



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™ Scotchshield™ Safety & Security Window Film with the sun control benefits of 3M™ Sun Control Night Vision™ 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™ 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

| | |
|-----------------------------|-------|
| 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™ Safety & Security Window Films.

Ultimate protection and enhanced views.





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 TSO1-2003

Product Performance and Technical Data

| Glass Type (All 1/4") | Film Type | Visible Light | | | Total Solar Energy Rejected | Solar Heat Gain Coefficient (G Value) | U Value | | Solar Heat Reduction | UV Light Rejected | Glare Reduction | Visible Light to Solar Heat Gain Ratio |
|--------------------------|--------------|-------------------------|-------------------------|-------------|-----------------------------------|--|----------------------------|------------------------|-------------------------|----------------------|--------------------|--|
| | | Reflected (Interior) | Reflected (Exterior) | Transmitted | | | btu/ hft ² F | w/ m ² K | | | | |
| Clear | Ultra NV S25 | 7% | 19% | 24% | 60% | 0.40 | 1.02 | 5.8 | 51% | 99.9% | 73% | 0.6 |
| Tinted | 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 |

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

*Building codes vary, please consult with 3M and your local code official.

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 is specifically stated on the applicable 3M product packaging or product literature, 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.

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