

Grade	Type	Thickness (mm)	Maximum Area (m²)
A	Toughened	3	1.0
		4	2.2
		5	3.0
		6	4.0
		8	6.0
		10	8.0
		12	10.0
	Laminate	5	2.2
		6	3.0
		8	5.0
		10	7.0
		12	9.0

AS1288-2006 Table 5.1 – Maximum Areas of Safety Glass*

This table represents an extract from AS1288-2006 and should be used as a guide only. Maximum areas do not take into account design wind pressures. To calculate minimum glass thickness for stress at ultimate limit state and deflection at the serviceability limit state pressures, AS1288-2006 Supplement 1 must be used. For a complete version including minimum thickness of annealed glass, refer to the published standard.

Note: AS1288-2006 states that the maximum area for 3mm annealed (float) glass is: n 0.85m² for monolithic annealed glass or; n 1.36m² for annealed glass incorporated in an IGU.

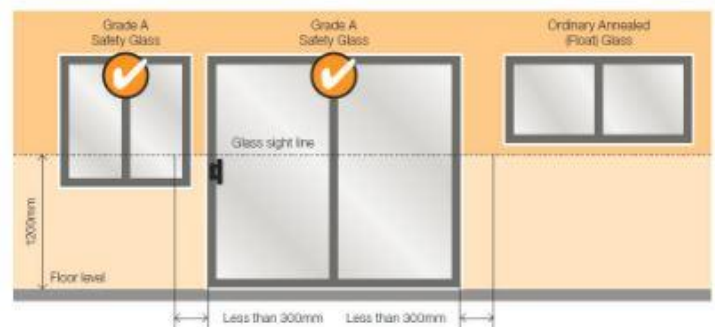
In the above example, the product configuration on the left would be comprised of a combination of 4mm and 5mm monolithic annealed (float) glass. However, if the same opening was replaced by a single fixed lite, the minimum glass requirement is 8mm toughened glass at the very least. As a result, the product on the right would, in most circumstances, be site glazed with additional costs (i.e. crane lift, on-site labour) accounted for in the final price. Although more visually appealing, this product would be significantly more expensive due to size restrictions imposed through AS1288-2006.



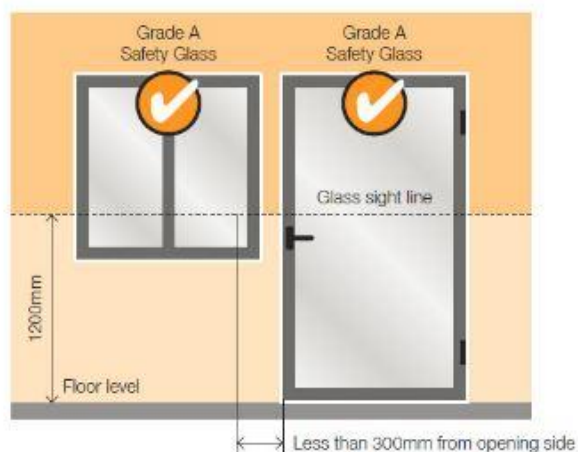
Standard size SFS/FFF 2100mm x 3000mm VS Single 'F' Fixed Lite of equivalent size

Critical Locations for Doors

Glazing in all doors (including but not limited to hinged, sliding, stacking and bi-folding) shall be Grade A safety glass in accordance with AS1288-2006 Table 5.1 and AS1288-2006 Supplement 1. Side panels next to doors are deemed to be subject to human impact where the nearest vertical sightline is less than 300mm from the nearest edge of the doorway opening and within 1200mm of the floor level and therefore glazing in this instance shall be of Grade A safety glass.



Example - Hinged Doors



Example - Sliding Doors

Glazing Mistaken for a Doorway

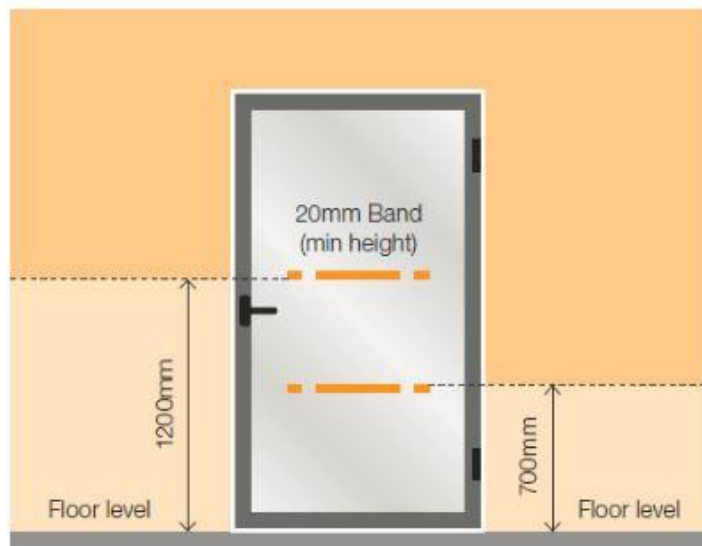
Glazing capable of being mistaken for a doorway or opening must be Grade A safety glass. By definition, glazing is considered to be capable of being mistaken for a doorway if all the following conditions are met:

- The daylight width is greater than 500mm;
- The daylight height is greater than 1000mm;
- The lowest sightline is within 500mm of the floor level;
- The glazing is not opaque, patterned or leadlight;
- Where a transom or hand rail is not incorporated within 700mm – 1000mm of floor level;
- Where a louvre has blade widths greater than 230mm.

✓ Understanding Glass Rules - Manifestation

Ensure that the motif has sense of permanency which includes etched or applied that are difficult to remove (kiss or security cut). They cannot be able to be pulled off easily. Standard industry practice is to have etched markings on doors leaves to ensure compliance

If the presence of glass in a door, side panel or a panel capable of being mistaken for a doorway or opening is not made apparent by transoms, colonial bars, or other components of the glazing system, or other decorative treatments, the glass shall be marked to make it visible. However, making glass visible by marking is not a substitute for safety glass where required in this standard.



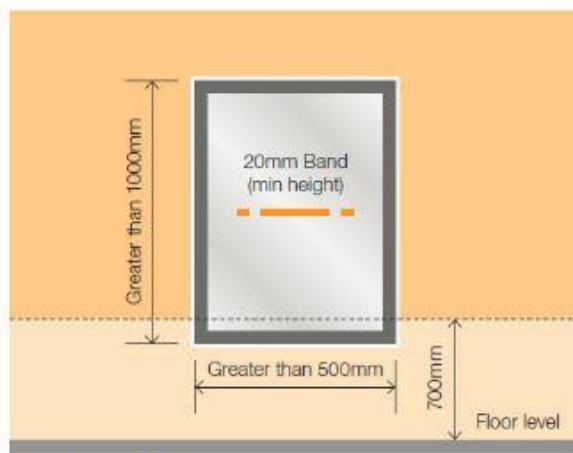
Marking shall be in the form of an opaque band not less than 20mm in height and located so that the vertical distance from the floor level is:

- not less than 700mm from the upper edge of the band; and
- not more than 1200mm to the lower edge of the band.

Example - Doors

Marking is required on any glazing where all of the following applies:

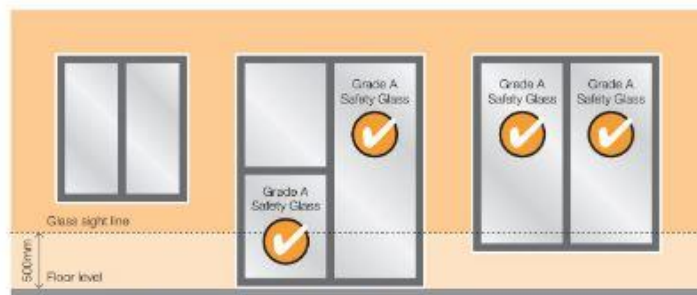
- The height of the glazing is greater than 1000mm at any part; and
- The width of the glazing is greater than 500mm at any part; and
- Any part of the glazing falls within 700mm of the floor level; and
- The glazing is not provided with at least one fixed glazing bar, firmly attached to the styles to locate and protect each face of the glass. At least one glazing bar shall be located with its upper edge not less than 500mm, and its bottom edge not more than 1000mm above the floor level. The glazing bar shall have a face width not less than 40mm.



Example - Any Glazing

✓ Understanding Glass Rules - Low Level Glazing

Glazing where the lowest sightline is within 500mm of the floor level shall be Grade A safety glass. Ordinary annealed (float) glass may be used providing glazing is fully framed and not less than 5mm thickness up to a maximum area of 1.2m². Larger areas are not permitted regardless of thickness.



Example - Grade A Safety Glass Required

Understanding Glass Rules - Wet Areas



Example - Bathroom

All glazing including mirrors within 2000mm of the floor level in wet areas shall be Grade A safety glass or Grade B safety glass in accordance with the requirements of AS1288-2006 Table 5.1.

Note: Ordinary annealed glass may be used provided it is fully backed by and completely adhered to a solid material in such a way that all pieces remain bonded to the backing in the event of breakage.

Understanding Glass Rules - Stairway Glazing



Example - Stairway

Glass within 2000mm horizontally from the bottom of the stairs and 1000mm either side of the stairs is deemed to be subject to human impact and therefore all glazing surrounding a stairway in this high risk zone shall be Grade A safety glass.

Stairways include stairwells, landings or porches where the stair flight has a minimum of two risers.

✓ Understanding Glass Rules - Splashbacks

Special care needs to be taken when toughened glass is to be used as a wall material or wall covering near a gas cooking appliance.

In a residential building where the distance from the nearest burner to the surface of the glass is greater than 200mm, ordinary monolithic annealed (float) glass can be used. However, where the distance is 200mm or less and greater than 140mm, a minimum 6mm toughened glass is required.

The recommended minimum clearance from the nearest burner to the surface of the glass is 140mm. Ordinary annealed (float) glass is limited to between 40°-50° where toughened float glass can be used in situations up to 250°

Note: Splashbacks near a cooker require a fire retardant board behind them.

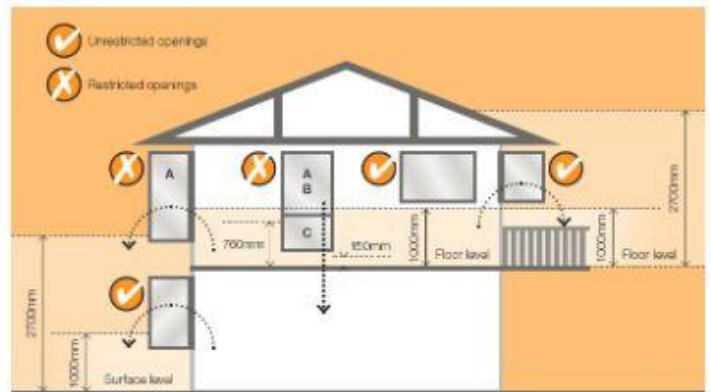


Example - Splashback

✓ Understanding Glass Rules - Restricted Openings

The guide below outlines Dazmark's direction in regards to restricted openings in all building types and exceeds requirements prescribed in the Building Code of Australia.

- Restricted openings apply when it is possible for a person to fall from an openable window, where the distance to the nearest surface level below (eg. ground, balcony, roof, pool) is 2700mm or greater (A); and
- Where the openable portion of a window is within 1000mm of the floor level (B), or the lowest part of the frame falls between 150mm and 760mm of the floor level (C), the openable portion must be restricted to facilitate a 120mm opening.
- The above rules apply to any openable window (eg. louvre, awning, double hung) of any size located on an external wall.



Example - Restricted Openings

Note: Where the openable portion of a window is permanently fitted with a safety grill or security screen so as to prevent access to the outside or where the openable portion of a window is equal to or above 1000mm from the floor level and no climbable horizontal elements (eg. transoms) exist below the openable portion within 150mm and 760mm from the floor level, no sash restriction is required.