

THE SASH
WINDOW
WORKSHOP

Critical Areas for Safety Glass





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Safety and Security Glass

The term 'Safety' is applied to glazing used to reduce the risk of accident by impact, fracture, shattering, or in a fire.

The term 'Security' is applied to glazing which is also able to withstand deliberate attack of various kinds, such as physical attack with regards to vandalism and / or burglary.

Critical Locations

The updated British Standard BS 6262: Part 4: 1994 Code of Practice for Glazing for Buildings '**Safety related to human impact**', introduced new requirements that glazing fitted in critical locations in domestic buildings must be fitted with safety glass and is now a legal requirement.

Certain internal and external areas are considered 'critical locations' in terms of the safety of vertical glazing, as they are at risk from accidental human impact.

Examples of Locations

Doors	Any glazing or part of that glazing in a door, which is between the finished floor level and a height of 1500mm above the floor level.
Side Panels to Doors	Any glazing or part of that glazing, which is within 300mm of either side of a door edge and which is between the finished floor level and a height of 1500mm above the floor level.
Windows, Partitions, and Walls	Any glazing or part of that glazing, which is between the finished floor level and a height of 800mm above the floor level

The diagram below gives examples of glazing in windows, partitions, walls, doors and side panels. 'Critical locations' are shaded grey. Any glazing within a shaded area must comply with British standards and be safety glass.

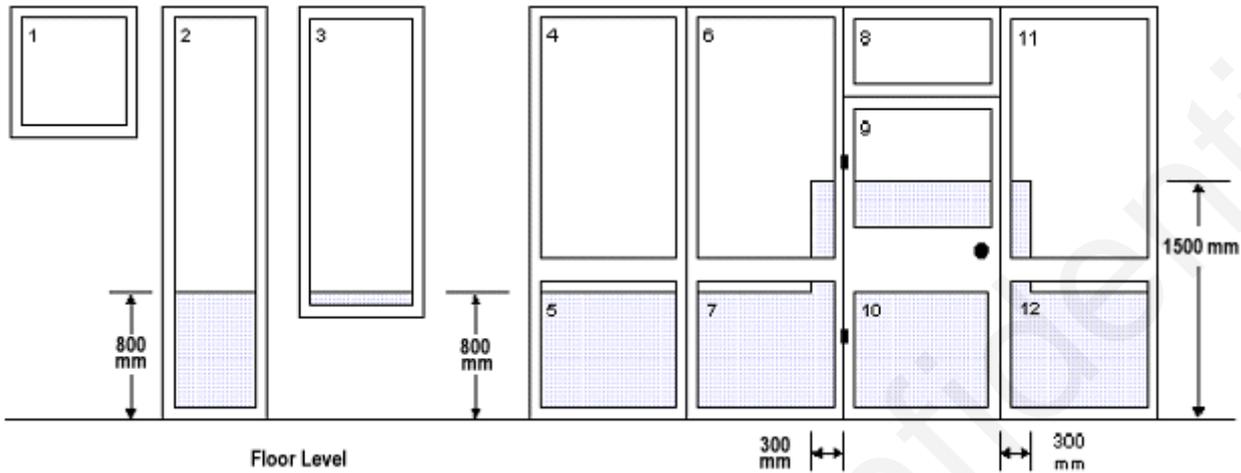
In the diagram, glazing unit No. 10 falls wholly within a 'critical location' and so the glazing must comply with BS 6206.

Where only part of a glazing unit falls within a 'critical location' the **whole** of that unit must comply with BS 6206. In the diagram this applies to units Nos. 2, 3, 5, 6, 7, 9, 11 and 12.

In the diagram only glazing units Nos. 1, 4 and 8 fall wholly outside the 'critical location' and need not comply with BS 6206.



Diagram 1
Glazing in Windows, Partitions Glazing in Doors and Side Panels and Walls



Safety glass, which complies with may be fitted in 'critical locations'. This standard requires the glass to pass stringent tests involving impacts from a "punch bag" containing lead shot. Providing the glass does not break or breaks safely it is categorised as Class A, B, or C with A being the highest grade of safety glass.

Different types of glass can be classified as safety glass:

TSWW fitters can cut none of the glasses listed below on site, accurate sizes must be provided for re-glazing work.

Toughened Glass (also called tempered) categorised as Class A

This looks like ordinary glass but receives a special heat treatment process to toughen it. It is much stronger than ordinary glass and on impact disintegrates into small granular pieces, which are not sharp, reducing the risk of injury.

Laminated Glass available in Class A, B or C

Consists of two or more sheets of ordinary glass, which are attached together by a plastic interlayer. The plastic layer provides a barrier and on impact any broken shards of glass will remain attached to the plastic reducing the risk of injury.

Wired Glass (also called Pyroshield safety clear/textured) categorised as Class C

This glass has a network/mesh of wires embedded in it. Certain types of wired glass can satisfy the impact requirements for safety glass while giving a level of fire resistance.