

## PRODUCT DESCRIPTION

Acuity™ glass is a low-iron glass providing high visible light transmittance and true-to-life color rendition for vision glazing and spandrel glass applications. Designed to eliminate the green hue of clear glass, Acuity™ glass delivers enhanced clarity and is available with the full range of Solarban® solar control low-e glass coatings.

## APPROXIMATE WEIGHTS

Per m <sup>2</sup>		Per ft <sup>2</sup>	
thickness	weight	thickness	weight
3.0 mm	8.2 kg	1/8	1.5 lbs
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	4.1 lbs
10.0 mm	23.8 kg	3/8	4.9 lbs
12.0 mm	31.8 kg	1/2	6.5 lbs

## COLOR

	6.0 mm
Transmitted Color: D65, 10° L*	96.2
a*	-0.7
b*	0.0
Hue Angle (°)	179
Dominant wavelength: C, 2°	492 nm

## CHEMICAL COMPOSITION

SiO <sub>2</sub>	73%
Na <sub>2</sub> O	14%
CaO	9%
MgO and Trace elements	4%

## MECHANICAL PROPERTIES

Knoop Hardness Number (indentation hardness) indenter load—500 gm	470 kgf/mm <sup>2</sup>	
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 <sup>3</sup>	157 lb/ft <sup>3</sup>

## 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)	8.7*10 <sup>-6</sup> /°C	4.9*10 <sup>-6</sup> /°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)	1.00 W/m-K	0.58 Btu/hr-ft-°F
Softening Point	722°C	1332°F
Annealing Point	544°C	1011°F
Strain Point	506°C	943°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:

LEED® and Living Building Challenge documentation  
Material Ingredient Disclosure and Safety Data Sheets  
Annual Corporate Sustainability Report

Further information is available through [VitroGlazings.com](http://VitroGlazings.com) or by calling 855-887-6457 (VTRO GLS)



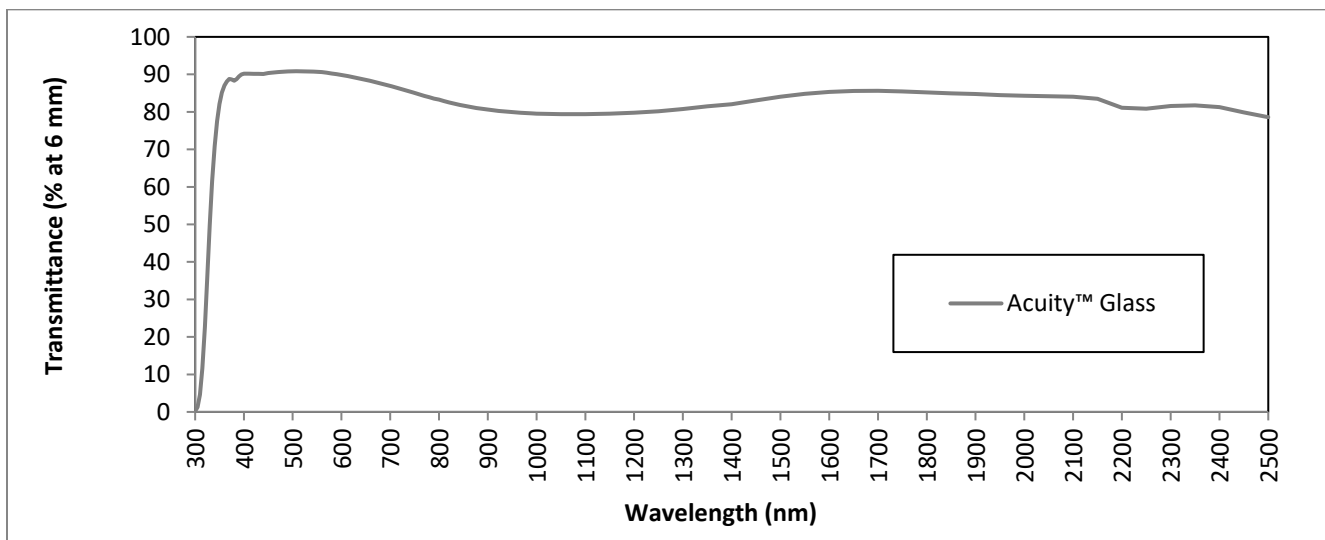
## SOLAR PERFORMANCE VALUES <sup>[1]</sup>

Glass Thickness		Transmittance				Reflectance	
inches	mm	Ultra-violet (%)	Visible (%)	Infrared (%)	Total Solar (%)	Visible (%)	Total Solar (%)
1/8	3.2	82	91	86	88	8	8
5/32	4.0	80	91	85	87	8	8
3/16	5.0	79	91	83	86	8	8
1/4	6.0	77	90	81	85	8	8
5/16	8.0	73	90	78	83	8	7
3/8	10.0	71	90	75	81	8	7
1/2	12.0	67	89	70	78	8	7

<sup>[1]</sup> 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)	Acuity™ Glass %T	Wavelength (nm)	Acuity™ Glass %T	Wavelength (nm)	Acuity™ Glass %T	Wavelength (nm)	Acuity™ Glass %T	Wavelength (nm)	Acuity™ Glass %T
300	0.3	430	90.1	660	88.2	890	80.8	1600	85.3
305	1.3	440	90.1	670	87.9	900	80.6	1650	85.6
310	4.6	450	90.4	680	87.7	910	80.5	1700	85.6
315	11.7	460	90.5	690	87.2	920	80.3	1750	85.2
320	22.7	470	90.6	700	86.9	930	80.2	1800	85.2
325	36.2	480	90.7	710	86.6	940	80.0	1850	85.0
330	49.7	490	90.8	720	86.2	950	79.9	1900	84.8
335	61.5	500	90.8	730	85.8	960	79.8	1950	84.5
340	70.8	510	90.8	740	85.4	970	79.7	2000	84.3
345	77.5	520	90.8	750	85.0	980	79.7	2050	84.2
350	82.1	530	90.8	760	84.6	990	79.6	2100	84.1
355	85.2	540	90.8	770	84.2	1000	79.5	2150	83.5
360	87.0	550	90.7	780	83.9	1050	79.4	2200	81.1
365	88.1	560	90.6	790	83.5	1100	79.4	2250	80.9
370	88.8	570	90.5	800	83.3	1150	79.5	2300	81.6
375	88.7	580	90.2	810	82.9	1200	79.8	2350	81.8
380	88.3	590	90.1	820	82.6	1250	80.2	2400	81.3
385	88.7	600	89.9	830	82.3	1300	80.8	2450	79.9
390	89.5	610	89.6	840	81.9	1350	81.5	2500	78.6
395	90.0	620	89.4	850	81.6	1400	82.1		
400	90.2	630	89.1	860	81.4	1450	83.1		
410	90.2	640	88.8	870	81.2	1500	84.1		
420	90.2	650	88.5	880	81.0	1550	84.8		



**ADDITIONAL INFORMATION/DOCUMENTS**

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