

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 | 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) | 2.50 g/cm ³ | 156 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.

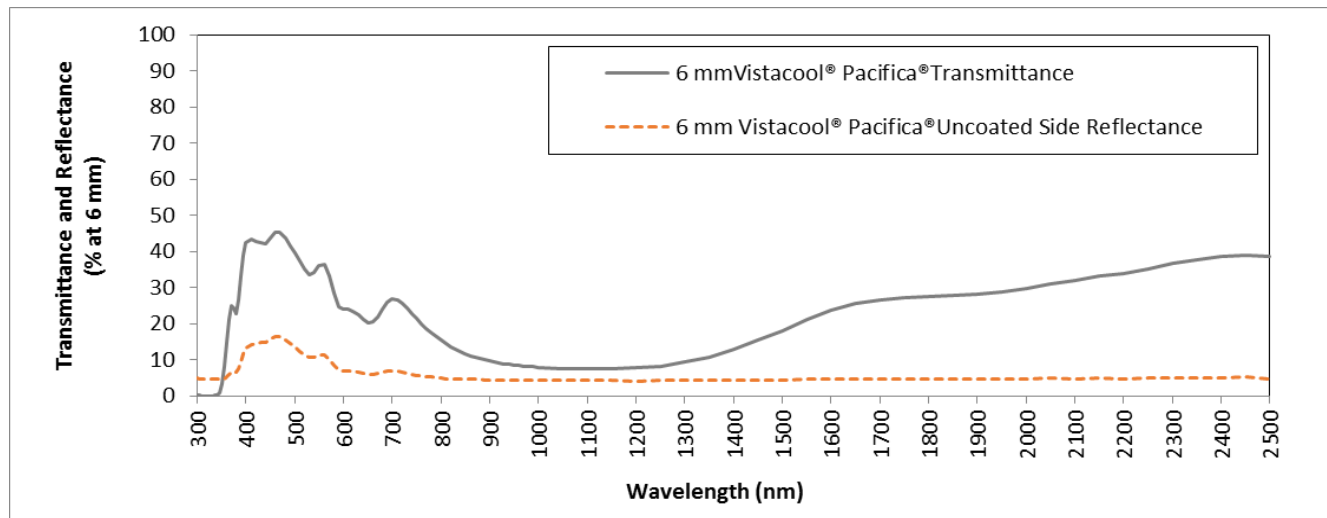
SOLAR PERFORMANCE VALUES COATED SURFACE [1]

| Glass Thickness | | Transmittance | | | | Reflectance | |
|-----------------|-----|------------------|-------------|--------------|-----------------|-------------|-----------------|
| inches | mm | Ultra-violet (%) | Visible (%) | Infrared (%) | Total Solar (%) | Visible (%) | Total Solar (%) |
| 1/4 | 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