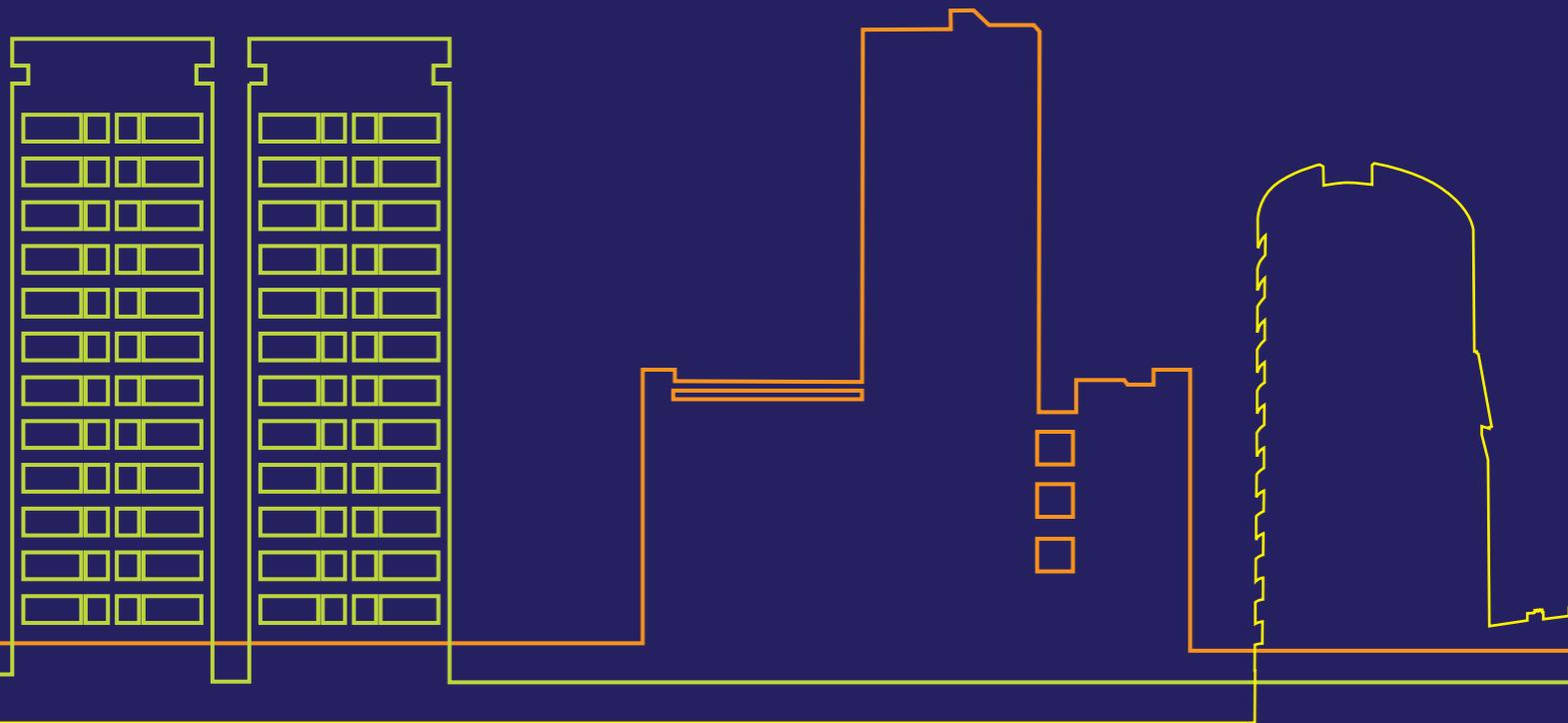


Tower Hamlets Inclusive Design Advice: **Housing**



Inside

What is Inclusive Design?	3	Examples: good and bad practice in housing	11
Why Inclusive Design is important in housing development?	4	Further Reading	13
Policy Framework	5	Inclusive Design Note comparison table comparing relevant space standards	14
Accessible Housing: Tower Hamlets Key Facts	7	Assessment Tool	23
The key Inclusive Design requirements for residential development	8		
What information should be provided upon submission by the applicant	10		

This document is part of a series that sets out Tower Hamlets approach to Inclusive design.

The Inclusive Design advice notes will concentrate on the fundamental spatial issues that need to be considered early on in the planning and design stages of all new development. The advice notes are intended to assist developers, architects, designers and planning officers in determining if a development has considered inclusive design in its proposal and to give them the confidence to make amendments.

It should be noted that current design standards are an absolute minimum and have not been updated recently. New research shows that current space standards are not sufficient for larger wheelchair users, specialist wheelchairs, buggies and larger people i.e. many people now, especially with the surge in obesity.

What is Inclusive Design?

Inclusive Design means designing in a way that aims to remove the barriers that create undue effort and separation. It enables everyone to participate equally, confidently and independently in everyday activities.



Why Inclusive Design is important in housing development?

- ➔ The ageing population, by 2050 more than half of Britons will be 50 or older. Incidence of disability increases with age.
- ➔ Reduces accidents in the home.
- ➔ Enables people to stay safely and independently in their own homes longer.
- ➔ Inclusive access enables anyone to visit family and friends
- ➔ Disability as defined under the Equalities Act 2010 includes people with mobility impairments, mental health problems, long term illness (such as cancer), sensory impairments and learning disabilities. Many people have a 'hidden disability and/or are related to someone who has a disability.
- ➔ Research found that 84% of homes in England do not allow a wheelchair user to get through the front door without difficulty (source Habintag).
- ➔ Many families in Tower Hamlets have children with disabilities whose access requirements will change.
- ➔ Accommodation that can flexibly accommodate households changing access requirements, prevent households needing to move or rejoin the housing waiting lists in the future.
- ➔ Avoids separation and enables the potential for sustainable communities.
- ➔ Reduces the need for 'specially designed' housing to be built.

Policy Framework

National

Equalities Act 2010

Civil rights legislation protecting disabled peoples equitable rights, including access to everyday goods and services.

(1) Every public authority shall in carrying out its functions have due regard to:

- (a) the need to eliminate discrimination that is unlawful under this Act;
- b) the need to eliminate harassment of disabled persons that is related to their disabilities;
- (c) the need to promote equality of opportunity between disabled persons and other persons;
- (d) the need to take steps to take account of disabled persons' disabilities, even where that involves treating disabled persons more favourably than other persons;
- (e) the need to promote positive attitudes towards disabled persons; and
- (f) the need to encourage participation by disabled persons in public life.

This is the core duty under the Act.

National Planning Policy Framework

Everyone should have the opportunity to live in high quality, well designed homes, that deliver what people want and need, within sustainable, inclusive mixed communities.

Plan for a mix of housing that includes the spatial needs of different groups in the community (such as families with children, the elderly and people with disabilities). In larger scale residential developments in particular key facilities such as primary schools and local shops should be located within walking distance of most properties.

Regional

London Plan Policy

Ensuring equal life chances (3.1 pages 76 – 77).

Strategic: The mayor is committed to ensuring equal life chances for all Londoners...

Planning decisions: Addressing the spatial needs of London's people and communities is essential to enable them to enjoy and contribute to a safe, secure, accessible inclusive and

sustainable environment and to ensure these are taken into account in new development. Development proposals should have regard to the SPG Accessible London and other guidance produced by the Mayor.

Quality and design of housing (3.5 pages 90-94 and para 3.48)

Planning decisions and LDF Preparation: the design of all new dwellings should.....have adequately sized rooms, convenient and efficient room layouts and meet the needs of Londoners over their lifetime... and address social inclusion objectives: 3.38, 3.39 provide more detailed guidance.

Housing Choice (3.8)

LDF Preparation: all new housing is built to Lifetime Homes standards, ten per cent of new housing is designed to be wheelchair accessible, or easily adaptable for residents who are wheelchair users; account is taken of the changing age structure of London's population and in particular the varied needs of older Londoners.

Sustainable design and construction (5.3 para 5.27 pages 143 -144)

Planning decisions: ensuring developments are comfortable and secure for users, including avoiding the creation of adverse local climatic conditions

Parking (6.13 pages 200 -201)

Planning decisions: provide parking for disabled people in

line with table 6.1. In locations with high public transport accessibility, car-free developments should be promoted (while still providing for disabled people). Para 6.44 developments should always include parking provision for disabled people...Applicants for planning permission should use their transport assessments and access statements to demonstrate how the needs of disabled people have been addressed.

London Housing Design Guide 2010

GLA guidance on space standards etc.

Tower Hamlets Policy

Core Strategy 2010

Strategic objective to ensure that housing contributes to the creation of socially balanced and inclusive communities.

All new housing developments to offer a range of housing choices, in terms of size and type, built to Lifetime Homes standards.

10% must be designed to be wheelchair accessible, or easily adaptable for residents who are wheelchair users.

Managing development DPD (submission version)

DM4 Housing standards and amenity space

Accessible Housing: Tower Hamlets Key Facts

1. The **2004 housing needs survey** found 15,385 people in Tower Hamlets top have a 'special need' (For example, a physical disability or they are frail and elderly); at the time this represented about **15 per cent of Tower Hamlets population**, higher than the national average of 11-13 per cent. Seventy-nine per cent were housed in the social rented sector.
2. **Poplar** had the highest concentration of special needs households at 21% of all special needs households.
4. There is a **43 per cent need for accessible family-sized housing (within Tower Hamlets)**. Focusing on people requiring full/partial wheelchair accessible homes there is a 53 per cent need.
5. Latest data shows us 43% of all households on the Accessible Housing Register (within Tower Hamlets) were overcrowded and need accessible family sized housing.

LBTH Housing Needs Survey 2004.

Data Extracted from tables: 12.1, 12.6 and 12

3. In **August 2008** there **were 397 households** on the Accessible Housing People Register (AHR) **living in inadequate housing and waiting to be re-housed**. The requirement for fully and partially accessible homes has remained constant, **a likely reason for this is the current lack of new supply or suitable re-let homes becoming available**.

The key inclusive design requirements for residential development

- ➔ Planning obligations and/or planning conditions should be used on all housing developments, to secure the delivery of units to the correct specification and to ensure that adaptations can be made if required in the defects period (the first year post completion).
- ➔ Provide a lift or passive provision that would enable cost effective future provision of a lift (with minimum internal dimensions of 1100mm x 1400mm) in all service cores in all residential blocks.
- ➔ Wheelchair housing should only be above ground floor if at least two wheelchair accessible lifts service the accommodation.
- ➔ Level entrances/thresholds to all accommodation including balconies.
- ➔ 10% of new housing should be designed to wheelchair standard. This will normally be 10% of units, but on individual schemes where a better outcome is provided by producing larger units which meet particular local needs, it may be agreed to measure this as 10% of habitable rooms."

- ➔ Storage and recharging facilities should be provided within developments within the communal areas suitable for scooters.



- ➔ In car free developments: in the first instance Blue Badge parking should be provided on site in exceptional circumstances there may be potential to secure a reasonable number of on street parking bays, for blue badge holders within 50m of the development this should be established with the local highway authority.
- ➔ In all dwellings one bathroom and/or fully accessible toilet should be provided with floor drainage, suitable to allow for future level access shower installation
- ➔ Long corridors which look the same can be confusing and disorientating for people with sensory impairment and should be avoided if possible.
- ➔ Internal communal corridors must have minimum widths of 1200mm, 2m preferred: 1800mm enables two wheelchairs users to pass, 1500mm allows a wheelchair user to turn and retrace their steps.
- ➔ All accommodation should ideally have separate kitchens and living room improving safety for children and practically providing a quiet space for homework and for cultural reasons.
- ➔ The site should maximise its potential for well connected safe inclusive walking routes to local services, transport.
- ➔ Hate crime is a serious problem for people with disabilities. All new residential development should be designed to be both “tenure and unit type blind” – i.e. no external distinction between the tenure or type of unit.
- ➔ Provide adequate accessible storage: people with disabilities often have additional storage requirements such as medical equipment etc.

What information should be provided upon submission by the applicant

- ➔ Design and Access Statements should provide details of the design evolution as a means of articulating the inclusive design strategy. All unit diagrams should be at scale 1:50 and include notional furniture layouts.
- ➔ Any potential wheelchair units should be clearly marked on floor plans, showing how they conform to Wheelchair housing standards.
- ➔ Location and orientation of the apertures for future provision of through the floor lift eg access point in same location on all levels - entry is through short side. It's location should preferably be in circulation space not living space/rooms, its location should not make the residual space unworkable.
- ➔ Diagrams showing how life time homes conform to the 16 standards should be provided.
- ➔ Plans indicating the step free routes in and around development including access to bike storage, refuse and post.
- ➔ Relationship of buildings to local amenities, public transport infrastructure.
- ➔ Location of accessible parking spaces off or on site.
- ➔ Any Inclusive Design Strategy should consider how the public realm is used by all people including children, elderly and those with physical and sensory impairments.

The examples below are all from Mary Jones court , Garford Street



The bathroom walls are not robust enough to take grab rails – which have prevented drop down rails being fitted, resulting in bulky free standing frame round toilet further reducing manoeuvring space



The same bathroom showing the tortuous access into the shower. Best practice could have floor drainage/wet room to enable step free access.



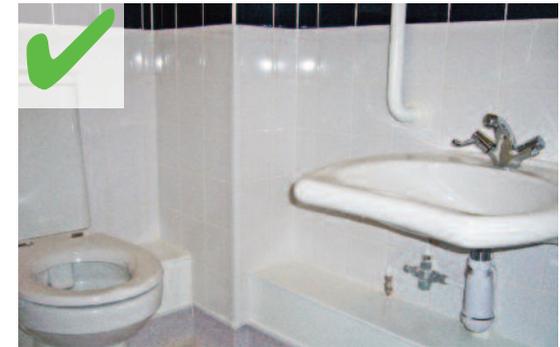
Another bathroom in the same complex were the inability to fix adaptations to the walls has resulted in 3 additional pieces of equipment:

- toilet frame
- perching stool
- shower seat (bottom right with towel on top).



Image on the left: bathroom in new development on Old Bethnal Green Road. Spacious and well detailed apart from sink which the manufacturer claims is DDA compliant it is not.

Image on the right: same scheme with a standard wall hung sink which is usable by all.



Almost perfect access to external space except the window is framed creating a tripping hazard.



Underground refuse storage when correctly sited (not in walking route i.e. set back) is accessible to all.

Further Reading

Lifetime Homes

<http://www.lifetimehomes.org.uk/pages/design-criteria.html>

LDA London Housing Design Guide

<http://www.london.gov.uk/archive/mayor/publications/2009/docs/housing-design.pdf>

GLA Publications

Wheelchair accessible housing - <http://legacy.london.gov.uk/mayor/strategies/sds/docs/bpg-wheelchair-acc-housing.pdf>

Draft SPG - <http://www.london.gov.uk/sites/default/files/spg-housing-draft.pdf>.

The Strategic Housing Market Assessment, Needs Survey and Summary are available in full internally here:

M:\D&R SHARED\SHMA 2009 (Strategic Housing Market Assessment).

This is the external source for the strategic housing market assessment, needs survey externally the summary is available here:

http://www.towerhamlets.gov.uk/lgsl/851-900/868_housing_strategy_and_polic/strategic_housing_market_asses.aspx

Wheelchair housing design guide second edition by Stephen Thorpe and Habinteg Housing Association

Mind the step: An estimation of housing need in England

http://www.habinteg.org.uk/documents/Publications/Mind%20the%20step_onlineversion.pdf

Inclusive Design Note comparison table

Comparing some of the space requirements, key at planning stage of the following standards:

Wheelchair housing (as defined by Stephen Thorpe second addition)

Lifetime Homes standards (Joseph Rowntree Trust)

Lifetime Homes <http://www.lifetimehomes.org.uk/pages/design-criteria.html>

Approved Document part M of the Building Regulations

http://www.planningportal.gov.uk/uploads/br/BR_PDF_ADM_2004.pdf

All the dimensions are the **minimum** required; Part M of the building regulations are the minimum mandatory requirements

	Tower Hamlets Inclusive design principals	Wheelchair Accessible Housing	Lifetime Homes	Part M
	Inclusive stepfree access to surrounding area and services within developments			
Path/ramps gradients	<p>Communal paths: 1200mm minimum width 1800mm preferred crossfalls avoid were ever possible and preferably no greater than 1:50</p> <p>Ramp gradient: Ideal no steeper than 1:20; 5m - 1:15max; 1200mm widths. Crossfalls not exceed 1:50</p>	<p>Communal paths: 1200mm minimum 1000mm at pinch points width 1800mm preferred at regular at regular intervals to allow turning and passing. Crossfalls avoid wherever possible</p> <p>Ramp gradient: Ideal no steeper than 1:20; 5m - 1:15max; 1200mm widths. Crossfalls not exceed 1:50</p>	<p>Communal paths: 1200mm minimum, best practice 1800mm. Preferably level i.e. no gradient exceeding 1:60 and/or no crossfall exceeding 1:40</p> <p>Ramp if unavoidable as Part M. additional point</p>	<p>Communal paths: preferably level, gradient no steeper than 1:20</p> <p>Ramp no steeper than 1:15 up to 10m; 1:12 up to 5m. 900mm width. Crossfalls not exceed 1:40</p>
Communal Parking	High density (including car free) should provide 1 designated space per wheelchair user dwelling, where not possible the potential to secure a reasonable number of on street parking bays, for blue badge holders within 50m of the development should be established.	<p>Adjacent, covered (low density development)</p> <p>High density (including car free) should provide 1 designated space per wheelchair user dwelling</p>	<p>3300mm x 4800mm adjacent to entrance or lift core</p> <p>Access route between parking and communal entrance/lift core should maintain a minimum clear width of 1200mm</p>	

	Tower Hamlets Inclusive design principals	Wheelchair Accessible Housing	Lifetime Homes	Part M
Scooter storage	Storage and recharge facilities in the common parts suitable for scooters.	Need power point and under cover, adjacent to individual's accommodation.		No standard
Communal lifts	Provide at least one lift and/or suitable structural space that would enable cost effective future provision of a lift (with minimum internal dimensions of 1100mm x 1400mm) in all service cores in all blocks.	Minimum 2 where wheelchair unit is above ground level.	Not a requirement. LTH best practice: Provide lift access to all dwellings above entrance level as far as practicable. Provide access to two lifts within blocks of 4 or more storeys. Where lift access is not provided, consider potential to enable provision at a later date (by provision of space and/or adaptation).	
Communal Entrance	As wheelchair accessible.	1800x1800 level clear of door swings in front of main entry door with adequate weather protection	1500mm x 1500mm level landing clear of door swings and have adequate weather protection	
Communal corridors	1200mm min, in short corridors/single loaded passing places 1800mm width x 1200mm at reasonable intervals	1200mm min If more than 1 wheelchair unit – passing places 1800mm width x 1200mm at reasonable intervals	1200mm which may reduce at pinch point to 1050mm	900mm - 1200mm

	Inclusive Design Housing Access principals	Wheelchair Accessible	Lifetime Homes	Part M
Doors	300mm to leading edge of doors. Potential for unobstructed space to reverse a wheelchair clear of the door swing.	Open beyond 90 degrees, at least 300mm to leading edge of door	300mm leading edge (pull side only)	
Turning space inside front door	1500mmX1500mm	1800mm x 1500mm		
Communal level entrance clear opening width	825mm with 300mm to leading edge of door.	800mm	800mm	750mm to 800mm
Dwelling doors				
Internal door clear opening width	900mm	775mm	750 - 900mm Dependent on direction and width of approach.	750mm to 800mm
Balcony level access	Level access Door 800mm or 825mm c.o.w depending on the width and direction of approach. with 300mm beside leading edge (pull side only). Be easy to open with limited dexterity/strength	Not sliding doors/preferably outward opening with 1100 min clear of door swing space outside.	800mm - 825mm with 300mm beside leading edge (pull side only).	

	Inclusive Design Housing Access principals	Wheelchair Accessible	Lifetime Homes	Part M
Corridor widths – in dwelling	900mm minimum 1400 preferred, to enable ease of manoeuvring.	900mm Straight with no turning required clear of all obstructions 1200mm Turning 90 degrees clear of all obstructions 1500mm Turning 180 degrees clear of all obstructions.	900mm may reduce to 750mm at 'pinch points' Door/corridor ratio same as Part M except a 1050 corridor requires 900mm door when approached at right angles.	900mm - 1200mm
Wheelchair storage, charging & transfer space	Provision for potential assisted wheelchair storage: 1400mm x 750mm would accommodate most power and manual chairs 1100mm x 700mm would accommodate many, with power point.	Adjacent to entrance 1100mm x 1700mm (access along the length of this side to enable transfer from wheelchair) space clear of circulation routes with charging point.		

	Inclusive Design Housing Access principals	Wheelchair Accessible	Lifetime Homes	Part M
<p>Mechanical means of moving between levels in the home.</p>	<p>Same as LTH with preference for knock out panel to be located in circulation space.</p>	<p>Lift for independent wheelchair use. Typical car size 1085x725 + approach width beyond 1200</p>	<p>900mm minimum stair width to enable instillation of a (seated) chair lift.</p> <p>Through the floor lift: Provide a knockout panel of 1000mm x 1500mm. Within dwelling without compromising the space i.e. if lift goes to bedroom it still functions as a single room.</p>	
<p>Bedroom/space at entry level</p>	<p>In family dwellings of two or more storeys an entry level room that could be reassigned as a single bedroom should be provided, without loss of amenities.</p>		<p>A single bedspace with 750mm to one side, capable of being screened, the room should remain functional. The use of kitchen dinner/dining space should be avoided.</p>	

	Inclusive Design Housing Access principals	Wheelchair Accessible	Lifetime Homes	Part M
Bedroom	Adequate manoeuvring space clear of typical furniture layout.		Main bedroom 750mm width to both sides and foot of a standard double bed. Other bedrooms 750mm clear width to one side of bed, 750mm circulation space to approach the window etc.	
Bathroom	Manoeuvring space of either 1500mm clear turning circle or 1400mm x 1700mm ellipse clear from finished floor level to Walls in bathrooms and toilets should be structurally capable of taking adaptations such as handrails	1000 min to approach bed and transfer – (both sides of double bed) Where there is only one bathroom a fully accessible and installed shower should be provided at the outset, with provision made for future installation of a bath. 1000 x 1000min level access shower activity area or 1700 x 700 bath 1500mm x 1500mm wheelchair manoeuvring space clear of all obstructions	Where a bath is provided, capped drainage for an accessible floor level shower should be located beneath it. Providing a clear manoeuvring zone for a wheelchair user.	

Inclusive Design Housing Access principals		Wheelchair Accessible	Lifetime Homes	Part M
Entrance level toilet	Yes, with shower drainage	1000min clearance (transfer space from centre of wc pan) 1100min clear of door swing to front of pan	1100mm minimum extending forward of front rim of WC pan. 400 - 500mm from centre of WC pan to adjacent wall. 1000mm from center of WC pan to the opposite wall. Shower zone (with drainage)	Door opens out When approached head on or oblique, clear space of 750mm in front of WC pan.
Second toilet		Yes in 4P+ units should have transfer space located in opposite place to bathroom		
Kitchen	May be combined with dining room but not living room, particularly in family housing. 1500 mm diameter turning circle,	1500mm diameter clear (of kitchen units and fixed objects) turning circle with additional room outside the zone to assist manoeuvring continuous along its length. Having the space standards to be fully wheelchair accessible but were the wheelchair user is not main user of kitchen there may need to be a compromise between wheelchair and ambulant layout.	1200mm between kitchen units and any fixed obstruction, maintained along its length.	

	Inclusive Design Housing Access principals	Wheelchair Accessible	Lifetime Homes	Part M
<p>Living rooms/ areas dining rooms</p>	<p>750mm circulation space to all areas.</p> <p>Living and kitchen dining should not be combined in larger units in living room, dining room and kitchen areas</p>	<p>Avoid doors entering in a corner, window positions that create spaces narrower than 3000mm.</p> <p>Circulation 1500mm diameter clear (of furniture) turning circle with additional room outside the zone to assist manoeuvring. circulation routes of 800mm.</p> <p>In smaller house holds (not family) a more open plan arrangement between kitchen and living may be considered</p>	<p>1500mm clear turning circle or an ellipse of 1400mm x 1700mm clear of furniture (coffee tables/side tables can be included within the zone), essential circulation i.e. to a window should be 750mm clear between items, in living room and dining room areas</p>	

Assessment Tool

Indicative room layouts

To scale turning circles and typical furniture layout for printing on acetate as a working tool if printed at A4.

