

Internal Layout Checklist for Universal Design Homes



**Centre for Excellence
in Universal Design**

**Údarás Náisiúnta Míchumais
National Disability Authority**



Introduction

Housing in Ireland needs to be designed and future-proofed, so that it can accommodate the diverse needs of our current and future population. In Census 2022, a total of 1,109,557 people reported experiencing at least one long-lasting condition or difficulty to any extent, accounting for 22% of the population. Ireland's population is ageing. In 2022 there were 768,900 people aged 65 and over living here, an increase of 35% from 2013. By 2051 the population of older people is projected to increase to 1.6 million. In the coming years, there will be greater demands for accessible, age-friendly, Universal Design Homes, to respond to our changing demographics. This checklist is a summary of guidelines from the [Universal Design Guidelines for Homes in Ireland](#) that impact on the internal layout of dwellings.

Several city and county development plans contain objectives for the provision of Universal Design Homes in both the private and social housing sectors. The checklist is provided as a tool for designers to ensure that Universal Design is considered at the early stages of housing design.



Scope of this Checklist

The scope of this checklist is limited to the internal layout of an individual apartment or house only. The location and design of the approach to a dwelling, including the common areas of apartment buildings, are also key elements of Universal Design Homes, but are not within the scope of this checklist. For example, a Universal Design Home should be well-connected to local amenities, ideally located within walking distance to shops and services, and near to public transport links. Refer to the [Universal Design Guidelines for Homes in Ireland](#) for a complete set of guidelines. Further information on Age Friendly Homes is also set out in the publication '[Ten Universal Design Features to include in a Lifetime Adaptable and Age Friendly Home](#)' and on the www.agefriendlyhomes.ie website.





UD Home and UD Home +

The Universal Design Guidelines for Homes in Ireland are provided in a two-tier system described as **UD Home**; optimising flexibility, adaptability and usability for everyone and **UD Home+**; providing for greater accommodation of people's changing needs over time. The checklist includes a summary of guidelines for both the UD Home and UD Home+ levels that impact on the internal layout of a dwelling. For wheelchair liveable homes, UD Home+ guidelines should be applied. Residential developments incorporating Universal Design Homes should include both UD Home and UD Home+ dwellings.

Five example floor plans are provided with the checklist, to demonstrate the checklist being applied in both UD Home and UD Home+ dwellings:

- a UD Home 1-bedroom apartment
- a UD Home 2-bedroom apartment
- a UD Home+ 2-bedroom apartment
- a UD Home 3-bedroom 2-storey house
- a UD Home+ 2-bedroom single storey house

The example floor plans of the UD Home 1 and 2-bedroom apartments demonstrate that UD Home apartments can generally be achieved within the additional floor area that is already mandated in the Design Standards for New Apartments (Section 3.8, Safeguarding Higher Standards), for at least 50% of apartments in developments with ten or more apartments. There is therefore an opportunity within the mandatory increased target floor areas for apartments, to provide apartments in line with this internal layout checklist for Universal Design Homes.

The example floor plan of the UD Home+ 2-bedroom apartment demonstrates that the internal floor area of a UD Home+ 2-bedroom 3-person apartment is similar to the target floor area for a non-UD 2-bedroom 4-person apartment (73 sqm). This provides an opportunity for UD Home+ apartments of this type to be easily integrated into apartment developments.

The example floor plans of the UD Home 3-bedroom 2-storey house demonstrate that the Universal Design guidelines have a greater impact on internal floor area in multi-storey dwellings than in apartments, where the accommodation is typically all on one level.



Internal Layout Checklist for Universal Design Homes

Notes:

All of the guidelines included in this checklist should be achieved in the internal layout of a Universal Design Home, at the applicable level – UD Home or UD Home+.

Some guidelines may not be relevant to an individual dwelling unit and should be marked 'n/a' (not applicable) if that is the case. For example, the guidelines for stairs will not typically be relevant to apartments which have all accommodation on one level (no stairs).

This checklist should be used in conjunction with the more detailed guidance in the [Universal Design Guidelines for Homes in Ireland](#). The relevant section and page number in the guidelines giving more detailed guidance for each location in the home is provided in the checklist below.

Checklist

Location (page no. in guidelines)	Guideline Summary	UD Home	UD Home+	Check
Entrance Hallway (Section 2, page 85)	Level access	Y	Y	Y
	Entrance door minimum effective clear width	800mm	850mm	Y
	Minimum clear space adjacent to entrance door	1500mm x 1500mm	1800mm x 1800mm	Y
	Space for storing outdoor wear	Y	Y, enclosed storage space	Y
Corridors (Section 2, page 87)	Minimum width between walls	1050mm	1200mm	Y

Location (page no. in guidelines)	Guideline Summary	UD Home	UD Home+	Check
Doors (Section 2, page 87)	Minimum effective clear width of doors, straight on approach or right-angled approach via corridor at least 1100mm wide	800mm	850mm	Y
	Minimum effective clear width of doors, right-angled approach via corridor less than 1100mm* ¹ wide	850mm	850mm	Y
	Minimum clear space beside the leading edge (on the pull side) of all doors at entrance level	300mm	300mm	Y
Stairs (Section 2, page 91)	Straight flights between landings, no tapered steps	Y	Y	Y / n/a
	Clear width between handrails	900mm, with handrail on one side	900mm with handrails both sides	Y / n/a
	Stairs rise and going	Rise max 175mm*, going min. 280mm	Rise max. 175mm*, going min. 300mm	Y / n/a
	Top and bottom landing clear space minimum	n/a	1200mm x 1200mm	Y / n/a

1. A small number of items in this checklist have different values or guidance to that stated in the Universal Design Guidelines for Homes in Ireland. These revised items are marked with an asterisk (*). These revisions have been made to ensure compatibility with current construction practice and practicability considerations, following testing of the checklist by the National Age Friendly Technical Advisors Network and the Land Development Agency.

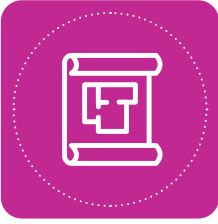
Location (page no. in guidelines)	Guideline Summary	UD Home	UD Home+	Check
Through-Floor lift (Section 2, page 94)	1000mm x 1500mm aperture in floor for future through-floor lift	Future lift space can be accessed from habitable rooms or circulation space	Lift space is accessed from circulation space (provide store on both floors of the right size for future conversion to a through floor lift)	Y / n/a
	Clear turning space minimum in front of future through-floor lift	1500mm turning circle diameter or 1400mm x 1700mm ellipse	1500mm turning circle diameter or 1400mm x 1700mm ellipse	Y / n/a
Living spaces (Section 3, page 99)	A living space at the same level as the entrance to the home.	Y	Y	Y
	Location for a temporary bed space at entrance level (if no bedroom at entrance level)	Y	Bedroom at entry level	Y / n/a
	Minimum clear turning circle diameter	1500mm	1800mm	Y
	Minimum width of clear route between items & in front of windows and routes between doors	750mm	800mm	Y
Dining area (Section 3, page 101)	Minimum clear space for use and movement around the dining table	1200mm on 2 consecutive sides of table, continuous	1200mm on all sides of table, continuous	Y

Location (page no. in guidelines)	Guideline Summary	UD Home	UD Home+	Check
Kitchen (Section 3, page 103)	Minimum space between work surfaces	1200mm	1500mm	Y
	Minimum clear turning circle diameter	1500mm	1800mm	Y
	All doors to the kitchen from habitable rooms are outside the main workspace.	Y	Y	Y
	If the dining area is not in the same room, provide an occasional eating space in the kitchen	Y	Y	Y / n/a
Bedroom (Section 3, page 118)	Minimum size of double and twin bedrooms	13sqm	13sqm	Y
	Minimum size of single bedrooms	8sqm	8sqm	Y / n/a
	Minimum clear space both sides and end of double bed	800mm	800mm	Y
	Minimum clear turning circle diameter in double bedroom	1500mm	1800mm	Y
	Single bedroom – minimum clear space at side of single bed	800mm	1200mm	Y / n/a
	Provide a bedroom at entry level	n/a	Y	Y / n/a

Location (page no. in guidelines)	Guideline Summary	UD Home	UD Home+	Check
Bathroom (Section 3, page 121)	Located immediately adjacent to main bedroom with a full height door or 'soft spot' between them for future installation of a door	Y	Y	Y
	Layout allows for the provision of either a bath or a shower	Y	n/a	Y/n/a
	Minimum internal dimensions	2100mm x 2400mm	2500mm x 2650mm	Y
	Minimum turning circle diameter with a 200mm overlap of the basin allowed	1500mm	1800mm	Y
	Outward opening door, preferably* against a wall	Y	Y	Y
	Minimum activity space beside bath, if a bath is provided	1100mm x 700mm	1100mm x 700mm	Y / n/a
	Minimum transfer space at end of bath, if a bath is provided	400mm	400mm	Y / n/a
	Minimum size of level access shower area, if a shower is provided	n/a	1100 x 1100mm	Y / n/a
	Basin minimum access space to front	1100 x 700mm	1100 x 700mm	Y
	Toilet minimum access space to front	1100 x 700mm	1100 x 700mm	Y
	Toilet centreline from wall	400-500mm	400-500mm	Y

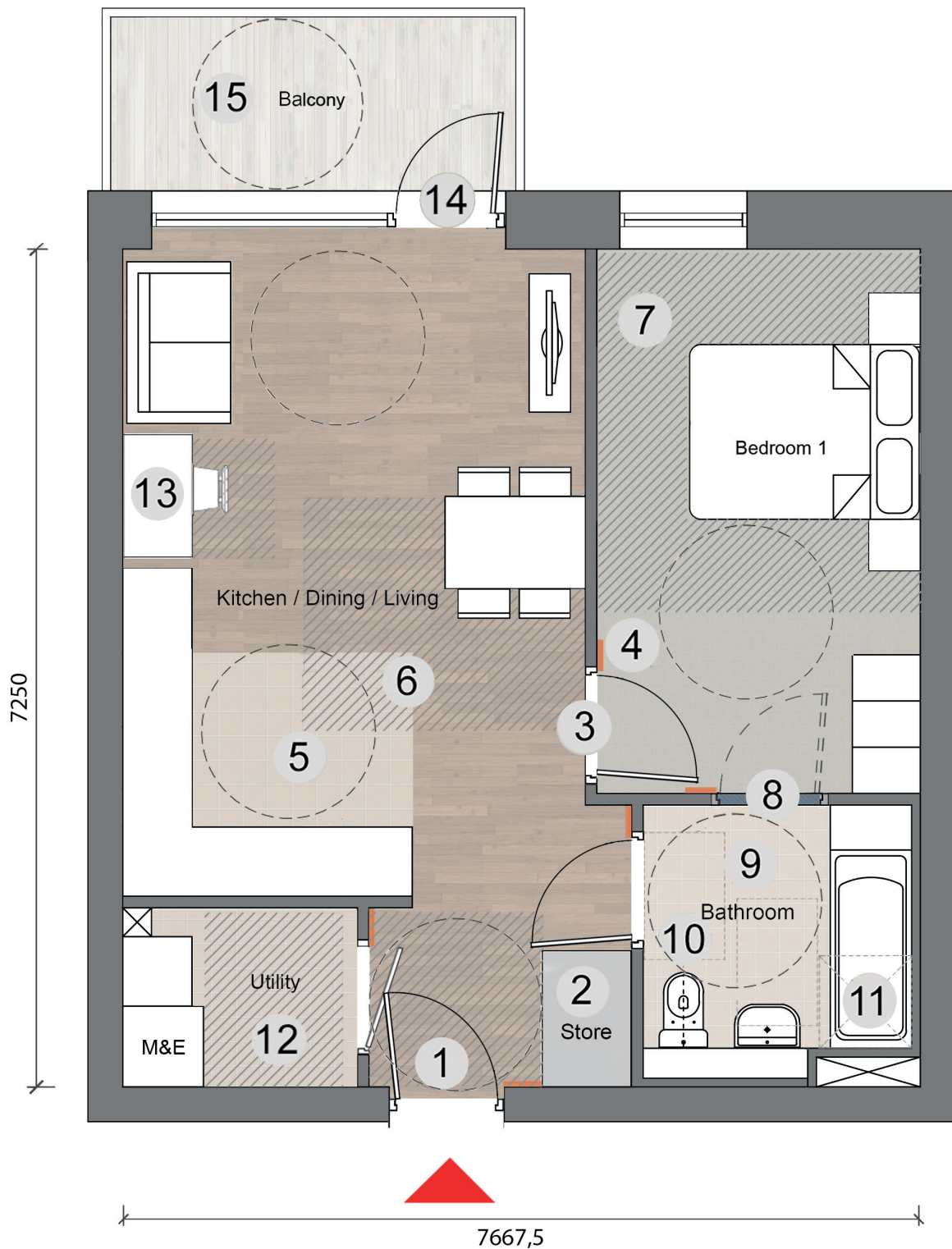
Location (page no. in guidelines)	Guideline Summary	UD Home	UD Home+	Check
Entry Level Toilet (Section 3, page 116)	Minimum internal dimensions	1500 x 1800mm	1800 x 2000mm	Y / n/a
	Outward opening door, preferably against a wall	Y	Y	Y / n/a
	Basin minimum access space to front	1100 x 700mm	1100 x 700mm	Y / n/a
	Toilet minimum access space to front (where space is restricted, the basin can overlap the toilet access space by 200mm)	1100 x 700mm	1100 x 700mm	Y / n/a
	Toilet centreline from wall	400-500mm	400-500mm	Y / n/a
	Install a level access shower in the entrance level toilet compartment to act as a second bathroom	Provide drainage point for future level access shower installation	Y	Y / n/a
Storage (Section 3, page 141)	Mixture of storage type (e.g. shallow cupboard / deep cupboard / storage room)	Y	Y	Y
	Cupboard Depth Range	300 - 600mm	300 - 600mm	Y
Utility (Section 3, page 141)	Separate utility space in homes of 3-bedrooms or more	Y	Y	Y / n/a
	Laundry Clear Area (in front of units)	1200mm	1200mm	Y / n/a

Location (page no. in guidelines)	Guideline Summary	UD Home	UD Home+	Check
Study / work space (Section 3, page 140)	Natural light to study / work space	Y	Y	Y
	Study / work space length minimum	1200mm*	1200mm*	Y
	Study / work space depth minimum (incl. chair space)	1500mm	1500mm	Y
Private Open Space (Section 3, page 145)	Minimum effective clear width of doors to private open space	800mm	850mm	Y
	Level access to private open space	Y	Y	Y
	Apartment balcony/ terrace minimum depth	1500mm	1800mm	Y / n/a



Example Floor Plans

Figure 1 Example Floor Plan of UD Home 1-bedroom 2-person apartment



Key

1. Clear space adjacent to the entrance door of minimum 1500mm x 1500mm.
2. Space for storing outdoor wear.
3. Clear effective door width of minimum 800mm.
4. Clear space beside the leading edge of doors of minimum 300mm.
5. Turning circle of minimum 1500mm clear diameter.
6. Continuous clear space of 1200mm to a minimum of two consecutive sides of a dining table.
7. Clear space of minimum 800mm on both sides and at the end of a double bed.
8. Soft spot for future door between bathroom and bedroom.
9. Bathroom located immediately adjacent to the main bedroom.
10. Toilet centreline between 400mm to 500mm from the wall.
11. Position of future shower adaptation.
12. Clear area of minimum 1200mm in front of units within a utility room.
13. Study / workspace of minimum length 1200mm and a minimum depth of 1500mm (including desk and chair space).
14. Level access to a balcony / terrace.
15. Balcony / terrace with a minimum depth of 1500mm.

Table 1 Comparison with target floor areas in the Design Manual for Quality Housing

1 Bed 2-Person Apartment	Gross Floor Area	Aggregate living area	Aggregate bedroom area	Storage	Private Amenity Space
Target	45 sqm	23 sqm	11.4 sqm	3 sqm	5 sqm
UD Home 1B2P example	50 sqm	26 sqm	13.2 sqm	3 sqm	5 sqm

Figure 2 Example Floor Plan of UD Home 2-bedroom 4-person apartment



Key

1. Clear space adjacent to the entrance door of minimum 1500mm x 1500mm.
2. Space for storing outdoor wear.
3. Clear effective door width of minimum 800mm.
4. Clear space beside the leading edge of doors of minimum 300mm.
5. Turning circle of minimum 1500mm clear diameter.
6. Continuous clear space of 1200mm to a minimum of two consecutive sides of a dining table.
7. Clear space of minimum 800mm on both sides and at the end of a double bed.
8. Clear space of minimum 800mm to the side of a single bed.
9. Bathroom located immediately adjacent to the main bedroom.
10. Soft spot for future door between bathroom and bedroom.
11. A level access shower.
12. Toilet centreline between 400mm to 500mm from the wall.
13. Study / work space of minimum length of 1200mm and depth of 1500mm (including desk and chair space).
14. Level access to a balcony / terrace.
15. Balcony / terrace with a minimum depth of 1500mm.

Table 2 Comparison with target floor areas in the Design Manual for Quality Housing

2 Bed 4-Person Apartment	Gross Floor Area	Aggregate living area	Aggregate bedroom area	Storage	Private Amenity Space
Target	73 sqm	30 sqm	25 sqm	6 sqm	7 sqm
UD Home 2B4P example	82.4 sqm	30 sqm	26 sqm	6 sqm	7 sqm

Figure 3 Example Floor Plan of UD Home+ 2-bedroom 3-person apartment



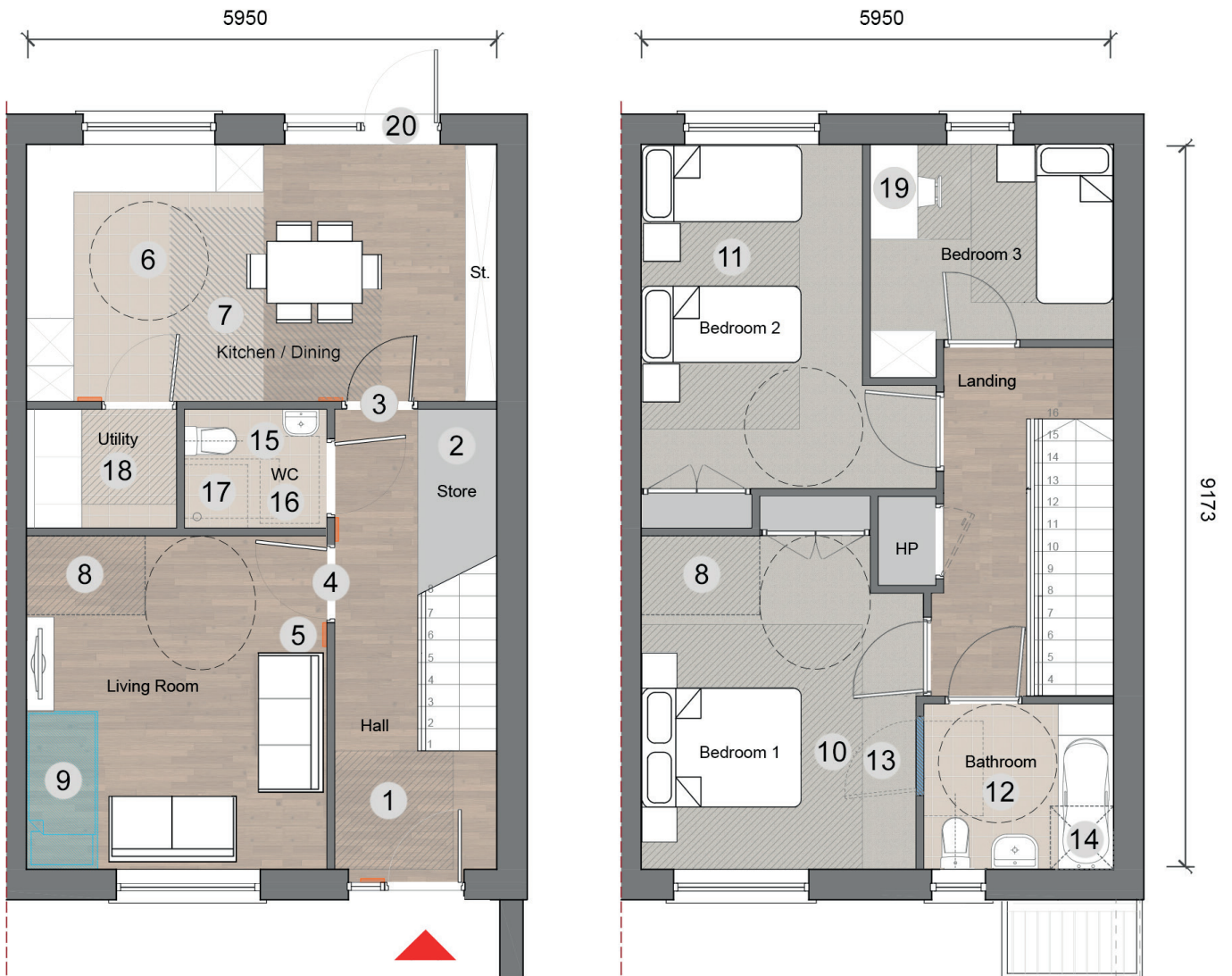
Key

1. Clear space adjacent to the entrance door of minimum 1800mm x 1800mm.
2. Enclosed space for storing outdoor wear.
3. Clear effective door width of minimum 850mm.
4. Clear space beside the leading edge of doors of minimum 300mm.
5. Turning circle of minimum 1800mm clear diameter.
6. Continuous clear space of 1200mm to all sides of a dining table.
7. Clear space of minimum 800mm on both sides and at the end of a double bed.
8. Clear space of minimum 1200mm to the side of a single bed.
9. Bathroom located immediately adjacent to the main bedroom.
10. Soft spot for future door between bedroom and bathroom.
11. A level access shower of minimum 1100mm x 1100mm.
12. Toilet centreline between 400mm to 500mm from the wall.
13. Side transfer space beside a toilet.
14. Clear area of minimum 1200mm in front of unit within a utility room.
15. Study / work space of minimum length of 1200mm and depth of 1500mm (including desk and chair space).
16. Level access to a balcony / terrace.
17. Balcony / terrace with a minimum depth of 1800mm.

Table 3 Comparison with target floor areas in the Design Manual for Quality Housing

2 Bed 3-Person Apartment	Gross Floor Area	Aggregate living area	Aggregate bedroom area	Storage	Private Amenity Space
Target	63 sqm	28 sqm	20.1 sqm	5 sqm	6 sqm
UD Home+ 2B3P example	73.68 sqm	28 sqm	21 sqm	5.2 sqm	6 sqm

Figure 4 Example Ground and First Floor Plans of UD Home 3-bedroom 5-person House



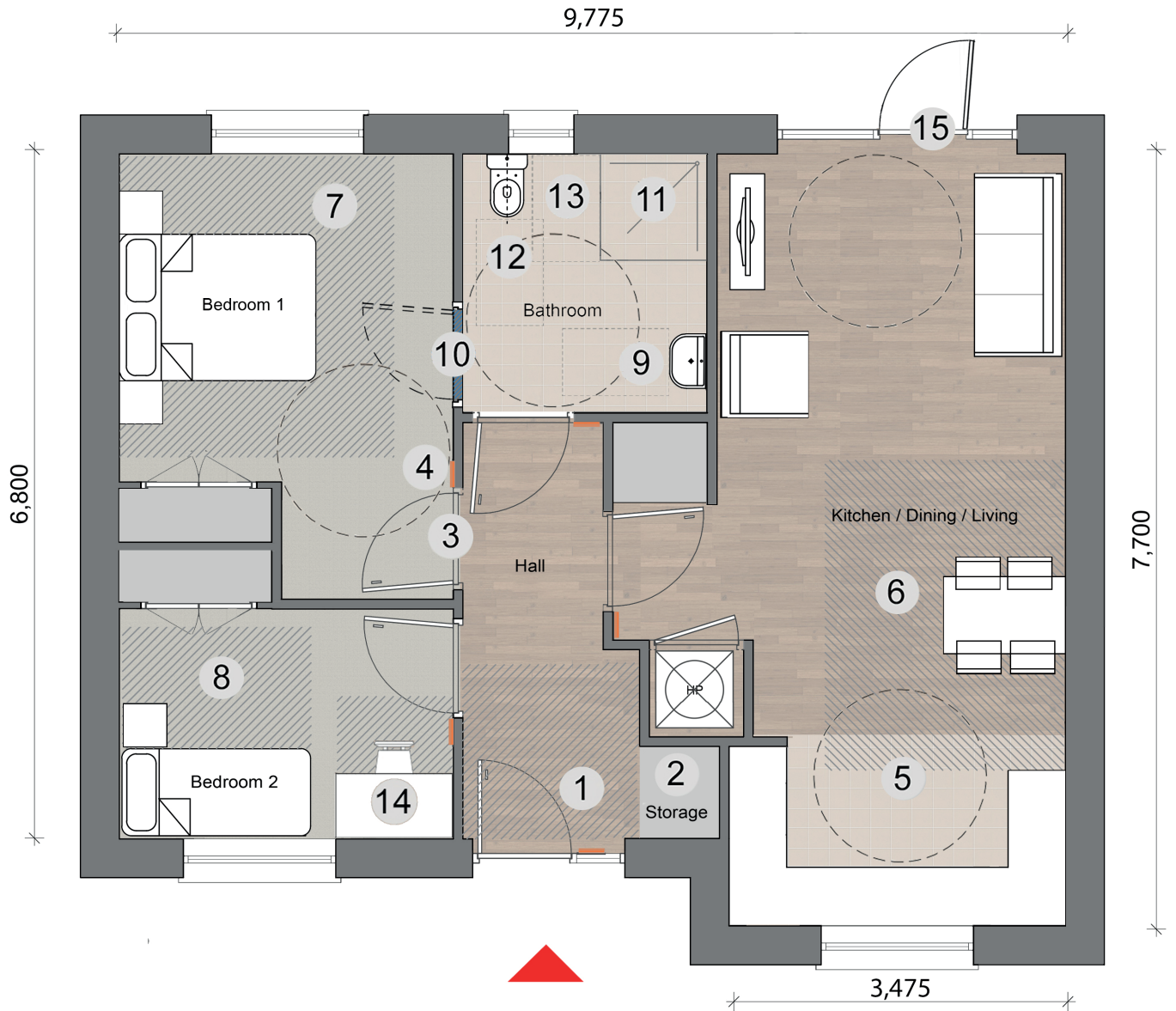
Key

1. Clear space adjacent to the entrance door of minimum 1500mm x 1500mm.
2. Space for storing outdoor wear.
3. Clear effective door width of minimum 800mm.
4. Clear effective door width of minimum 850mm with right-angled approach on corridor less than 1100mm wide.
5. Clear space beside the leading edge of doors of minimum 300mm.
6. Turning circle of minimum 1500mm clear diameter.
7. Continuous clear space of 1200mm to a minimum of two consecutive sides of a dining table.
8. Aperture for a future through-floor lift of 1000mm x 1500mm with 1500mm turning circle or 1400 x 1700mm ellipse turning space to front.
9. Temporary bedspace at ground floor level.
10. Clear space of minimum 800mm on both sides and at the end of a double bed.
11. Clear space of minimum 800mm to the side of a single bed.
12. Bathroom located immediately adjacent to the main bedroom.
13. Soft spot for future door between bathroom and bedroom.
14. Position of future shower adaptation.
15. Toilet centreline between 400mm to 500mm from the wall.
16. An entry level toilet with minimum dimensions of 1500mm x 1800mm.
17. A drainage point provided to an entry level toilet for future level access shower installation.
18. Clear area of minimum 1200mm in front of units within a utility room.
19. Study / workspace of minimum length 1200mm and of minimum depth 1500mm including chair space.
20. Level access to a private outdoor space.

Table 4 Comparison with target floor areas in the Design Manual for Quality Housing

3 Bed 5-Person House (2-storey)	Gross Floor Area	Aggregate living area	Aggregate bedroom area	Storage
Target	92 sqm	34 sqm	32 sqm	5 sqm
UD Home 3B5P example	109 sqm	34.1 sqm	35.4 sqm	6.4 sqm

Figure 5 Example Floor Plan of UD Home+ 2-bedroom 3-person House



Key

1. Clear space adjacent to the entrance door of minimum 1800mm x 1800mm.
2. Enclosed space for storing outdoor wear.
3. Clear effective door widths of minimum 850mm.
4. Clear space beside the leading edge of doors of minimum 300mm.
5. Turning circle of minimum 1800mm clear diameter.
6. Continuous clear space of 1200mm to all sides of a dining table.
7. Clear space of minimum 800mm on both sides and at the end of a double bed.
8. Clear space of minimum 1200mm to the side of a single bed.
9. Bathroom located immediately adjacent to the main bedroom.
10. Soft spot for future door between bedroom and bathroom.
11. A level access shower of minimum 1100mm x 1100mm.
12. Toilet centreline between 400mm to 500mm from the wall.
13. Side transfer space beside a toilet.
14. Study / work space of minimum length of 1200mm and depth of 1500mm (including desk and chair space).
15. Level access to garden / terrace.

Table 5 Comparison with target floor areas in the Design Manual for Quality Housing

2 Bed 3-Person House	Gross Floor Area	Aggregate living area	Aggregate bedroom area	Storage
Target	60 sqm	28 sqm	20 sqm	3 sqm
UD Home+ 2B3P example	70 sqm	29.5 sqm	21 sqm	3.2 sqm



References

Universal Design Guidelines for Homes in Ireland

Ten Universal Design Features to include in a Lifetime Adaptable and Age Friendly Home

Dementia Friendly Dwellings for People with Dementia, their Families and Carers

Design Manual for Quality Housing

Land Development Agency Apartment Typology Booklet



Age Friendly Ireland is a local government shared service hosted by Meath County Council that manages Age Friendly programmes and services. Our resources are developed in consultation with older citizens through Older People's Councils structures established in every local authority area.



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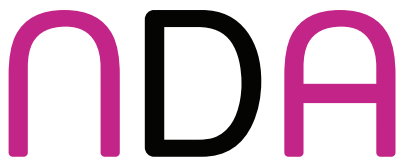
The **National Disability Authority** is the independent statutory body that provides information and advice to government on policy and practice relevant to the lives of persons with disabilities. We assist the Minister for Children, Equality, Disability, Integration and Youth in the co-ordination of disability policy. We also promote Universal Design through our **Centre for Excellence in Universal Design**.

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