

# Glass Characteristics - 30 MM Thickness

TECHNICAL CHARACTERISTICS OF BURGLAR PROOF, LOW EMISSIVITY CHAMBER GLASS 30 mm 5+5.6/12/3+3.1 BE (Burglarproof Class P5A - Thermal value  $U_g=1,3 \text{ W/m}^2\text{K}$  - For Glass Doors

## Thermal properties (EN 673)

Ug Value ( $\text{W}/(\text{m}^2\text{K})$ )	1.3
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## Lighting properties (EN 410)

Light transmission	75
Light reflection	12
Internal reflexion	13
Colours rendering index - RD65	95

## Energy saving characteristics

	EN 410	ISO 9050
Energy direct transmission	43	41
Energy reflection	17	17
Energy absorbtion	40	42
Energy absorbtion glass 1	32	34
Energy absorbtion glass 2	8	8
Solare factor	52	50
Shading value	0.6	0.57
Ultraviolet rays transmission	0	
Schattenfaktor		63.0

## Other characteristics

Fire resistance (EN 13501-2)	npd
Fire resistance (EN 13501-1)	npd
Bullet proof presistance (EN 1063)	npd
Manual attacks resistance (EN 356)	P5A
Impact resistance (pendulus test) (EN 12600)	1B1 / 2B2
Sound insulation	39 dB

## UNI EN 356 NORM

### TESTS AND CLASSIFICATION TO MANUAL ATTACK

#### Test Description

A steel ball weighting 4.1 kg. is dropped on a glass section measuring 90x110 cm (horizontally positioned) for three times so to create a triangle 13 cm each side at the center of the glass.

The glass resistance is defined according to different heights of the drop and the test is valid if the glass is not passed through.

### CLASSES OF RESISTANCE

P1A 1 3 drops from 1.5 m height

P2A 1 3 drops from 3 m height

P3A 1 3 drops from 6 m height

P4A 1 3 drops from 9 m height

**P5A 3 drops from 9m height**

### APPLICATIONS

o Low floors glazings (P4A), window shops for valued or dangerous objects or animals.

o Fanlights for high security window shops (P4A), doors and windows fro schools (P4A), **Consulates (P5A)**.

o Aeroports (P3A)

o Law Courts (P5A)

o Post Offices (P5A)

o Money Exchange Offices (P5A)

# Glass Characteristics - 25 MM Thickness

TECHNICAL CHARACTERISTICS OF BURGLAR PROOF LOW EMISSIVITY CHAMBER GLASS 25 mm 5+5.6/6/3+3.1 BE (Burglar proof Class P5A - Ug Value =1.9 W/m²K) min.m² 0.5 FOR FANLIGHT AND SIDELIGHTS

## Thermal properties (EN 673)

Ug Value (W/(m²K))	1.9
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## Lighting properties (EN 410)

Light transmission	75
Light reflection	12
Internal reflexion	13
Colours rendering index - RD65	95

## Energy saving characteristics

	EN 410	ISO 9050
Energy direct transmission	43	41
Energy reflection	17	17
Energy absorbtion	40	42
Energy absorbtion glass 1	32	34
Energy absorbtion glass 2	8	8
Solare factor	52	50
Shading value	0,6	0.57
Ultraviolet rays transmission	0	
Schattenfaktor		63.0

## Other characteristics

Fire resistance (EN 13501-2)	npd
Fire resistance (EN 13501-1)	npd
Bullet proof presistance (EN 1063)	npd
Manual attacks resistance (EN 356)	P5A
Impact resistance (pendulus test) (EN 12600)	1B1 / 2B2
Sound insulation	39 dB
Isolamento al rumore aereo diretto	39 dB

## UNI EN 356 NORM

### TESTS AND CLASSIFICATION TO MANUAL ATTACK

#### Test Description

A steel ball weighting 4.1 kg. is dropped on a glass section measuring 90x110 cm (horizontally positioned) for three times so to create a triangle 13 cm each side at the center of the glass.

The glass resistance is defined according to different heights of the drop and the test is valid if the glass is not passed through.

### CLASSES OF RESISTANCE

P1A 1 3 drops from 1.5 m height

P2A 1 3 drops from 3 m height

P3A 1 3 drops from 6 m height

P4A 1 3 drops from 9 m height

**P5A 3 drops from 9m height**

### APPLICATIONS

- o Low floors glazings (P4A), window shops for valued or dangerous objects or animals.
- o Fanlights for high security window shops (P4A), doors and windows fro schools (P4A), **Consulates (P5A)**.
- o Aeroports (P3A)
- o Law Courts (P5A)
- o Post Offices (P5A)
- o Money Exchange Offices (P5A)