

Reliable Testing for Quality and Performance

These guidelines aim to outline the industry-standard tests conducted for the SDX3™ Smart Glass product lines. The tests are categorized into five specific groups: (1) Durability & Reliability, (2) Optical Metrology, (3) Safety & Impact, (4) Acoustic, and (5) Electronics.

For detailed specification assistance regarding this product applications, please contact Steve Spangler at steve@skyline.glass. You may also reach out to our office at sales@skyline.glass for further support.

Subject 1 — Durability & Reliability

Standard Description	Test Method / Standard
Concentrated Irradiance	ASTM-D-4364
Thermal/Humidity	IEC 61215-1:2016
Frost Point	ASTM-E-546
Thermal Cycling	ASTM-E-2188
Fogging resistance	ASTM-E-2189
IG Evaluation	ASTM-E-2190

Subject 2 — Optical Metrology

Standard Description	Test Method / Standard
Color	ASTM-D-2244
Haze	ASTM-D-1003

Subject 3 — Safety & Impact

Standard Description	Test Method / Standard
Safety Glazings Used in Buildings	ANSI-z97.1
Missile Impact*	ASTM-E-1886
Windborne Debris*	ASTM-E-1996
Uniform Static Air Pressure Difference	ASTM-E-330
Cyclic Air Pressure Differential	ASTM-E-1233
Security Glazing Materials**	ASTM – F -1233
Human Impact of Window Systems Intended for Use in Behavioral Care Applications **	AAMA 501.8

Subject 4 — Acoustic

Standard Description	Test Method / Standard
Windborne Debris*	ASTM-E-1996
Uniform Static Air Pressure Difference	ASTM-E-330

Subject 5 — Electronics

Standard Description	Test Method / Standard
Radiated emissions (Residential)	FCC Part 15 subpart Class B
Conducted emissions (Residential)	FCC Part 15 subpart Class B
Radiated emissions (Commercial)	FCC Part 15 subpart Class A
Conducted emissions (Commercial)	FCC Part 15 subpart Class A
Household and Commercial Furnishings	UL 962
Safety Automatic Electrical Controls	UL 60730-1
Radiated emissions (Residential)	FCC Part 15 subpart Class B
Conducted emissions (Residential)	FCC Part 15 subpart Class B

Notes:

*: 12.4A SDX3™ Smart Glass: 3.1 mm CLR / .030" PVB 1 + .030" PVB2 / 4.0 A CLIC / .030" PVB 1 / 3.1 A Clear

** : 17.7T SDX3™ Smart Glass: 5.7mm CLR tempered / 0.090" PVB / 4.0 A CLIC / 0.090" PVB / 5.7mm CLR tempered

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