# Corning<sup>®</sup> Med-X<sup>®</sup> Glas

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 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**.
- Maximum sizes of up to 2800 x 1400 mm, allowing windows with a wider field of vision.
- Finishing options including **polished** edges, insulation glass, laminated glass
- Extensive stocks held in all plate sizes and thicknesses for immediate cutting and dispatch.

Lead equivalent / 110kV	Glass thickness	Maximum plate size			
[Pb]	[mm]	[mm]			
1,3 Pb	4-5,5	2.000 x 1.000			
1,7 Pb	5-6,5	2.420 x 1.200			
2,3 Pb	7-8,5	2.745 x 1.350			
2,9 Pb	8,5-10	2.600 x 1.260			
3,6 Pb	11-13	2.720 x 1.200			
4,6 Pb	14-16	2.420 x 1.200			
5,9 Pb	18-20	2.000 x 1.000			



## 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



Flachglas Sachsen GmbH Einfach gutes Glas.

# Corning<sup>®</sup> Med-X<sup>®</sup> Glas – 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/ft <sup>2</sup>
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 and chemical Properties**

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

Transmission %/550nm (through 5mm path) ≥85,0 Sound reduction R(w) 40dB (at 8,1mm thickness) Refractive Index nd 1,76 Coefficient of Thermal Expansion (x10-7/°C) 78,8

### **Mechanical Properties**

Density (g/cm3) **4,8** Knoop Hardness (kg/mm2) **409** Young's Modulus (GPa) **62,6** Torsion Modulus (GPa) **24,8** Poisson's Ratio **0,26** 

## Further information to be found here:

www.strahlenschutzglas.de post@flachglas-sachsen.de FLACHGLAS SACHSEN GmbH, Wurzener Straße 93, 04668 Grimma, Germany

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.







Flachglas Sachsen GmbH Einfach gutes Glas.