

Entering, Exiting and Moving Around 02



Entering, exiting and moving around the dwelling requires interaction with the built environment on a number of levels over all times of the day. For people with dementia, their families and carers, good access and circulation within the dwelling is critical to their independence, health and well-being.



Vera lives with her husband in a two storey terraced house on the edge of town. She manages quite well and can still go out and about independently because she lives close enough to the shops.

However, Vera is starting to find it harder to carry her shopping up the three steps to her front door. She's wondering if a ramp or even a handrail might help.

Entering, Exiting and Moving Around - Overall Design Issues

This section of the guidelines describes a number of issues, ranging from entrance doors to corridors, stairs and lifts. For people living with dementia and their family or carers, entering, exiting and moving around an apartment building or house is critical to their independence, well-being and safety. When designing or adapting a dwelling it is important to consider the complete circulation route as a continuum; oftentimes it takes only one design failure or barrier to prevent a person from reaching their destination.

The Universal Design (UD) measures presented in the UDHI Guidelines provide an overall framework for dementia friendly dwellings but there are a few additional key dementia friendly design issues that will enhance the UD approach and help provide clear, legible and easily understood circulation routes to support people living with dementia.

In the context of entering, exiting and moving around consider the following key **Design Issues:**

Participatory Design: will identify circulation features such as front doors, or internal door handles that suit the residents needs or are familiar to the person with dementia.

Familiar Design: in line with the above, will provide recognisable design features related to circulation. This may involve readily identifiable locks, handrails or similar that can be understood by the person with dementia.

Personalisation: provide opportunities for people to personalise key areas along circulation routes to make these spaces more familiar and recognisable.

Easy to Interpret and Calm: will make circulation routes easier to understand and reduce any distractions which may impinge on navigation and orientation.

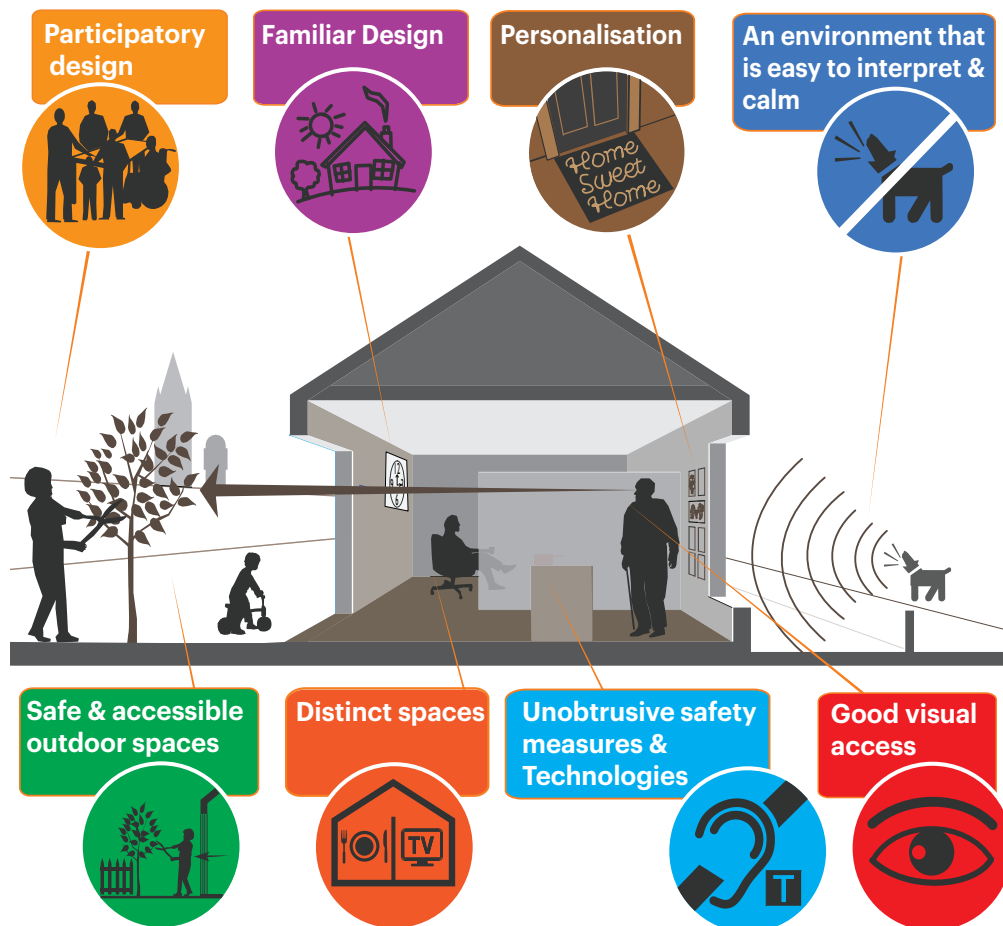
Good Visual Access: ensuring that key parts of the dwelling can be seen clearly will help with orientation and prompt actions such as using the bathroom or going out into the garden at appropriate times.

Unobtrusive Safety Measures and Assisted Living Technologies: consider how this can be used as part of any circulation strategy. In some cases this may involve measures to prevent or discourage exiting at inappropriate times such as late at night.

Distinct Spaces: clearly defined spaces with dedicated uses will make circulation with the dwelling more legible and thus help with orientation.

Safe and Accessible Outdoor Spaces: circulation within the dwelling should promote easy access to these spaces and should positively encourage use by providing direct visual access from the inside, framing views, or capturing natural light, sounds, smells, or other external cues which would entice a person to go outside into a safe outdoor space.

Please refer to the [Introduction Section](#) of this document for more detail on these design issues.



2.1 Entering the Home



01 Entrance doors to three storey townhouses.

Photo Design Features

- Different types of planting at each entrance help to distinguish one dwelling from another.
- The projecting canopy provides a visual cue to help with orientation while also providing cover from the weather.
- A glazed panel to the side of the door will make the hallway inside brighter which will help with visibility inside the home.

Photo Design Tip

- ▲ The covered area by the front door could be increased by using a larger canopy which would give a person more shelter when entering the dwelling
- ▲ If each front door was painted a different colour it would help personalise the entrances and distinguish one dwelling from another.



02 *A entrance to a contemporary detached dwelling.*

Photo Design Features

- The projecting canopy provides a visual cue to help with orientation while also providing cover from the weather.
- Good levels of lighting illuminate the entrance, while an obvious door handle which clearly communicates its function is usable by people of various heights.

Photo Design Tip

- ▲ Colour contrast between the door and the adjacent solid panel would make the door itself more visible upon approach.

Entering and Exiting the Dwelling

Design Considerations and Awareness

Section 2.1 of the UDHI Guidelines provides detailed guidance that will improve access, usability and understanding of dwelling entrances for all residents including people with dementia. However some issues may be worth reiterating in the context of this current document.

In general, entering the home will be easier for people with dementia if the entrance door is located in a logical place that is consistent with a person's expectations, if it is clearly visible upon approaching the dwelling, and if it is easily distinguished from adjacent entrances.

Steps are considered to be one of the main obstacles for people with dementia, most of whom are older people, so there should be a level threshold; however, the colour or appearance of this threshold must ensure that it is not mistaken as a step.

Opening and closing the door should involve familiar actions, and where remote or automatic door opening systems are provided these should be simple and intuitive to use.

Some people with dementia may need higher levels of lighting and this should be taken into consideration at the entrance to ensure even illumination with enhanced task visibility where possible. Uneven natural lighting can also cause issues for people with dementia, so it is important that the entrance is designed to reduce excessive shadows or shaded areas to ensure safe transition and access.

Please refer to Section 2.1 in the UDHI Guidelines for overall guidance.



03 Entrance doors to housing for people with dementia which use a very contemporary design approach.

Photo Design Features

- Colour is used to distinguish one unit from the other.
- The projecting roof above the entrances provides cover from the weather as a person enters the dwelling and also provides a covered area in front of the dwellings for sitting out.

Photo Design Tip

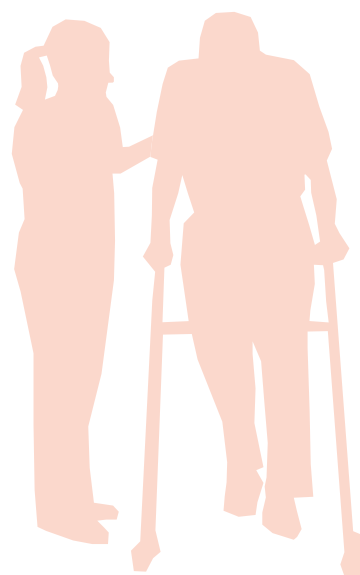
- ▲ The use of colourful or fragrant planting in the grassed area to the front would create a more interesting and multisensory environment.

UD Dementia Friendly Design Guidance

- Locate the entrance in a logical location so that it is clearly visible on approach to the dwelling.
- Use an entrance canopy or similar to reinforce the location and function of the main entrance.
- Provide a front door and associated door furniture that is intuitive and simple to use and that is familiar to the extent that it is consistent with the occupant's expectations around appearance and function.
- Use colour and tone to make the entrance door stand out from the background and distinguish it from adjacent dwellings.
- Allow opportunities to personalise the entrance area and front door to make the entrance more recognisable for people with dementia.
- Use a level threshold, but ensure that there is not an excessive visual contrast between the threshold and the floor, otherwise this may be perceived incorrectly as a step.
- Use clear signage and graphics to identify dwellings and provide house numbers.



Where possible, direct engagement with the occupants or family members will inform the designer about the past experiences of the person with dementia and thus allow the use of design features, colours or objects that may be familiar to the occupant.





04 Entrance to a single storey dwelling.

Photo Design Features

- The projecting canopy provides a visual cue to help with orientation while also providing some cover from the weather.
- A seat beside the door offers a sheltered place to sit and watch the world go by.

Photo Design Tip

- ▲ The covered area by the front door could be increased by using a larger canopy which would give a person more shelter when entering the dwelling.

Exiting and Safety Issues

Design Considerations and Awareness

If a dwelling is provided with safe outdoor space then this will enable a person to exit the dwelling and remain within a safe and controlled environment. In this regard, it has been shown that the freedom to open a door and independently go outside may reduce agitation, frustration and wandering behaviour among people with dementia, as opposed to being simply confronted by a locked door. **(See section 3.8 for information on private outdoor space).**

Where the exit of the dwelling leads to a public space, such as a street or road, then this may cause concern. This may be of particular concern during inclement weather, or at night when the person with dementia could be in greater danger of getting lost or at risk from traffic. In this context it may be helpful if a person is disinclined from leaving the house and venturing into the community. To achieve

this consider the following:

- Avoid simply locking a door or adding more complex locking as this may just increase frustration and agitation.
- Consider painting the inside of the door the same colour as the adjacent walls to help disguise the door internally. However, this approach also disguises the door during the day, or at any time when a person needs to leave the house.
- A more flexible approach involves fitting a curtain or similar to the inside of the door which can be drawn across at appropriate times to camouflage the door and remove the visual cue that may prompt a person to leave the house in the first place. This curtain can also be located so that it conceals other items associated with leaving the house such as a coat rack, umbrellas, keys and similar.
- Technology such as a door alarm, or door sensors such as Exit Risk Messaging that can alert carers or family members via text message or similar that the door has been opened, may be useful in this regard. (See Section 4 for further information on technology).

UD Dementia Friendly Design Guidance

- Fix a curtain rail to the inside of the front door to allow a curtain to be drawn over the exit if required, and if necessary drawn over associated objects such as coat rack or umbrella stand. This will eliminate a direct view of the door and may help discourage a person with dementia to leave the dwelling.
- Devices that signal to a family member or carer when a door is opened can be used where required, but should always be used in an ethical manner and every effort should be made to find a balance between being overprotective and respecting individual autonomy.



Direct consultation with the occupants or family members may reveal certain behaviour patterns or preferences the occupant may have which may result in a more satisfactory design response.



05 Entrance to a contemporary apartment block.

Photo Design Features

- This building uses colour to highlight entry points and distinguish one entrance from another.

Photo Design Tip

- ▲ An entrance canopy or covered area would provide shelter and also create a more identifiable entrance on approach.
- ▲ Colour or tonal contrast would help highlight the door and distinguish it from the adjacent glazed screen.
- ▲ Permanent markings on the glazed entrance door and side panels would make the glass more visible and help prevent a person colliding with the glass.

Entrance Doors and Access Control to Apartment Buildings

Design Considerations and Awareness

For people with dementia, the main issues regarding entering an apartment building revolve around identifying the right entrance to the apartment block from the street or a courtyard, and then gaining access, whether as a resident or a visitor. Access to apartment buildings often involves the use of key pads or automatic doors and these need to be carefully designed so that they are simple and intuitive to use.

Please refer to Section 2.1 in the UDHI Guidelines for overall guidance.

UD Dementia Friendly Design Guidance

- Locate the entrance in a logical location so that it is clearly visible on approach to the apartment building from the street, courtyard or similar communal external space.
- Use an entrance canopy or similar to reinforce the location and function of the main entrance.
- Provide an entrance door and associated door furniture that is intuitive and simple to use and that is familiar to the extent that it is consistent with the occupants' expectations around appearance and function.
- Use colour and tone to make the entrance door stand out from the background and distinguish it from adjacent glazed screens or entrances to other residential or commercial units.
- Allow opportunities to personalise the entrance area and front door to make the entrance more recognisable for people with dementia.
- Use a level threshold but ensure that there is not an excessive visual contrast between the threshold and the floor so that it is not perceived incorrectly as a step.
- Use clear signage and graphics to identify block numbers and apartment block numbers.
- Intercoms should be located in an logical position adjacent to the door where their function and operation is obvious. They should be simple and intuitive to use for a person with dementia.
- Where possible provide a visual and audio intercom to provide multiple means of communicating the function of the intercom for both the resident and the caller.
- While fob entry or swipe card systems may provide assistance for many people, they may be confusing for a person with dementia. Where these are provided ensure that they are simple and intuitive to use.
- Ensure that the fob or card reader is in a logical location, can be easily seen on arrival at the door, and is finished in a colour or tone that makes it stand out visually from the background.



Where possible, direct engagement with the occupants or family members will inform the designer about the past experiences of the person with dementia and thus allow the use of design features, colours or objects that may be familiar to the occupant.



06 The use of highly visible and bold signage.

Photo Design Features

- While the image above relates to retail it nevertheless illustrates how strong graphics and clear signage can be used to assist with orientation.

Hallways, Lobbies and Corridors in Apartment Buildings

Design Considerations and Awareness

Many apartment buildings contain convoluted circulation areas to comply with fire regulations and this is compounded by long, artificially lit, double-loaded corridors where all the apartment entrance doors are identical. Situations like this may be very problematic for people with dementia, whether they are a resident or just visiting.

To deal with these issues and to create dementia friendly dwellings, circulation within an apartment block must be logical and legible upon entry. Good visual access to key spaces or to external landmarks will provide additional orientation cues. In addition to this, good levels of even lighting, signage and the personalisation of individual apartment entrances will all help.

For instance, Figure 08 on the next page shows a 'memory box' which is a device often used in long stay residential settings to help personalise the entrance to an individual's room and to provide items or images to help trigger memories or enhance a continuation of self. Such measures may be useful in an apartment corridor to help identify a person's dwelling where there are many identical doors opening off the same space.

Please refer to Section 2.1 in the UDHI Guidelines for overall guidance.



07 *A staircase in a mixed-use residential building*

Photo Design Features

■ *A bright spacious staircase with plenty of natural light.*

Photo Design Tip

- ▲ If there was a clear glazed section in the external wall it would provide orientating views to the outside.
- ▲ Depending on the orientation of the external wall this space may need some solar control to avoid excessive glare within the staircase.

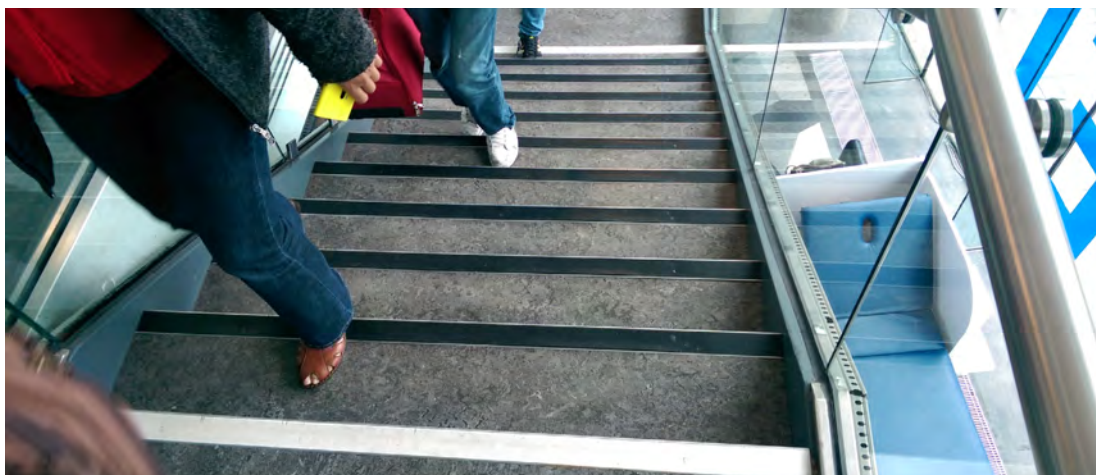


08 *The use of 'memory boxes' to personalise entrance doors.*

The memory box shown in Figure 08 could be used within an apartment corridor or other shared access area to help personalise and identify a dwelling. This would need to be agreed with the overall building owner or the management company who are typically responsible for these areas.

UD Dementia Friendly Design Guidance

- Provide legible and logical circulation within all common areas of the building to ensure ease of navigation from the main building entrance to the apartment entrance.
- Provide direct visual access along the circulation route to key spaces such as stairs or elevators.
- Provide external windows to circulation areas, and where possible, to provide natural light and views to external landmarks to help with orientation within the building. Be aware that an external window at the end of a corridor may cause glare and disorientation.
- Use colour and tone to make key doors along the circulation route stand out from the background.
- Use contrasting colours or tones to distinguish the floor from the walls. In a similar manner, use contrasting colour on the skirting boards to provide a visual break between the walls and the floors to ensure greater visual contrast.
- Provide a continuous floor finish with as little change in material as possible. Where there is a change in material make sure there is minimum colour contrast, particularly at door thresholds.
- Avoid strong patterns on floor finishes and provide plain coloured, matt finishes which will help reduce glare or shine in brightly lit conditions.
- Provide clear signage and bold graphics to enhance way-finding. These should be carefully located in obvious positions using non-reflective materials.
- Where required, handrails fixed to walls along circulation routes can be used for support while walking and also help with navigation. Use colour and tone so that the handrail stands out clearly from its background.
- Ensure the structure of any walls where handrails may be required at a future date will allow secure fixing of handrails fittings.
- Ensure high levels of even, natural and artificial lighting within circulation areas to help those with visual difficulties.



09 Stairs with contrast strips including clearly defined top and bottom steps.

Photo Design Tip

- ▲ A material other than stainless steel for the handrails may provide greater visual contrast and may be not be as cold to touch.

Communal Stairs and Lifts in Apartment Buildings

Design Considerations and Awareness

In a dementia friendly apartment block the stairs and passenger lift should be in a logical location and should be clearly visible upon entering and moving about the building. Access doors or lift controls must be easy and intuitive to use while lighting and signage will make these entrances easy to locate and use.

Please refer to Section 2.1 in the UDHI Guidelines for overall guidance.

UD Dementia Friendly Design Guidance

- Access doors to stairs and lifts should be well lit and clearly distinguishable from their background by using a different colour or tone.
- Provide a continuous floor finish and colour from the corridor into the stairs or lift. Where there is a change in material make sure there is minimum colour contrast, particularly at door thresholds.
- For the stairs use a contrasting colour or tone so that the handrail stands out clearly from the background.
- Lift controls should be in a logical position adjacent to the lift where their function and operation is obvious. They should be simple and intuitive to use for a person with dementia.
- Consideration should be given to the use of mirrors within lifts as these may cause confusion. Similarly, care must be taken with lift announcements to ensure they do not startle or confuse a person with dementia.

2.2 Moving About The Home

This section relates to all dwellings, including apartments and houses. In line with the UDHI Guidelines, a dementia friendly dwelling should be designed logically and simply to create an environment that is instantly legible with a clear, easy and convenient circulation route for everyone to use.



10 Visual access upon entry and movement throughout a dwelling.

Photo Design Features

- The circulation within the home provides good visual access and direct views to the exterior outside space to the rear which helps with orientation and may encourage a person to go outside.
- Large south facing rear windows provide good levels of natural light internally.
- The lack of saddle boards or any threshold makes it easy for everyone to move around between rooms.

Photo Design Tip

- ▲ The highly polished tiles may result in glare and cause problems for people with visual difficulties.
- ▲ In similar terms, the south facing rear windows may need some level of control to avoid excessive glare within the room which again may cause problems for some people who are sensitive to bright light.
- ▲ The doormat at the entrance should be recessed and its colour should match the colour of the paving to ensure that a person does not perceive it as a step.



11 *Open plan entrance and living area.*

Photo Design Features

- The layout provides an open arrangement where the circulation area is part of the living room. This provides good visual access and helps with orientation.

Entrance Hallway, Corridors and Doors

Design Considerations and Awareness

Similar to the kind of layout discussed in relation to the common areas of an apartment block, the circulation within a dwelling must also be logical and legible upon entering. Good visual access to key spaces within the house, supported by good levels of even natural and artificial lighting, will contribute to an easily understood and simply navigated internal environment.

The avoidance of strong patterns on floor or wall finishes coupled with the use of familiar design features, signage and opportunities for personalisation will also enhance the dementia friendly approach.

When considering the design of circulation within a dwelling, it is important to create a balance between an open plan approach, which gives maximum visual access, and the creation of a more traditional layout which has separate rooms providing clearly identifiable and distinct spaces. In this regard the needs and preferences of the residents, along with the past experiences of the person with dementia, will inform all design decisions. **(Balancing open plan and distinct spaces is also discussed in Section 3).**

Please refer to Section 2.2 in the UDHI Guidelines for overall guidance.

UD Dementia Friendly Design Guidance

- Provide legible and logical circulation to ensure ease of navigation from the entrance throughout the dwelling.
- Provide direct visual access from the entrance area and main circulation space to key living spaces, the bathroom or stairs.
- Provide external windows to circulation areas, and where possible, to provide natural light and views to external landmarks to help with orientation and encourage the use of safe external spaces.
- Use colour and tone to make key doors within the circulation area stand out from the background.
- Use contrasting colours or tones to distinguish the floor from the walls. In a similar manner, use contrasting colour on the skirting boards to provide a visual break between the walls and the floors to ensure greater visual contrast.
- Provide a continuous floor finish with as little change in material as possible. Where there is a change in material make sure there is minimum colour contrast, particularly at door thresholds.
- Avoid strong patterns on floor finishes and provide plain coloured, matt finishes which will help reduce glare or shine in brightly lit conditions.
- Provide clear signage and bold graphics to enhance way-finding. These should be carefully located in obvious positions using non-reflective materials.
- In some circumstances it might be useful to fit handrails to load bearing walls within circulation spaces for extra support while moving around the house. Use colour and tone so that the handrail stands out clearly from its background.
- Ensure high levels of even, natural and artificial lighting within circulation areas to help those with visual difficulties.
- When planning the dwelling, carefully consider the balance between an open plan which enhances visual access and a more traditional cellular plan which has the benefits of providing distinct and clearly identifiable spaces.



Direct engagement with the occupants or family members will inform the designer about the needs, preferences and past experiences of the person with dementia and thus allow the use of design features, colours or objects that may be familiar to the occupant.

Technical Sketch:

Indicative Floor Plan Showing General Circulation Layout

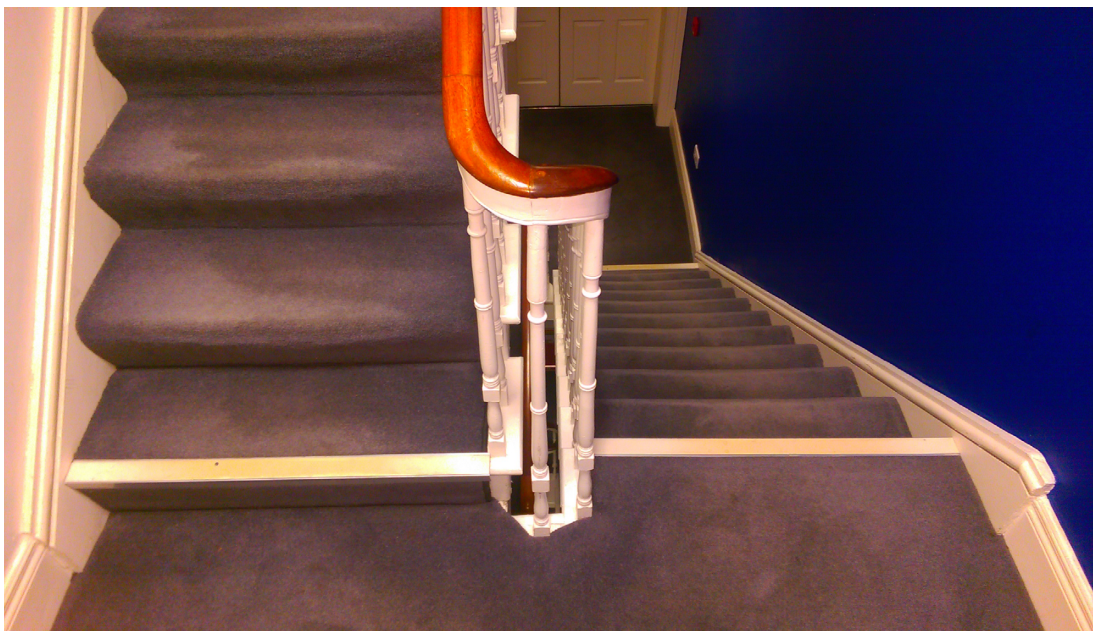


- A. Ensure good acoustic conditions by orientating spaces away from sources of noise or by providing high levels of acoustic insulation such as triple glazing.
- B. Create a distinct entrance by planting particular shrubs or by providing distinct colours to the entrance area or front gate.
- C. Provide a level entry door.
- D. Provide a brightly painted front door to make it distinct and recognisable.
- E. Consider fitting a curtain to disguise the inside of the door at certain times in order to discourage a person leaving the house at unsuitable times, if necessary.
- F. Ensure the layout provides maximum visual access to key parts of the dwelling.
- G. Ensure good views to exterior spaces.

Technical Sketch: Open plan living, dining and kitchen area



- A. Create distinct spaces using book shelves or room dividing screens.
- B. Use distinct colours to define individual spaces.
- C. Use distinctive furniture to define specific functions and spaces.



12 *Internal domestic stairs.*

Photo Design Features

- Contrast strips on the first and last steps at the landing.
- The floor colour, skirting boards and wall colour all serve to create visual contrast.
- The timber handrail is also visually distinct and stands out from the balustrade.

Photo Design Tip

- ▲ For added support an additional handrail could be fitted to wall. The stairs would have to be of a sufficient width to ensure that the additional handrail did not compromise the overall clearance of the stairs.
- ▲ Contrast strips could be added to all steps to provide greater contrast.

Stairs in the Home

Design Considerations and Awareness

Internal stairs may represent a physical barrier for people living with dementia, especially those with mobility difficulties. Contrasting colours between the steps of the stairs, the stringer and the walls can help a person with dementia to identify steps and changes in level or gradient, thereby simplifying the visual environment. This is also beneficial for older caregivers with age-related vision difficulties. Lighting is also very important on internal stairs so that they can be used safely at all times.

Please refer to Section 2.2 in the UDHI Guidelines for overall guidance.

UD Dementia Friendly Design Guidance

- Use colour or tonal contrast to help a person identify the stairs.
- Provide colour contrasting nosing strips to the top and bottom of the flight of stairs to highlight the changes in level.
- In addition to the above, providing colour contrasting nosing strips to all steps will provide greater legibility for the user.
- Use a handrail design that will be familiar to most people and will be consistent with their expectations.
- Use colour and tone so that the handrail stands out clearly from its background.
- Where possible, use some feature to clearly indicate where a handrail ends, as this will help provide a better signal to the user that the handrail is ending and thus give them a chance to adjust accordingly.
- Provide fixing grounds on the wall opposite to the handrail to allow future fixing of an additional handrail.
- Ensure high levels of even, natural and artificial lighting within circulation areas to help those with visual difficulties.



Direct engagement with the occupants or family members will inform the designer about the past experiences of the person with dementia and thus allow them to design the stairs around their specific needs.



Stair Lifts and Through-Floor Lifts

Design Considerations and Awareness

Guidance around through-floor lifts is provided in Section 2.2 of the UDHI Guidelines. It is recommended that much care should be taken with regard to any decisions regarding the installation and use of stair-lifts or through floor lifts for people with dementia, or indeed for others living in home.

The installation of a stair lift or through-floor lift may present a challenge to a person with dementia if they are not familiar with such pieces of technology. If the equipment is for the person with dementia then the controls should be simple and intuitive to use. If it is for another occupant then the controls may need to be disguised or left out of view when not in use.

It may be prudent to seek the advice of an Occupational Therapist or other relevant health professional before installing a stair lift or a through-floor lift in a dwelling where a person with dementia resides.

Please refer to Section 2.2 in the UDHI Guidelines for overall guidance.

