

PRODUCT DESCRIPTION

Atlantica® tinted glass by Vitro Architectural Glass is a soda-lime float glass product with a medium green color that deepens as thickness increases. In a 6mm thickness, Atlantica® glass provides 67% visible light transmittance, with an excellent solar heat gain coefficient of 0.52 for improved solar control. Atlantica® 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
5.0 mm	11.9 kg	3/16	2.4 lbs
6.0 mm	14.2 kg	1/4	2.9 lbs

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

COLOR

	6.0mm
Transmitted Color: D65, 10° L*	85.6
a*	-10.9
b*	4.5
Hue Angle (°)	158
Dominant wavelength: C, 2°	513 nm

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	719°C	1326°F
Annealing Point	541°C	1006°F
Strain Point	499°C	930°F

CHEMICAL COMPOSITION

SiO ₂	73%
Na ₂ O	14%
CaO	9%
MgO and Trace elements	4%

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)



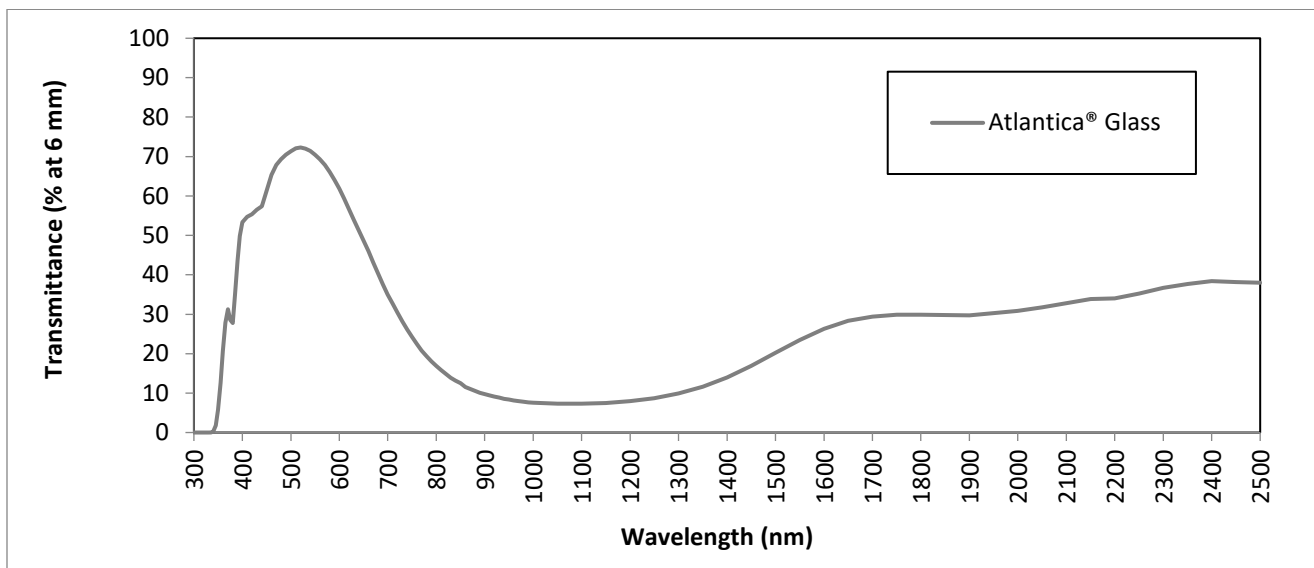
SOLAR PERFORMANCE VALUES ^[1]

Glass Thickness		Transmittance				Reflectance	
inches	mm	Ultra-violet (%)	Visible (%)	Infrared (%)	Total Solar (%)	Visible (%)	Total Solar (%)
3/16	5.0	20	71	19	39	7	5
1/4	6.0	16	67	14	34	7	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)	Atlantica® Glass %T	Wavelength (nm)	Atlantica® Glass %T	Wavelength (nm)	Atlantica® Glass %T	Wavelength (nm)	Atlantica® Glass %T	Wavelength (nm)	Atlantica® Glass %T
300	0.0	430	56.5	660	46.0	890	10.1	1600	26.3
305	0.0	440	57.4	670	43.1	900	9.7	1650	28.3
310	0.0	450	61.4	680	40.3	910	9.4	1700	29.4
315	0.0	460	65.4	690	37.6	920	9.1	1750	29.9
320	0.0	470	67.9	700	35.0	930	8.8	1800	29.9
325	0.0	480	69.3	710	32.7	940	8.6	1850	29.8
330	0.0	490	70.4	720	30.4	950	8.4	1900	29.8
335	0.0	500	71.3	730	28.2	960	8.1	1950	30.3
340	0.3	510	72.1	740	26.2	970	7.9	2000	30.9
345	1.8	520	72.3	750	24.3	980	7.8	2050	31.7
350	5.8	530	72.0	760	22.5	990	7.7	2100	32.8
355	12.6	540	71.4	770	20.8	1000	7.6	2150	33.8
360	20.6	550	70.4	780	19.4	1050	7.3	2200	34.1
365	27.9	560	69.3	790	18.1	1100	7.3	2250	35.2
370	31.3	570	67.9	800	16.9	1150	7.5	2300	36.7
375	28.6	580	66.1	810	15.8	1200	7.9	2350	37.7
380	27.8	590	64.1	820	14.9	1250	8.7	2400	38.4
385	34.9	600	61.8	830	13.9	1300	9.9	2450	38.1
390	43.6	610	59.3	840	13.2	1350	11.7	2500	38.0
395	49.9	620	56.7	850	12.5	1400	14.0		
400	53.4	630	54.0	860	11.5	1450	16.9		
410	54.7	640	51.2	870	11.0	1500	20.2		
420	55.4	650	48.7	880	10.6	1550	23.5		



ADDITIONAL INFORMATION/DOCUMENTS

The following documents can be referenced for additional information regarding Atlantica® glass; Atlantica® Performance Data, Vitro Float Glass Warranty, Vitro Float Glass SDS, C2C Material Health Certificate, Vitro Float Glass EPD