

Good practice in the design of homes and living spaces for people with dementia and sight loss

Corinne Greasley-Adams, Alison Bowes, Alison Dawson and Louise McCabe



Funded by:

Thomas Pocklington Trust



Housing and support for
people with sight loss



UNIVERSITY OF
STIRLING

Foreword

For the last twenty-five years the University of Stirling has championed the importance of design in creating spaces which actively support and enable people with dementia. Stirling has promoted the identification and dissemination of good practice both through the work of its renowned Dementia Services Development Centre (DSDC) and through rigorous applied academic research.

Whether adapting a family residence or designing a purpose-built care home, individual differences in tastes, needs and abilities mean that creating homes that simultaneously cater for all the people who live in them is challenging. People with dementia experience impaired memory, learning and reasoning and become more reliant on their senses. People with very poor vision face a different but not entirely dissimilar set of challenges. Despite the potential for people to develop both dementia and some degree of sight loss, how best to support people with both is a relatively neglected area of study. With the support of Thomas Pocklington Trust, researchers from Stirling have sought to examine the evidence base and to provide guidance on what works, when and for whom.

The project on which this guidance is based is an excellent example of Stirling's continuing commitment to innovative applied research and these guidelines are a valuable addition to Stirling's portfolio of publications promoting best practice.

Professor Emma Reynish

Chair in Dementia Studies
University of Stirling



Acknowledgements

The project team gratefully acknowledges the help and support of: Renfrewshire Council, Scottish War Blinded and staff at the Linburn Centre, and all those people who participated in interviews or focus groups or responded to the project survey; colleagues in DSDC for advice and support throughout the project; photographer Tony Marsh for permission to use images; John Ellis at Eon Creative Ltd for help with the web resource; and our partners at Thomas Pocklington Trust without whose support none of this would have been possible.

Contents

- 03 About the guidelines**
- 05 Colour and contrast**
- 08 Lighting**
- 12 Fixtures and fittings**
- 17 Kitchens**
- 20 Bathrooms**
- 23 Entrances and exits**
- 27 Outdoor spaces**
- 30 Concluding remarks**
- 31 Useful resources**

About the guidelines





These guidelines are based on findings from a study which aimed to assess the research evidence around what works well for visually impaired people with dementia in terms of the design of their homes and the things in them. The guidelines are intended to be used to make people's 'living spaces' more supportive and accessible, whether those spaces are individual and family residences or the bedrooms, bathrooms and shared areas of care homes. The recommendations and suggestions can be used to modify and adapt existing homes to a person's changing circumstances or incorporated into new buildings. The research was funded by Thomas Pocklington Trust and was undertaken by the University of Stirling.

To help develop these guidelines the study included a careful search for and review of reports of relevant research in this area, particularly focusing on research that involved people with both dementia and visual impairment. The study also included interviews with a number of people who have professional interests in providing care and support for people with dementia or sight loss or both. Finally, interviews and focus groups were held with a range of people, some of whom had either dementia or sight loss and some of whom experienced difficulties as a result of both dementia and visual impairment. Carers also attended the interviews and focus groups. The study

included these different groups of people in order to explore under what circumstances a given design feature might be more helpful to someone with sight loss than to somebody with dementia and vice versa. Further details and results from each of these stages of the research can be found online on the Dementia Services Development Centre website at: www.dementia.stir.ac.uk.

Findings from the different stages of the research study were used to draft a set of evidence-based 'good practice' guidelines. As part of the study, people were also given the opportunity to comment on the draft guidelines via an online survey. A total of 360 people completed all or part of the survey. Those answering the survey included: people with dementia, people with visual impairments and people with both dementia and sight loss; friends, relatives and informal (unpaid) carers of people with dementia and/or sight loss; formal carers; service managers; and interested individuals from a wide range of professional backgrounds. The final guidelines incorporate answers and feedback from the survey in addition to findings from other elements of the study.

What do the ticks mean?

-  helps or is of benefit to most people
-  helps or is of benefit to some people
-  helps or is of benefit in specific circumstances
-  means that this aspect of design needs to be considered carefully before being adopted

(These categories have all been derived from the responses to the survey).

In this booklet the terms 'people with sight loss', 'visually impaired people' and 'people with visual impairment' all refer to people who have very poor vision, including people who are blind or have partial sight.

The guidelines are split into eight sections. The first seven sections discuss key aspects of design or areas of homes that can be enhanced through design. They are followed by a 'Concluding remarks' section and, at the end of the guidelines, information on other 'Useful resources'.

Colour and contrast

Colour and contrast can both be used to enable people with sight loss and dementia to identify different rooms and key features inside and outside of their homes. Good use of colour and contrast can facilitate independent living, for example, by supporting people to find their way around and to use fixtures and facilities such as lighting unassisted.

These guidelines use the word 'colour' in a non-technical way, but experts use a combination of the terms 'hue', 'saturation' and 'tone' to describe colours. 'Hue' is what most people mean when they talk about colour, and shows its place on the colour spectrum i.e. red, blue, green, etc. 'Saturation' refers to how vivid colours appear, from bright to 'muted'. Finally, 'tone' is a measure of how light or dark a

colour is. Colours can be contrasting if they are different hues, e.g. yellow on blue, or the same hue but different saturation or tone, e.g. dark blue against pale blue. It is important to discuss people's personal preferences before making decisions on how to create contrast. For some situations, people may consider contrasting hues more appropriate, e.g. where the aim is to highlight a hazard, but often in living rooms, bedrooms and other living spaces people may prefer to use contrasting tones.

It is worth bearing in mind that due to natural thickening of the lens with age, older people may experience colours as 'washed out' and may increasingly find blues, greens and purples harder to differentiate.



Using distinctive colours and signage makes doors stand out

Coloured doors

✓✓✓ Bathroom doors of a different colour to the doors to other rooms in the house help people identify the bathroom.

✓✓✓ Having bedroom doors in a range of colours in care homes assists people to find their rooms. It may help if the colour used is similar to that of the front door of a resident's previous home.



Chair contrasting with walls and floor



Contrasting coloured toilet seat

Contrasting key features

✓ ✓ ✓ Using a colour that contrasts with the background draws attention to key features. For example, it can be easier to locate and use switches and sockets, railings and handrails that are of contrasting colour to the wall.

✓ ✓ ✓ Having furniture in colours which contrasts with walls and flooring helps people with dementia and sight loss to recognise where they are and to find their way around.

✓ ✓ ✓ Having doorways that are in a contrasting colour to the surrounding walls, and door/window handles that contrast with the doors/windows help people to use them.

Contrasting potential hazards

✓ ✓ ✓ Colour and contrast can be used to highlight hazards. For example, highlighting sharp edges with colour draws attention to the danger that they may pose.

✓ ✓ ✓ Contrast can be used to help define objects more clearly. For example, using contrast in the kitchen to highlight the edges of cabinets helps people to locate themselves within their surroundings and to avoid accidental injury from edges. Using coloured rubber mats and/or crockery that contrast with tablecloths helps to define the edge of plates and dishes and might be helpful for some people.

✓ ✓ ✓ Toilet seats in colours that contrast with the toilet and with other nearby surfaces can help make these more visible and identifiable.

✓ ✓ ✓ Step edges that are contrasted to stair treads and risers improve safety by helping to visually reinforce the change from flat surfaces to steps.

Choice of colour and contrast



Colour can affect the way that people feel. When choosing colour schemes it is important to consider the impact colour may have on mood.



Individual preferences for how to contrast colours may depend on why people have poor vision, e.g. particular eye conditions may lead to different preferences. Some people may prefer to contrast warmer colours (such as oranges, reds and yellows) against light backgrounds, whereas others may prefer dark colours (e.g. black or dark blue) against light. It is best to consult people before making choices about what colours to use and how to achieve contrast. It is also important to remember that a person's preferences may change over time.



Some people with dementia may mistake this strongly contrasting doormat for a hole and try to avoid or step over it

Points for reflection and further consideration

Contrasting edges could be perceived as a barrier by some people with dementia. In such circumstances stark contrasts at floor level might become a hazard. In making changes to a person's home or living spaces it is important to consider what that person needs and wants, and to achieve the appropriate balance between protecting them from potential hazards and supporting their independence and freedom of choice.

Consideration should be given to how contrast is used to highlight key features and hazards. Using the same colours or ways of contrasting both could lead to confusion. Care must be taken to ensure there is no risk of hazards being mistaken for important features and vice versa.

People may not always find it easy to remember the significance of colours, so it may be helpful to have other visual cues in addition to colour and/or contrast differentiation, e.g. appropriate pictures or signage.



Lighting

Lighting is important to people with sight loss and dementia. Good lighting can make the most of people's capabilities and help to compensate for poor eyesight; it can assist people in finding their way around both new and familiar spaces and help them to undertake specific tasks.



Natural lighting enhances corridor spaces. Colour and contrast should be used to make anything placed in the corridor clearly distinguishable



Good access to natural lighting is important

Maximisation of natural light

✓ ✓ ✓ People benefit from high levels of natural lighting. Daylight provides higher levels of light than most domestic electric lighting; it is more diffused and lights a larger area, so can be more comfortable to work in than specific task lighting; and changes in daylight over the course of the day help to signal the passing of time and to maintain normal sleeping patterns.

✓ ✓ ✓ Maximising the amount of natural light in buildings can have multiple benefits. For example, internal corridors need careful lighting. Windows will provide natural lighting in corridors, may also be visually stimulating for occupants, and can aid people in finding their way around.

Types of artificial lighting

✓✓✓ There are different types of artificial lighting available and the choice of both light-bulb and light fitting can be important in terms of the quality and distribution of light. It is important to consider the types of artificial lighting that will be used in different parts of the home.

✓ Some research participants expressed reservations about using low energy light-bulbs. They felt that, in the past, low energy bulbs had been: less effective; took time to reach full brightness; and even then provided insufficient light. This is not the case with more modern energy-efficient lighting, and people may benefit from up-to-date advice on the appropriate use of current low energy lighting products.

Positioning of lighting

✓✓✓ Task lighting is helpful in some areas of the home. For example, strip lighting under cabinets in the kitchen helps with kitchen tasks, and lights in shower areas support independent personal care. Extra lighting for exterior doors contributes to people being able to enter and leave their homes more safely; they may also find lighted keyholes easier to use.

✓✓✓ It is useful to have additional electrical points available in rooms to enable further lighting to be made available when it would be helpful for specific tasks or activities needing more light, such as reading. Additional lighting can be provided through a variety of lighting types, e.g. table lamps, angle-poise lamps or standard lamps.

✓✓✓ The positioning of lighting is important. Lighting placed directly over beds can be uncomfortable for people when resting. It may be possible to correct this through the use of appropriate shading.



Wall lights and a standard lamp provide extra lighting



Intensity and uniformity of light

✔✔✔ Lighting of an appropriate intensity supports and promotes independence. Buildings and interiors should be designed to allow a sufficient intensity of light throughout. The preferred intensity of light depends upon individual needs and preferences, as well as the tasks being undertaken.

✔✔✔ Background lighting may sometimes be preferred to intense lighting at particular times of day. For example, at night, background lighting can be used to make it easier for people to recognise their surroundings and find their own way safely around their home.

✔✔✔ Natural lighting helps people to be awake during the day and to sleep at night. Artificial lighting which can be varied in intensity to reflect natural light patterns helps people to maintain good sleeping patterns.

✔✔ It is important to have uniformity of lighting levels in and between different rooms and spaces in the home. This is because some people with sight loss find it difficult to adapt to changing light conditions and some people with dementia may misinterpret shadows.

Control of Lighting

✔✔✔ Lighting preferences vary according to the individual. Designing homes to enable residents to have full control and choice in lighting levels can improve comfort.

Lamp in bedroom corner providing soft orange background lighting

Multiple sources provide uniform lighting and help to avoid dark corners



Points for reflection and further consideration

Where some or all of the living space in a home is shared with others, it is important to consider how different people's lighting requirements for the same spaces can be met.

It is important to think about whether a person has particular needs for lighting at night and, if so, how these might be met. For example, for some people leaving a bathroom light on may be helpful but only when this is independent of any extractor fan as the

noise might otherwise be disturbing. Other people may prefer to rely on lighting coming in from outside to provide background light after dark.

People's preferences and needs for lighting differ. It is important that homes are designed or adapted to be flexible in terms of lighting provision, and that people are regularly consulted to identify any changes in their individual preferences and needs.



Fixtures and fittings

The design of fixtures and fittings within the home is important. Good design can ensure that those people with sight loss and dementia are able to easily identify and use fixtures and fittings in their homes. Well designed fixtures and fittings can facilitate independent living. For example, providing user-friendly kitchen devices may encourage people to prepare their own food, and suitable handrails and grab rails will support people to move independently around their homes.



Grab rails can be helpful in the bathroom

Handrails and grab rails

✓✓✓ Handrails and grab rails can be helpful throughout the home but are particularly important near external and internal stairs and in bathrooms or toilets. Where these are positioned at stairs they should extend beyond the first and last steps before coming to a clearly defined end.

✓✓✓ Having handrails and grab rails in a colour which contrasts with the background can make them easier for people to locate and to use.

✓✓ Some people with sight loss and dementia may find tactile markers useful as a way to navigate round their homes, e.g. plastic bumps stuck to the underside of handrails to signal key points such as the proximity of doors on the opposite side.

Rugs and mats

✔✔✔ Rugs and mats present potential tripping hazards and removing them can contribute to greater safety in the home. For a variety of reasons some people may wish to retain particular rugs or mats despite the hazard that they pose, and an appropriate balance should be sought between managing potential risk and respecting people's rights to choice in their own homes.



Simple analogue controls on front of cooker

Controls (e.g. on appliances or for central heating)

✔✔✔ Providing the most appropriate types of controls and switches in the home supports independence.

✔✔✔ Positioning controls for ovens and cookers at the front of the appliance makes it easier for people to identify the controls and to operate them safely.

✔✔✔ People find that control panels with tactile markings, and audible confirmation when keys are depressed, are easier to operate.

✔✔✔ Larger LCD screens and print sizes make digital controls easier to use.

✔✔ Some people may find that analogue controls are easier to use than digital controls. Consideration should be given to individual preferences when deciding on the type of control that will be used.

✔✔ Some people may benefit from heating controls which allow for the manual entry of a desired temperature.



Contrasting light switches



Familiar furniture makes a room feel more homely

Light switches and electrical sockets

✔✔✔ Light switches and electrical sockets should be positioned to be easily accessible. Sockets which are raised off the floor are easier to locate and use. Switches with clear on and off positions allow users to feel more confident that a switch is appropriately set.

✔✔✔ Flexible accommodation enables people with changing needs to remain in their homes for longer. Additional electrical sockets placed around the room allow mobile lighting or assistive technology to be used.

Room furnishings

✔✔✔ People feel more at home when they have familiar objects around them. In care home settings it is important that residents are able to personalise the furnishings in their rooms.

✔✔✔ People find colour contrast with the background helpful in locating and using fittings. Contrasting coloured fittings or coloured back plates should be used to highlight switches and sockets within the home.

✔✔ Some people may find switches on double sockets difficult to operate and single sockets may be a better option.

✔✔ Full control of lighting is important, because people's lighting needs change throughout the day. Some people may prefer dimmer switches to allow more control of lighting levels.

✔✔ There may be times when it is necessary to move care home residents into different bedrooms (e.g. to provide access to particular facilities or a higher level of care). People may find this transition easier where the furnishings in one room are consistent with furnishings in the other room.

Assistive technology

✔✔✔ People benefit from appropriate assistive technology and both individual homes and care homes should be designed to allow for this. For example, the provision of technologies such as emergency assistance alarms, gas monitors in kitchens and water overflow sensors in bathrooms can provide peace of mind both for people in whose homes they are installed and for their carers.

Signage

✔✔✔ Care homes should make use of appropriate signage as this helps people to find their way around.

✔✔✔ Meaningful symbols and signifiers used around the home can help people to locate particular rooms and objects more easily. For example, a sponge or facecloth on the bathroom door acts as a prompt as to the room's purpose.



Directional toilet sign using words and pictures

✔✔ In care homes and group accommodation with many similar doors, numbering helps some people to identify their own rooms more easily. Numbers can be incorporated with other signage, such as name plates, and signifiers such as a photograph of the room's resident.

✔✔ Signage may also help people living in their own family homes to find objects more easily, e.g. on labels identifying contents on the outsides of storage containers and kitchen cupboards.



Colour and contrast

✔✔✔ Colour and contrast help people to identify specific furnishings and fittings more easily.

✔✔✔ Having electrical sockets, lighting controls, heating controls, control panels, and furniture in colours or shades that contrast with the walls helps people to locate fittings and to orientate themselves to their surroundings.

Points for reflection and further consideration

People's views should always be sought and due consideration should be given to individual choice. For example, it is suggested that in the interests of safety, rugs and mats should be removed, but this may not be the person's own preference. In such circumstances there is a need to balance management of risk against people's rights to make independent choices.

The information about controls and switches used to create these guidelines came primarily from the findings of research on the needs of people with sight loss, rather than on studies which looked at people with both sight loss and dementia. Those people who completed the survey carried out as part of this study were unsure about their applicability to some people with dementia. Users of these guidelines should give due consideration to this when considering potential changes.



Kitchens

Good layout and design of kitchens can make preparation of food and drink easier and thus facilitate independent living for people with sight loss and dementia.



Lighting inside kitchen drawers helps contents to be seen

Lighting

✓ ✓ ✓ Additional lighting in kitchens helps to make the most of people's sight, e.g. providing strip lights under cabinets and placing additional lighting in fridge and freezer compartments.

Worktops

✓ ✓ ✓ Some people find it helpful to be able to sit down whilst working in the kitchen. Having a worktop set at an appropriate height and with space underneath for a chair or stool allows them to do this.



Colour and contrast

✔✔✔ It can be helpful to people to make use of contrast in the kitchen. For example, contrasting handles or knobs on cupboard doors and kitchen drawers are more easily identifiable. Contrast can be achieved using colour, e.g. red coloured handles on white kitchen fittings, or a contrasting tone of the same colour, e.g. dark blue handles on pale blue cupboard doors.

✔✔✔ Worktops which are of a solid colour rather than patterned and which have a matt finish to them are easier for people to work at, since matt finishes result in less glare than highly polished gloss finishes, and solid colours reduce the possibility of visual clutter.

✔✔ Some people benefit from light coloured worktops in the kitchen as lighter colours help to maximise the distribution of light and to make the most of people's visual capabilities. This is not the case for everyone, so it is important to find out people's personal preferences when considering changes.

Ovens, hobs and microwaves

✔✔✔ Controls which are at or on the front of hobs and cookers stop people from having to reach over a heat source when using the appliance.

✔✔✔ People find microwave ovens with control panels that incorporate tactile feedback e.g. concave buttons, or buttons of different sizes and colours, easier to use. Handles are more intuitive than buttons for opening microwave doors.

✔✔✔ Tactile markings help people to find key temperatures on dials.

✔✔✔ People find microwave ovens with audible sounds to signal the end of microwaving easier to use.

✔✔ Providing an easy-to-use microwave oven in the kitchen may encourage people to carry out their own food preparation.

Contrasting knobs and handles are more easily identifiable

Cupboards and cabinet design



Some people may find sliding cupboard doors or spring loaded doors useful because these remove the risk of injury as a result of walking into doors left open.



Some people may find transparent cupboard doors helpful as a way to identify contents. It may be better to avoid glass in favour of other, more shatterproof clear materials because using glass can present a safety risk.



Some people may find slide out cupboard shelves useful to increase storage space, allow better organisation of cupboards and improve ease of access.



Some people might find that recessed handles on cupboard doors are useful to prevent the risk of bumping into handles which stand proud of the door. Others may find recessed handles confusing, more difficult to locate and more difficult to use. It is important to ask people about their preferences and balance risk reduction against supporting individual choice.



Transparent cupboard doors make finding items easier

Points for reflection and further consideration

Kitchens can present many potential dangers to any person using them, from hot appliances to sharp kitchen utensils to cabinets and their contents set at head height. The risks of injury are greater for people with dementia and sight loss than for people who have good vision, but it is important to balance potential risks against people's right to make choices about their homes and the need to facilitate and promote people's independence.

The information about kitchens used to create these guidelines came primarily from the findings of research on the needs of people with sight loss, rather than on studies which looked at people with both sight loss and dementia. People with dementia might find things like sliding doors and shelves and recessed handles unfamiliar and confusing. Users of these guidelines should give due consideration to this when thinking about potential changes.



Bathrooms

Good bathroom design can support more independence with washing, toileting and personal hygiene. Good design can also help with identification of the toilet and bathroom, especially during the night.



Bathroom with traditional fittings which contrast with walls and floor

Lighting

✓ ✓ ✓ Having additional lighting in the shower cubicle supports people to carry out personal care tasks independently.

✓ ✓ ✓ Bathroom lighting should be independent from any extractor fan. People can find it helpful to leave the door ajar and the bathroom lights on at night both for background night lighting and to help them to find and recognise the bathroom during the night. However, they may be disturbed by the noise made by a constantly operating extractor fan.



People with dementia may find mixer taps difficult to understand. Traditional cross head taps would be better, ideally with both labels and colour cues to distinguish hot and cold taps

Bathroom fittings

- ✔✔✔ People find grab rails helpful in bathrooms.
- ✔✔✔ Separate hot and cold water taps can be easier for people to operate and are less confusing than mixer taps.
- ✔✔✔ Low-profile shower trays make it easier for people to get into and out of shower cubicles and present less risk of people tripping. Some people may also find wet rooms a helpful alternative.

- ✔✔✔ Toilet seats which contrast with the toilet and bathroom surfaces help people to find the toilet.
- ✔✔ Bathrooms should incorporate at least one mirror to help people carry out personal care and grooming. However, it is useful to incorporate a way of covering up mirrors into the bathroom design, as they may cause confusion and upset people with dementia who no longer recognise their own reflection.



Contrasting coloured grab rails and toilet seat make this bathroom easier to use



Bathroom doors

✔✔✔ Doors of a different colour to that used for other rooms help people identify the location of the bathroom. Supplementing this with appropriate signage or pictures is helpful as some people may not always be able to remember the significance of door colours.

✔✔✔ Signifiers and/or signs can also be used on bathroom doors to allow people to identify the bathroom.



Some people may find sliding bathroom doors helpful as these reduce the risk of accidentally walking into doors and door handles, but others may find them unfamiliar and confusing so people's views should always be sought when contemplating changes.

Signage for shower and toilet

Points for reflection and further consideration



Bathrooms can be hazardous places. Limited space, hard surfaces and fixture and fittings, and the potential for slipping on water, soap, shampoo, etc. all increase the risk of injury. When considering the most helpful design for a bathroom, it is important to balance the reduction of potential risk on one hand and protecting people's rights to privacy, maintaining their dignity, and fostering and promoting their independence on the other.

Entrances and exits

Good design of entrances and exits is important for people with sight loss and dementia. With good design of both internal and external entrances and exits, people with dementia and sight loss will be able to move easily between rooms and to enter and leave buildings freely. Some guidelines in this section relate mainly to care homes, e.g. advice about emergency exits, but most are applicable to both individual homes and shared residential accommodation.



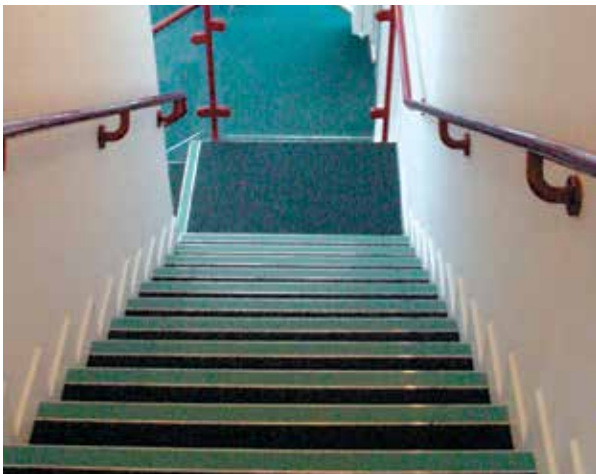
Door in contrasting colour to door frame and walls

Door security

✓✓✓ Where house alarm systems are fitted, control panels which have tactile markings and audible confirmation when keys are depressed are easier for people to use.

✓✓✓ Intercoms that allow entrance doors to be answered from anywhere in the house can be helpful. Colour, contrast and lighting can help external intercom panels to be seen.

✓✓ Some people may find it helpful to have equipment fitted to exterior doors which provides an audible warning whenever the door is opened to let them know when others have entered their homes.



Clearly visible steps and handrails improve safety

Accessibility of entrances and exits

- ✓ ✓ ✓ Whether in people's own homes or in care homes, all doorways should be wide enough to be easily accessible for people with different levels of mobility. Additionally, external entrances and exits should be designed to provide easy access to outdoor spaces.
- ✓ ✓ ✓ Door thresholds should be as low as possible because thresholds which are not flush to the floor can be trip hazards.
- ✓ ✓ ✓ Handrails help people to use steps safely. Where steps lead up to front doors or to entrances to buildings, handrails should be provided. Handrails should extend beyond the first and last steps so that people can grip them before starting to go up or down.
- ✓ ✓ ✓ Larger landings at stairs are helpful to people with sight loss.
- ✓ ✓ Sliding doors may help some people and may reduce the hazard of people walking into door edges. However, it is important to be aware that they may cause confusion for others and to base choices on people's individual needs and preferences.
- ✓ In some circumstances, to prevent injury from accidental collisions, it might be appropriate to replace standard door handles with recessed door handles. However, this will depend on individual preferences as some people may find recessed handles harder to locate or confusing and difficult to operate.

Visibility of entrances and exits



Colour coded doors and/or door frames draw attention to the doorway and assist people to identify their front doors or doors to specific rooms. For example, front doors painted in colours that contrast strongly with the front of the building are more easily spotted from a distance, and coloured bathroom and bedroom doors can help people identify these rooms. Colour and contrast can also be used to highlight key features such as: door handles; keyholes; letterboxes; bells, buzzers or door knockers. It can be useful to supplement interior doors with appropriate signage or pictures, as some people may find it difficult to remember what the colours signify.



There may be circumstances where going through a particular door would expose a person to risk of harm, for example where doorways lead directly to steps down to cellars or to rooms with unguarded machinery or exposed heat sources. In such circumstances, visual barriers such as dividers, cloths, and blinds which obscure all or part of a doorway can disguise a doorway and/or deflect attention from it.



Sometimes people will repeatedly try to use doors which are designed only to be used in emergencies. Whilst it is possible to use visual barriers to disguise emergency exits, this has implications for safety and many consider this to be inappropriate. If this is a problem it is better to use other ways of diverting the person's attention away from the door, e.g. providing other activities.



Raised keyhole in colour which contrasts with door



Lighting at entrances and exits

✔✔✔ Additional interior and exterior lighting at entrances and exits makes them easier for people to use. Entering through a front door can be made easier by providing motion or sound-activated exterior lighting which comes on as people approach their doors. Illuminating key parts of the door can also be helpful, for example by using lighted key holes and lighted doorbells.

Additional lighting above entrance door

Points for reflection and further consideration

The information about door security used to create these guidelines came primarily from the findings of research on the needs of people with sight loss, rather than on studies which looked at people with both sight loss and dementia. People with dementia who are not familiar with their use might find intercoms or audible warnings alarming or confusing. Users of these guidelines should give due consideration to this when thinking about potential changes.

Careful consideration needs to be given to the ethical and safety implications of disguising entrances and exits. In particular, it is important to recognise people's right of free movement, to try to understand why a person is repeatedly trying to leave their home, and look for solutions which address the cause of this. Nevertheless for safety reasons there might be some instances where disguising access may be deemed necessary.



Outdoor spaces

It is important that people are able to access gardens and outdoor areas adjacent to their homes. Going outdoors has been shown to have multiple benefits including; providing physical exercise; helping to maintain normal sleeping patterns and daily rhythms; improving mood and helping people to cope with stress. A well-designed outdoor space can be enjoyed by people with sight loss and dementia, as well as their families.



Well defined paths and opportunities to sit make it more likely that people will use outdoor spaces

Accessibility of outdoor spaces and path design

✓ ✓ ✓ There should be easy access to garden spaces. Light, easily opened doors and minimal door thresholds make it easier for people to get outside.

✓ ✓ ✓ Having well-defined paths helps people to find their way around outdoor spaces. The research evidence suggests that free-flowing looped designs are preferred.

✓ ✓ ✓ Well maintained paths within the garden help to minimise trip hazards.

✓ ✓ ✓ People find garden tools which have been appropriately adapted easier to use. Example adaptations include, e.g. incorporating longer handles, using colour to draw attention to the tool or parts of the tool, having tactile guides.



Easy access to outdoors

✔✔✔ People find handrails for garden paths helpful. Areas for seating are also useful.

✔✔✔ It is important for outdoor areas to have appropriate lighting as this helps people to find their way around and encourages use of outdoor spaces. Different types of lighting may be used for different purposes, e.g. lighting under handrails could be used to highlight paths, and security lights could be used to provide widespread light after dark in an outdoor space.

Perimeter fences

✔✔✔ Gardens and outdoor spaces which have fences or other physical boundaries help people to avoid accidentally leaving safe areas and being exposed to risks.

✔✔✔ Using contrast on external stairs and steps helps to highlight the change from a flat surface to steps, and using edging materials for paths which contrast with the surrounding area makes paths easier for people to identify and follow.

✔✔✔ Contrast can help to highlight both key features and hazards in outdoor spaces. It is important that different contrasts are used so that people can clearly identify which is being highlighted in any given instance.

Plantings

✓✓✓ Plants that make interesting sounds, e.g. bamboos and grasses that rustle, or seed pods that pop, and/or those that have pleasant or interesting smells and textures provide people with additional sensory stimulation.

✓✓✓ People like to touch and feel things growing in their gardens so planting schemes which include poisonous plants and those likely to cause skin irritation should be avoided.

✓✓✓ Planting schemes should be based on people's personal preferences, and draw on their memories and experiences.

✓✓ Large sections of small plants of the same colour may be easier for people to see than large plants of a single colour.

✓✓ Warm colours (such as oranges, reds and yellows) may be easier for people to pick out than cooler colours (such as blues).

Points for reflection and further consideration

These guidelines make recommendations about gardens and outdoor areas adjacent to people's homes, but they may contain useful things to bear in mind when planning visits to outdoor spaces further afield.

In the past it has been suggested that there may be different 'best' layouts for paths for people with sight loss and for people with dementia. People responding to the survey carried out as part of this study suggested that having well-maintained and well-defined paths was more important than what layout was used.



Concluding remarks

The aim in this booklet has been to set out a series of guidelines based on the available research evidence which will help people living with both dementia and sight loss to be comfortable and safe in their own homes and to be supported to make independent use of their living spaces should they wish to do so.

The guidelines represent a drawing together of evidence from both research and practice, but knowledge of what works 'best' for people with dementia and sight loss is incomplete. The study found 'gaps' and shortcomings in the available research evidence and these have been noted in the 'points for reflection and further consideration' at the end of each section. In addition, research evidence may not yet be available for products with newer, potentially helpful design features, for example 'smart' and 'talking' kitchen appliances.

When considering making any changes to a person's home or living spaces it is important to be guided by overarching principles of person-centred support, which include:

- » Recognising that everybody has different capabilities and needs,
- » Upholding people's dignity,
- » Supporting their right to make their own choices,
- » Promoting their independence.

Finally, it is important to remember that people's capabilities and needs change over time. It is therefore vital to consult people before making any changes, and to have regular conversations about how they are managing and what things may be starting to cause them difficulty.

Useful resources

The following organisations may be able to provide further help and advice:

Dementia Service Development Centre

Based at the University of Stirling, DSDC is international centre of knowledge and expertise dedicated to improving the lives of people with dementia

web: www.dementia.stir.ac.uk
email: via web-based contact form at dementia.stir.ac.uk/contact-us
tel: 01786 467740

Thomas Pocklington Trust

Thomas Pocklington Trust is a national charity dedicated to delivering positive change for visually impaired people, and commissions a programme of social and public health research, including research about housing for people with sight loss

web: www.pocklington-trust.org.uk
email: research@pocklington-trust.org.uk
tel: 020 8995 0880

RNIB

RNIB is a leading source of information on sight loss and the issues affecting blind and partially sighted people

web: www.rnib.org.uk
email: helpline@rnib.org.uk
tel: 0303 123 9999

Alzheimer's Society

Alzheimer's Society works to improve the quality of life of people affected by dementia in England, Wales and Northern Ireland

web: www.alzheimers.org.uk
email: enquiries@alzheimers.org.uk
tel: 020 7423 3500

Alzheimer Scotland

Alzheimer Scotland campaign for the rights of people with dementia and their families in Scotland and provide an extensive range of innovative and personalised support services

web: www.alzscot.org
email: info@alzscot.org
tel: 0131 243 1453

School of Applied Social Science

Colin Bell Building
University of Stirling
Stirling, FK9 4LA

web: www.stir.ac.uk/social-science
email: appliedsocialscience@stir.ac.uk
tel: +44 (0)1786 473171

Thomas Pocklington Trust

Pier House
90 Strand on the Green
London, W4 3NN

web: www.pocklington-trust.org.uk
email: info@pocklington-trust.org.uk
tel: +44 (0)20 8995 0880