Corning® Med-Gamma® Glass

Radiation Shielding Glass for medical, technical and research applications.

Corning is a world leader in Radiation Shielding Glass offering a comprehensive range of products including **Corning® Med-Gamma® Glass**. Corning® Med-Gamma® Glass is supplied as polished plates with dimensions up to 2800 x 1400 mm, and has been designed to provide **high quality, transparent and protective shielding** from gamma-based PET radiation under various keV levels.





Key benefits

- Protective shielding glass against gamma-based PET radiation as specified by IEC 61331:2014 (Standard Gamma Radiation).
- Extensive physical testing carried out on Corning[®] Med-Gamma[®] Glass allowing designers to specify glass with maximum confidence.
- High quality and neutral appearance providing excellent visual clarity.
- Corning® Med-Gamma® Glass is supplied as :
 - Polished plate up to 2800 x 1400mm
 - Laminated plate using PVB Interlayer
 - Cut plate supplied to customer specific sizes (with edges ground or polished and finished with safety chamfers).
- Corning® Med-Gamma® Glass is stocked worldwide through local Corning sales offices and a network of specialist partners.

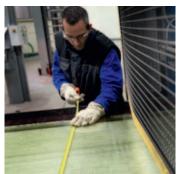
Applications

- Occupational protection from PET radiation in scanning techniques for diagnostics and treatment.
- Cyclotron maintenance.











Shielding Characteristics

Glass Thickness		Minimum lead equivalent (mm) for stated keV			Max. Plate Mass	
mm	inches	511 keV	661 keV	1250 keV	kg/m²	lbs/ft ²
7.0 - 8.5	0.276 - 0.335	2.3	2.5	2.8	40.8	8.4
8.5 - 10.0	0.335 - 0.394	2.8	3.1	3.5	48.0	9.8
10.0 - 12.0	0.394 - 0.472	3.3	3.6	4.1	57.6	11.8
11.0 - 13.0	0.433 - 0.512	3.7	4.0	4.5	62.4	12.8
12.0 - 14.0	0.472 - 0.551	4.0	4.3	4.9	67.2	13.8
14.0 - 16.0	0.551 - 0.63	4.6	5.1	5.8	76.8	15.7
16.0 - 18.0	0.630 - 0.709	5.3	5.8	6.6	86.4	17.7
18.0 - 20.0	0.709 - 0.787	5.9	6.5	7.4	96.0	19.7
20.0 - 24.0*	0.787 - 0.945	6.7	7.3	8.5	115.2	23.6
22.0 - 26.0*	0.866 - 1.024	7.3	8.1	9.4	124.8	25.6
24.0 - 28.0*	0.945 - 1.102	8.1	8.9	10.3	134.4	27.5
28.0 - 32.0*	1.102 - 1.260	9.3	10.2	11.7	153.6	31.5
32.0 - 36.0*	1.260 - 1.417	10.7	11.7	13.4	172.8	35.4
36.0 - 40.0*	1.417 - 1.575	12.0	13.2	15.2	192.0	39.3
45.0 - 53.0*	1.772 - 2.087	15.0	16.8	19.2	216.0	44.2

Data provided by the UK Health Protection Agency, based on Cs137/Co60 standard gamma radiation qualities according to ISO 4037-1. Attenuation measured using the narrow beam method, in accordance with IEC 61331:2014.

^{*} Thickness achieved through lamination process using a 1.5 mm interlayer.

Physical Properties					
Optical Properties Refractive Index nd Transmission % @ 550nm through 5mm path	1.76 ≥85.0				
Mechanical Properties Torsion Modulus (Gpa)	24.8				
Chemical Properties Heavy oxide content	<70%				

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-gamma

Note: The high barium and lead content makes Corning Med-Gamma® 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.

Corning SAS - 7, bis avenue de Valvins, CS 70156 Samois-sur-Seine, 77215 AVON Cedex, France Tel ± 33 1 64 69 71 35

www.corning.com/med-gamma

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