



Med-X[®] Glass

CORNING Med-X[®] Glass provides high-quality, transparent and safe protective shielding against X-ray radiation for medical, technical, and research applications.

Its high lead and barium content, and wide thickness range, provides optimum shielding against radiation from equipment operating in the 80 to 300 kV range.

Product features:

- Dimension:

Med-X[®] Glass is supplied as polished plates from 3.5 mm to 20 mm thickness with dimensions up to 2800 x 1400 mm (54" x 108").

- This allows architects to design viewing windows with a wider field of vision to maximize the observation requirements of the diagnostic operators.

- Smaller sizes can be cut to meet most of customers' requirements.

- All cut edges are ground and finished with safety chamfers.

- Laminating/ double glazing:

Med-X[®] Glass is suitable for laminating using polyvinyl butyral (PVB) inter-layers and can also be fitted into sealed, double-glazed units for insulation purpose.

Shielding Characteristics

Thickness		Minimum lead equivalence (mm) for stated X-Ray tube voltage							Max. Plate Mass	
mm	inches	80kV	100kV	110kV	150kV	200kV	250kV	300kV	kg/m ²	lbs/ft ²
3.5-5.0	0.138-0.197	1.2	1.3	1.2	1.1	1.0	1.0	1.0	24.0	4.9
5.0-6.5	0.197-0.256	1.7	1.7	1.7	1.5	1.3	1.3	1.3	31.2	6.4
7.0-8.5	0.276-0.335	2.3	2.3	2.3	2.0	1.8	1.7	1.8	40.8	8.4
8.5-10.0	0.335-0.394	2.8	2.8	2.8	2.6	2.1	2.1	2.1	48	9.8
10.0-12.0	0.394-0.472	3.3	3.3	3.3	2.9	2.5	2.6	2.6	57.6	11.8
11.0-13.0	0.433-0.512	N/A	3.5	3.6	3.2	2.7	2.7	2.8	62.4	12.8
14.0-16.0	0.551-0.630	N/A	4.4	4.7	4.2	3.5	3.6	4.0	76.8	15.7
16.0-18.0	0.630-0.709	N/A	N/A	N/A	4.8	4.0	4.1	4.3	86.4	17.7
18.0-20.0	0.709-0.787	N/A	N/A	N/A	5.4	4.4	4.5	4.7	96.0	19.7

Data provided by the UK Health Protection Agency: N/A = X-Ray transmission below level of detection

Physical Properties

Optical Properties

Refractive index nd 1.76
Transmission % @ 550nm through 5mm path ≥85.0

Chemical Properties

Lead (Pb) 52%
Barium (Ba) 17%

Mechanical Properties

Density (g/cm³) 4.8
Knoop Hardness (kg/mm²) 409
Young's Modulus (GPa) 62.6
Poisson's Ratio 0.26
Coefficient of Thermal Expansion (x10⁻⁷/°C) 78.8

Ph Properties



Application :

Med-X[®] Glass is compatible with a large range of installations and other viewing applications such as:



- Viewing windows for X-ray, angiography, CT scans
- Screens for medical diagnostics
- Protection windows/ glove boxes in laboratories
- Airport security X-ray screens
- Lenses for safety goggles

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