INVISICADE
TRANSPARENT GLAZING SOLUTIONS

SHOOTER ATTACK
THIRD PARTY LAB TESTED
ASTM-F3561
LEVEL ONE PASSED

PRODUCT TECHNICAL SPECIFICATIONS

Crisis Shield CS-650

DESCRIPTION:

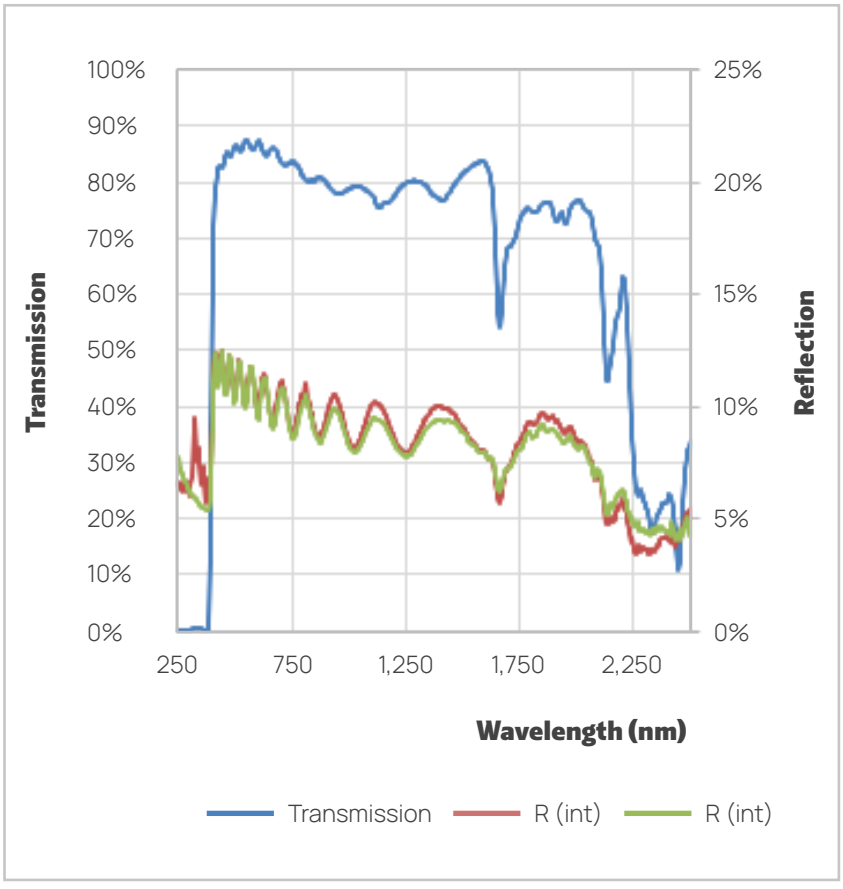
Premium safety window film for the Architectural segment. Multilayer structure based on ultra-clear PET, UV enhanced PSA layers - all laminated in a unique design set for advanced safety & security protection.

APPLICATION:

The product could be either retrofitted or dry laminated on glass.

OPTICAL & SOLAR PRODUCT SPECIFICATIONS[1] :

PROPERTY	VALUE
Visible Light Transmitted	86%
Visible Light Reflected (int)	11%
Visible Light Reflected (ext)	11%
UV Rejection	>99%
Total Solar Energy Transmitted	78%
Total Solar Energy Reflected	10%
Total Solar Energy Absorbed	12%
Shading Coefficient	0.93
Solar Heat Gain Coefficient	0.80
Total Solar Energy Rejected	20%
Glare Reduction	4%
U-Factor	Est. 1/2025
Emissivity	Est. 1/2025
Light to Solar Gain	Est. 1/2025



[1] Optical and Solar results are performed on 1/8" clear glass and simulated using LBNL software (Optics and WINDOW 5.2) according to NFRC methodology

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PHYSICAL PROPERTIES[2] :

PROPERTY	TEST METHOD	VALUE
Overall Product thickness [3]	Mahr Millimar Direct Measure	650 µm
Haze	ASTM D1003	< 4%
Tensile Strength @ Break (TD)	ASTM D882	32,000 psi
Break Strength (TD)	ASTM D882	655 lb/in
Elongation at Break (TD)	ASTM D882	90
Surface Burning Characteristics	ASTM E84	Est. 2/2025
Puncture Strength	ASTM D4830	Est. 2/2025
Tear Resistance	ASTM D1004	Est. 2/2025
Peel Strength	ASTM D3330	Est. 2/2025

INDEPENDENT LAB TESTING RESULTS[4] :

PROPERTY	STANDARD	DESCRIPTION	RESULT	LAB
Blast and Overpressure	ASTM F1642	Standard Test Method for Glazing and Glazing Systems Subject to Airblast Loadings	Est. 3/2025	
Blast and Overpressure	GSA-TS01	US General Services Administration Standard Test Method for Glazing and Window Systems Subject to Dynamic Overpressure Loadings	Est. 3/2025	
Forced Entry	ASTM F3561	Simulated Active Shooter Atack and Forced Entry Resistance	**PASS** Level 1	Intertek
Forced Entry	UL 972	Burglary Resisting Glazing Material	Est. 3/2025	
Glass Safety	ANSI Z97.1	Safety Glazing Material Used in Buildings	Est. 2/2025	
Glass Safety	CAN/CGSB 12.1	Safety Glazing	Est. 2/2025	
Glass Safety	CPSC 16 CFR 1201	Safety Standard for Architectural Glazing Materials	Est. 2/2025	

[2] Physical properties are not tested on any substrate
[3] Overall thickness includes 25 µm installation liner
[4] Independent Lab Testing is performed on ¼" tempered glass since it is the most likely substrate to be encountered in safety, security, storm and debris and forced entry applications.

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PROPERTY	STANDARD	DESCRIPTION	RESULT
Storm and Debris	ASTM E1886 ASTM E1996	Standard Test Method for Performance of Exterior Windows, Curtain Walls, Doors, and Impact Protective Systems Impacted by Missile(s) and Exposed to Cyclic Pressure Differentials Standard Specification for Performance of Exterior Windows, Curtain Walls, Doors, and Impact Protective Systems Impacted by Windborne Debris in Hurricanes	Est. 3/2025
Storm and Debris	ASTM E283	Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen	Est. 3/2025
Storm and Debris	ASTM E330	Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference	Est. 3/2025
Storm and Debris	ASTM E331	Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure Difference	Est. 3/2025
Storm and Debris	TAS 201 TAS 202 TAS 203	Impact Test Procedures Criteria for Testing Impact & Non-impact Resistant Building Envelope Components Using Uniform Static Air Pressure Criteria for Testing Products Subject to Cyclic Wind Pressure	Est. 3/2025

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