

# AS1288-2006 AUSTRALIAN STANDARDS GLASS IN BUILDING

The following is a **summary** of the AS1288-2006, January 2006 Glazing code that you need to be aware of in regard to glass (please refer to the Australian Standards - AS1288-2006 for the full code) with forms part of the Building Code of Australia.

TABLE 5.1 – Maximum Areas of Safety Glass (extracted from AS1288-2006

		,,,,	
	Type of Glazing	Nominal	Maximum area
		thickness (mm)	(m²)
Grade A Safety Glass*	Toughened and toughened laminated glass	3	1.0
		4	2.2
		5	3.0
		6	4.0
		8	6.0
		10	8.0
		12	10.0‡
		>12	Extrapolated
	Laminated glass†	5	2.2
		6	3.0
		8	5.0
		10	7.0
		12	9.0‡
		>12	Extrapolated
	Safety organic coated mirror (vinyl backed)	4	3.0
		5	3.5
		6	4.0
	Safety organic- coated glass	3	2.0
		4	2.0
		5	2.2
		6	3.0
		8	5.0
		10	7.0
		12	9.0
Grade B Safety Glass*	Wired glass	≥6	2.5

<sup>\*</sup> Safety glazing material Grade A or Grade B to AS/NZS2208

Note Maximum area do not take into account design wind pressures. Refer to AS1288-2006 Supplement 1.

<sup>†</sup> Based on total glass thickness only (interlayer thickness not included and should be added)

<sup>‡</sup> This area may not be readily available



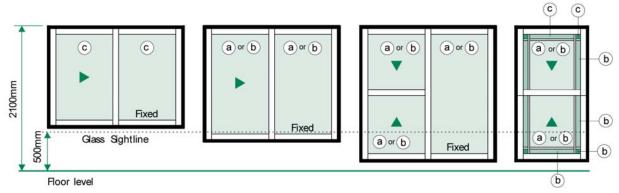
### LOW LEVEL GLAZING IN RESIDENTIAL BUILDINGS

### Where the lowest sight line is less than 500mm from floor or ground level

You must use Grade A Safety Glazing.

**Fully framed glazing only** – ordinary annealed minimum 5mm thick up to 1.2m<sup>2</sup> (previously 2.0m<sup>2</sup>).

Larger areas of ordinary annealed not permitted regardless of glass thickness.



On tall double hung windows (floor to ceiling) both sashes could be within 500mm of floor level so both sashes need to comply with human impact clauSe

#### Glass within 500mm off the floor

- a) Grade A Area over 1.2m<sup>2</sup>
- b) 5mm annealed Max area 1.2m² max anneal glass is 5mm then Grade "A" safety glass
- c) Ordinary annealed glass to withstand design wind load use Australian Standard Aspect Ratio chart

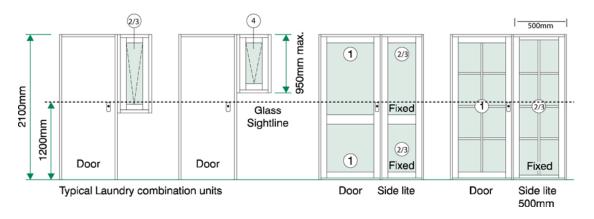
### Glazing within 300mm of door

All panels within the nearest vertical sight lines less than 300mm from the nearest edge of the doorway opening shall be glazed as follows:

a) Fully framed wholly or partially within 1200mm from floor or ground level



- b) Grade A Safety glass with these exceptions:
  - A minimum of 5mm ordinary annealed may be used up to a maximum area of 0.3m2 (500mm x 600mm example size)



Glass - 300mm of the opening sash of the door

- 1) Grade A Safety Glass only used in doors
- 2) Grade A Safety Glass Area over 0.3m<sup>2</sup>
- 3) 5mm annealed Area less than 0.3m<sup>2</sup>
- 4) Ordinary annealed glass to withstand design wind load use Australian Standard Aspect Ratio chart

### **Human Impact**

Specific requirements or exceptions:

Annealed and annealed decorated glass panels in doors

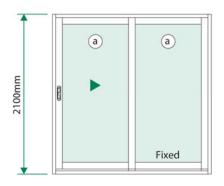
3mm and 4mm shall not exceed 0.1m<sup>2</sup> with maximum width of 125mm

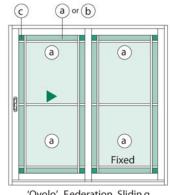
5mm and 6mm shall not exceed 0.26m<sup>2</sup> with maximum width of 300mm

10mm or greater with or without bevelled edges shall not exceed 0.5m<sup>2</sup>



### **Sliding Doors**







(a)

'Ovolo' Federation Slidin g Door (individually glazed)

'Ovolo' Colonial Slidin g Door (individually glazed)

- a) Grade "A" Safety Glass
- b) 5mm & 6mm Annealed Glass Area less than 0.26m<sup>2</sup>- max width panel 300mm
- c) 3mm & 4mm Annealed Glass Area less than 0.1m<sup>2</sup> max width panel 125mm

# Glazing capble of being mistaken for a doorway or opening (previously umimpeded path of travel)

Specific requirements or exceptions:

Cover panels excluding doors and side panels which may be capable of being mistaken for:

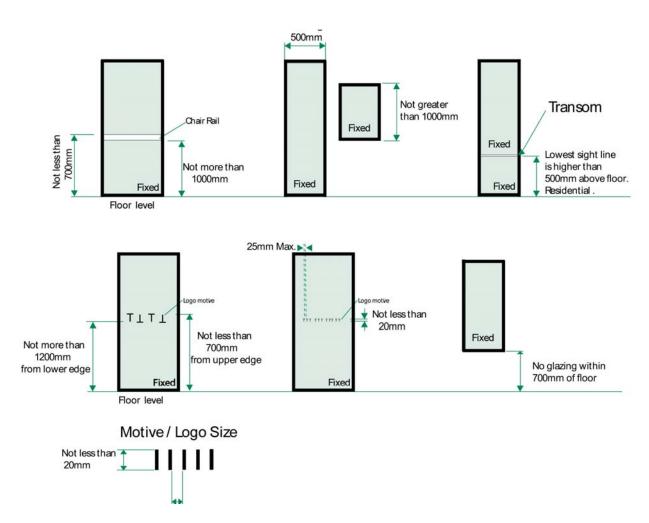
- a) A doorway
- b) An opening that could provide access to, or egress from, one part of a building or another, or
- c) An opening between inside and outside of a building
- d) And can result in human impact

Glazing that conforms to the following shall not be considered to be capable of being mistaken for a doorway or opening



# Outside these following parameters glass panel will need to be fitted with a motif Permanently etched into the glass OR

Self adhesive label that cannot be removed in single action



- a) The sight size width is less than or equal to 500mm
- b) The sight size height is less than or equal to 1000mm
- c) The lowest sightline is higher than 500mm above the floor level in residential buildings
- d) Where a crash/chair rail, handrail or transom is provided and located with its upper edges not less than 700mm or its bottom edge not more than 1000mm above the floor level



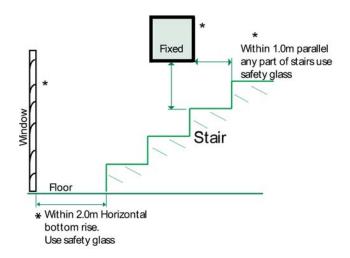
e) The glazing is marked for visibility

DH Door Height	MHLE Motif Height Lower edge	M Motif
2400	1187	20
2100	1037	20
2065	1019	20

- f) The glazing is opaque, patterned or leadlight
- g) The panels are louvres with a blade width (ie shortest side) not greater than 230mm
- h) The glazing protects a difference in level of 1000mm or more

## **Stairways**

Within these areas - Grade "A" Safety Glass required

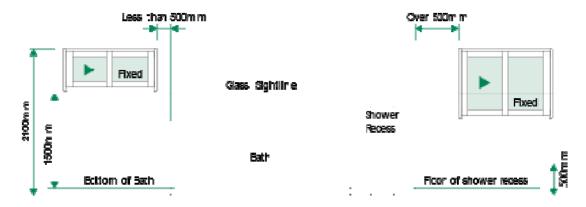




#### **Bathrooms Windows**

Bathroom, ensuite and spa room glazing

Glazing including mirrors within 2000mm above floor level – all glazed to A Grade Safety Glass;



### **School**

Schools, early childhood centres, aged care buildings, retirement villages and nursing homes

Requirements are in addition to requirements for doors and side panels

Schools and early childhood centres

Fully framed glazing within 1000mm of the ground or floor to be Grade A Safety Glass

### **Aged Care**

Aged care buildings, retirement villages and nursing homes (new requirement)

Fully framed glazing within 1500mm of the ground or floor to be Grade A Safety Glass



### SAFETY GLASS IDENTIFICATION

Original panels – to be marked in accordance with AS/NZS2208

Either a label that cannot be removed and reused or a permanent mark on the glass surface Cut panels – applies to laminated safety glass, safety-organic coated glass or safety mirror, or safety wire glass

Requires a label or permanent mark Minimum marking requirements - name, trade mark or code of manufacturer or supplier

Type of safety glass

Relevant standard (AS/NZS2088)

Whether Grade A or B