



Landscape Design for Dementia Care

This Factsheet is intended to be used as a tool to further debate on the subject of design for dementia care in the specialist housing sector. The principles of landscape design for elderly people with cognitive and/or sensory impairment is an increasingly active field of study and the purpose of this report is to highlight the experiences of PRP Landscape as a consultant operating in this specialist sector.



Produced for the Housing Learning & Improvement Network by **Tom Delhanty**, Associate Director, PRP Architects

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Introduction

PRP regards landscape design as an integral part of the design process. This often demands early involvement in the evolution of the site layout to ensure that features including vegetation, levels and aspect are manipulated for the enhancement of resident amenity.

The therapeutic benefits of a safe, attractive and carefully planned external living environment are well recognised. Access and proximity to external space will enable an older person to maintain an active lifestyle which supports their physical and emotional wellbeing. The potential for exposure to sunlight to assist the body's manufacture of vitamin D is of particular importance in older people. A well-planned garden can form part of a holistic treatment plan providing scope for physical exercise to relieve tension or aggression alongside personal space for reflection and privacy. Landscape design should reflect changing needs and allow for activities that are familiar and encourage participation.

Evidence is available which suggests that as visual and cognitive ability changes, certain people with dementia will increasingly function on a sensory rather than intellectual level.

A well designed landscaped garden in an Extra Care or Care Home setting can help improve the

quality of life for residents, create enjoyment and encourage those with dementia to live a more active and stimulating life which can help combat the effects of declining cognitive ability.

As a multi-disciplinary practice active in this field, PRP recognise the importance of collaborative and proactive team working to ensure that the requirements and aspirations of the Client operator and end users are fulfilled. There is design guidance available which we have previously partnered such as the *Inclusive Design for Getting Outdoor* by I'DGO which focuses on the 'Design of Streets with Older People in Mind' and 'Lifelong Access to Parks and Public Open Space' and which document the significant benefits of creating dementia friendly environments. This is also supported by a recent study by Stoneham and Jones (1997) which found that the level of interest in gardening within sheltered housing communities is high although in most cases adequate facilities are not provided.

This factsheet refers more specifically to landscape design for housing in the care sector and identifies the essential principles to consider when designing landscapes for people with dementia (together with their families and care staff within a holistic care environment).



Multi-award winning Trees Extra Care Housing, Highgate, London

Landscape Design Principles - Improving Quality Of Life

Each site will have its particular character, opportunities and constraints however, in our experience, it is imperative that the landscape design for dementia care considers certain key design principles at an early stage:

Access, Movement & Orientation



Provide level access to garden areas from communal rooms or private patios and provide safe, generous balconies on upper floors to maximise the availability of external space and enable residents to access fresh air, sunlight and views of the natural environment.



Routes through external areas should be laid out in a legible manner, level and barrier free to promote confidence and independence. Footpaths around the garden must be immediately obvious and clearly sign-posted as residents who can see the garden but not find access to it may become agitated and anxious.



Maximise views into the garden. Seating bays at upper levels to provide views into the landscape from a safe vantage point.



Provide clear, legible routes and entrances.



Introduce ‘circular’ walking routes which return the resident to their starting point. Routes must never terminate at dead ends and exit gates should be concealed.

Provide clear navigational markers around the garden and along the building margin such as strongly scented plants or garden features. Consider including sculptures or memorable features throughout to aid wayfinding.



Design external space based on themes and colours which follow an overall design concept to aid orientation.

Introduce paths wide enough for two people to facilitate accompanied access and wheelchair use. Ensure plenty of opportunities to pause or sit along routes. Some residents will like to use easily operable garden gates which demarcate themed areas, provide activity and offer the satisfaction of entering or leaving different spaces within the garden.

Memory & Mental Mapping



Many people with dementia will have experience of gardens and gardening - access to external space can trigger positive memories and provide a sense of achievement.



The attributes of a garden including particular images and smells can stimulate memories of home giving a strong sense of normality, security and refuge.



Involve residents in gardening experiences which offers the opportunity to reminisce and engage in familiar activities such as hanging the laundry, picking flowers and growing herbs and vegetables for the kitchen. Consider other interventions such as telephone boxes, pet enclosures (such as chickens or rabbits) or a static car to trigger memory associations within the garden.

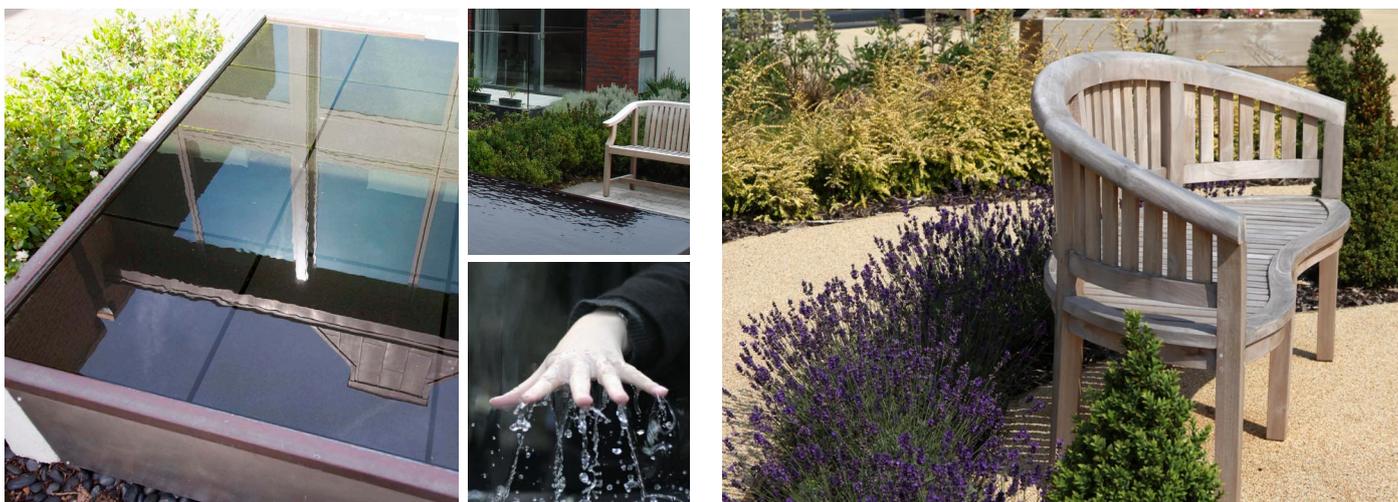
Sensory Stimulation

Certain people with dementia may also experience sensory impairment such as hearing loss or poor vision. The external environment should provide opportunities for quiet contemplation, to ease stress, anxiety and aggressive behaviour, which are all potential symptoms of dementia.



Introduce stimuli for the visually impaired in planting through colour or textural ‘contrast’

Avoid polished materials such as stainless steel street furniture which may generate glare or shiny paving which may be mistaken for water or slippery surfaces.



Water can contribute many benefits including the effects of sound, touch and cooling. However, it should be introduced in a safe controlled manner - shallow reflective pools or bubblers pose the least risk.

Use strongly scented plants as ‘markers’ in the garden environment - at corners, seating areas or access points.



Encourage people to touch plants - raised beds helps in making the plants more accessible to wheelchair users and those who have difficulty bending.



Illuminate pathways, trees and features within the garden to enhance security and enable the gardens to be enjoyed at night (this is particularly important for residents experiencing acute sensitivity to sunlight).

Shelter & Shade



Consider the provision of a heated summer house or winter gardens containing indoor plants to enable access to the garden environment at all times of year.



Avoid locating seating areas subject to bright light and glare - use pergola, climbing plants and trees to create light shade.



Creating a sheltered garden will encourage greater use - ensure seating areas in particular are sheltered from the wind.

‘Studies demonstrate the role of exercise and vitamin D in maintaining bone and muscle quality, and access to natural light is also necessary to help regulate the circadian rhythm.’

DSDC University of Stirling (2013) “Improving the Design of Housing to Assist People with Dementia”

Maintenance & Gardening Activities



Introduce kitchen gardens or raised planters to provide residents of limited mobility with the opportunity to participate in gardening hobbies.



Provide locations for a greenhouse and potting shed to facilitate horticultural activities.



Engagement in gardening activities (particularly where residents can identify the process of food grown on site to supply the kitchen) can be a factor in bringing together residents, families and staff. Gardening projects can allow residents to retain a sense of identity by working alongside care staff and activity coordinators in the maintenance of the garden.

‘Re-learning gardening skills following sight loss can restore confidence in carrying out other aspects of daily living’

Stoneham, J. and Jones, R. (1997) “Residential landscapes: Their contribution to the quality of older people’s lives”, Activities, Adaptation & Aging, Vol. 22 No. 1-2

Planting Strategy

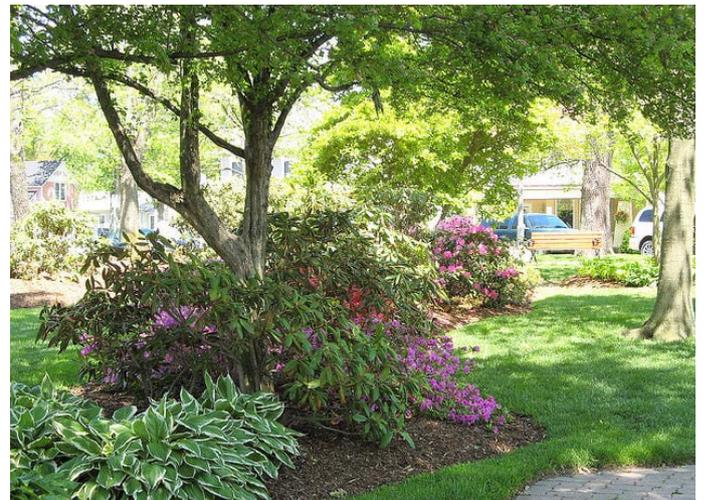


Create a planting palette which reflects 'seasonal change' to facilitate a patient's association with natural timelines and chronology.

Consider a 'sensory' planting scheme employing species combinations selected for their colour, texture, sound and scent within a clearly defined scheme. Use strongly scented plants alongside footpaths so fragrance is released as residents brush past.



Avoid toxic, thorny plants or species with serrated leaves. Place plants with bright berries or inedible fruits out of reach.



Consider small to medium size trees to provide dappled shade for seating areas.

Safety Considerations

- Provide level access thresholds.
- Avoid strong tonal contrast in adjacent surface finishes (certain people with dementia are sensitive to bright light and glare from shiny surfaces, and may also mistake a change in tone or colour for a step).
- Avoid standard utility access covers that may appear as holes in the ground - use recessed covers which appear part of the paved environment.
- Avoid steps or sudden changes in level.
- Provide opportunities for relaxing in shaded locations to mitigate against skin sensitivities to sunlight brought on by some medications.
- Landscape to be managed to avoid accessible tree branches which may pose a climbing risk.
- Avoid toxic or sharp textured plant species which may aggravate existing skin conditions.
- Provide barriers or hand rails in compliance with current building regulations to facilitate use of the outside space.
- Prevent access to 'open' water or opportunities for climbing (trees, fencing/railings or garden structures).
- Consider observation and surveillance of the space from the building.
- Ensure protection against falling from upper floor amenity (balconies / roof terraces) by installing minimum 1800mm height (glazed) balustrades.
- Consider defensive / barrier planting to ground floor windows for privacy and security.
- Site boundaries must be secure and well screened with a combination of physical barrier and defensive planting.
- Provide a canopy or some form of shelter at entrances to allow eyes to adjust to the change from indoor to outdoor light levels and assist people who may suffer anxiety to do with the weather.

Nature & Wildlife

- Select plants and incorporate nesting boxes and bird baths to encourage wildlife into the garden for the enjoyment of the residents.
- Plant to encourage birds and insects to visit the garden, enhancing the interest and activity in the garden.
- Residents should be given the opportunity to experience the sights, smells and sounds of the natural world through the activities of wildlife and seasonal change.



Views or access to a beautiful well maintained garden can greatly enhance self-esteem and dignity in a person with dementia as well as make a positive contribution to the setting of the building and wider visual amenity.

PRP Case Study - James Terry Court, Croydon

This nursing home comprising 76 residential, nursing and dementia care bedrooms for the RMBI. The existing locally listed main building has been retained and converted at lower ground level with the three upper floors refurbished to include 13 new Extra Care apartments.

The ground level is divided into a sequence of courtyard spaces which bring light into ground floor accommodation and provide an attractive outlook from residential bedrooms and staff quarters.

The garden pavilion, which provides a wide range of communal facilities, is topped by a roof garden which maximises the availability of outdoor space for residents to enjoy on an intensively developed site.

To address safety considerations the roof garden is framed by 1800mm height glazed balustrading and continuous raised planters providing barrier planting.

At ground level a dementia lounge leads out to a shaded sensory garden incorporating circular walking route, raised planting areas, and 'greened' boundaries to provide a sense of safety and privacy.

The floor to ceiling window heights in the majority of the residents' rooms provides clear views into the gardens and enhances levels of natural light which assists with orientation and general awareness of the surroundings, the weather, the season and time of day.

All external areas including the roof garden are available for the most vulnerable residents when under supervision, providing a safe, secure and holistic living environment which enhances their sense of purpose, health and wellbeing.



Secure roof top garden at James Terry Court which maximises the amount of external space for the residents to enjoy.



Original sketch of roof top garden and upper ground floor plan.



Wheelchair accessible roof top garden over pavilion. The central circular walking route provides routes through in a logical manner.



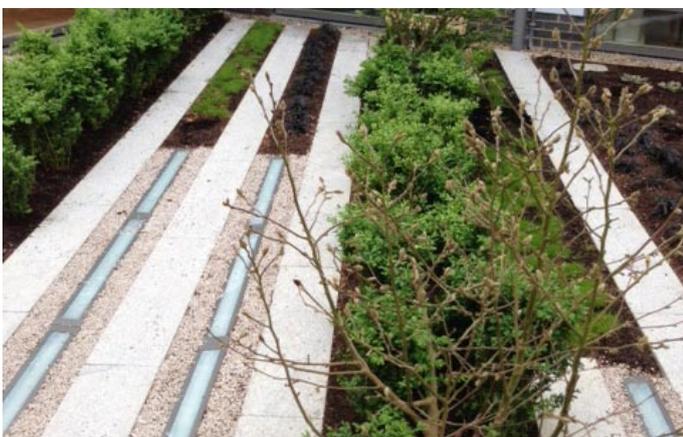
Secure boundaries & trees for shading once mature.



Raised textured planting suitable for a variety of seasons which enables wheelchair users to touch the planting.



Secluded, safe, secure courtyard.



Shared surfaces to maximise the use of the gardens by residents of all abilities.



Flowering trees in raised planters to provide immediate shade for seating areas.

About PRP Landscape

PRP Landscape is part of PRP Architects LLP, one of the largest multidisciplinary practices specialising in residential, specialist housing, mixed use, commercial, retail, healthcare, hotel, education and leisure sectors. The landscape team is embedded within the Specialist Housing Group which is a multi-award winning team with a reputation for leading the market with high quality design and expert knowledge of the sector.

This factsheet is part of a collection of factsheets PRP has produced for the Housing LIN, including Factsheet No 6 *Design Principles for Extra Care* and Factsheet No 34 *Can Interior Design Improve the Quality of Life in Extra Care Housing*.

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Note

The views expressed in this document are those of the author and not necessarily those of the Housing Learning and Improvement Network.

About the Housing LIN

Previously responsible for managing the Department of Health's Extra Care Housing Fund, the Housing LIN is the leading 'learning lab' for a growing network of housing, health and social care professionals in England involved in planning, commissioning, designing, funding, building and managing housing, care and support services for older people and vulnerable adults with long term conditions.

For further information about the Housing LIN's comprehensive list of online resources and shared learning and service improvement opportunities, including site visits and network meetings in your region, visit www.housinglin.org.uk

The Housing LIN welcomes contributions on a range of issues pertinent to housing with care for older and vulnerable adults. If there is a subject that you feel should be addressed, please contact us.

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