

Low-Iron Glass (백유리/White Clear Glass) 데이터

1) Optical properties

Light transmission TL (light source D 65, eye sensitivity), solar transmission TE (according to Moon, air mass 2) UV transmission TUV, color rendering index Rn

Normal thickness (mm)	Thickness tolerances (mm)	T _L (%)	T _E (%)	T _{UV} (%)	R _n (%)
3.2	±0.2	91.7±1	90.9±1	83±3	99.9±0.3
4	±0.2	91.6±1	90.6±1	82±3	99.8±0.3
5	±0.2	91.5±1	90.2±1	81±3	99.8±0.3
6	±0.2	91.4±1	89.8±1	79±3	99.8±0.3
8	±0.2	91.2±1	89.0±1	76±3	99.7±0.3
10	±0.3	91.0±1	88.1±1	74±3	99.6±0.3
12	±0.3	90.7±1	87.0±1	72±3	99.4±0.3

2) Chemical composition (approx.) – by Weight

SiO ₂	72.70%
Na ₂ O	13.00%
CaO	8.80%
MgO	4.30%
Al ₂ O ₃	0.60%
K ₂ O	0.40%
SO ₃	0.20%
Fe ₂ O ₃	0.02%

3) Mechanical Data

Density	:	2.5 x 10 ³ kg/m ³
Yong's modulus of elasticity	:	7.3 x 10 ⁴ N/mm ²
Poisson's ratio	:	0.23
Coefficient of Linear thermal expansion (between 20'-300'C)	:	9 x 10 ⁻⁶ K ⁻¹
Vickers hardness	:	5 x 10 ³ N/mm ²
Compressive strength	:	700 – 900 N/mm ²
Bending strength (Calculation value for measuring the glass thickness)	:	30 N/mm ²
Alkaline resistance	:	class 1-2
Acid resistance	:	class 1
Hydrolytic resistance	:	class 3
Refractive Index	:	1.52

