

# 3M™ Safety & Security Window Film





## Ultra S600

### Technical Data

#### Product Features & Benefits

- Premium tear resistant safety and security window film utilizing microlayered film technology
- Optically clear, 6-mil (0.15 mm) thick film for application to interior glass surface
- Provides shatter resistance to protect from broken glass hazards caused by seismic activity, spontaneous glass breakage, and other impact events
- Broad range of application use, including bomb blast mitigation, windstorm protection, safety glazing, and deterring smash & grab attempts and break & entry events
- Can be combined with 3M Impact Protection Attachment systems for additional safety and security
- Exhibits strong adhesion to glass and shock absorbing properties
- Protective hardcoat provides scratch resistance and durability
- Protects from the harmful effects of UV light and reduces fading of interior furnishings

#### Product Performance & Technical Data

Ultra S600								
	Single Pane		Tinted		Double Pane		Double tinted	
Film	1/4" Clear	Ultra S600	1/4" tint	Ultra S600	Dual 1/4" Clear	Ultra S600	Dual 1/4" tint	Ultra S600
Solar Heat Gain Coefficient	0.82	0.78	0.63	0.59	0.70	0.68	0.51	0.46
Visible Light Transmitted	89%	84%	53%	47%	79%	73%	47%	41%
Visible Light Reflected Interior	9%	10%	6%	6%	15%	18%	13%	8%
Visible Light Reflected Exterior	8%	10%	6%	6%	15%	18%	8%	8%
U Value	1.03	1.03	1.03	1.03	0.47	0.47	0.47	0.47
UV Block	38%	99%	NA	99%	NA	99%	NA	99%
Total Solar Energy Rejected	19%	22%	37%	41%	30%	32%	49%	54%
Glare Reduction	NA	5%	NA	11%	NA	8%	NA	13%
Heat Loss Reduction	NA	0%	NA	0%	NA	0%	NA	0%
Solar Heat Reduction	NA	4%	NA	6%	NA	3%	NA	9%

#### Film Properties\* (nominal)

Product	Film Thickness	Number of Layers	Tensile Strength	Break Strength	Elongation at Break	Graves Area Tear Resistance	Puncture Propagation Tear Resistance	Young's Modulus	Abrasion Resistance
Ultra S600	0.006"	42	30,000 psi	180 lbs/in	>125 %	1,150 lbs%	19.2 lbf	<500 kpsi	< 5% haze increase

\*not for specification purposes

#### Important:

The information provided in this report is believed to be reliable; however, due to the wide variety of intervening factors, 3M does not warrant that the results will necessarily be obtained. All details concerning product specifications and terms of sale are available from 3M.

