

DIRECTORATE OF ESTATES AND FACILITIES

PROCEDURE AND INFORMATION MANUAL

EPM HS30

Fire Safety Signs – Provision & Installation Guidance

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The purpose of this document is to aid in the installation of fire safety signs throughout the estate of The University of Manchester.

Fire Safety Signs – Provision & Installation Guidance

1. Introduction

- 1.1 These guidance notes have been produced to aid in the installation of fire safety signs throughout the estate of The University of Manchester.
- 1.2 The aim of this guidance is to ensure, so far as is practicable, that fire safety signs are provided to both comply with the relevant Regulations and Standards and to meet the requirements of the University's fire safety strategy. It is acknowledged that in some instances, there may be differences between both these aims. In such cases a risk assessment will determine which has precedence.

2. What is a fire safety sign?

- 2.1 Fire Safety signs fall within the scope of The Health and Safety (Safety Signs and Signals) Regulations 1996. A fire safety sign is defined in regulation 2(1) as a sign (including an illuminated sign or an acoustic signal) which:
 - (a) provides information on escape routes and emergency exits in case of fire;
 - (b) provides information on the identification or location of firefighting equipment;
 - (c) gives warning in case of fire.

NB Whilst covered by the regulations acoustic signals are not covered within this EPM which is only concerned with visual signage.

3. Legislative Overview

- 3.1 BS 5499 covers all safety warning sign, including fire safety signs and is aligned with both the Health and Safety (Safety Signs and Signals) Regulations 1996 and with the ISO standards relevant to fire signs.
- 3.2 BS 5499 part 4 is devoted to escape route signing and while good sign design practice is important, the correct application and positioning of those signs is of equal significance in ensuring an effective signing system is in place. The size and positioning of signs within a building should form a major part of the package. It clearly and concisely deals with all aspects of the design of an effective escape route signing system.
- 3.3 Points to consider are:
 - Sign type, sign size and viewing distance
 - Construction durability and suitability
 - Servicing and maintenance
 - Illustrations (use of safety signs)
 - Use of arrows to indicate direction of travel
- 3.4 It also deals with the issues associated with designing a coordinated system of signage throughout any given building. BS5499 will form the basis of all fire safety signage within all University buildings.

4. When are fire safety signs required?

4.1 Duties on employers to provide these signs primarily arise from the Regulatory Reform (Fire Safety) Order 2005. The necessary level of fire safety signs should give consideration to the nature & use of each building. E.g. a building allowing public access may require more signs than a building with restricted access or limited occupancy.

- 4.2 Not all types of fire safety signs are necessary in all buildings. For example "Fire Door Keep Shut" notices are generally required on both sides of fire resisting and self-closing doors. However, in residential accommodation University policy is not to fit them to the doors to student bedrooms. Another example is that we don't place fire extinguisher signs above fire extinguishers. The actual extinguishers are their own signs and anything more is largely superfluous.
- 4.3 With regard to fire escape routes, while these are partly indicated by adding legends to the emergency lighting devices, supplementary signs are almost always required.

5. Purpose of Signs

- 5.1 Safety signs and signals are required where, despite putting in place all other relevant measures, a significant risk to the health and safety of employees and others remains.
- 5.2 Signs must be clear and legible, and should be used to identify actions that are prohibited (eg no access), safeguards that must be followed (eg ear protection must be worn), warning of a hazard (eg corrosive material) and to direct towards fire exits/equipment or first-aid equipment.
- 5.3 The use of too many signs should be avoided because this may cause confusion.

6. Sign Design

- 6.1 Signs should provide clear, unambiguous instruction that will lead people directly to a final exit out of a building or give clear instruction with regard to strategy.
- 6.2 New signs installed should comply with BS5499. Existing signage already installed to European Standards will be reviewed on a case by case basis. Mixing of the two types of signs is not acceptable.

7. Location of signs

7.1 Incorrect positioning can cause confusion & in the case of an emergency; could be life threatening; there are basic principles for sign positioning. These include defining the shortest travel distance from various evacuation starting points to the primary escape route. If at any place there is a choice of two escape routes, only the shortest/most direct choice should be indicated. In all cases, the minimum number of signs should be used without compromising reasonable viewing distances.

8. Mounting & Installation

- 8.1 Signs should be mounted at sensible heights so that their message can have the most effect. Where possible, affixing signs to doors should be avoided, with the preferred location being above the door; where possible, affixing signs to glass should also be avoided. Whilst hanging signs are acceptable, care should be taken to ensure adequate overhead height is maintained.
- 8.2 The use of semi-rigid PVC material is preferred in all circumstances to the use of vinyl.
- 8.3 The most suitable means to install the signs is to be decided upon by the installing operative. Double sided adhesive tape can be used in most locations but consideration may have to be given to the uses of glue, screw fixing or hanging wires. It must also be noted that many surfaces throughout the estate will be of architectural significance & must be so preserved;

when in doubt with regard fixing methods in these areas, always consult with the Fire Safety Team.

8.4 The proximity to asbestos used in construction must also be considered if screw fixing is required.

9. Supplementary Text

9.1 Supplementary text helps to ensure that the meaning of the graphical symbols, now compulsory on all fire safety signs, is fully understood & may convey additional information unique to a particular area of the University.

10. Use of Arrows

10.1 The inclusion of directional arrows within signs is necessary, but care must be taken to avoid people getting lost or navigating circular routes. Arrows must be used with care; correct identification of the direction of an escape route is critical.

11. Sign Size

11.1 Whenever possible, standard off the shelf signs should be selected; this should ensure consistency of supply & fitment. Safe condition signs should contain characters allowing for a viewing distance of approximately 20 meters.

12. Viewing Distances



| Image | Description | Where | University |
|--|--|--|--|
| Image: Construction of the second of the | Mandatory Sign Manufactured to BS 5499 Fire Procedure Sign (AKA Fire Action Notice) | Required It is important that occupants of a building know what to do in the event of a fire. Fire Procedure Signs should be located in prominent positions where they will readily be seen by the building occupants. Affixing these signs adjacent to fire Alarm Call points is common | Consideration These signs will normally be installed by the University with the projects team |
| Fire door keep shut | Mandatory Sign Manufactured to BS 5499 Fire door keep shut | practice These signs should be affixed to both sides of each self-closing fire door. | The university accepts that existing text only signs should remain in place. Where signs are missing, the new type should be installed. Mixing the old type & new type on the same door set should be avoided; replacing the old type with the new type in this instance. |

| Fire door keep locked shut | Mandatory Sign Manufactured to BS 5499 Fire door keep locked | These signs should be affixed to the external face of plant room doors, & doors to other rooms or ducts which may present a risk in the event of fire. | The university accepts that existing text only signs should remain in place. Where signs are missing, the new type should be installed. |
|-------------------------------------|--|---|--|
| Fire alarm call point | Fire Sign Manufactured to BS 5499 Fire Alarm Actuation Point | These signs should be affixed adjacent to each manual fire alarm call point. | It is not University policy to provide these signs, although it accepted that some may be in place throughout the estate. Existing signs should remain in place but new signs should not be installed. |
| | Fire Sign Manufactured to BS 5499 Fire extinguisher identification | These signs should be affixed adjacent to each portable fire extinguisher. These signs identify the location of the fire extinguisher together with its uses and restrictions. The sign also indicates which type of fire extinguisher should be in place where the fire extinguisher is missing. | It is not university policy to provide these signs. Existing signs should remain in place but new signs should not be installed. |

| ← Slide to open | Safe Condition Sign Manufactured to BS 5499 Slide to open | To be affixed on the internal face of final fire exit doors (or internal doors along a designated escape route) to illustrate that said door opens by sliding in the given direction. | <u>No information</u> <u>her</u> |
|---------------------------|---|--|---|
| Push bar to open | Safe Condition Sign Manufactured to BS 5499 Push Bar to Open | To be affixed on the internal face of final fire exit doors (or internal doors along a designated escape route) to illustrate that said door opens by pushing the operating bar. Normally affixed to each door in a door set. | The University will accept the fitting of one sign to each door set; irrespectively of the number of doors. |
| FIRE EXIT Keep clear | Safe Condition Sign Manufactured to BS 5499 Fire Exit Keep Clear | To be affixed on the external face of final fire exit door, where said door opens to a car park or yard with the potential for the door to be obstructed. | The university does not require these signs when the final fire exit door is made of glass. |

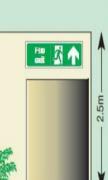
| Refuge point Keep clear | Safe Condition Sign Manufactured to BS 5499 Disabled Refuge Point | To be affixed where a disabled person refuge point is in a lobby or staircase (BS 5588-8:1999) | |
|---------------------------------------|---|---|--|
| <text><image/><image/><image/></text> | Safe Condition Sign Designed by University of Manchester Disabled refuge area-Action to take- Refuge communications equipment | To be affixed where a disabled person refuge point is in a lobby or staircase (BS 5588-8:1999) | |
| <text><image/><image/><image/></text> | Safe Condition Sign Designed by University of Manchester Disabled refuge area-Action to take- No Refuge communications equipment. | To be affixed where a disabled person refuge point is in a lobby or staircase (BS 5588-8:1999 | |
| Fire A Sexit | Safe Condition Sign Manufactured to BS 5499 Fire exit route leading to Refuge Point | To be affixed where disabled occupants of a building may not be able to egress via other means. | |

| Fire E | Safe Condition Sign Manufactured to BS 5499 Fire exit route leading to Refuge Point | To be affixed where disabled occupants of a building may not be able to egress via other means. | |
|--|--|---|--|
| Fire & A | Safe Condition Sign Manufactured to BS 5499 Fire exit route leading to Refuge Point | To be affixed where disabled occupants of a building may not be able to egress via other means. | |
| Fire S | Safe Condition Sign Manufactured to BS 5499 Fire Exit Route | To be affixed where progress along the fire exit route is downwards. | |
| Fire and a fire exit | Safe Condition Sign Manufactured to BS 5499 Fire Exit Route | To be affixed where progress along the fire exit route is straight on or upwards. | |
| Fire and a second secon | Safe Condition Sign Manufactured to BS 5499 Fire Exit Route | To be affixed where progress along the fire exit route is to the right. | |
| Fire exit | Safe Condition Sign Manufactured to BS 5499 Fire Exit Route | To be affixed where progress along the fire exit route is to the left | |
| Fire and a main and a | Safe Condition Sign Manufactured to BS 5499 Fire Exit Route | To be affixed where progress along the fire exit route is upwards and to the right. | |

| Fire exit | Safe Condition Sign Manufactured to BS 5499 Fire Exit Route | To be affixed where progress along the fire exit route is upwards and to the left. | |
|--|---|--|--|
| Fire exit | Safe Condition Sign Manufactured to BS 5499 Fire Exit Route | To be affixed where progress along the fire exit route is downwards and to the left. | |
| Fire and a second | Safe Condition Sign Manufactured to BS 5499 Fire Exit Route | To be affixed where progress along the fire exit route is downwards and to the right. | |
| Fire exit | Safe Condition Sign Manufactured to BS 5499 Final Fire Exit Door | Affixed in location which leads directly to a place of safety; usually above or on the internal face of a final exit door | |
| DO NOT ENTER THIS BUILDING WHEN BEACON IS FLASHING | Fire Sign Designed by University of Manchester Connected Building | Affixed in locations where adjoining buildings are served by independent fire alarm systems | |

Do

 Wherever possible fix the sign between 2m and 2.5m off the ground when positioned above the door



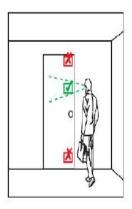
- Wherever possible, fix the sign between 1.7m and 2m off the ground when affixed to walls
- Affix an Exit/Fire exit sign without an arrow on it, if that doorway is the final exit leading to a place of safety.

| Viewing distances | Exit /Fire Exit Sign |
|-------------------|----------------------|
| Up to 12.7 metres | 300mm x 100mm |
| Up to 20.4 metres | 450mm x 150mm |
| Up to 25.5 metres | 600mm x 200mm |

Don't

- Fit a right/left pointing arrow if the occupant has to progress through the door before turning right or left - The arrow should be upward pointing
- Fix signs to doors
- Fix signs where they can be obscured by opening doors
- Fix signs next to other signs containing directional information
- Never use Fire Exit and Exit for emergency use only signs in close proximity of one another – this could cause confusion.

Signs affixed to fire doors should be positioned at eye level.



The viewing distance of signs is the maximum distance from which the sign has to be understood. When deciding upon size, it should be noted that it is the height of the symbols & characters', not the overall size of the sign itself.