

# SAFETY & SECURITY GLASS

 **ŞİŞECAM**  
LAMINATED GLASS



A SECURE LIFE  
BEHIND THE GLASS

- Şişecam Laminated Glass is the trademark of laminated glass of Şişecam Flat Glass. It is produced by combining two or more panels of glass with special binding agency polyvinyl butyral (PVB) interlayer under heat and pressure. If the glass is broken, most of the fragments remain stuck to the interlayer, therefore minimizing the risks of injury caused by broken glass.
- Şişecam Ultra Clear Laminated Glass is the trademark of low iron laminated glass produced with low iron flat glass. The transparency of Şişecam Ultra Clear Laminated Glass is significantly higher, minimising distortion of the original colours of the objects behind it.



## Multiple Functions

**Safety:** Minimizes risks of injury due to accidental impact.

**Security:** Retains its overall integrity and continues to act as a barrier even if the glass breaks, protection from vandalism, burglary attack. Able to withstand repeated blows from heavy objects such as bricks, hammers or crowbars.

**Ultraviolet (UV) Control:** Provide extremely high levels of protection against UV radiation (over 99 % of UV radiation is blocked), therefore helps to reduce fading and ageing effects.

**Sound Insulation:** Reduces noise, providing a quiet atmosphere day and night.

**Thermal Insulation:** Low-e coated laminated glass products reduce heat loss coefficient, keeping more heat inside the building.

**Solar Control and Thermal Insulation:** Helps saving energy by reducing cooling and heating expenses of the building.

**Decoration:** Ideal for decorative or architectural applications. In addition to various options of color, Şişecam Ultra Clear Laminated Glass offers options for architects and interior architects with its transparent appearance.

**Privacy:** Şişecam Laminated Glass Opaque allows your privacy and security without compromising light transmission.



## Colour Options



## Applications

Regulations for safety glass applications; can be found at TS 13433 - Glazing in buildings - Code of practice for safety related to human impact. Laminated glass is used in many applications such as,

- Curtain walling
- Windows
- Overhead glazing
- Internal partitions
- Balustrades
- Doors
- Interior fittings
- Shower and bath enclosures
- Areas of high pedestrian traffic, museums & art galleries where UV protection is necessary
- Areas where improved acoustic performance is a requirement
- Passageways with busy pedestrian traffic



## Safety And Security Level Determined

You can find the following table recording the safety and security level of glass solutions for your needs.

SOLUTIONS		CLASS OF RESISTANCE		
		Ball Drop Test (EN 356)	Pendulum Test (EN 12600)	Glass Configuration
LIFE SAFETY	Two panes of glass and a PVB interlayer with a minimum thickness of 0,38 mm	-	2(B)2	3+0,38+3 4+0,38+4
	Two panes of glass and a PVB interlayer with a minimum thickness of 0,76 mm	P1A	1(B)1	3+0,76+3 4+0,76+4
PROPERTY SAFETY	Two panes of glass and a PVB interlayer with a minimum thickness of 0,76 mm	P1A	1(B)1	3+0,76+3
		P2A		4+0,76+4
		P2A		5+0,38+5

Şişecam Laminated Glass has C mark, it is manufactured in accordance with the results of the tests conducted at the international accredited laboratories to determine the class of resistance within the frame of TS EN 12600 and TS EN 356 standards, as a requirement of the relevant marking system.

