

Spaces for Living 03



Universally Designed Dementia Friendly Dwellings should provide high quality supportive environments that are easy to move around in and understand. They should be safe and easy to manage, flexible, cost effective and adaptable over time.



Breda lives with her husband in a bungalow in the country. She has always loved her garden and still grows some fruit and vegetables which are used in the house.

Recently, she is finding the garden harder to access and move around in, and sometimes gets a little disorientated. However, this won't stop her as her time in the garden is her favourite part of the day.

Spaces for Living - Overall Design Issues

The guidelines contained in this section refer to all key living areas of a typical dwelling including outdoor living space. While the design of these spaces greatly influences the quality of life for all people, it may have greater significance for a person with dementia as they may spend more time at home. The Universal Design Homes for Ireland (UDHI) Guidelines describe a Universal Design (UD) approach which helps to make living spaces more dementia friendly; however, there are a number of additional design issues which need to be fully explored when designing UD dementia friendly dwellings.

In the context of spaces for living consider the following key **Design Issues:**

Participatory Design: will identify the kind of living spaces, internally and externally, that will meet the needs of the residents. This may be important, for instance, in deciding on an open plan or a more traditional internal layout.

Familiar Design: will provide a recognisable layout for the person with dementia to ensure they can operate successfully.

Personalisation: allowing space for people with dementia to add their own touches will help create a more recognisable and familiar environment.

Easy to Interpret and Calm: this can be achieved in living spaces through good spatial planning, careful light and acoustic design, and the use of easily operated and understood fixtures and fittings.

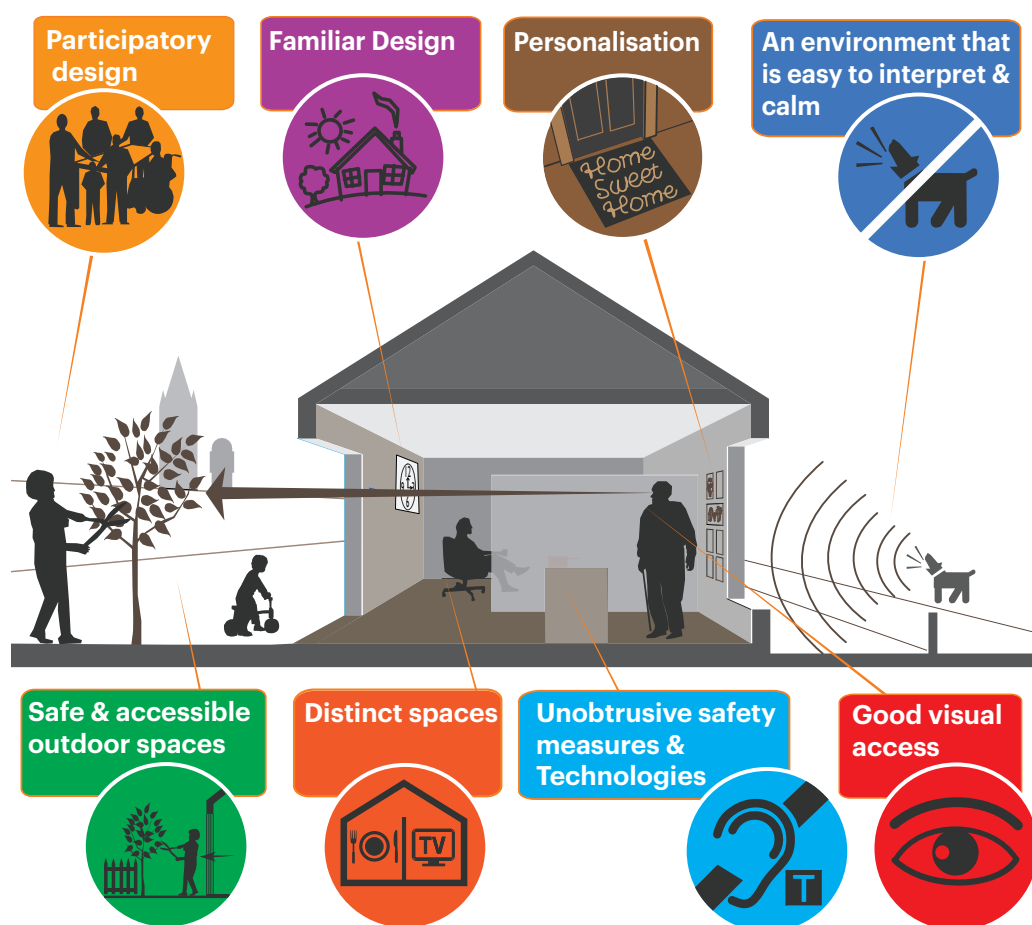
Good Visual Access: being able to see key internal and external spaces, or important objects will help remind and prompt an occupant to carry out certain tasks, engage in a particular activity, or venture outside to put out the rubbish or cut the lawn. This will also facilitate supervision which may help alleviate anxiety on the part of the person with dementia.

Unobtrusive Safety Measures and Assisted Living Technologies: will help a person with dementia to continue living at home by making everyday activities, such as cooking, cleaning or gardening, manageable and safe. Providing supports for Activities of Daily Living (ADLs), Instrumental Activities of Daily Living (IADLs), and leisure activities, not only aids independent living, but may also help a person's confidence and support remaining abilities.

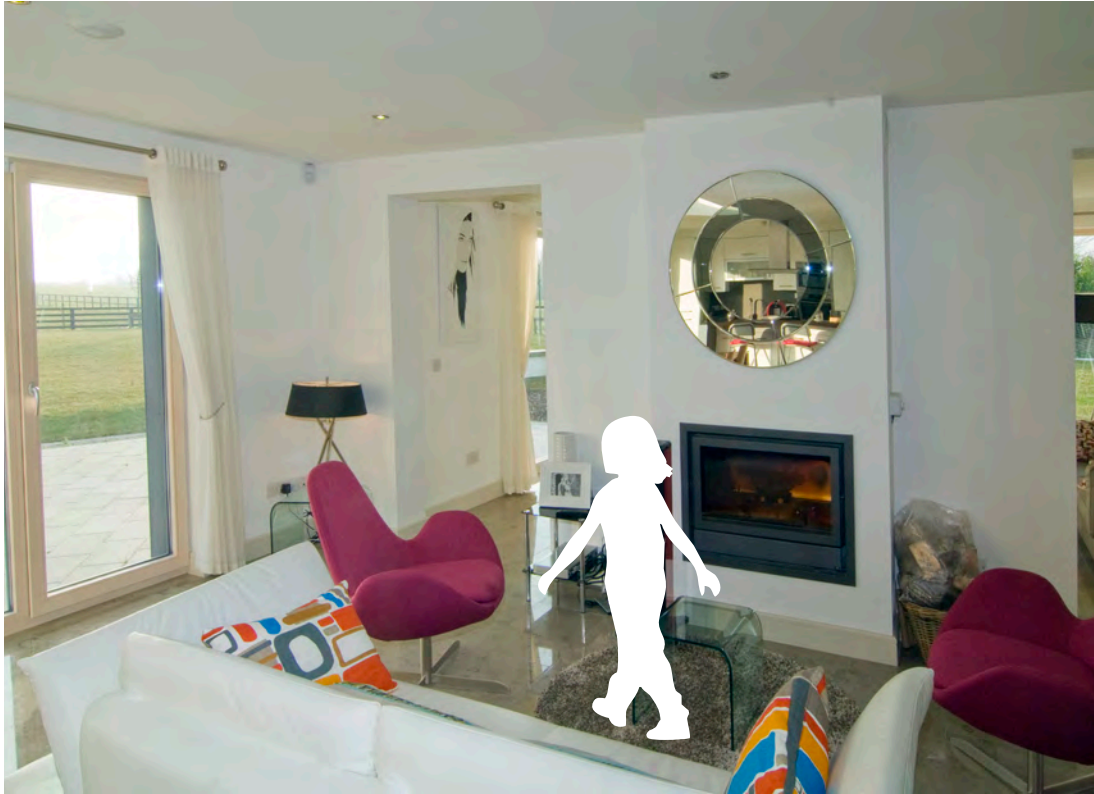
Distinct Spaces: separate rooms dedicated primarily to certain activities, such as dining or watching TV, will help reinforce the function of the space and provide further orientation cues. However, while open plan space may increase visual access, there is some debate as to whether the lack of defined or enclosed space may cause disorientation.

Safe and Accessible Outdoor Spaces: will allow people with dementia to spend more time outdoors, helping to regulate the body clock, promote exercise, and provide multisensory experiences.

Please refer to the Introduction Section of this document for more detail on these design issues.



3.1 Living Room



01 An open-plan living and dining area.

Photo Design Features

- Potential for a large clear turning space in the living area.
- Direct views to garden with no transoms or window sills obscuring view.

Photo Design Tip

- ▲ High gloss tiles may cause problems due to glare.
- ▲ The floor rug could be a trip hazard; as such it is important to be careful where floor rugs are positioned.
- ▲ Any reflections in the mirror over the stove may cause difficulties for some people with dementia.

Design Considerations and Awareness

The living room is one of the most important places in the home, and as a person with dementia may spend a lot of time in the living room, the quality, safety and usability of the space is paramount. While the overall layout and design of the dwelling will determine the nature, form and location of the living room, there are a number of key issues in relation to the dementia friendly dwellings which need to be carefully considered.

Balancing an open plan arrangement to create maximum visual access, while also creating calm and distinct spaces is important. The use of furniture and materials to offer strong cues, appropriate lighting levels, certain finishes, colour and tone to provide greater legibility, and views to the outside, are all important dementia friendly issues that need to be incorporated as part of the UD approach.

Please refer to Section 3.1 in the UDHI Guidelines for overall guidance.

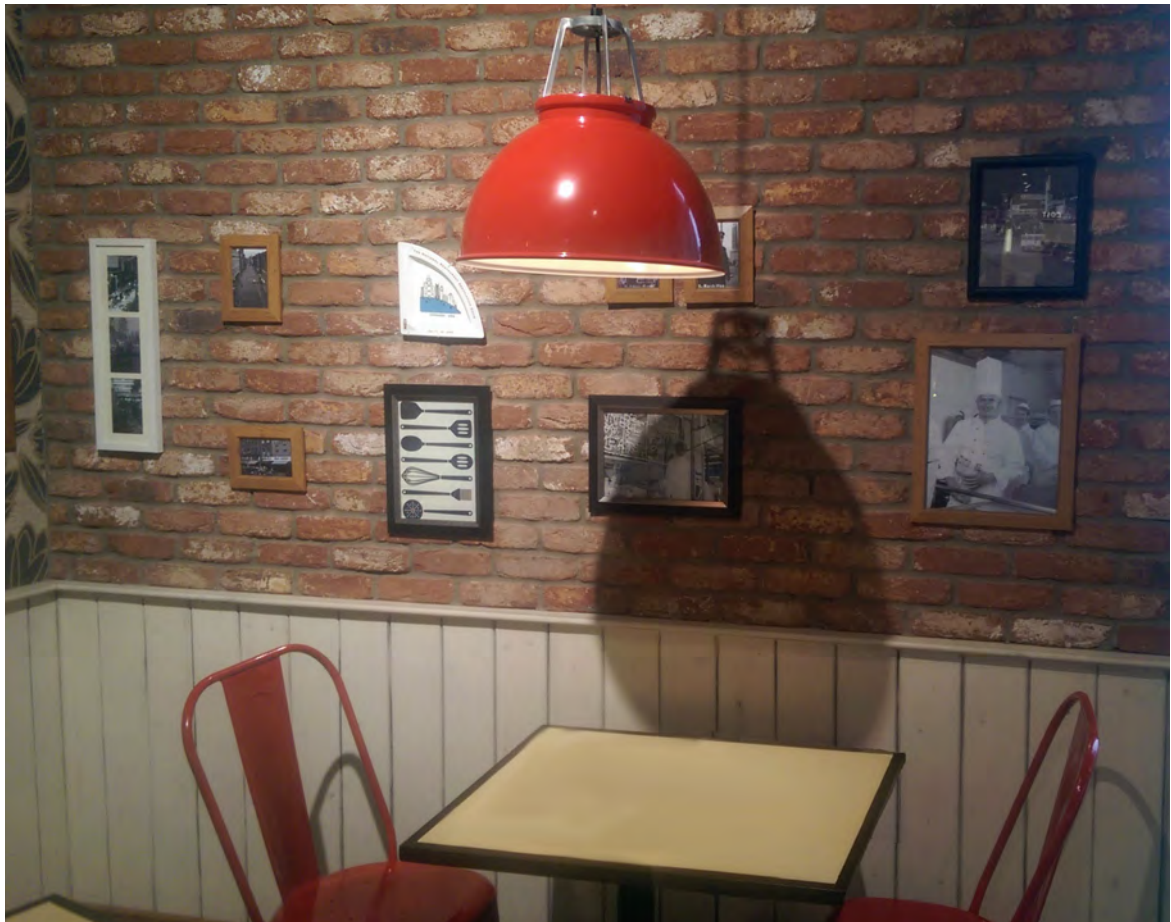
UD Dementia Friendly Design Guidance

- Locate the living room away from sources of external and internal noise to create relaxing spaces that open out onto calm and safe external spaces receiving natural light.
- Ensure that internal and external walls, ceilings, floors, or windows have sufficient acoustic insulation to mitigate airborne and impact sounds from external and adjacent internal spaces.
- Whether the living area is open plan or not, every effort should be made to provide direct lines of vision to key spaces such as bathrooms, kitchens, or dining areas, to help with orientation and provide visual cues.
- Windows must be sized and located to provide daylighting and views to external spaces. Typically, a living room will benefit from a south and west orientation to capture midday and evening sun. Ensure that window transoms or window sill heights do not obstruct a seated person's view from the room.
- Where appropriate provide direct access from the living area to a safe and accessible outdoor space..
- Use colour and tone to provide contrast between the furniture and floor, and to make floors, walls, doors and other important features more legible.



Direct consultation with the occupants or family members may reveal certain preferences or design approaches that are most appropriate for the occupant.

3.2 Dining Rooms



02 A dining area with feature lighting and cooking related decor.

Photo Design Features

- Feature lighting to emphasise the dining table.
- Timber wainscoting fitted to the wall which is used as a design feature to reinforce the function of the space.
- Food related images and objects decorating the wall.
- Red chairs standing out from light coloured wainscoting in background.
- Section of the brick wall used to create a visual feature within the space.
- Dark brown rim around the table gives it more definition against background.

Photo Design Tip

- ▲ The strong patterns on the wall paper to the left may cause confusion for some people with dementia. If it is an existing wallpaper then it may help to keep it. Consult with the person with dementia and their family/carers for their feedback.

Design Considerations and Awareness

While the UDHI Guidelines outline a number of measures that will make a dining area more accessible and usable by all people, there are a number of subtle issues that can be examined to enhance the eating experience and to positively influence the eating habits of a person with dementia.

In many homes the dining area is part of the kitchen, or adjacent to the kitchen in an open plan arrangement. This may be used as an advantage where direct views to cooking activities and cooking smells from the kitchen stimulate appetite by providing visual and olfactory cues. Visual connection between a person with dementia and a family member, or carer, will help with caring while also allowing a person with dementia to see other people in the dwelling, thus reducing anxiety about being alone or isolated.

Using natural and artificial light, or lighting contrast to define the dining area will help to reinforce the meaning and function of the space, while food related images and other objects will help provide additional visual cues in relation to dining.

Please refer to Section 3.2 in the UDHI Guidelines for overall guidance.

UD Dementia Friendly Design Guidance

- Locate the dining area in close proximity to the kitchen so that cooking smells and views to food preparation are available.
- If the dining area is part of the kitchen, or part of an open plan arrangement, use lighting, finishes, colour, tonal contrast (on the wall), or decorative objects or images to create a distinct dining area with familiar elements.
- Ensure that the floor finish is continuous with adjacent spaces to eliminate anything that could be misconstrued as a step.
- Use overhead lighting to emphasise the dining table and to create good lighting thereby enhancing visual conditions.
- Use tables and chairs that visually contrast with the wall and floor. In this context avoid glossy surfaces that may cause a shine or glare, and use a table colour, or place mats that will contrast with crockery, glassware or cutlery.



Direct consultation will inform the design process and ensure that a design approach or objects that are best suited to the occupant can be used to engage with long-term memories.

3.3 Kitchens



03 *A bright modern accessible kitchen.*

Photo Design Features

- Dining table located within the kitchen area.
- Dark colour floor tiles and counter top provide good visual contrast.
- Adjustable sink unit allows it to be lowered or raised depending on needs.

Photo Design Tip

- ▲ Colour contrast between wall and kitchen units will make space more legible.

Design Considerations and Awareness

The design of the kitchen should aim at enhancing independence, social interaction, and nutrition. The kitchen is central to many ADLs, such as eating, and IADLs, for example cooking or washing clothes. While the kitchen should serve all occupants, it is critical in supporting people with dementia so that they can be assisted to continue as far as possible to prepare and cook food, set the table, clean up after the meal, do laundry, etc. In this regard accessibility, usability, and safety are paramount, not only for the person with dementia, but also for family members, or others providing care support.

The kitchen is often the heart of the home, and in many cases it is closely related to the living room, and it is in these two spaces that occupants will spend most of their time during the day. The UDHI Guidelines outline measures that will make a kitchen more usable by a person with dementia and to supplement these, there are a number of specific issues that should be considered:

- Locate the kitchen away from external disturbances and ensure that it receives plenty of daylight, and opens out onto a calm and safe external space.
- Locate the kitchen in a central location within the house to make it more accessible.
- Provide direct access between the dining room and the kitchen to help with the transmission of sensory cues, supervision, and comforting visual contact with others in the house.
- Direct visual and physical access to safe outdoor spaces will encourage and provide opportunities for a person with dementia to partake in outdoor activities such as putting out the rubbish, or hanging out clothes.
- Ensure good natural and artificial lighting for general visibility and for undertaking tasks. People with dementia will often need higher levels of lighting and therefore even, distributed lighting must be maximised. Use downlighters to highlight certain specific areas such as a sink or cooker.



04 *Bright contemporary kitchen.*

Photo Design Features

- Bright kitchen with plenty of daylight which is also provided with even artificial lighting from a number of ceiling mounted downlighters.

Photo Design Tip

- ▲ Better colour contrast between the kitchen units and the walls would provide better legibility within this space.

Sound absorbing materials, non-glossy finishes, and good visual contrast between the walls, floors, counters, kitchen units, and appliances will all contribute to a calm and easily legible environment. This approach will be reinforced by reducing clutter, ensuring that white goods such as fridges or washing machines are not placed behind kitchen unit doors, and by using more traditional appliances that may be more familiar to the occupant.

Making sure that certain objects and spaces are clearly visible, especially food, crockery, or cooking items, may serve as a reminder and may help with activities such as cooking and in turn nutrition. The use of clear glazed kitchen units which reveal their contents may help in this regard.



05 Clear glazed wall-mounted kitchen units giving visual access to contents.

The use of more familiar appliances and kitchen fittings may resonate with older personal memories and therefore enhance usability. For example, more traditional taps may be recognisable to older people, regardless of short term memory loss or the inability to learn new things.



06 Typical kitchen tap in a modern home.

Risk and safety are major concerns in a kitchen, but it is vital not to undermine a person's independence. As discussed in the introduction, 'positive risk taking' strikes a balance between safety, autonomy and wellbeing and this can be considered in the context of kitchen design. While bearing this in mind, it may still be necessary to provide safety measures, or in some cases to conceal certain hazards which pose a particular threat. Flexible and adaptable solutions should be considered to deal with any progressive decline in a person's cognitive abilities, or to ensure that these measures do not restrict other members of the household. **(See Section 4 for more information on assisted living technologies).**

Please refer to Section 3.3 in the UDHI Guidelines for overall guidance.

UD Dementia Friendly Design Guidance

- Locate the kitchen away from sources of external and internal noise and ensure where possible that it opens out onto calm and safe external spaces that receive plenty of daylight.
- Provide visual access to key adjacent spaces such as dining areas, the living room, bathrooms and to safe outdoor spaces.
- Provide direct access to safe outdoor spaces to facilitate activities that require movement between the kitchen and outdoor spaces for activities such as taking out rubbish, recycling, or doing the laundry.
- Windows must be sized and located to provide good daylighting and views to external spaces. Typically, a kitchen will benefit from an east and south orientation to capture morning and midday sun.
- Use colour and tone to provide contrast between furniture and the floor, and to make floors, walls, doors, light switches, plug socket plates and other important features more legible. Make sure these colours contribute to a bright room where lighter colours can be used to reflect light.
- Avoid glossy floor, counter or kitchen unit materials that may cause glare.
- Ensure a continuous floor finish with adjacent spaces to avoid changes in material that may be mistaken for a step.
- Avoid concealing white goods or other kitchen appliances behind kitchen unit doors to ensure maximum visibility.
- Use traditional or familiar fittings with simple controls to enhance usability.
- Use open shelves or wall mounted units with clear glazed panels for maximum visibility to regularly used foodstuff, crockery or cooking utensils.
- To avoid accidental misuse, remove potentially hazardous materials or appliances, or certain controls in a kitchen unit which are identical to adjacent units, or painted to match the background. Lockable units can also be used for this purpose, if necessary.
- Use labels, images, or photos on kitchen unit doors or appliances to remind the occupant about their use(s), or what each item contains.
- Consider safety devices such as automatic gas and water shut-off valves, or cooker and oven shut-down devices. Consult your plumber/electrician/specialist supplier for more information on these safety devices.

UD Dementia Friendly Design Guidance

- Smoke and heat sensors linked to an alarm system will enhance safety. These should not emit an excessively loud alarm sound as this could be very frightening and disorientating for a person with dementia. Where possible, consultation with the person with dementia and their families and carers would help in providing the right solution. In some cases it may be best to link these to a carer alert system, or an external monitoring service. (See Section 4 for more information on assisted living technologies).



Consultation with the occupants or family members may reveal certain preferences or design approaches that are most suited to occupant(s), or that provide higher levels of safety.



3.4 Entry-Level Toilet

Design Considerations and Awareness

The UDHI Guidelines outline the requirements for an entry level toilet and discuss the benefits of making this toilet large enough and providing plumbing and drainage provisions so that it can accommodate a shower at some future date. This will allow an entry level room to be used as a bedroom and to be provided with adequate sanitary facilities. In the context of a typical two storey dwelling, this will also provide a downstairs shower adjacent to the main living areas.

Most of the relevant dementia friendly issues relating to toilets will be discussed in Section 3.6 Bathrooms.

Please refer to Section 3.4 in the UDHI Guidelines for overall guidance.



3.5 Bedrooms



07 Accessible bedroom with adjacent accessible ensuite toilet.

Photo Design Features

- The WC is clearly visible from the bed to provide a visual prompt to use the toilet when required.
- The wardrobe is visible from the bed to provide a prompt about getting dressed.

Photo Design Tip

- ▲ If the door to the ensuite was a distinct colour it would be more visible when closed.
- ▲ The sharp colour contrast between the bedroom floor and the hallway and ensuite may be seen as a step by some people with dementia.
- ▲ In the example above, there are objects behind the doors that prevent the doors from opening fully. Care must be taken with the arrangement of furniture to ensure doors can be fully opened for maximum visibility.

Design Considerations and Awareness

Sleep disturbance is common in some people with dementia. This often results in insomnia, nocturnal restlessness and wandering. In this regard, the bedroom must be designed to firstly help a person get a good nights sleep, and secondly to provide a safe environment at night when a person wakes up to use the toilet, or to move around in their room.

The bedroom is also central to ADLs such as dressing, walking and grooming. The design of the bedroom can provide supports for these activities by making sure that the room is properly lit, and that wardrobes or dressing tables and their contents are fully visible and usable.

In many dwellings the master bedroom will have an ensuite bathroom, and in this scenario the spatial relationship between the two rooms must be carefully considered. In other cases, such as older houses, or secondary bedrooms without an ensuite, proximity to a bathroom and the adjoining corridor must be fully considered to ensure a safe and supportive circulation between the rooms.



08 Bedroom with direct views to ensuite. Image 1 shows the door to the ensuite open while Image 2 shows it closed.

Photo Design Features

- The ensuite is easily accessible while the WC is clearly visible from the bed to provide a visual prompt to use the toilet when required.
- The use of the timber door to the ensuite provides a good colour contrast with the wall and therefore make it more visible from within the bedroom.

Photo Design Tip

- ▲ A plain floor finish within the ensuite, as opposed to the tile pattern, may cause less confusion for a person with visual difficulties.

In general, colour contrast between floor coverings and the visibility of the threshold should be minimised. Change of material to ensuite door would also make it more visible from a bedroom. Oftentimes, the bedroom may also serve as a retreat area, not only for the person with dementia, but for all others

in the dwelling. In this regard it must generally provide a calm and relaxing environment for resting, reading or just getting away.

Please refer to Section 3.5 in the UDHI Guidelines for overall guidance.

UD Dementia Friendly Design Guidance

- Locate the bedroom away from sources of external and internal noise to create a calm and relaxing space.
- Ensure that internal and external walls, ceilings, floors, or windows have sufficient acoustic insulation to mitigate airborne and impact sounds from external and adjacent internal spaces.
- Windows must be sized and located to provide good daylighting and views to external spaces. Typically, a bedroom will benefit from an east and south orientation to capture morning and midday sun. Ensure that window transoms or window cill heights do not obstruct a person's view of the outside when lying down or seated.
- Where the bedroom is not served with an ensuite ensure that a sufficiently sized room (See UDH Guidelines) is located adjacent to a bathroom providing ease of access, especially at night.
- In bedrooms served with an ensuite ensure that there is a direct unimpeded access route from the bed to the door of the ensuite.
- Ideally the WC should be visible from the bed to provide visual cues in relation to using the toilet. Ensure the doors are hung so they can open fully to reveal the WC when viewed from the bedroom.
- Use a distinct colour or tonal contrast to make the ensuite door more visible from the bedroom and recognisable as a bathroom.
- Minimise or eliminate, where possible, any threshold between the bedroom and the ensuite. While the ensuite floor will often be tiled or finished with linoleum (as opposed to timber or carpet in the bedroom), it is still important to minimise the colour and tonal contrast at the threshold to avoid the appearance of a step.
- Use colour and tone to provide contrast between furniture and the floor, and to make floors, walls, doors, light switches, plug socket plates and other features more legible. Make sure these colours contribute to a bright room where lighter colours can be used to reflect light.
- Wardrobes should be located so they are clearly visible from within the room, especially the bed. This will provide visual cues about getting dressed, particularly first thing in the morning.

UD Dementia Friendly Design Guidance

- Consider using clear glazed panels in certain sections of the wardrobe doors to allow a person to see their clothing as a visual prompt to get dressed. In some cases it may help if a person's clothes for the day are left out in this section the night before.
- Use signage on ensuite doors, wardrobes, dressers and drawers, or on certain switches or controls, to make key spaces and objects legible.
- Ensure that the room is adequately lit by removing heavy curtains, blinds or pelmets that may reduce daylight. Replace existing light bulbs to achieve higher levels of artificial lighting in the room.
- Artificial lighting should be designed to provide high levels of even lighting with spot lights or similar feature lighting, such as down lighters, used to highlight specific areas or key objects associated with particular tasks.
- Assisted Living Technologies such as movement sensors or pressure mats that activate lighting once a person gets out of bed can be used to guide a person to the toilet at night. Telecare and ambient assisted living technologies should be considered in this context. **(See Section 4 for more information on Assisted Living Technologies).**

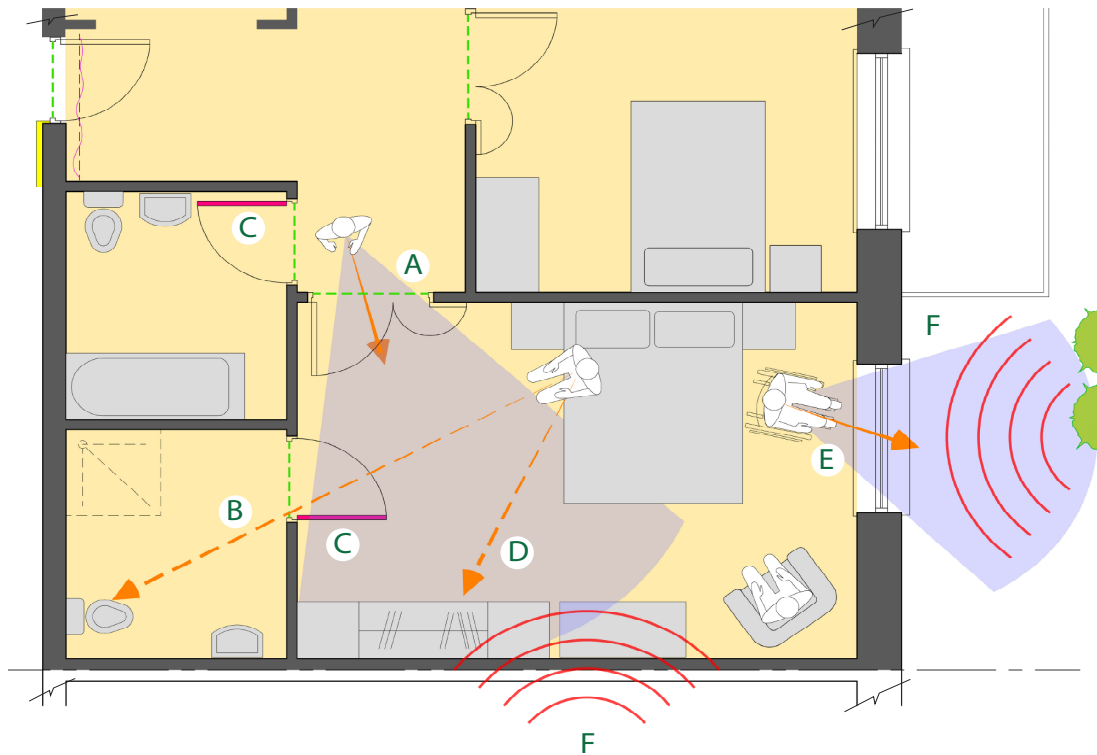


Direct consultation with the occupants or family members may reveal certain preferences or design approaches that are most suited to the occupant.



Technical Sketch:

UD Dementia Friendly bedroom and ensuite



- A. Provide extra wide doors or 'cat and kitten' doors to provide maximum physical access and also good visual access.
- B. Provide direct views to the WC from the bed to provide a visual prompt.
- C. Provide a distinct colour door to ensuite bathroom to visually reinforce its location and function.
- D. Provide direct views to the wardrobe and consider glazed doors to sections of wardrobe to provide views of the clothes hanging inside.
- E. Ensure window location, window cill height and window dressings, such as blinds or curtains, facilitate visual access to the outside.
- F. Ensure good acoustic conditions by orientating spaces away from sources of noise or by providing high levels of acoustic insulation such as triple glazing.

Technical Sketch:

3-Dimensional views to UD DFD bedroom and ensuite

- A. Provide extra wide doors or 'cat and kitten' doors to provide maximum physical access and also good visual access.

- B. Provide direct views to the WC from the bed to provide a visual prompt.

- C. Provide a distinct colour door to ensuite bathroom to visually reinforce its location and function.

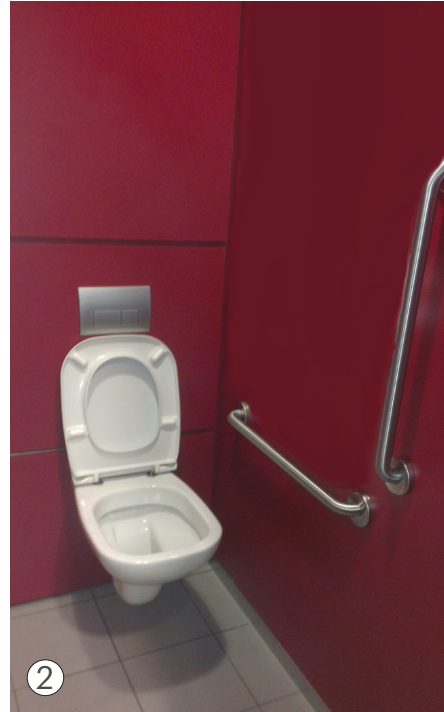
- D. Provide direct views to the wardrobe and consider glazed doors to sections of wardrobe to provide views of the clothes hanging inside.

- E. Ensure window location, window sill height and window dressings, such as blinds or curtains, facilitate visual access to the outside.

- F. Ensure good acoustic conditions by orientating spaces away from sources of noise or by providing high levels of acoustic insulation such as triple glazing.



3.6 Bathrooms



09 Two bathrooms with contemporary fittings.

Photo Design Features

- Image 1 shows a wall mounted sink which makes cleaning the floor easier and creates a more spacious feeling.
- Image 2 shows a wall mounted WC, which again is helpful in terms of cleaning and creating a greater sense of space.
- Image 2 also shows how colour is used to create visual contrast between the walls, floor and the WC.
- The bathroom in Image 2 is fitted with grab rails to assist people with mobility difficulties.

Photo Design Tip

- ▲ A greater colour contrast between the sanitary fittings and the walls shown in Image 1 would make this space more legible.
- ▲ The use of stainless steel grabrails in Image 2 may not be comfortable for some users.
- ▲ Try and make the bathroom look more homely rather than a medical space. Use off-the-shelf sanitary goods and place them as per the regulations in order to minimize an overly institutional feel.

Design Considerations and Awareness

The UDHI Guidelines details a range of measures which will make bathrooms more accessible, easily understood, and usable by people with dementia, while also creating a supportive environment for family carers or care workers. However, as the bathroom may be a difficult room for a person with dementia to interpret due to rapid advances in bathroom design over the years, several dementia specific issues should be reiterated as part of a UD dementia friendly approach to bathrooms.

Personal care, including toileting or showering are critical to a person's self confidence and independence and the bathroom must be carefully designed to support these activities. Similar to other spaces in the home, familiar design, a calm, easily interpreted space, good visual access, and the use of unobtrusive safety measures, will contribute to a secure and supportive space for people with dementia and carers alike.

Please refer to Section 3.6 in the UDHI Guidelines for overall guidance.

UD Dementia Friendly Design Guidance

- The main bathroom (whether it is on the ground or the first floor) should be centrally located with ease of access from all parts of the dwelling.
- The bathroom windows should be large enough and located to provide maximum daylight for the bathroom. Typically, a bathroom will benefit from an east and south orientation to capture morning and midday sun.
- The bathroom door should be visually distinct through the use of colour or tone to make it clearly visible within the dwelling.
- Minimise or eliminate, where possible, any threshold between the bathroom floor and the hallway. While the bathroom floor may be tiled or finished with linoleum, in contrast to carpet or timber in the hallway, it is still important to minimise the colour and tonal contrast at the threshold to avoid the appearance of a step.
- Use signage on the bathroom door to make it easily recognisable.
- Artificial lighting should be designed to provide high levels of even lighting with spot lights or similar feature lighting, such as downlighters or concealed strip lights, used to highlight specific areas or key objects such as sinks or WCs.
- Provide adequate levels of mechanical ventilation to remove steam during bathing times.
- Ensure all mirrors can be easily moved, removed or covered over.

UD Dementia Friendly Design Guidance

- Where condensation on mirrors is causing problems for a person with dementia, consider fitting proprietary heating pads behind mirrors to keep them steam free.
- Install anti-scald taps to kitchen sinks or thermostatic mixing valves to bath taps or showers to prevent scalding during bathing times.
- Consider safety devices such as automatic water shut-off valves.
- Assisted living technologies such as movement sensors or emergency pull-chords can help in the case of a fall. Telecare and ambient assisted living (AAL) technologies should be considered in this context. **(See Section 4 for more information on assisted living technologies).**



Direct consultation with the occupants or family members may reveal certain preferences or design approaches that are most suited to the occupant.

**“The bathroom is awkward...to use the bathroom you have to go down...that is ok during the day...but at night-time negotiating the stairs”
(Man with dementia living in his own home).**

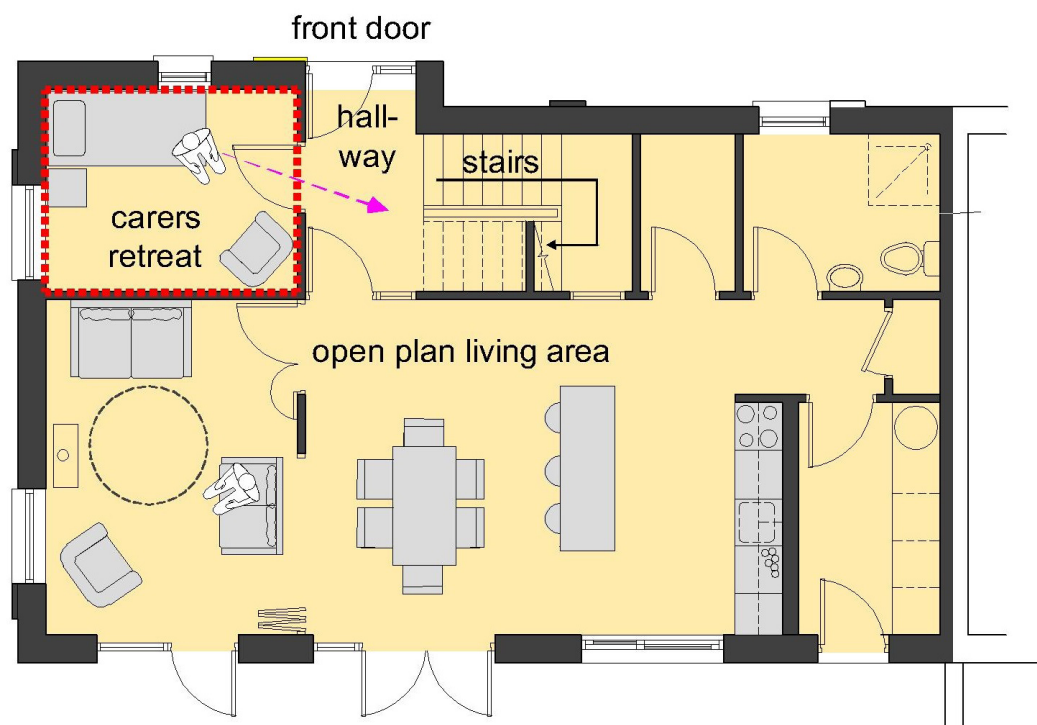


3.7 Multi-purpose rooms - Retreat Space for Carers

Design Considerations and Awareness

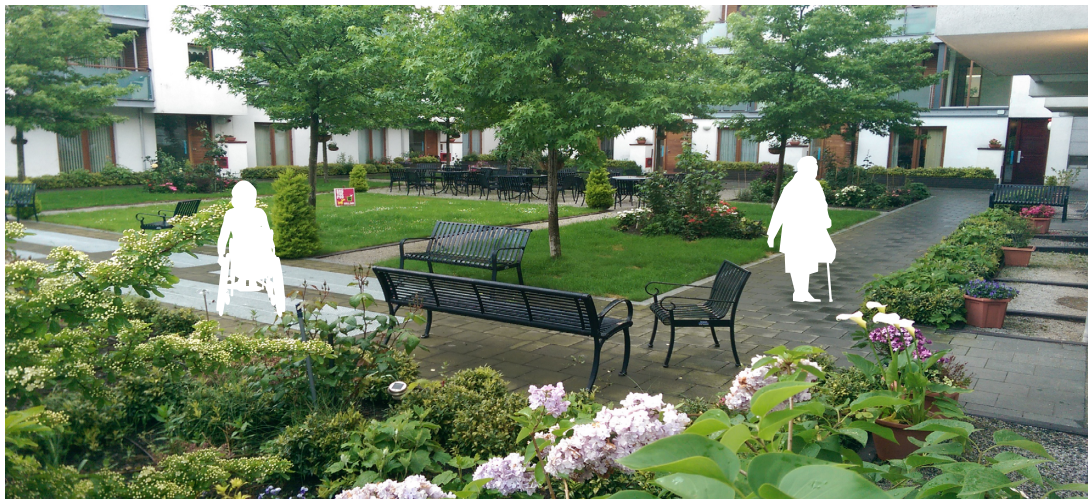
The UDHI Guidelines outline a range of issues concerning study rooms, and storage and utility spaces. These sufficiently cover issues regarding dementia friendly design. However, in the context of a dwelling that is designed to not only support the person with dementia, but also support family members and carers, it is worth discussing the provision of a retreat space for both people with dementia and carers. This retreat space may simply be a bedroom or a study that allows the person with dementia or carer to withdraw to a quiet space or carry out activities in privacy.

Please refer to Section 3.3 in the UDHI Guidelines for overall guidance.



09 An example of a room that could provide a retreat space for a carer. The location of this room provides some level of privacy while allowing the carer visual access to key spaces such as the stairs and the front door.

3.8 Private Outdoor Space



10 *Courtyard in an apartment scheme for older people.*

Photo Design Features

- Ground floor residential units have direct access to courtyard space.
- Various moveable seating types allow residents to exercise control over seating arrangements.
- Flat lawn space provided for sitting or lying out on the grass.
- Plants used to stimulate senses and create an attractive space.

Photo Design Tip

- ▲ The change of material on the walkway to the left could be misconstrued as a step or change in level by a person with dementia.

Overall Design Considerations and Awareness

Easy access to outdoor space is critical for people with dementia as access offers opportunities to carry out physical activities, get fresh air and exposure to daylight, which are all therapeutic for people with dementia. Gardens also provide multisensory experiences through contact with wildlife and plants, exposure to seasonal change, and information about the time of day, all of which help with orientation.

Private or semi-private outdoor space can take many forms, and can range from a small balcony to a large garden or courtyard. As long as the space provides an opportunity to be outside it will be beneficial for all occupants. However, depending on the nature and intended purpose of the outside space, an adequately sized area is important to allow a person who may have mobility difficulties to comfortably access, sit out or grow some plants or flowers in the space.



11 Covered terrace area outside ground floor apartment in modern apartment development.

Photo Design Features

- Ground floor residential units have direct access to covered terrace space.
- Terrace spaces open directly to common areas and extensive views.
- The projecting building and canopy provide a deep covered area for sitting out, eating, or growing flowers or plants.
- The covered area provides a transition space between outside and inside in terms of graduated natural light levels, shelter from the elements and a sense of enclosure and protection.

Photo Design Tip

- ▲ The change of material on the walkway to the left could be misconstrued as a step or change in level by a person with dementia.

Some kind of covered space between the interior and the exterior space, such as a veranda, pergola or covered terrace as shown above, will benefit people with dementia by providing a transition area between inside and outside. This transition space will help those who are sensitive to bright light or who have visual adaptation difficulties which may be exacerbated when moving from dimly lit interiors to brighter external daylight conditions. Such spaces will also provide shelter and shade in wet, windy or excessively sunny conditions.

When designing outdoor spaces consider how familiar planting, finishes, furniture or other fittings can be used to make these spaces more recognisable, trigger long-term memory and help with reminiscing for a person with dementia.

All of the above must be provided within a safe environment, so where required, care should be taken to provide secure boundaries that cannot be easily climbed. Secure garden gates that can be subtly disguised are also helpful.



12 An example of a well designed garden.

Private Gardens

Design Considerations and Awareness

Private gardens provide for a range of uses and activities and in the context of a UD dementia friendly dwelling it is important to consider the following:

- Provide space for socialising. This may be a bench or few garden chairs, or an outdoor eating space such as a patio with table and chairs.
- If areas for rubbish and recycling bins, fuel stores, garden sheds or clothes lines are within easy reach and in clear view, they may prompt a person to engage with domestic activities such as hanging out clothes or putting out the rubbish.
- A covered external space between the interior and the exterior will benefit people with dementia and others, by providing a transition area between inside and outside. In a private garden this might take the form of a veranda which would extend the living area and provide a space for a person to be outside without full exposure to the weather conditions.
- Many gardens provide views to the community, or views to the surrounding landscape. Therefore, a balance must be struck between secure boundaries and visual and auditory contact with the adjacent environment.



Please refer to Section 3.8 in the UDHI Guidelines for overall guidance.

UD Dementia Friendly Design Guidance

- The internal and external spaces of the dwelling must be designed together in an integrated manner in order to create a unified whole and to provide physical and visual access to the outdoors.
- Provide level access from the key internal living spaces such as the living room or the kitchen through an accessible and easily operated external door.
- Consider the use of a veranda, pergola or similar space to provide a shelter or shaded transitional outdoor space that can allow people to sit outside without full exposure to the weather conditions.
- Use solid, non-slip, non-reflective material for ground surfaces without strong patterns. Ensure the ground surfaces are suitable for wheelchairs or a person who may shuffle when walking.
- Avoid the use of garden structures or items which might cast slatted shadows on the ground which may be perceived as troughs or changes in level.
- Avoid abrupt changes in ground finishes or junctions between very different materials.
- Provide plants preferred by resident (e.g. roses or lilacs). Use planting that will also clearly illustrate the changing seasons.
- Provide multisensory experiences through the use of colourful planting or colourful materials for visual stimulation; fragrant planting for olfactory stimulation; textured objects and plants for tactility; or bubbling water features or similar for aural stimulation.
- Consider how the design of these spaces can provide for pets or other small animals such as rabbits. Consider growing vegetables, fruit, or herbs which can be picked and used – these activities may be therapeutic for people with dementia.
- Where safety is a major issue, provide an enclosure using trees, tall shrubs or bushes to screen walls or fences. This planting will also lessen the feeling of being overly contained.
- See Section 1.2 for specific guidance relating to paths, gateways, ramps, handrails, lighting, etc.



Direct consultation with the occupants or family members will provide information about garden layouts, garden furniture or planting that would be familiar or preferred by the person with dementia.



13 Many recent apartment developments include large balconies and these can provide excellent private outdoor spaces.

Photo Design Features

- Large balconies that wrap around the apartment giving direct access to the balcony from all rooms.
- Glazed balustrade providing maximum views to the surrounding landscape from the balcony and from within the apartment.

Photo Design Tip

- ▲ In terms of safety it may be appropriate to consider providing a higher balustrade or provisions for full height glazing similar to a wintergarden.

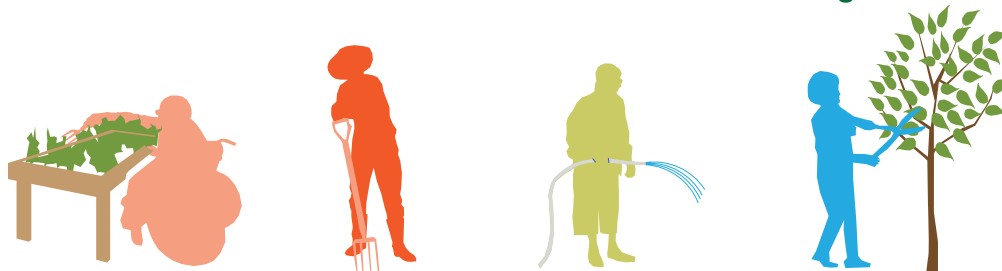
Balconies and Terraces

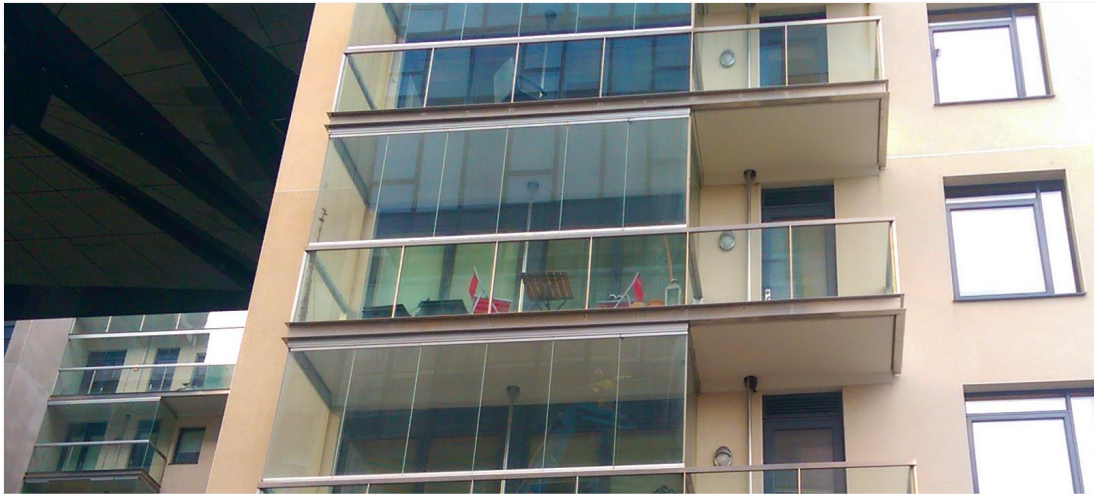
Design Considerations and Awareness

Well designed balconies and terraces can provide many of the same benefits that have been outlined in the previous section. Access to fresh air, daylight and views, or the opportunity to grow plants or food may be very enjoyable therapeutic for a person with dementia.

The key issues around providing good quality balconies or terrace space revolve around access, adequate space, and safety.

Please refer to Section 3.8 in the UDHI Guidelines for overall guidance.





14 Fully glazed balcony or 'Winter garden' in a recent apartment development. This also has a smaller open section with direct access from a bedroom.

Photo Design Tip

- ▲ If this balcony had a greater depth, it would provide a higher quality external space and allow the growing of plants or vegetables which can be a therapeutic and meaningful activity for a person with dementia, as well as allow the person to sit outside and enjoy the weather.

UD Dementia Friendly Design Guidance

- To ensure that a balcony or terrace is fully usable by a person with dementia it must be easily accessed and visually accessible from key internal spaces such as a living, kitchen or bedroom.
- While a typical balcony with standard 1200mm high balustrade may be appropriate in most cases, it may also be worth considering the creation of a 'winter garden' style balcony which is fully enclosed.
- Where safety is a real concern provide 1800mm high safety glazing or similar balcony balustrade or full height screening.
- Providing a balcony with a minimum depth of 1500mm or 1800mm will ensure that it can function as an adequate outdoor space. This may be particularly important if a person spends much of their time at home.



Direct consultation with the occupants or family members may reveal certain preferences or design approaches that may help inform the design of balconies or terraces so they are suitable for people with dementia.