

# CORNING® MED-X® LT GLASS

Corning continues to innovate  
with the extension of  
the Radiation Shielding Glass range.

Contact our North American distributor:  
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**McGRORYGLASS**

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CORNING

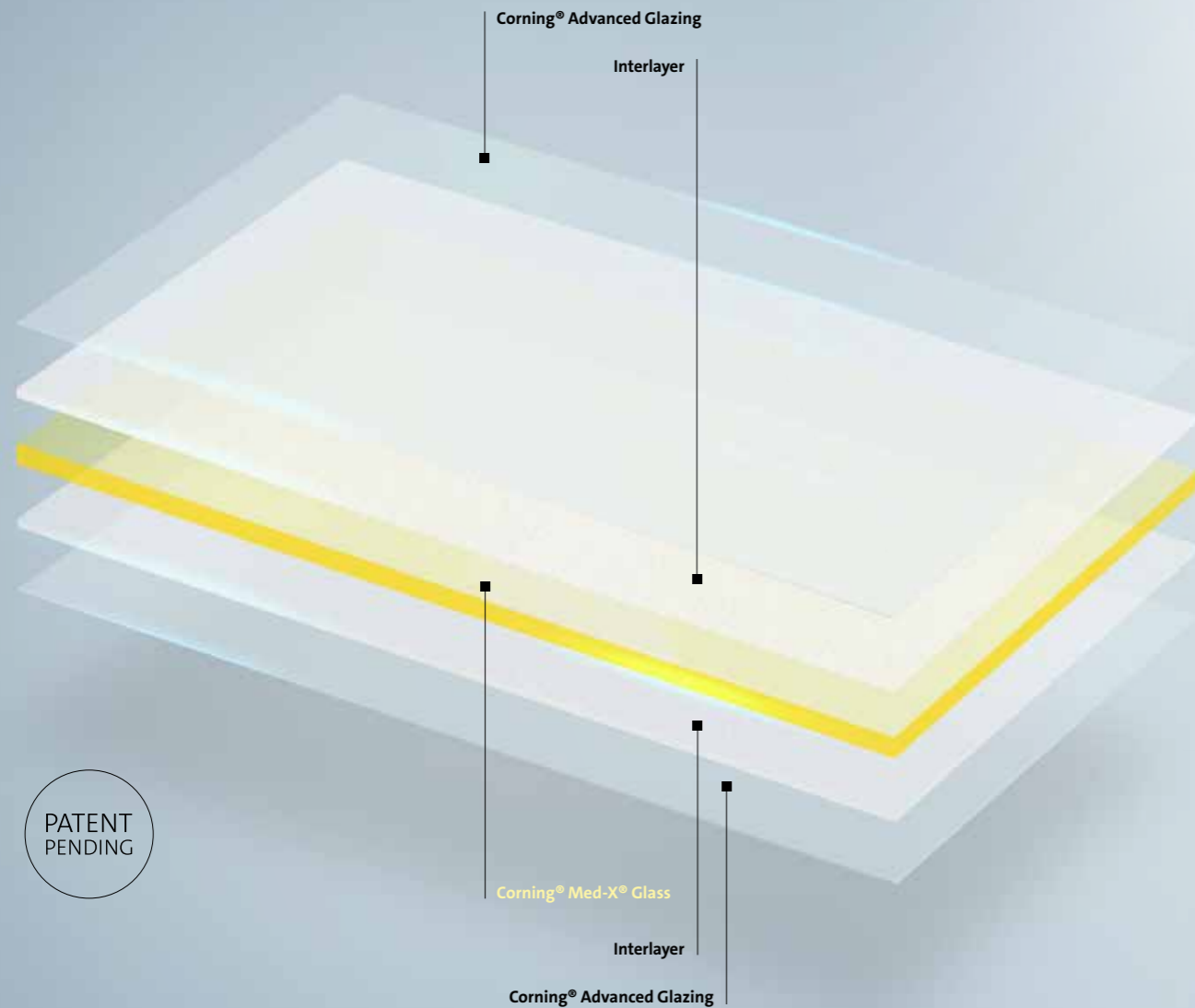
**THIN, CLEAR, & ROBUST**

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CORNING

# CORNING® MED-X® LT GLASS

Innovative, Lami-Thin Shielding



PATENT  
PENDING

Corning® Advanced Glazing = Thin Glass <1 mm

## CORNING INNOVATION

With Corning® Med-X® LT Glass, Corning continues its innovation in the field of Radiation Shielding Glass.

Thanks to an innovative laminated design combining different Corning glasses, the new Corning® Med-X® LT Glass enables improved glazing.

The new radiation shielding solution brings improved features:

- Extra safety in case of impact
- Extra clarity, resistance to scratches, and easy to clean
- Easy handling and framing thanks to a lightweight design



## COMBINATION OF UNIQUE TECHNOLOGIES

CORNING® MED-X® GLASS offers reliable radiation shielding performance and clear transparency for safer X-RAY operations.

CORNING® ADVANCED GLAZING offers a unique combination of thin, lightweight, and tough properties, enabling a new generation of innovative windows.

## PRODUCT LIFE CYCLE

From transportation to installation into window panels inside architectural healthcare facilities and laboratory around the world, radiation shielding glass **must withstand several constraints during its life cycle:**

- Handling, packing, unpacking, and storage
- Daily maintenance and cleaning
- Repeated ionizing radiation

IMPACT RESISTANCE:  
building requirements  
**are becoming increasingly  
strict with regard to safety  
standards.**

CLARITY:  
**visual comfort and a well-lit  
work environment** are essential  
for specific glazing materials  
such as radiation shielding glass.

A new construction project? A new device?  
**Comfort and reliability** of materials are crucial.



## CORNING DEVELOPED A NEW GLASS SOLUTION

**A solution which brings  
SAFETY  
DURABILITY  
and  
USER-FRIENDLINESS  
for all stakeholders  
along the product life cycle.**

Whether you are a distributor looking for the best solution to offer to your customers, a radiation specialist designing and installing the most reliable X-ray room, or an architect working with engineering consultants looking for the best solution available on the market, **the new Corning® Med-X® LT Glass will meet your expectations.**







## SAFETY

### Protects people against ionizing radiation

Corning® Med-X® LT Glass offers excellent radiation protection performance: **1.2 mmPb to 2.6 mmPb lead equivalence at 150 kV** tested according to **international standard IEC 61 331:2014**.

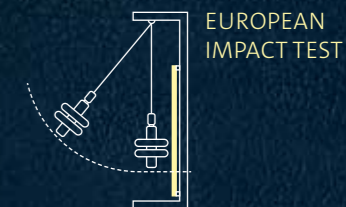
### Limits the risk of injury in case of impact

Corning® Med-X® LT Glass is a laminated glass.

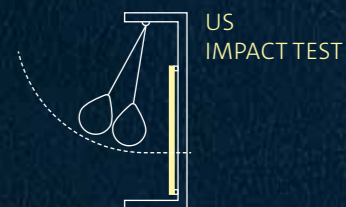
In case of impact, numerous cracks could appear but fragments are being held together: no projection of glass.

Corning® Med-X® LT Glass is qualified with the most stringent Impact Safety standards for glazing:

- EN 12600 (Europe)
- Cat II CFR Part 16 #1201 (United States)



EUROPEAN  
IMPACT TEST



US  
IMPACT TEST

## SAFETY GLAZING IMPACT TEST

Safety glass tests reveal how the glass will behave when subjected to an impact of about 50 kg at different drop heights: from a few centimeters to more than 1.20 m (equivalent to an adult hitting the glass unintentionally or a child landing on it accidentally). All tests are performed by accredited independent laboratories.





## DURABILITY

Radiation shielding glass requires special care. Corning® Med-X® LT Glass is resistant to scratching and daily cleaning.

### Scratch resistant

Corning® Med-X® LT Glass has better scratch resistance than other products available on the market:

- Up to **4 times better** than conventional radiation shielding glass
- **24 times better** than acrylic panels

It is measured using the ASTM F735-94 abrasion protocol (BAYER test – 3,600 cycles – Corundum sand – Haze measurements).

### Easy to clean

Corning® Med-X® LT Glass is easy to clean with common detergents.



## USER-FRIENDLINESS

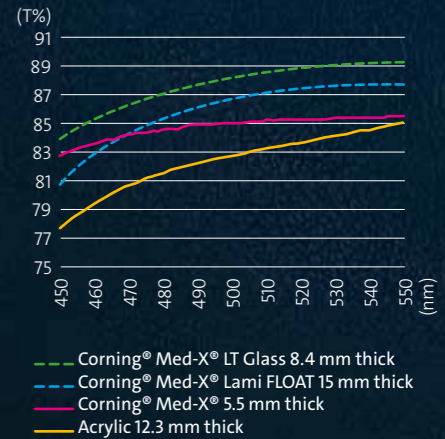
### Improved clarity for users

Corning® Med-X® LT Glass guarantees the properties and reliability of a premium radiation shielding glass while being clearer and more transparent. Visual clarity is improved as the new solution brings **up to 5 extra points** of light transmission.

### For installers and integrators

Corning® Med-X® LT Glass provides the added value of a laminated sheet without the constraints of extra weight and thickness. Compared to current solutions on the market, Corning® Med-X® LT Glass is **up to 10 kg/m<sup>2</sup>** lighter.

## LIGHT TRANSMISSION COMPARISON\*



\* Light transmission % for different materials Shielding @150 kV of 1.2 mm Pb for glass vs 0.5 mm Pb for acrylic



## TECHNICAL INFORMATION

### Corning® Med-X® LT Glass characteristics:

#### Optical Properties

Transmission % @550 nm	> 89%
Y D(65%): Optical transmission for visible spectrum at daylight – D65 illuminant	> 89%

#### Mechanical Properties

Density of lead glass (g/cm <sup>3</sup> )	4.8
Knoop Hardness (kg/mm <sup>2</sup> )	489

#### Chemical Properties

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

#### Testing\*

Radiation Shielding	IEC 61331: 2014 international standards, data provided by the Public Health of England (PHE)
Safety Impact Glazing	EN 12600, 1B1 class** Cat. 2 - CPSC 16 CFR 1201***
Abrasion	ASTM F735-94 (3,600 cycles, Corundum sand)

\*More information available on request  
 \*\*Test performed for the LE 2.1 mmPb item  
 \*\*\* Test performed for the LE 1.7 mmPb item

### Thickness and weight

Thickness of lead glass	4.0-5.5 mm	5.0-6.5 mm	5.7-7.0 mm	7.0-8.5 mm	8.5-10.0 mm
<b>SHIELDING performance @150 KV</b>	1.2 mmPb	1.5 mmPb	1.7 mmPb	2.1 mmPb	2.6 mmPb
<b>Thickness</b>	6.9 to 8.9 mm	7.9 to 9.9 mm	8.6 mm to 10.4 mm	9.9 to 11.9 mm	11.4 to 13.4 mm
<b>Weight ratio</b>	24 to 33 kg/m <sup>2</sup>	29 to 38 kg/m <sup>2</sup>	32 to 41 kg/m <sup>2</sup>	38 to 48 kg/m <sup>2</sup>	45 to 55 kg/m <sup>2</sup>







## RADIATION SHIELDING GLASS APPLICATIONS

### Why use radiation shielding glass?

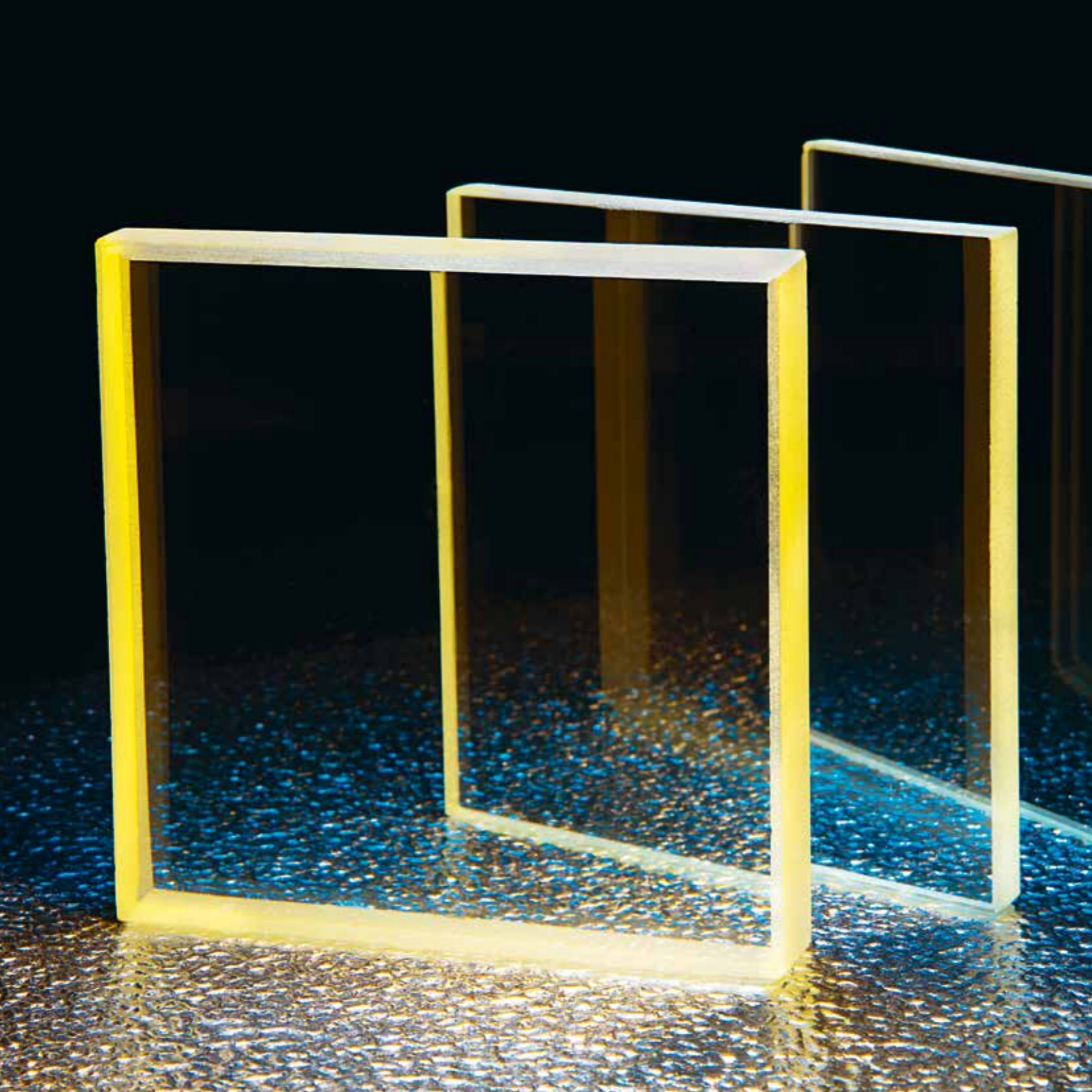
Wherever X-ray and gamma ray technologies are used, radiation shielding glass can protect people against ionizing radiation (interventional cardiology, CT scans, radiation therapy, etc.).

### Medical, Technical, and Industrial applications:

- Fixed windows in hospitals or smaller practices
- Suspended or mobile panels in hospitals or smaller practices
- Research laboratories
- Industrial scanners and non-destructive testing







## RADIATION SHIELDING GLASS PRODUCT RANGE

Corning is one of the worldwide leaders in radiation shielding glass, with years of experience providing high-quality glass with a comprehensive range of thickness and sizes.

### **Corning® Med-X® Glass and Corning® Med-Gamma® Glass**

#### **Corning® Med-X® Glass**

##### **X-Ray shielding:**

- observation windows & panoramic glazing
- door glazing
- panel (fixed and mobile)
- glove boxes for X-Ray rooms
- CT scanning facilities

#### **Corning® Med-Gamma® Glass**

##### **Gamma-Ray shielding:**

- windows for nuclear medicine applications including hot cell, cyclotron, and PET scanning

Corning® Med-X® Glass and Corning® Med-Gamma® Glass are supplied as polished plates in the largest available sizes on the market (up to 2,800 x 1,400 mm) and as finished, cut-to-size plates. Customized shapes and finishing are available upon request for the widest range of possibilities.

## FDA REGISTRATION

Corning is **the first** radiation shielding glass manufacturer on the market to provide its customers and their end-customers with **full compliance and traceability** adhering to **U.S. Food and Drug Administration (FDA) regulations**.

This compliance demonstrates Corning's commitment to supporting public health, safety, and security through high-quality, radiation shielding glass.

**More information on US regulatory requirements for Class 1 medical devices is available in the FDA's Devices section at the following link:**

<http://www.fda.gov/MdicalDevices/deviceRegulationandGuidance/ImportingandExportingDevices/ucm050126.htm>

### **ISO and OHSAS certifications**

Corning S.A.S facilities are strictly controlled in accordance with the Quality Standard ISO 9001, ISO 140001, and OHSAS 18001.

Corning® Med-X® Glass, Corning® Med-Gamma® Glass, and Corning® Med-X® LT Glass are proudly **manufactured in France**.





[www.corning.com/radiation-shielding-glass](http://www.corning.com/radiation-shielding-glass)

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