Corning® Med-X® Glass

Radiation Shielding Glass for medical, technical and research applications.

Corning is a world leader in Radiation Shielding Glass offering some of the largest glass sizes available. Corning® Med-X® Glass is supplied as polished plates with dimensions up to 2800 \times 1400 mm and is available worldwide with quick delivery times.





Key benefits

- Shields against X-Rays from equipment operating in the 80 to 300 kV range.
- High Barium and lead content providing optimum protection with excellent visual clarity.
- Supplied as polished plates cut to customer requirements up to 2800 x 1400 mm, allowing architects to design viewing windows with a wider field of vision.
- Also available in sizes cut specifically to customer requirements (with cut edges ground or polished and finished with safety chamfers).
- Extensive stocks held in all plate sizes and thicknesses at distribution points worldwide, for immediate cutting and despatch.

Applications

- Viewing windows for X-Ray, Angiography Rooms, CT Scans.
- Screens for medical diagnostics.
- Protection windows in laboratories.
- Airport security X-ray screens.
- Lenses for safety goggles.











Shielding Characteristics

Glass Thickness		Minimum lead equivalence (mm) for stated X-Ray tube voltage								Max. Plate Mass	
mm	inches	80kV	100kV	110kV	150kV	200kV	250kV	300kV	kg/m²	lbs/ft²	
4.0-5.5	0.157 - 0.217	1.4	1.4	1.3	1.2	1.0	1.0	1.0	26.4	5.4	
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	
5.7-7.0	0.224 - 0.276	1.9	1.9	1.9	1.7	1.5	1.5	1.5	33.6	6.9	
7.0-8.5	0.276 - 0.335	2.3	2.3	2.3	2.1	1.8	1.8	1.8	40.8	8.4	
8.5-10.0	0.335 - 0.394	2.7	2.8	2.9	2.6	2.1	2.1	2.2	48.0	9.8	
10.0-12.0	0.394 - 0.472	3.2	3.2	3.3	2.9	2.5	2.6	2.6	57.6	11.8	
11.0-13.0	0.433 - 0.512	3.6	3.5	3.6	3.2	2.8	2.8	2.9	62.4	12.8	
12.0-14.0	0.472 - 0.551	4.0	3.8	4.0	3.5	3.0	3.1	3.2	67.2	13.8	
14.0-16.0	0.551 - 0.630	4.7	4.5	4.6	4.1	3.5	3.6	3.7	76.8	15.7	
16.0-18.0	0.630 - 0.709	5.3	5.1	5.3	4.7	4.0	4.1	4.3	86.4	17.7	
18.0-20.0	0.709 - 0.787	6.0	5.7	5.9	5.2	4.4	4.6	4.8	96.0	19.7	

Data provided by the Public Health England (PHE).

Attenuation measured using the narrow beam method, in accordance with IEC 61331:2014.

Physical Properties			
Optical Properties		Mechanical Properties	
Refractive Index nd	1.76	Density (g/cm ³)	4.8
Transmission % @ 550nm through 5mm path	≥85.0	Knoop Hardness (kg/mm ²)	409
Chemical Properties		Young's Modulus (GPa)	62.6
Lead (Pb)	52%	Torsion Modulus (GPa)	24.8
Barium (Ba)	17%	Poisson's Ratio	0.26
		Coefficient of Thermal Expansion (x10 -7 /°C)	78.8

Suitable for laminating using PVB interlayers, and can be fitted into sealed double-glazed units.



The production of Corning S.A.S. is strictly controlled and manufactured in accordance with the Quality Standard ISO 9001, the Environmental Standard ISO 14001 and the Health & Safety Standard OHSAS 18001.

For more information contact: radiationglass@corning.com

To contact the nearest Corning sales office: www.corning.com/med-x

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