CORNING Med-X®Glass

Radiation Shielding Glass for medical, technical and research applications.

Corning is the world leader in Radiation Shielding Glass offering the largest glass sizes available. Corning Med- X^{\otimes} Glass is supplied as polished plates with dimensions up to 2800 x 1400 mm and is available worldwide with quick delivery times.



Key benefits

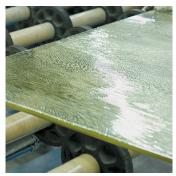
- Shields against X-Rays from equipment operating in the 80 to 300 kV range.
- High Barium and lead content providing optimum protection with excellent visual clarity.
- Supplied as polished plates cut to customer requirements up to 2800 x 1400 mm, allowing architects to design viewing windows with a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

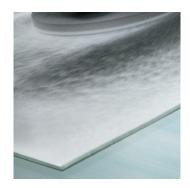
Applications

- 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

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
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		Mechanical Properties	
Refractive Index nd	1.76	Density (g/cm³)	4.8
Transmission % @ 550nm through 5mm path	≥85.0	Knoop Hardness (kg/mm²)	409
		Young's Modulus (GPa)	62.6
Chemical Properties		Poisson's Ratio	0.26
Lead (Pb)	52%	Coefficient of Thermal Expansion (x10 ⁻⁷ /°C)	78.8
Barium (Ba)	17%		

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



For more information contact: radiationglass@corning.com

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



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.

Note: The high barium and lead content makes Corning Med-X* Glass susceptible to staining by acids and alkalis. We recommend this glass is not used or stored in conditions that will result in exposure to acid gases or excessive humidity.

This publication gives a general description of the product and materials. It is the responsibility of the users to ensure that the proposed application of the product is appropriate and that such application complies with all relevant local and national legislation, standards, code of practice, and other requirements. To the extent allowed by law, Corning and its affiliates hereby disclaim all liability arising from any error or omission from this publication and all the consequences of relying on it. The information contained herein is based upon data considered to be accurate. However, no warranty is expressed or implied regarding the performance of this product. The only applicable warranties are those that are set out in a contract or in Corning's general sales conditions.