



CORNING

## Corning® Thin Sheet Glass Products

### Product Information

Corning Specialty Materials Thin Sheet Products include Eagle XG®, Eagle XG® Slim, and Willow® brand glasses. The glasses are Alkaline earth boro-aluminosilicate and contain no heavy metals (arsenic, antimony, barium). Produced using Corning's proprietary fusion process, these glasses have exceptional surface quality that are inherently flat with low surface roughness, high optical clarity and excellent dimensional stability. These glasses are "as drawn" to thickness which eliminates surface grinding and polishing processes that add cost and may introduce surface flaws.

### Glass Offerings

Corning® Eagle XG®, Corning® Eagle XG® Slim, and Corning® Willow® Glass

### Forms Available

Fusion drawn sheet; Score/cut or finished edges to customized dimensions

### Applications

IR cut-off filters for mobile, tablet PC and CCTV camera devices  
Semiconductor processing for MEMS, CMOS image sensors, advanced packaging and LEDs  
Flat panel digital x-ray detectors  
Electrochromatic windows and mirrors  
Substrates for active matrix flat panel displays

### Attributes

As-drawn surfaces that are pristine, flat and low roughness - ideal for coatings  
Tight thickness control  
Matched coefficient of thermal expansion to Silicon  
Excellent chemical durability  
Adaptable to mechanical and laser cutting and dicing technologies

### Dimensions

Custom sizes from 25 mm to 1000 mm; round wafer or panel shaped; score/cut or edge finished

### Nominal Thicknesses (mm)

0.1      0.2      0.3      0.4      0.5      0.70      1.1

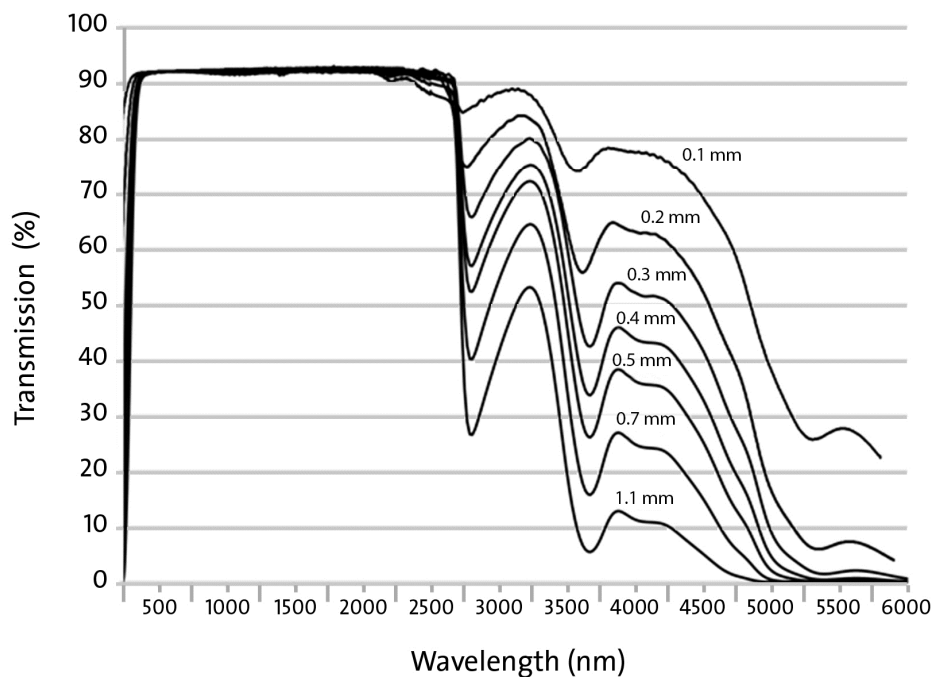
### Standard Thickness Range (mm)

±0.01    ±0.02    ±0.02    ±0.02    ±0.02    ±0.02    ±0.03

## Properties and Characteristics

Attribute	Nominal Value
Density (g/cc)	2.3 – 2.5
Coefficient of Thermal Expansion (CTE)(o to 300 °C) ppm °C	3 – 3.5
Young's Modulus (GPa)	70 – 80
Poisson's Ratio	0.20 – 0.25
Vicker's Hardness (200 g load, 25 sec dwell)	640
Strain Point (°C)	650 – 700
Anneal Point (°C)	700 – 750
Dielectric Constant (k=Eo/E)	5 – 6
Surface Roughness Ra (nm)	< 0.5 to < 1.0
Refractive Index (@ 589.3 nm)	1.50 – 1.52
% Transmission (400 nm to 800 nm)	> 90

### Optical Transmission



For more information about Corning® Thin Sheet Glass products please contact:

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