

Corning® Enlighten™ Glass

Product Information Sheet

Corning® Enlighten™ Glass is an enabling technology for high-performance windows, doors, and skylights that can significantly enhance the thermal performance, comfort, and aesthetics of built environments.

Benefits

- Allows for thinner, lighter designs for architectural applications including the center lite of triple- and quad- pane insulated glass units, impact and safety laminated glass, and smart windows.
- Protective glazing offering provides excellent durability and a scratch resistant surface
- Enables innovative new designs with greater design freedom to optimize energy, acoustic, and safety performance as well as frame width
- Optically neutral, pristine surface with improved insulated glass unit (IGU) seal integrity

Material Properties

| | |
|------------------|--|
| Glass Type | Boro-Aluminosilicate |
| Form | Fusion-drawn sheets |
| Sheet Size (max) | 2200 mm x 3200 mm |
| Thickness | 0.5 mm to 0.7 mm ±10% |
| Flatness | <1 mm/m |
| Squareness | ±3 mm (ASTM C1036) |
| Blemishes | ASTM C1036 Type 1, Class 1, Q3; EN 572-4 |
| Coating | Compatible with LowE coatings |




Thermal & Mechanical Properties

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|---|--------------------|
| Thermal Expansion | 32 x 10-7 / °C |
| Thermal Conductivity | 1.09 W/m/K (23°C) |
| Vickers Hardness (200 g load, 25 sec dwell) | 560 |
| Density | 2.38 g/cc |
| Fracture Toughness | 0.8 - 0.9 MPa*m0.5 |
| Youngs Modulus | 74 GPa |
| Shear Modulus | 30 GPa |
| Poisson Ratio | 0.23 |

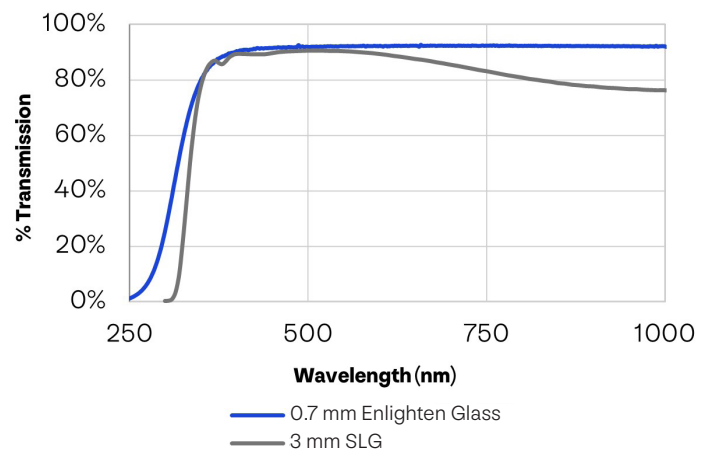
International Glazing Database Registration

| Glazing Type | ID | Product Name |
|--------------|-------|------------------------|
| Monolithic | 22500 | 0.7 mm Enlighten Glass |
| Monolithic | 22501 | 0.5 mm Enlighten Glass |

Innovative Windows, Doors, and Skylights

| | | |
|--|---|---|
|  |  |  |
| Lightweight | Energy Efficient | Acoustic Performance |
| Up to 50% glass weight reduction in IGU | Enhanced thermal performance within same IGU footprint | Improved outside noise reduction with less weight |

Superior Optical Quality



Lighter Weight

| Glass | Thickness (mm) | Weight per area (kg/m²) |
|-----------------|----------------|-------------------------|
| Enlighten Glass | 0.5 / 0.7 | 1.2 / 1.7 |
| Soda Lime Glass | 3 / 4 / 6 | 7.5 / 10 / 15 |