

# GUIDE TO SELECTION OF FIRE RESISTING DOORS

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**This guide has been prepared to assist in the selection of fire resisting doors to meet the requirements of Part B (Fire safety), Part M (Access and facilities for disabled people) and Part N (Glazing - materials and protection)**

(Please note that doors to lifts are not covered by this guidance)

## *INTRODUCTION*

Guidance on the interpretation of the Building Regulations is given in the Approved Documents which are linked to their respective parts.

One of the main changes relating to both Part B and Part M affecting doors is the definition of clear opening width.

The **clear opening width** required is measured between the face of the door stop and the face of the door leaf when the leaf is positioned at right angles to the opening. (Where a pair of doors is used the measurement is taken from the leading edge of the secondary door).

For the purpose of measurement, weatherboards and door furniture are ignored.

## *NON-DOMESTIC DOORS*

Part B identifies the fire resistance period which is required for any particular location. Part B also recommends the use of vision panels to doors on escape routes. In most instances, the area of glass in a door is not limited by Part B, except between a non-domestic protective shaft and the accommodation where for a single stairway a limitation of 25% of the door area is applied or 50% where there is more than one stairway. Further limitation may be applied by the door manufacturer as a result of the fire test report.

Part M introduces requirements for providing access to disabled people. The Approved Document provides guidance on how to meet these requirements.

In non-domestic situations the following recommendations apply:-

### **Principal entrance doors**

1. Sufficient width to provide for manoeuvrability for a wheelchair.
2. Space alongside to provide reach from a wheelchair to the door.
3. Visibility through the door to prevent collision.

These can be met by:

- a) A clear opening width of 800 mm.
- b) Space adjacent to door leading edge of 300 mm.

- c) A vision panel between 900 mm and 1500 from the floor.

**Internal doors**

The same criteria is applied to internal doors and the same guidance is also applied except on opening width.

1. Sufficient width to provide for manoeuvrability for a wheelchair.
2. Space alongside to provide reach from a wheelchair to the door.
3. Visibility through the door to prevent collision.

These can be met by:

- a) A clear opening width of 750 mm.
- b) Space adjacent to door leading edge of 300 mm.
- c) A vision panel between 900 mm and 1500 from the floor.

**Hotels and Motel Bedrooms**

Where an internal door provides access to a hotel or motel bedroom specifically designed for disabled occupants the rules for width and accessibility may apply. Viewing panels are not required. Where the room is not a disabled bedroom the side access of 300 mm can also be disregarded.

**Sanitary Conveniences**

Specific door widths are not indicated for these locations, but dimensions for overall single leaf door sets are provided.

For wheelchair compartments the single leaf doorset should be at least 1000 mm.

For ambulant disabled a single leaf doorset of 800 mm is required. Side clearances and vision panels are not required.

***DOMESTIC DOORS***

This applies to all dwellings – (includes purpose built self-contained student living accommodation)

Entrance doors must provide a clear opening width of 775 mm.

<b>Table 1 – Minimum widths of corridors and passageway for a range of doorway widths</b>	
<b>Doorway clear Opening width (mm)</b>	<b>Corridor/passageway width (mm)</b>
750 or wider	900 (when approach head-on)
750	1200 (when approach not head-on)
775	1050 (when approach not head-on)
800	1900 (when approach not head-on)

Internal doors have varying width requirements which are dependent upon the width of the approach. The above table extract from Part M provides the guidance.

## ***GLAZING***

It can be seen that in most non-domestic requirements a vision panel will be required. However, in addition to the requirements for vision under Part M, fire resistance under Part B consideration must be given in the use of safety glazing under Part N.

The location of these vision panels below a height of 1500 mm will bring with them the requirement to meet Part N. Therefore the glass must meet the requirements of BS 6206.

If the narrowest tight size can be kept to 250 mm or less, then glass at a minimum of 6 mm thick can probably be used. If the least dimensions is above this, proof that the BS 6206 classification, as well as fire resistance has been met, will be needed.