

# Low Iron Data Sheet

## **Overview:**

Low Iron soda lime glass is most commonly referred to as Low Iron but can also be called water white or extra clear glass. Low Iron is a high-clarity glass that is made from silica with very low amounts of iron. This low level of iron removes the green tint that can be seen on the edge of normal clear soda lime glass. Some manufacturers have a slight green-blue

tint to their low iron glass. As a result, low iron will have no tint or a light blue tint on the edge of the glass.

### **Features and Benifits:**

- Low Iron allows high light transmission which enhances visual clarity.
- Low Iron has minimum color cast which also enhances visual clarity.
- This glass can be heat tempered or laminated for safety and security.

#### **Material Properties:**

Modulus of Elasticity (Young's)		10.6 x 10 <sup>6</sup> psi	73.1 GPa
Modulus of Rigidity (Shear)		6.0 x 10 <sup>6</sup> psi	41.4 GPa
Poisson's Ratio		0.21	0.21
Refractive Index		1.511	1.511
Knoop Hardness		456	456
Density		156 lb/ft <sup>3</sup>	2500 kg/m³
Coefficient of Thermal Stress		50 psi/°F	0.62 MPa/°C
Thermal Conductivity at (75°F)		6.5 Btu.in/hr.°F.ft <sup>2</sup>	0.937 W.m/m².°C
Specific Heat at (75° F)		0.21 Btu/lbm.°F	0.88 kJ/kg.°C
Coefficient of Linear Expansion (20-300°F)		193997.517°F	9.28 x 10-6/°C
	(20-450°F)	193997.517°F	9.75 x 10-6/°C
Transformation Temperature		1032.8°F	556 °C
Intenerate Temperature or Yiled Point		1122.8°F	606°C
Softening Point (ASTM C 338)		1310°F	710°C
Annealing Point (ASTM C 336)		1016.6°F	547°C
Strain Point (ASTM C 336)		955.4°F	513°C
High Temperature Viscosity	(log 2)	2537.6°F	1392°C
	(log 3)	2105.6°F	1152°C
	(log 4)	1824.8°F	996°C
Liquid Phase Temperature		1846.4°F	1008°C

#### **Dimensions of Standard Products**

Thickness	0.037" to .750"	0.95 mm to 19.0 mm
Stock Sizes	84" x 65"	2133.6 mm x 1651 mm

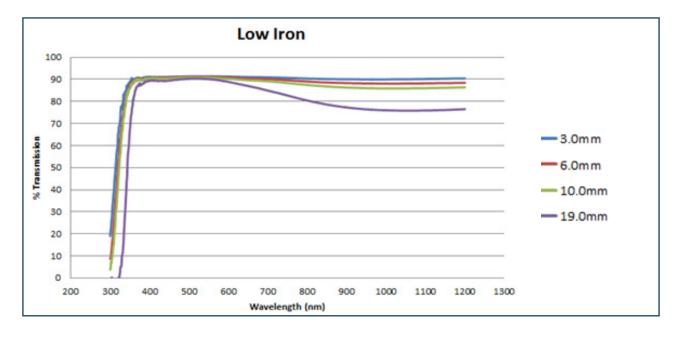
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# **Performance Data**

#### Transmission Curve



### **Reflectance Curve**

