

# **Accessible Homes**

## **Supplementary Planning Document**

A guide to well-designed Lifetime and Wheelchair Standard Homes



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**Somali** Haddii Ingiriisku uusan ahayn afkaaga koowaad aadna u baahan tahay turjumidda xog ku jirta dokumentigan fadlan la xiriir lambarka lagu siiyey.

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 ஆங்கிலம் உங்கள் தாய்மொழியாக இல்லாதிருந்து இப்பத்திரத்திலிருக்கும் தகவலின் மொழிபெயர்ப்பு

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for their assistance.

## Foreword





Andy Parsons Group Manager, Planning & Development

With demand increasing for living accommodation that truly embraces the needs of our diverse community, Harrow Council is driving forward its commitment to promote homes which meet the demands of people, throughout their lifetime, irrespective of disability, age or changes in lifestyles.

In today's world it is difficult to perceive a public place that is successful if it is not accessible to everyone. Likewise, when we consider people, their houses, and their living requirements as a primary concern, we come to realise that successful and sustainable communities are achieved only by making access considerations a pre-requisite of good design.

In recognising the social and economic benefits that accessible homes bring to the community, Harrow Council will only encourage development that support the principles of access as an integral part of the whole design. With concerted effort and teamwork, accessible developments that are attractive, profitable and fit for 21st century living, can be built to serve the entire community.

## Introduction

Government legislation requires Harrow Council to ensure that new residential developments meet the needs of most householders. These design features provide for a home, which is flexible enough to meet whatever comes along in life: pregnancy and young children, carrying in heavy loads, debilitating illness, or the limitations of getting older. Harrow Council is fully committed to the principle of producing well-designed homes and therefore, will not support development applications for new homes that potentially involve major adaptation.

The aim of this guide is to highlight the most important principles in designing accessible homes and is particularly aimed at architects, developers and builders of a range of residential developments. Produced as a Supplementary Planning Document (SPD), this guide seeks to illustrate the best ways to achieve well-designed accessible homes, that seamlessly integrate with the surrounding area, by illustrating examples of homes that are 'universal' in their appeal and application.

When designing new homes, it is now necessary to take account of three sets of requirements:

- Part M to the Building Regulations
- Lifetime Home standards
- Wheelchair Standard Housing

The requirements of all three design standards are broadly similar, inasmuch as they seek to achieve inclusive and adaptable homes.

- Part M to the Building Regulations, 2004 - enable a wheelchair user to visit, but not occupy a home.
- Lifetime Homes have built-in flexibility and can be easily adapted, without the need for structural alterations.
- Wheelchair Standard Homes are particularly spacious and built fullyequipped for wheelchair users.

#### **Planning Applications**

Lifetime Home standards involve only minor additions to Part M, and can be achieved without increasing building costs, or creating an adverse effect on high-density and/or narrow frontage developments. The council will therefore require all housing developments, as far as practicable, to meet the minimum requirements of Lifetime Home standards. In addition, the council will require 10% of all new housing, up to a maximum of 10 in any one development, to meet Wheelchair Housing standards. Harrow Council welcomes preapplication discussions with architects and developers, as accessible design is key to meeting planning application requirements.

## **Planning Policy Context**

This Accessible Homes SPD is accompanied by a Sustainability Appraisal [SA] Report, which provides the necessary background regarding the social, environmental and economic considerations which have been applied throughout the production of this document. The purpose of this SPD is to supplement the policies in the Development Plan. The Development Plan comprises the Harrow Unitary Development Plan (adopted July 2004) and the London Plan (adopted February 2004). The contents of this SPD are intended to provide additional guidance to assist developers and those preparing planning applications to achieve welldesigned accessible homes.

This SPD is supplementary to Policy H18 of the Harrow Unitary Development Plan [HUDP] and will form part of the Local Development Framework [LDF]. Furthermore, this SPD has been produced in-line with the Mayor of London's Spatial Development Strategy for Greater London and in particular policy 3A.4.

### Policy H18

"The Council will encourage new housing development, including changes of use and conversions of buildings into flats, to be accessible to all. In larger residential schemes, the Council will seek to ensure that a proportion of these are built as Lifetime Homes or capable of adaptation to Wheelchair Housing. All Wheelchair Housing, provided as part of a new residential development, should be in a suitable location in order to meet the needs of the occupants."

### (HUDP, July 2004)

### London Plan - Policy 3A.4

"Boroughs should take steps to identify the full range of housing needs within their area. UDP policies should seek to ensure that:

 New developments offer a range of housing choices, in terms of the mix of housing sizes and types, taking account of the housing requirements of different groups, such as students, older people, families with children and people willing to share accommodation

- All new housing is built to Lifetime Homes standards
- 10% of new housing is designed to be wheelchair accessible or easily adaptable for residents who are wheelchair users."

(London Plan, Spatial Development Strategy, Mayor of London, February 2004)

#### **Application of Policies**

This SPD is supplementary to Policy H18 of the Harrow Unitary Development Plan (HUDP) and London Plan Policy 3A.4.

#### **New Homes**

In-line with the Development Plan policies,, the Council will require Lifetime Homes standards to be applied to new developments and will in the main require 1 in every 10 new properties to be built to Wheelchair Standard Housing (up to a maximum of 10 in any one development). However, there may be very rare situations in which extenuating circumstances or site constraints prevent adherence to Wheelchair Standard Housing, eg: on a steeply sloping site where landscaping solutions are not viable. Any proposed deviation on the above requirements should be documented as part of a planning applicant's formal Access Statement submission.

#### **Residential conversions**

The Council will expect existing properties being converted or re-developed (for example conversion of a house into flats) to conform to Lifetime Home Standards where feasible. Non-conformity with the standards should be documented as part of an Access Statement submission.

In relation to listed buildings or conservation areas, design solutions that are sensitive to both the building and the surrounding area are required, and must accord with PPG15 and relevant Harrow Council UDP policies (D11, D12, D13, D14, D15 and D16). Further design advice can be sought from the Council's Conservation Team.

## **Access Statements**

An Access Statement is a document illustrating what has been done from the start to ensure buildings, facilities and services are accessible to disabled and non-disabled people alike. Access Statements must be submitted with all residential development applications to avoid unnecessary delays or rejection of a planning application.

Access Statements are now central to the Planning Application process and Harrow Council is empowered to formally address detailed access issues as a key principle for granting planning permission. Designers, developers and clients are now obliged to provide statements covering the finer details of access as part of the development process.

An Access statement submitted as part of a housing development scheme, should demonstrate compliance with Lifetime Home standards and the additional requirements of Wheelchair Standard Housing. In addition, the Access Statement must reflect the principles of good design, detailed in the accompanying Design Statement. The Access Statement will need to clearly demonstrate the following stages in the Develoment process:

- Pre-Planning Stage
- Planning Application stage compliance with all 16 Lifetime Home Standards and Wheelchair Standard Housing, as appropriate, see Appendix 1. Plans submitted should be clearly labelled to highlight the individual features and the range of standards used in designing the scheme. For applications to be considered, plans should provide clear details of all dimensions and materials.
- Building Control stage the same detail presented as part of the planning application should take on board any changes that were required to achieve planning consent.

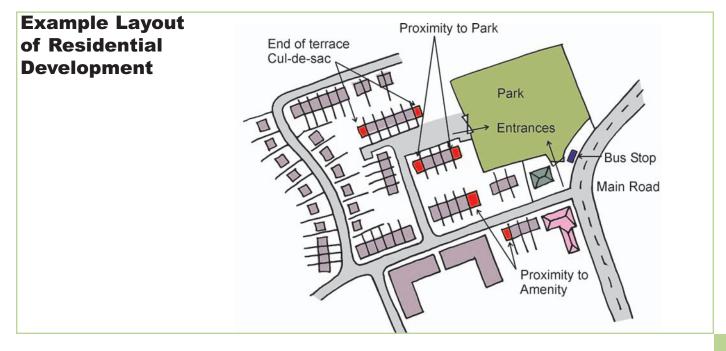
Further information about writing an Access Statement can be obtained from Harrow Council's Development Control section.

## Designing Accessible Residential Developments

The overall design and layout of a residential development plays an important role in creating communities which are safe, easy to navigate and accessible. The Council therefore welcomes developments that provide convenient walking and cycling routes, are nearby to local services and amenities, as well as within easy reach of public transport services.

Wheelchair Standard Homes should be located conveniently within the

development, including corner plots to reduce any adverse effect on housing density. Wheelchair Standard Homes should be made available for private sale, as well as through affordable housing schemes. They should be evenly distributed throughout a residential development, in order to promote social, inclusion, avoid the possibility of creating 'disability ghettos' and residents falling victim to targeted hate crime.



#### What is a Lifetime Home?

A Lifetime Home is a home built around 16 specific design standards. It is a home which promotes high levels of comfort; one that is flexible, adaptable and accessible.

Features such as step-free entry and wider doors, allow people with pushchairs to gain easy, uninterrupted entry. Built-in removable ceiling and wall panels become invaluable for lift installation, when climbing the stairs is no longer viable. Likewise, many wheelchair users can comfortably enjoy a Lifetime Home, gain access to the upstairs and easily have a bathroom modified, without the need for disruptive or costly alterations.

Lifetime Homes allow people increased choice over where they live, and can remain homes for life, if one chooses.

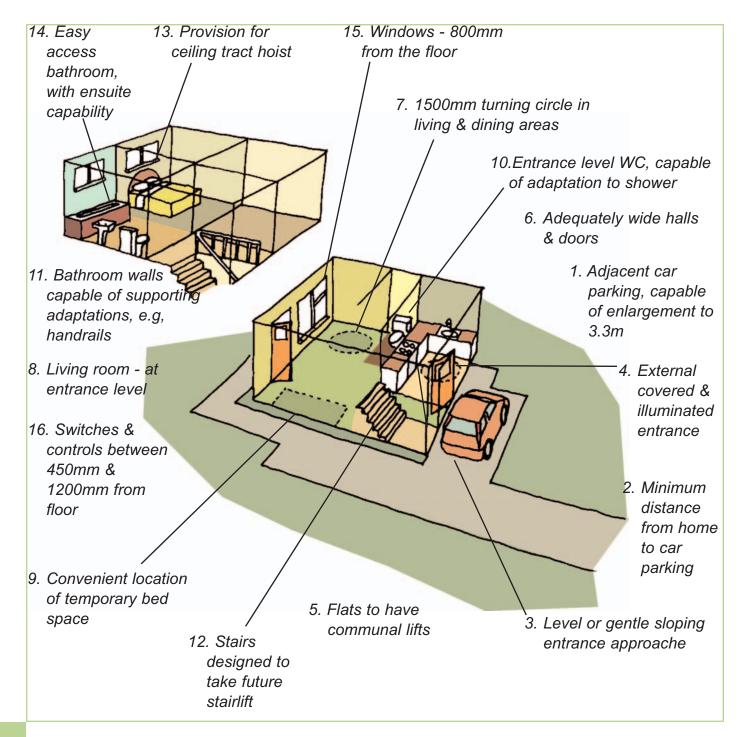
In addition to Part M, Lifetime Home standards require:

 a parking space (capable of enlargement to 3.3m in width) adjacent to the home

- 2. car parking within minimum distance of the home
- 3. an entrance approach that is level or gently sloping
- 4. an illuminated, covered entrance, with a level access threshold. (Flats to have a covered communal entrance.)
- 5. easy to access communal lifts and stairs
- doorways a minimum width of 800mm (900mm when approach is not head on). Internal doors should have 300mm of wall space to the side of the leading edge
- a 1500 mm turning circle (or 1400 x 1700 mm ellipse) in dining and living areas, with adequate wheelchair circulation in other areas
- 8. a living room at entrance level
- space on the entrance level that could be used as convenient, temporary, bed space

- 10. a wheelchair accessible entrancelevel WC, with plumbing and floorgully drainage, to allow future installation of a 'wet-room' shower facility
- 11. bathroom and WC to be capable of taking adaptations such as handrails
- a staircase designed to accommodate a stair lift, and a concealed ceiling hatch for a through-the-ceiling lift. (To allow for easy future installation).
- 13. a direct route from a bedroom to the bathroom for potential installation of a ceiling track hoist. (Achieved by installing a removable floor-to-ceiling wall panel to create an ensuite facility.)
- 14. a bathroom designed for ease of access, with at least 700 mm between items of bathroom furniture, e.g. between bath and washbasin
- 15. living room windows no higher than 800mm from the floor level, with easy to open/operate windows

16. switches, sockets, ventilation & service controls between 450 mm & 1200 mm from the floor.



#### **Lifetime Homes are:**

- not oversized dwellings. Using attention to detail, a Lifetime Home need not exceed average sizes or impede narrow frontage or highdensity development. (Designing Lifetime Homes - Joseph Rowntree Foundation, 1997)
- not necessarily more costly to build. Lifetime Home standards can be incorporated with little or no extra cost, providing the concept is taken on board at the stage of project inception and is applied to the whole development. (Costing Lifetime Homes - Joseph Rowntree Foundation, 1997)
- not difficult to achieve. A full understanding of the concept, together with creative design, results in well-designed Lifetime Homes. Lifetime Home standards can be applied to virtually all housing types. (Designing Lifetime Homes - Joseph Rowntree Foundation, 1997)
- not 'special-needs' homes. Their flexible design takes into account the

needs of a diverse range of people, whilst enabling those with moderate to severe mobility impairments to choose or remain living in mainstream housing. (Designing Lifetime Homes - Joseph Rowntree Foundation, 1997)

- not Wheelchair Standard Homes. Lifetime Homes are designed for easy retrospective adaptation, at minimal cost. The council recognises that a Lifetime Home will not meet the individual housing needs of everyone in society. (Designing Lifetime Homes - Joseph Rowntree Foundation, 1997)
- not unattractive. They can be designed tastefully, are attractive to a wider range of people, and will rarely remain unoccupied. (Designing Lifetime Homes - Joseph Rowntree Foundation, 1997)
- not all ramps and handrails. A Lifetime Home is like any other home. Intrusive adaptations are unnecessary in Lifetime Homes as access and flexibility is built-in from the start. (Designing Lifetime Homes - Joseph Rowntree Foundation, 1997)

## What is a Wheelchair Standard Home?

Whilst a Lifetime Home goes some way towards being suitable for wheelchair users, it is not always ideal. A Wheelchair Standard Home encompasses highly effective differences, to achieve a design that enables wheelchair users to maximise personal independence.

In basic terms a Wheelchair Standard Home is more spacious, allowing a wheelchair user to move around unhindered. These homes should be designed for wheelchair users with more complex requirements and should be built, already adapted for use, including pre-installed features such as low-level kitchen facilities, infrared light switches, pre-installed handrails, etc.

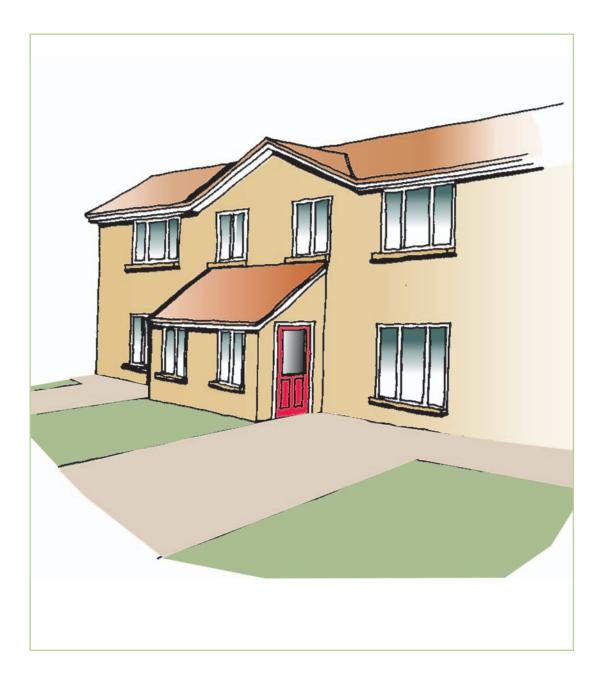
- In addition to Part M requirements and Lifetime Homes criteria, Wheelchair Standard Homes also require:
- 1. a covered car parking space

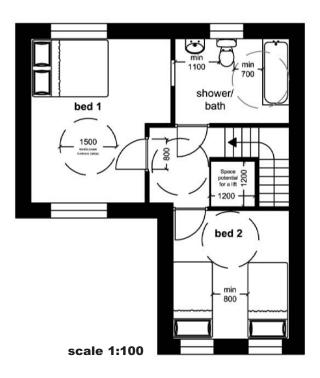
- 2. level hard standing with a minimum drainage fall, to allow safe transfer between car and wheelchair
- 3. a car park location that allows natural surveillance
- car parking (where a carport cannot be provided within the curtilage) no more than 30m away
- 5. hard surfaced external paths, which are non-slip, easy to maintain, hard wearing and adequately drained
- 6. good external lighting on pathways and in parking areas
- 7. adequate, wheelchair accessible, refuse disposal areas
- 8. easy to maintain garden areas
- screened washing drying areas (where residents do not have access to individual gardens)
- 10. a rear patio area, leading from a secondary garden door

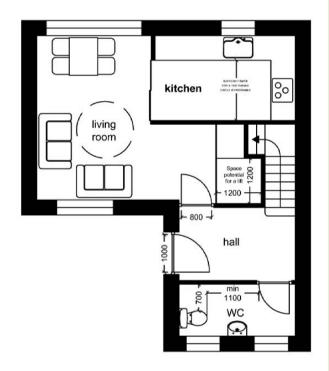
- 11. carefully designed damp proof specification, and level entrance to prevent ingress of moisture and rainwater
- 12. easy wheelchair access to door locks
- a well ventilated storage space (1200mm x 1200mm x 700mm) for outdoor mobility vehicles, with an unobstructed transfer area.
- 14. letter boxes of a suitable type and at an appropriate height
- 15. hallways to be a minimum width of 1200mm
- 16. internal doors to open more than90 degrees
- 17. the leading edge of internal doors to be 550mm from an adjacent wall
- a bathroom (2400mm x 2400 mm) provided ensuite to a main bedroom

- 19. the kitchen to have a minimum clear space (1500 mm x 1500 mm) between walls and/or fixed units
- 20. a kitchen, designed to allow safe and convenient use by wheelchair users, with worktops that are electrically or manually height adjustable
- 21. a storage cupboard for disability related equipment.
- 22. a separate dining room, or defined dining space, with adequate circulation routes
- 23. that electrical sockets be positioned 750mm above floor level and at least 600mm from a wall intersection (except where electrical safety standards specify otherwise).
- 24. a telephone point in the living room, main bedroom and second bedroom, with a nearby plug point.

## **Example: Lifetime Home Standard Design**

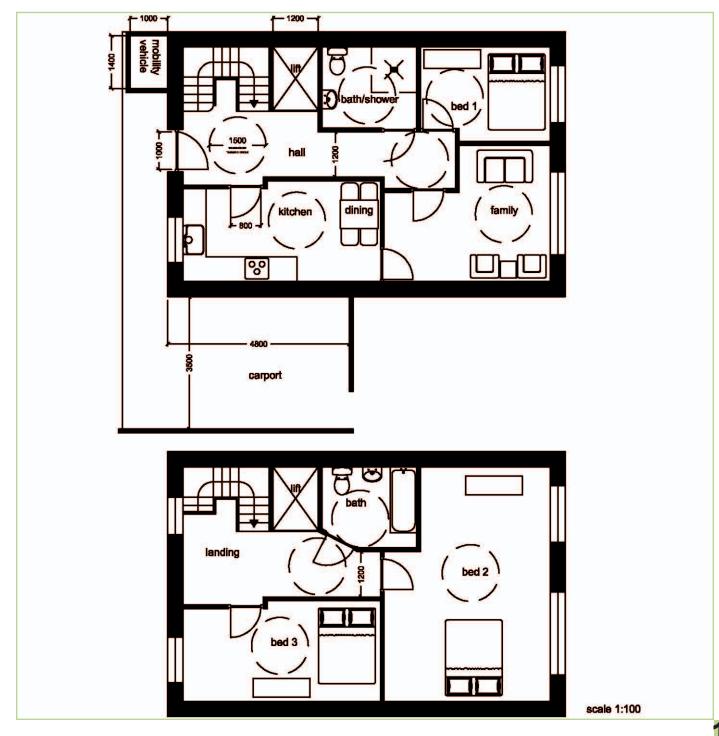


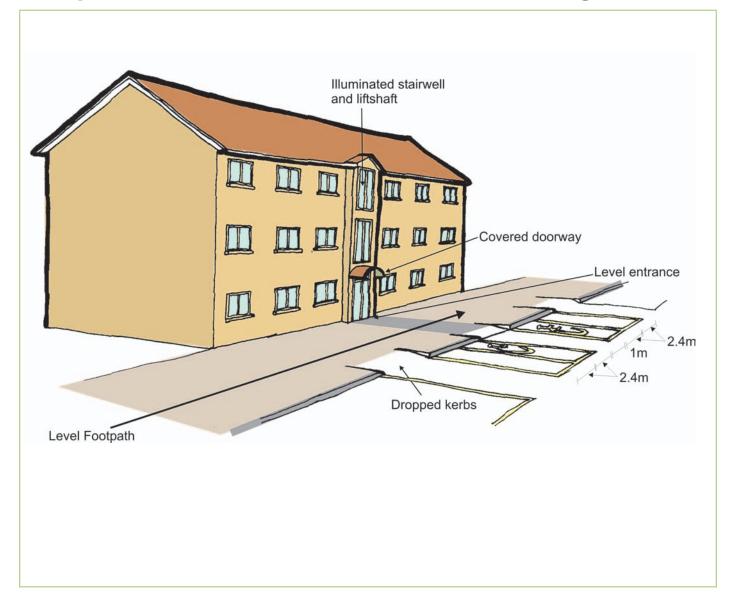




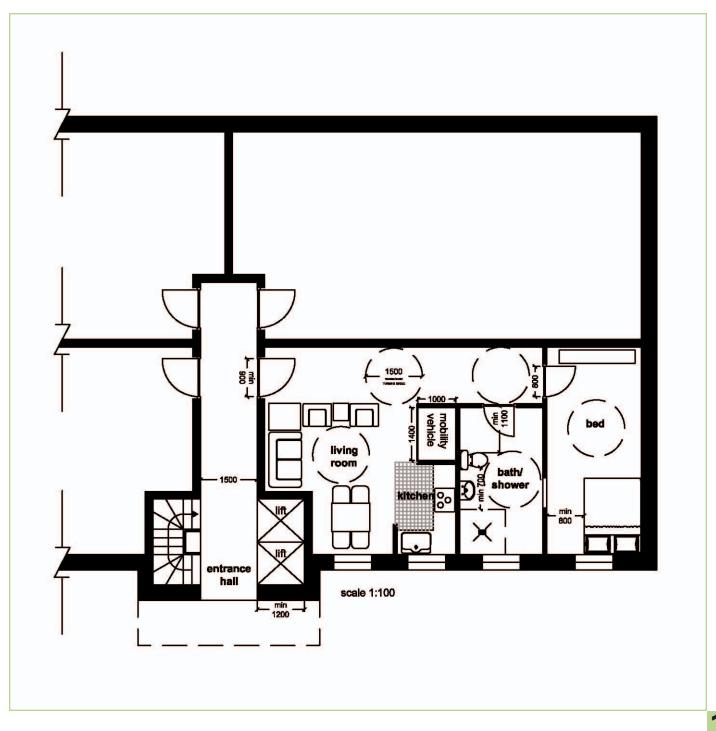
## **Example: Wheelchair Standard Home Design**







### **Example: Lifetime and Wheelchair Standard Flats Design**



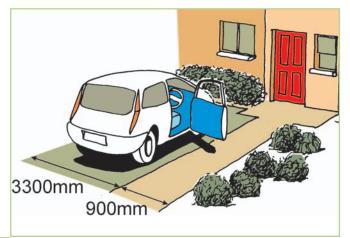
## **Detailed Design Considerations**

## **Car Parking**

**Lifetime Home** 

Car parking should comply with Part M and should be:

- on the same level as the home
- adjacent to the home and be capable of enlargement to a width of 3.3m to allow a car door to be fully opened and a wheelchair pulled up alongside.
- adjacent or kept to a minimum distance from the front of the property.



## **Car Parking**

- Car parking should comply with the standards of Lifetime Homes and in addition should:
- be 3.6m wide to include an integrated wheelchair user transfer area
- provide a covered transfer area which is integral and aesthetically compliments the home
- ensure hard standing areas are level, with a minimum drainage fall, to allow the safe transfer between car and wheelchair.
- be located to allow natural surveillance, in order to design out crime.
- be installed with solar powered lights, controlled by time clock(s), to ensure the area is well-lit at night
- provide a side protection fence or wall, where car parking is provided in exposed locations

#### **Wheelchair Standard Home**

- not be more than 30m from the home, where a carport cannot be provided within the curtilage
- ensure underground car parks have a headroom height of 2m, to allow access by people-carriers and similar large wheelchair accessible vehicles



## **Approaches & Entrances**

Approaches to dwellings should comply with Part M and also need to:

- be level or gently sloping; maximum gradient 1:20
- have a covered, illuminated entrance and level access over the threshold with a maximum upstand of 15mm
- have front doors with a clear opening width of 800mm
- have pathways leading to the property not less than 900mm wide, non-slip and clearly defined
- be landscaped and planted carefully to avoid danger or injury to people with visual impairments.

Where plot gradients are steeper than 1:20, access to the dwelling must be provided by a ramp, designed in accordance with Part M to the Building Regulations.

### **Lifetime Home**



## **Approaches & Entrances**

The approach and entrance to a Wheelchair Standard Home should comply with Part M, Lifetime Home Standards and should:

- have hard surfaced paths leading to the property, which are non-slip, easy to maintain, hard wearing, adequately drained, well lit and not less than 1200mm wide. (Ensure slopes have good grip for wheelchair tyres in wet weather conditions.)
- ensure gullies and drains are flush to the surrounding surface, so as not to cause a hazard to wheelchair or walking aid users.
- provide a storage space (1200mm x 1200mm x 700mm) for charging outdoor mobility pavement vehicles, with an unobstructed transfer area. (The charging area should be located to allow high level passive ventilation or mechanical ventilation when this is not possible.)
- have letter boxes of a suitable type and at an appropriate height

### Wheelchair Standard Home

- ensure that external entrance lighting is provided (controlled by passive infra-red sensors and manual switches from within the home)
- incorporate an adequately sized refuse disposal area close to the entrance, which is wheelchair accessible
- provide easy to maintain garden areas, particularly where an individual resident is responsible for its upkeep



- have screened areas for hanging out washing (where residents do not have access to individual gardens).
   In any case, areas should include height adjustable rotary dryers
- provide a rear patio area (minimum 3m x 3m), leading from a garden door, linked to a main path, to provide a safe means of escape for wheelchair users
- ensure a carefully designed level entrance and damp proof specification, to prevent ingress of rainwater and moisture.

## **Communal areas**

Communal areas within blocks of flats should provide:

- a wheelchair accessible passenger lift (1100 mm x 1400 mm)
- communal stairs designed in accordance with Part M
- entrance doors, lifts and stairs located at the front of blocks of flats
- a corridor width of at least 1500mm



## **Circulation Areas within the Home**

Circulation areas should comply with Part M, and additionally;

- the width of doorways and hallways to be dependent upon position in relation to each other, in line with the table opposite
- turning space for wheelchairs to be provided, (i.e. 1500 mm or 1400 mm x 1700 mm ellipse) in the kitchen, dining and living room areas.
   Adequate wheelchair circulation space to be provided in other circulation areas.
- a removable ceiling hatch should be positioned to allow for future installation of a 'through the ceiling'

Door Clear Opening Width	Corridor Width
750 mm	900 mm (when approach <b>is</b> head on)
750 mm	1200 mm (when approach <b>is not</b> head on)
775 mm	1050 mm (when approach <b>is not</b> head on)
900 mm	900 mm (when approach <b>is not</b> head on)

### **Lifetime Home**

type wheelchair lift, e.g. from a downstairs living room, to an upstairs bedroom

 staircases should be designed to allow for future installation of a stairlift

# **Circulation Areas within the Home**

Doorways and corridors should meet the standards of Lifetime Homes and additionally provide:

- corridors and halls at a minimum width of 1200 mm, with 1500 mm
- turning circles at corridor junctions
- internal doors with a minimum width of 850 mm, which open more than 90°(to ensure handles do not project into opening width)
- 550mm from an adjacent wall to the leading edge (opening side) of internal doors
- a vertical lift, positioned to allow its convenient use, without causing disturbance/disruption to the commonly used rooms, e.g. located in a hallway, rather than a living room.

**Wheelchair Standard Home** 

## WC's, Showers and Bathrooms

Entrance Level WC

In houses with three bedrooms or more, a wheelchair accessible, entrance level WC, should be provided, which exceeds the requirements of Part M.

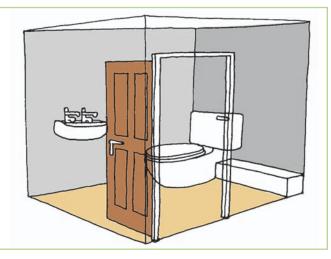
The WC should;

- ideally be located towards the rear of the house.
- provide 1100mm of space (clear of door swing) between the front edge of the toilet pan and WC door. An additional 700mm transfer area should also be provided to one side of the toilet pan.
- be waterproofed, and fitted with recessed floor-gully drainage to allow use of the compartment as a 'wet-room' shower facility.
- have walls capable of taking adaptations where significant load may be applied, e.g. handrails.
- be fitted with wash hand basins that are accessible to wheelchair users.
   Bathrooms

#### **Lifetime Home**

In addition to entrance level WC requirements, Lifetime Home bathrooms should:-

- provide 700mm between items of furniture, e.g. between bath and toilet.
- provide recessed floor-gully drainage



so that any fitted bathtub can be replaced with a shower in future.

 provide a direct route for a ceiling track hoist (via a ceiling to floor wall panel), from a main bedroom to a bathroom, to be installed at a later date.

## WC's, Showers and Bathrooms

Entrance Level WC

A Wheelchair Standard Home WC should meet all the requirements of a Lifetime Home entrance WC, and should also:

- provide a wash hand basin that is easily reachable whilst seated on the WC.
- provide more than one toilet facility per home.

### Wheelchair Standard Home

 provide either a wheel in 'wet-room' shower facility, or, a bathtub that is height adjustable and compatible with both ceiling track and freestanding hoists

N B: The bathroom/shower room is extremely important for the independence of many disabled people as success or failure can depend on the usability of personal hygiene facilities.

#### Bathrooms

In addition to a downstairs WC, Wheelchair Standard Home bathrooms should:

- be located next to the main bedroom, with either a removable floor to ceiling wall panel or folding/sliding door to allow en-suite wheelchair access.
- have minimum internal dimensions of 2400 x 24000mm



## **Kitchens**

Lifetime Home

Kitchens should:-

- be located at the front of a house
- provide a turning circle of at least 1500mm or 1400mm x 1700 ellipse



## **Kitchens**

In addition to the requirements of a Lifetime Home kitchen, a Wheelchair Standard Home kitchen should:

- provide a minimum 1400mm x 1400mm clear floor space between fixed units
- should ensure a layout which minimises needing to carry hot pans and dishes
- have kneehole spaces under worktops, hob and sink units, and a reach to the wall of no more than 600mm depth to operate controls.
- have built in appliances at a maximum reaching height of 1400mm, e.g. oven
- be fitted with user operated height adjustable work surfaces using flexible plumbing

### **Wheelchair Standard Home**

- have pull-out surfaces that supplement main worktop areas
- provide a sink bowl 150mm in depth, with waste pipes positioned at the rear of the bowl.
- have the sink fitted with mini-lever taps as standard
- ensure that stopcocks to washing machine and sinks are accessible to wheelchair users



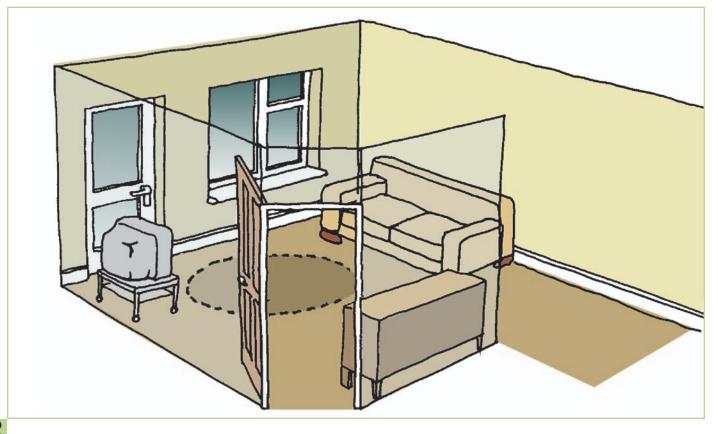
## **Living Rooms**

Living rooms should be at entrance level and should:

- allow a seated person to see out of the living room window: glazing should start at a height of 800mm.
- Provide an adequate turning space, ie 1500mm diameter or 1400 x 1700mm ellipse

### Lifetime Home

 provide space on the entrance level that could be used as convenient, temporary, bed space (in homes with an upstairs).



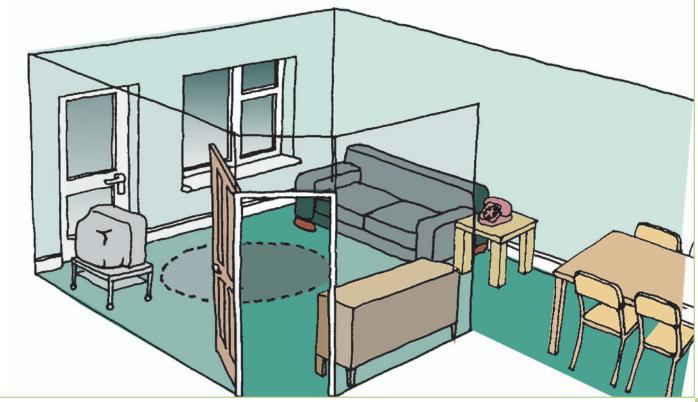
## **Living Rooms**

Living room accommodation should:

- be wider than 3m
- be private and quiet (e.g. away from noise such as stairlifts)
- allow for alternative furniture layout, including parameter layout to maximise wheelchair manoeuvrability

### **Wheelchair Standard Home**

- provide a defined dining space (where a separate dining room is not provided)
- incorporate a telephone point.

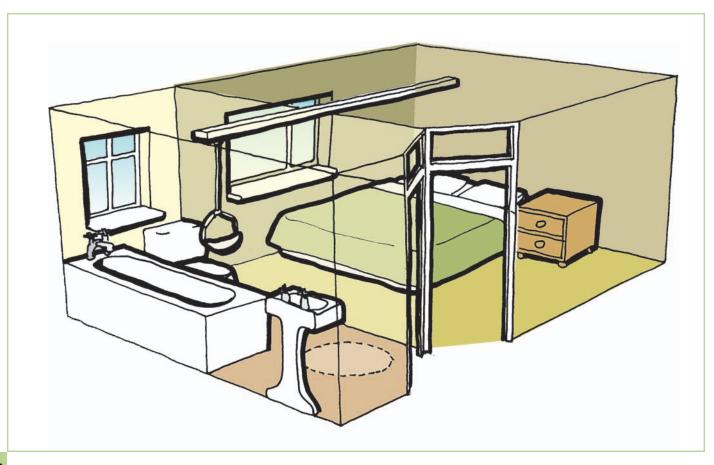


## **Bedrooms**

#### Lifetime Home

Bedrooms should:

- be located at the rear of the property where possible.
- allow for the future installation of a ceiling-track hoist from a main bedroom to the bathroom, via a removable floor-to-ceiling panel.



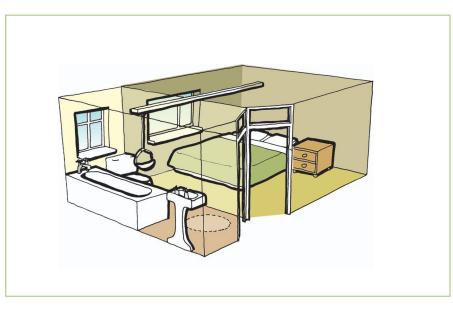
## **Bedrooms**

Bedrooms should conform to Lifetime Home Standards and should:

- be 4.3m x 3.6m minimum
- allow wheelchair access to both sides of a double bed (it is acceptable for a wheelchair user to reverse alongside the bed, but they should not be expected to reverse round the bed corner)
- have wardrobes (where fitted) designed and positioned to allow a wheelchair user to easily reach from a sideways position

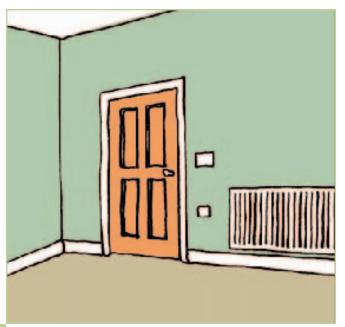
#### **Wheelchair Standard Home**

- have a second bedroom positioned with an adjoining door to the main bedroom (to allow for easy night-time assistance)
- have a bathroom (designed to British Standard 8300) provided en-suite to the main bedroom
- have TV aerial, power outlets, telephone socket and door entry system controls close to the bed.



## **Fixtures and Fittings**

- Fixtures & fittings should be easy to use by as many people as possible and should ensure:
- all windows allow one-handed operation, using minimal effort, i.e. handles and locks not requiring fine manual dexterity, and set at maximum reaching point of 1.2m from the finished floor
- that window glazing in the living room begins at 800mm from the floor level



### Lifetime Home

- installation of electrical sockets (switched at outer ends) at a height of 450mm from the finished floor
- switches, ventilation and service controls at 1200mm from the floor



Electrical socket positioned at 450mm above floor and switched at outer ends

## **Fixtures and Fittings**

- In addition to Lifetime Home fixtures & fittings, design of a Wheelchair Standard Home should ensure that:
- internal doors have lever-type handles at a height of 800mm-900mm
- door closers (where needed) require a maximum opening pressure/closing force of 25 newtons.
- controls and switches can be used effortlessly by people with limited manual dexterity
- e.g. light switches, heating controls, door-entry systems

### **Wheelchair Standard Home**

- electrical sockets are positioned at a height of 750mm from the floor
- a dedicated 13 amp spur is provided close to the inside of external doors, to allow for installation of powered door openers, etc
- wheelchair users can easily reach heating and hot water controls (maximum height of 1200 mm), e.g. boiler ignition time programmer, and room thermostat
- heater controls or radiator valves are positioned at a height of 600mm -850mm from the floor.



Radiater valve at a height of 800 mm



Full plate light switch



Infra-red light switch

## **Sources and References**

- Wheelchair Housing Design Guide: Stephen Thorpe, Architect, 1997, ISBN: 1 86081 1647
- Accessible Thresholds in New Housing: The Stationery Office Ltd, 1999, ISBN: 0 11 702333 7
- 'Designing Lifetime Homes', Edited by Julie Brewerton and David Darton, Joseph Rowntree Foundation 1997, ISBN 1 85935 025 9
- 'Costing Lifetime Homes', Kim Sangster, Joseph Rowntree Foundation, ISBN 1 85935 024 0
- British Standard BS 8300:'Design of buildings and their approaches to meet the needs of disabled people', BSI 2001
- Planning and Access for Disabled People: 'A Good Practice Guide', ODPM: March 2003

- Building Regulations 2000 Part M: 'Access to and Use of Buildings', ODPM: May 2004 Edition
- The Mayor of London's, 'London Plan: Spatial Development Strategy for Greater London': Greater London Authority: February 2004
- Accessible London: Achieving an Inclusive Environment, The London Plan Supplementary Planning Guidance, Mayor of London: 2004

