

SAFETY & SECURITY GLASS



LAMINATED GLASS



A SECURE LIFE
BEHIND THE GLASS



LAMINATED GLASS

- Laminated Glass is the trademark of laminated glass of 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.
- Ultra Clear Laminated Glass is the trademark of low iron laminated glass produced with low iron flat glass. The transparency of Ultra Clear Laminated Glass is significantly higher, minimizing 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 quite 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, Ultra Clear Laminated Glass offers options for architects and interior architects with its transparent appearance.

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



Colour Options



Gray



Bronze



Blue



Green

Applications

- 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	• Protection from injuries For protecting people against risk of accidental injury	-	2(B)2	3+0,38+3 4+0,38+4
		• Protection from falling down For preventing individuals from falling through glass ever when the glass is accidentally broken.	P1A	1(B)1	3+0,76+3
	PROPERTY SAFETY	Two panes of glass and a PVB interlayer with a minimum thickness of 0,76 mm	• Protection from vandalism, hampers break-ins Retains its overall integrity and continues to act as a barrier even if the glass breaks, protection from vandalism, burglary attack.	P2A	1(B)1
P1A				1(B)1	3+0,76+3
P1A				1(B)1	5+0,38+5

Laminated Glass has CE 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.

