

Corning Med-X™

Comprehensive X-Ray Protection from Corning



Corning's Med-X™ provides high quality, transparent, protective shielding against X-Ray Radiation for medical, technical, and research applications.

Applications

- Viewing windows and insulation glazing for X-Ray Rooms
- Screens for medical diagnostics
- Protection windows in laboratories
- Lenses for safety goggles
- Airport security X-Ray screens

Benefits

- Suitable for laminating using PVB interlayer, and can be fitted into sealed double glazed units
- Shields against X-Rays from equipment in the 100 to 300 kV range
- High barium and lead content for optimum protection

Med-X™ is supplied as polished plates up to 2600 x 1300 mm, with smaller sizes cut to customer requirements

Med-X™ is available worldwide through local Corning sales offices and a network of specialist distributors.

Contact Corning or visit www.corning.com to find the distributor nearest to you.

CORNING

Shielding Characteristics

Shielding Properties - Minimum lead equivalence (mm) for stated X-Ray tube voltage

Thickness		100 kV	110 kV	150 kV	200 kV	250 kV	300 kV	Max. Plate Mass	
mm	inches							kg/m ²	lbs/sq. ft.
5.0-6.5	0.197-0.256	1.7	1.6	1.5	1.3	1.3	1.3	31.2	6.4
7.0-8.5	0.276-0.335	2.3	2.3	2.1	1.8	1.8	1.8	40.8	8.4
8.5-10.0	0.335-0.394	2.8	2.8	2.5	2.2	2.2	2.2	48	9.8
10.0-12.0	0.394-0.472	3.2	3.2	2.9	2.5	2.5	2.5	57.6	11.8
11.0-13.0	0.433-0.512	3.6	3.6	3.3	2.8	2.7	2.8	62.4	12.8
14.0-16.0	0.551-0.630	4.6	4.6	4.3	3.5	3.5	3.6	76.8	15.7
16.0-18.0	0.630-0.709	N/A	N/A	4.6	4	4.1	4.3	86.4	17.7

Physical Properties

Optical Properties

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

Knoop Hardness (kg/mm²) 440
 Young Modulus (GPa) 62.7
 Poissons Ratio 0.23
 Coefficient of Thermal Expansion 81.8
 (x10⁻⁷/°C)

Chemical Properties

Lead (Pb) 48%
 Barium (Ba) 15%

***Note:** The high barium and lead content makes Corning Med-X™ is susceptible to staining by acids and alkalis. We recommend this glass not be 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 of this document 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.

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To obtain additional technical information or an engineering sample, or to place an order for this product, please contact us:

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Chemical Properties

Specific Gravity (g/cm³) 4.8