

Standards and Quality in Development: A Good Practice Guide. 2nd Edition National Housing Federation (2008)

Summary Note

The Guide reflects the standards that were introduced at the time of its publication in 2008 and the importance of careful attention to design quality throughout the design process. The standards introduced at the time include the requirement for D&A Statement, the Building for Life 20 questions, the Housing Corporation's Design and Quality Standards, the Code for Sustainable Homes and the London Housing Federation's Higher density housing for families: a design and specification guide (2004).

(Foreword, CABE, pvi) The difference between good and bad quality design is not about spending more money but is about dedicating more time to arriving at the best solution. Good building must be durable, functional and pleasurable. Functionality is an essential base for a designer to exercise his/her talents to make truly delightful homes. People must be at the centre of design. A good home is more than a building but a building that functions well for the household will let them make the best home they can. The quality of the immediate surroundings and the relationship between houses that support a neighbourhood are just as important.

Part A (p2-4) offers guidance on the knowledge and skills needed by staff responsible for delivering successful schemes, to enable them to effectively manage the project team.

➔ Not relevant to LPA

Part B (p.6-38) is designed to help maximise the chances of success, by ensuring that the design process is as well-managed as possible.

- ➔ May be relevant at pre-app stage. Parts that could be relevant include:
- Section 4 Initial brief: the client's requirements (p23)
 - Section 5 Appraising the scheme context and the site (p26)
 - Section 6 Design principles and sketch options (p29)

Part C considers the external environment and provides explanations on the urban design issues addressed in Building for Life, the Urban Design Compendium, the Manual for Streets and the companion design guide to PPS3

This Guide assumes the residential schemes are fewer than 500 units where master planning is limited or unnecessary. The structure follows the Better Places to Live by Design: A Companion Guide to PPG3 more closely than that of the Urban Design Compendium. That means less attention is given to the issues of creating a large-scale urban structure, starting instead from the need to create clear site structure. The difference lies on the degree and emphasis of the issues considered and their order, rather than of scope. A larger scheme should refer to Urban Design Compendium for a more appropriate order in which design issues should be addressed.

Section 2 Location and setting (p44)

setting and context → should exploit any existing buildings, landscape or topography, take into account the surrounding areas in terms of scale and character, reinforce locally distinctive patterns of development, landscape and culture, utilise local landmark

Access to local facilities → within 1km of local shops, phonebox, primary school, health facility and a park or open space, within 0.5km of a bus or train route (existing/planned), with access to secondary schools, cultural and entertainment facilities.

Section 3 Creating a movement framework (p46)/ Standards (p56)

External environment is often seen by providers as an easier target for cost savings as it is harder to demonstrate a link between decisions made at design stage and the creation of a bleak environment.

3.1 Creating connections (p46) → streets layout tips and illustrations from Urban Design Compendium and Better Places to Live by Design Creating connections

3.2 Streets and traffic (p48) → road design and layout places the needs of pedestrians and cyclists before those of the car -- tips and illustration from Manual for Streets, Streets for People, Better Places to Live by Design

3.3 Walking and Cycling (p54) → Pedestrian and cycle friendly streets measured on the 5C's principles: connections, conveniences, convivial, comfortable, conspicuousness

3.4 public transport (p55) → Densities of at least 40 dwellings/ 80 people per hectare within a 400m radius of bus stops help to make bus routes more viable. Higher densities should be provided close to the bus stop. Tips from Better Places to Live by Design

3.5 Utilities infrastructure (p56) → easy to repairs/replacement with minimal disruption to the residents

Section 4 Housing Mix and neighbourhood (p59)

4.1 Creating mixed communities (p59) → definition of mixed communities from Better Places to Live by Design

Section 5 Urban Form (p62)/p67

5.1 Structure and legibility (p62) → creating a hierarchy of spaces, right urban structure, gateway

5.2 Density (p63) → advantages of having a density higher than the normal suburban 25dph: improved local services viability, reduced average dwelling land acquisition cost, reduced car usage and parking

5.3 Landmarks, vistas and focal points (p64) → clear view into the distance to help people orientate themselves

5.4 Blocks (p65) → the 'block' is not the building or buildings, but an area of land that is surrounded by streets, paths or natural boundaries such as a stream (Example from Manual for

Streets showing variations on the block structure). Different types of perimeter blocks should be used on larger scheme as they offer different feel and character.

5.5 Building size and scale (p67) → emphasises the hierarchy of different spaces, e.g. taller buildings can act as a focal point

Section 6 Layout and form (p70)/p81

6.1 Active frontage (p70) → Urban design Compendium

6.2 Designing for corners (p70) → key design issues, tips and illustrations from Better Places to live by Design

6.3 Enclosure and street widths (p71) → people are drawn to areas that have a strong sense of enclosure and place. Tips from Better Places to live by Design

6.4 Setbacks (p72) → the extent to which the building is set back from the rear of the pavement. Refer to Better Places to live by Design

6.5 Solar orientation (p73) → microclimate of a site is built up from the direction and strength of locally prevailing winds; the altitude of the site and its aspect (e.g. orientation with respect to the sun, wind effects, prevalence of overshadowing). These affect the comfort of residents when inside as well as when they are outdoors. A balance will therefore be needed.

6.6 Public and shared/communal space (p73) → spaces should only be provided to meet a clearly-identified purpose. Space that has no clear function is known in the trade as SLOAP – Space Left Over After Planning.

6.7 Private space (p74) → gardens provide an important amenity to the residents and should allow a variety of activities, such as sitting out space an area to air clothes, cultivation, storage etc. Gardens must be accessible to residents and visitors, and reasonably secure from intruders. Orientation and overshadowing are important considerations for garden areas. (p.74)

Storage must be provided for household items that are large, that tend to be dirty, or that are for external tasks only. Common examples are gardening tools, grass cutters, bikes, car tools and so on.

6.8 Privacy and safety (p75) → tips from Better Places to Live by Design

6.9 Accommodating parking/parking and servicing (p77) → car parking arrangements can have a fundamental effect on the scheme layout and the quality of the resulting built environment. Illustrations from Better Places to Live by Design. A successful parking strategy depends on careful detailing, landscaping and lighting. *Car Parking: What Works Where* is a very useful tool.

6.10 Footpaths and access ways (p81) → reflect the 'desire lines'

Section 7 Space around the home (p92)

7.1 Density and space (p92) → Traditional terraced housing at a density of 50-80dph (approaching the definition of 'high density' of 80dph)

7.2 Flexibility, adaptability and inclusiveness (p92) →

Flexibility means that if a room or space is divided in two, both of the new rooms must be large enough to accommodate the furniture needed with the associated access, activity and passing zones, daylight, etc.

Adaptability refers to the ease with which dwellings can be converted into other uses.

Inclusiveness is an aspect of flexibility – it refers to the internal size and layout of dwellings being sufficiently flexible to accommodate relatively minor internal changes that can be of great benefit to the residents.

Lifetime Homes Standards provide a good practice list of design requirements which enhance the likelihood that residents can remain in their homes if their ability is reduced.

This Guide incorporates Lifetime Homes criteria as Essential requirements.

Section 8 Detailing the place (p94)/ p101

8.1 Building elements (p94) → are elevations, corner treatments, roofline and structure, doors, windows, porches, flues and ventilation, gutters, pipes and other rainwater details, balconies, garage doors end entrances, ironmongery and decorative features. Flashings, materials. The perception of whether the building or streetscape is of high-quality or poor quality is heavily influenced by the design of the individual building elements, and their relationship to one another.

Estate agents' folklore says that 90% of a housebuyer's mind is made up about whether to buy a property they are viewing by the time they ring the front doorbell.

8.2 Public realm elements/ landscaping (hard and soft) (p96) → are planting (trees, flowers, grass and other planting), carriageways, footways and floorscape, cycleways, kerbs, steps and ramps, fences, walls, hedges and gates, inspection boxes and covers, tree grilles, street furniture (street signage, seats, bollards, railings), lighting, public art. The street needs sufficient public realm elements to allow it to function properly, but the designers should take pains to avoid undue clutter.

Hard landscape design may be used for many reasons such as creating links between buildings, enclose space, create a theme within a development, define private areas, give security to private areas, cater for pedestrian or vehicular movement, etc.

Tips from Better places to live by design

8.3 Interface elements (p99) are steps, walls, hedges, fences and gates, front gardens, hedges, doors, windows, bin storage, cycle storage, external lighting, meter boxes, service entries, inspection boxes, storage for waste recycling, cool storage for home deliveries, clothes drying space.

Tips from Better places to live by design and Urban Design Compendium

Part D Shared and Communal Areas (p107)/p108 recognises the importance of carefully designing and managing communal areas. It covers access controls, lifts, stairs, shared circulation areas and facilities, waste disposal and recycling, post and deliveries in blocks of flats.

Part E Internal Environment (p113) contains tables that set out the amount of furniture and storage space required by households of different sizes. It also contains illustrations of the furniture sizes, passing zones and activity zones that are required, as well as a number of illustrations of possible room layouts that accommodate the furniture and zones. This section reflects the imminent requirement to meet Lifetime Homes criteria.

This part proposes a series of minimum sizes for: (p114-171)

- Essential items for furniture and kitchen and bathroom fixtures and fittings;
- The space generated by their use
- The areas needed for storage of general household items
- Circulation and access zones
- The main services and sound insulation levels required in all social housing schemes.

Part C & E (External and Internal environment) contain standards on accessibility and inclusive design. These are embedded in these parts as they need to be considered by the design team from the outset.

Part F highlights the importance of lifecycle costing, and costs in use for the resident.

Part G contains some guidance on sensible approaches to obtaining Level 3 and 4 of CfH and a summary of the Code's Technical Guidance. As the optimum solutions are highly site-specific, no specific design and specification solutions for meeting the Code level were included.

The standards make no direct comment on the quality of the finishes as these are a matter of choice depending upon the market at which the housing is aimed.

Most of the standards are identified as 'essential' items which should be achieved to ensure the quality of a development and nearly all fall within the parameters of the Housing Corporation's Design and Quality Standards. There are a number of recommended standards that go beyond Housing Corporation requirements but which will add value to a development if incorporated.

D&A Statement should demonstrate how the design reflects local plan policies and recommended good practice (such as BfL questions). It should demonstrate how the proposed designs respond to the policy context and the scheme context.

Establishing site capacity isn't scheme design. Establishing site capacity is usually done by asking a designer to produce an initial sketch scheme for the site. This is dangerous, as once any design is produced it remains largely set in stone with future design development simply adding to the detail rather than re-evaluating whether the fundamentals of the design maximise the opportunities of the site.

For the development to be attractive to its residents and a welcome addition to the neighbourhood, the design of the scheme must complement the built environment that surrounds the site.

Design principles should be agreed by the provider before any drawings are produced. If only one outline design is prepared, amendments tend to be minor rather than fundamental, even if a radically different design solution would in fact be preferable.

Part C – External Environment

Flexibility, adaptability and inclusiveness (p.92)

The choice of plants and trees, their grouping and growing conditions, and whether or not they thrive, can have an enormous impact upon the short- and long-term appearance of a development. It therefore affects resident satisfaction and maintenance costs. The choice of planting takes account of long-term costs as well as procurement costs

Internal Environment – P114

Inclusive design – as emphasised in the Design management process Part, standards are best achieved if they are integrated into the design from concept stage onwards.

The proposals set out in this book update those in the first edition which were largely based on details contained in the BRE's Housing Design Handbook : Energy and internal Layout which itself draws on the information set out in Space in the Home. The BRE publications remain the most authoritative and relevant guidance on the internal environment of dwellings currently available. This edition reflects more recent significant publication, in particular Housing Quality Indicator v4 and Housing Space Standards (GLA, 2006), and High-density housing for families: a design and specification guide (London Housing Federation, 2004)

Functionality standards and minimum dwelling areas

When setting space standards, there is always a tension between robustness and ease of use. Robust space standards are driven by issues of functionality. However, whether a certain floor area of Xm² meets these requirements depends upon a number of factors such as the room shape and the position of doors and windows, radiators, etc. It is therefore inappropriate to specify that a floor area of Xm² will be sufficient space for a particular room/area. It may be for some rooms of rectangular shape with their door, window, and radiator positions, but not for other rooms with different shapes and layouts. **Room sizes are therefore less robust than functionality standards.**

Robustness is further weakened if one moves to minimum areas for entire dwellings. A lot of the Ym² might be circulations space, bathrooms and shower rooms leaving the kitchen, living areas and bedrooms too cramped.

Indicative Minimum Dwelling Areas (IMDA) – are simply a risk-based approach to offering designers help when plotting schemes to assess site capacity, to significantly reduce the probability that they discover at RIBA Stage D that they are unable to comply with the essential requirements. Of themselves IMDAs have no status. Dwellings with these IMDAs are likely to be able to achieve the specific essential requirements of this Guide only if they:

Are rectangular in plan

Have a footprint ratio of 1:<2 (i.e. are less than twice as deep as they are wide, or less than twice as wide as they are deep);

Maximise the habitable areas within the dwelling, i.e. no en-suite bathrooms or shower rooms, efficient internal circulation areas.

If a scheme is likely to contain a significant proportion of units that do not conform to the description set out above, providers and designers should use higher figures when ascertaining site capacity.

GIA(m ²)	Flats						2 storey houses					3 storey houses			
	1b1p	2b2p	2b3p	2b4p	3b5p	4b6p	2b4p	3b5p	4b6p	4b7p	5b7p	3b5p	4b6p	4b7p	5b7p
NHF 2008 (good practice standards)		50	61	70	86	98	82	96	108	117	120	102	114	123	126
English Partnership (minimum)		51	66	77	93	106	77	93	106			93	106		
HQI (mean)	33	48	62	71	80	90		84	98				103	112	
GLA 2006 (Safety-net standards)	37	44	57	67	81	92				105					
Parker Morris incl. storage (mean)	32	45	60	73	82	89	79	89	97			98	102		
Dublin City Development Plan 2005-2011 (minimum)		55	65	85	100										
Germany	48	60	70	88	100	110									

(Space Standards p171)

IMDAs refer to GIA defined by RICSs (p169) but excluding areas on plan with a floor-ceiling height of less than 1.5m.

(p.118) $30\text{m}^2 + 10\text{m}^2$ per person + 10m^2 per staircase + 5m^2 for each additional WC/shower room/ bathroom. Warning: this rule of thumb tends to understate the IMDA for two-storey houses by up to 5m^2		
Example		
2b4p flat	$30\text{m}^2 + 10\text{m}^2 \times 4 = 70\text{m}^2$	
3b5p flat	$30\text{m}^2 + 10\text{m}^2 \times 5 + 5\text{m}^2 = 85\text{m}^2$	
2b4pH	$30\text{m}^2 + 10\text{m}^2 \times 4 + 10\text{m}^2$ (staircase) = 80m^2	IMDA is 82m^2
4b7pH (2 storey)	$30\text{m}^2 + 10\text{m}^2 \times 7 + 10\text{m}^2$ per staircase + 5m^2 for additional WC = 115m^2	IMDA is 117m^2
4b7pH (3 storey)	$30\text{m}^2 + 10\text{m}^2 \times 7 + 10\text{m}^2$ (staircase) $\times 2 + 5\text{m}^2$ for additional WC = 125m^2	IMDA is 123m^2

Sound Insulation p160

Whilst all construction must comply with part E of the Building Regs, practical experience is that poor design or workmanship and inadequate knowledge about noise insulation techniques, can lead to instances where the Building Regs noise reduction standards are not achieved. Rather than simply wait to find out at the time of conducting sound tests, landlords should seek expert confirmation that the designs that the architect or contractor offers will comply with the published Robust Details. This approach should again help to promote prevention rather than retrospective cures. The standard have been set lower than the first edition and three credits under the CfH.

part f - costs in use can be considered from 3 perspectives – cost to the natural environment (directly addressed by CfH), cost to landlord/owner, cost to the resident. This Guide CONSIDERS that balance between the initial cost of a component and its lifecycle cost.(p173)

Lifecycle costing tool (free) <http://blplcc.co.uk/mms/register.asp>

Construction Durability Database - £499 + VAT per licence p/a

Bathtub model of component failure

Phase 1 – Burn in failure/ Phase 2 Random failure/ Phase 3 Ageing failure

<http://calculator.bcis.co.uk/> Building Cost Information Service

Final Code certification

Part H Accessibility and Inclusive Design (p.227)

Lifetime Neighbourhoods: A National Strategy for Housing in an Ageing Society