Appendix A
Stakeholder Engagement Process

These Guidelines are underpinned by in-depth research and supported by an extensive engagement process with key stakeholders. This stakeholder engagement process is outlined in the Research & Recommendations Report titled - *Research for Dementia and Home Design in Ireland looking at New Build and Retro-Fit Homes from a Universal Design Approach*.

To download this report please go to; www.universaldesign.ie/housing/
Centre for Excellence in Universal Design

Appendix B: Bibliography and Acknowledgements
Appendix B Bibliography & Acknowledgements

Bibliography


Please note that an extensive bibliography of relevant literature is available in the Research & Recommendations Report as referred to above.

(see www.universaldesign.ie/housing/)
Acknowledgements

People to Thank
A key part of the design guidance development was to embark on a process of engagement with a wide range of stakeholders and the authors would like to acknowledge and thank the many people from a wide range of organisations who participated in a stakeholder interview and/or attended the workshops.

We greatly appreciate that everyone who participated gave their time so generously, participated so enthusiastically and were so willing to share their knowledge and expertise with us in a way that has greatly informed and enhanced this research. We would particularly like to thank those people with dementia and their families and carers for taking part and for providing us with their views and perspectives on the design of their homes. Their insights are especially important and will no doubt inform others. We would like to thank the staff and residents at the case study sites that we visited for welcoming us so warmly to their homes and place of work.

The authors would also like to thank each of the members of the Project Steering Committee for their commitment to this work and for their valuable guidance and to Joost van Hoof for his contribution.

Finally, we are most grateful to the Centre for Excellence in Universal Design at the National Disability Centre, and particularly Dr. Ger Craddock and Neil Murphy MRIAI, for initiating this project, hosting the stakeholder workshops and for their input and continuous support throughout the project.

Photographs
All Photographs are from TrinityHaus and LiD except those listed below.

Thank you to Michael O’Farrell Photography - 26 Brackenbush Park, Killiney, Co. Dublin for the following images: Section 02 - Image 02, Section 03 - Image 01, Image 04 Section 04 - Image 08, Image 16, Image 18, Image 22

Thank you to Andrew Lee Photographer - 41 Burghead Place, Galsgow, Scotland for the following images: Section 02 - Image 03

Thank you to Joost van Hoof, Fontys Hogeschoolen - Fontys University of Applied Sciences, The Netherlands for the following images: Section 04 - Image 26, Image 27, Image 29

Thank you to CLICKTOGO Unique Perspectives Ltd for the following images: Section 04 - Image 30

Thank you to Tunstall Emergency Response Ltd for the use of various images relating to Technology on page 153.

Image of couple on page 105, image of lady on phone on page 148, and couple on page 152, courtesy of Ambro at FreeDigitalPhotos.net
Centre for Excellence in Universal Design

Appendix C: Key Terminology
Appendix C Key Terminology

Accessible
With respect to buildings, or parts of buildings, means that people, regardless of age, size, ability or disability, are able to both access and use the building and its facilities.

Acoustics
Characteristics relating to sound.

Activities of Daily Living (ADL)
Typical domestic activities such as washing, dressing etc.

Alzheimer’s disease
Alzheimer’s disease- named after the Bavarian doctor who first described it (Alois Alzheimer), in a 51 year old woman, this is an organic illness that affects the brain. There are 48,000 people in Ireland with dementia and most of these people have Alzheimer’s disease. During the course of the disease, proteins build up in the brain to form structures called ‘plaques’ and ‘tangles’. This leads to the loss of connections between nerve cells, and eventually to the death of nerve cells and loss of brain tissue. People with Alzheimer’s also have a shortage of some important chemicals in their brain.

Ambient Assisted Living (AAL)
Ambient Assisted Living (AAL) centres on information and communication technology (ICT) enabling older people to live at home independently.

Apraxia
Apraxia is an acquired disorder of motor planning, despite intact motor coordination. It is not caused by incoordination, sensory loss, or failure to comprehend simple commands but rather by damage to specific areas of the cerebrum in the brain.

Assistive Technologies
Technological devices (equipment or systems) that are used to increase, maintain, or improve functional capabilities of individuals.

Bathroom
A room comprising a bath, WC, washbasin, and associated accessories.

Building
A permanent or temporary structure of any size that accommodates facilities to which people have access. A building accommodating sanitary facilities may include a toilet block in a public park or shower facilities at a campsite. A temporary building may include portable toilet facilities such as those provided at outdoor events.
Cardiovascular
Cardiovascular disease includes ischemic heart disease (heart attacks) and blood vessel disease such as strokes. A heart attack occurs when the blood flow to part of the heart gets blocked and similarly a stroke occurs when the blood vessel that feeds the brain gets blocked.

CAT6
A data communication cable standard for Gigabit Ethernet cable.

Cat and Kitten Door
This door set comprises of two door leafs; one leave is a standard width door (the cat - usually between 700-800mm), while the other leaf is narrower (the kitten-usually 300-400mm). Therefore, when opened at the same time a wider door opening is created.

Circulation
External or internal spaces to allow a person move from one place to another (i.e. External pathways or internal corridors)

Challenging behaviours
Sometimes known as “behavioural and psychological symptoms” of dementia. A person with dementia may exhibit one or more of these challenging behaviours during the course of the illness. Challenging behaviours include agitation, aggression, wandering, sleep disturbance, inappropriate eating, inappropriate sexual behaviour, delusions, hallucinations, paranoia, depression, anxiety and misidentification.

Clear width
The width between hardrails.

Cognitive impairment
A cognitive decline greater than that expected for a person’s age and education level.

Decibels
Decibels (dBs) are the units used to measure sound intensity

Dementia
Global or umbrella term used to describe a group of diseases that have common symptoms but different causes. Symptoms include impaired memory, language, ability to communicate, mood and personality. By far the most common type of dementia is Alzheimer’s disease.

Designated car parking
Car parking spaces reserved for the use of car users with disabilities, whether as motorists or passengers.
**Door ironmongery**
A collective term for components including hinges, handles, locks and self-closing devices, which are used to facilitate the correct functioning of a door. May also be termed ‘architectural ironmongery’ or ‘door furniture’.

**Dropped kerbs**
A lowered section of kerb between a pavement and carriageway forming a level or flush crossing point. Also referred to as dished kerbs.

**Dwelling**
A private home (privately owned or rented) that can take the form of a detached, semi-detached, terraced house or an apartment.

**Enuresis Sensor**
Detects moisture typically associated with bedwetting.

**Handrail**
Component of stairs, steps or ramps that provides guidance and support at hand level.

**Instrumental Activities of Daily (IADL)**
Typical daily activities which involve a higher level of organisation than ADLs. These include shopping, paying bills, etc.

**Leading edge**
The opening edge of a door adjacent to the handle.

**Matwell**
Enterance Door Matting Systems set into a frame in the floor.

**Mixed dementia**
Mixed dementia is a combination of Alzheimer’s disease and Vascular dementia. The diagnosis of mixed dementia is on the increase probably as a result of more refined technologies now used in the detection of dementia sub-types.

**M²**
Metres Squared.

**Nosing**
An edge part of the step tread at the top of the riser beneath in a flight of stairs.

**Parietal Lobes**
The brain comprises many different lobes (frontal, temporal, occipital and parietal ) each with particular functions. The parietal lobes are found in the cortex of the brain and are where information such as taste, temperature and touch are integrated or processed. The parietal lobes enable us negotiate our way in the three dimensional world in which we live. Humans would not be able to to feel sensations of touch, if the parietal lobe was damaged.
**Parkinson’s disease**
Parkinson’s disease is a degenerative disorder of the central nervous system mainly affecting the motor system. The motor symptoms of Parkinson’s disease result from the death of dopamine generating cells. Early in the course of the disease, the most obvious symptoms are movement related; these include shaking, rigidity, slowness of movement and difficulty with walking and gait. Later, thinking and behavioural problems may arise. Dementia is very common in the more advanced and severe stages of the disease. Parkinson’s disease is more common in older people.

**Passenger lift**
A conventional motorised lift enclosed within a structural shaft and rising one or more storeys within a building. Lift and door movement is automatic.

**Path**
A pedestrian route that has no adjacent vehicle carriageway and includes paths in countryside locations as well as paths in urban and residential environments.

**Pavement**
A pavement is the part of a roadway used by pedestrians and is adjacent to the vehicle carriageway.

**PIR**
A Passive Infrared (PIR) sensor-activated light fitting.

**Positive risk-taking**
Positive Risk taking – refers to balancing the positive benefits gained from taking risks against the negative effects of attempting to avoid risk altogether. In dementia care, positive risk taking involves enabling the individual with dementia have some autonomy, independence, dignity and choice whilst unobtrusively protecting that person from potentially hazardous situations.

**Psycho-Social**
Psycho-social environment refers to the culture, climate and ethos of the setting in which we live or where we work. The build environment in contrast refers to the actual architectural lay out of the setting. Examples of the psychosocial environment of a nursing home might include the ethos of care, respect for residents, quality of life, quality of care, and acknowledgement of employees’ psychological well-being.

**Ramp**
An inclined plane 1:20 or steeper from the horizontal and intermediate landings that facilitate access from one level to another.

**Retro-fit**
Carrying out building works to an existing building.
Appendices

**Riser**
The vertical portion between each tread on the stair.

**Setting-down point**
A designated area close to a building entrance or other facility where passengers can alight from a car or taxi.

**Shower room**
A room comprising a shower, WC, washbasin, and associated accessories, such as en-suite facilities in residential accommodation.

**Soffit**
The underside of any construction element, the underside of a flight of stairs.

**Stairlift**
A device mounted on a support rail that follows the incline of a stair and incorporates either a seat with footrest (chairlift) or standing platform and perch (perching stairlift). Stairlifts are designed for domestic use only. Also termed chair stairlift and domestic stairlift.

**Step nosing**
The leading edge of a step or landing.

**Street furniture**
Items located in street and other pedestrian environments such as lamp posts, litter bins, signs, benches, and post boxes.

**Tactile paving surface**
A profiled paving or textured surface that provides guidance or warning to pedestrians with visual difficulties.

**Telehealth**
A system that uses the electronic exchange of personal health data from a person at home to medical staff at a hospital or similar site to assist in diagnosis and ongoing monitoring of the person’s health condition.

**Telecare**
The use of various ICT to provide support and social care from a distance, supported by telecommunications, such as phone or video equipment.

**Through-floor lift**
A simple one-person lifting car, suitable for someone standing or in a wheelchair, which can be easily installed in most homes. Travel distance is limited to between two floors only. It is usually self-supporting, motored by a free-standing vertical track, and open above the car. The floor space on the upper level is closed by an infill lid attached to the lift car.
**Transom**
A horizontal crosspiece in a window frame usually dividing the window into a top and bottom section.

**Tread**
The part of the stairway that is stepped on.

**Urban Form**
The layout, shape, height and design details of the built environment, including streets, roads, public space, buildings etc. in an urban area.

**U-Value**
U-value refers to thermal transmittance and it is a measures the rate of heat that passes through a component or structure. It is expressed in units of Watts per square metre per degree of air temperature difference (W/m²K)

**Vascular Dementia**
Vascular dementia is caused by reduced blood supply to the brain due to diseased blood vessels and results in symptoms that can include memory loss and difficulties with thinking, problem-solving or language.

**Ventilation Strips**
Vents integrated into a window frame that are in the shape of a bar or strip, and that can be controlled by opening or closing the aperture within the vent to different extents.

**Vision panel**
A fixed, glazed panel set into a door that enables people to see through from one side of the door to the other. May also be termed ‘viewing panel.’

**Visual contrast**
Colour and/or tonal contrast between surfaces and fixtures, designed to improve visual clarity.

**Wainscoting**
Panelling (usually timber) fixed to the lower part of an internal wall and usually carried up to approximately 1000m above finished floor level.

**Wayfinding**
A collective term describing features in a building or environment that facilitate orientation and navigation.

**Wet room**
A shower room in which the floor and walls are all waterproof. The shower area can be accessed without crossing a threshold or stepping into a shower tray.
Appendix D: Key Acronyms
### Appendix D Key Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAL</td>
<td>Ambient Assisted Living</td>
</tr>
<tr>
<td>ADL</td>
<td>Activities of Daily Living</td>
</tr>
<tr>
<td>AT</td>
<td>Assistive Technology</td>
</tr>
<tr>
<td>BMS</td>
<td>Building Management System</td>
</tr>
<tr>
<td>CEUD</td>
<td>Centre for Excellence in Universal Design</td>
</tr>
<tr>
<td>CPTED</td>
<td>Crime Prevention through Environmental Design</td>
</tr>
<tr>
<td>ECU</td>
<td>Environmental Control Units</td>
</tr>
<tr>
<td>F,F&amp;F</td>
<td>Furniture, Fixtures and Fittings</td>
</tr>
<tr>
<td>IADL</td>
<td>Instrumental Activities of Daily Living</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communications Technologies</td>
</tr>
<tr>
<td>MHRV</td>
<td>Mechanical Heat Recovery Ventilation</td>
</tr>
<tr>
<td>NDA</td>
<td>National Disability Authority</td>
</tr>
<tr>
<td>UD</td>
<td>Universal Design</td>
</tr>
<tr>
<td>UDHI</td>
<td>Universal Design Homes for Ireland</td>
</tr>
<tr>
<td>UFH</td>
<td>Under Floor Heating</td>
</tr>
</tbody>
</table>