



Product Name	FSG Sunextra (Anti-reflective Coating on FSG Suntex &FSG Sunlite)	
Process	Single Side Process	
Coating Material	Main material: porous SiO ₂ , solvent and aditive resolved under high temperature during tempering process, free of ROHS and SVHC substance	
Glass Properties		
Glass Quality	According to Solar Glass FSG Suntex & Sunlite	
Size & thickness tolerance	According to Solar Glass FSG Suntex& Sunlite	
Processing Quality	According to Solar Glass FSG Suntex& Sunlite	
Glass additive agent and iron	According to Solar Glass FSG Suntex& Sunlite	
Solar Energy Transmittance T_E % (380-1100nm) Measurement by UV-Vis-Spectrometer (acc. ISO 9050:2003)	3.2mm	> 93.5% 94% preferred
	4.0mm	> 93.4% 94% preferred
Coating Properties		
Cosmetics: Test criteria (EN 572-5; 1994 / 5.1.1.1): Viewing distance 1,5 m vertical to the sheet parallel to a matt grey sheet at a distance of 3m in diffuse daylight	Color Variations: the nonuniformity color of whole surface caused by the uneven coating liquid.	
	Distance from edge ≤ 12mm	allowed
	Distance from edge > 12mm	not allowed
	Color Spot: the nonuniformity color of local (partial) surface caused by the uneven coating liquid.	
	Spot Diameter ≤ 10mm	5/sqm
	Spot Diameter > 10mm	0
	Stain: caused by the excessive coating liquid along four edges.	
	Distance from edge ≤ 7mm	allowed
	Distance from edge > 7mm	not allowed
	Coat Scratch: caused by transfer of glass during process.	
	W ≤ 0.3mm, L ≤ 60mm	4/sqm, with an interval of not less than 100mm
	W > 0.3mm, L > 60mm	not allowed
	Visible Inclusion: caused by such coating liquid poluted by foreign substance.	
Diameter ≤ 1.2mm	no cluster (less than 20 within an area of Dia.100mm)	
Diameter > 1.2mm	not allowed	
Coating Mechanical Properties	Pencil Hardness: according to ASTM D3363, test the pencil hardness with pencil hardness tester.	>= 4H
	Abrasion resistance test per EN 1096-2, use Taber 5135 abrasion tester, 1000 cycles with a loading weight of 500g.	transmission degradation after test < 1.0%
	Adhesion test according to ASTM, D3359, use checkerboard testing method.	ISO class ≤ 0
Alkalinity and Acidity Resistance Testing	SO ₂ test: 20 cycles of 24 hours in 0.67 vol% of SO ₂ per DIN 50018	No unremovable white spot, transmission degradation after test < 1.0%
	Salt spray test: according to DIN 50021, salt spray (5% NaCl in H ₂ O at 35 °C) for 96 hours	No unremovable white spot, transmission degradation after test < 1.0%
Accelerated Testing	Damp heat test: 1,000 hours at 85 °C and 85% relative humidity per IEC 61215	No unremovable white spot, transmission degradation after test < 1.0%
	Thermal cycling test: according to IEC 61215, 200 cycles from -40°C±2 to +85°C±2, maintain at least 10 minutes at each extreme temperature.	No unremovable white spot, transmission degradation after test < 1.0%
	Damp freeze test: according to IEC61215, 10 cycles from -40°C±2 (maintain 4 hours) to +85°C±2 (maintain 20 hours).	No unremovable white spot, transmission degradation after test < 1.0%