

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 x 1400 mm and is available worldwide with quick delivery times.



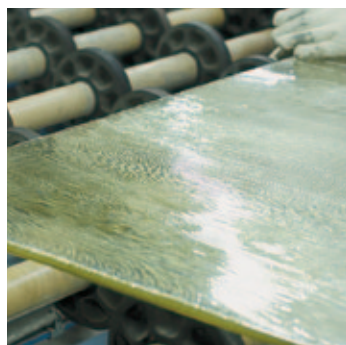
Key benefits

- 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 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.

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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/m ² | lbs/ft ² |
| 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

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

Chemical Properties

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

Mechanical Properties

| | |
|--|------|
| Density (g/cm ³) | 4.8 |
| Knoop Hardness (kg/mm ²) | 409 |
| Young's Modulus (GPa) | 62.6 |
| Torsion Modulus (GPa) | 24.8 |
| 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:
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To contact the nearest Corning sales office:
www.corning.com/med-x

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