

# MADICO® SAFETYSHIELD® 800

## Test Data:

### Impact

ANSI Z-97.1 . . . . . Unlimited  
CPSC 16 CFR Part 1201 . . . . . Category II

### Hurricane

ASTM E-1886/E-1996 Large Missile Impact  
Category B

**Wind Storm** . . . . . +/-100 psf  
*Tested on 3/16" tempered patio door with silicone wet glaze attachment to ASTM E-1886/E-1996.*

### Blast Mitigation

*Attachment System* . . . . . *GSA Performance Condition*  
4 Side FrameGard® . . . . . .2\*  
2 Side FrameGard . . . . . .2  
4 Side Structural Silicone Bead . . . . . 3A  
Day Light (No Attachment) . . . . . .3B  
*Subjected to GSA category C blast loads, 4psi 30psi/ms minimum on 1/4" annealed glass. By ABS/EQE International and Grendon Design Agency.*

*\*SafetyShield 800 with 4 side FrameGard received a GSA Category 2 when subjected to 9.19 PSI and 64.53 PSI/ms, and a Category 3B when subjected to 12.78 PSI and 78.79 PSI/ms blast loads. These loads far surpass the GSA criteria of 4 PSI and 28 PSI/ms.*

### Accelerated Weathering

Miami/Dade Criteria, 4500 hours  
Xenon Arc Per: ASTM G26-95 . . . . . Pass

### Puncture Strength

ASTM D-4830-88 . . . . . 129 lbs.

### Tear Strength

ASTM D-1004 . . . . . >18 lbf.  
ASTM D-2582 . . . . . 33.016 Average Tear Force (Newtons)

### Surface Burn Characteristics: ASTM E-84

Flame Spread Index . . . . . "A" Rating  
Smoke Developed Index . . . . . "A" Rating

### Ignition Properties: ASTM-D-1926-96

Flash Ignition Temp. . . . . .760°F  
Self-Ignition Temp. . . . . .880°F

## Properties:

### Optical Properties

#### Total Solar Energy

Transmitted . . . . .83%  
Reflected . . . . . 9%  
Absorbed . . . . . 8%

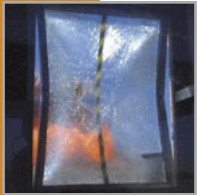
#### Visible Light

Transmitted . . . . .88%  
Reflected Interior . . . . .10%  
Reflected Exterior . . . . .10%

"U" Factor . . . . .1.10  
Ultraviolet Light Rejected . . . . .99%  
Shading Coefficient . . . . .0.97  
Solar Heat Gain Coefficient . . . . .0.84  
Total Solar Energy Rejected . . . . .15%

### Physical Properties

Structural Component . . . . . .0.008"  
Film Thickness . . . . . .0.095"  
Structure . . . . . Multiply Laminate  
Tensile Strength . . . . . 32,000 PSI Average MD/TD  
Break Strength . . . . . 240 lbs./inch (Width) Avg.  
Adhesive Type . . . . . Acrylic Pressure Sensitive  
Peel Strength . . . . . 5 to 6 lbs./inch



**Top:** A category C blast load, 4psi 30psi/ms is detonated.

**Middle:** Shock wave breaking untreated window. Glass fragments are blown into the building creating a deadly hazard.

**Bottom:** Shock wave hitting treated window with SafetyShield 800 and four-sided FrameGard attachment system. Performs to GSA conditions 2.



ISO 9001: 2000 Certified

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WHEREVER THERE IS GLASS, WE CAN *improve* IT.