

# Planning design Guide

New build housing schemes

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## Contents

<b>Introduction to the guide</b>	<b>4</b>	
<b>The guide</b>	<b>8</b>	
<b>Section 1</b>	<b>External Scheme Design</b>	<b>8</b>
1.1	General	8
1.2	Design Principles	8
1.2.1	Scheme Layout	8
1.2.2	Estate Roads	8
1.2.3	Adopted Open Spaces and Play Areas	9
1.2.4	Unadopted Open Spaces and Private Spaces	9
1.2.5	Boundaries	9
1.2.6	Security	10
1.2.7	Garden Areas	10
1.2.8	Dwelling Approach	11
1.2.9	Dwelling Access – Rented Homes	11
1.2.10	Drives/Parking Areas – Rented Homes	11
1.2.11	Refuse Storage	12
1.2.12	General Storage	12
1.2.13	Recycled Material Storage	13
1.2.14	Landscaping	13
1.2.15	Existing Ecological Features	14
1.2.16	External Lighting / Equipment	14
<b>Section 2</b>	<b>Internal Dwelling Design</b>	<b>15</b>
2.1	General	15
2.2	Rented Homes	16
2.2.1	Lounge Windows	16
2.2.2	Bathrooms/Cloakrooms	16
2.2.3	Airing Cupboards	16
2.2.4	Circulation Areas	16
2.2.5	Home Office Space	16
2.2.6	Doors	17
2.2.7	Staircases	17
2.2.8	Heating System	17
2.2.9	Kitchens	17
2.2.10	Kitchen Storage Requirements	17
2.2.11	Energy Efficiency Labelling Scheme	17

2.3	'Home Buy' & Intermediate Rented Dwellings	17
2.4	Housing for People with Disabilities	18
2.4.1	Circulation Areas	18
2.4.2	Door Openings	18
2.4.3	Storage	18
2.4.4	Staircase	18
2.4.5	Windows	18
2.4.6	Bathrooms	18
2.4.7	Kitchens	18
2.5	Lifetime Homes	19
<b>Section 3</b>	<b>Elevational Treatment – Dwellings</b>	21
3.1	General	21
3.2	Elements & Features	21
3.2.1	Walls	21
3.2.2	Windows	21
3.2.3	External Doors	21
3.2.4	Roofs	21
3.2.5	Canopies	21
3.2.6	Porch / Lobbies	22
<b>Appendices</b>	Appendix 1 – Code for Sustainable Homes/Passivhaus standard	23
	Appendix 2 – Fair Play for Children	28
	Appendix 3 – Building for Life – Summary	35
	Appendix 4 – Secured by Design – Summary	36
	Appendix 5 – HQI's - Summary	38
	Appendix 6 – Preferred House Designs	39

## Introduction

Knightstone Housing Association is committed to producing desirable, affordable, high quality homes and environments for all new housing developments which fully meets our residents' current and future expectations in places where they want to live.

Good housing design should reflect the purpose for which it is being developed as well as considering changing economies, demography, technology, resource issues and environmental sustainability.

The Government's good design champion, the Commission for Architecture (CABE), has identified the key elements of quality building design as:

- **Function** – the building should work and be fit for the purpose for which it is designed
- **Appearance** – the building should be excellent in itself and appropriate to its surroundings. It should attract a favourable response from users and the wider public
- **Context** – the project should be seen as a place not as an isolated building. It should create a public space and contribute to the neighbourhood and its environment
- **Buildability** – this includes ease of construction, the use of materials from sustainable and local sources, off-site manufacture and the use of standard components
- **Maintenance** – Including energy use and repair costs over the life of the building
- **Sustainable** – buildings should use natural resources responsibly.

All of our new schemes now have to be measured against the 'Building for Life' publication 'Delivering Great Places to Live – Twenty Questions You Need to Answer' as 'The Touchstone of Reasonableness' and have to reach the appropriate minimum scores. We therefore require the development of all our new homes to be undertaken in a manner which delivers great places to live, creates well mixed and integrated communities and provides an appropriate balance between private and public open space.

This guidance document has been prepared to assist the Association's design consultants with the preparation of design work for new build housing schemes. It covers aspects of site layout design, gives general house type planning requirements and sets out the Association's preferences for elevational design treatments.

Wherever the future residents of a scheme are known their views and involvement should be sought jointly by both Knightstone staff and the consultants / contractor involved in the scheme. This should be undertaken at all stages. An example is regeneration schemes that involve re-housing existing residents in new developments. For many schemes, the future residents will not be known until building work nears completion. However, the housing management, and the maintenance officers will be able to draw on their experience of involvement in previous schemes and offer useful feedback. The views of colleagues, the local community and residents should be incorporated into the development brief as a matter of course.

Where schemes are specifically catering for the needs of households from minority ethnic, religious or cultural backgrounds their particular requirements must be accommodated both within the physical, social and cultural context in which home life takes place and within the internal arrangement of a home and its rooms. The National Housing Federation publication

'Accommodating Diversity' should be used as a tool to build up the design brief for new schemes specifically aimed at the black and minority ethnic community.

For specific information regarding the required standards of materials and workmanship reference must be made to Part 2 of the Employer's Requirements available from the Association's Development team.

All reference to 'Approved Documents' means the guidance documents to The Building Regulations.

It is a Homes & Communities Agency requirement that all housing which receives Social Housing Grant must comply with the criteria contained in the HCA's 'Design and Quality Standards' publication. This particular document sets out the HCA's requirements and recommendations for compliance and a copy can be downloaded from the HCA's website: [www.homesandcommunities.co.uk](http://www.homesandcommunities.co.uk)

## The Standards

New build properties have to meet minimum design standards known as 'core standards' comprising of 'Housing Quality Indicators' (HQI), 'Code for Sustainable Homes' and 'Building for Life'.

In addition to these core standards there are further Health and Safety and Secure by Design (SBD) standards that need to be considered as part of the design process:

### Housing Quality Indicators (HQI)

"The Housing Quality Indicators system is a measurement and assessment tool designed to allow potential or existing housing schemes to be evaluated on the basis of quality rather than simply of cost. The system works by considering information on the ten indicators/sections that measure quality and which form the main body of HQI. Each Indicator contains a series of questions that are completed by the RSL. The ten indicators/sections are:

- 1 Location
- 2 Site – visual impact, layout and landscaping
- 3 Site – open space
- 4 Site – routes and movement
- 5 Unit – size
- 6 Unit – layout
- 7 Unit – noise, light, services and adaptability
- 8 Unit – accessibility within the unit
- 9 Unit – sustainability
- 10 External environment – Building for Life

It is important to relate dwelling design to the way in which people wish to live and the context in which their home is placed. For this reason, the Indicators look not only at the unit and its design in detail (no's 5-9), but also the context and surroundings (no's 1-4 and 10).

It is the profile of the ten different Indicators that gives the most useful information about the strengths and weaknesses of a scheme. The overall figure is merely a convenient aggregate.

For new build developments there is a requirement to meet minimum scores:

Indicator 5 Unit size	min 41
Indicator 6 Unit layout	min 32
Indicator 7 Unit services	min 22
Indicator 9 Unit sustainability	min 68 – Code 4 (see below)
Indicator 10 External environment 'Building for Life'	min 60 or 50 (rural or infill sites)

The HQIs can be downloaded from [www.homesandcommunities.co.uk/hqi](http://www.homesandcommunities.co.uk/hqi). Appendix 5 summarises the assessment criteria whilst the following is a brief introduction;

## **Indicator 9 – Sustainability**

The ‘whole home’ is required to achieve ‘Code Level 3, 4, 5 or 6’ as set out in the guidance publication, “Code for Sustainable Homes” (referred to as “CSH”). A copy of the document can be downloaded from the CLG website at [www.communities.gov.uk](http://www.communities.gov.uk). The following is a brief summary:

“Background – the Code for Sustainable Homes” is an independent environmental labelling scheme for housing. It has been developed by the BRE and assesses the environmental quality of a ‘whole home’, rating it as a complete package by considering the broad concerns of climate change, use of resources and materials, pollution and impacts on bio-diversity.

**Issues** – the various issues to be assessed by the CSH are grouped into the following 9 environmental categories:

- Energy
- Water
- Materials
- Surface water run-off
- Waste
- Pollution
- Health & well being
- Management
- Ecology

**Scoring system** – credits are available for each issue, under each category, and these have an environmental weighting applied to determine a total points score. Each range of points then equates to an associated ‘code level’:

Code Level	Total Points
Level 3	57
Level 4	68
Level 5	84
Level 6	90

**Method of compliance** - the Association’s preference for achieving the minimum of ‘Code Level 3 and 4’ is summarised in

Appendix 1 and includes gaining all security credits under criteria Man.4.

**Assessment process** – each housing development must be assessed by a qualified ‘Code Assessor’ who must register the scheme with the BRE. Assessments are carried out in two stages:

- Design Stage Assessment – where each ‘code dwelling’ type is given an interim ‘code certificate’
- Post Construction Review – where each ‘dwelling’ is given a final ‘code certificate’.”

The contractor / consultant will need to refer to Part 2 of the Employer’s Requirements for detailed guidance on the various measures which need to be considered including the provision of Energy Performance Certificates.

**It is vital that the various requirements needed for compliance with the “code for sustainable homes” are considered at the scheme design stage. This will include the early appointment of a suitable ‘code assessor’ to work alongside both the design consultant and CDM Coordinator.**

**Passivhaus Standard** – Where compliance with the Passivhaus principles is required, reference should be made to Appendix 1 and also Part 1 of the Employers Requirements.

## **Indicator 10 – External Environment**

There is a minimum commitment criteria required for a range of design aspects and these are discussed and identified in the “Building for Life” publication, “Delivering great places to live; 20 questions you need to answer”.

A copy of this document can be downloaded from [www.buildingforlife.org](http://www.buildingforlife.org) and Appendix 3 summarises the assessment criteria.

**"Eco-development in Street, Somerset is awarded highest ever national score for good design"**

3 December 2009



Lime Tree Square, part of the first phase of Crest Nicholson's innovative ICON eco development in Street, Somerset, was awarded a Building for Life Award by CABE, the highest national standard for well-designed homes and neighbourhoods.

This accolade follows the announcement in October 2009 that this phase of ICON had been awarded a Building for Life Gold Standard. ICON comprises 138 homes. The 30 affordable homes at Lime Tree Square are managed by Knightstone, which has been working together with Crest Nicholson since the design stage of the development to incorporate the affordable homes into the scheme.

Judged against 20 Building for Life criteria which embody CABE's vision of functional, attractive and sustainable housing, the scheme was awarded 19 out of 20, the highest ever scoring development since the launch in July 2003. The assessor's view was that Lime Tree Square presents an interesting range of homes that use the public space and street in an inventive way. They said: "There is a quality in the detailing, design of public spaces and a sensitive use of materials."

Wayne Hemingway MBE, designer and chair of Building for Life, said: "Living in a housing scheme which has been well designed adds to quality of life. Good

design can provide opportunities for social interaction, opportunities to get outside and do things, opportunities for children to enjoy their environment and an uplifting place to come home to. It also helps to know that in tough times it will hold its value better than a badly designed scheme."

It is the responsibility of the design consultant to ensure full compliance with all relevant issues contained in the 'Design and Quality Standards' and so specific reference needs to be made to Annex 3 of the standards where details of further reading and references are provided.

## Health and safety

- The Association will require the appointment of a competent CDM Co-ordinator prior to initial design as required under the CDM Regulations 2007
- All designers engaged by the Association will give advice to the Association on the client's responsibilities under CDM Regulations 2007.

## Secured by design

- All dwellings will comply with the 'Physical Security' requirements (internal environment) contained in the 'Secured by Design' initiative from the Association of Chief Police Officers
- The external environment (scheme layout) for rented accommodation should reflect the advice obtained from the local Police Architectural Liaison Officer / Crime Prevention Design Advisor. Such advice should be obtained by the design consultant and be included in the scheme design prior to the submission of the detailed Planning Application. See [www.securebydesign.com](http://www.securebydesign.com) for the required information which is also summarised in Appendix 4.

# The Guide

## Section 1: External scheme design

### 1.1 General

**1.1.1** All of the following design requirements are for use when the scheme design or Employer's Requirements are not fully detailed. It is expected that no changes will be made to any existing design work without prior consultation with us

**1.1.2** The design consultant will prepare proposals and arrange for the discharge of all conditions attached to the Planning Approval Certificate. Before submitting such proposals to the Planning Authority, the design consultant will obtain our approval

**1.1.3** In particular, design consultants will ensure that the choice of all external materials for the dwellings, landscaping options and especially site / plot curtilage treatments, are discussed and agreed with the Association before submission to the Planning Authority

**1.1.4** For detailed information and guidance matters regarding the "Code for Sustainable Homes", reference must be made to Part 2 of the Employer's Requirements.



Carnival Court, St Paul's, Bristol was shortlisted in the prestigious Affordable Home Ownership Awards 2009, Best Regeneration category

### Design Principles

#### 1.2.1 Scheme Layout

**1.2.1.1** The Association expects its design consultants to produce an attractive and interesting layout of dwellings taking advantage of the existing site topography

**1.2.1.2** The orientation of the dwellings should ensure that the main living room maximises the southerly/sunny aspect, whilst enhancing occupant privacy and providing noise protection

**1.2.1.3** The scheme layout and road design must restrict the speed of vehicles

**1.2.1.4** Elderly person dwellings should be kept separate from larger family houses and young single person dwellings

**1.2.1.5** Consideration must be given to the location within a scheme of housing designed for occupation by disabled or elderly people: such housing should be on the flattest areas of the scheme with level access to adjacent facilities.

#### 1.2.2 Estate Roads

**1.2.2.1** All roads (including associated parking spaces etc) will be constructed to adoptable standards, completed with a finish of tarmac

The provision of block pavers is not encouraged by the Association but the delineation of different surfaces can be indicated by contrasting and coloured materials. However, it is appreciated that in some situations the highways authority may insist on this type of finish. In all cases, the proposed finishes will be agreed with the Association prior to the Planning Application submission

**1.2.2.2** All roads are to be clearly signed and traffic calming measures will be incorporated as agreed with the Highways Authority. However, the Association is keen to avoid the use of speed 'humps' as a means of traffic calming.

**1.2.2.3** To aid the partially sighted, textured / contrasting treatment of surfaces adjacent to crossings, level changes etc., will be provided. In addition dropped kerbs will be provided at all likely road crossing points.

### **1.2.3 Adopted Open Spaces and Play Areas**

**1.2.3.1** The Association encourages the integration of public open space and play areas into new schemes. Such areas must be clearly identified on the site layout, must be overlooked by adjacent dwellings, must be served by well lit paved footpaths and must be agreed for adoption by the Local Authority Parks Department before the scheme is submitted for Planning Approval. Any such agreements will include the amount of commuted sum required by the Local Authority as well as the type and level of any play equipment.

**1.2.3.2** Where provided, play areas and associated equipment need to be suitable for the age group of resident children. If this information is not available during the design stage, it may be appropriate to agree with the planning department details of the play area and equipment once the dwellings are occupied and the children's age groups are identified.

**1.2.3.3** Appendix 2 included within this guide sets out the Association's practical guidance for the provision of children's play which design consultants and contractors must consider as part of the overall design process.

### **1.2.4 Unadopted Open Spaces and Private Spaces**

**1.2.4.1** Unadopted open spaces must be avoided wherever possible. If unavoidable however, these spaces must be kept as small as possible and hard landscaped as agreed with the Association.

**1.2.4.2** The emphasis must be on the avoidance of narrow, awkward and difficult to manage private strips of grassed or planted areas. Where these types of areas cannot be designed out then they should be hard landscaped as agreed with the Association.

**1.2.4.3** Private spaces must include physically defined boundaries and be clearly identified on the site layout.

### **1.2.5 Boundaries**

#### **1.2.5.1 General**

Well defined boundaries must be provided which will maximise private spaces and enhance security within the development – see 1.2.6 Security.

#### **1.2.5.2 Fencing**

Rented Accommodation – where hedges and walls are not appropriate for curtilage / perimeter boundary treatments, plastic coated chain link fencing will be provided, unless screening is a requirement, in which case vertical close boarded timber panel fencing will be provided.

Home Buy Accommodation – where walls are not appropriate for curtilage / perimeter boundary treatments, close boarded timber panel fencing or similar will be provided.

#### **1.2.5.3 Hedges**

The provision of new hedging, supported by 1.0m high "stockproof" fencing, as a perimeter plot boundary treatment, is the preferred option in rural areas.

Any new hedging must be a dense, quick growing and low maintenance variety. If possible, proposed hedge planting is to take place at the commencement of site works.

#### **1.2.5.4 Walls**

Generally, walls will be brickwork and provided as specified on the scheme

layout drawings e.g. for retaining walls, screen perimeter boundary walls where adjoining public open spaces (generally 1.8m high) or for particular security or planning considerations. All walls will include engineering brick damp proof courses and well detailed capping proposals.

#### **1.2.5.5 Railings**

‘Hurdle’ topped iron railings, with matching gates, may be included to assist with appearance and natural lighting, but not at the expense of security.

#### **1.2.5.6 Division Fences**

Rented Accommodation – rear plot divisions will be of 1.8m high vertical close boarded timber panel fencing.

Home Buy Accommodation – rear plot divisions will be of 1.8m high close boarded timber panel fencing or similar.

#### **1.2.5.7 Front Boundaries**

All front garden areas to rented properties are to be ‘defensible’ by the provision of boundary treatments such as iron railings or low masonry walling, or a combination of both. The use of picket and chain link fencing in these locations is not acceptable.

All front boundary proposals regardless of tenure must be agreed with the Association before the submission of the Planning Application. There are no specific requirements for the front boundary treatments to Home Buy dwellings.

#### **1.2.5.8 Garden Gates**

Where there is rear access to properties, lockable gates will be provided in materials and height to match the associated fence.

### **1.2.6 Security**

**1.2.6.1** The overall design of the scheme layout should encourage natural surveillance which can be achieved by the careful mix and location of the dwellings. See Appendix 4 for an overview of the ‘Secured By Design’ initiative.

**1.2.6.2** Where ‘on-plot’ car parking is limited provision should be made for grouped ‘off-road’ car parking areas which can be overlooked by adjacent dwellings.

**1.2.6.3** Create “defensible space” outside dwellings using, for example, a change in road surface treatment or narrowed vehicular / pedestrian entrances with masonry piers to provide a more personal environment within.

**1.2.6.4** Public access through developments must be restricted to as few routes as possible.

**1.2.6.5** Natural surveillance should be enhanced by properly arranged good quality landscaping and carefully co-ordinated lighting.

**1.2.6.6** Ideally, dwelling frontages, including entrance doors and windows, need be in open view rather than obscured by walls or fences etc.

**1.2.6.7** All dwellings, together with their boundaries, need to form secure private areas which are difficult to penetrate unobserved.

**1.2.6.8** Wherever possible rear gardens should back onto each other, rather than directly onto public or open spaces.

#### **1.2.7 Garden Areas**

**1.2.7.1** All dwellings should have their own private and secure gardens. All flats will have access to a private and secure shared garden, roof space or a private balcony.

**1.2.7.2** The area of useable rear gardens should be sufficient for the number and likely ages of the intended residents and must include a patio area. Patio areas will be a minimum 1.8m deep extending across the rear of the dwelling.

**1.2.7.3** All front and rear gardens will be as flat as possible. However, on sloping sites, suitable levels can be achieved by the provision of steps and retaining walls. Any such provision must be agreed with the Association before any work commences.

**1.2.7.4** For all dwellings with private gardens a robust and quality rotary or retractable clothes line will be provided ("CSH" criteria).

**1.2.7.5** Flats – all schemes are to include communal drying areas including rotary clothes lines, as described in Para 1.2.7.4. These areas must be secure ("CSH" criteria).

As an alternative to the provision of external drying areas for flats, internal drying spaces are acceptable. They shall consist of private and heated spaces with a humidistat- controlled extract fan or passive ventilation. This 'space' may be the bathroom or utility room. In any event, the drying space must include fixings / fittings to hold a clothes line or clothes airer etc. ("CSH" criteria).

**1.2.7.6** An approx 1.8m wide level area must be provided around the perimeter of the building, (3m wide along the rear) as permitted by the proximity of other buildings, and effectively drained.

**1.2.7.7** Generally proposed grassed areas will be turfed only. However, the final extent of turfed areas will be agreed on a scheme by scheme basis with the Association.

**1.2.7.8** All homes which have an allocated individual outdoor space and all communal outdoor spaces must be provided with a rainwater butt ("CSH" criteria).

## **1.2.8 Dwelling Approach**

**1.2.8.1** Unless otherwise agreed with the building inspector there will not be any steps provided within the external pedestrian approach to the dwelling.

**1.2.8.2** Footpaths and ramps will be of non-slip concrete, pavers or concrete slabs. Pavers and slabs will be coloured to provide interest.

**1.2.8.3** All detached, semi-detached and end terrace properties must have access footpaths leading from the front of the dwelling to the rear garden area. Inner terraced properties will be served by slightly cambered rear access paths which will connect with the rear patio area. However, in certain locations such access paths may provide a security risk or may not be practical and will need to be omitted but only with the Association's approval. In these cases, attention must be paid to the storage of refuse at the front of the dwelling. In addition, the means of storing bicycles will need to be re-considered. See Section 1.2.12.2.

**1.2.8.4** Private footpaths and ramps will be minimum 900mm wide – 1200mm wide in the case of 'Wheelchair Housing'.

## **1.2.9 Dwelling Access – Rented Homes**

**1.2.9.1** In 'Wheelchair Housing', access into the dwelling will be achieved by a 1500 x 1500mm standing area immediately outside the main and secondary entrances.

## **1.2.10 Drives / Parking Areas – Rented Homes**

**1.2.10.1** Private drives and parking spaces will be a minimum of 2.4m wide constructed of pavers or tarmacadam.

**1.2.10.2** Parking spaces will be a minimum of 4.8m long and where in-curtilage, one space will have an adjoining hard surfaced area of 900mm wide (3.3 x 4.8m o/a).

**1.2.10.3** The drives will be at least 3.3m wide if they are the only means of approach to the dwelling or if they are located immediately alongside the dwelling entrance.

**1.2.10.4** Where the drives / parking spaces are in front of the dwelling, they are not to be hard up against the dwelling wall –

a hard landscaped margin will be provided between the drive / space and wall.

**1.2.10.5** Wherever practical private parking should be within the associated dwelling curtilage even if located at the rear of the dwelling. The overlapping of parking spaces onto adjoining properties must be avoided.

**1.2.10.6** Parking spaces should be adjacent to access footpaths, see 1.2.10.3 and preferably not directly outside lounge windows.

**1.2.10.7** In addition, where ‘on-plot’ parking is not available, small group parking is preferred. Small grouped areas of car parking are preferred to large communal parking areas. However, where large parking areas are unavoidable, the individual definition of spaces is essential, including those allocated for disabled people, which should be located at the end of the parking bank adjacent to a footpath. Alternatively, where the parking space is for two or more disabled users then a shared centre space of 900mm minimum should be provided.

**1.2.10.8** Single steps between drives / parking spaces are not permitted.

**1.2.10.9** At the junction of drives and parking spaces with roads, splayed junctions (600 x 600mm) will be provided immediately behind the footpath edging.

**1.2.10.10** In ‘Wheelchair Housing’, footpaths and ramps linking associated parking spaces and drives with entrance doors

should be under cover and well lit with PIR detectors with internal switching. Canopies over entrance doors will be a minimum 1.2 x 1.5m and in all cases, the travel distance from the road to the dwelling must be minimal.

**1.2.11** For all ‘Wheelchair Housing’ dwellings the car parking space will be at least 3.6m wide and 5.4m long.

## **1.2.12 Refuse Storage**

**1.2.12.1** The details of all proposed bin stores will be agreed with the Association prior to the submission of the Planning Application and a written record provided for the audit file.

**1.2.12.2** A hard standing area suitable for bins will be allocated at the rear of all dwellings where rear access is provided and where the bin space will be within 25m of vehicle access. Where this is not possible for rented dwellings, a convenient, inconspicuous, well ventilated, low maintenance and easily accessible bin store will be provided to the front of the dwellings. The bin store should be vermin-proof.

**1.2.12.3** Purposely designed communal bin stores will be provided for schemes containing flats, regardless of tenure. In these cases, it is important that the designer consults with the local authority waste management department to determine exactly what facilities need to be provided in each locality, including the provision of recycling bins. This may include the provision of large ‘wheelie bins’.

## **1.2.12 General Storage**

**1.2.12.1** An external store will be provided for rented dwellings. The store will be lockable, on a concrete base, with a window, with a footpath from the dwelling and constructed of stout pre-treated timber with a pitched roof.

**1.2.12.2** In the case of dwellings with

private gardens, the store should be located in the rear garden, with a min. rectangular plan of 2.0 x 1.2m and with sufficient additional space for the storage of cycles if required. If the store is used for storing bicycles (“CSH” criteria) there must be a means of access to it other than through the dwelling. The number of bicycles capable of being stored will depend on the number of bedrooms in the dwelling.

**1.2.12.3** Also, where schemes include rented flats, provision needs to be made for the secure storage of bicycles. This may be achieved by the provision of a shared purpose built facility either free-standing or integrated into the ground floor of the block with access from the street. In these cases, stands or hangers suitably protected from the weather must be provided to which individual bicycles can be padlocked. The number of bicycles capable of being stored will depend on the number of bedrooms in the flats (“CSH” criteria).

**1.2.12.4** Where a need is identified for the provision of storing and re-charging of wheelchairs in schemes of flats, which cannot be accommodated within individual homes, a shared and purpose built storage room should be integrated into the ground floor of the block with access directly off a secure communal entrance area. These storage rooms must be well ventilated and must include sufficient electrical points for re-charging of wheelchairs.

### **1.2.13 Recycled Material Storage (“CSH” criteria)**

**1.2.13.1** Adequate external storage provision will incorporate:

- Dedicated position under cover within 10m of external door
- 3 separate bins of min. total storage capacity of 180 litres
- Provision of permanent Local Authority scheme for collection of at

least 3 types of recyclable waste.

NB: There are special requirements which apply to flats. See the “Code for Sustainable Homes” guidance for more information.

### **1.2.14 Landscaping**

**1.2.14.1** The Association places great emphasis on appropriate landscaping to enhance its developments. Particular aims of the landscaping schemes are to “soften” the built environment, provide shade, privacy and enclosure, colour and interest. However, narrow strips of landscaped areas need to be avoided.

**1.2.14.2** If appropriate, the use of landscaping to act as a “buffer” between differing accommodation types is to be encouraged.

**1.2.14.3** Generally, and apart from grass, private front garden areas are to be soft landscaped with low maintenance shrub planting, especially to boundary lines.

**1.2.14.4** Public open spaces and play areas are to be landscaped to adoptable standards.

**1.2.14.5** Careful consideration of hard landscaping will be important to ensure that low maintenance requirements are achieved throughout the scheme.

**1.2.14.6** Choice of plants to be influenced by the need to ensure a low maintenance objective and, taking into account factors of vandalism and trampling, the following considerations should be noted:

- Rapid establishment (e.g. semi-mature plants)
- Tolerance of poor site conditions
- Low maintenance requirement e.g. low or no pruning necessary
- Long aesthetic lifespan
- High leaf area index i.e. dense ground cover and evergreen.

## **1.2.15 Existing Ecological Features**

**1.2.15.1** All existing features of ecological value are maintained and protected from damage at all times. (“CSH” criteria).

## **1.2.16 External Lighting / Equipment**

**1.2.16.1** All areas used by the general public must be well lit in consultation with the Highways Authority, to adoptable standards and may involve discussions with the local Architectural Liaison Officer (ALO) or Crime Prevention Design Advisor (CPDA).

**1.2.16.2** Where alleyways or footpaths are provided as a means of rear access to dwellings, suitable external communal lighting must be provided together with a separate landlord’s electrical supply. Specific arrangements for the provision of this lighting must be discussed with the contractor during the scheme design process.

**1.2.16.3** Requirements for the provision of solar or photovoltaic panels must be established early in the design process and agreed with the Association prior to submitting the planning application.

## Section 2: Internal dwelling design

### 2.1 General

For the specific requirements needed in respect of the size, layout and services associated with all dwellings, reference must be made to Ver. 4 HQI's April 2008 – see Appendix 5 for a summary.

**2.1.1** For specific information and guidance regarding energy efficiency matters and the “Code for Sustainable Homes” (CSH), reference must be made to the Employer’s Requirements and <http://www.communities.gov.uk>

**2.1.2** Schemes which include flats often have particular design requirements not normally associated with houses and bungalows. These requirements usually relate to the common parts of the building in which the flats are located.

To ensure that appropriate consideration is given to these matters, the following are particular facilities and provisions which need to be considered and agreed with the Association as part of the overall design process:

- CCTV
  - relayed to residents’ TVs or via video door entry handsets
- Passenger lifts
  - appropriate detailing and finishes
  - appropriate to meet the physical limitations of residents
  - capable of accommodating a wheelchair
  - appropriately located controls
  - provision of emergency telephone
- Storage of refuse and recycled materials
  - see 1.2.11.3 relating to the requirements of the local authority waste management department

- number of bins required varies from authority to authority

- Storage of bicycles
    - see 1.2.12.3 relating to the provision of purpose built free-standing or integrated facilities
  - Digital TV (equivalent to “Sky +” standard)
    - served by communal dish / aerial
    - providing ‘free to view’ channels to all residents with option to subscribe to ‘pay to view’ channels
  - Communal letterboxes
    - see 2.2.4
  - Satisfactory ‘stacking’ of flats
    - habitable rooms located above each other
    - bathrooms / kitchens located above each other
    - services not to penetrate party walls / floors etc.
- In addition to the above facilities and provisions, consideration also needs to be given to the following items where flats may be more than 18 metres above ground level:
- Lightning conductors
    - suitably located
  - Drying facilities and washing lines
    - see 1.2.7.5 relating to the provision of communal drying areas and internal private drying spaces
  - Window cleaning
    - method and equipment required
  - Roof access and safety systems
    - provision of suitable access hatches and ladders
    - provision of roof perimeter safety wires e.g. ‘Mansafe’ system

- Fire detection and prevention systems
  - provision of alarm system
  - provision of dry risers and sprinkler systems
  - provision of automatic opening vents (AOV)
  
- Fire protection of building
  - adequate fire proofing compartmentation.
  - effective structural frame protection (eg steel frame construction)
  
- Stored cold water
  - provision and location of water tanks
  - provision of pumps
  
- Main entrance doors
  - specific designated manufacturer / supplier
  - suitable access for people with disabilities
  - provision of controls and accessories
  - provision of suitable canopies
  
- Landlord's power supply
  - all controls located in service cupboard
  - method of access to service cupboard
  
- Power back-up generator
  - location
  - access
  - management
  
- Services meters eg gas and electricity
  - locations
  
- Suitable signage
  - provision of notice boards to communal areas – cloth covered 600 x 900mm with metal frame
  - provision of information signs to main entrance, lobbies and lifts

## **2.2 General Needs Rented Homes**

This section sets out the Association's design requirements for general needs housing.

Where the designs contained in Appendix 6 are considered not to be suitable, then the design consultant and the Association will need to agree on a range of alternative designs which will need to comply with the principles already included in the designs contained in Appendix 6.

### **2.2.1 Lounge Windows**

The main window sill should be a max height of 750mm above floor level.

### **2.2.2 Bathrooms / Cloakrooms**

- Bathroom WC to be alongside the bath
- Bath not located below window
- Bathroom and Cloakrooms only accessible from circulation areas.
- In bungalows, bathroom doors must open outwards
- All cloakroom doors must open outwards.

### **2.2.3 Airing Cupboards**

- Where provided, always located at first floor level in houses
- Only accessible from circulation areas.

### **2.2.4 Circulation Areas**

- Halls, lobbies etc., must not include steps
- Where letter boxes are grouped together in the entrance lobbies of blocks of flats, the boxes must be lockable and fire proof.

### **2.2.5 Home Office Space (See 'CSH' criteria)**

- Include window provision / ventilation
- Min. size to allow installation of a desk, computer table and cabinet
- One wall at least 1.8m long.

## **2.2.6    Doors**

- Front doors to open into circulation areas only
- Front doors not to open directly into rooms
- A 300mm offset is needed between the opening edge of all doors and the return wall, when pulling the door.

## **2.2.7    Staircases**

- Future provision of stairlift including power outlet and suitable landings
- Winders are not permitted.

## **2.2.8    Heating System**

Generally, heating boilers will be located in the kitchen area.

## **2.2.9    Kitchens**

Kitchens must have the benefit of natural light and be adjacent to a dining area. Kitchen layouts must include:

- Recycled Material Storage provision consisting of 3 bins in a dedicated position in or near to the kitchen (“CSH” criteria)
- Facing base units need to be 1200mm apart
- A minimum of 300mm should be provided between the cooker space and any internal worktop corner return
- A minimum of 400mm should be provided between the sink and any internal worktop corner return
- The layout design of all kitchens must be agreed with the Association prior to the completion of the working drawings.

## **2.2.10    Kitchen Storage**

Requirements For details of the storage volume requirements, refer to the ‘Housing Quality Indicators’ – version 4 HQI’s April 2008 in Appendix 5.

## **2.2.11    Energy Efficient Labelling Scheme (See ‘CSH’ criteria)**

It is not proposed to install white goods in rented dwellings. However, it is an option for information on the EU Energy Efficient Labelling Scheme, which assesses the efficiency of white goods, is provided for each household.

## **2.3    Home Buy and Intermediate Rented Dwellings**

Our design requirements for Homebuy and Intermediate Rented homes are generally the same as discussed in paragraph 2.2 above. However, we will accept variations of the developers existing house designs.

Any proposed house designs must be approved by our Home Buy team before being submitted with the planning application.



Ducrow Court, St Paul’s, Bristol was awarded the Silver Standard in the Building for Life Awards 2010. It also achieved Gold Award for Best Shared Ownership Development

## **2.4 Housing for people with Disabilities**

This section sets out the our design requirements for housing for occupation by people who are disabled and who are heavily reliant on wheelchairs for mobility.

The requirements are in addition to those identified for 'General Needs Rented Homes' (Section 2.2) and all proposed designs must be agreed with the relevant local authority Occupational Therapist before they are finalised.

The final design must have due regard to the current 'Wheelchair Housing Design Guide', 2nd Edition, published by Habinteg. Wherever possible and practical, all such appropriate requirements have been incorporated within this document.

Where a specific need for this type of dwelling is identified on a scheme, reference needs to be made to the specific design examples included in Appendix 6. However, it is accepted that the designs may not always be appropriate. In these cases, the design consultant and the Association will need to agree on a range of suitable alternative designs, which will need to comply with the same specifically associated principles already established, especially those relating to furniture provision and access / activity zones.

For detailed specification requirements, see Chapter 4 in Part 2 Employer's Requirements. However, in all cases, the following matters must be addressed as part of the design process:

### **2.4.1 Circulation Areas**

- Halls and lobbies etc. must be a minimum 1.2m wide
- Halls must include a turning area of 1.2 x 1.5m
- Halls must include wheelchair storage area. (See 2.4.3).

### **2.4.2 Door Openings**

300mm offset is needed between the opening edge of all doors and the return wall, when pulling the door.

### **2.4.3 Storage**

1.2 x 0.7m wheelchair storage area incorporating battery re-charging power outlet and high level ventilation direct to outside air.

### **2.4.4 Staircase**

- Winders are not permitted.
- Future provision of stair lift to BS.5900 including power outlet.

### **2.4.5 Windows**

Living room/dining room/bedroom windowsills to be a maximum height of 750mm above floor level.

### **2.4.6 Bathrooms**

- Access from circulation area with alternative direct access from main bedroom
- Doors must open outwards
- A bath will be installed as standard
- Floor drain located below bath position and defined wheel-in shower space indicated
- A shower (in lieu of bath) will be installed when required by the local authority occupational therapist
- Transfer bench/seat at end of bath
- Basin adjacent to WC
- Radiators are not to be fitted next to the WC
- Provision of full-height 'knock-out' panel in wall between bathroom and main bedroom.

### **2.4.7 Kitchens**

Kitchens must have the benefit of natural light, be adjacent to a Dining area and should include:

- Clear manoeuvring area of minimum 1.8 x 1.4m
- Built-in hob with minimum 600mm wide base unit under with a separate oven and housing unit located at end of the unit run
- 1000mm long sink top with minimum 600mm wide space under
- 600mm wide fridge/freezer space with no worktop over and located at the end of the unit run
- 630mm wide washing machine space located below worktop level and close to the sink
- 600mm wide serviced appliance space (in addition to washing machine and fridge/freezer) depending on size of household
- Wall units to within 150mm of both sides of hob
- Storage facilities must largely be accessible by wheelchair users and may include a storage 'trolley'
- 600mm wide base unit close to the sink and identified for future removal in order to accommodate a serviced dishwasher. (Dwellings for 5 people or more).



**Ducrow Court, St Paul's, Bristol**

The kitchen layout proposals must be agreed with us prior to completion of the working drawings and will be based on the layouts which appear on the standard dwelling designs in Appendix 6 where applicable.

Where these standard designs are not used on the scheme, then the kitchen layout must be of a similar standard to those in

## Appendix 6.

### 2.5 Lifetime Homes

The Lifetime Homes concept was brought about because of concerns about how inaccessible and inconvenient many homes were for those people who become less able for various reasons.

The resultant principles provide flexibility, through design and a range of built-in features, which will accommodate variations in the needs of occupants at different stages of their lives.

The Lifetime Homes Standard seeks to enable 'General Needs' housing (Section 2.2) to provide, either from the outset or through simple and cost-effective adaptation, design solutions that meet the existing and changing needs of diverse households. This offers the occupants more choice over where they live, increases the likelihood that they will stay in their home for longer and enables visitors to be accommodated more easily for any given time scale.

Housing that is designed to the Lifetime Homes Standard will be convenient for most occupants, including some (but not all) wheelchair users and disabled visitors, without the necessity for substantial alterations. A Lifetime Home will meet the requirements of a wide range of households, including families with push chairs as well as some wheelchair users.

The standard is broken down into 16 Design Criteria originally developed by the Joseph Rowntree Foundation and Habinteg HA:

1. Car Parking Width
2. Access From Car Parking
3. Approach Gradients
4. Entrances
5. Communal Stairs & Lifts
6. Doorways & Hallways
7. Wheelchair Accessibility
8. Living Room
9. Entrance Level Bedspace

10. Entrance Level WC & Shower Drainage
11. Bathroom & WC Walls
12. Stair Lift / Through-Floor Lift
13. Tracking Hoist Route
14. Bathroom Layout
15. Window Specification
16. Controls, Fixtures and Fittings

Although compliance with the Lifetime Home Standard is not a compulsory requirement for all of the homes we provide, some local planning authorities may insist upon it. In addition, our funders (eg the Homes and Communities Agency) may make compliance a condition of providing grants or it may become a requirement in order to achieve between Code Level 3 and 6 of the 'Code for Sustainable Homes'.

A copy of the assessment information (revised on 5/7/10) is available at:  
[www.lifetimehomes.org.uk/pages/revised-design-criteria.html](http://www.lifetimehomes.org.uk/pages/revised-design-criteria.html)

Where a specific need for this type of dwelling is identified on a scheme, reference should be made to the specific design examples contained in Appendix 6 where applicable.

However, it is accepted these particular designs may not always be appropriate for the identified scheme. In these situations, the design consultant and the Association will need to agree on a range of suitable alternative designs.

## **Section 3: Elevational treatment – dwellings**

### **3.1 General**

**3.1.1** The following notes are for guidance only and deal with the main elevational features required with the Association's dwellings.

**3.1.2** The Association wants to see innovative, modern, exciting and contemporary designs with an emphasis on durability and quality which will ensure low maintenance.

### **3.2 Elements and Features**

#### **3.2.1 Walls**

**3.2.1.1** Where traditional construction solutions are envisaged, the Association's first choice of material is for good quality through-coloured, clay faced brickwork but with attractive variations including the provision of render, tile hanging and boarding.

**3.2.1.2** The choice and manufacturer of bricks or other materials will be agreed with the Association prior to submitting the Planning Application.

**3.2.1.3** Care must be taken to avoid potential future maintenance problems which may be associated with poor detailing. Particular attention must be paid to details relating to wall cappings and projecting sills etc. In these cases the recommendations of the brick manufacturer are to be employed.

#### **3.2.2 Windows**

**3.2.2.1** The Association's preference is for timber window and door frames. However, it is recognised that these frames will not always be appropriate for particular schemes. In these cases, the design consultant must agree with

the Association alternative proposals before the Planning Application is submitted.

**3.2.2.2** All timber windows must be of a 'high performance' variety with a stain or paint finish.

**3.2.2.3** Lounge windows in all dwellings must be deep enough in order to provide easier viewing for wheelchair users and other seated people.

**3.2.2.4** Wherever possible, all windows should include at least one opening fanlight.

#### **3.2.3 External Doors**

**3.2.3.1** Glazed vision panels to be in top half of front doors.

**3.2.3.2** Rear doors are to include glazing to the top half.

#### **3.2.4 Roofs**

**3.2.4.1** In particular, low maintenance materials should be used, e.g. PVC-U, for eaves treatments such as soffits and fascias.

**3.2.4.2** The choice and manufacturer of roof tiles is to be agreed with the Association before submitting the Planning Application.

#### **3.2.5 Canopies**

**3.2.5.1** The Association prefers the use of lean-to and pitched roof type canopies, but also encourages the use of alternative, attractive designs, the construction of which should be sympathetic to the design and standard of the main building. Some pre-formed canopies may be appropriate for certain designs.

**3.2.5.2** In most cases however, the use of plain roofing tiles is preferred, rather

than large profiled tiles.

### **3.2.6 Porch/Lobbies**

**3.2.6.1** Where no rear access is provided to dwellings, porches/lobbies are to be provided and will be of a design and standard of construction to match the main dwelling and will incorporate the storage of refuse bins where appropriate.

**3.2.6.2** Low maintenance materials should be used wherever possible.

## Appendix 1

### Code for Sustainable Homes

The following tables set out the Association's preferred route to achieving minimum compliance with "Code Level 3" and "Code Level 4" on a Brownfield or Greenfield site where 1 Ecology credit is scored. For compliance with "Code Level 5 & 6", reference must be made to the scheme- appointed Code Assessor. Please note that Contractors must ensure that the Home Office is feasible (ENE 9) and that the daylighting scores (HEA 1) are achieved in the accepted planning drawings (where applicable). If not, these credits will need to be recouped elsewhere.

#### Code Level 3 Compliance

Criteria Ref	Heading	Proposal	Notes	Credits Required Greenfield Sites	Credits Required Brownfield Sites
Ene.1	CO2 Emissions	% reduction over Bldg. Regs		1	1
Ene.2	Heat loss parameter	Thermal envelope		Min 5	Min 5
Ene.3	Energy Display Devices	Monitor heating & electric fuel consumption		2	2
Ene.4	Drying space	Clothes drying provision		1	1
Ene.5	White goods	Energy labelling of white Goods		1	1
Ene.6	External lighting	Dedicated energy fittings with sensors		2	2
Ene.7	LZC	Use of renewable technology for CO2 reduction		o	o
Ene.8	Bicycle storage	Provision of storage of bicycles		2	2
Ene.9	Home office	Services for working from home	Conditional on accepted planning drawings	1	1
Wat.1	Internal water use	Limited internal consumption		3	3
Wat.2	External water use	Provision of rainwater butt		1	1
Mat.1	Environmental impact of materials	Compliance with 'The Green Guide' is required		12	12
Mat.2	Responsible sourcing - building elements	Responsibly sourced materials		o	o
Mat.3	Responsible sourcing - finishing elements	Responsibly sourced materials		o	o

Sur.1	Surface water run-off	Reduce run-off rate And volume		o	o
Sur.2	Flood risk	Site flood risk Assessment		2	2
Was.1	Domestic storage	Internal / External recycling		4	4
Was.2	SWMP	Provision of management plan		3	3
Was.3	Composting	Provision of household facility		1	1
Pol.1	GWP of insulants	Limited GWP for specific elements		1	1
Pol.2	NOx emissions	Restricted NOx Emissions		Min 2	Min 2
Hea.1	Daylighting	Min. requirements – must be incorporated by design team	Conditional on accepted planning drawings	1	1
Hea.2	Sound testing	Testing to ensure 8dB Improvement over Building Regs Part E		4	4
Hea.3	Private space	Provision of external space		1	1
Hea.4	Lifetime Homes	Compliance with all 16 items (exception available for steeply sloped sites)		3/4	3/4
Man.1	Home user guide	Provision of home efficiency guidance		3	3
Man.2	Considerate Constructors Scheme	Compliance beyond best practice		2	2
Man.3	Site impacts	Site managed to reduced impact		2	2
Man.4	Secure by Design	Provision of safe and secure developments	Compulsory HCA requirement	2	2
Eco.1	Ecological value	Develop sites with limited wildlife value	Conditional on site	o	1
Eco.2	Ecological Enhancement	Implement ecologists' recommendations		1	1
Eco.3	Protection of features	Retain features on site	Conditional on site	o	1
Eco.4	Change in ecological value	Improve ecological value of the site	Conditional on site	o	1
Eco.5	Building footprint	Improve efficiency of footprint		o	o

#### **Code Level 4 Compliance**

Please note that where attenuation tanks are permissible under the Code requirements and used as the drainage solution, then 2 credits from SUR 1 will be lost and need to be recouped elsewhere.

Please note that sites located in areas which do not have a low flood risk will lose 2 credits from SUR 2 and will need to be recouped elsewhere.

<b>Criteria Ref</b>	<b>Heading</b>	<b>Proposal</b>	<b>Notes</b>	<b>Credits Required Greenfield Sites</b>	<b>Credits Required Brownfield Sites</b>
Ene.1	CO2 Emissions	% reduction over Bldg. Regs		4	3
Ene.2	Heat loss parameter	Thermal envelope		6	Min 5
Ene.3	Energy Display Devices	Monitor heating & electric fuel consumption		2	2
Ene.4	Drying space	Clothes drying provision		1	1
Ene.5	White goods	Energy labelling of white Goods		1	1
Ene.6	External lighting	Dedicated energy fittings with sensors		2	2
Ene.7	LZC	Use of renewable technology for CO2 reduction		2	2
Ene.8	Bicycle storage	Provision of storage of bicycles		2	2
Ene.9	Home office	Services for working from home	Conditional on accepted planning drawings	1	1
Wat.1	Internal water use	Limited internal consumption		3	3
Wat.2	External water use	Provision of rainwater butt		1	1
Mat.1	Environmental impact of materials	Compliance with 'The Green Guide' is required		12	12
Mat.2	Responsible sourcing - building elements	Responsibly sourced materials		o	o
Mat.3	Responsible sourcing - finishing	Responsibly sourced materials		o	o
Sur.1	Surface water run-off	Reduce run-off rate And volume		o	o
Sur.2	Flood risk	Site flood risk Assessment		2	2

Was.1	Domestic storage	Internal / External recycling		4	4
Was.2	SWMP	Provision of management plan		3	3
Was.3	Composting	Provision of household facility		1	1
Pol.1	GWP of insulants	Limited GWP for specific elements		1	1
Pol.2	NOx emissions	Restricted NOx Emissions		o	o
Hea.1	Daylighting	Min. requirements – must be incorporated by design team	Conditional on accepted planning drawings	1/2	1
Hea.2	Sound testing	Testing to ensure 8dB Improvement over Building Regs Part E		4	4
Hea.3	Private space	Provision of external space		1	1
Hea.4	Lifetime Homes	Compliance with all 16 items (exception available for steeply sloped sites)		3/4	3/4
Man.1	Home user guide	Provision of home efficiency guidance		3	3
Man.2	Considerate Constructors Scheme	Compliance beyond best practice		2	2
Man.3	Site impacts	Site managed to reduced impact		2	2
Man.4	Secure by Design	Provision of safe and secure developments	Compulsory HCA requirement	2	2
Eco.1	Ecological value	Develop sites with limited wildlife value	Conditional on site	o	1
Eco.2	Ecological Enhancement	Implement ecologists' recommendations		1	1
Eco.3	Protection of features	Retain features on site	Conditional on site	o	1
Eco.4	Change in ecological value	Improve ecological value of the site	Conditional on site	o	1
Eco.5	Building footprint	Improve efficiency of footprint		o	o

### **Passivhaus Standard**

Where compliance with the Passivhaus principles is required, reference should be made to Appendix 1 and also Part 1 of the Employers Requirements.

In summary a Passivhaus is a highly insulated dwelling which requires extremely little fuel input to maintain comfortable living temperatures. Compliance with the Passivhaus Standard is considered using a calculation procedure called the Passivhaus Planning Package (PHPP) which can only be assessed by a Passivhaus designer who is accredited by one of the only three UK accredited certifiers.

## Appendix 2

### Fair Play for Children

Guidance for planners, consultants and contractors

<b>Contents</b>	<b>Page</b>
Introduction	1
Design requirements for play at family schemes	
1. Provide suitable, safe space for children to play out	2
2. Provide fenced front gardens where possible	3
3. Keep child density at a level which can be accommodated	3
4. Traffic safety – design for people as well as cars	3
5. Use robust planting to enhance play provision	4
6. Avoid design that contributes to nuisance from play	4
7. Locate play areas and open space to meet children's needs	4
8. Equip play and games areas to meet local needs	5
9. Arrange adoption of play areas & open space by the local authority	6
10. Further information and helpful contacts	7

## **Introduction**

Knightstone housing provides the home environment in which many children spend their childhoods and grow up.

We want to help give children a good start in life by providing a safe, family friendly environment with interesting space and opportunities for play and for socialising with friends. Equally we want to ensure that neighbour nuisance from children's play is kept to a minimum. The design of our schemes plays a major part in these objectives.

The findings of independent research into play provision and related nuisance issues on Knightstone estates (2002) show that good design for children can make a significant difference to people's quality of life. In addition to reducing housing management problems, it has a positive impact on the children themselves, their neighbours and the long term popularity of the housing development.

We recognise that consultants, developers and planners have to accommodate many, sometimes conflicting, considerations in the design of new housing developments. Site restrictions and the requirement to provide as many homes as possible can limit ideal solutions for children. However, we believe it is important not to replicate design features which experience shows will cause problems in the future.

To achieve good design for play it will be necessary to open discussions on play provision at a very early stage in the scheme planning process in order that the best solution can be found. Once the plans are too far advanced it may not be possible to do this – or to negotiate important changes to standard planning requirements.

We are looking for innovative and imaginative ways to accommodate the needs of children in family schemes. The following practical guidance sets out our requirements and some of the options for achieving them. This is a key document and should be read in conjunction with our Planning & Design Guide.

### **Design requirements for play at family schemes**

#### **1. Provide suitable, safe space for children to play out**

**1.1** Design of family schemes should reflect the realities of where and how children play. They may enjoy their own gardens but will always play out if they can – whether or not the scheme has been designed with this in mind. Younger children choose to play out close to home. All children opt for places where they feel safe, are likely to meet friends and can observe the comings and goings of the community i.e. where they can see and be seen.

**1.2** Children will play on pavements and paths, driveways and walls, central grassed areas, in carparks and in the road near home – in preference to a play area some distance away. Carparks and pavements will be used for cycling, skateboarding, roller blading and other activities needing a smooth surface.

Walls will probably be climbed on and low walls used as seating. Children tend to gather outside their own home or at a corner to meet and talk with friends. Older children often "hang out" by the shops where there is a higher chance of meeting other people than at almost any other place on an estate.

**1.3** Design needs to consider areas where children are likely to collect and imaginative ways to make these places safe and interesting. For example:

- A wider stretch of pavement or verge will allow children to gather without obstructing others
- Providing some imaginative detail can enhance play without endangering safety or adding high costs – a slope, a tree, low wall or ground graphics (e.g. hopscotch) or an interesting feature
- Courtyards or communal garden space for flats can provide great safe play opportunities if carefully planned
- In unsuitable places, for example near a busy road, the design may need to deter play.

To allow safe space for children to play out together in front of their homes it may be necessary to compromise on the size of private gardens – especially back gardens.

## **2. Provide fenced front gardens where possible**

**2.1** Private gardens are important, especially when children are small. Front gardens tend to be more popular as play places because they give opportunities to see friends and observe the community.

**2.2** Residents have made it clear that they want a boundary to their front gardens to allow privacy and defensible space. Railings (not knee rails) achieve this while retaining a sense of openness, good sightlines (so parents can keep an eye on children playing out) and opportunities for friendly interaction.

## **3. Keep child density at a level which can be accommodated**

**3.1** Child density is a crucial factor. Design of family schemes should allow enough well located space for the expected number of children to play out. If there are too many children for the space, we are designing in problems.

## **4. Traffic safety – design for people as well as cars**

**4.1** Traffic is the biggest threat to safe play. Route and control traffic to allow maximum safety for children and other residents – and peace of mind for parents. Deter or prevent through traffic wherever possible. Traffic calming measures may be necessary but please avoid use of speed humps.

**4.2 Home zones** – Where feasible we are keen to implement the principles of Home Zones which recognise the importance of the local environment to children and the community. Residential streets are designed as places for residents, pedestrians and cyclists as well as routes for traffic. For further details please contact the Children's Play Council (see page 6).

**4.3** Design of paths and pavements should enable children to walk or cycle unaccompanied to their friends, play area, school, shops, park etc.

## **5. Use robust planting to enhance play provision**

**5.1** Planting can be used as boundaries, deterring children from running onto roads, as a buffer zone between play places and homes and to create an interesting place to play. Use robust plants which are capable of re-growth if trampled. Avoid poisonous species! Young trees may need some buffer planting themselves with a few robust bushes planted around – or jagged

decorative paving – to protect them from damage until they are well established.

## 6. Avoid design that contributes to nuisance from play

**6.1** Design needs to consider where children are likely to play and how this will impact on neighbours. Some features and materials unintentionally contribute to nuisance from children's play and should be used with care, for example:

- A wide drive between two homes, with a high wall at the end, provides a perfect ball game area and is likely to be used as such by children
- Gravel is useful to detect intruders but children can find it irresistible and it is often scuffed or thrown around causing nuisance
- Where the end of a house presents an unimpeded brick wall next to open space children will be tempted to kick or throw a ball against it
- Open grassy areas close to homes will be used for ball games. If that is not appropriate the area needs to be designed for another purpose e.g. a fenced communal garden
- Decorative features, such as concrete balls, need to be firmly fixed
- An expanse of white wall is tempting for graffiti artists - but it could offer scope for a community art project
- Gardens need some kind of boundary. Children (and adults) in a hurry may take the shortest route and a fence will deter them from running over flower beds or coming up close to windows
- If there is no space to play out close to home, except the carpark, then children will play in the carpark.

## 7. Locate play areas & open space to meet children's needs

**7.1** At some schemes, a safe environment with sufficient space for playing out, enhanced by some imaginative detail, may be sufficient. But designated play and games areas can be a valuable addition.

**7.2 Location:** The location of a play or games area is critical to its success and much more important than the facilities provided. They are best sited where children naturally choose to play (see 1.1 above). This will usually be at a central location where people are naturally coming and going and where casual supervision is high so children feel safe from strangers or older kids. Play areas on the edges of estates or hidden from view are much less well used and more likely to be vandalised. They need not be large to provide popular and successful play space.

**7.3 Routes:** The route to the play area from children's homes should be safe, open and easy without any busy intervening roads.

**7.4 Sightlines:** Play areas for younger children should be clearly visible from the main living rooms or kitchens of nearby homes – to allow casual supervision. Front garden boundaries should allow parents and neighbours to see over or through (e.g. railings). Provision for older children can be further away from homes but good sightlines from housing or passers by are still important.

**7.5 Buffer zones and boundaries:** Residents need a “buffer zone” space between their homes and places children play. Play will be a nuisance to a resident if their house or garden wall serves as a play area boundary.

**7.6** Fencing, walls, bollards and planting may be necessary to set boundaries but should not obstruct sightlines. A play or games area may need fencing, gates or other barriers to:

- Keep out dogs or vehicles
- Stop children running onto roads
- Protect people and property from balls
- Lock up a facility outside agreed hours (if local people agree).

Do a risk assessment first. It may show that money spent installing and maintaining fencing could be better spent in other ways.

## 8. Equip play and games areas to meet residents needs

**8.1 “Signposting” play areas:** There are significant benefits in involving residents in deciding how to equip an area, once they have moved in. People likely to use or be affected by the facility (including children and young people) will want to have a say. If this approach is agreed, put one or two low-cost, brightly coloured signpost items in place in the interim (e.g. small climbing and balance items with a fall height of less than 1 metre and no moving parts). This makes it easy for prospective residents to see where the play area will be – and children are encouraged to use it from the start

**8.2 Age ranges:** Play equipment must cater for the ages and needs of the girls and boys living, or likely to be living, on the estate. Standard planning specifications may not always be appropriate to the particular housing estate or to the needs and wishes of residents and their children. Children’s expectations are often modest – a place of their own to meet and chat, somewhere to kick a ball, a basketball net

**8.3 Provision for young children:** Play provision can be enhanced by changes in levels and planting – a tree, a slope, some bushes.

Interesting features or ground designs can encourage games and use of the imagination. A sense of adventure can be achieved without creating blind spots that are hidden from the children’s homes. Equipment might include:

- Small items such as a bench, balance beams, stepping logs and springers. Where the fall height is less than 1 metre good grass or topsoil is a sufficient impact-absorbing surface (see safety standards below). In heavy use areas a wear patch may be desirable
- Traditional playground equipment - swings (cradle and flat), slides, see-saws, roundabouts and multi-play items are always popular
- Somewhere for the children and parents to sit.

**8.4 Provision for older children and teenagers:** Research suggests that older children colonise younger children’s playgrounds when they have nowhere better of their own to go. Facilities might include:

- a purpose built shelter with seating – a place to meet and talk
- challenge items such as an aerial runway or maypole swing
- a multi-sports area e.g. for football and basketball (this can be a very simple wall or a sophisticated commercial facility)

- skateboarding, biking or roller blading areas (young people may get involved in designing the ramps and layout themselves).

**8.5 Safety standards:** Play equipment and surfacing must meet proper safety standards. When purchasing equipment make it a condition of contract that the equipment complies with the following standards:

- EN1177 for impact absorbing surface
- EN 1176 for design and installation of the item.

A post installation inspection by a recognised inspector is strongly recommended.

## **9. Arrange adoption of play areas and open space by the local authority**

**9.1** In most cases Knightstone's policy is to ensure open spaces and play areas are adopted by the local authority. Otherwise costs fall on tenants via a service charge. The authority usually has trained and experienced staff, established procedures and the equipment and bulk purchasing power to inspect and maintain playgrounds to a good standard. In addition most play facilities on Knightstone estates will benefit more than just our own residents. It is important to investigate the local authority's willingness to adopt the facilities and to reach agreement on ongoing management responsibilities.

**9.2** The contractor is responsible for ensuring that play facilities are properly inspected and certified by an approved inspector before handing over the scheme. Knightstone is normally responsible for insuring, inspecting and maintaining play areas until they are formally adopted – usually for a year. The standards and procedures to be followed will be agreed via a management agreement.

**9.3 Areas which may not need adoption:** It may not be necessary or beneficial to arrange adoption of low risk and low maintenance play provision (e.g. a basketball net or living willow playhouse); likewise for communal garden space and courtyards for Knightstone residents. Avoid planning in grassed areas which are too small to be of value for leisure and do not enhance the scheme as residents have to pay for upkeep through their service charge but receive no benefit.

## **Further information and helpful contacts**

### **Knightstone**

We can provide you with our full policy statement and staff guidance on children's play ('Fair play for children in Knightstone housing'), including case studies, on request. A copy of the research findings 'Children's Play on Knightstone Housing Estates' by Rob Wheway (2002) is also available from our Community Development Manager (01934 520052).

### **Children's play information service (NCB)**

Information and advice on improving play opportunities for 5-14 year olds, including funding, safer play and play area design.

Tel: 020 78436303 (Weds 9.30-12.30 and Thurs/Fri 9.30 – 5pm)

Website: [www.ncb.org.uk](http://www.ncb.org.uk)

### **Children's Play Council (Home Zones)**

Launched Home Zones and provides advice, guidance and information on traffic free areas in housing estates. Works to improve play opportunities and services for all children. Jointly administers Better Play grants.

Tel: 020 7843 6016 (general enquiries)

020 7843 1167 - Merrin Hunt (information on Home Zones)

[www.ncb.org.uk/cpc.htm](http://www.ncb.org.uk/cpc.htm)

### **National Children's Bureau**

National charity working to challenge childhood disadvantage and promote the interests, well being and participation of children and young people. Supports the Children's Play Information Service and Children's Play Council (see above).

Wakely St, London EC1V 7QE Tel: 020 78436000

### **Association of Play Industries**

Contact them for information on play equipment suppliers and manufacturers.

Tel: 024 7641 4999

### **Register of Play Inspectors International**

Contact them for a list of competent play and games area inspectors.

Tel: 024 7644999

### **Fair Play for Children**

Promotes action on the Child's Right to Play, publishes a journal, PlayAction, and provides services to members. The website includes helpful factsheets (e.g. consulting children; playground safety) and useful contacts by local authority area.

Website: [www.arunet.co.uk/fairplay](http://www.arunet.co.uk/fairplay)

### **England Basketball Association**

Advice and information on basketball provision including outdoor basketball.

Tel: 08707 744225

[www.englandbasketball.co.uk](http://www.englandbasketball.co.uk)

### **Sport England**

Help and advice on providing sport opportunities, including factsheets on multi-use games areas and other community provision. Information on sources of funding.

Tel: 01460 73491 (SW Region)

Tel: 0118 9483311 (SE Region)

Website: [www.sportengland.org](http://www.sportengland.org)

### **National Playing Fields Association**

The national association helps local communities buy land for outdoor play or sports and safeguard it for community use in the future, through management by local trustees. They also help with site improvements, insurance and inspections and technical advice, e.g. on design and safety. Independent county associations offer help and advice too.

London office: 020 78335360

Coventry office: 024 76222308

County associations – see Knightstone's area leaflets Help and advice for parents, young people and children.

Website: [www.npfa.co.uk](http://www.npfa.co.uk)

November 2003

## **Appendix 3**

### **Building for Life (BfL)**

The Building for Life assessment is used to measure the quality of the external environment. The assessment is undertaken by the design team as an informal assessment. The assessment is a series of 20 questions, under four headings:

#### **Environment and community**

1. Does the development provide (or is it close to) community facilities, such as a school, parks, play areas, shops, pubs or cafes?
2. Is there an accommodation mix that reflects the needs and aspirations of the local community?
3. Is there a tenure mix that reflects the needs of the local community?
4. Does the development have easy access to public transport?
5. Does the development have any features that reduce its environmental impact?

#### **Character**

6. Is the design specific to the scheme?
7. Does the scheme exploit existing buildings, landscape or topography?
8. Does the scheme feel like a place with distinctive character?
9. Do the buildings and layout make it easy to find your way around?
10. Are streets defined by a well-structured building layout?

#### **Streets, parking and pedestrianisation**

11. Does the building layout take priority over the streets and car parking, so that the highways do not dominate?
12. Is the car parking well integrated and situated so it supports the street scene?
13. Are the streets pedestrian, cycle and vehicle friendly?
14. Does the scheme integrate with existing streets, paths and surrounding development?
15. Are public spaces and pedestrian routes overlooked and do they feel safe?

#### **Design and construction**

16. Is public space well designed and does it have suitable management arrangements in place?
17. Do the buildings exhibit architectural quality?
18. Do internal spaces and layout allow for adaptation, conversion or extension?
19. Has the scheme made use of advances in construction or technology that enhance its performance, quality and attractiveness?
20. Do buildings or spaces outperform statutory minima, such as building regulations?

The scoring of each question is zero,  $\frac{1}{2}$  or 1 point; where we require a minimum of 12 points out of a possible 20. Further information on the assessment (including guides on completing the assessment) is available at:

<http://www.buildingforlife.org/assessments/housing-associations>

## Appendix 4

### Secured by Design Summary

(Extracted and adapted from ‘SBD New Homes 2009’ and ‘Safer Places – The Planning System and Crime Prevention’)

#### The concept of Secured by Design

**1.1** One of the governments’ key objectives for the planning of new housing is to secure high quality sustainable places where people will choose to live. To achieve this, the government recognises that much greater emphasis needs to be placed on the quality of design and planning. Designing for community safety is a central part of this, and the core principles apply not only to residential but also to other forms of development.

**1.2** Secured by Design (SBD) is a police initiative to guide and encourage those engaged within the specification, design and build of new homes to adopt crime prevention measures in new developments. The advice given in this guide has been proven to reduce the opportunity for crime and the fear of crime, creating safer, more secure and sustainable environments. Secured by Design is owned by the Association of Chief Police Officers (ACPO) and is supported by the Home Office and Communities and Local Government (CLG).

#### Secured by Design and other design guidance

**1.3** Communities and Local Government (CLG) circular 1/2006 “Guidance on changes to the Development Control System” emphasises the PPS1 policy that a key objective for new developments should be that they create safe and accessible environments where crime and disorder or fear of crime does not undermine quality of life or community cohesion. Paragraph 87 of this document states unequivocally that Design and Access Statements for outline and detailed planning applications should therefore demonstrate how crime prevention measures have been considered in the design of the proposal and how the design reflects the attributes of safe sustainable places set out in ‘Safer Places – the planning system and crime prevention (Home Office/ODPM 2003)’. If adequate crime prevention information is not included in the explanation of the design principles applied to the amount, layout, scale, landscaping, appearance and context of the development, this may hinder the application as crime is a potential adverse economic, social and environmental impact of development and PPS1 requires such impacts to be avoided or mitigated.

**1.4** In addition to the requirements of planning legislation and guidance, local authorities (and the other bodies within each local Community Safety Partnership) have a wider responsibility under Section 17 of the Crime and Disorder Act 1998 to consider the crime and disorder implications of all their activities, and to do all that they can to reduce opportunities for crime and fear of crime in the exercise of their functions. Developers and their designers and advisers need to be aware of this.

**1.5** The CLG good practice companion guide to Design Bulletin 32 ‘Places Streets and Movement’ provides advice to local authorities and developers on the main planning considerations to be taken into account in laying out roads and footpaths in residential areas. The companion guide seeks to show in general terms how these considerations can be applied in ways to create sustainable and well-designed residential areas. It underlines the importance of natural surveillance and designing routes that are overlooked and busy so that the design of housing layouts can make a major contribution to both the prevention of crime and reducing the fear of crime.

**1.6** The reduction of crime and the fear of crime are key objectives of Secured by Design, which are in accord with the aim of the CLG guidance to put more emphasis on people and communities. Busy movement routes provide informal control by citizens and a heightened sense of safety, a point highlighted in another CLG publication ‘Personal Security Issues in Pedestrian Journeys’. In particular, clear and direct routes through an area for all forms of movement are desirable. However, these should not undermine defensible space and the sense of ownership and responsibility inherent in well-designed neighbourhoods. Secured by Design seeks to promote routes that are active and self-policing, and where leisure routes are less busy to ensure that the design approach responds accordingly. The creation of underused and lonely movement routes is to be avoided.

**1.9** Safe communities are stable communities. If the overall direction given by government planning policy and the CLG guidance is combined with the principles of Secured by Design and put into practice by developers, this will be a major advance towards the government’s goal of sustainable communities.

**1.10** Secured by Design aims to achieve a good overall standard of security for buildings and for the private and public spaces around them. In respect of residential environments, detailed requirements and recommendations are set out in the publication ‘Secured by Design New Homes 2009’. Through the introduction of appropriate design features that facilitate natural surveillance and create a sense of ownership and responsibility for every part of the development, criminal and anti-social behaviour within the curtilage or grounds of an estate can be deterred. These design features include secure vehicle parking, adequate lighting of communal areas, fostering a sense of ownership of the local environment, control of access to individual and common curtilages, defensible space, and landscape design supporting natural surveillance and safety.

## **Marketing opportunity**

**1.12** Developers who gain Secured by Design approval benefit from a significant marketing opportunity. They are entitled to use the official Secured by Design logo in their literature and advertising, the police award for incorporating design, layout and security measures that are conducive to community safety. Information about the application process and how the logo may be used is contained within the main Secured by Design Standards document which can be obtained from your local police Architectural Liaison Officer (ALO) or Crime Prevention Design Adviser (CPDA) or from the Secured by Design website [www.securebydesign.com](http://www.securebydesign.com)

## **Why Secured by Design?**

**1.13** Incorporating sensible security measures during the construction of a new development or the refurbishment of buildings and estates has been shown to reduce levels of crime, fear of crime and disorder. This works best if balanced with the need to achieve desirable places to live. The aim of the police service is to assist in the design process to achieve a safe and secure environment for residents and users of public space, without creating a fortress mentality which would be counter-productive not only in terms of the governments objectives for the creation of attractive living environments and sustainable communities, but also ultimately in terms of security. By providing quality environments and ensuring that they are properly managed and maintained, communities can more readily be encouraged to exercise a sense of ownership and responsibility. By bringing the crime prevention experience of the police more fully into the planning and design process, a balance can be achieved, and the government’s desire to create ‘better places to live’ can be fulfilled. See [www.securebydesign.com](http://www.securebydesign.com) for further details.

## Appendix 5

### Housing Quality Indicators (HQI's)

HQI's assess the quality of the internal environment of the home – see Section 1, Internal Environment in the ‘Introduction - ‘Internal environments should be comfortable, convenient, and capable of sensibly accommodating the necessary furniture and equipment associated with specific room activities and be suitable for the particular needs of intended user groups.’

The assessment is undertaken by Knightstone’s Employers Agent, advising the designer/contractor where the design falls short of the minimum scores. The internal environment of our homes must reach the minimum HQI's scores for the following:

#### **Unit size (minimum score 41)**

This indicator measures whether the internal floor area provided exceeds or falls short of a normative range for any given occupancy and storey height. It also identifies the extent to which the number and use of living spaces provided exceeds normative provision. The minimum unit sizes are:

2 bedspace 45 to 50 sq m,	3 bedspace 57 to 67 sq m,
4 bedspace 67 to 75 sq m,	5 bedspace 1 storey 75 to 85 sq m
5 bedspace 2 storey 82 to 85 sq m,	5 bedspace 3 storey 92 sq m
6 bedspace 1 storey 85 to 95 sq m,	6 bedspace 2 storey 95 to 100 sq m
6 bedspace 3 storey 100 to 105 sq m,	7 bedspace 2+ storey 108 to 115 sq m
7+ bedspace add 10 sq m per bedspace	

#### **Unit layout (minimum score 32)**

This indicator measures whether the designed internal layout exceeds or falls short of a normative range of provision within individual rooms or spaces for furniture, access, passing and activity zones. It also identifies a wide range of additional positive features that will enhance the liveability of homes. For example, the living space of a five bedspace home would be assessed against the normative space provision of one TV, occasional table, coffee table and three-seat settee. Additionally space for two arm chairs, two visitors' chairs and appropriate storage units; and....

#### **Unit services - Noise control, light quality and services (minimum score 22)**

This indicator measures whether a range of characteristics and service provisions are present compared to normative provision. It identifies characteristics in relation to noise attenuation, daylight quality, electrical sockets outlet provision and other positive additional features. Higher scores would be achieved where measures are taken in the design to reduce airborne sound, to increase the level of daylight provision, to increase future adaptability of the home and to make special provision for electrical services in areas at medium and high risk of flooding.

A copy of the assessment form is available at [www.homesandcommunities.co.uk/hqi](http://www.homesandcommunities.co.uk/hqi)

## Appendix 6

### Preferred house designs

(To follow)