

Pods

Building Standards Guidance Note 10



Introduction

Purpose

This note gives guidance on considerations to be made when assessing compliance with the Building Regulations when installing Pods into offices.

Introduction

Prefabricated modular office workstations which can incorporate; seating, desks, lighting, power, or acoustic walls/ceilings, better known as “Pods”, are becoming increasingly popular within offices. There are a variety of designs that can quickly and effectively offer privacy from the rest of the office. This makes them a popular solution for the needs of many businesses.

Fully enclosed pods often achieve excellent acoustic performance. Whilst this reduces disruption from online meetings it can impact on the effectiveness of the life safety system within the building.

There is no specific reference to Pods within the Approved Documents, however their inclusion can have an impact across a breadth of Regulations. This Guidance Note gives advice on the recognition of the issues presented using Pods and enables surveyors to ensure design teams consider the risks. Each pod should be considered on a case-by-case basis dependent on size and location. The Principal Designer for the project should be clear that they are ultimately responsible for the compliance of their design.

Guidance – The Building Regulations

The Building Regulation 2010

An alteration is material for the purpose of these Regulations if the work, or any part of it, would at any stage result in a building or controlled service or fitting not complying with a relevant requirement where previously it did.

Applicable requirements:

- **Part A Structure**
- **Part B1 Means of warning and escape**
- Part B3 Internal fire spread (structure)
- Part B4 External fire spread
- Part B5 Access and facilities for the fire service
- **Part M Access to and use of buildings**
- Part T Toilet accommodation

Installing pods potentially could impact on Parts A, B1 and M. If it is considered the work is a Material Alteration then compliance with other parts of Building Regulations become relevant, including Part B2 Internal fire spread (linings), Part F Ventilation, and Part K Protection from falling, collision and impact.

If the installation of a pod is a Material Alteration, then items for consideration are set out in Page 8 of this document. In Sweco's view if a fully enclosed pod is introduced into an office this would constitute a Material Alteration. For open pods, the consideration the Client and Principal Designer need to make is more nuanced. If they determine that the installation does not need an application, a good test would be to consider whether the proposal meets their duties under the Regulatory Reform Order and Equalities Act.

Guidance – Additional legislation

The Regulatory Reform (Fire Safety) Order 2005 applies covering:

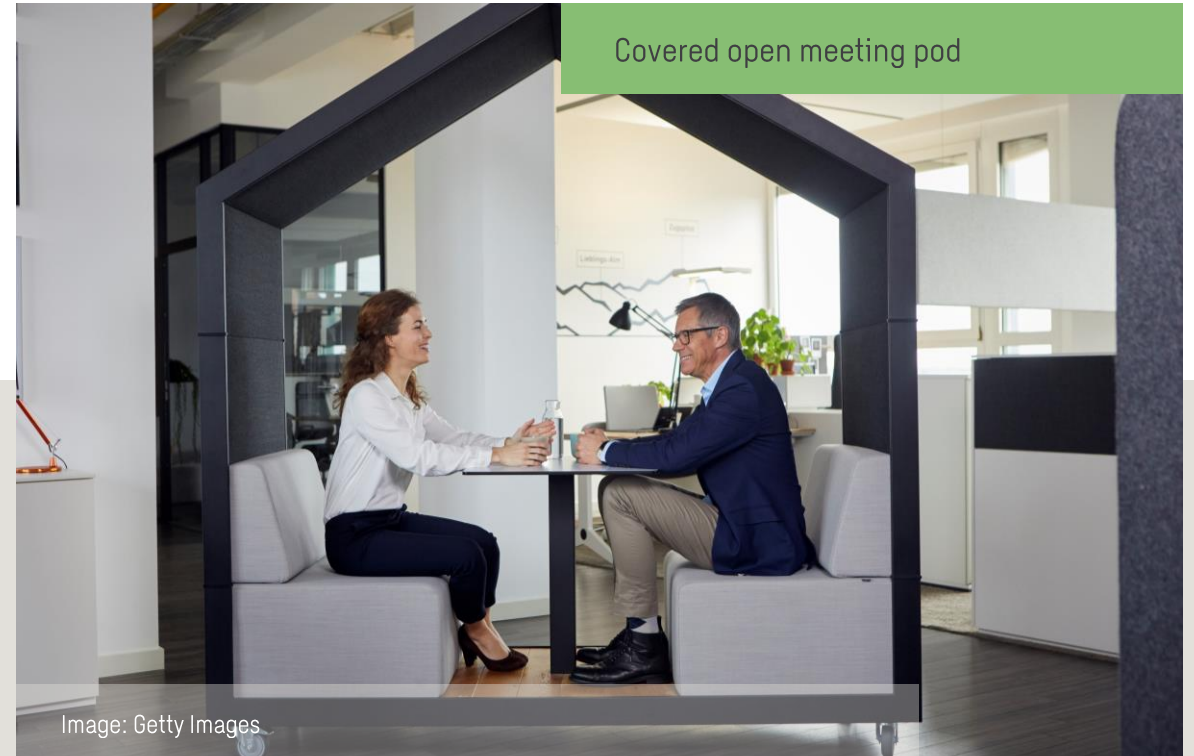
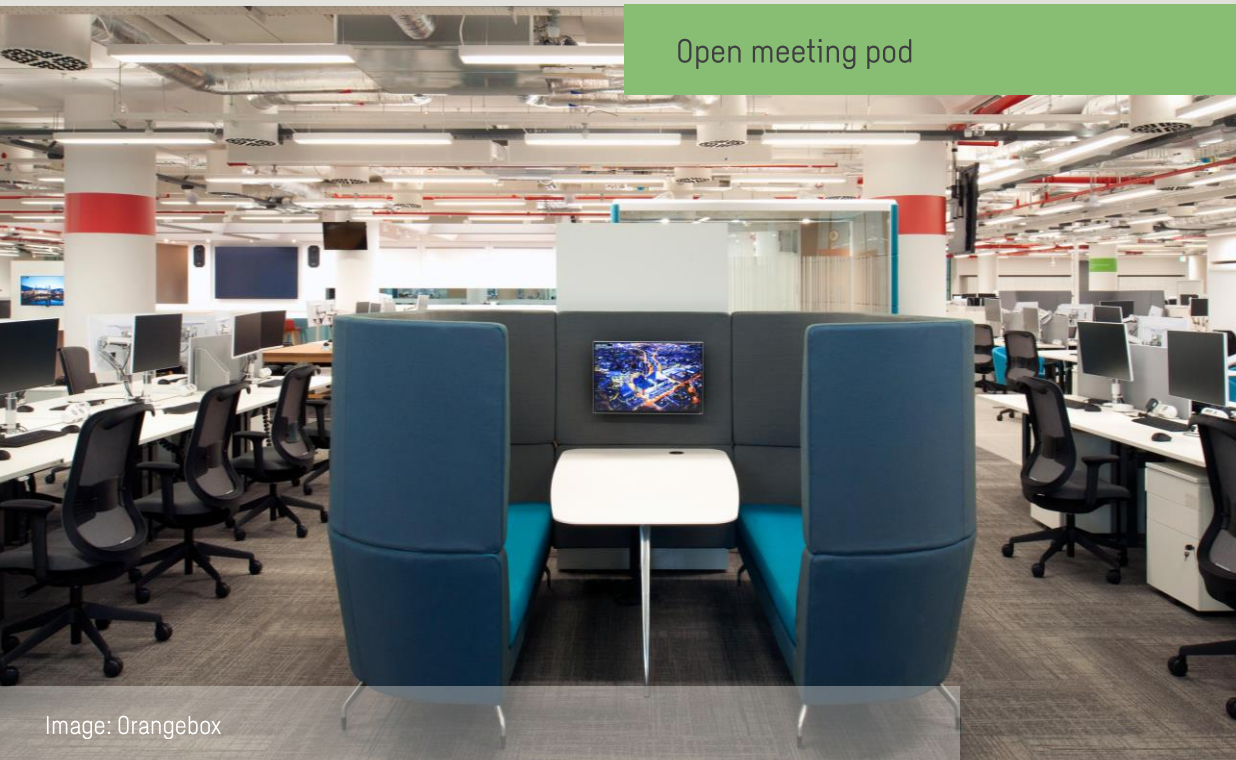
- Materials and construction used
- Provision of escape routes
- Fire detection
- Fire fighting systems etc
- The building contents

The Equalities Act 2010:

- Legally protects people from discrimination, harassment, and victimisation in the workplace.
- Protects individuals based on their characteristics and includes disability.

Pod Types

Open Pods

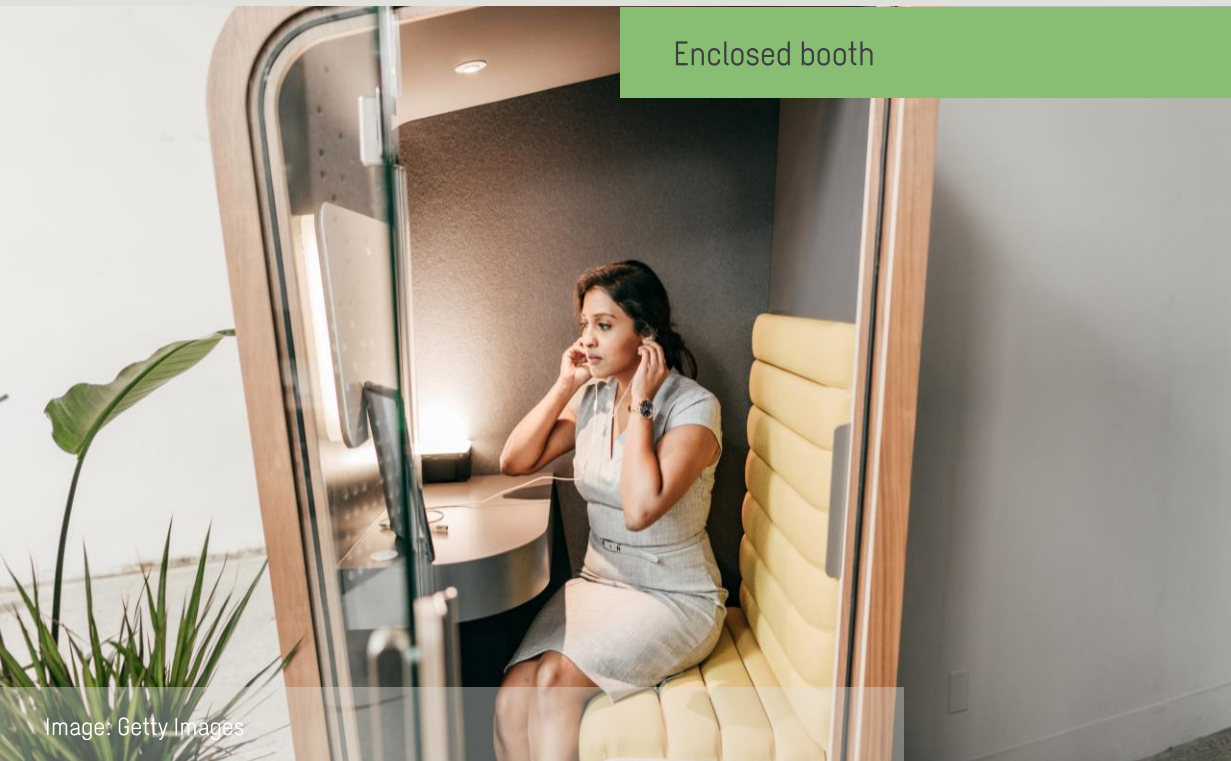


For the purposes of this document Pods can broadly be separated into two types; Open or Enclosed.

These examples are 'Open Pods'

Pod Types

Enclosed Pods (booths)

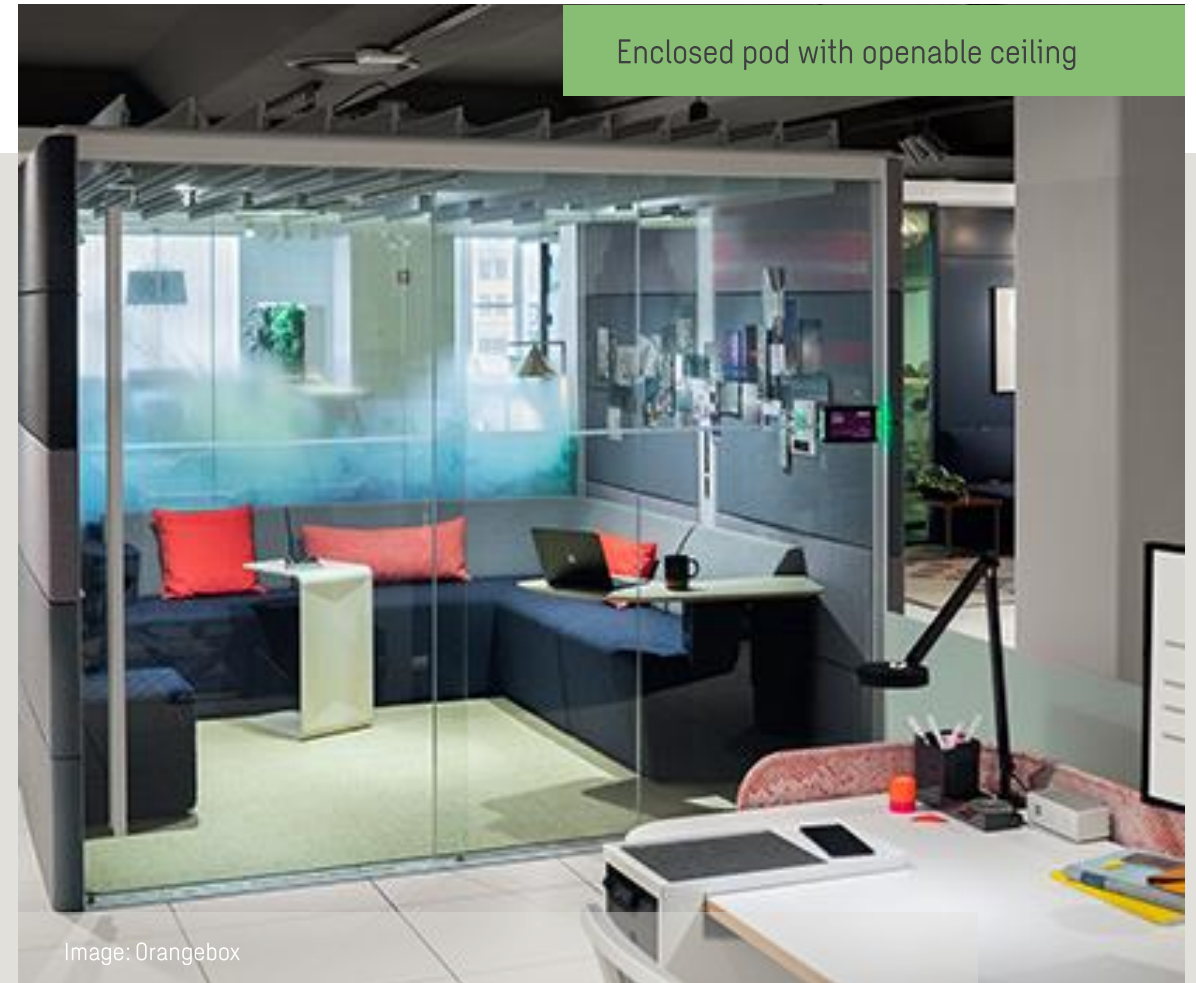


Fully enclosed pods (4 walls and a fixed ceiling).

Pod Types

Enclosed pods with openable ceilings

There are pods that are fully enclosed but are fitted with a ceiling that can open upon activation of a smoke detector within the pod. Providing the pod is fitted with a smoke detector to BS EN 54-7 or a multi-sensor to BS EN 54-31, and the ceiling fails safe open on power failure then these pods can be considered as “open pods” for the purposes of the fire alarm and sprinkler coverage. However, they are considered as enclosed with regards to the inner room situation. There is also the option to interface the pod’s built in smoke detector with the building’s fire alarm system.



Part B - Fire Safety

- Do the pods form inner rooms or inner inner rooms?
- Do the pods obstruct fire exit signage?
- What is the category of fire alarm coverage within the building?
- What is the audibility of alarms within the pods?
- In a sprinklered building, how do the pods allow suppression within their space and effect existing head positions?
- What surface spread of flame standard does the pod finishes provide?

Part F - Fresh air supply

- How is the Pod ventilated (Mechanically to achieve 10 l/s/person or 1 litre per second per m² floor area, whichever is greater)?

Part K - Collision with Glazing

- Is any glazing in the pod in a critical location, what is its specification?
- Is manifestation to glazing needed?

Part M - Access

- Does the pod provide level access?
- Does fixed furniture obstruct access?
- Has 300mm clear space been provided adjacent to the leading edge on the pull side of the door?
- Are there fully accessible facilities nearby that can be used as an alternative?

Fire alarm systems

Open pods should have sufficient openings so that when a fire originates within the pod other building users become aware of the fire, or a landlord's smoke detector is activated. The open pods should be positioned so they are not obstructing any smoke heads.

Although it's not always a Building Regulations requirement, most office buildings are fitted with a form of automatic fire detection. BS 5839:1 prioritises escape stairs and corridors, followed by access rooms. The requirement for fire detection in small offices or meeting rooms which are not circulation routes, is reserved for the highest category of fire system (L1 coverage).

If the pod enclosure interferes with the activation of the fire alarm system in the building, it must be checked to ensure that the pod is not adversely affecting it. This can happen in the following instances:

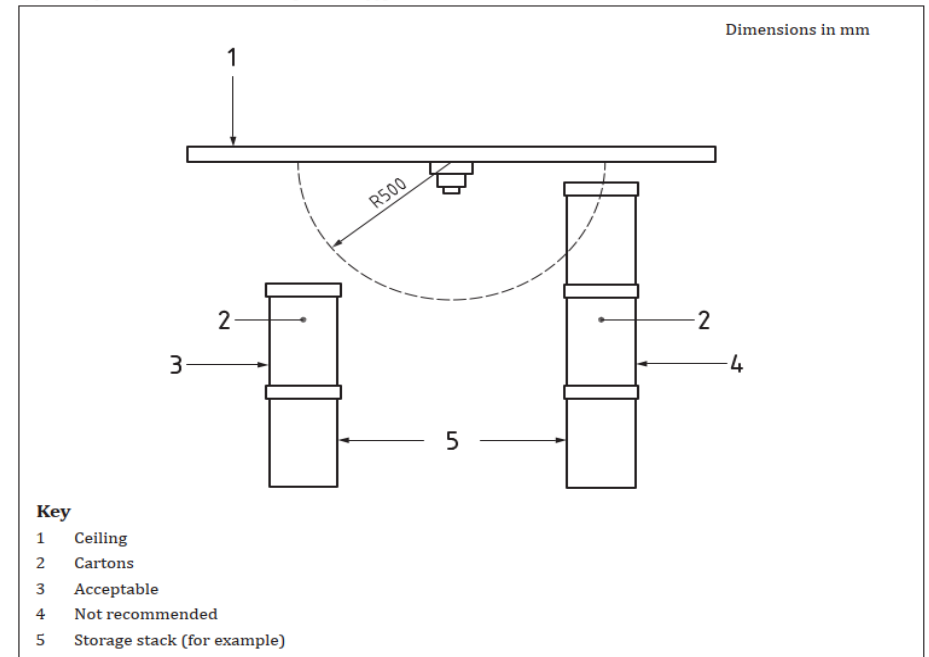
1. The pod is located within 500mm of a smoke detector head.
2. The pods ceiling is not perforated.
3. The pod is fully enclosed and the building's fire alarm system is designed for L1 coverage.

When the fire alarm is activated, the sound level within the pod should achieve a minimum of 60 dB, the same as a small enclosed area. We would expect sound level measurements to be taken from within the pods as part of the commissioning of the fire alarm system.

Clear space around smoke detectors

A clear space of 500mm is required around smoke detectors. Pods should not encroach on this zone. If they do alterations to the automatic fire alarm system will be required.

Figure 13 — Clear space around a detector [see 22.3p]



Perforated false ceilings

For purposes of BS 5839-1 (Fire detection and fire alarm systems for buildings) detectors above a perforated false ceiling may be used for protection of the area below the ceiling if:

- 1) The perforations are substantially uniform, appear cross the complete ceiling and throughout they make up more than 40% of the surface; and
- 2) The minimum dimension of each perforation in any direction is 10 mm; and
- 3) The thickness of the ceiling is not greater than three times the minimum dimension of each perforation.

In all other cases, the detector should be mounted below the false ceiling, and above if protection of the void is necessary.

Category L1 fire alarm system

The highest possible enhancement of life safety is provided by a Category L1 system. In a Category L1 system, all areas of the building are protected by automatic fire detectors.

Where the building has a Category L1 system, fire detection should be extended into the pod to ensure that this coverage is maintained to this level.

Sprinkler systems

Enclosed pods should have the sprinkler system extended into the pod to comply with BS EN 12845.

Where open pods or pods with openable ceilings are provided then the following considerations should be made.

Minimum pod requirements:

- $\geq 70\%$ clear opening is required
- Openable ceiling automatically activated via localised detectors

The height of the pod louvre relative to the underside of the sprinkler deflector needs to be considered as this is not the ceiling height. Clarification of BRE testing and classification for use is also relevant (as set out below).

The absolute minimum for flat spray ceiling sprinklers would be 300mm. This may however necessitate changing localised sprinklers, above the pods, to flat spray.

The absolute minimum for pendant spray ceiling sprinklers would be 500mm, providing BRE testing does not classify the pod as an open cell ceiling.

Guidance

Sprinkler systems

For areas with ceilings, sprinkler deflectors are, on average, 30mm below the underside of the ceiling – therefore 30mm needs to be added to 'X' dimension as illustrated.



Reaction to Fire

Depending on where the pods are located, they will need to achieve the following surface spread of flame classification to the external walls.

The inside of the pods under 30m² should have walls and ceilings that achieve D-s3,d2 classification.

Table 6.1 Classification of linings

Location	Classification
Small rooms of maximum internal floor area:	D-s3, d2
a. 4m ² in residential accommodation	
b. 30m ² in non-residential accommodation	
Other rooms (including garages)	C-s3, d2
Other circulation spaces	B-s3, d2 ⁽¹⁾

NOTE:

1. Wallcoverings which conform to **BS EN 15102**, achieving at least class C-s3, d2 and bonded to a class A2-s3, d2 substrate, will also be acceptable.

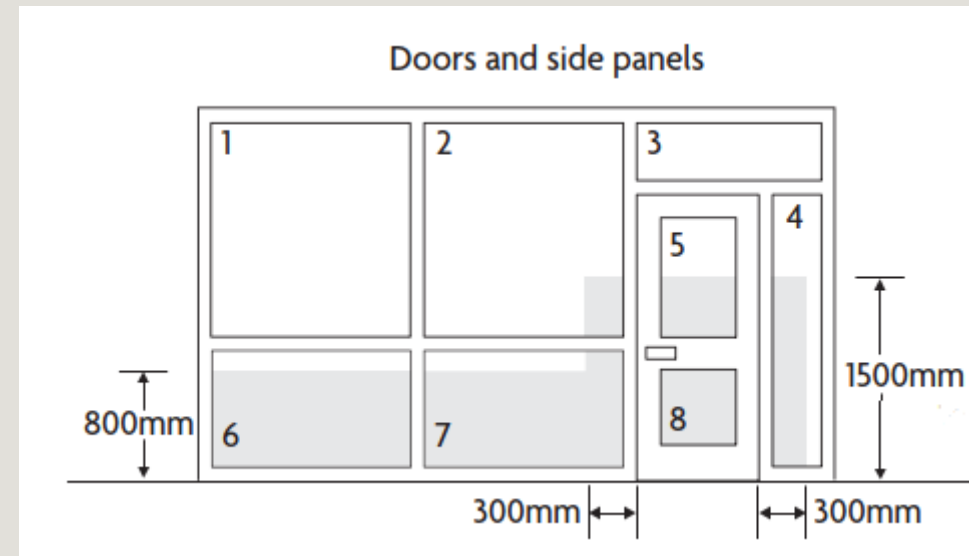
Guidance

Ventilation

Whilst the air is recirculated from the main office space, enclosed pods should either be able to achieve 10 litres per second per person, or 1 litre per second per m² floor area, whichever is more. Confirmation is required that that this performance will be achieved.

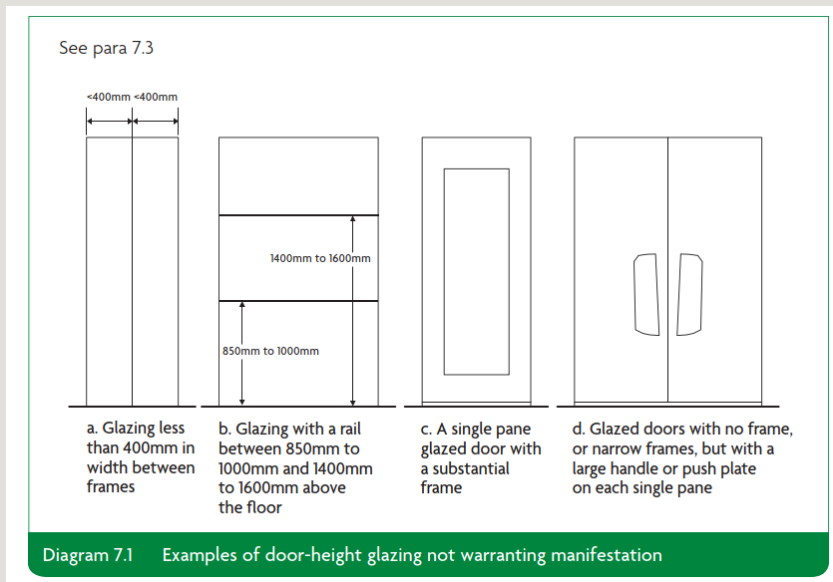
Glazing

Glazing within critical locations (see below) should either satisfy the requirements of Class 3 of BS EN 12600 or Class C of BS 6206.

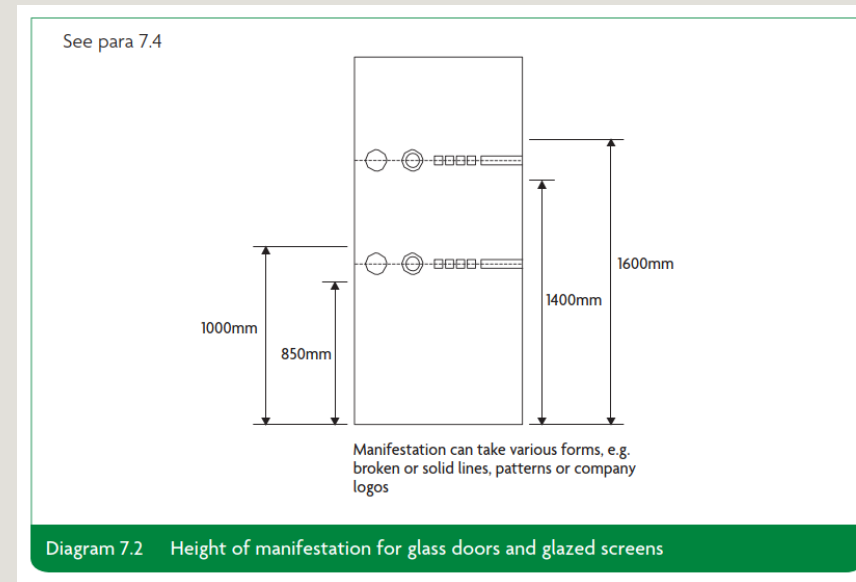


Manifestation

Areas not requiring manifestation



Manifestation zones



Guidance

Accessibility

Ideally pods should be accessible for all. This means where possible the threshold should be level. If a raised threshold is unavoidable, it has a total height of not more than 15mm, a minimum number of upstands and slopes, with any upstands higher than 5mm chamfered or rounded.

Any fixed furniture should allow sufficient space for a wheelchair user to move around the pod. A 300mm clear space should be provided adjacent to the leading edge on the pull side of the door.

Where pods are not wheelchair accessible, then other accessible rooms containing the same function should be provided. This should be recorded in the Access Strategy.

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