



Protecting People and Property

Safety Series



Break and Entry



Seismic



Windstorm

Benefits

- Mitigates hazards from shattered glass due to natural and human causes
- Increases security and provides added protection against smash and grab burglaries
- Provides protection to people and property from flying glass in windstorms and seismic activity
- 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
Break and Entry	NR	★★	★★	★★★★★
Safety Glazing	★★	★★★	★★★★	★★★★
Seismic	★★★	★★★★★	★★★★★	★★★★★
Windstorm	NR	NR	NR	★★★
Blast Mitigation	NR	★★★	★★★★	★★★★
Anti-Graffiti	★	★★	★★	★★

- ★★★★ Best (preferred product for this application)
- ★★★ Better (suitable for this application)
- ★★ Good (some limited benefits in this application)
- ★ Fair (other products more suitable for this application)
- NR (Not recommended)

Valued Associations & Alliances





Break and Entry

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

Completed testing

- EN 356
- UL 972
- ULC 332



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
- 16 CFR CPSC 1201
- EN 12600



Windstorm and Debris Protection

- Help reduce damage by water or debris, even if the window is broken
- Protect occupants, assets and maintain continuity of operations

Completed testing

- ASTM E1886
- ASTM E1996



Seismic and Spontaneous Glass Breakage

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

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%	> 5 lbs/in (22 N / 25mm)	<5%
Safety S70	7 mil (0.18mm)	Single ply	25,000 psi (172 MPa)	175 lbs/in (778 N / 25mm)	>125%	> 6 lbs/in (27 N / 25mm)	<5%
Safety S80	8 mil (0.20mm)	2-ply	25,000 psi (172 MPa)	200 lbs/in (890 N / 25mm)	>125%	> 4 lbs/in (18 N / 25mm)	<5%
Safety S140	14 mil (0.36mm)	3-ply	25,000 psi (172 MPa)	350 lbs/in (1,557 N / 25mm)	>125%	> 6 lbs/in (27 N / 25mm)	<5%

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