

Marking of safety glass

(November) (Second issue – supersedes January 2016)

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Question

What markings are required on safety glass to show compliance with British Standards?

Considerations

- NHBC Standards clause 6.7.7 refers to the risk of accidental breakage of glazing particularly at low level and in doors and side panels. The clause describes the need for safety glass in these areas in accordance with National Building Standards and BS 6262 'Glazing for buildings'.

Answer

BS 6262 refers to safety glass and its classification and need for marking in accordance with *BS 6206 'Impact performance requirements for at glass and safety plastics for use in buildings'* and *BS EN 12600 'Glass in building. Pendulum test. Impact test method and classification for at glass'*. Although BS 6206 was withdrawn in 2006 it is still referenced in National Building Standards so is shown below for comparison purposes.

The comparisons between the classification systems under BS 6206 and BS EN 12600 are shown below. Both BS 6206 and BS EN 12600 use pendulum impact tests with similar drop heights and grades safety glass under one of three impact performance classifications.

- BS 6206 grades are 'A, B or C' with 'A' being the highest performance grade.
- BS EN 12600 grades are '1, 2 or 3' with '1' being the highest performance grade.

For comparison purposes between the two Standards grade 'A' = '1', 'B' = '2' and 'C' = '3'.

To identify the grade of safety glass used each pane should be indelibly marked so that the marking is visible after installation. The markings should include:

- The manufacturer's name or trade mark
- The product number for the type of glass *
- The impact performance classification e.g. 1, 2 or 3 to BS EN 12600 or A, B or C to BS 6206.

* e.g. BS EN 12150 toughened glass, BS EN 14449 laminated glass, BS EN 14179 heat soaked thermally toughened glass.

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Insulating glass units (IGU's)

Care should be taken to ensure that IGU's, made from panes with different safety glass performances, are installed the correct way round if this will affect their ability to meet the required impact resistance from one or both sides when installed.

In the case of IGU's in which both panes are classified as safety glazing material, the marking may be on one pane only provided this mark clearly indicates that it applies:

- to both panes, and
- to the lowest performance, if different performances apply to the individual panes.

Note: Safety glass markings should not be confused with IGU product markings which are covered under Technical Guidance 6.7/16.

Bath and shower screens

Flat glass screens to baths and showers, should be tested for impact and marked in accordance with the appropriate safety glass markings. Alternatively, the glass need not be marked, as described above, if the whole shower enclosure complies with *BS EN 14428 'Shower enclosures – Functional requirements and test methods'* and is marked with:

- a CE mark,
- the name or identifying mark and registered address of the manufacturer,
- the last two digits of the year in which the CE marking is axed and
- reference to BS EN 14428.

Marking to BS EN 14428 covers both curved and at glass and any framing. The marking can be anywhere on the enclosure and should be easily visible, readable and permanent.

Wardrobe doors

Glazed or mirrored wardrobe doors without a rigid backing to the glass, which when installed will only be impacted from one side i.e. the room/face side, may be tested and classified for impact from the room/face side only.

Glass which has been tested and passed for impact from one side only will be classified as grades 1, 2 or 3 to BS EN 12600 and should be marked accordingly.

Safety glazing that has only been tested and classified for impact from one face side should not be used in locations where it could be accessed from both sides e.g. as in a room divider, unless it can be provided with a suitable backing for protection.



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