



LAMINATED SAFETY GLASS

# LAMISTAR®

The laminated glass LAMISTAR®, is formed by two or more glass panes joined by one or more interlayers.

A laminated glass is a safety glass, because in case of breakage of one of the glass panels, the entire makeup will retain its structure, thus avoiding detachment of shards and maintaining structural integrity until it can be replaced.

Different possibilities: Laminated with colourless, colourful, acoustic or structured polyvinyl butyral (PVB), and with ionoplast interlayers.

A laminated glass also improves the filtering out of ultraviolet radiation by preventing the passage of harmful UV rays by 99%. This helps to reduce photodegradation (of furniture, curtains, carpentry), glare and improves comfort inside the room, reducing the passage of heat through the windows, maintaining its transparency.

## ➤ Services

- It improves comfort by reducing UV radiation and corrects temperature differences between sunny and shady areas on the windows.
- It improves visibility by avoiding glare.
- High light transmission with colourless interlayers.
- Great variety in the range of colours to achieve a certain aesthetic result.
- Laminated safety glass.

\* Services against aggression resulting from attacks by throwing an object, vandalism or personal aggression.

\*\* The Technical Building Code (CTE, for its Spanish initials), in its safety document for usage, SUA 2, stipulates a performance classification of X(Y)Z according to the UNE 12600 standard for fragile elements and areas at risk of impact.

## ➤ Safety classifications

Glasses with the necessary properties to withstand the impact of intentional attacks\* in accordance with the EN 356 standard.

Glasses exposed to receive the impact of a person tested according to the safety of use by virtue of EN 12600\*\*.

Anti-bullet resistance pursuant to EN 1063.

### Laminated glass with PVB. Safety classifications

Safety category	EN 12600	Lamistar® 33.1 and 44.1 : <b>2(B)2</b>		Other laminated glass: <b>1(B)1</b>		
Anti-aggression resistance	EN 356	Lamistar® 5.5/2: <b>P2A</b>	4.4/4: <b>P4A</b>	4.4/6: <b>P5A</b>	8.8/6: <b>P6A</b>	10.10.3/6: <b>P7B</b>
Anti-bullet resistance	EN 1063	Lamistar® 19 mm: <b>BR1 S</b> , 24 mm: <b>BR2 S</b> , 29 mm <b>BR3 S</b> , 43 mm <b>BR4 S</b> , 46 mm <b>BR5 S</b> , 62 mm <b>BR6 S</b>				



## ➤ Uses

- General and safety glazing.
- Office and accommodation buildings.
- Shop windows, concessionaires, commercial premises.
- Elements such as windows, handrails, skylights, glass partitions or showcases.