

PRODUCT DESCRIPTION

Azuria® tinted glass by Vitro Architectural Glass is a soda-lime float glass product with an aquamarine color that deepens as thickness increases. In a 6mm thickness, Azuria® glass provides 68% visible light transmittance, with an excellent solar heat gain coefficient of 0.51 for improved solar control. Azuria® glass mechanical and physical properties are similar to other soda-lime float glass products.

APPROXIMATE WEIGHTS

Per m ²		Per ft ²	
thickness	weight	thickness	weight
4.0 mm	9.9 kg	5/32	2.0 lbs
5.0 mm	11.9 kg	3/16	2.4 lbs
6.0 mm	14.2 kg	1/4	2.9 lbs
8.0 mm	19.8 kg	5/16	4.0 lbs
10.0 mm	23.8 kg	3/8	4.9 lbs

COLOR

	6.0mm
Transmitted Color: D65, 10° L*	86.5
a*	-12.3
b*	-7.4
Hue Angle (°)	211
Dominant wavelength: C, 2°	487nm

CHEMICAL COMPOSITION

SiO ₂	73%
Na ₂ O	14%
CaO	10%
MgO and Trace elements	3%

MECHANICAL PROPERTIES

Knoop Hardness Number (indentation hardness) indenter load--500 gm	470 kgf/mm ²	
Poisson's Ratio	0.22	
Modulus of Elasticity (Young's)	73.1 GPa	10,600,000 psi
Tensile Strength (Determined as Modulus of Rupture, ultimate)	41.4 MPa	6,000 psi
Density at 21°C (70°F)	2.51 g/cm ³	157 lb/ft ³

THERMAL PROPERTIES

Hemispherical Emissivity at -18 to 66 °C (0 to 150°F) glass	0.84	
Expansion Coefficient (linear) 20 to 300°C (68 to 572°F)	8.6*10 ⁻⁶ / °C	4.8*10 ⁻⁶ / °F
Specific heat at 0 to 100°C (32 to 212°F)	858 J/kg-K	0.205 Btu/lb-°F
Thermal Conductivity (k) at 50°C (122°F)	0.937 W/m-K	0.542 Btu/hr-ft-°F
Softening Point	720°C	1328°F
Annealing Point	548°C	1019°F
Strain Point	508°C	947°F

SUSTAINABILITY

To provide architects with the assurance and documentation they need to meet and verify their sustainability goals, Vitro Architectural Glass participates in a range of programs and initiatives. Resources available include, but are not limited to:

- Type III Environmental Product Declarations
- Cradle to Cradle Certified™ Bronze with associated Gold Material Health Certificate
- LEED® and Living Building Challenge documentation
- Material Ingredient Disclosure and Safety Data Sheets
- Annual Corporate Sustainability Report

Further information is available through VitroGlazings.com or by calling 855-887-6457 (VTRO GLS)



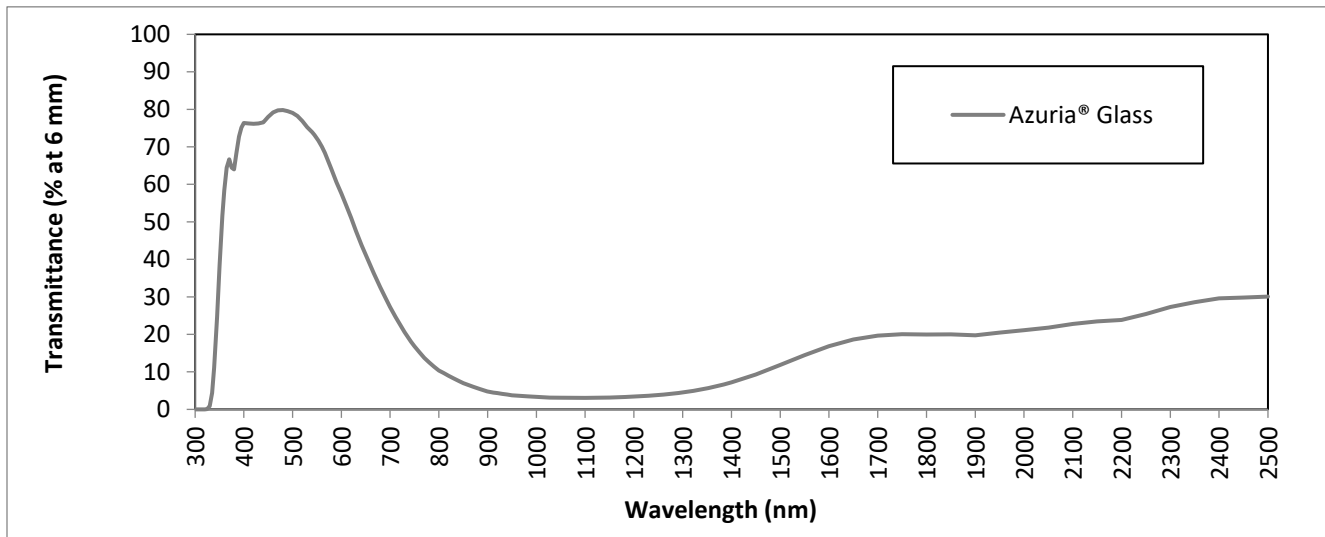
SOLAR PERFORMANCE VALUES ^[1]

Glass Thickness		Transmittance				Reflectance	
inches	mm	Ultra-violet (%)	Visible (%)	Infrared (%)	Total Solar (%)	Visible (%)	Total Solar (%)
5/32	4.0	50	75	17	40	7	5
3/16	5.0	46	72	12	36	7	5
1/4	6.0	42	68	8	32	7	5
5/16	8.0	35	61	4	26	6	5
3/8	10.0	31	57	2	23	6	5

^[1] Figures may vary due to manufacturing tolerances. All tabulated solar performance data are based on the methodology prescribed in ISO 9050, 2003 except Infrared, which is based on the solar irradiance data prescribed by ISO 9050, 2003 from 780 to 2500 nm. Slight changes in transmitted optical properties may occur on exposure to sunlight.

Transmittance (% at 6 mm/0.223")

Wavelength (nm)	Azuria® Glass %T	Wavelength (nm)	Azuria® Glass %T	Wavelength (nm)	Azuria® Glass %T	Wavelength (nm)	Azuria® Glass %T	Wavelength (nm)	Azuria® Glass %T
300	0.0	430	76.2	660	38.2	890	5.2	1600	16.9
305	0.0	440	76.5	670	35.4	900	4.7	1650	18.6
310	0.0	450	78.0	680	32.5	910	4.5	1700	19.7
315	0.0	460	79.2	690	29.9	920	4.3	1750	20.0
320	0.0	470	79.7	700	27.3	930	4.2	1800	20.0
325	0.1	480	79.8	710	24.9	940	4.0	1850	20.0
330	0.9	490	79.5	720	22.6	950	3.8	1900	19.8
335	4.4	500	79.1	730	20.5	960	3.7	1950	20.5
340	12.4	510	78.2	740	18.6	970	3.6	2000	21.1
345	24.4	520	76.9	750	16.8	980	3.5	2050	21.8
350	37.5	530	75.3	760	15.3	990	3.4	2100	22.8
355	49.4	540	73.9	770	13.8	1000	3.3	2150	23.5
360	58.4	550	72.2	780	12.5	1050	3.1	2200	23.9
365	64.4	560	70.1	790	11.4	1100	3.1	2250	25.4
370	66.7	570	67.2	800	10.4	1150	3.2	2300	27.3
375	64.5	580	63.9	810	9.7	1200	3.4	2350	28.6
380	64.0	590	60.6	820	9.0	1250	3.8	2400	29.6
385	68.4	600	57.5	830	8.3	1300	4.5	2450	29.8
390	72.7	610	54.4	840	7.6	1350	5.6	2500	30.1
395	75.1	620	51.1	850	7.0	1400	7.2		
400	76.3	630	47.6	860	6.5	1450	9.3		
410	76.2	640	44.3	870	6.1	1500	11.9		
420	76.2	650	41.2	880	5.6	1550	14.5		



ADDITIONAL INFORMATION/DOCUMENTS

The following documents can be referenced for additional information regarding Azuria® glass;

Azuria® Performance Data, Vitro Float Glass Warranty, Vitro Float Glass SDS, C2C Material Health Certificate, Vitro Float Glass EPD