

Excellent tear-resistant protection and superior solar control with 3M[™] Scotchshield[™] Safety & Security Window Film Ultra Prestige Series.

- Combines the benefits of 3M[™] Ultra Series with the benefits of 3M[™] Prestige Series Window Film
- Tear resistant glass fragment retention film for increased protection of people, property and possessions
- ► Can be combined with 3M[™] Impact Protection Attachment System for additional safety and security
- High visual light transmission providing excellent aesthetics
- Up to 97% infrared rejection providing energy savings and enhanced comfort*
- Low interior and exterior reflectivity enhances views while maintaining exterior appearance
- Helps extend the life of furnishings by significantly reducing harmful UV rays, the largest cause of fading
- Comprehensive warranty from 3M

*IR Rejection as measured from 900–1000nm

Ultimate protection and clarity.

| Break and Entry | **** |
|----------------------------|------|
| Safety Glazing | **** |
| Seismic | **** |
| Blast Mitigation | **** |
| Visible Light Transmission | **** |
| Low Reflection | **** |
| Infrared Rejection | **** |
| | |

Best ★★★★ Better ★★★ Good ★★ Fair ★★ Not Recommended ★ In comparison to other 3M[™] Safety & Security Window Films



Valued Associations and Alliances:







INTERNATIONAL WINDOW FILM ASSOCIATION.







Break and Entry

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

Completed Testing — Ultra S600

- EN 356
- Independently evaluated, contact 3M for details



Safety Glazing and Human Impact

- Upgrade your glass to meet safety glazing codes*
- Help protect your 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 Va | alue | | | | 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 |
| μ ⁴ . | Ultra PR S70 | 9% | 10% | 68% | 50% | 0.51 | 1.02 | 5.8 | 38% | 99.9% | 23% | 1.4 |
| لك Clear | Ultra PR S50 | 7% | 9% | 48% | 56% | 0.44 | 1.02 | 5.8 | 46% | 99.9% | 46% | 1.1 |
| | Ultra PR S70 | 8% | 6% | 41% | 56% | 0.44 | 1.02 | 5.8 | 30% | 99.9% | 23% | 0.9 |
| Tinted | Ultra PR S50 | 7% | 6% | 29% | 60% | 0.40 | 1.02 | 5.8 | 37% | 99.9% | 45% | 0.7 |
| Ĺ | Ultra PR S70 | 13% | 16% | 61% | 44% | 0.56 | 0.47 | 2.7 | 20% | 99.9% | 23% | 1.1 |
| Double Clear | Ultra PR S50 | 9% | 15% | 43% | 47% | 0.53 | 0.47 | 2.7 | 25% | 99.9% | 46% | 0.8 |
| <u> </u> | Ultra PR S70 | 12% | 9% | 37% | 58% | 0.42 | 0.47 | 2.7 | 17% | 99.9% | 23% | 0.9 |
| Double Tinted | Ultra PR S50 | 9% | 9% | 26% | 60% | 0.40 | 0.47 | 2.7 | 21% | 99.9% | 46% | 0.6 |

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.

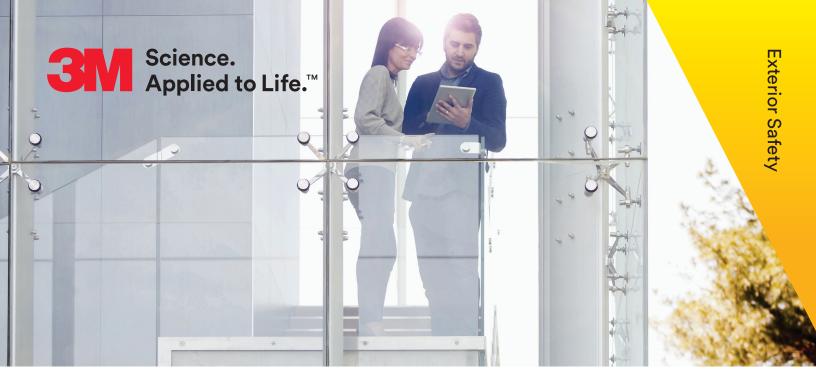
Film Properties (nominal)

Note: The following technical information and data are based upon limited 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 Prestige | 8 mil (0.22 mm) | Micro-layered | 1,100 lbs% | 27,000 psi (186 MPa) | 215 lbs/in (956 N/25mm) | 120% | > 4 lbs/in (18 N/25mm) | <3% ∆ Haze |

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.

3M



Long-lasting protection you and your tenants can count on — 3M[™] Safety & Security Window Film.

- Designed for both exterior and interior applications
- Exterior durability gives you an extended warranty from the most trusted global brand in window films
- Glass fragment retention film helps hold shattered glass together to protect people, property and possessions from:
 - Spontaneous glass breakage
 - Seismic events
 - Low-force glass impacts
- ► Can be combined with 3M[™] Impact Protection Adhesive Attachment Systems for additional safety and security
- Helps extend the life of furnishings by significantly reducing harmful UV rays, the largest cause of fading

| Superior protection |
|----------------------------|
| inside and out. |

| | S20X | S40X | \$70X |
|-------------------------------|------|------|-------|
| Exterior Use | **** | **** | **** |
| Spontaneous Glass Breakage | **** | **** | **** |
| Seismic | **** | **** | **** |
| Safety Glazing | ** | ** | *** |
| Anti-Graffiti | * | *** | **** |

Best ★★★★ Better ★★★★ Good ★★★ Fair ★★

Not Recommended 📩

In comparison to other 3M[™] Safety Window Films.

























Exterior Safety and Security Window Film

 3M's extensive weathering knowledge and technical innovations enable durable exterior safety films

Seismic and Spontaneous Glass Breakage

 Help keep glass fragments from falling from your windows, protecting people and potentially reducing injuries on your property

Safety Glazing and Human Impact

- Upgrade your glass to meet safety glazing codes*
- Help protect occupants from broken glass hazards

Anti-Graffiti

- Protect your glass and your image from vandalism caused by scratching, gouging, tagging or acid etching
- Less costly and less disruptive than replacing new windows

Common Applications

- Tempered glass
- Curtain walls
- Balcony glass
- Glass railing systems, guards and balustrades
- Skylights
- Safety glazing

Completed Testing

- ANSI Z97.1
- 16 CFR CPSC 1201
- EN 12600
- ▶ JIS A5759

Completed Testing

- ANSI Z97.1
- 16 CFR CPSC 1201
- EN 12600
- JIS A5759

Completed Testing

- ASTM G151
- ASTM D4830 (puncture strength)
- ASTM D1044 (abrasion resistance)
- ASTM D3330 (peel strength)

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 | Tensile Strength | Break Strength | Elongation at Break | Peel Strength | Abrasion Resistance |
|-------------|----------------|--------------|----------------------|-------------------------|------------------------|-----------------------|------------------------|
| Safety S40X | 4 mil (0.1mm) | Single ply | 25,000 psi (172 MPa) | 100 lbs/in (445 N/25mm) | >115% | >5 lbs/in (22 N/25mm) | 5% |
| Safety S70X | 7 mil (0.18mm) | Single ply | 25,000 psi (172 MPa) | 178 lbs/in (792 N/25mm) | >150% | >5 lbs/in (22 N/25mm) | 5% |

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

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Protect tenants and your property even on a budget with 3M[™] Safety & Security Window Film.

- Mitigates hazards from shattered glass due to natural and human causes
- Increases security and provides added protection against smash and grab burglaries
- Helps provide protection to people and property from flying glass in natural disasters
- Increases anti-spall protection for laminated glass
- 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

| S40 | S70 | S80 | S140 |
|------|-----------------------|--|--|
| * | *** | *** | **** |
| *** | **** | ****1 | ***** |
| **** | **** | **** | **** |
| * | **** | **** | **** |
| ** | *** | *** | ***1 |
| | * *** **** * | * *** *** *** **** **** * *** | * *** *** *** **** **** *** **** |

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INTERNATIONAL WINDOW FILM ASSOCIATION,









Break and Entry

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

Safety Glazing and Human Impact

- Upgrade your glass to meet safety glazing codes*
- Help protect your occupants from broken glass hazards

Seismic and Spontaneous Glass Breakage

 Glass fragment retention film for increased protection for people, property and possessions

Completed Testing

- EN 356
- ▶ UL 972
- ULC 332

Completed Testing

- ANSI Z97.1
- 16 CFR CPSC 1201
- EN 12600

Completed Testing

- ANSI Z97.1
- ▶ 16 CFR CPSC 1201
- EN 12600



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
- ▶ ISO 16933

Film Properties (nominal) — not for specification purposes

| Film Type | Film Thickness | Construction | Tensile Strength | Break Strength | Elongation at Break | Peel Strength | Abrasion Resistance |
|-------------|-----------------|--------------|----------------------|-----------------------------|------------------------|--------------------------|------------------------|
| Safety S40 | 4 mil (0.10mm) | Single ply | 25,000 psi (172 MPa) | 100 lbs/in (445 N / 25mm) | >125% | > 4 lbs/in (18 N / 25mm) | <5% |
| Safety S70 | 7 mil (0.18mm) | Single ply | 25,000 psi (172 MPa) | 175 lbs/in (778 N / 25mm) | >125% | > 5 lbs/in (22 N / 25mm) | <5% |
| Safety S80 | 8 mil (0.20mm) | 2-ply | 25,000 psi (172 MPa) | 200 lbs/in (890 N / 25mm) | >125% | > 2 lbs/in (9 N / 25mm) | <5% |
| Safety S140 | 14 mil (0.36mm) | 3-ply | 25,000 psi (172 MPa) | 350 lbs/in (1,557 N / 25mm) | >125% | > 2 lbs/in (9 N / 25mm) | <5% |

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