



London Borough of Ealing

Design guide for affordable Housing

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Introduction

This document is intended to guide and assist in the design and construction of new affordable council housing for Ealing Council.

Use of this document

It is divided into two sections – part 1 sets out the general principles of design, and Part 2 the Council's specific requirements.

This guide aims to bring together best practice in housing design with the aspirations, policies and strategies of Ealing Council and its residents.

It is not intended to be exhaustive in scope or prescriptive, rather it is intended to convey to the designer the Council's broader aims, wishes and priorities, and to guide and inform rather than restrict the decisions the designer will have to make in developing a housing scheme for the Council.

The Council is keen to explore new, innovative or challenging design ideas and concepts, and it is not the intention of the guide to suppress these, rather it sets out the Council's base-line position so the designer knows when they are departing from this.

For the design of a specific scheme, this document should be read together with the Council's design brief for that scheme, and where there are differences between the two, the latter document will take precedence.

This document does not seek to replicate the statutory or planning requirements for development, which must be read alongside this document.

Part 1 – General principles of design

Ealing Council wishes to construct housing that their occupiers are proud to call “home

In particular housing that:

- Has been well designed;
- Is safe and secure;
- Has good space standards with adequate storage;
- Makes the best use of natural daylight;
- Is warm and comfortable with low energy costs;
- Is quiet;
- Remains suitable for, or can be reasonably adapted as necessary for residents as their age and their circumstances change

In addition, the Council also requires that the new housing:

- Is in harmony with its immediate neighbourhood;
- Is financially sustainable;
- Is constructed using process that minimise waste and the production of Co2;
- Is durable, and built from materials that have low whole-life maintenance costs;
- Provides adequate space for children to play safely;
- Includes space for waste and recycling;
- Makes adequate provision for car parking and cycle storage

The Council recognises that there is inherent conflict in attaining some or all of these objectives, that they are not all of equal merit or value, and that there is not a universal solution and that many are site dependant. The aim of this guide is to assist the designer in finding the compromise, or “best fit” that delivers the most appropriate design for the individual situation.

Exploring these requirements in detail:

Has been well designed

The design should incorporate, insofar as is possible, the following features:

- Rooms should be a regular shape to allow comfortable grouping or arrangement of furniture;
- Internal bathrooms should be avoided (although a internal second WC is acceptable);
- A shower is preferable to a bath, but both are required for homes with 4 or more bedrooms;

- Homes with 3 or more bedrooms shall have a second WC on the same level and the living accommodation;
- In general, separate kitchens are preferable to open plan, and are required for homes with 4 or more bedrooms;
- Separate dining rooms are preferable, but where combined dining / living rooms, or kitchen / dining rooms are used, one use should be possible without compromising on the other;

Is safe and secure

The design of the housing and its neighbourhood should foster a sense of safety and security in its occupants. In particular the design should:

- Maximise the overlooking and natural surveillance to avoid secluded areas,
- Make clear distinction between public and private areas;
- Include good external lighting.

Has good space standards and adequate storage

The Council wishes to build houses that are as large as is reasonably possible, and the sizes given in the London Plan should be treated as the minimum to be achieved.

There should be sufficient storage for the usual range of household equipment, including over-size items like vacuum cleaners, brooms etc, and near the main entrance door, space for buggies, coats and outdoor shoes;

For those homes that have a secure garden area, the design should include a sturdy shed or storage room for cycles, garden equipment etc.

Makes the best use of natural daylight

The housing should have generous glazing, and be oriented so as to make the best use of natural daylight, and or any attractive outlooks.

Is warm and comfortable with low energy costs

The building shall have the best possible thermal standards, and the most efficient heating and hot water, and ventilation appliances so as to reduce the energy costs to residents.

Is quiet

Homes shall be laid out to minimise noise transmission within, and between dwellings. In particular careful stacking or arrangement is required between noisy and quiet rooms, and careful placement of windows to reduce reflected noises

Where the building is affected by external noise, for example traffic, aircraft or train noise, special measures shall be included so as to reduce the transmission of this into the interior of the dwelling.

Remains suitable for, or can be reasonably adapted as necessary for residents as their age and their circumstances change

The design shall take into account the changing needs of resident as they progress through life, so that the building remains, or can be made suitable for them as their needs change.

Is in harmony with its immediate neighbourhood

As a general principle the new housing should be designed to sit well within its neighbourhood in terms of proportion, scale, form, and appearance. However this does not necessarily mean simply copying the adjacent buildings - good design is still required. Also, this requirement should not necessarily prevent the development of an innovative or challenging design – the Council is willing to explore alternatives.

Is financially sustainable

The new housing must be financially sustainable over the immediate and longer term. This means:

- That the costs of construction must be able to be funded from the rental income;
- That there are no excessive or unusual costs of long-term maintenance of the building;
- That the design of the building is adaptable over time.

Is constructed using process that minimise waste and the production of Co2

The construction process, and the materials used shall be selected so as to minimise wastage and offcuts, and to have the lowest possible embodied Co2.

Is durable, and built from materials that have low whole-life maintenance costs

The houses shall be constructed of durable materials that have the minimum of maintenance requirements, and do not require specialist or unusual maintenance techniques.

The design shall allow for easy access to those parts that are likely to require future maintenance, for example service ducts etc, and shall avoid areas that are accessible only with complicated scaffolding.

Provides adequate space for children to play safely

Children shall have adequate outside play space, either in a private garden, or a communal space. A communal play space shall be discrete from the public areas, and overlooked by the adjacent dwellings, and contain suitable play equipment.

Includes space for waste and recycling

The Council wishes to maximise the amount of waste that is recycled, and minimise the amount that goes for landfill or incineration.

Therefore the design shall include space for a refuse bin (or Eurobin) for multiple dwellings) and within each dwelling in a convenient locations, dedicated space for recycling boxes.

Makes adequate provision for car parking and cycle storage

The Council recognises that safe and adequate car parking is essential to many residents, and the design shall include provision for this.

The Council also wishes to encourage greater use of cycles as an alternative to the car, and therefore requires secure and private cycle storage for each dwelling, for one cycle one and two bedroom homes, and for not less than two cycles for three bedroom or larger homes.

Part 2 – Specific design requirements

The following requirements are those that the Council expects to see reflected in the design. Where the requirements are silent on a particular matter, or where there is a conflict between requirements the designer should seek guidance from the Council.

Section 1 – Standards and compliance

All products, materials, and workmanship included in or specified by the design are to comply with current British Standards or the equivalent European CE or international ISO standards. Design, material specification and workmanship are to comply with the NHBC Standards current at the time of agreement of basis of Contract.

Notwithstanding the requirements set out below, the Council is willing to explore alternative and challenging designs, and unusual or innovative methods of construction, however the designer must set out a sufficiently detailed case for such designs or methods, and only proceed with these with the Council's approval.

Low Maintenance Cost Requirements and durability

The building shall be designed, and construction methods selected to ensure a life expectancy of not less than 60 years.

The design, materials, and construction methods, minimise maintenance costs without detracting from architectural attractiveness or utility of the buildings. The designer shall therefore select established and proven materials and use robust detailing, which are known to enhance the life of building elements and reduce maintenance costs in their relevant situations.

The design shall allow for easy access to parts of the structure and components that are likely to require regular maintenance.

External decorations shall be sufficient to last a minimum of 8 years before re-decoration is necessary.

Materials shall be of a standard type and size and readily available, wherever possible.

Compliance with standards and requirements

The design shall, insofar as is reasonably possible, comply with the following standards and requirements:

Standard	Measure or requirement
London Housing Design Guide	Compliant
Lifetime Homes	Maximum points score against the Lifetime Homes criterion with the Code for Sustainable Homes assessment is required
Secured by Design	Compliant with the requirements of Section 2 – Physical Security from “Secured by Design – New Homes”.
Building for Life	14 out of 20 positive responses when assessed against the CABI Building for Life Publication “Delivering Great Places to Live – Twenty Questions You Need to Answer – as the Touchstone of Reasonableness”.
The Greater London Authority’s New Funding Design and Sustainability Standards	Compliant
Housing Health & Safety Rating System (HHSRS)	Free from Category 1 and 2 hazards
Code for Sustainable Homes	Level 4 certified, achieved by a “fabric first” approach, ie improvements to the performance of the building structure and services in preference to a reliance on renewable technologies.
Habinteg Wheelchair Design Guide	Wheelchair homes compliant with.
The Building Regulations	Compliant
Fire Regulations & Means of Escape	Compliant
NHBC (or similar approved) Building Warranty standards	Compliant
Ealing Council’s adopted planning policies	Compliant

Sustainability

All dwellings shall be designed and constructed in a sustainable manner using products and processes that reduce environmental impact, better adapt to climate change, with lower running costs, and incorporating features that enhance the health and wellbeing of developers, constructors, occupiers and the wider community.

2 Outdoor spaces, gardens & balconies

Gardens or balconies shall be provided to all homes. Where there are site constraints, shared outdoor space may be provided.

Balconies should be big enough to allow residents to grow plants, sit out and for children to play safely.

Private gardens shall be sown with grassed. Public spaces shall contain a mixture of durable planting, grass and hard landscaping.

Paths should be slip resistant, smooth and in communal gardens, wide enough to let people pass comfortably.

External boundaries shall be fenced with close boarded treated timber fencing (height to meet Secured by Design Requirements), with concrete posts with concrete gravel boards.

Gardens for wheelchair homes shall be purpose designed, with wider paths and raised planting beds.

Outdoor lighting shall be provided to illuminate the entire garden, including boundaries, to deter intruders.

Houses with private gardens shall have a well-constructed shed of a size large enough to fit at least 2 bicycles, and a rotary clothes dryer and path leading to it.

For a development of flats with a potential total occupancy of ten children or more, provision for appropriate play space and equipment shall be made.

Approaches to housing should be barrier free and level for access for people with physical or sensory disabilities. At roadways dropped kerbs should be provided for crossings.

At entrances to the buildings shall be level, and there shall be good lighting, and a canopy or porch for shelter. Entrances to houses and blocks should be sited so they are overlooked to allow safe and secure access.

External Lighting

Good exterior lighting is required and shall be provided to all public areas and areas in need of supervision play spaces, car parking areas etc. Lights should be strong, durable and out of reach for possible vandals but should be accessible for maintenance. Lighting columns should not be positioned in close proximity to bedroom windows thus causing nuisance.

Lighting is to be wired to landlord's meter

Parking spaces

The design should allow for one off-street parking space per dwelling. Where there is more than one, the spaces shall be marked out so as to clearly denote their extent. Where there are ten or more, one in ten shall be dedicated for disabled use.

Parking areas shall include measures to prevent unauthorized parking, if necessary with fob-controlled access.

Parking areas shall be well illuminated, and wherever possible overlooked so as to deter car crime.

Cycle storage

Except where each dwelling has individual cycle storage provision, communal cycle stores shall be provided.

Cycle stores shall be designed with reference to the Cambridge Cycle Parking Guide.

3 – Entrance and internal communal areas

Door entry system

An access core serving 4 or more dwellings shall be provided with a keyless “fob” type electric door release and entry phone system, all meeting Secured by Design Requirements. The Council’s express approval is required for the type of door entry system to be fitted

Communal Letter boxes

Communal letterboxes shall be robust and lockable, “through the wall” type, and where the development includes a wheel chair unit, accessible to wheelchair users.

Communal stairs and halls

Communal halls and stairs must be kept to a minimum, but shall be of a size and layout that allows reasonable access for people and large items of furniture, or the manoeuvring of buggies. They shall be well lit and ventilated to ensure that condensation problems are avoided.

A lockable cleaner’s cupboard, with a power and water supply and a floor gully shall be provided in common areas serving 4 or more units, but other storage cupboards are not acceptable

Walls to be hardwall plaster with satin or eggshell paint finish.

Flooring shall be welded non-slip sheet vinyl, with aluminium nosings or PVC insets in

the stair treads (nosing to be alternate contrast colour to comply with AD Part M)
A flush fitting mat shall be provided inside the street entrance door.

All internal communal lighting should be wired to a separate landlord's supply meter.

Heating to common area is should be provided only where necessary to achieve Building Regulations.

Roof access hatches in communal areas to be lockable.

Refuse & recycling storage and arrangements

Storage facilities for waste and recycling containers must be provided in accordance with local authority requirements and the Councils waste service should be consulted in the design of these.

The bin storage area or enclosure must be of sufficient size to allow manoeuvring of bins, robust, conveniently accessible to all dwellings, well ventilated, covered and well lit with PIR operated lights.

A water supply is required in each communal bin storage area.

4 Dwellings

Sale & shared-ownership homes

The requirements below are intended for the houses for rent to be retained by the Council. Those units intended for market or shared ownership sale will have enhancements, which may include, but are not limited to, the provision of kitchen white goods and appliances, floor coverings, and an on-suite shower / bathroom. Specific details will be provided for each scheme where these requirements apply.

Space and layout generally

The minimum floor areas of the dwellings and rooms shall be as set out in the London Housing Guide except where the design is a wheelchair unit, in which case the requirements are as set out in the Habinteg Wheelchair Housing Design Guide.

The plans must demonstrate that the proportions and layout of the rooms will accommodate the required furniture, and provide flexibility by allowing for alternative furniture arrangements in living rooms and by accommodating double or twin beds in at least one double bedroom.

The plans must also show the positions of radiators and power outlets.

Overheating

Development proposals must demonstrate how the design of dwellings will avoid overheating during summer months without reliance on energy intensive mechanical

cooling systems.

Storage and Utility

Provision shall be made for the storage of brooms, ironing boards and the like. This may be accommodated within a tall kitchen cupboard, forming part of the kitchen layout, or if there is insufficient space in the kitchen, within a dedicated cupboard in the hallway, below stairs, or similar.

All 2-bedroom or larger units, shall have an airing cupboard providing not less than 0.5m² easily accessible and usable storage space.

Hat and coat rail shall be provided a suitable location near dwelling front door.

Study and Work

2-bedroom and larger units shall have adequate space and services to be able to work from home. The Code for Sustainable Homes guidance on working from home is recommended as a reference.

Kitchens

As a general principle internal kitchen, ie those without an external wall and window are not acceptable, but may be considered if no better options are available.

Dwellings with three or more bedrooms must have two living spaces, for example a living room and a kitchen-dining room. Both rooms must have external windows. If a kitchen is adjacent to the living room, the internal partition between the rooms must not be load-bearing, to allow for reconfiguration as an open plan arrangement. Studies will not be considered as second living spaces.

Kitchen units shall be from a manufacturer approved by the Council, and shall have as minimum metal drawer boxes, 180 degree hinges, and 15mm thick backs to the units.

All kitchens shall have provision for a fridge, free standing cooker and washing machine. 2-bedroom dwellings and larger shall have in addition provision for a dish washer, and where practical, 1-bedroom units shall have a single base unit that may be removed at the resident's preference for a dish washer.

Wall tiling is required in 3 courses above the worktop level, and in appliance spaces.

Flooring shall be a non-slip vinyl with welded joints.

Bathrooms and WCs

Dwellings intended for an occupancy of five or more people must provide a minimum of one bathroom with WC and one additional cloakroom WC at the entrance level.

Bathrooms shall be designed to enable sufficient wall space for the hanging of towels and floor space for the storage of dirty linen, without affecting the efficient use of the bathroom appliances.

In family houses there should be enough space to bath and dry two infants.

Taps generally shall be lever operated quarter turn types

The shower shall be thermostatically controlled

The handbasin shall be pedestal mounted, except for the cloakroom handbasin which may be wall mounted.

Half ceiling height wall tiling is required in the bathrooms, extended to full height around the perimeter of the bath. In separate WCs, at least 2 courses over basin to window sill and reveals.

The ground floor toilet may be sized and plumbed if necessary to take a washing machine, together with associated electrical wiring, subject to meeting accessibility requirements.

5 – Building structure & general design considerations

Future proofing

The design shall, in so far as is possible, make provision for future remodelling of the dwelling. In particular, upper floor and roof loads should be transferred to the perimeter wall in preference to load bearing partitions, and the services etc should be routed away from the centre of the building.

Floor to Ceiling Heights

Except in the case of a room in the roof, the minimum floor to ceiling height in habitable rooms is 2.5m between finished floor level and finished ceiling level

Daylight and Sunlight

Glazing to all habitable rooms must be not less than 20% of the internal floor area of the room.

All homes must provide for direct sunlight to enter at least one habitable room for part of the day. Living areas and kitchen dining spaces must preferably receive direct

Fenestration

The Council's preference is for aluminium / timber composite windows and doors, Rational or similar, except for communal doors which should be steel composite.

Noise

The layout of adjacent dwellings and rooms therein, vertically and horizontally, shall be such to minimise noise transmission.

Soil stacks should not pass through habitable rooms, but where this is unavoidable, they should be insulated so as to mitigate noise nuisance.

Mechanical plant should not be installed on party walls

6 - Mechanical services

Heating & hot water

Space heating and hot water is to be provided by gas fired 'wet' radiator system, either with a factory insulated hot water cylinder combi-boiler. The Council's preference is for appliances manufactured by Worcester-Bosch Ltd.

Please note that under no circumstances will the Council accept a heating and hot water system that incorporates a concealed flue.

TV

Individual houses shall have a TV aerial, and cabling for a satellite dish.

Blocks of flats shall have an IRS aerial capable of receiving terrestrial TV and 2 satellite signals

Ventilation

A whole-house heat recovery is required for each dwelling, extracting from the wet rooms and providing to the living spaces. The extract units shall be positioned so as to allow easy access for occupants to clean the filters.