

Lifetime Homes Compliance - LCC

For all proposed residential development Developer's checklist

Date: 9th December 2015

Development: Plot 64, Newhall Campus

Schedule completed by: Pearson Architects

LTH criteria:

1: 'On plot' (non communal) parking

Where there is car parking within a dwelling's individual plot (or title), at least one space should be capable of enlargement to 3300mm minimum width. Scheme complies/ will comply?

There is no 'on plot' parking however, on road parking on the private road is available and one 3300mm space per property will be marked out in front of each residential property. The distance from the main entrance to these spaces will be 14m, due to the landscaping on this Listed site.

Communal or shared parking. Where this type of parking is provided, it should include 3300mm wide spaces.

Yes, on road parking on the private road is available and one 3300mm space per property will be marked out in front of each residential property. In addition to this all access routes to the building are over 1500mm wide, including between the existing gate posts.

2. Approach to dwelling from parking.

The distance from the car parking space to the dwelling entrance (or relevant block entrance/ lift core) should be kept to a minimum and be level or gently sloping. The distance from visitors parking to relevant entrances should be as short as practicable, and be level or gently sloping.

Yes, the distance from car parking spaces is kept to the absolute minimum we can achieve given the layout of the site, the boundary walls, front gardens and paths. As the buildings are Grade II listed, as too is the curtilage of the site. Therefore, no adjustments to this will be permitted however, the routes are no more than 14m with clear wide pavements of 1500mm to the door.

3. Approach to all entrances

The principle access route to all entrances needs to meet ADM 'level' or 'ramped' approach requirements. Distance from the car parking to the home to be kept to a minimum. Paths to be firm reasonably smooth & slip free, 900mm min. width within curtilage/ 1200mm min. for communal use.

The distance from the car park spaces has been kept as short as possible given the existing layout. The paths are clear and unobstructed, at 1500mm wide even at the gate post section. There are 2 steps to the main entrance and, due to Listed Building restrictions, no adjustments may be made to this.

4. Entrances should:

- 4a) be illuminated – provide diffused luminaries
- 4b) have level access over the threshold - Level threshold: max 15mm up-stand)
- 4c) have effective clear opening widths and leading edge to the door handle side

The pavements and paths are illuminated by private street lights and low energy LED diffused lighting bulkheads mounted on the building. There isn't level access to the main front door due to

the Listed Building status of these Villas. The doors have a clear opening width of over 900mm throughout.

Communal entrance doors at right angles to an access route less than 1500mm wide (1200mm min) (LTH/ADM) and a 825 mm min effective clear width

All circulation routes are 1000mm due to the space restrictions within the building and all doors have a clear opening width of 825mm (900mm frames). All doors have been re-furnished with DDA compliant handle sets and lock mechanisms.

All other dwelling and communal entrance doors, either straight on from access route or at right angles to one at least 1500mm wide & 800 mm min effective clear width* (more than ADM)

All doors have a clear opening width of 825mm as we are using the existing openings in the majority of instances. All doors have been re-furnished with DDA compliant handle sets and lock mechanisms.

4d) have adequate weather protection at main entrances: Individual dwellings = 900mm typical depth (600mm min). Communal dwellings = 1200mm typical depth (900mm min).

No canopies have been added to the building as this would negatively affect the front elevation of the listed building.

Width to exceed door set + any controls. Additional cover/ Scheme complies/ will comply? (State below yes/no/ n.a.)

No, no canopies will be permitted to the front elevation of the listed buildings as this would negatively affect the appearance of the buildings.

4e) have a level external landing (dims. clear of any door swings): Individual dwellings (LTH/ADM) = 1200x1200 min Communal dwellings = 1500 x 1500 min

As above, not possible due to the Listed Building status of these dwellings.

5a Communal stairs

Principal stairs should provide easy access (regardless of whether lift is provided). LTH / ADM requirements: 170mm max rise & 250mm max going, handrails 900mm above nosings & extend (level) 300mm beyond top and bottom step, visual contrast on nosings, no open risers). LTH additional requirements to ADM: All communal stairs within a block to achieve this specification - and regardless of whether or not a lift is provided.

These buildings benefit from grand staircases at 1200mm clear width with 250 treads and 180 risers- a little steeper than the approved documents but these stairs are an important component of the building's listed status. We have installed clear nosing to all these stairs. Handrails at 950mm above the nosing exists.

5b Communal Lifts

Where homes are reached by a lift, it should be fully accessible. Lifts also to meet other LTH/ ADM (including clear landings 1500mm x 1500mm) Minimum internal lift car size to be 1100mm x 1400mm. Scheme complies/ will comply? (State below yes/no/ n.a.)

There are no lifts in the building and due to the building's listed status we were not able to install one.

6. Internal doorways, hallways & landings

Movement should be as convenient to widest range of people. Generally narrower hallways & landings will need wider doorways in their side walls. Minimum widths below apply to every storey within a dwelling (ADM only relate to the entrance level).

Hallway/ corridor min widths: 900mm within dwelling /1200mm in communal area (may reduce to 750mm/1050mm at pinch point/s, but not opposite/ adjacent to doorways).

The communal circulation consists of two grand hallways with large principal entrance doors. The buildings' wings are narrower, resulting in 1000mm wide corridors to each apartment. All doors have a minimum opening width of 825mm.

7. Circulation Space.

There should be space for turning a wheelchair in dining areas and living rooms and basic circulation space for wheelchair users elsewhere.

Living & dining rooms/ areas capable of either:

- 1500mm diameter clear turning circle, or 1700mm x 1400mm turning ellipse.
- 750 clear width between items of furniture where needed for essential circulation.

Occasional items of furniture (e.g coffee/ side tables) can be shown on layout plans as being within or overlapping the turning zones. Kitchens (preferably at entrance level): clear width of 1200mm between unit fronts/ appliances (for entire length) and fixed obstruction opposite (e.g. fittings or walls). Main bedroom needs clear space around bed: 750mm wide to both sides and foot of a standard sized double bed. Other bedrooms: 750mm clear space to one side of the bed + 750mm at its foot, if access is needed e.g. to approach window (see Criterion 15). Layouts can show bedside cabinets within clear spaces beside beds.

This is possible in all living rooms and bedrooms. To avoid doubt, all bedrooms are drawn with 2000mm x 1500mm double beds and a 1200mm x 600mm wardrobe. Turning circles are achievable in the living rooms based upon the furniture layouts drawn: a large 'l'sofa, single sofa and dining table with chairs.

8. Entrance level living space:

Provide a living room/space at entrance level of every dwelling.

Half the apartments are on ground floor so therefore this is inherently possible in 50% of all the dwellings we provide.

9. Potential for entrance level bed-space.

In dwellings (2 or more storeys) with no permanent bedrooms on the entrance level, there should be space on the entrance level that could be used as a convenient bed- space (for someone temporarily unable to use the stairs – e.g. after a hip replacement)

Temporary bed space specification:

- (typically) a corner of a room – preferably the living room;
- big enough for a single bed + 750mm wide space to one side;
- capable of being screened (with a portable screen) from the rest of the room;
- electrical socket provided within the space;
- remaining living area to remain functional (although furniture layout may be compromised);
- avoid providing within a dining area – but if this option is done, ensure the dining use can continue or it's relocated elsewhere;

Half the apartments are on ground floor so therefore this is inherently possible in 50% of all the dwellings we provide.

10. WC & shower facilities

Entrance level WC & Shower drainage

Where an accessible, entrance level bathroom (Criterion 14) is not provided a wheelchair accessible WC at that level is needed and potential for a shower to be installed.

Small houses/ maisonettes (at least two storeys, but less than 3 bedrooms - or habitable rooms in addition to main living room and kitchen/ diner): a WC compartment to ADM will meet this criterion, but in addition should have a floor drain for a future accessible shower within the compartment.

All other dwellings (if no accessible bathroom at entrance level): a WC compartment (see figures 10a & 10b of the standards), should contain the following;

A WC with:

1. A centre line between 400mm – 500mm from an adjacent wall. A flush control located to the side of the cistern furthers away from the adjacent wall. An approach zone extending at least:

- 350mm from the WC's centre-line towards the adjacent wall,
- 1000mm from the WC's centre-line on the other side.
- 1100mm forward from the front rim of the WC
- 500mm back from the front rim of the WC for a width of 1000mm from the WC's centre-line. A basin on the wall adjacent to the WC or cistern should:
 - not project into the approach zone by more than 200mm,
 - have a clear approach zone of 1100mm (from any obstruction under it)

2. Floor drainage (unless provided elsewhere at entrance level) for an accessible floor level shower, located as far from the doorway as practicable and floor construction with shallow falls for drainage, or which allows easy installation of future laid to fall surface.

Note:

These layout requirements can be achieved in a variety of ways. 1450mm x 1900mm over-all compartment size will enable increased choice of fittings.

3. Outward opening door needed to meet Approved Document M (if it's the only accessible entrance level WC in the dwelling).

Half the apartments are on ground floor so 50% of the apartments will have bathrooms at this level. Therefore, separate ground floor shower rooms are not required.

11. WC and bathroom Walls

Walls in all bathrooms and WCs should be capable of firm fixing and support of adaptations such as handrails. Provide for adequate fixing and support for (future) grab rails onto walls at any point within 300mm and 1800mm from the floor.

The bathrooms walls are formed using 15mm marine plywood as opposed to plasterboard or similar. This allows for future adaptation of grab rails and additional supports as may be required. Many of the apartments have separate ensuite shower rooms which utilise large 1200 x 1800 shower trays, ideal for assisted bathing when used in conjunction with the necessary support rails.

12. Stairs and potential through-floor lift.

Stairs & lifts (within dwellings), hoists & bathroom (criteria 12- 14)

Design should incorporate:

- a) Potential for stair lift installation; and
- b) A suitable identified space for a through-the-floor lift from entrance level to a storey containing a main bedroom and a bathroom satisfying Criterion 14.

Potential route for through floor lift

This is needed if the entrance level does not contain all of the following:

- the living room/ space
- the kitchen
- a main (twin or double) bedroom, and
- a bathroom meeting Criterion 14.

The route identified:

- should enable potential access to any rooms listed above which are not at entrance level,
- may be from a living room/ space directly into a bedroom above, or
- may be from (or arrive in) circulation space. It will require:
 - a minimum 1000mm x 1500mm potential aperture, clear of services,
 - the potential approach to the lift being on one of the aperture's shorter sides,
 - a 'knock out' panel pre-formed within any concrete floor through which the route passes;
 - the design of other types of floors (wooden joists, 'I' beam or metal web floors) should take account of associated point loads to enable the creation of a void if required.
- space to exit and approach a lift within a bedroom (min requirement is to continue to function as a single bedroom),
- the dwelling to have at least one bedroom that remains functional as a double bedroom.

This is possible in the grand hallway spaces but subject to local authority listed building consent which would be contested as these are the most important internal spaces within these listed buildings. In pure functional terms, the floors are timber joists and there is the required space for a retrospective through floor platform lift.

Stairs

Stairs & associated areas should be adequate to enable installation of a seated stair lift without significant alteration or reinforcement. 900mm clear width across stairs needed (measured 450mm above pitch height).

The stairs are wide enough to accommodate a sit on stairlift however, as with the platform lift above, any such proposal would be met with opposition from the conservation officers due to the irreversible damage this would cause to the grandest internal spaces of these listed buildings.

13 Bedroom/ bathroom relationship and potential for fitting hoists

Structure above a main bedroom and bathroom ceilings should be capable of supporting ceiling hoists. Design should provide a reasonable route between this bedroom and bathroom.

The structure above ceilings of a main (twin or double) bedroom, and bathroom, should be capable of supporting (or adaptation to support) future installation of single point hoists above the bed, bath and WC. The bedroom & bathroom (meeting Criterion 14) should:

- be on the same storey level
- (unless at entrance level) have potential for access via the through floor lift (Criterion 12); be designed / located to provide a reasonable route between them, which should not pass through any living/ habitable room/ area.

Many of the apartments have shower rooms with large shower trays installed. The ceiling build up consists of 200mm joists at 400mm centres- more than adequate for fixing hoist tracks and other associated assisted movement / bathing equipment. The showrooms and bathrooms are all formed using marine ply to allow secure fixing of handrails, hoist rail down stands and other accessibility adaptations.

14 Bathrooms

An accessible bathroom, providing ease of access should be provided on the same storey as a main bedroom. An accessible bathroom, giving ease of access, should be provided:

- close to a main (double or twin) bedroom,
- at entrance level, or on a level with potential for access by a through floor lift (Criterion 12b)
- with an outward opening door - if bathroom contains the only accessible entrance level WC (ADM requirement)
- with the facilities listed (1-5) below.

Note: an Internal footprint of 2100mm x 2100mm increases flexibility and choice of layout, fittings etc.

1. A WC with:

- i) A centre line between 400mm – 500mm from an adjacent wall.
- ii) A flush control located to the side of the cistern furthest away from the adjacent wall.
- iii) An approach zone extending at least:

- 350mm from the WC's centre-line towards the adjacent wall,
- 1000mm from the WC's centre-line on the other side.
- 1100mm forward from the front rim of the WC 500mm back from the front rim of the WC for a width of 1000mm from the WC's centre-line.

2. A basin on the wall adjacent to the WC or cistern should not project into the approach zone by more than 200mm and have a clear approach zone of 1100mm (from any obstruction under it). A bath or accessible floor level shower bath to have a 1100mm x 700mm clear zone alongside (can overlap with approach zone to WC and/ or basin), or shower to have a clear 1500mm diameter, or 1700mm x 1400mm elliptical, clear manoeuvring zone.

NB. Where both a bath and accessible shower are provided from the outset, 1000mm x 1000mm min clear floor space is needed for showering.

Floor drainage for an accessible floor level shower (unless provided elsewhere in the dwelling), with:

- floor construction providing shallow falls to drainage, or simple laid-to-fall provision in the future;
 - drainage, which if capped for future use, may be located under a bath;
- If future bath removal for an accessible shower is provided for, ensure potential for a clear 1500mm diameter/1700mm x 1400mm elliptical manoeuvring zone.

The existing spacial constraints do mean we cannot achieve all of the above however, I can confirm the following:

- WC toilet centre lines are over 400mm from any adjacent wall.
- Concealed cisterns have air buttons furthest away from adjacent walls.
- We have achieved the approach zones to the WC's with the exception of the 1100mm from the front- the minimum we have is 900mm
- The sinks do not encroach into these approach zones
- Large shower trays are used as opposed to floors with a shallow falls and the drainage locations are flexible for future adaptation.
- If baths are removed for larger shower rooms (larger than the already generous showrooms that is) then the elliptical turning circle is achievable.

15. Glazing and window handle heights

Windows in principle living space should allow people to see out when seated. At least 1 opening light in each habitable room should be approachable and useable by a wide range of people including those with restricted movement and reach. Principle window in main living room/ space:

Principle window (or glazed door if in lieu):

Glazing to begin 800mm from floor or lower. Must be easy to open/ operate

Any full width transom/ cill within field of vision (normally 1700mm of floor)

At least 400mm in height away from any other transom/ balcony balustrade.

All habitable rooms:

Approach route to a window (i.e. at least one in each room).

Potential for 750mm wide route for wheelchair user. Does not apply to kitchen/ bathrooms with a single window beyond fittings/ units.

Handles/ controls to an opening light to this window

No higher than 1200mm from floor. Does apply to kitchen & bathrooms with a single window beyond fittings/ units.

All windows are sliding sash windows with decorative timber surrounds. These form an important component of the building's listed status. The window sills are between 800 & 850mm high and are over 2.5m high. Therefore, all rooms get good views and plenty of natural light whether the resident is in a seated or standing position.

The sash windows have been re-weighted and re-corded, allowing for the bottom sash to be lifted with minimal effort. No handles or window pulls are over 1200mm from the ground.

16. Location of service controls

Should be within a band of 450 to 1200mm from the floor, and at least 300mm from any internal room corner.

All service & ventilation controls: within a band of 450 to 1200mm from the floor, and at least 300mm from any internal room corner (if needed to be operated or read on a frequent basis, or in an emergency; see examples listed in the standard).

All plug sockets are 500mm from the finished floor level and positioned more than 300mm from any internal room corner. The same is applicable for ventilation controls.

All high level switches are positioned 900mm from the finished floor level (light switches, appliance isolators, alarm systems etc.) to ensure they can be easily operated by wheelchair users.