

PRODUCT DESCRIPTION

Vistacool® Pacifica® coated glass by Vitro Architectural Glass is a rich blue tinted float glass with a durable, subtly reflective, metallic oxide coating applied during the float process. The reflective coating side of the glass can only be glazed on the second surface. The subtly reflective coating amplifies and enriches the tint of the glass substrate underneath without a mirror-like appearance.

APPROXIMATE WEIGHTS

Per m ²		Per ft ²	
thickness	weight	thickness	weight
6.0 mm	14.2 kg	¼"	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*	64.1
a*	-8.4
b*	-13.2
Hue Angle (°)	237.6
Dominant wavelength: C, 2°	482.5

THERMAL PROPERTIES

Hemispherical Emissivity at -18 to 66 °C (0 to 150°F) glass / coating	0.84 / 0.14	
Expansion Coefficient (linear) 20 to 300°C (68 to 572°F)	8.7*10 ⁻⁶ / °C	4.9*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	722°C	1331°F
Annealing Point	542°C	1008°F
Strain Point	505°C	941°F

CHEMICAL COMPOSITION

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

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)



HEAT TREATMENT GUIDELINES

The coating on Vistacool® Pacifica® glass is permanent, allowing the glass to be heat treated to satisfy increased strength or safety glazing requirements. While heat treating Vistacool® Pacifica® coated glass, face the coating away from the furnace rolls to reduce the risk of introducing scratches to the coated surface. Process the glass the same as uncoated glass. The coating on Vistacool® Pacifica® does not appreciably reflect furnace heat since the coating emissivity is essentially the same as uncoated glass. Glass heat-up time will remain nearly identical as for the same uncoated Pacifica® tinted glass. **Turn off SO₂ in the furnace.** SO₂ may cause an appreciable loss in durability of the Vistacool® coating. Degradation is the result of the SO₂ reducing the atmosphere causing potential damage to the coating.

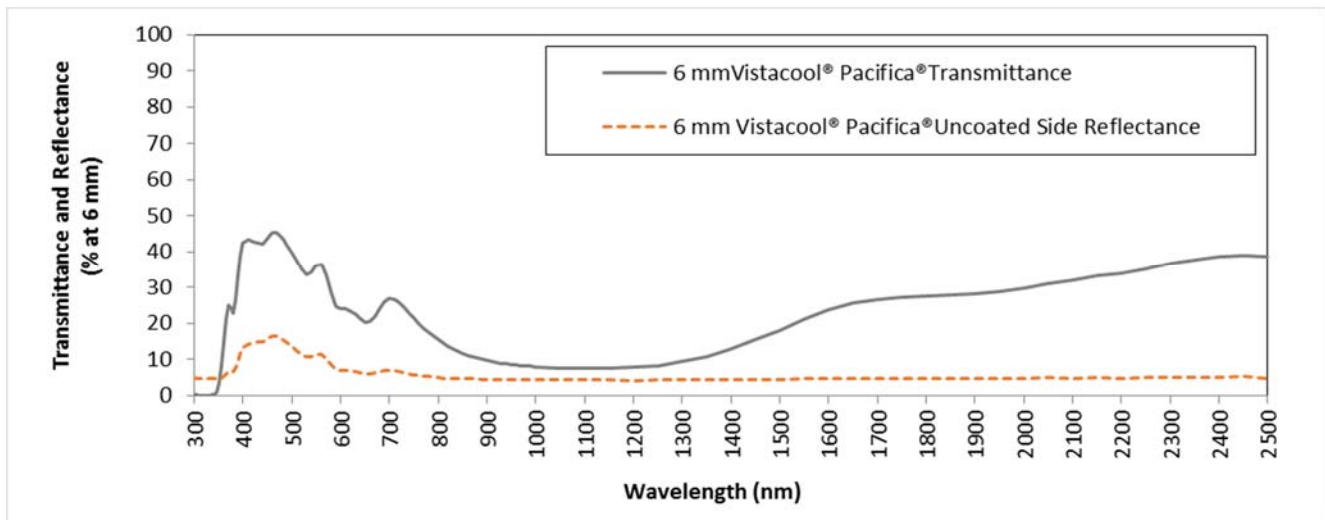
SOLAR PERFORMANCE VALUES COATED SURFACE [1]

Glass Thickness		Transmittance				Reflectance	
inches	mm	Ultra-violet (%)	Visible (%)	Infrared (%)	Total Solar (%)	Visible (%)	Total Solar (%)
¼	6.0	12	32	14	22	28	20

[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.

6 mm Vistacool® Pacifica® Transmittance and Uncoated Side Reflectance (% at 6 mm/0.223")

Wavelength (nm)	%T	%R	Wavelength (nm)	%T	%R	Wavelength (nm)	%T	%R	Wavelength (nm)	%T	%R	Wavelength (nm)	%T	%R
300	0.0	4.8	430	42.5	14.7	660	20.5	6.0	890	10.0	4.4	1600	23.7	4.6
305	0.0	4.8	440	42.1	14.7	670	21.8	6.2	900	9.6	4.2	1650	25.6	4.7
310	0.0	4.8	450	43.7	15.6	680	23.9	6.5	910	9.4	4.3	1700	26.7	4.7
315	0.0	4.7	460	45.3	16.5	690	25.9	6.8	920	9.1	4.3	1750	27.1	4.7
320	0.0	4.7	470	45.2	16.4	700	26.8	7.0	930	8.9	4.3	1800	27.3	4.6
325	0.0	4.7	480	43.6	15.5	710	26.5	6.8	940	8.6	4.3	1850	27.6	4.7
330	0.0	4.7	490	41.4	14.4	720	25.6	6.6	950	8.5	4.3	1900	28.0	4.6
335	0.0	4.6	500	39.5	13.4	730	24.2	6.3	960	8.3	4.2	1950	28.8	4.7
340	0.1	4.6	510	37.2	12.2	740	22.7	6.0	970	8.2	4.2	2000	29.7	4.6
345	0.9	4.6	520	35.0	11.2	750	21.3	5.7	980	8.1	4.3	2050	30.8	4.8
350	3.3	4.6	530	33.5	10.5	760	19.9	5.5	990	8.0	4.3	2100	32.0	4.7
355	8.1	4.7	540	34.0	10.6	770	18.6	5.3	1000	7.9	4.2	2150	33.3	4.8
360	14.8	5.1	550	36.0	11.2	780	17.3	5.1	1050	7.6	4.2	2200	33.9	4.7
365	21.3	5.9	560	36.4	11.2	790	16.3	5.0	1100	7.5	4.2	2250	35.2	4.9
370	25.0	6.7	570	33.3	10.0	800	15.3	4.9	1150	7.5	4.2	2300	36.6	4.8
375	24.2	6.7	580	28.4	8.3	810	14.4	4.8	1200	7.8	4.1	2350	37.7	4.9
380	22.8	6.5	590	24.5	7.2	820	13.6	4.7	1250	8.3	4.2	2400	38.4	5.0
385	26.4	7.5	600	23.8	7.0	830	13.0	4.6	1300	9.4	4.2	2450	38.9	5.2
390	33.2	9.5	610	23.9	6.9	840	12.2	4.6	1350	10.7	4.2	2500	38.5	4.7
395	38.9	11.7	620	23.4	6.8	850	11.6	4.5	1400	12.9	4.3			
400	42.2	13.3	630	22.3	6.5	860	11.1	4.6	1450	15.3	4.3			
410	43.3	14.3	640	21.0	6.2	870	10.8	4.5	1500	18.0	4.4			
420	42.7	14.4	650	20.2	6.0	880	10.4	4.5	1550	21.0	4.5			



ADDITIONAL INFORMATION/DOCUMENTS

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

Vistacool® Pacifica® Performance Data, Vitro Vistacool® Coated Glass Warranty, Vitro Pyrolytic Coated Glass SDS, C2C Material Health Certificate, Vitro Processed Glass EPD