

# SAFETY GLAZING REQUIREMENTS

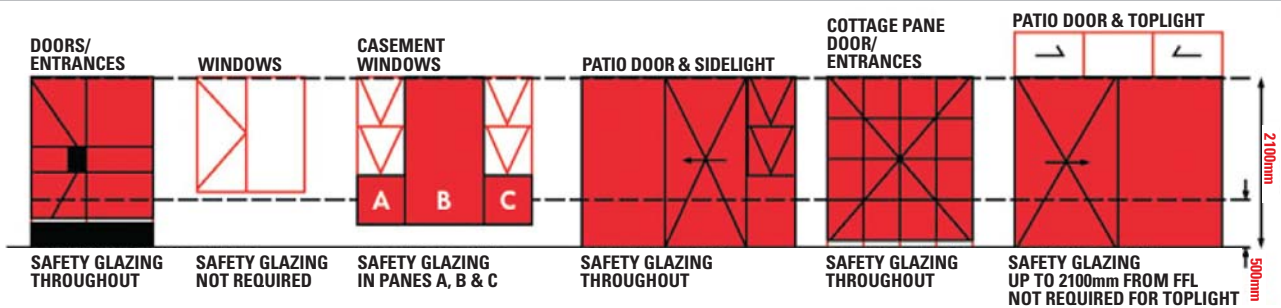
## PERMANENT MARKINGS ON SAFETY GLASS MATERIALS

GLASS CODE (1) Human Impact	GLASS CODE (2) Burglary and Vandalism	GLASS CODE (3) Armed Attack
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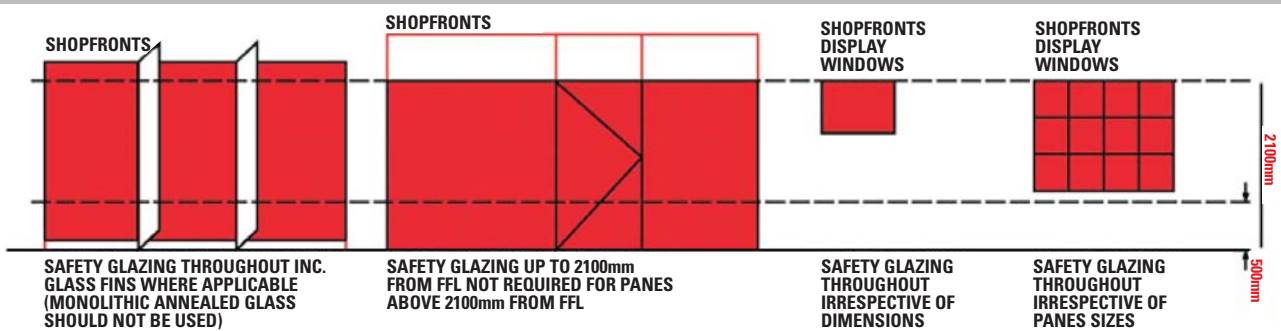
### Types of Glazing Materials

NS PVB Laminate HPR PVB Laminate Resin Laminate  Toughened Safety Glass  Any other glazing material complying with the requirements of SANS 1263 Part 1.	HI PVB Laminate   Any other glazing materials complying with the requirements of SANS 1263 Part II.	Multi Laminate Bullet Resistant Glass of PVB and/or Resin Laminates  Any other glazing material complying with the requirements of SANS 1263 Part III.
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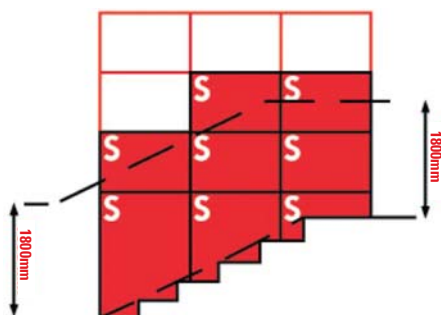
## SAFETY GLAZING REQUIREMENTS FOR DOORS AND WINDOWS



## SAFETY GLAZING REQUIREMENTS FOR SHOPFRONTS AND DISPLAY WINDOWS



## SAFETY GLAZING REQUIREMENTS FOR WINDOWS AROUND STAIRWAY, RAMP OR LANDING



## SAFETY GLAZING REQUIREMENTS FOR BALUSTRADE TO STAIRWAY, RAMP, LANDING OR BALCONY



SAFETY GLAZING BETWEEN BROKEN LINES AS MARKED WITH 'S'

## SAFETY GLAZING REQUIREMENTS

**DIMENSIONS: Vertical glass supported in a frame supported all round in external walls**  
in buildings where height measured from the ground to the top of such wall does not exceed 10 metres.

Nominal glass thickness in mm	Maximum pane area, m <sup>2</sup>						
	3	4	5	6	8	10	12
Monolithic Annealed Glass	0.75	1.5	2.1	3.2	4.6	6.0	6.0
Patterned Annealed & Wired Glass	-	0.75	1.2	1.9	2.6	3.4	-
Laminated Annealed Safety Glass	-	-	-	2.9	4.3	5.7	5.7
Toughened Safety Glass	-	1.9	3.0	4.5	8.0	8.0	8.0

**DIMENSIONS: Vertical glass supported in a frame supported all round in internal walls.**

Nominal glass thickness in mm	Maximum pane area, m <sup>2</sup>						
	3	4	5	6	8	10	12
Monolithic Annealed Glass	0.75	1.5	2.1	3.2	4.6	6.0	6.0
Patterned Annealed & Wired Glass	-	0.75	1.2	1.9	2.6	3.4	-
Laminated Annealed Safety Glass	-	-	-	4.1	6.0	7.2	7.2
Toughened Safety Glass	-	3.0	4.2	6.4	9.2	9.2	9.2

**DIMENSIONS: Vertical glass supported in a frame on two opposite sides in external walls**  
in buildings where height measured from the ground to the top of such wall does not exceed 10 metres.

Nominal glass thickness in mm	Maximum pane area, m <sup>2</sup>						
	3	4	5	6	8	10	12
Monolithic Annealed Glass	-	0.4	0.5	0.6	0.85	1.0	1.3
Patterned Annealed & Wired Glass	-	0.25	0.3	0.35	0.5	0.6	-
Laminated Annealed Safety Glass	-	-	-	0.55	0.8	0.95	1.2
Toughened Safety Glass	-	0.55	0.7	0.85	1.15	1.3	1.8

**DIMENSIONS: Vertical glass supported in a frame on two opposite sides in internal walls.**

Nominal glass thickness in mm	Maximum pane area, m <sup>2</sup>						
	3	4	5	6	8	10	12
Monolithic Annealed Glass	-	0.65	0.8	0.95	1.3	1.55	2.0
Patterned Annealed & Wired Glass	-	0.4	0.48	0.57	0.78	0.9	-
Laminated Annealed Safety Glass	-	-	-	0.9	1.25	1.5	1.95
Toughened Safety Glass	-	0.9	1.1	1.3	1.75	2.0	2.7

### SELECTION OF AAAMSA PERFORMANCE CLASS DESIGNATIONS

Terrain Category as per SANS 10160	Height from ground to top of products in Metres			
	5	10	15	20
<b>Category 1</b> Open sea, lake shores and flat treeless plains	A2 1500Pa	A3 2000Pa	A3 2000Pa	A3 2000Pa
<b>Category 2</b> Airfields, open parklands, farmlands, undeveloped outskirts of towns and suburbs	A2 1500Pa	A2 1500Pa	A3 2000Pa	A3 2000Pa
<b>Category 3</b> Built-up areas	A0 600Pa	A1 1000Pa	A1 1000Pa	A2 1500Pa
<b>Category 4</b> City centres	A0 600Pa	A1 1000Pa	A1 1000Pa	A2 1500Pa

**A0, A1, A2, A3 are AAAMSA Performance Class Designations - Minimum design criteria for internal work in 600Pa (A0).**

**Note:** Internal glazed screens (shopfronts, partitioning) are to be designed to withstand a design load of 600PA. This design load represents all the impact forces which may occur in terms of SANS 10160. The framing of such screens must have maximum deflection of 1/175<sup>th</sup> of the span.