

The AKW Guide to Creating Dementia-Friendly Bathrooms

Dementia-Friendly Bathrooms

An introduction

This guide summarises best practice design advice for creating dementia-friendly bathrooms with guidance provided by leading healthcare and building design experts.

All aspects of bathroom design including lighting, flooring, taps, showers and heating are covered. We also explore some specific safety challenges and how they can be best overcome with the careful selection of products.

What is a dementia-friendly bathroom?

A dementia-friendly bathroom is one where simple but careful consideration of design can reduce the barriers that people with dementia can face in carrying out daily living activities, greatly improving their safety and preserving their independence for as long as possible. This guide highlights special design considerations and the safest types of bathroom products to address them.

Who is this guide for?

This guide has been produced for all those involved in dementia care:

- + health and care professionals
- + relatives and carers
- + specifiers and contractors involved in bathroom adaptations
- + social landlords



What is dementia and why is it so important to create well designed dementia-friendly bathrooms?

The word 'dementia' describes a set of symptoms associated with an ongoing decline of the brain functioning. This may include changes to cognitive function such as memory loss and difficulties with thinking, problem-solving or language. Dementia Friendly Design aims to compensate for the changes people experience when living with dementia. However, all of the principles underpinning Dementia Friendly Design are applicable to a wide number of people, including those with age related impairments, mobility issues and sight impairments to name a few.

Good design is substantially more complex than just making physical changes to the built environment and the bathroom, despite being one of the smallest rooms to design in any building, is one of the most complicated. Indeed, there are at least ten tonal considerations within a bathroom or shower room. These include tonal contrast for surfaces / critical planes such as walls, floors, doors, skirtings, sanitary ware and toilet seats which should achieve a minimum contrast of 30 points LRV (Light Reflectance Value) in order to see one object against another.

Well considered design has an impact on the way a space is interacted with, the health and wellbeing of the people who use it and overall quality of life. Independence, dignity, purpose, and personal identity are qualities we all hope to maintain as we age, however poor design considerations can have a devastating effect on the lives of older people and people living with dementia or other impairments. Understanding how a person experiences the world around them is key to making sound design choices. Ultimately, our goal should be to improve the lives of people living with dementia.

We confirm 'The AKW Guide to Creating Dementia-Friendly Bathrooms' (pages 2-11) has been prepared in collaboration with the DSDC, University of Stirling and we can confirm that it represents current best-practice in relation to dementia-friendly bathroom design principles.

Lynsey Hutchinson
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Dementia Services Development Centre, University of Stirling



2 Reasons why we need more dementia-friendly bathrooms in accommodation for the elderly

Reason 1

As our population ages, dementia is becoming much more prevalent

Key Facts*

- + 209,600 will develop dementia this year, that's one person every three minutes.
- + There are currently around 850,000 people with dementia in the UK. This is projected to rise to 1.6 million by 2040.
- + 1 in 6 people (17%) over the age of 80 have dementia.
- + 70 per cent of people in care homes have dementia or severe memory problems.

Reason 2

The bathroom is one of the most challenging and dangerous places for a person with dementia

Dementia can cause someone's perception of danger to steadily diminish and the bathroom can become a dangerous and confusing place. People with dementia are twice as likely to fall and these falls result in significantly higher mortality rates than for others in the same age group.

Hazards are numerous and include trip points, slippery floors, hot water and confusing layouts. What was once a comfortable and familiar room can become a challenging and sometimes frightening place that can cause upset, frustration and a reluctance to use the bathroom.

Sources: * www.alzheimers.org.uk/about-us/news-and-media/facts-media

Design Guidance

Our design guidance is split into two sections:

1 Protecting the Individual

A person-centric approach to bathroom design for people with dementia. This section highlights the unique challenges that the condition presents and gives simple bathroom design and product selection guidance to safely meet those challenges.

2 Product guide

The second section is a simple product guide that deals with each essential bathroom item and offers advice on selection.

Key considerations: Safety

A person with dementia may over time become less aware of basic dangers such as scalding, so their bathroom has to be made into an ultra-safe and comfortable space.

Key considerations: Familiarity

For some people with dementia, adaptations can be distressing as they may fail to recognise their own bathroom. For those people it may help if a dementia-friendly bathroom adaptation is made as soon as possible after a dementia diagnosis has been given. This gives the person time to familiarise themselves with their new bathroom products and layout.



A dementia-friendly bathroom doesn't need to cost any more than a standard bathroom adaptation

Products needed for a dementia-friendly bathroom don't usually cost any more than those for a standard bathroom adaptation for the elderly, but it is essential that the most appropriate ones are chosen and that design guidelines regarding product colour etc. are followed to maximise the safety and comfort of the person with dementia.



Protecting the individual

Seven major dementia challenges

1 Protection against scalding

Someone with dementia may progressively lose safety awareness and as a result they will become more vulnerable to scalding.

Requirements & Considerations

1. Select thermostatic taps and showers
2. Use LST (low surface temperature) radiators or under-floor heating. Don't leave pipework exposed as this can get extremely hot. If the person is prone to falling (see below) consider under-floor heating

2 Fall protection

People with dementia are twice as likely to fall as others in their age group, and have a three times greater mortality rate three months later as a result

Requirements & Considerations

1. Avoid sharp edges on any product in the bathroom
2. Remove the bath and install a level access shower to reduce trip hazards. Include a shower seat to reduce the likelihood of falling when showering

3 General confusion

For a minority of people with dementia, the reflection of their own face in a glass shower screen or mirror can frighten them and may lead them to believe another person is using the bathroom.

Requirements & Considerations

1. It is important to include a mirror in a bathroom, but it must be capable of being covered (ideally fit a roller blind or similar to it)

4 Memory loss

Short term memory loss / forgetfulness can lead to a risk of flooding.

Requirements & Considerations

1. Consider selecting a shower that automatically turns off after 30 minutes of use
2. For flood prevention consider using flood-proof plugs or don't provide a plug at all
3. Choose PET plastic shower screens, not glass
4. Consider installing under-floor heating only so there is no radiator to fall against
5. Choose shower curtains with a breathable fabric to prevent suffocation if the person with dementia passes out, falls and becomes entangled

5 Retro memory

Most people with dementia have good long-term memory but poor short-term and so are more comfortable with familiar fixtures and fittings from the past.

Requirements & Considerations

1. Choose familiar-looking, traditional tap handles and toilet flush controls not push-button or infra-red ones as modern devices can be confusing
2. Ideally select basins that are big enough to accommodate a toothbrush mug

6 Floor colour perception

A change in floor colour (in a room or between adjoining rooms/corridors) can lead a person with dementia to believe there is a step up or down, which on a level surface can cause trips or falls

Requirements & Considerations

1. Ensure the floor is single colour - avoid the use of level access trays as a person with dementia may assume the colour change from floor to tray means there is a step up or down and fall. The safest solution is a wet room that is fully tiled or safety floored in a single colour
2. Avoid very dark colour flooring as this can be perceived as being a big hole making the person with dementia reluctant to step into the bathroom
3. Avoid shiny flooring as this can be perceived as being wet
4. Avoid flecked or small patterned flooring as this can be perceived as having dirt flecks that the person with dementia may try and pick up, leading to the possibility of falling

7 Visual confusion

Use contrasting colours to clearly define the showering and toilet areas so the user can safely and effectively locate and use them.

Requirements & Considerations

1. Establish the LRV (Light Reflectance Value) of the colours used – the minimum to achieve good contrast is 30 points of difference
2. The shower curtain and shower seat need to be a different and clearly contrasting plain colour to the wall behind it to make it easy to find the showering area
3. The sanitary fittings need to contrast clearly with the colour of the wall behind
4. The colour of the toilet seat needs to contrast clearly with the colour of the toilet pan/cistern.
5. Toilet roll holders and grab rails also need to be strongly contrasting colours to the walls they are attached to



Does it have to be red?

There is a common misconception that the only dementia-friendly colour that should be used for grab rails and toilet seats is red. Leading dementia-friendly building design experts, dementia research academics and OTs agree that this is a myth.

Whilst red is an acceptable colour to use, other colours are equally as effective, providing they clearly contrast with the wall colour behind them. It is also essential that the toilet seat contrasts clearly with the colour of the toilet pan and with the colour and tone of the floor.



Product guide

Choosing the right products for your dementia-friendly bathroom

Showers

- + Choose a thermostatic care shower to guarantee a safe and stable temperature and ideally choose a shower with easy to use and familiar controls.
- + To avoid accidental flooding (if a shower is left running), ideally choose a shower that automatically shuts-down after 30 minutes use.
- + Avoid using rain head (overhead deluge) shower heads as these can cause fright. It helps if a person with dementia can see where water is coming from and that they can control its flow.
- + Ensure shower has controls that are visible against the shower body – i.e. the controls should be a contrasting colour.
- + Choose a shower that has a riser rail that also acts as a grab rail and ideally choose one with a dark colour riser /grab rail (e.g. dark blue or grey) so that it clearly contrasts with the wall behind it.



Toilets & Basins

- + Choose a different colour toilet seat to the pan and cistern so the user can easily locate it.
- + Choose familiar looking toilet flush levers. Avoid push button or infra-red flush controls as these can cause confusion.
- + We recommend specifying a cross-head tap with a quarter turn which will be easier to turn. Taps should have clear indications to help people understand which is hot and which is cold.
- + Make sure that the toilet roll holder is a contrasting colour to the wall so it can be easily seen.
- + Avoid the use of hidden cisterns.
- + Ensure the basin is big enough to accommodate toothbrush mug, toothpaste tube and soap.
- + Ideally position the toilet so that it can be seen from the bed – this is especially important in nursing homes.
- + Consider using flood-proof plugs that pop-up if the basin overfills or don't use a plug at all.



Shower Screens & Curtains

- + **Screens** – Ideally choose PET plastic safety screens not safety glass, as being a softer material these reduce the likelihood of impact injury should they be fallen against.
- + **Screens** – Choose a frosted screen as these don't show the reflections that can frighten someone with dementia, making them think that someone else is in the bathroom with them. The added advantage of a frosted screen is that it offers greater dignity if the carer needs to stay in the room.
- + **Curtains** – Choose curtains that are a different colour to the walls and the floor. This creates a clearly recognisable showering area. If the bathroom user is susceptible to falls then ensure the curtain fabric is breathable to avoid the danger of suffocation if the curtains are pulled down in a fall.



Flooring

- + Ensure that any threshold strips between adjoining rooms are within a maximum of 10 LRV (ideally less than 8 LRV) of both abutting floor finishes. Flooring should be consistent in tone throughout including threshold strips, as the colour change can be perceived as a step resulting in falls at the threshold.
- + Also ensure that the bathroom floor is a single colour. Avoid the use of level access trays as a person with dementia may assume the colour change means there is a step up or down and this can lead to falls. The safest solution is a wet room that is fully tiled or has safety flooring.
- + Non-slip flooring reduces the need for bath mats that can be a trip-hazard.
- + Avoid very dark coloured flooring as can look like a large hole, discouraging a person with dementia from stepping onto it.
- + Flooring should be plain and non-reflective. Flecks and speckles can cause confusion as it may look like crumbs or dirt and this can lead to falls if the user tries to pick them up.
- + Avoid a shiny floor surface as this can give the appearance of being wet.
- + The floor colour must clearly contrast with the walls, sanitaryware and toilet seat.



Shower waste cover

We recommend specifying a waste cover to match the colour and tone of the flooring as closely as possible. In the picture above, a grey waste cover is closer in tone to the flooring than a white waste cover would be. In this instance a white waste cover could be mistaken for a bar of soap which could cause falls and injury if the person tries to pick it up.

Tiles

- + Avoid patterns and three dimensional representation of objects because these can cause visual confusion.
- + Avoid white tiles as these can be seen as being clinical and not homely.
- + Choose a grout colour which matches as closely as possible to the colour of the tiles as a contrasting grout colour will inadvertently create a pattern.
- + Avoid shiny tiles which can cause issues with reflections and glare. Some people with dementia cease to be able to understand a mirror or reflection and are frightened to see other people in them. Glare causes visual discomfort and squinting and is often misinterpreted: shadows can be seen as objects and holes.



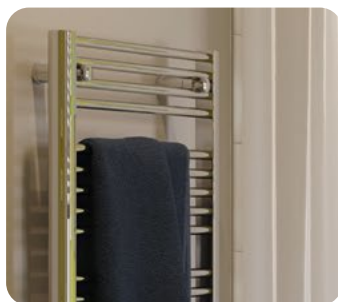
Storage

- + Use shelves rather than cupboards so that items can be easily found.



Heating

- + Provide extra heating as tasks take longer to complete.
- + Consider using LST (low surface temperature) radiators or under-floor heating, but don't leave exposed pipework as it can get extremely hot.
- + If the person is more prone to fall, consider installing under-floor heating so there is no radiator to fall against.



Doors, Locks & Signage

- + It may be necessary to remove the bathroom door lock, or replace it with a lock that can be opened from outside. Someone with dementia may lock themselves in and panic or they may fall and a locked door may delay the carer being able to reach them.
- + The door to the bathroom should open outwards or be fitted with a 2-way hinge. This is in case the person falls against the door blocking access to them.
- + Ensure that door into the bathroom contrasts with the walls on both sides.
- + The door handles should contrast the door by a minimum of 15 points LRV (Light Reflectance Value).
- + Use signs on the bathroom door that include words and pictures as shown above - some people may recognise the word and others may recognise the picture.
- + Ensure that the text and picture contrasts well with the background of the sign and that the background of the sign contrasts with the door as shown in the image.



Lighting

- + People with dementia can become more sensitive to glare from lights, so maximise natural light where possible.
- + Install at least two lights that are positioned to avoid shadows.
- + Install task lighting e.g. over the basin, shower and toilet – see picture on opposite page (task lights should be narrow beam lights to illuminate the task area only)
- + Make sure the light switches are easy to see and use. A contrasting colour against the wall, with contrasting switches and illuminated switch surrounds all help.
- + Finding and using the toilet requires light and this varies depending on the layout of the house. Ensure that light transitions are created between spaces which minimise disturbance to sleep patterns. If the bedroom has an en-suite toilet, a continuous low light in the toilet or movement sensor can be helpful at night. We recommend a red spectrum light for night time as this will not interrupt the body clock (circadian rhythm) as much as a blue spectrum light which suppresses the production of melatonin, essential for sleep. Consider tunable white luminaires with warmer colour temperatures.
- + LED lights can cost more but last longer and have better colour rendition than other lamp types. Colour rendition ensures finishes appear more vivid and help the aging eye to perceive colour. LED light output is more direct and intense and will generally need a diffuser to prevent glare.
- + Light levels for bathrooms should be around 300 lux for daytime. Lighting within rooms should be uniform to avoid dark spots and shadows. In addition, the aging eye takes longer to adjust to differences in light levels and as such we should ensure that light levels between adjacent spaces are as consistent and uniform as possible.
- + If there is a window, ensure that daylight can be controlled using a blind to minimise glare and shadow contrasts in bright sunlight.



Task Focus Lighting

Task Focus Lighting helps people with Dementia and/or sight loss:

- + to identify key areas of bathroom
- + to clearly see controls
- + with their personal grooming
- + with their health monitoring e.g. foot inspection for diabetics

AKW Dementia Friendly Products

Featured in this Guide

- + **PET Plastic Shower Screens:** AKW's Silverdale care screen panels are made from PET plastic and reduce the risk of impact injury if the person falls against them. The frosted panels help preserve modesty and don't reflect faces like glass or plain plastic panels, something that can frighten someone with dementia.
- + **Curtain:** The AKW white shower curtain is made from breathable fabric so is safer if the person with dementia falls and becomes entangled in it.
- + **Shower Seat:** AKW's Series 4000 shower seats feature a cushioned back for comfort, plus arms to increase comfort and reduce the danger of falling sideways. Coloured backs and arms can make the shower seat easier to locate provided that it contrasts clearly with the colour and tone of the flooring and adjacent wall. The shower seat can be folded up to allow access for wheelchair users.
- + **AKW SmartCare Lever or Plus Electric Care Shower:** The AKW SmartCare Lever electric shower, is BEAB Care approved and is the first electric shower to be DSDC (Dementia Services Development Centre) accredited. It features a single easy to understand and use lever control. The award winning, AKW SmartCare Plus thermostatic care shower is RNIB and BEAB Care approved; it features independent temperature & flow controls and has an optional remote control for use by carers.

Both SmartCare models:

- + Are thermostatically control and have a phased auto-shutdown after 30 minutes to prevent them being left on
- + Offer riser rails that are also secure grab rails (with dark blue or mid grey options available)
- + Have an option of dual purpose riser rail/grab rail in dark blue or mid grey to offer options to achieve colour contrast with the wall on which it is fixed.



AKW SmartCare Lever Electric Care Shower and optional riser rails: Dark Blue, Mid Grey



AKW SmartCare Plus Electric Care Shower and optional riser rails: Dark Blue, Mid Grey

AKW's Safety Flooring range is now DSDC (Dementia Services Development Centre) accredited. 7 out of AKW's 8 floor colours have the highest possible DSDC rating (1a) and the 8th is (1b).

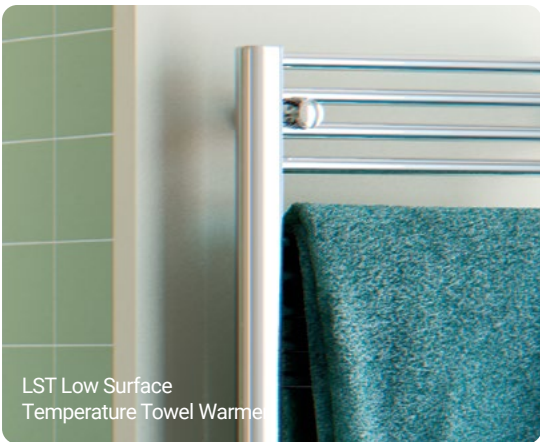
Ivory LRV: 56 DSDC: 1a	Cement LRV: 55 DSDC: 1a
Beige LRV: 46 DSDC: 1a	Dove LRV: 38 DSDC: 1a
Wedgewood LRV: 26 DSDC: 1a	Slate LRV: 18 DSDC: 1a
Dusk LRV: 13 DSDC: 1a	Anthracite LRV: 10 DSDC: 1b



Safety Flooring

- + AKW Safety Flooring provides the same level of slip resistance in both wet or dry conditions, regardless of whether the user is wearing shoes or barefoot. This has been thoroughly tested in a variety of high-risk conditions.
- + The Light Reflectance Value has been considered so that the range offers specifiers options in dark, mid and lighter tone categories to allow suitable contrast with other critical elements within the interior. The Ivory flooring in this image is LRV 56.
- + AKW flooring is suitable for users with dementia as the range is plain and can be used indiscriminately. Omitting large speckles, chips and sparkles means that potential perception issues and confusion can be avoided.

- + TMV3 approved Arka Care Mixer Shower:**
Pictured on page 11, with a grey care kit, the Arka mixer shower delivers up to twice the flow rate versus electric care showers (including the Smartcare models). This makes the Arka more suitable for totally immobile or seriously underweight users who may feel the cold more. Its riser rail (that can also be bought as an optional extra with either Smartcare model) also doubles as a secure vertical grab rail.
- + Toilet:** AKW's raised height toilet has an intuitive to use flush handle that is suitable for use by those with limited mobility.
- + Fold-Down Support Rail:** Available in a grey, blue, white or a stainless steel finishes, AKW's support rail folds up to allow easier side transfer from a wheelchair and can be supplied with an optional toilet roll holder. The colour/finish options enable specifiers to select the product which maximises tonal contrast with the adjacent flooring and walls. We do not recommend having an integrated toilet roll on the drop down bar as it is not familiar or domestic. For people with dementia, we recommend installing a grab rail without the toilet roll holder and instead installing a more familiar, domestic style toilet roll holder.
- + Toilet Seat:** AKW's toilet seat features lugs under the seat rim to prevent sideways movement of the seat when side-transferring from a wheelchair. Available with or without a lid, in blue (LRV 7) or grey (LRV 57), both of which provide clear contrast against a white toilet pan and cistern.
- + LST Low Surface Temperature Towel Warmer:**
The AKW LST electric towel warmer provides touch-safe towel warming. AKW also offer electric and central heating radiators as well as under-floor heating solutions.



Talk to the experts

If you work in specialist housing for the elderly, contact us today to book a dementia-friendly bathroom consultation with a member of our 30-strong team of sales and surveying experts. They can tailor a solution to your specific resident, building and budget needs.

You can request a visit at www.akw-ltd.co.uk/dementia or alternatively contact us using the details on the back page.

About AKW

AKW are the leading designers and manufacturers of accessible bathroom and kitchen products having supplied this specialist market for over 35 years. We supply the majority of social landlords, local authorities and care and nursing home groups in the UK as well as customers internationally. We work closely with OTs and other healthcare professionals when designing our products to ensure they meet the specific needs of our end users. Our broad range of products include:

- + Geberit shower toilets
- + Lever taps
- + Grab rails
- + Raised height sanitaryware with paddle flushes and seats designed for side transfer
- + Specialist care showers (electric and mixer showers)
- + Wet room (level access showering) kits
- + Low level shower trays
- + Safety shower screens and curtains
- + Doc M packs
- + Accessible kitchens with optional ActivMotion® rise and fall units



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