

Safety Note 28

Emergency Evacuation of Disabled People: Personal Emergency Evacuation Plans (PEEPs)

1 Introduction

The University of Reading welcomes staff and students with a range of disabilities, specific learning difficulties and chronic medical conditions. The University's objective is to provide an environment where people with disabilities are able to enjoy all the facilities comparable to any able bodied person

The University and other employers on campus have a responsibility for ensuring that all people can leave a building safely in the event of a fire. This means providing emergency evacuation plans for all people likely to be on the premises, including disabled people. It is recognised that failure to do so may breach fire safety and discrimination legislation. Where special arrangements are required, as outlined in this Safety Note, these are intended to provide a balance between the right of disabled people to participate fully in university life and the requirement to ensure their health and safety

This Safety Note provides practical guidance on how to help those who may need assistance to escape in the event of an emergency (normally a fire), and how to plan for this by developing Personal Emergency Evacuation Plans (PEEPs)¹.

Advice and support for writing a PEEP is available from the University Health and Safety Services and the Disability Advisory Service.

2 What is reasonable?

Planning for means of escape is about planning for exceptional circumstances i.e. not an everyday event. What a disabled person is prepared to do in exceptional circumstances may differ significantly from what they can reasonably be expected to do or manage in their everyday activities.

Evacuation plans for disabled people should be prepared with the view that this may be needed for 'the real thing'. The same level of effort may not be acceptable for a practice or false alarm or in everyday activities. Procedures should take account of this and allow for simulation during fire drills or other emergency evacuation practices.

It should be noted that evacuation plans should not rely on the Fire and Rescue Service to make them work - it is the employer's responsibility to ensure an effective evacuation in the event of fire.

¹ Safety Guide 6 Emergency Evacuation Procedures sets out the University procedures and responsibilities for emergency evacuation.

3 Reducing unnecessary evacuations

Some disabled people are put at risk when carry-down procedures are used. It is therefore necessary to reduce or remove the need to escape for a false alarm. Good communication when a fire alarm sounds is essential in order to determine the cause of the alarm and reduce the need for emergency escapes.

4 What is a PEEP?

In an emergency people may not react exactly as planned. Unless guided by trained staff i.e. Fire Wardens, most people will make their way to the exit that they are familiar with, rather than to the most suitable escape route.

A Personal Emergency Evacuation Plan (PEEP) is a plan that is jointly agreed **in advance of any emergency** between the disabled person and the building management so that the disabled person knows what they have to do (where to go etc) in an emergency and the building management can ensure that the correct assistance is available.

Managers, disability advisers and tutors should be aware that some disabled people may not wish to disclose personal information about their disability - discretion should be used in how this issue is approached.

4.1 Types of PEEPS

4.1.1 Individual PEEPs

In residential Halls and academic buildings where a disabled staff or student member normally lives, works or visits regularly, an individual PEEP should be prepared wherever possible. This is a plan tailored to the specific individual, for a specific building.

If a person visits more than one university building on a regular basis, it may be necessary to produce a PEEP for each building.

4.1.2 Standard PEEPs for casual users and visitors

It is not practical to provide a bespoke plan for each visitor and casual user of a building. Instead, standard plans should be developed. This is appropriate for any buildings that have uncontrolled access, and in particular for buildings that have centrally booked rooms or are open to the general campus population e.g. the Library, Palmer, Great Hall.

Standard (PEEP) evacuation plans can be used as options for disabled people to choose from. They should be held at the reception points within the building and advertised and offered to people as part of the entry/reception procedures.

Where a system of standard evacuation plans has been established, all staff resident in the building, and in particular those with a role in the evacuation procedures e.g. fire wardens, should be trained to offer an appropriate option to disabled people during an emergency and to lead them to appropriate points in the building.

4.1.3 Advertising the plan

Whichever type of plan is proposed, the disabled person needs to be made aware that a plan is offered, and where practicable, invited to make themselves known to the building management.

However staff should not be concerned if a person who has an apparent disability does not ask for or accept a plan. It is possible that the person is confident that they can make their way out the building. Staff should confirm that this is the case.

Standard plans should be provided in a discreet manner. This will encourage people who have conditions such as asthma, heart disease, epilepsy or emotional problems to ask for assistance, if they wish to do so.

Disabled people have a responsibility for their own safety. They should be expected to identify themselves so that they can be informed of the choice of evacuation plans and co-operate by giving any information necessary for the safe execution of the plan.

5 Responsibilities for developing the PEEP

The groups of people who should be considered and are likely to be present in university buildings are:

- University staff
- University students
- Residents in Halls of Residence
- Contractors
- Tenants
- Visiting members of the public

5.1 Range of disabilities

Anyone who may need assistance in an emergency evacuation should have a PEEP. This includes:

- Mobility impaired people – including wheelchair users, those who use walking aids such as sticks, and those who may be unable to exit via stairs, steps or narrow corridors.
- Sensory impaired people – who may not be able to hear audible, or see visual, alarm signals.
- Those who may have difficulty reading or understanding signage.
- Those people with medical conditions (e.g. asthma, heart disease) which may affect their ability to use the stairs, or to move quickly.
- Those with broken limbs or on crutches due to a temporary medical problem who may not be able to use the stairs, or to move quickly.
- Women in the later stages of pregnancy.

5.2 Responsibility for preparing the PEEP

The responsibility for the production of a PEEP is as follows:

Disabled staff - Human Resources are responsible through normal recruitment procedures for identifying a new disabled member of staff who disclose a disability.

Line managers and HR have a joint responsibility to identify existing members of staff who develop a disability.

The PEEP should be written by the person's line manager, in consultation with the Building Manager(s), the Area Health and Safety Co-ordinator(s) (AHSCs) and the disabled person. Sensitivity may be required, since the disabled person may not want to 'have a fuss made' on their behalf.

Disabled student - the Disability Advisory Service is responsible for inviting potential students to declare a disability during the student recruitment process, and identifying those students who make such a declaration. The Disability Advisory Service will advise School Disability Officers of the potential recruitment of a disabled student. The School Disability Officer is then responsible for making sure a PEEP is developed for the disabled student, with input from e.g. tutors, Building Managers, AHSCs, Health and Safety Services.

If the student is resident in a Hall of Residence and a PEEP is needed or requested, the responsibility for its production rests with the Hall Residence Manager.

Contractors - It is the responsibility of the member of university staff who is managing the contract to make visiting contractors aware of the system of PEEPs, where necessary. The contractor's management should be advised to liaise with relevant Building Managers to find out if the building's standard arrangements will be suitable, or to prepare an individual PEEP.

Visiting members of the public - If the University is given sufficient prior notice of a disabled visitor, the first option should be to book rooms/accommodation from which the disabled person can easily self-evacuate. If this is not possible, then the person who is organising the visit should liaise with building management to identify suitable evacuation options, preferably based on the building's standard plans. If necessary an individual PEEP should be prepared.

Where public lectures are organised, consideration should be given in advance to access/egress arrangements for disabled people who may choose to attend. The building standard PEEP should provide a model for this.

Tenants - the responsibility for evacuating disabled persons from tenanted accommodation rests with the tenant. However they may be reliant on facilities provided by the University, such as refuges and communications, and it may be appropriate to co-ordinate and share resources.

Open buildings and ad hoc visitors - Building Managers are responsible for developing and advertising standard PEEPs and making them available on request.

Multi-occupancy buildings - responsibility may rest with a number of persons from each occupying organisation and with the operators of the building. It is important that they co-operate and co-ordinate evacuation plans with each other.

Figure 1 overleaf summarises the process of producing and implementing a PEEP.

5.3 Obtaining information and writing the PEEP

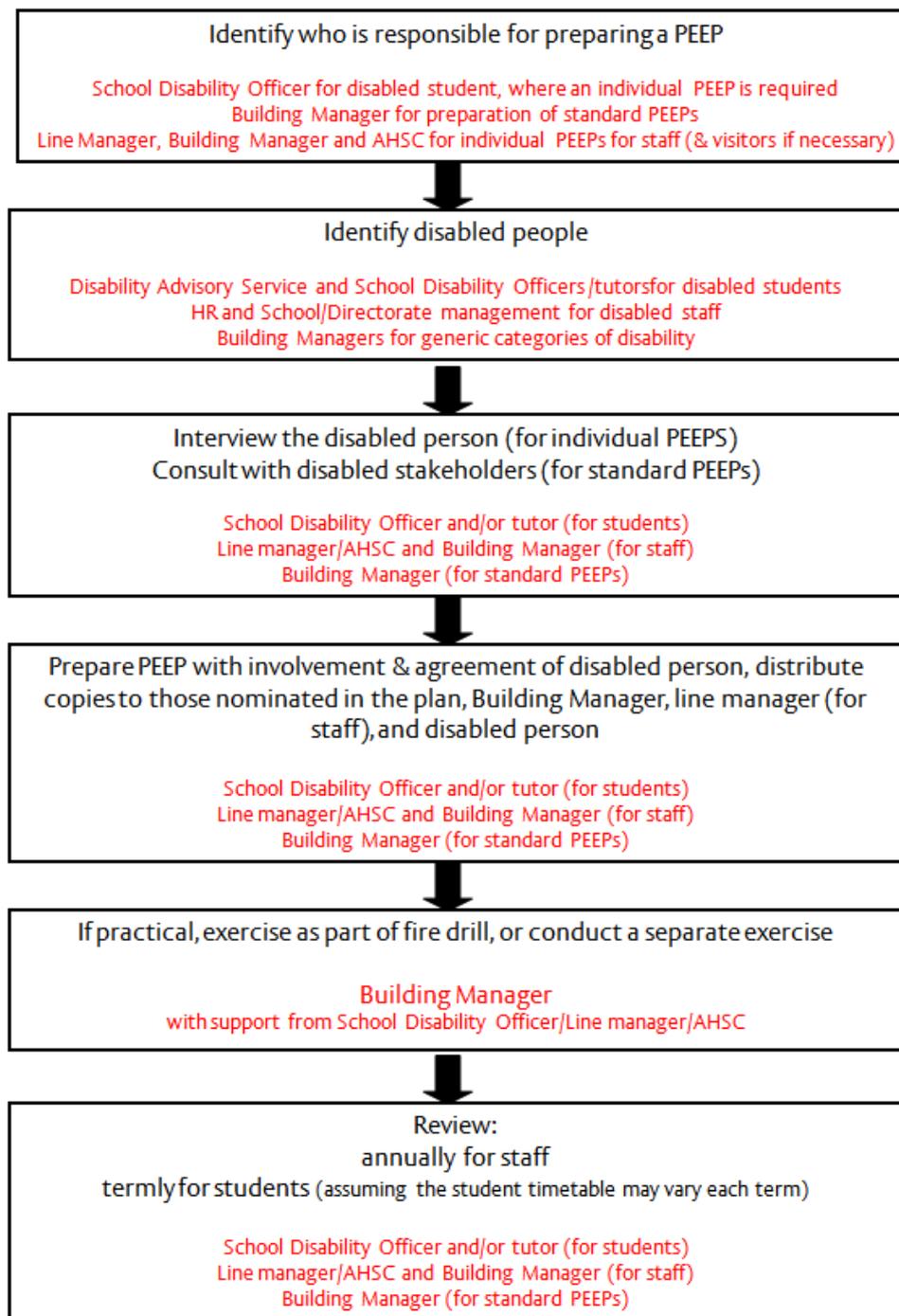
Any disability information declared by potential students or staff during the recruitment process, or the Emergency Evacuation Questionnaire (see Appendix 1) should form the

starting point for collecting information about the disabled person's capabilities. The Emergency Evacuation Questionnaire is best completed by the responsible person, in conjunction with the disabled person, during an informal interview.

The initial checklist has four forms, depending on the nature of the disability. Complete the header sheet and the relevant form, for each building that the disabled person will use regularly.

Appendix 2 is the PEEP itself. This should be completed by the person responsible for producing the PEEP and agreed with the disabled person. Copies must be given to the disabled person, their line manager (for staff) or School Disability Officer (for students), relevant Building Managers and Health & Safety Services.

Figure 1 Process for preparing a PEEP



The PEEP should be updated when an individual’s circumstances change and should be reviewed at least annually (or more often for students where timetables change termly).

All personal data should be adequately safeguarded. When a disabled person leaves the University, PEEPs should be destroyed.

6 Types of disability

Disabled peoples' needs will vary, depending on the nature of their disability and their individual capabilities. This section outlines relevant factors to be considered for each category of disability. Further guidance is given in Appendix 3.

6.1 Hearing impaired and deaf people

Where only an audible fire alarm system is present, hearing impaired people may not hear the alarm. The preferred options to alert hearing impaired people about an evacuation are flashing beacons, installed as part of the fire alarm system, and/or a paging system. Where this is not possible, other auxiliary aids may be used e.g. text messaging.

6.1.1 Flashing beacons

Flashing beacon systems are installed in a limited number of locations round the University. If this system is required, check with the Building Manager to find out if there is a suitable system installed.

Flashing beacons may not be appropriate in all buildings, for instance where other lighting or alarm systems conflict with the beacon.

6.1.2 Vibrating pagers

Vibrating pagers can alert hearing impaired and deaf people that there is an emergency and they need to leave the building. They can also be used to communicate with other people who are part of the assisted escape system.

Within university Halls of Residence the “Deaf Alert” system has been installed. The system is being extended to academic buildings during refurbishment programmes and fire safety upgrades. The “Deaf Alert” system requires hearing impaired or deaf people to carry a vibrating pager which is triggered by the activation of a fire alarm in the building. Buildings that have this facility are indicated with a ‘Deaf Alert available here’ sign normally displayed at the entrance or at reception desks.

All pagers and other equipment should be tested regularly to ensure that they work.

6.1.3 Staff training in deaf awareness

Where other staff or students are used to alert hearing impaired or deaf people that they need to leave the building, they should be trained in deaf awareness. Floor wardens who sweep the building to ensure that there is no one left should be trained to look for signs that a hearing impaired person is present.

A typical situation where this may occur is in single offices, libraries, toilets or changing rooms. Fire wardens should not expect a vocal call to be sufficient and should be trained to physically check all areas, provided it is safe for them to do so.

When a person does not react in logical manner in response to a fire alarm, they may not have heard the alarm. Shouting louder is unlikely to be the answer. It may be necessary to walk up to the person and explain what is happening with signs or even a written note or a pre-prepared short written instruction.

6.1.4 Fire instructions in alternative formats

It is important that a Plain English translation of the fire procedures is provided. It may help to provide pictograms in support of written information. The latest version of the University Fire Action Poster has both written and pictographic information (Word versions of this poster are available from the Health and Services). Deaf people may prefer to have instructions explained to them through a British Sign Language (BSL) interpreter.

6.1.5 Lone working by a deaf or hearing impaired person

Care should be taken to ensure that hearing impaired or deaf people who are working alone in a building know what is happening. In these instances, it may be imperative that a visual alarm or vibrating pager system is installed. Where this is not practicable, a buddy system, hearing dog or some other acceptable alternative will be required.

Lone working should not be allowed unless there is an acceptable method of alerting the hearing impaired person to the alarm. However the working hours or working flexibility of deaf or hearing impaired persons should not be restricted because provision for safe evacuation is inadequate. Such restrictions, if made without full consideration of reasonable adjustments, may amount to unlawful discrimination.

6.2 Visually impaired and blind people

People who are visually impaired should be helped to evacuate by good signage and other orientation clues. Most visually impaired people have some sight and they will be able to use this to make their own way out of the building as part of a crowd. It is helpful if the escape route can use the normal circulation corridors/routes, with which the visually impaired person is already familiar (this assumes that the circulation route is protected and designated as a fire evacuation route).

Where a person uses a guide dog, they may prefer the dog to assist them out of the building. The escape routes should be shown to the disabled person, with a view to training the dog in the safe route. Assistance to do so may be available from the Guide Dogs for the Blind Association District Team. Other guide dog owners will prefer to take the responsibility away from the dog for means of escape and request a human assistant. In these cases a buddy should be allocated to the person. It may also be necessary to provide a person to look after the dog.

6.2.1 Orientation information

The University has not made provision for specialist orientation information, for example tactile information and audio signals. However existing elements or design features may help visually impaired people to evacuate. These may be good colour contrasts, handrails on escape stairs, step edge markings on escape stairs, colour contrasted or different textured floor coverings on evacuation routes or other way finding information. Logical routes to escape stairs will assist all users of the building.

Visually impaired people should be informed of these design features via the PEEP. Orientation training for visually impaired staff or students will make them more aware of the options for escape. Where there is a lack of orientation information, assistance from staff or others will be necessary to provide guidance out of a building.

6.2.2 Fire instructions

Suitable fire escape instructions should be made available in Braille², large print or on audio tape. It can be useful to provide a tactile map of the escape routes. The University's Design and Print Unit will assist with information in large print, and the Technical Support Unit at the Institute of Education may assist with recording of audio instructions.

² Refer to the RNIB for advice on translation into Braille.

6.2.3 Keeping routes safe for visually impaired people

Visually impaired people may have a difficulty in stairways where there are open risers, so these should be avoided on escape routes. Where using such stairs is unavoidable, there may be a need for assistance or adaptations to the stairs to make them safer. Alternatively, a different stairway may be available.

When room/building layouts are changed and evacuation routes are affected, it is important that these changes are documented and made known to visually impaired people in the building.

6.3 People with cognitive disabilities

People with cognitive disabilities, including dyslexia, dyspraxia and autism, may have problems understanding what is happening in escape conditions, or they may not have the same perceptions of risk as non-disabled people. There may be some reluctance to take an unknown route from the building. The PEEP system should be used to give them an opportunity to understand the possible need for choice and direction change during an escape.

6.3.1 Orientation information

Provision of good orientation facilities within the building are essential. Colour coding of evacuation routes can be a useful tool. Practice of the evacuation route is essential, especially in situations where one person is responsible for a number of others, for example in a lecture room situation with this group. Use of evacuation routes for general circulation is an advantage.

6.3.2 Fire instructions

The evacuation plan may need to be read and explained to this group. A video or DVD explaining and demonstrating what to do in an emergency can also be an advantage. A photographic explanation of the route can also be useful.

It may be more effective to ask what the person understands and to develop the plan based on how they will find and follow the evacuation routes. It should not be assumed that a carer or helper will always be available.

6.3.3 Other factors

Sometimes people with cognitive disabilities will move more slowly than the main flow and there may be a need for a slow and fast lane in the escape stair.

It may not be possible to tell that a person has an impairment that affects their ability to orientate themselves around the building. Staff should be made aware of such possible situations and be tactful when assisting a person who may seem lost or unsure of what to do during an evacuation.

6.4 Other conditions

6.4.1 Epilepsy

People with epilepsy may be able to leave the building unaided in an emergency, and it should not be assumed that a person with epilepsy will have a seizure due to the fire alarm

operating. It is very unlikely that they will collapse in an area where they are on their own (e.g. a toilet cubicle or storeroom) so that no one knows where they are. The general practice of fire wardens carefully and fully checking each floor during the evacuation process should cover this rare eventuality.

6.4.2 Unknown requirements

It should not be assumed that because a person has a disability they will need or ask for a PEEP. Some will be confident that they can get out of the building unaided. Conversely, there should also be an opportunity for other people who may not be considered to have a disability to request a PEEP. All staff and students should be given the opportunity to have a confidential discussion about their evacuation requirements and it should be made clear that, if they need help, it will be provided.

6.5 People with a mobility impairment

Some mobility impaired people will decide that they can facilitate their own evacuation using the existing systems within the building. Others will decide that they need assistance from one or more people. Options available may include:

- Use of an evacuation lift
- Use of a refuge area
- Making their own way down stairs slowly, walking
- Making their own way down stairs on their bottom, or after the main flow of people
- Carry down in own chair or assisted with an evacuation chair
- Horizontal evacuation to another, safer, part of the building

6.5.1 Evacuation lifts

Most lifts cannot be used in an emergency. Any lift used for the evacuation of disabled people should be either a "fire-fighting lift" or an "evacuation lift." The University is installing evacuation lifts in new and refurbished buildings, so over a period of time specific lifts may be used for evacuation. Contact Health and Safety Services to find out if a lift in a building is an 'evacuation lift'.

Where evacuation lifts are provided, disabled people should make their way to the lift landing and use the communication system to contact the lift operator and make them aware of which floor they are waiting on. Information for users in the form of a Refuge Action Poster will be displayed adjacent to the lift (Word versions of these posters are available from Health and Safety Services).

6.5.2 Refuge area

A refuge is a designated temporary safe space protected from fire and smoke where disabled people can wait for assistance. The refuge is normally en route to a final exit e.g. the head of a protected stairway. They are usually intended for use by wheelchair users, but they could be used by other disabled people e.g. those with a physical or medical impairment who may need to rest during their evacuation³.

³ Further information is given in Safety Note 20 on Fire Refuge Areas and in Safety Guide 34, "Fire Safety" available on the Health and Safety Services website.

Refuges have two-way communications to enable a disabled person or their helper to communicate where they are. The communications system links with the main control point within the building and with University Security Control. Instructions on use of the refuge and communications system are given in the Refuge Action Poster.

The provision of a refuge allows a phased evacuation to be implemented i.e. it will be safe to wait in the refuge until the situation is assessed and an evacuation organised if necessary.

There must be a specific procedure to ensure that:

- the refuge is checked by floor wardens
- the presence of a disabled person in a refuge is reported to the Evacuation Officer
- Disabled persons are able to be evacuated from the refuge area under safe and controlled conditions⁴.

People should not be left in a refuge point to wait for the Fire and Rescue Service. There should be a plan to evacuate a person from a refuge should the need arise.

Most refuges can only accommodate one wheelchair. This should not be a problem where there is more than one wheelchair user, provided that there is a suitable evacuation strategy in place. As one disabled person progresses out the building, the next person will take their place in the refuge. Building fire compartmentation is also a form of a refuge.

6.5.3 Make own way down stairs slowly

Some people who use wheelchairs may be able to walk down the stairs if they have a little mobility. It is preferable if the disabled people can leave the building by their own efforts. This reduces the chance of confusion and the chance of the plan breaking down. It may be necessary to ensure that there are suitable handrails and step edge markings.

Disabled people who can make their own way out of the building are likely to move slowly down stairs. It may be better for them to wait for the main flow of people to leave the building. They may also need to rest along the way in refuges. Escape stairs that are incorporated in a fire resisting shaft should be safe for up to 30 minutes. This greatly increases the available escape time, especially when the fire alarm systems incorporate advanced fire detection measures which will give early warning of fire. This reinforces the importance of building occupiers keeping self closing fire doors shut and observing good housekeeping practices.

Where this evacuation method is chosen, it is important that it becomes part of the PEEP and is recorded and monitored should there be a problem during the escape. The fire warden should report to the evacuation officer that a disabled person is slowly making their way out of a building. This information must be passed on to the Fire and Rescue Service on their arrival at the incident.

6.5.4 Move down stairs on bottom after main flow

Some disabled people may prefer to make their own way out by shuffling down the stairs on their bottom. Again, it will be best for this group of people to wait until after the main flow of people has evacuated. Wherever possible, they should be monitored to ensure that

⁴ See Safety Note 38 on the duties of Fire Wardens and Evacuation Officers.

there is not a problem with their progress; the Fire Warden should report to the Evacuation Officer. This information must be passed on to the Fire and Rescue Service on their arrival.

6.5.5 Carry-down

There are a number of types of carry-down techniques using two, three or four people. Where a disabled person needs to be carried out either using their own wheelchair or by another method, a manual handling risk assessment should be carried out and a suitable team assembled and trained to take them out safely, based on the particular equipment in use. Because of the potential risk to the disabled person and the carrying team, this option must be discussed with Health and Safety Services.

IF a carry-down e.g. by four people with the disabled person in their own wheelchair, is required, the width of the stair will need to be sufficient for all of the team to move freely and safely.

6.5.6 Electrically powered wheelchairs and people with limited mobility - possibly heavy

People who use electrically powered wheel chairs may have less mobility than people who use manual chairs and therefore they may need more assistance. The building plan should therefore facilitate the independent evacuation of all other disabled people in order to ensure that there are enough staff available to assist electric wheelchair users.

It is impractical to expect that an electric wheelchair user will be able to take their chair with them, due to its weight and size. They will need to leave their chair in the building unless there is an evacuation lift available (see section 6.5.1). Therefore some other method of carrying them down the stairs will be required e.g. an evacuation chair. Assistance may be required to help the disabled person transfer to an evacuation chair, and then to take them down stairs. There are also other types of mechanical equipment that can be used to move people up or down stairs; however, obstructing the evacuation routes for other occupants has to be considered.

6.5.7 Evacuation chairs

NB at the time of writing the University is assessing the purchase of chairs, and none as yet have been supplied to buildings. This section therefore reflects future intended practice.

Where this is the preferred method of escape identified in an individual PEEP, the University will provide an evacuation chair. It will be allocated to a particular person and either kept alongside their desk or in the most suitable refuge close to them.

In the case of a visitor, the person who is responsible for booking them into the building should contact the University Portering Services to arrange for an evacuation chair to be brought to the most suitable part of the building. It should be returned after the visit to the central storage point.

In buildings with an uncontrolled and unknown population, evacuation chairs will be provided at suitable points within the building.

Provision of evacuation chairs should always be accompanied by a full system of escape for disabled people, including regular training of staff in the use of evacuation chairs. Evacuation chairs require as a minimum one person to manage the chair, and preferably an

assistant to open doors, walk down in front of the person in the chair and provide reassurance etc. Such chairs are most suitable for disabled people who can self-transfer from their own wheelchair to the evacuation chair.

6.5.8 Move down stairs in own chair with support

Some wheelchair users are strong and skilled enough to tip their chair on its axis and travel down the stairs in this way. Others can do this with assistance. Where this method of escape is considered, expert training will be required and the technique should be practiced regularly. The escape should only take place after the main flow of people leaves the building. It is only acceptable for short flights of stairs.

6.5.9 Cannot transfer readily

Some people will find it difficult or impossible to transfer their chairs to an evacuation chair or other evacuation aid. These people may require a hoist to assist with this movement. The process can be quite difficult and suitable training is required. It is preferred, wherever possible, for a disabled person's place of work to be located in a place where better evacuation plans can be made. In these cases a risk assessment of the use of lifts within the building for evacuation purposes may find that this solution presents less of a risk. The Fire Safety Adviser must be consulted about this option.

Meeting organisers should ensure that meeting rooms with easier evacuation routes are booked for disabled people who require a high level of assistance.

7 Facilitated escape options

Section 6.5 outlined the facilitated escape options that may be available to people with a mobility impairment. This section summarises other options/building facilities that may help other groups of disabled people.

7.1 Move down stairs using handrails

Some people will be able to make their own escape but will require a handrail to support them to get out of the building. This will be to either the left or the right of the stairs. Some people will not be able to use the right and others the left. Once you have established that they require a handrail, check each staircase to ensure that a suitable handrail is provided. Where one is not available then assistance may be required. Provision of handrails may be considered a reasonable adjustment, assuming that the stair is wide enough to provide a handrail on either side.

7.2 Assistance from one or two people

Some people will require a buddy to assist them out of the building. Some will be happy to organise this by themselves on a casual basis. A check should be made to ensure that the disabled person will always be in a group of peers or regular staff who are able to provide this support. If not, then it may be necessary to establish a formal procedure for times when they are likely to be alone. In these cases it may be suitable for them to use the standard procedures set up for visitors in that building.

7.3 Buddy system

A buddy system may be the most suitable method for alerting a hearing impaired or deaf person to the fire alarm, but the system can be used for other disabled people as well. This should not be done on an informal basis in case everyone assumes that someone else has given the warning. Operation of a "buddy" type system will ensure a colleague or fellow student with an awareness of the disabled person's needs is immediately available. The buddy should remain with the disabled person. It is helpful if either the buddy or the disabled person has a mobile phone with which they can contact the University Security Control for information (Tel. 0118 378 6300). The mobile phone number should also be identified on the PEEP.

7.3.1 Meet at a specific pre-arranged point

Some people will need to meet their buddy at a pre-arranged point such as their workstation. The buddy should be someone who can go straight to the meeting point and then evacuate together.

7.4 Orientation information

Where a person requires additional orientation information, it may be sufficient to give them a guided tour of the escape routes from the rooms they use.

Some people will only need the escape routes pointed out to them and this will be sufficient.

7.5 Colour contrasting on stairways

Some people will require an orientation strategy to assist way-finding within the building. This can be achieved through colour coding or contrasting the escape routes. An alternative for smaller buildings may be to provide laminated paper signs with red triangles or yellow squares printed on them; these are used to identify the escape routes and supplement the regulated escape signs.

7.6 Step edge markings

Some people will be more confident about making their own way out of the building if there is sufficient contrast on the nosings (leading edge) of stairs. If a person requests this option, the stairs should be checked to see if the step edges are highlighted. If they are not, the person may require a buddy to help them out of the building, or to identify a working area close to where there are suitable step edge markings. It would be advisable to provide contrasting nosing on all stairs in order to reduce the need for assistance. FMD should be consulted to see if this is viable for the stairs in question.

7.7 Assistance to open doors

Some people may have difficulty negotiating self-closing fire doors. All such doors and their self-closing devices (including those that are normally held open by electromagnets linked to the fire alarm system) should comply with the recommendations of the appropriate British Standard regarding opening and closing forces.

However, some people may still require assistance to open the doors, for example, those with upper limb impairments. This can be a formal or informal arrangement. However where a person may be alone in a building that has doors that may be difficult for them to open, it may be necessary to provide more formal assistance.

7.8 Identification of evacuation routes by reception or other staff

Visitors to the building may need reception or other staff to show them the evacuation when they arrive at the building. This task should be allocated to the most suitable person for each building or department, not necessarily the reception staff.

7.9 Alternative alarm systems

There are other methods of contacting disabled people; these can be either through the telephone system or through the intranet. It is recommended that where a person cannot use the existing system or needs support to use it, all other communications routes are explored.

7.10 Additional checks by fire wardens

In order to provide back-up wherever there is an assisted escape system in place, it is also necessary for the fire wardens in the building to be aware of who is present and what escape plans are in place. They should then be trained to provide suitable assistance where necessary.

7.11 Horizontal evacuation

In some buildings it is possible to evacuate people horizontally through the building, and away from the emergency situation. Information about where to go is required in order for this system to work.

When the alarm goes off, people who cannot use the stairs are directed to move along the floor level they are on to another fire compartment i.e. through fire doors to another part of the building. Wherever possible, horizontal evacuation routes should allow the evacuating person to move freely into an adjacent building without having to negotiate steps and stairs. Where horizontal evacuation is not immediately available on the affected floor, it may be available on a lower floor. This may be more acceptable than travelling all the way to the ground floor.

The University Fire Safety Adviser can advise on the extent of fire alarms and the fire separation between areas of buildings so that these routes can be identified. Use in a fire situation will depend on the availability of information about the location of the fire or alarm signal e.g. from the fire panel or from other building occupants.

7.12 Large print information

Some people will need fire evacuation information provided in large print. This can be obtained through a number of organisations that provide accessible information services. Alternatively, it is possible to produce large print information in-house. The most practical way of ascertaining the size of print required in any given case is to have a card with

various sizes and styles of text and to ask the person what size and style of print is suitable for them.

7.13 Taped information

Where a person cannot read the fire evacuation instructions, they may benefit from their provision in tape format. This should be produced in Plain English and in other languages where appropriate⁵.

8 Training

8.1 Preparation of PEEPs

All persons who have to prepare a PEEP should be competent to do so. Training in completing PEEPs is available on request from Health and Safety Services.

8.2 Practical exercises

To be effective, any evacuation plan depends on the ability of staff to respond efficiently. Staff must receive instructions, practical demonstrations and training appropriate to their role in the PEEP. This may include some or all of the following elements:

- Fire drills for staff and students (contact the designated Building Manager and/or the Area Health & Safety Co-ordinator).
- Specific training for designated persons involved in evacuating disabled people. Typically this would include Evacuation Assistants, Fire Wardens and Evacuation Officers.

8.3 Equality training

All staff involved in the process of producing evacuation plans should be provided with a good standard of equality training to ensure that they do not inadvertently discriminate against disabled people and support the University's aim to promote disability equality. People should be free to ask for a PEEP when needed, without them feeling that it will affect the provision of the service, and without it resulting in restricted use of the building.

The University has an on-line Diversity in the Workplace learning module that should be completed by all staff involved in producing PEEPs – see <http://www.reading.ac.uk/Personnel/rdg-only/diversityintheworkplace.htm>. Contact the Equal Opportunities and Diversity Office to register.

8.4 Drills

All evacuation procedures must be practised and recorded. Fire drills should be conducted at least twice per academic year. As a rule, persons with a disability should be offered the opportunity to fully participate in a fire drill, so that procedures can be practised. They should be provided with advance warning of a fire drill so that the disabled person, their buddy and any assistants are available to participate.

⁵ Contact the London Road Building Support Officer for advice.

However it is not essential that they evacuate the building at the same time as other occupants. This should be the case if a person had a mobility impairment and participation in a drill may result in the person suffering unnecessary exertion or stress.

Advice on training is available from Health and Safety Services. H&SS will involve the University Disability Officer if appropriate.

9 Sources of further information

For more help and advice about means of escape for disabled persons contact Health and Safety Services.

Reference sources:

- Regulatory Reform (Fire Safety) Order 2005
- HM Government Fire Safety Risk Assessment – Supplementary Guide for Means of Escape for Disabled People
- British Standard 8300:2001 ‘Design of buildings and their approaches to meet the needs of disabled people - Code of practice’.
- Building Regulations Approved Document B Fire Safety.

Health & Safety Services
April 2017

Appendix 1 Emergency Evacuation Questionnaire for disabled staff and students

The University of Reading wants to ensure that all our staff, students and visitors are able to leave our buildings safely in the event of fire or other emergency. We understand that many disabled people will be able to leave unaided; however some may require assistance. **Therefore if you would like to have a Personal Emergency Evacuation Plan (PEEP) drawn up for you, please complete the questionnaire below.**

If you do not feel comfortable about answering some of the questions and would prefer to develop the plan in a meeting with your manager or School Disability Officer, that is acceptable. However, if you do not provide all the information requested then the University may not be able to develop a suitable plan for you.

Once developed you will receive a copy of your plan, which will also be given to those people who may be nominated to help you to evacuate or escape.

The Plan will identify your options for evacuating from those university buildings that you regularly work or live in. You may be asked to participate in a practice to test the plan, but this will not require you to make any extraordinary effort to escape, or place you at any risk. The plan will only be implemented in full for a confirmed fire or other emergency.

If you do not request a plan, we will accept that you are able to make your own way out unaided.

If you or the person(s) producing the plan identify problems that you cannot resolve together, please contact Health and Safety Services for assistance.

Health and Safety Services
Room 110, JJ Thomson Building
PO Box 220
Whiteknights
Reading, RG6 6AF
Telephone: 0118 378 8888
Extension 8888
Email safety@reading.ac.uk

Emergency Evacuation Questionnaire

to be completed by the School Disability Officer for student, or line manager for staff member, in consultation with the Building Manager and the disabled person

	(Please complete)	
Name of disabled person		Employee or Student No.
School/Directorate		
Building/Room (if known)		
Course of study		

Buildings being used (if known)	Location and floor levels in respective buildings	Day and time
1.	i) ii)	
2.	i) ii)	
3.	i) ii)	
4.	i) ii)	
5.	i) ii)	

Other buildings visited/used	
Use and location of catering facilities	
Location of toilet facilities	

Name of line manager or dis rep:

Date:

Signature:

Contact tel. no.:

Position:

One of the following forms should be completed by the line manager or dis rep and the disabled person, and attached to this header sheet.

Form A – Mobility Impairment

Form B – Visual Impairment

Form C – Hearing Impairment

Form D – General – For all other disabilities not falling within Forms A – C.

A PEEP should be completed for each building identified above.

FORM A - MOBILITY IMPAIRED PERSONS

Name of disabled person:		School/Department:	
Building to which this PEEP applies:			
Floors used:			
	Personal Emergency Evacuation Plan Questionnaire	Yes	No
1	Have the general emergency procedures been explained to you?		
2	Could you raise the alarm if you discovered a fire (operate the call point)?		
3	Can you open the fire escape door on the floor(s) you will be using?		
4	Could you use a telephone in the area to call the emergency services?		
5	Can you walk unaided down the stairs?		
6	Can you slide down the stairs? (insert details)		
7	How many flights of stairs could you manage?		
8	Would this be increased if help was available?		
9	What type of assistance would help you?		
10	Do you use a manual wheelchair?		
11	What is the approximate width of your wheelchair	mm	
12	If you use another type of mobility aid, what is it? (insert details)		
13	If appropriate, would it be possible for a team of helpers to carry you down stairs in your own wheelchair?		
14	Could you transfer to an Evacuation Chair in an emergency with assistance?		
15	At the intended time of use, how many fire exits are available for your use?		
16	How far, approximately, is the nearest exit from the area where you are starting to evacuate?		
17	If relevant, how long, approximately, would it take you to evacuate, unaided, from the building? (please record a time for each of your available exits up to a maximum of 4)	Mins	
		Mins	
		Mins	
		Mins	
18	Are the escape routes free from any structural features that will present either a hazard or a barrier to you using any of the available fire exits? If no, insert details.		
19	Are the refuges adjacent to each fire escape route accessible to you, without assistance?		
20	Where refuges are not provided on all escape routes, does the existing fire escape signage clearly lead you to other refuges that are available?		
21	Are you able to and have you been shown how to use the refuge communications equipment?		

22	Would your ability to evacuate be impaired by other factors such as smoke or by other people using the stairs?		
23	Do you work alone? If so, when?		
24	If you are (or will you be) resident in a University owned property, has a PEEP been prepared for your accommodation? (If not please ask for one to be prepared).		
	The following questions should be answered by all mobility impaired persons who are normally assisted by full time “helpers”.		
25	Who will be providing this assistance? (insert names)		
26	Who will cover this “help” role when your normal helper is absent e.g. due to sickness, leave etc? (insert names)		
	ARE THERE ANY OTHER MEASURES THAT COULD BE INTRODUCED IN THE BUILDING THAT MIGHT HELP YOUR EVACUATION IN CASE OF AN EMERGENCY? E.G. BUDDY SYSTEM		
	Activities based on floors that can only be exited by the use of stairs i.e. upper floors or basements - for completion by the line manager or dis rep		
27	Can the activity or service provision be relocated to the ground floor (of this or any other building)?		
28	Is there an evacuation or fireman's lift?		
29	Is there an evacuation chair provided in the building? (insert where)		
30	Where are the nearest alternative chairs kept?		
31	At the intended time of use, how many fire exits from the floor are available for use? (insert number in column)		
32	Do any of the escape routes involve escape into an adjoining building allowing horizontal evacuation?		
33	Where refuges have been provided, are these suitable for use at the intended time of occupancy?		

COMMENTS/REMEDIAL MEASURES REQUIRED

Identify any issues here, and consult Health and Safety Services.

ASSESSMENT SIGN-OFF:

Signed (Line manager or dis rep)	
Signed (Building User)	
Date:	

Thank you for completing this form. The information provided will be used to help produce a Personal Emergency Evacuation Plan to meet your needs.

The line manager or dis rep should now move on to complete a PEEP (Appendix 2).

FORM B - VISUALLY IMPAIRED PERSONS

Name of disabled person:		School/Department:	
Building to which this PEEP applies:			
Floors used:			
Personal Emergency Evacuation Plan Questionnaire			
	AWARENESS OF EMERGENCY EGRESS PROCEDURES	Yes	No
1	Have the general emergency procedures been explained to you?		
2	Could you raise the alarm if you discovered a fire (operate the call point)?		
3	Can you open the fire escape door on the floor(s) you will be using?		
4	Could you use a telephone in the area to call the emergency services?		
5	Do you require the emergency escape procedure to be on tape or CD?		
6	Do you require the emergency escape procedures to be in Braille?		
7	Do you require the emergency escape procedures to be in large print?		
8	Can you read the fire escape signs?		
9	Can you make your own way out of the building without assistance?		
10	How long would you estimate that it would take to evacuate the building unaided (other than with the help of any items identified above), in the event of an emergency?		min
11	How many escape routes are available to you in the event of an emergency?		
12	Have any hazardous "projections" or other structural components been identified on your escape routes? If yes, insert details.		
13	Do you work alone? If so, when?		
14	If you are (or will you be) resident in a University owned property has a PEEP been prepared for your accommodation? (If not please ask for one to be prepared)		
The following questions need only be answered by those visually impaired persons possessing some degree of visual capacity			
15	Are all escape routes clearly signposted to meet YOUR requirements? If no, insert details.		
16	Where applicable, are all escape corridors designed so as to prevent visual confusion in YOUR circumstances? If no, insert details.		
17	Where necessary, are all escape staircases fitted with adequate colour contrasting nosing and a suitable handrail? If no, insert details.		
The following questions should be answered by all visually impaired persons who will be using / provided with full time "helpers" while in the building for which this PEEP is being prepared.			
18	Who will be providing this assistance?		
19	Who will cover this "help" role when your normal helper is absent e.g. due to sickness, leave etc. (insert names)		

20	<p>ARE THERE ANY OTHER MEASURES THAT COULD BE INTRODUCED IN THE BUILDING THAT MIGHT HELP YOUR EVACUATION IN CASE OF AN EMERGENCY ? E.G. BUDDY SYSTEM</p>
----	---

COMMENTS/REMEDIAL MEASURES REQUIRED

Identify any issues here, and consult Health and Safety Services.

ASSESSMENT SIGN-OFF:

Signed (Line manager or dis rep)	
Signed (Building User)	
Date:	

Thank you for completing this form. The information provided will be used to help produce a Personal Emergency Evacuation Plan to meet your needs.

The line manager or dis rep should now move on to complete a PEEP (Appendix 2).

FORM C - HEARING IMPAIRED PERSONS

Name of disabled person:		School/Department:	
Building to which this PEEP applies:			
Floors used:			
Personal Emergency Evacuation Plan Questionnaire			
	AWARENESS OF EMERGENCY EGRESS PROCEDURES	Yes	No
1	Have the general emergency procedures been explained to you?		
2	Could you raise the alarm if you discovered a fire (operate the call point)?		
3	Can you open the fire escape door on the floor(s) you will be using?		
4	Could you use a telephone in the area to call the emergency services?		
5	If you are, or will be, resident in a University owned property has a PEEP been prepared for your accommodation? (If not please ask for one to be prepared).		
6	Do you require the building emergency procedures to be provided to you in an alternative format to the standard written instructions?		
7	Do you require written emergency procedures to be supported by BSL interpretation?		
8	Can you hear the fire alarm in normal circumstances?		
9	Do you work alone? If so, when?		
10	Is your work area/accommodation (office, laboratory, workshop, toilet, study bedroom) fitted with a flashing beacon or vibrating pager system, linked to the fire alarm?		
11	Do you need an alternative alerting system e.g. text messaging, 'buddy system, text phone?'		
12	ARE THERE ANY OTHER MEASURES THAT COULD BE INTRODUCED IN THE BUILDING THAT MIGHT HELP YOUR EVACUATION IN CASE OF AN EMERGENCY?		

COMMENTS/REMEDIAL MEASURES REQUIRED

Identify any issues here, and consult Health and Safety Services.

ASSESSMENT SIGN-OFF:

Signed (Line manager or dis rep)	
Signed (Building User)	
Date:	

Thank you for completing this form the information provided will be used to help produce a Personal Emergency Evacuation Plan to meet your needs.

The line manager or dis rep should now move on to complete a PEEP (Appendix 2).

FORM D – GENERAL

Name:	Name of School/Department:		
Building to which this PEEP applies:			
Floors used:			
Personal Emergency Evacuation Plan Questionnaire			
	AWARENESS OF EMERGENCY EGRESS PROCEDURES	Yes	No
1	Have the general emergency procedures been explained to you?		
2	Could you raise the alarm if you discovered a fire (operate the call point)?		
3	Can you open the fire escape door on the floor(s) you will be using?		
4	Could you use a telephone in the area to call the emergency services?		
5	If you are, or will be, resident in a University owned property has a PEEP been prepared for your accommodation? (If not please ask for one to be prepared).		
6	Do you understand what the fire alarm sounds like, and can you hear it?		
7	Do you need assistance to get out of your place of work/study in an emergency?		
8	Do you know the way out of the building that you would take in an emergency?		
9	Do you know an alternative routes?		
10	Are all routes adequately signed or otherwise marked (e.g. colour coded signage, colour contract on walls or stairs) so that you can easily follow the route?		
11	Is anyone designated to assist you to get out in an emergency? If so, who?		
12	Is the arrangement with your assistant a formal arrangement?		
13	In an emergency could you contact the person in charge of evacuating the building in which you work/study and tell them where you were located?		
14	Do you require the building emergency procedures to be provided to you in an alternative format to the standard written instructions?		
15	Can you move quickly in the event of an emergency?		
16	Do you work alone? If so, when?		
17	ARE THERE ANY OTHER MEASURES THAT COULD BE INTRODUCED IN THE BUILDING THAT MIGHT HELP YOUR EVACUATION IN CASE OF AN EMERGENCY?		

COMMENTS/REMEDIAL MEASURES REQUIRED

Identify any issues here, and consult Health and Safety Services

ASSESSMENT SIGN-OFF:

Signed (Line manager or dis rep)	
Signed (Building User)	

Thank you for completing this form. The information provided will be used to help produce a Personal Emergency Evacuation Plan to meet your needs.

The line manager or dis rep should now move on to complete a PEEP (Appendix 2).

Appendix 2 Personal Emergency Evacuation Plan

1. PERSONAL DETAILS OF DISABLED PERSON:

Name:	
School/Department:	

2. LOCATION:

Building	
Floor	
Room Number	
Days of the week and times when the PEEP is applicable	

3. AWARENESS OF PROCEDURES:

I have received the emergency evacuation procedures:

In Braille		On tape or CD (specify)	
In British Sign Language (BSL)		In print	
In large print		In Sign Supported English (SSE)	

4. ALARM SYSTEM:

I am informed of an emergency evacuation by:

Existing alarm system (bell/siren)		Visual alarm system (e.g. flashing beacon)	
Vibrating pager			
Other (please specify)			

5. DESIGNATED ASSISTANCE:

Where applicable, the following people have been designated to give assistance when I need to get out of the building in an emergency.

Name:	Meeting point:

My designated assistants have been trained in the emergency procedures to assure my safety:

Yes

No

6. EVACUATION PROCEDURE (To be provided by the Line manager or dis rep):

Details of the specific emergency procedures from first alarm up to the building user reaching a “place of safety”. The details provided here should include a step by step account of how the University will ensure that the building user will reach a place of safety from first alarm actuation to final exit. A diagram should be provided, where necessary, highlighting the position of specific escape routes, refuges and any equipment provided to ensure the safety of the person under assessment.

7. ASSESSMENT SIGN-OFF

Signed (Line manager or dis rep)	
Signed (Building User)	
Health & Safety Services	
Date:	

Copies to:	✓
School or Department Disability Officer (students) or line manager (staff)	
Disabled person	
Building Support Officer (and local AHSC if necessary)	
Health and Safety Services	

Appendix 3 Questions to ask when preparing a PEEP

1. People with a mobility impairment

The following information should be obtained about the building:

- Which routes have handrails provided
- How far the distance of travel is on particular routes
- The degree of fire compartmentalisation within the building and the exact location of the fire compartments
- The provision of evacuation chairs
- Which staircases are provided with handrails and what side of the stair they are situated on
- The opportunity to use lifts (evacuation or passenger) and where the lifts are located
- What staff assistance may be available

The following information may be given to a mobility impaired person when writing their plan:

- The technical operation of fire alarms – how to raise the alarm, how to contact the security control room or emergency services etc.
- The evacuation procedures – where to go, the location of fire refuges, alternative escape routes, and where to report to after the evacuation if they can make their own way out of the building.
- Who will assist them
- Where will they meet their assistants
- What method will be used to assist them to a place of safety
- If they can make their own way out of the building, where to report to e.g. the fire assembly point

2. Deaf or hearing impaired persons

The following information should be obtained about the alerting systems available in the building:

- Visual alarm system (e.g. beacon)
- MSN text messaging
- Office intranet
- Telephone network – text phone
- Vibrating pager ((e.g. Deaf Alert)
- Team member
- Fire wardens
- Appointed buddy
- Local beacon

The following information should be given to a hearing impaired or deaf person when writing their plan:

- The systems that are available to advise them of an evacuation, e.g. alarm, beacon, pager, MSN text message, personal contact, buddy, text phone etc.
- The technical operation of fire alarms – how to raise the alarm, how to contact the security control room or emergency services etc.

- The evacuation procedures – where to go, alternative escape routes, where to report to after the evacuation, e.g. fire assembly point.

3. Visually impaired or blind people

The following information should be obtained about the building:

- What type of alarm system is available?
- Are the evacuation routes clearly marked?
- Is there sufficient orientation information?
- Are fire instructions provided in accessible formats?
- Are there step edge markings on the escape stairs?
- Are there handrails on the escape stairs?
- Are risers closed?
- Are there external, open, steel escape routes?

The following information may be given (in an appropriate format e.g. Braille, large print or audio tape) to a visually impaired person when writing their plan:

- Building Fire Action Information
- The technical operation of fire alarms – how to raise the alarm, how to contact the security control room or emergency services etc.
- The evacuation procedures – where to go, alternative escape routes, and where to report to after the evacuation (e.g. the fire assembly point) if they can make their own way out of the building.
- Who will assist them
- Where will they meet their assistants
- What method will be used to assist them to a place of safety

It can be useful to provide a tactile map of the escape routes and to provide orientation training to visually impaired staff and students working in a building, so that they are more aware of the options for escape.

4. Persons with cognitive disabilities

The following information should be obtained about the building:

- What type of alarm system is available?
- Are the escape routes clearly marked?
- Is there sufficient orientation information?
- Are fire instructions provided in accessible formats?
- Are there step edge markings on the escape stairs?
- Are there handrails on the escape stairs?
- Is it likely that there will be a need for two-speed traffic on the stair? If so, is it wide enough to allow this?
- Are risers closed?
- Are there external, open, steel escape routes?

The following information may be given to a person with cognitive disabilities when writing their plan:

Be prepared to read or explain any information to them. A video or DVD explaining and demonstrating what to do in an emergency can also be an advantage.

- Building Fire Action Information
- The technical operation of fire alarms – how to raise the alarm, how to contact the security control room or emergency services etc.
- The evacuation procedures – where to go, alternative escape routes, and where to report to after the evacuation (e.g. the fire assembly point) if they can make their own way out of the building.
- Who will assist them
- Where will they meet their assistants
- What method will be used to assist them to a place of safety
- Orientation information
- A photographic explanation of the escape routes

Reviewed	Date	Changes
HSS	12 th September 2017	<ul style="list-style-type: none">• Assessor terminology changed to Dis Rep• Version 003• Footer updated