.9%	73%	0.4
Double Clear	Ultra NV S25	8%	24%	22%	50%	0.50	0.47	2.7	28%	99.9%	73%	0.4
Double Tinted	Ultra NV S25	8%	11%	13%	62%	0.38	0.47	2.7	24%	99.9%	73%	0.3

# 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	Tear Resistance	Tensile Strength	Break Strength	Elongation at Break	Peel Strength	Abrasion Resistance
Ultra Night Vision S25	8 mil (0.22mm)	Micro-layered	1,100 lbs%	27,000 psi (186 MPa)	215 lbs/in (956 N/25mm)	95%	>4 lbs/in (18 N/25mm)	3% Δ Haze

<sup>3</sup>M products are tested to multiple industry standards. Glazing systems vary. Contact 3M for more information.

Warranty, Limited Remedy and Disclaimer: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. User is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application. Unless an additional warranty specification the applicable 3M product packaging or product iterature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. If the 3M product does not conform to this warranty, then 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, including warranty, contract, negligence or strict liability.



<sup>\*</sup>Building codes vary, please consult with 3M and your local code official.