

THE NATIONAL AFFORDABLE HOMES AGENCY

721 Housing Quality Indicators (HQI) Form

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Revisions to this edition:

This HQI update builds on HQI version 4 in that it is revised to address areas of ambiguity which have been identified by the Housing Corporation and its Investment Partners since the publication in April 2007. The principal revisions are listed below:

Page 3: More detailed Table of Contents included

Page 4-7: Introduction summarised and shortened. Irrelevant wording removed.

Page 6: Additional Guidance on "Not Applicable" options included.

"Not Applicable" Options removed for questions 2.7, 2.11, 2.12, 2.18, 2.22, 2.25, 2.26, 2.30, 3.17, 4.2.16, 6.2.33 and 6.2.34.

Page 26: Additional Guidance on the Unit Size Indicator included

Page 27: 5 bedspace 3 storey option included

Page 32: Additional Guidance on Storage requirements included

Page 32. Minimum area of external storage required revised from to 2.2 m² 2.5m², for 1-4 bedspaces to allow for standard garden shed sizes.

Page 42: Additional Guidance on the Code for Sustainable Homes Included

Page 45: Additional Guidance on Building for Life Included

Annexes which contain information which is duplicated elsewhere removed.

Minor spelling and grammatical errors corrected and formatting changes have not been included above

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INTRODUCTION

The Housing Quality Indicators (HQI) 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.

How the System Works

The main body of HQI contains information on the ten indicators/sections that measure quality. 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 & 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 (5-9), but also the context and surroundings (1-4 &10).

Scoring

The answers on the HQI form are calculated into a standardised score. This is expressed as a series of scores showing how well the scheme performs on each indicator as well as an aggregated score.

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.

Indicators 5-7 are the key ones currently used by the Housing Corporation to underpin the Internal Environment Performance standards set out in the Design and Quality Standards (April 2007)

New build feasibility stage

At the early stages of a project, detailed information about the design of new houses or flats and their setting is usually not known. Typically use of the HQI at feasibility stage implies a commitment that the detailed design will provide a particular quality score. Verifying that this quality score has been delivered may form part of an audit process. The completed unit, unit type or scheme can be checked against the HQI profile to confirm that the commitment to levels of quality has been met. Proof of compliance with some commitments – such as noise reduction or achieving temperature levels – can only be tested after completion. This will also apply to any decisions that are left until after a project is occupied in order to take account of tenant preferences. Where schemes are based on the HQI requirements, it should be possible to complete the HQI as part of the normal design process. Many answers should be

predetermined as part of the process of deciding that level of quality is to be aimed for in the scheme. This process will, of itself, perform a role in helping to achieve higher quality and ensure design and construction decisions take account of quality.

Refurbishment schemes

In principle, the qualities that are considered to be 'good' will be the same in refurbished and new buildings. However, as the former were built under different regulations and guidance they may be unable to meet all the higher levels of quality on certain Indicators. This does not imply that a different set of Indicators is needed for refurbished dwellings, but merely that typical quality scores may be lower than new housing.

Housing Type - units for sheltered, special needs and/or supported housing

The HQI system is designed to assess housing for the general population (General Needs). It is not intended to cover the specialist requirements for sheltered, special needs and/or supported housing with the exception of 'Designated supported housing for older people'. For further information, please refer to the Housing Corporation's Design & Quality Standards, April 2007.¹

Scoring

The HQI system can be used to assess single unit or type of unit, but can also be applied to a scheme with units of different types. Appropriate answers to the questions that make up the Indicators should be ticked. This information is then transferred to the scoring spreadsheet which then produces the scores. If final information is not available, questions should be answered on the basis of commitment.

Each Indicator receives one tenth of the total possible score as equally, though differently, important in creating quality. Each Indicator has several parts and there are individual questions within each part. Within each Indicator, the weight of each part is shown alongside the relevant sub-title.

Failure to meet suitable levels of, say, security or noise control may render a house so uninhabitable that other factors cannot compensate. However, this does not imply that these Indicators should be more heavily weighted than other factors; merely that failure to meet a certain level is unacceptable for these Indicators.

Comments

At the end of each Indicator, a Yes/No box allows users to indicate whether they have recorded comments about the scoring of that Indicator at the back of the HQI form. This is the opportunity for a provider to explain why it has provided or not provided a particular feature. Comments are particularly important where current stated minima are not met and where only very few units, or a single unit, are involved (see below for special instructions in such situations). For example, when considering the provision of gardens, the base assumption is that 'more' is 'better'. If this is not the case for the project under consideration, a comment can be added.

¹ Accessed Jan 08 at <http://www.housingcorp.gov.uk/server/show/ConWebDoc.10783>

‘Not applicable’

When a question is ‘not applicable’ to some, but not all, units in a scheme, then a comment should be entered to note that fact so that reduced scores in respect of these Indicators can be explained. For example, where there are bungalows and houses in a scheme, the questions about stairs will not apply to the bungalows. A comment to this effect should be added to the HQI form.

We are currently assessing whether it may be appropriate to replace NA options with specific answers tailored to the questions. For example where a question asks "Are spaces between buildings planned for specific uses?," rather than having an NA option it there may be scope for the user to specifically indicate that there are no spaces between the buildings on the scheme.

Mixed schemes

When there are different units within a scheme, the score will take account the variety. In an estate with two types of houses, for example, one of which meets and one of which exceeds or falls short of standards, the scoring method will indicate the overall quality gain for the estate as a whole. This overall score takes into account the number of each type of unit in the scheme. In such case, the HQI user can assess each unit type separately by calculating Indicators 4 to 10 for each type, to evaluate their differences.

Sampling

The HQI system is designed to allow schemes to be fully assessed without detailed examination of all individual units. The majority of questions relate either to schemes at the site level or to unit types. However, where responses to questions vary at the level of individual units, a full HQI assessment involves examining each ‘individual unit’. However, there are two possible occasions when such an examination is sufficiently time consuming to be impractical.

Large number of units

Schemes that contain a very large number of individual units, irrespective of number of unit types, may require sampling techniques to be used for Indicator 7. In all other cases, sampling should not be necessary provided a systematic approach has been taken to the design of the units.

Large number of ‘unit types’

Where very large numbers of ‘unit types’ are encountered in a single scheme making a full assessment of the scheme can become time consuming. To reduce the workload to a manageable level, larger more complex schemes may require the use of sampling. Initially in these cases, the assessor should attempt to consolidate their different ‘unit types’ into a smaller number –the developers unit types may vary by characteristics that do not affect HQI scores e.g. handed units or by different external treatment. Such units can be grouped together. This may reduce the number of unit types to a manageable level. An assessment based on these consolidated units types will lead to no loss of accuracy and should not be considered to have been sampled. If the number of unit types cannot be reduced by this method, sampling will be necessary. Again the approach should be to group together similar unit types by common characteristics: number of bedrooms, bedspaces, floor area (grouped within reference to Indicator 5 standards), type of dwelling and new/refurbished. This should reduce the number of unit types to a manageable level. The HQI assessment can then be carried out based on a sample of representative examples from the grouped unit types. If a consistent approach has been taken to the provision of services, kitchen layout and associated elements, assessment based on a sample in these cases may lead to

little loss of accuracy. The assumptions and methodology behind grouping of unit types and the choice of sample should be detailed in the space for comments. Schemes will be encountered that combine large number of unit types with large numbers of individual units. In these cases, both of the approaches to sampling discussed above will have to be considered

PROJECT DESCRIPTION

This section is used to record descriptive and location information about the scheme being assessed. These are general questions mainly for reference and identification purposes and are intended to act as a data collection opportunity. The information requested in this section may only be partially available at feasibility stage: for example, the type and mix of units may be known, within the floor areas and number of storeys being finalised. The project information should be updated, as detailed information on the project becomes available.

Unit Type

The unit types are differentiated by whether they are new or refurbished, accommodation (bedrooms and bedspaces), construction type (flat/terraced house, semi-detached, detached) number of storeys and size.

The Size is the net internal floor area, which is measured from wall finish to wall finish of the Unit. For flats, the central lobby area and passage ways are excluded. Conservatories and similar are excluded, with the exception of when they form an integral part of the habitable space. See unit size for further more detailed guidance

Bedrooms and Bedspaces

The number of bedspaces represents the number of occupants the dwelling was designed to accommodate. For example, a three bedroom house with one double bedroom, one twin bedroom and a single bedroom has 5 bedspaces. A five bedroom house with two double bedrooms, one twin bedroom, and two single bedrooms has 8 bedspaces.

- A single bedroom is a bedroom designed to accommodate one person in a single bed.
- A twin bedroom is a bedroom designed to accommodate two people each in a single bed (with no bunk beds).
- A double bedroom is a bedroom designed to accommodate two people in one double bed.
- A triple bedroom is a bedroom designed to take three people in three single beds, or one double bed and one single bed (with no bunk beds).

Please note that this information should be consistent with Indicators 5 and 6. The total bedspaces given should be considered the 'full occupancy'. If a developer considers that the full occupancy is unrealistic, then they should indicate a 'realistic occupancy' in the table above. For example, a five bedroom house with two double bedrooms, one twin bedroom, and two single bedrooms has 8 bedspaces. However, the developer may consider it more realistic to assume the dwellings is occupied by a couple in one double bedroom, three children with their own bedrooms and a single 'spare bedroom'. In this case, the realistic occupancy is 5 people. Those undertaking assessments should bear in mind that it may be necessary to justify their "realistic occupancy" assessment to an auditor where housing corporation funding is involved..

1. LOCATION

Location has a major impact on occupants and the long-term desirability of housing. It is important to be aware from the outset how good it will be for residents, even if a provider may have little influence over it. This indicator considers the physical context in which the project is set. A very low score may indicate that it is inappropriate to pursue a particular project.

Amenities

The scale or type of amenity close to the project is relevant to 'quality'. Although there are different benefits to be achieved from different amenities, a better score is given for being close to a larger number of them. The most important amenities, such as health care facilities, appear on the table at two different distances. They score twice as much if very near (within 500 m) as if fairly near (between 500m and 1Km). A score can be obtained for both distances if there is a relevant amenity both very and fairly near. Only include amenities accessible to the general public. *Planned Amenities*: Where a service or amenity does not currently exist but is planned within a 3 year period, please provide details in the comments section to explain the score. *Refurbishment schemes*: For refurbishment schemes, the existing situation is the basis for the answers. Longer term plans should not be considered unless new amenities will be part of the project.

Play and leisure

Play facilities for the 5-12s would typically include 5 types of equipment and a small games area. Overall size approximately 400m². Play facilities for the over 12s would contain typically about 8 types of equipment, a game area suitable for kick-about football and/or cycle play opportunities. Overall size approximately 1000m².

Liabilities

Some features, such as a public refuse tip, may be a disadvantage. For these it is better to be further away. Absence of these liabilities generates the score, which contributes up to 10% of the indicator total. Where action has been taken to successfully mitigate against a liability, please score as if the liability is not present. Please detail the liability and mitigating action in the comments section.

Noise

Noise sources close to the site can cause problems for residents and constitute a disadvantage. The score is based on absence of noise sources and contributes up to 10% of the indicator total. For 1.3.1 and 1.3.2 a 'major' road is a motorway, trunk road or 'A' road. For 1.3.5, noise contour maps are usually available from local airports. If this information cannot be obtained, please assume all units within 5km of the airport would be affected. For all noise source questions, the % of the site affected needs to be identified to the nearest 10%.

Acceptable distances

Acceptable distances vary according to whether the location is urban or rural and for different types of resident. Where existing occupied units are being assessed, distances in terms of walking times can be used as an alternative method. For an able-bodied adult, please assume 5 minutes walking is equivalent to 500m, and 10 minutes equivalent to 1km. For schemes for elderly persons, assume 10 mins for 500m and 20mins for 1km. Please note that all walking times are indicative and priority should be given to using actual distances involved.

Measuring

Distance is measured along roads and foot paths from the:

- geographical centre for amenities
- boundary for liabilities
- noise source to points within the site.

Where a layout is not yet planned add 20% to the straight line distance. A site plan showing the relevant distances will make it easier to answer the questions. Amenities: the geographical centre of an estate is the basis for distance measurements where the project is a single compact area. For a long site, where one direction across a site measures more than twice another, treat the site as several with a diameter equal to the short dimension across the site. In these situations enter a percentage in the appropriate column.

Liabilities: use the distance from the item to the nearest point on the site boundary.

Scores

Tick 'Yes' where the scheme has assets or liabilities described and 'No' if not. Tick the planned column if applicable.

1.1 Amenities – how close are they? (80%)		
Support services (20%)	Yes	No
1.1.1 Is there a healthcare facility or GP practice very near (within 500m)?		
1.1.2 Is there a healthcare facility or GP practice fairly near (between 500m and 1 km)?		
1.1.3 Is there a public house, restaurant or cafe within 1km?		
1.1.4 Is there a place of worship or community hall or centre within 1km?		
Retail (20%)		
1.1.5 Is there local retail outlets – e.g. food or newsagent – very near (within 500m)?		
1.1.6 Is there local retail outlets – e.g. food or newsagent – fairly near (500m to 1km)?		
1.1.7 Is there a post office very near (within 500m)?		
1.1.8 Is there a post office fairly near (between 500m and 1 km)?		
1.1.9 Is there a public telephone very near (within 500m)?		
1.1.10 Is there a cash-point/bank very near (within 500m)?		
1.1.11 Is there a major commercial centre or 'high street' within 2 km?		
Schools (10%) (excluding fee paying)		
1.1.12 Is there a pre-school/nursery very near (within 500m)?		
1.1.13 Is there a pre-school/nursery fairly near (between 500m and 1 km)?		
1.1.14 Is there a primary school very near (within 500m)?		
1.1.15 Is there a primary school fairly near (between 500m and 1 km)?		
1.1.16 Is there a secondary school within 1km?		
1.1.17 Is there a secondary school more than 1km but within 2 km?		

Play and leisure (10%)		
1.1.18 Are there toddler play areas within sight of family houses?		
1.1.19 Are there play facilities for 5 – 12s very near (within 500m)?		
1.1.20 Are there play facilities for 5 – 12s fairly near (between 500m and 1 km)?		
1.1.21 Are there play facilities for over 12s very near (within 500m)?		
1.1.22 Are there play facilities for over 12s fairly near (between 500m and 1 km)?		
1.1.23 Is there a park/public open space within 1 km?		
1.1.24 Is there a leisure/sports facility (eg pool or gym or playing fields etc.) within 1 km?		
Public transport (20%)		
1.1.25 Is there a bus or tram stop very near (within 500m)?		
1.1.26 Is there a bus or tram stop fairly near (between 500m and 1 km)?		
1.1.27 Is there a train or underground station very near (within 500m)?		
1.1.28 Is there a train or underground station fairly near (between 500m to 1km)?		
Liabilities – how close are they? (absence of all of these will increase the score by		
1.2.1 Is there a refuse tip and/or ground contamination within 500m?		
1.2.2 Is there an industry generating smells or potential health hazards within 500m?		
1.2.3 Is there a derelict site – institutional/industrial/other within 500m?		
1.2.4 Are there high voltage overhead power lines within 500m?		
1.2.5 Are there polluted waterways within 250m?		
1.2.6 Is the site in a sea or river flood plain, within 3m (vertical) from high water level?		

1.3: Noise sources – how close are they ? (absence of all of these will increase the score by 10%)	Yes	% of site affected	No
1.3.1 Is there a bus route or major road within 20m?			
1.3.2 Is there a major road within 50m?			
1.3.3 Is there a motorway within 150m?			
1.3.4 Is there a railway within 150m?			
1.3.5 Is the site within the 69 Leq noise contour line of an airport?			
1.3.6 Is there industry generating noise within 150m?			
1.3.7 Is there an outdoor leisure facility (playing field pool etc.) within 150m?			

2. SITE: VISUAL IMPACT, LAYOUT, LANDSCAPING

Visual impact

Features considered in the site-based indicators can be hard to quantify, so some subjective judgement must be used. This is particularly the case in relation to visual issues. There is little consensus on what is aesthetically pleasing and how to describe this. It should be noted that as the environment into which a scheme may be placed may itself be a poor visual model, the first two questions may be not applicable. The questions relating to visual impact are likely to be modified as the HQI becomes more widely used. The feelings of those living there –whether they 'like' it, whether they are 'proud to invite friends and family to visit', whether 'it is a good place to bring up a family' –are all related to the site design as well as to the design and functionality of the dwellings. Achieving a high score in the site indicator overall will help to achieve a positive response from residents. Habitable rooms provide the 'living accommodation' of the dwelling. They include living room, dining room, study, home office, conservatory, bedroom etc. They exclude the bathroom, WC, utility room, store room and circulation space. A kitchen is not a habitable room unless it provides space for dining.

Landscaping

For a single unit or an infill site, there may be no land outside the unit curtilage/building plot. In this case answer 'No' to Q 2.21. The landscape score will then be shared between 'Visual impact' and 'Layout'. For most sites, there is at least hard surfacing to design and detail. Please note that roads and pavements are included in this section. If such hard landscaping is the only form of landscaping, then questions 2.25, 2.27 and 2.30 should be N/A.

Scores

Tick 'Yes' where the scheme complies with a particular question. Tick 'No' where it does not comply. If 'Yes' only applies to part of the scheme for any questions then tick 'No' for question 2.33 at the bottom of the page.

Visual Impact – overall visual effect and relationship to local character (33%)	Y	N	NA	Criteria where NA may be used
2.1 Does the site scale and concept fit well with the surrounding area?				- Surrounding local environment is of poor visual quality
2.2 Are the buildings in context with local buildings, street patterns (form, mass, detail and materials)?				- Surrounding local environment is of poor visual quality
2.3 Do the buildings enhance the local environment?				
2.4 Are elements associated with the overall site (lighting, street furniture, street names and direction signs, curbs, benches/seats etc) well detailed, co-ordinated with each other and carefully located				- Rural scheme or urban infill facing existing streets, where this is not relevant.

SITE: VISUAL IMPACT, LAYOUT, LANDSCAPING

2.5 Are external elements associated with the dwellings (walls and fences, garages, refuse bin screening, electricity meter boxes, drainpipes, handrails etc) well detailed and co-ordinated?				
2.6 Are existing important elements (natural or man-made) protected, to give the site maturity?				-No existing important natural or man made elements
2.7 Are any elements that could confer a special identity to the site used to do so?				
2.8 Is it easy to understand how to enter and move about the site?				-Infill site. -Design of this infrastructure falls outside the boundaries of the site.

Layout – relationship of buildings to each other, open areas and site (33%)				
2.9 Is overlooking of habitable rooms avoided e.g. 50% of units with at least 10m away from other buildings or public spaces, including pedestrian routes?				
2.10 Are buildings (houses, flats garages others) arranged to protect residents from external noise?				
2.11 Are units grouped to take best advantage of local topography?				
2.12 Has best advantage been taken of sunshine for views, heat and light in outdoor areas and in dwellings?				
2.13 Are there distant or varied views from public areas?				- No public areas within the scheme
2.14 Is the number of dwellings that share access (e.g. houses: driveway or courtyard; flats: landing or corridor) always 5 or fewer?				
2.15 Is the number of dwellings that share access from a cul-de-sac, or vertical access route in a block of flats always 15 or fewer?				
2.16 Is the private/shared open space enclosed within unit boundaries, well designed in shape, dimension and location?				- No shared open space
2.17 Do different public areas have specific differentiated characters?				- Only one, or zero public areas
2.18 Are refuse and bin storage areas convenient and inconspicuous?				
2.19 Is communal bin storage serviced by tap and drainage for cleaning?				- No Communal bin storage
Landscaping – excluding private open space (33%)				
2.20 Are there hard surfaces or soft landscaping in the				

SITE: VISUAL IMPACT, LAYOUT, LANDSCAPING

scheme? If 'No' go to Q2.34				
2.21 Is there varied planting to create visual interest in different seasons using height, colour, texture?				
2.22 Has planting been related to climatic conditions to provide wind protection and/or shade?				
2.23 Are there trees in the public open areas or streets?				
2.24 Is screening provided for in-curtilage and grouped parking (rails, fences, planting)?				No parking within Scheme
2.25 Are planted/grassed areas provided appropriate for the likely visage?				
2.26 Does layout of site discourage 'cutting corners' across landscape and/or private space?				
2.27 Has a qualified landscape architect been used to create or assess the landscape design?				No opportunities within the scheme.
2.28 Are hard surfaces varied – to suit relation to buildings or identify larger areas with different uses?				
2.29 Is landscaping able to be easily and cost effectively maintained?				
2.30 Is water (e.g. pool, stream, fountain etc) incorporated into the site and appropriately protected?				
2.31 Do all the 'Yes' answers above apply to 100% of the site	Y	N		
COMMENTS: Have any comments been entered on the comment page at the end?	Y	N		

3. SITE: OPEN SPACE

Public and private open space

The way in which public open space is provided has a great effect on the quality of a residential environment. Boundaries between public and private space must be clear for security and management reasons.

Areas without a fully designated purpose may be provided to enable spontaneous uses to develop. However, generally in residential areas the way in which public open space can safely and non-intrusively be used should be clear from the way in which it is designed. Private open space is open space accessible only to the resident. It includes gardens, roof terraces, patios, yards, and balconies. Shared open space is accessible to a restricted group of residents. It includes communal or shared gardens or courtyards. Any unit located more than 10m from the shared space (as measured from the closest entrance door) should not be considered to share the open space. Open space accessible by any member of the public or more than 25 units is considered public open space.

Site security

Principles of 'Secured by Design' that relate to the area outside and between buildings are addressed in this section. Others are covered in features of the unit. These questions are applicable even to single dwellings in infill or refurbishment schemes where some features may not be in the control of the developer.

For Q3.1.1, the presence of the following items would tend to indicate the space between buildings has not been planned for specific uses. The presence of areas with no planned hard or soft landscaping, open space with no clear ownership or boundaries, any open space without a clear purpose, or any shared/public open space of less than 4 sqm.

Children's play

In some projects, there will be no provision for children's play, either because the scheme is too small (or e.g. infill or refurbishment), or close to existing suitable provision, or because the dwelling types are not planned for, nor expected to attract, families. For these enter 'not applicable' (but still answer questions about children's play in indicator 1).

Shared areas

The shared areas of a block of flats are considered with the 'site' as they deal with areas outside individual dwellings. These have constraints and opportunities similar to those of open space: the distinction between public and private is crucial. Size, lighting and views all contribute to the quality. Where there are no flats enter 'not applicable'.

Private open space

It is recognised that larger gardens and private open space have implications for cost and land use, and consequently for 'sustainability'. These factors must be part of a wider project and policy assessment that relates the HQI measures to such other issues. Extra area is therefore not scored negatively. In this indicator, a general assumption is made that 'more' private open space is 'better' on the basis that most residents appreciate space. Safe toddler play is most easily achieved in private gardens. Gardening is a popular recreation, and private open space is likely to increase opportunities for sunlight and views.

However some projects or standard house types are deliberately planned with small gardens or even without gardens or other forms of private open space. In these cases, the reasons should be stated in the 'comment' space at the end. Where shared open space exists, how this will be effectively managed and maintained should be covered in the comments section at the end.

Scores

Tick 'Yes' where the scheme complies with a particular question. Tick 'No' where it does not comply. If 'Yes' only applies to part of the scheme for any questions then tick 'No' for question 3.1.22. To score the gardens and car parking sections please enter the number of units to which each type of space applies.

3.1 Public and shared open space – security and children’s play Site security (20%) (30% if no flats, 40% if no children’s play, 50% if neither)	Yes	No	NA	Criteria where NA may be used
3.1.1 Are spaces between buildings planned for specific uses?				No spaces between buildings
3.1.2 Are boundaries between public and private spaces clear?				
3.1.3 Are spaces that are to be shared by residents but not for the general public clearly defined?				-No shared spaces
3.1.4 Is casual intrusion by non-residents beyond clearly defined public areas discouraged – eg using barriers, 'gates', concierges or security systems?				
3.1.5 Is site route network designed to discourage strangers and hinder escape?				- No significant site route network
3.1.6 Is advantage taken of opportunities for private open space?				
3.1.7 Do unit boundaries consist of walls or railings to deter intruders and vandalism?				
3.1.8 Is main entrance clearly visible and hiding places, near front doors and pedestrian routes, avoided?				
3.1.9 Does building grouping, position of windows or cameras allow surveillance of unexpected visitors?				
3.1.10 Does building grouping and position of windows allow supervision of open space and play?				- No open space/ play space provided
3.1.11 Are vulnerable points on buildings visible by other residents or passers by?				
Shared areas in flats (10%)				
3.1.12 Are flats with shared areas provided? If 'No' go to Q 3.1.17				
3.1.13 Are halls and corridors in blocks of flats well lit (both natural and artificial light)?				
3.1.14 Are vandal and graffiti resistant glass/finishes used to 2000mm from the ground?				
3.1.15 Is there an entry phone or other security system to main entrances of blocks of flats?				

3.1.16 Is 9 sq m or more available for a concierge desk in the main entrance hall of large (20+) blocks?				- No large (20+) blocks
Children's play (20%)				
3.1.17 Is the housing designed for households with children? If 'No' go to Q 3.1.23				
3.1.18 Are play areas provided for 2–5 year olds within sight of 100% of family dwellings?				
3.1.19 Are play areas provided for 5–12 year olds – at a minimum of one for 40 dwellings?				
3.1.20 Are play areas fitted with play equipment for the age group?				
3.1.21 Is energetic play provided for – e.g. by adventure playground, cycle paths, etc?				
3.1.22 Are play areas and public spaces sited to avoid nuisance to neighbours?				
3.1.23 Do all the 'Yes' answers above apply to 100% of the site	Y	N		

3.2 Private/shared open space (16%) please enter the number of units to which the following apply	No of units	NA	Criteria where NA may be used
Principal private open space			
3.2.1 No private open space			
3.2.2 Principal (usually rear) private open space up to 8 sq m			
3.2.3 Principal (usually rear) private open space 8–20 sq m			
3.2.4 Principal (usually rear) private open space 21–50 sq m			
3.2.5 Principal (usually rear) private open space 51–200 sq m			
3.2.6 Private open space over 200 sq m			
Shared or second open space			
3.2.7 No shared open space or no second private open space			
3.2.8 Second private open space less than 8 sqm or shared open space less than 8 sqm per unit			
3.2.9 Second private open space over 8 sqm or shared open space over 8 sqm per unit			
Characteristics of gardens/private/shared open space (9%)			
3.2.10 Robust principal (usually rear) private open space, boundary fences or walls 1.2 m side, 1.8 m rear			
3.2.11 Second private open space or shared open space with boundary fences/walls not less than 700 mm high			- No second private open space
3.2.12 Privacy screen 1.8 m high to within 2m of house wall			- No open space provided
3.2.13 Lockable gates to open space same height as open space boundaries			-No gates in development. No open space/ open space boundaries

3.2.14 External lockable storage suitable for large items (eg bicycles)			- All units are flats without gardens
3.2.15 Facilities for water recycling for garden use in open space			- No units have gardens
3.2.16 Outside tap with suitable drainage			- No private outside space
3.2.17 Outside electricity supply			- No private outside space
3.2.18 Secure access from front to rear open space without going through house			- No units with both front and rear open space
3.2.19 Clothes drying facility with access path with no level change			- No outside clothes drying facility provided

Car parking

Provision of car parking is sometimes considered to be associated with a wasteful form of personal transport, rather than with convenience for individuals. However for scoring the current version of the HQI, availability of conveniently located parking space is considered to be a positive attribute, as residents normally value this highly. In circumstances where better alternative transport systems are provided or become available, a car space that is not required for parking can benefit the exterior by providing greater openness, or a garage can offer extra interior amenity. Only one car parking space per unit is assessed. No additional score is obtained for further spaces, except as clearly defined visitor parking. Some projects or unit types are planned without car parking. In others, there is no possibility of providing parking directly for individual units. This may be the result of

- location (inner city)
- building type (flats)
- planning requirements
- to increase the environmentally sustainable qualities of the project.

In these cases the reason for absence of provision for car parking should be stated in the 'comment' space.

A 'secure' car space needs to provide security for the vehicle when parked and also for the resident when making their way to and from the car space and unit. At a minimum, this would include good lighting and visibility, and a clear line of sight.

Underground garages

Underground garages with controlled and secure access for residents only (and authorised visitors) can be included in 3.3.5. All other underground garages are allocated to 3.3.2. Where such garages are shared with commercial organisation and/or the general public on a time or space basis, they should be allocated to 3.3.2.

Visitor Parking

'Clearly defined' visitor parking covers car spaces labelled as visitors parking or additional hardstanding

within the unit or building plot over and above the primary space per unit.

Scores

To score this section please enter the number of units to which each type of space applies.

The total of 3.3.1 to 3.3.11 MUST equal the total number of units in the scheme for a score to be registered.

3.3 Car parking (25%) please enter the number of units to which the following apply (a car parking space should be at least 2.4m x 4.8m to qualify for inclusion)	Number of units	NA	Criteria where NA may be used
Type of main/sole car parking provision for units These questions only apply to one (primary) space per unit			
3.3.1 No provision within 100m of front door			
3.3.2 Underground garages			
3.3.3 Only public road hard standing available – 30 to 100m beyond front door			
3.3.4 Only public road hard standing available – within 30m of front door			
3.3.5 Grouped hard standing more than 30m from unit or block (flats) or underground garages <i>only</i> accessible by residents			
3.3.6 Grouped hard standing within 30m of unit			
3.3.7 Grouped garages within 30m of unit or block (flats)			
3.3.8 Hardstanding outside building plot but clearly related to dwelling			
3.3.9 Hardstanding within unit or building plot			
3.3.10 Car port within unit or building plot			
3.3.11 Garage within unit or building plot			
Quality of car parking provision			
3.3.12 Where in dwelling curtilage, a large car space is provided (3.3m x 4.8m) or easily capable of achieving 3.3m in width.			No parking provided
3.3.13 Car space further than 2m from window of a habitable room			No parking provided
3.3.14 Car space is secure			No parking provided
3.3.15 Car space provides easy access directly to garden without passing through dwelling			No parking provided
3.3.16 Car space does not 'dominate' elevation – e.g. less than half width of elevation			No parking provided
3.3.17 Grouped parking is clearly identified with the dwellings it serves			No parking provided

Dispersed visitor parking			
3.3.18 Small amount of clearly defined visitor parking provided (less than one space per three dwellings)			
3.3.19 Fair amount of clearly defined visitor parking provided (more than one space per three dwellings)			
COMMENTS: Have any comments been entered on the comment page at the end?	Y/N		

4. SITE: ROUTES AND MOVEMENT

For small infill projects very few aspects of the wider site are in the control of the developing organisation and so will not form part of the project. However merely having no power to affect the site does not constitute 'not applicable'. Questions should be answered even where the developing organisation has no direct influence, by reflecting the prevailing provisions. Enter a comment on this if it is relevant. Only where the questions are genuinely non-applicable should 'n/a' be entered.

Routes and movements

Routes for vehicles and pedestrians need to be planned with convenience, safety and security of all users in mind. Where these already exist and are not provided as part of the scheme, the questions should be answered on the basis of the existing infrastructure. Appropriate traffic calming measures include clear road hierarchies, road detailing, speed bumps, road narrowing etc. Not all the measures need to be included in any scheme.

Access to the unit

For accessibility questions please answer questions about the recommended, non-required levels as well as the standard basic requirements. All questions must be answered in order for a score to be registered. The score will be increased where the recommended levels are met. For 4.2.3 and 4.2.5, essential ramps and stairs are those providing access where no alternative route is available. There are a number of features of lifetime homes and mobility standards that relate to items in this indicator. They include:

- Parking space associated with the dwellings is or can be widened to 3.3m
- Distance from car parking space to entrance door kept to a minimum
- Level or gently sloping approach to entrance door
- Level area outside front door and over the threshold within is covered and well lit.

Refer to Annex 3 for further guidance.

Scoring

Tick 'Yes' where the scheme complies with a particular question. Tick 'No' where it does not comply. For the accessibility questions there are two possible levels of achievement, the required basic level of provision and a higher recommended one. If 'Yes' only applies to part of the scheme for any questions then tick 'No' for questions 4.1.14 and 4.2.23 as appropriate.

4.1 Routes and movements (50%)	Yes	No	NA	Criteria where NA may be used
General				
4.1.1 Do routes connect with the surrounding neighbourhood (eg cul-de-sacs accessing more than 25 units avoided)?				
4.1.2 Is the hierarchy of routes clear?				
4.1.3 Are road, place and building names and unit numbers clear, visible and legible and sited appropriately in relation to buildings?				
4.1.4 Do routes take advantage of vistas/landmarks within or around the project site?				

Vehicles				
4.1.5 Are appropriate traffic calming measures used to control vehicle speed?				
4.1.6 Is vehicle segregation possible to help pedestrians (e.g. young children) to use safe routes?				
4.1.7 Can large, emergency or service vehicles come within 30m of all front doors of units or flats?				
4.1.8 Are there spaces for refuse and service/delivery vehicles to stand without blocking routes?				
4.1.9 Do routes facilitate and encourage cycling (cycle lanes, barriers to cars that cyclist can pass)?				
Pedestrians				
4.1.10 Are public spaces connected by clear, well lit and hard surface routes?				
4.1.11 Is lighting appropriately related to buildings and easy to maintain?				
4.1.12 Does position of lighting prevent 'pools' of darkness where people walk both outside and in common parts of flats?				
4.1.13 Are kerbs dropped where foot paths cross roads?				
4.1.14 Do all the answers in 4.1 above apply to 100% of the site?				
4.2 Access to the unit (50%)				
Are the following requirements met over the site as a whole?				
4.2.1 Pedestrian routes and garden paths – firm, even, slip-resistant finish, distinctive texture/colour?				
4.2.2 Pedestrian routes and garden paths – width 900mm minimum				
4.2.3 Gradient on access routes from car parking - max 5m at 1:12 or 10m at 1:15 or 1:20 if over 10m.				- No car parking provided
4.2.4 Where ramps are used, are alternative steps with handrails provided?				- Ramps not used
4.2.5 Rails for essential steps and communal stairs with rise max. 170mm plus going min. 280mm				- No steps
4.2.6 Level changes protected from adjacent drop by handrail if drop exceeds 380mm				- Drop does not exceed 380mm
4.2.7 Dropped kerbs for main footpaths and dwelling access positions				

Are the following recommended standards met over the site as a whole?				
4.2.8 Paths with gradients of less than 1:12 throughout				- No new paths on scheme
4.2.9 Paths with minimum width of 1000mm				- No new paths on scheme

Are the following requirements met for the dwelling entrance approach?				
4.2.10 Gateways min width 850mm and no step				- No gateways on scheme
4.2.11 Convenient wheelchair accessible parking space within 30m of main entrance for 10% of units				- Less than 5 units
4.2.12 Any slope to external doors to be gentle with level platform 1200x1200mm clear of door swing				
4.2.13 Canopy/porch over main entrance with light.				
4.2.14 External thresholds nominally flat – max. 15mm upstand weather bar				
4.2.15 Main front door 800mm clear width between blade and stop-swings				
4.2.16 Other external doors 750 mm clear between blade and stop-swings				
4.2.17 Lifts for dwellings with entrances over 3m from ground level for wheelchair plus accompanying person with good travel speed				- No dwellings in excess of 3m m from ground level
Are the following recommended standards met for dwelling entrance approach?				
4.2.18 Approach to all external doors to be level				
4.2.19 Convenient wheelchair accessible parking space within 30m of main entrance for 100% of units				
4.2.20 Lift to all dwellings with entrances above ground level				No dwellings with entrances above ground level
4.2.21 All dwellings with private entrance at ground floor level				
4.2.22 Main front doors with a 300mm return (in addition to the required 800mm width)				
4.2.23 Do all the answers in 4.2 (excl. 4.2.11) above apply to 100% of the site				
COMMENTS: Have any comments been entered on the comment page at the end?				

5. UNIT SIZE

It is recognised that larger dwellings have implications for cost and land use, and consequently 'sustainability'. These factors must be part of a wider project and policy assessment that relates 'quality', as measured by this HQI method, to such other issues. People set store by larger living spaces and the size of a unit as well as the number of rooms it contains. A larger unit in area and one with more rooms both represent higher quality than smaller ones. However, merely providing a larger unit will not compensate for a poor layout, badly proportioned spaces, awkward door swings that reduce usability, or poor orientation of units.

Scores

Indicator 5 must be calculated assuming a 'full occupancy'. If developers consider this level of occupancy is unrealistic, they can separately calculate the indicator based on 'realistic occupancy' and place this information and the reasons for this decision in the comments section. If this approach is adopted, developers must complete the last two columns of the occupancy table (in the Project Description section). The assessment of the units is designed to cover the whole group of units simultaneously – generally either all the units in one type, or all the units in all types in the project. This number is the number of units that is totalled in the Project Description. It is entered in the spreadsheet and used in calculations. Enter the number of units that achieve a particular quality as indicated in each question. On the spreadsheet, an automatic calculation will allocate the appropriate percentage of the score according to the number of units achieving the quality in each part of each question. If preferred, the unit indicators 5 to 10 can be separately scored for each unit type on a project with several different types. When the majority of units meet a particular level in a question, with some individual exceptions, these can be separately noted and reasons for non-compliance given.

Where housing Corporation grant support is required it is strongly advised that indicator 5 is assessed additionally on an individual basis to ensure that the corporations published standards in respect of internal environment are met, and specific minimum standards apply on an individual unit level. Providers seeking grant should refer to the Corporations Design and Quality Standards (April 2009) for the HQI levels that must be obtained at an individual unit level, in order to be considered for grant funding.

Size by internal area

For each type of unit represented in the assessment, enter the number of units in the relevant size category indicating the size achieved. The list should match that in the project description. Where the list is insufficient to cover the unit types on the project, insert additional ones in the rows labelled 'other'. If more are needed make additional copies of the list. Where a type has more than 7 bedspaces add 10 sqm to the areas in the target range for each additional bedspace. 'Exceeds' applies to those that exceed the upper figure in a range by the % indicated at the top of the column, 'falls short' applies to those that fall short of the lower figure in a range by the % indicated at the top of the column. Where a unit is larger than the given size range, and does not include additional living spaces, it is also likely to score positively in Indicator 6. If this is not the case, then it may be that the design of the unit should be reconsidered.

The Size is the internal floor area, measured from wall finish to wall finish of the Unit and as defined by the Housing Corporation for the purposes of this assessment in the table below.

Specifics of what is and is not permitted when undertaking the unit size assessment

Not Permitted

- Perimeter wall thicknesses and external projections
- Central lobby areas, passageways and other communal areas shared with other units.
- Any space where the height to the ceiling is less than 1.5m (e.g. rooms with sloping ceilings, external dustbin enclosures)
- Porches, covered ways etc
- Balconies (private, escape and access) and decks
- Voids and air wells
- Non-habitable basements, attics, thermal buffer zones or sheds.
- External storage space (see unit layout for this requirement)
- All space for purposes other than housing (e.g. garages, commercial premises etc.
- Conservatories not forming an integral part of the habitable space
- Chimney breasts, bay windows or other features, which, when included, would result in a unit size unrepresentative of the true unit size.

Permitted

- Floor area measured between the inside faces of the finished enclosing walls of each unit and measured over:
 - Private staircases
 - Partitions
 - Internal walls
 - Heating appliances
 - Internal chimney breast projections.
- Internal porches forming an integral part of the habitable space
- Internal storage space greater than 1.5m in height
- Conservatories forming an integral part of the habitable space

Size by number of living spaces

If additional living spaces over the numbers shown in the following table of required rooms are provided in some or all units, enter the number of units which benefit from each of the different additional living spaces as listed in 5.2. Please note that for 5.2.2, additional bedrooms above the minimum required can be provided by the provision of additional single bedrooms rather than twin or double bedrooms.

Number of rooms required

required living spaces 1p 2p 3p 4p 5p 6p 7p 8+

	1p	2p	3p	4p	5p	6p	7p	8+
Bedroom	1	1	2	2	3	3	4	4+
Bathroom	1	1	1	1	1	1	1	1+
WC†	1	1	1*	1*	2	2	2	2+
Kitchen	1	1	1	1	1	1	1	1
Living room	1	1	1	1	1	1	1	1
Dining space	1	1	1	1	1	1	1	1

† Separate or within a bathroom

* Two WCs required for 3p or 4p when on two floors (Source adapted from 'Standards and

Quality', National Housing Federation/ Joseph Rowntree Trust)

The Housing Corporations Design and Quality standards, published in April 2007 indicate that each individual unit funded by grant, within the development must satisfy the internal environment core standard. In real terms this means that only in the most exceptional circumstances would a scheme which includes units which "fall short" in terms of unit size be acceptable. It is the user's responsibility to ensure that each individual dwelling meets the minimum criteria set out in the Design and Quality Standards.

5.1 Unit type by area (75%) Please enter the number of units to which any of the following apply enter something on every line – use 'not applicable' for unit types not included in the scheme	Exceeds the upper figure by over 10%	Exceeds the upper figure by 1%-10%	Meets / falls within the range	Falls short of the lower figure by 1%-10%	Falls short of the lower figure by over 10%
5.1.1 1 bedspace 30 to 35 sq m					
5.1.2 2 bedspace 45 to 50 sq m					
5.1.3 3 bedspace 57 to 67 sq m					
5.1.4 4 bedspace 67 to 75 sq m					
5.1.5 5 bedspace 1 storey 75 to 85 sq m					
5.1.6 5 bedspace 2 storey 82 to 85 sq m					
5.1.7 5 bedspace 3 storey 85 to 95 sq m					
5.1.8 6 bedspace 1 storey 85 to 95 sq m					
5.1.9 6 bedspace 2 storey 95 to 100 sq m					
5.1.10 6 bedspace 3 storey 100 to 105 sq m					
5.1.11 7 bedspace 2+ storey 108 to 115 sq m					
5.1.12 7+ bedspace add 10 sq m per bedspace					
5.1.13 Other					

5.2 Units by living spaces (25%) <i>please enter the number of units to which any of the following apply. Enter something on every line</i>	Number of units.
5.2.1 At least the number of rooms required for the unit size are provided	
5.2.2 Additional bedroom above minimum required is provided	
5.2.3 Additional WC above minimum required is provided	
5.2.4 Additional bath/shower facility is provided in separate room from main bathroom	
5.2.5 Study/ separate work area is provided	
5.2.6 Separate utility room or separable utility space is possible	
5.2.7 Conservatory/enclosed sun porch/balcony (min. 3 sqm) is provided	
COMMENTS: Have any comments been entered on the comment page at the end?	

6. UNIT LAYOUT

Checking the quality of units, especially in relation to layout and usability, is a detailed task. It is most readily done in relation to standardised or preferred unit types and associated specifications which have been devised with the HQI in mind. However there is no requirement to use standard unit types, and they confer no scoring advantage other than as a convenience. The usability of a home is dependent not only on its size but also on whether it can be organised to suit the way the residents wish to live. These HQIs make use of material created for the Standards and Quality project by the NHF with the Joseph Rowntree Foundation (1998). This document provides a list of furniture that should fit into each rooms and which is included in the following tables. It also includes illustrations of spaces required to access the furniture and to perform activities typical to each room.

Furniture

If all listed furniture and appropriate activity and access zones (on following pages) can be accommodated, a room meets a basic standard. Please see tables in Indicator 6 annex to identify the additional furniture required to obtain higher scores. For storage, providing sufficient for the next size of unit is the way to exceed by one 'item'. If one (or more) furniture items listed for that room type cannot be accommodated, the room falls short by one (or more) 'item'.

Activity and access zones

The ability to accommodate activity, access and passing zones is treated in the same way as if these were furniture items. If an activity zone is 10% larger (or smaller) than the given size, the room exceeds (or falls short) by 'an item'. Similarly for access/passing zones:

1 sq m more (or less) means that the room exceeds or falls short by an item. If a room exceeds the requirement in one of these three particulars – furniture, activity zones, and access/passing zones – but falls short in another, then both aspects should be entered in the table. If this is the case, however, it may indicate poor planning of the unit and the design should be carefully reviewed. In the dining space, the following activity spaces are required between the edge of the dinning table and the surrounding wall or other furniture: 700mm one side, 900mm one side, 1100mm one side, and 1300mm one side. These allow for a combination of access to seats and passing with and without a tray/serving dishes. Where all the residents can be seated at a table which has one or two edges against a wall or other furniture then the 700mm and then 900mm activity space should be dropped.

Indicator 6 must be calculated assuming a 'full occupancy'. If providers consider this level of occupancy is unrealistic, they can separately calculate the indicator based on 'realistic occupancy' and place this information and the reasons for this decision in the comments section. If this approach is adopted, developers must complete the last two columns of the occupancy table (in the Project Description section).

Room Matrix Approach

In recognition of the time consuming nature of indicator 6, an alternative approach has been developed. Assessors should be aware that lower scores are likely to be obtained using the room matrix approach.. The Room Matrix Approach is detailed in the Layout Annex 1. **Assessors using this approach MUST indicate this in the Project Description section (Maintain Unit).**

Additional features

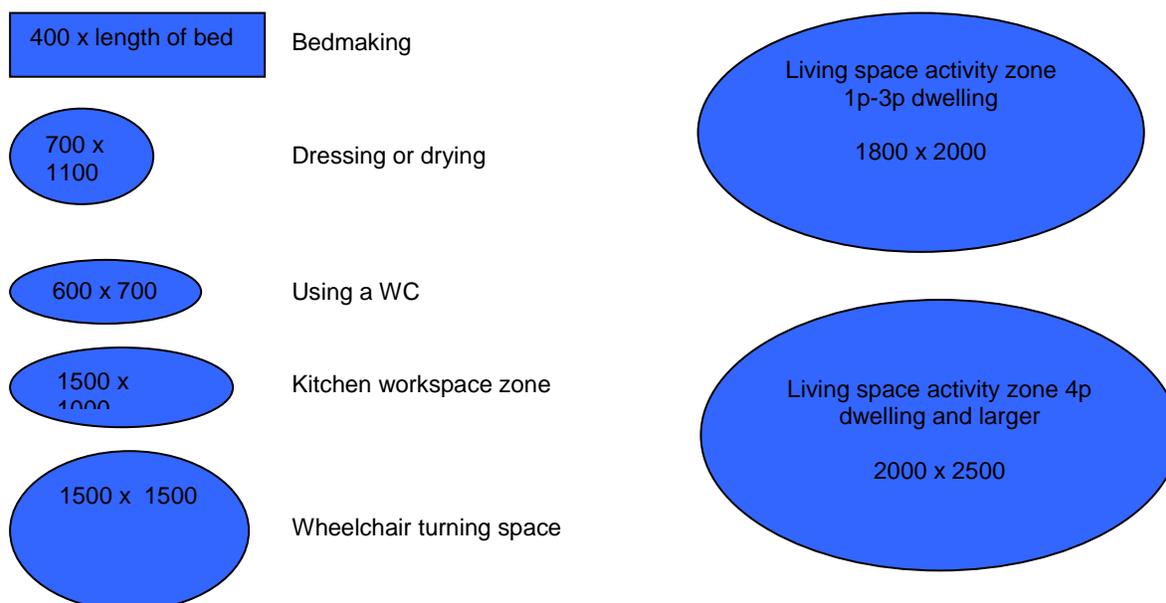
Further points can be obtained for additional features. Where these are achieved, enter the number of units in the project with that features. For 6.2.8, Layout Annex 1 contains advice on whether cot space is available. For 6.2.4 and 6.2.13, the resulting rooms must meet at least the basic standards detailed in Section 6.1

Where HC funding is required refer to Design and Quality Standards for details of the unit layout score required and Funding programme requirements

6.1 Furniture provision, access, passing and activity zones (50%)

please enter the number of units to which any of the following apply

	Exceeds by more than one item or more than 10%	Exceeds by one item up to 10%	Meets the requirement	Falls short by one item or 10%	Falls short by more than one item or more than 10%
6.1.1 Living room – furniture					
6.1.2 Living room – access/activity zones					
6.1.3 Dining space – furniture					
6.1.4 Dining space – access/activity zones					
6.1.5 Bedrooms – furniture					
6.1.6 Bedrooms – access/activity zones					
6.1.7 Bathroom – furniture					
6.1.8 Bathroom – access/activity zones					
6.1.9 Kitchen – furniture					
6.1.10 Kitchen – access/activity zones					
6.1.11 Storage – internal					
6.1.12 Storage – external					
COMMENTS: Have any comments been entered on the comment page at the end?				Yes	No



Source: adapted from 'Standards and Quality' National Housing Federation/Joseph Rowntree Trust

Units by layout – Table of furniture to be accommodated in units of different sizes*

See previous pages for illustration of the way in which furniture and access, passing and activity zones are shown on plans.

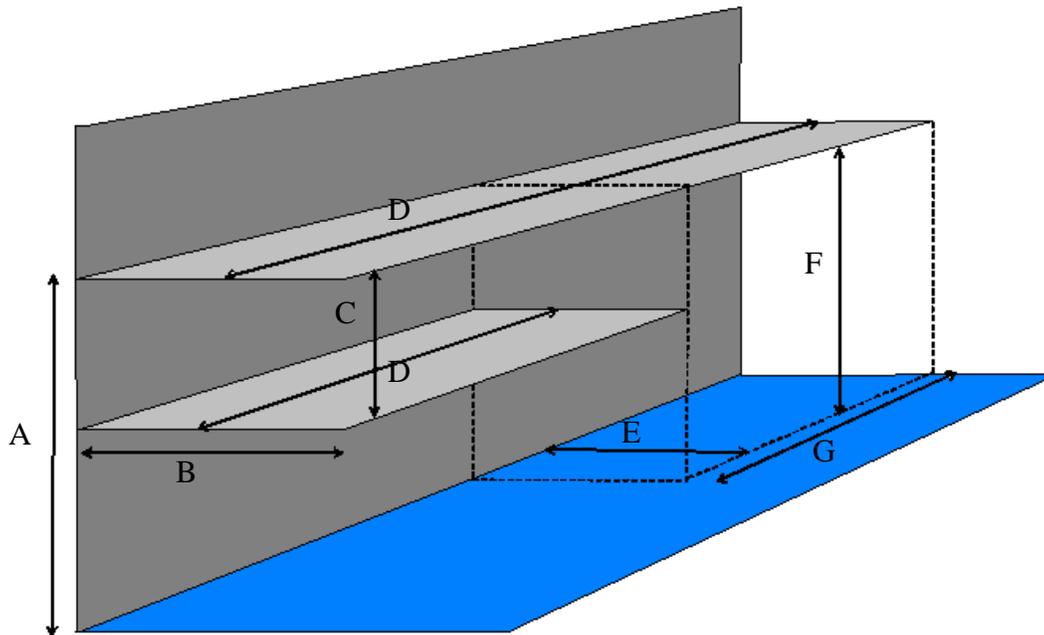
Living space	1p	2p	3p	4p	5p	6p	7p	+
arm chair 850x850 – combination to equal one seat/person	2	2	3	1	2	3	4	+1
settee – 2 seat 850x1300 (optional; as above)								
settee – 3 seat 850x1850 (optional; as above)				1	1	1	1	
TV 450x600	1	1	1	1	1	1	1	1
coffee table 500x1050 or 750 diameter	1	1	1	1	1	1	1	1
occasional table (450x450)					1	1	1	1
storage units 500x1000 – and incrementally larger	1000	1000	1000	1500	2000	2000	2000	+
space for visitor chair 450x450	2	2	2	2	2	2	2	2
Dining space	1p	2p	3p	4p	5p	6p	7p	+
dining chair 450x450	2	2	3	4	5	6	7	8
dining table 800x800 – and incrementally larger	800	800	1000	1200	1350	1500	1650	+
sideboard 450x1000 (+ larger) (but not in dining/kitchen)	1000	1000	1000	1200	1500	1500	1500	+
Bedrooms	1p	2p	3p	4p	5p	6p	7p	+
Double bedroom	n/a							
Double bed 2000x1500 or 2 singles 2000x900		1	1	1	1	1	1	1
bedside table 400x400		2	2	2	2	2	2	2
chest of drawers 450 x750		1	1	1	1	1	1	1
table 500x1050 , and chair/stool		1	1	1	1	1	1	1
double wardrobe 600x1200 – could be built in		1	1	1	1	1	1	1
occasional cot space 600x1200 for family dwelling				1	1	1	1	1
Twin bedroom	n/a							
single bed 2000x900		2	2	2	2	2	2	2
bedside table 400x400		2	2	2	2	2	2	2
chest of drawers 450 x750		1	1	1	1	1	1	1
table 500 x 1050, and chair/stool		1	1	1	1	1	1	1
double wardrobe 600x1200 (or two singles) could be built in		1	1	1	1	1	1	1
Single bedroom								
single bed 2000x900	1	1	1	1	1	1	1	1
bedside table 400x400	1	1	1	1	1	1	1	2+
chest of drawers 450 x750	1	1	1	1	1	1	1	2+
table 500 x 1050 and chair/stool	1	1	1	1	1	1	1	2+
single wardrobe 600x600 – could be built in	1	1	1	1	1	1	1	2+
Kitchen	1p	2p	3p	4p	5p	6p	7p	+
1 sink top and drainer 600x1000	1000	1000	1000	1000	1000	1000	1000	1000
2 cooker space 600x600	600	600	600	600	600	600	600	600

DESIGN:**UNIT - LAYOUT**

3 washing machine position / worktop 600x630	630	630	630	630	630	630	630	630
4 other base units 600 x length	1200	1200	1600	1600	1600	2700	2700	+
5 ancillary equipment space 600x length -					600	600	1200	1200
6 fridge/freezer space 600x600(space above not in VOL)	600	600	600	600	600	600	600	600
7 broom cupboard 600x600x1950. (Note this may be counted towards the "tall storage" requirement)	600	600	600	600	600	600	600	600
8 tray space 600x150	Inc.	inc.						
9 Recycle bins space	300	300	600	600	600	600	600	600
10 Length of fitments =1+2+3+4+5+6+7+8+9	4930	4930	5630	5630	6230	7330	7930	+
11. VOL- min capacity (cu m.) (MUST include drawers)	1.3	1.5	2	2.1	2.2	2.4	2.6	+
Any wall units provided should be 300 deep and 450 above base units.								
Note: Item 3,5,6,7,9 may be in adjacent rooms to the kitchen.								
Bathroom	1p	2p	3p	4p	5p	6p	7p	+
WC + cistern 500x700	1	1	1	1	2	2	2	2
Bath 700x1700	1	1	1	1	1	1	1	1
Wash hand basin 600x400 - 2nd one can be 250x350	1	1	1	1	2	2	2	2
shower tray 750x750 optional								
*All Sizes in mm								

Storage requirements

Internal Storage



General Normal Storage

1. Shelf width (B) should be a minimum of 0.3m
2. The height between shelves (C) should be a minimum of 0.3m
3. $B \times D$ (D being the total length of shelving in the unit) should be at least the minimum shelf area identified for that number of bed spaces (see table below).

General normal storage	1bs	2bs	3bs	4bs	5bs	6bs	7bs	8+bs
minimum shelf areas by bed space (m^2)	1.5	1.5	2.25	3.0	3.75	4.5	5.25	+0.75 for each additional bed space

4. Height A (i.e. the height of the highest shelf) should be no greater than 1.5m

Tall Storage - to be provided in addition to General Normal storage.

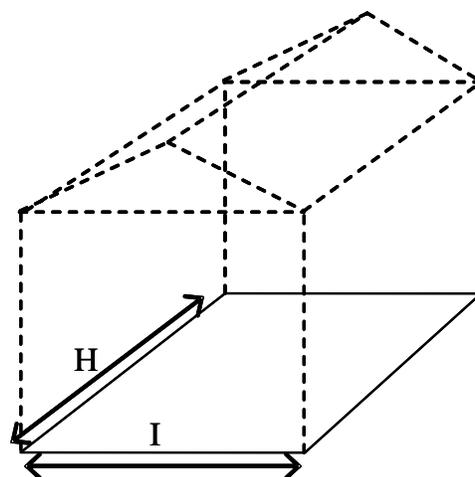
1. Height F (i.e. the height of the lowest shelf in the area designated for tall storage) should be at least 1.5m.
2. The floor area ($E \times G$) should be at least $0.5m^2$

Airing Cupboard

1. There should be shelving located inside an airing cupboard where the shelf area ($B \times D$ - where D is the total length of airing cupboard shelving) should be at least $0.4m^2$
2. This may be counted towards general normal storage.

Storage Requirements - External Storage (not applicable to flats without gardens)

1. This storage should be lockable
2. For units with 1-4 bed spaces floor area (H x I) should be equal to or greater than 2.2m²
3. For units with greater than 4 bed spaces the floor area (H x I) should be equal to or greater than 3.0 m²
4. Where a garage is provided the external storage requirement may be deemed satisfied.
5. This cannot be counted towards the internal storage requirements.



6.2 Additional features (50%) please enter the number of units to which any of the following apply	No of Units	NA	Criteria where NA may be used
Living space			
6.2.1 Living room not an essential part of circulation			
6.2.2 Space for or provision of future focal point fire installation or actual fire or other features in living room			
6.2.3 Some storage space not in living room			
6.2.4. Space for Personal Computer in the living room			
6.2.5 Two separate living rooms or areas are possible or provided			
6.2.6 Direct access or via lobby from living to private open space is possible or provided			
Dining space			
6.2.7 Dining space is separate (not in kitchen/living room)			
6.2.8 Casual eating for 2 people in kitchen (if household dining space not in kitchen)			- Household dining space in kitchen
Bedrooms			
6.2.9 Space for occasional cot in at least one double bedroom			
6.2.10 Beds (in all rooms) can be in more than one position			
6.2.11 Beds (in all rooms) have one position with bed-head NOT under window			
6.2.12 Double room can accommodate twin beds			- No double bedrooms

6.2.13 One or more twin or double bedrooms can subdivide into two single			- No double or twin bedrooms
6.2.14. A main bedroom has direct access, or adjacent bedroom/bathroom door to easily adaptable for washing/WC			
Bathrooms			
6.2.15 Shower over the (main) bath with necessary wall tiling and screening			
6.2.16 A separate shower cubicle is provided			
Kitchen			
6.2.17 View from kitchen of outdoor area suitable for toddler play or sitting			
6.2.18 Direct access or via lobby from kitchen to private open space			
6.2.19 Kitchen sequence storage/prep: cook/serve: waste/wash-up			
6.2.20 Kitchen work-surface not interrupted by circulation or tall fittings			
6.2.21 Min 1200mm run between cooker and sink in kitchen			
6.2.22 Drawers of varying depth provided in kitchen units			
6.2.23 Facing kitchen units 1200mm apart or more			- No facing kitchen units
6.2.24 Space for auxiliary equipment, (e.g. dishwasher) provided			
6.2.25 500mm min. clear work top each side of cooker			
Circulation and storage			
6.2.26 Halls and corridors well planned and lit			
6.2.27 Hanging for outdoor clothes by external doors			
6.2.28 Large item (e.g. push chair, wheelchair) 'park' by external doors			
6.2.29 Recyclable materials store in kitchen, hall, or external lockable store			
6.2.30 Tall storage in or adjacent to kitchen (or to utility room if this is provided)			

6.2.31 Provision of fitted storage - e.g. in bedroom, under stairs etc			
Safety			
6.2.32 Suitable floors in 'wet' areas (bath/shower rooms, WCs, kitchen, utility)			
6.2.33 Restrictors on upper floor casement windows			
6.2.34 Reversible childproof hinges on casement windows to allow safe cleaning			
6.2.35 Hard wired smoke alarm on every floor of the unit			
6.2.36 Secure storage for harmful substances, e.g. medicines, cleaning/gardening items			
General			
6.2.37 Glazing line in living rooms no higher than 800mm from floor level			
6.2.38 A floor to ceiling height of 2.5m or more is provided.			
COMMENTS: Have any comments been entered on the comment page at the end?	Yes	No	

UNIT NOISE CONTROL, LIGHT QUALITY, SERVICES & ADAPTABILITY

7. UNIT NOISE CONTROL, LIGHT QUALITY, SERVICES & ADAPTABILITY

Noise control

Appropriate characteristics can help ensure effective noise reduction. Where these are achieved, enter the number of units with the characteristics shown in 7.1.

Light quality - aspect and prospect

Good daylight, natural light and views add greatly to the quality of a dwelling unit. Enter the number of units with the characteristics shown in 7.2. Principal rooms for this purpose are to be defined as kitchen, living and dining spaces.

Services

The following table indicates a standard of service provision for each room - light, power, data and telecoms. Enter the number of units that meet, exceed or fall short of the standard - some elements are not 'required' and falling short in these respects will not jeopardise a scheme. An increment can be any of the following in the relevant category: additional double sockets in any room(s), additional appliance spur, additional TV aerial position, two phone data points. Please note that in Section 7.3, the basic standard of provision in an item must be met in all rooms before additional scores can be obtained for exceeding the standard. Additional points can be scored for certain non-standard features. Where these are achieved enter a number of units in the project with that feature.

Scores

Services specification							
Provision	living	dining	kitchen	bedrms	bathrm	hall	store
double switched sockets	3	2	4	2 in each		1	1
socket location - consistent height - 450-600mm from floor (Recommended)	all	all	all	all		all	all
kitchen appliance spurs 2 min, 3 for 5 + p			2-3				
shaver socket in each bathroom					1		
TV aerial links	1						
phone/data points						1	
switch location - consistent	all	all	all	all		all	all
two way switches						2	
Source: both tables adapted from 'Standards and Quality', National Housing Federation/Joseph Rowntree Trust							

UNIT NOISE CONTROL, LIGHT QUALITY, SERVICES & ADAPTABILITY

7.1 Noise reduction characteristics (27%) please enter the number of units to which any of the following apply	Number of Units	NA	Criteria where NA may be used
Characteristic			
7.1.1 Designed in accordance with Robust Details Standards.			
7.1.2 Designed to exceed the requirements of Building Regulations			
7.1.3 Sound reduction compliance demonstrated by testing..			
7.1.4 Living/sleeping areas are not adjacent to shared internal areas			
7.1.5 Bedrooms protected - not adjacent to neighbours bath/living areas			
7.1.6 Windows more than 3m horizontal distance from a public route or space			
7.1.7 Noisy communal equipment is >3m from doors/windows (e.g. lifts, plant)			- No noisy communal equipment on scheme
7.1.8 Effective buffer between building and any noise source identified in 1.3			- No noise source identified
7.1.9 Triple glazing to combat noise			- Scheme is not within 100m of a major road, train line or other source of significant noise.
7.2 Quality of light, aspect and prospect (18%) please enter the number of units to which any of the following apply			
7.2.1 Principal rooms have windows that do not look out on wall within 3m			
7.2.2 At least one main living area has urban views of over 50m OR distant or rural views			
7.2.3 Living room window within 30 degrees of South or gets good daylight			
7.2.4 Kitchen has a window			
7.2.5 Kitchen window is within 30 degrees of South or gets good daylight			
7.2.6 All bathrooms have a window			

UNIT NOISE CONTROL, LIGHT QUALITY, SERVICES & ADAPTABILITY

7.3 Standard of service provision (24%) Please enter the number of units to which any of the following apply	Exceeds by more than one increment	Exceeds by one increment	Meets the Standard	Falls short by one increment	Falls short by more than one increment
7.3.1 Double switched sockets					
7.3.2 Sockets in consistent location					
7.3.3 Appliance spurs					
7.3.4 Shaver sockets 240/115 volt					
7.3.5 TV aerial point with conduit and draw wire					
7.3.6 Phone/data points / Digital/Broadband					
7.3.7 Switches in consistent location					
7.3.8 Two way switches					

7.4 Additional features -services (25%) please enter the number of units to which any of the following apply	Number of Units	NA	Criteria where NA may be used
7.4.1 Hot water taps to fittings to have a thermostatically controlled supply			
7.4.2 Switched lights in storage spaces with volume over 1.2 cu m			- No storage spaces with volume over 1.2 cu m
7.4.3 Unobtrusive pipework and ductwork			
7.4.4 Fused spur for security alarm			
7.4.5 Fused spur for stair lift			- Unit is on one level
7.4.6 In flood risk location, electric sockets fed from above			- Not a flood risk location
7.4.7 Domestic sprinkler system installed in the internal environment of the dwelling			
7.4.8 Additional/new cabling can be installed with minimal disturbance to decoration			
7.4.9 In blocks of flats conduits/ducting provided for broadband and other forms of multimedia			- No blocks of flats on scheme

DESIGN:

UNIT NOISE CONTROL, LIGHT QUALITY, SERVICES & ADAPTABILITY

7.5 Adaptability (6%) Please enter the number of units to which any of the following apply			
7.5.1 Designed to allow for future roof space expansion			
7.5.2 Incorporates a basement			
COMMENTS: Have any comments been entered on the comment page at the end?	Yes	No	

8. ACCESSIBILITY WITHIN THE UNIT

Accessibility for those with impaired mobility or other access problems is assessed both at the site (external) and the unit (internal) level. The assessment for site accessibility is included in indicator 4, routes and movement in 4.2 Accessibility is important for residents and their visitors. An Access Statement considers the issues and requirements for accessibility with due regard to the anticipated profile of the developer's clients or users. A unit that scores well for accessibility will be suitable for a wider range of users and will enable residents to remain in their homes despite advancing age or decreased mobility for other reasons. This is an important aspect of value and quality in housing. The focus of this indicator is accessibility for disabled visitors, rather than for disabled residents requiring special adaptations, hence incorporation of Lifetime Homes Standard. A definition is provided in Annex 2 of this document.

Scores

8 Accessibility requirements for the interior of the unit (100%)	Yes	No	NA	Criteria where NA may be used
8.1 Inclusive environment				
8.1 Is there an Access Statement for this development?				
8.2 Lifts				
8.2.1 Passenger lift capable of accommodating a wheelchair and an accompanying person?				- No lifts on scheme
8.2.2 Lift provided to unit entrance level above 3 storeys				- No unit entrances above 3 stories
8.3 Wheelchair Designed Units				
Are wheelchair designed units in full compliance to the latest Wheelchair Design Guide				
8.3.1 Applicable to ALL units in the development.				
OR				
8.3.2 Applicable to SOME units in the development				
8.4 Lifetime Homes				
ALL homes in the development meets ALL requirement of Lifetime Homes				
OR				
1. Car Parking - Where there is car parking adjacent to the home, it should be capable of enlargement to attain 3300mm width.				
2. Access from Car Parking - The distance from the car parking space to the home should be kept to a minimum and should be level or gently sloping.				
3. Approach - The approach to all entrances should be level or gently sloping.				
4. External Entrances - All entrances should:				
a) be illuminated				
b) have level access over the threshold and				
c) have a covered main entrance.				

ACCESSIBILITY WITHIN THE UNIT

5. Communal Stairs				
a) Communal stairs should provide easy access; and				- No communal stairs on scheme
b) where homes are reached by a lift, it should be fully accessible.				- No communal stairs on scheme
6. Doorways & Hallways - The width of internal doorways and hallways should conform to Part M, except that when the approach is not head on and the hallway width is 900mm, the clear opening width should be 900mm rather than 800mm. There should be 300mm nib or wall space to the side of the leading edge of the doors on entrance level.				
7. Wheelchair Accessibility - There should be space for turning a wheelchair in dining areas and living rooms and adequate circulation space for wheelchairs elsewhere.				
8. Living Room - The living room should be at entrance level.				
9. Two or More Storey Requirements - In houses of two or more storeys, there should be space on the entrance level that could be used as a convenient bed-space.				
10. WC - There should be				
a) a wheelchair accessible entrance level WC, with				
b) drainage provision enabling a shower to be fitted in the future				
11. Bathroom & WC Walls - Walls in bathrooms and WC's should be capable of taking adaptations such as handrails				
12. Lift Capability - The design should incorporate:				
a) provision of a stair lift				- Unit is on one level
b) a suitably identified space for a through-the-floor lift from the ground to the first floor, for example to a bedroom next to a bathroom.				- Unit is on one level
13. Main Bedroom - The design should provide a reasonable route for a potential hoist from a main bedroom to the bathroom.				
14. Bathroom Layout - The bathroom should be designed to incorporate ease of access to the bath, WC and wash basin				
15. Window Specifications - Living room window glazing should begin at 800mm or lower and windows should be easy to open/operate				
16. Fixtures & Fittings - Switches, sockets, ventilation and service controls should be at a height usable by all (i.e. between 450 and 1200mm from the floor).				
COMMENTS: Have any comments been entered on the comment page at the end?				

9. SUSTAINABILITY

For this indicator, the assessor is required to indicate the achieved Code of Sustainable homes' level or Ecohomes rating for new builds. A separate section is available for rehabilitation schemes.

Code for Sustainable Homes

In December 2006, the Code for Sustainable Homes - a new national standard for sustainable design and construction of new homes was launched and is based on BRE's environmental assessment method for housing with mandatory performance levels set in key areas.

Where HC Grant support is required, refer to the Housing Corporations Design and Quality Strategy and Standards published April 2007, which sets out the standards to be achieved in order to be considered for grant funding.

Relationship between Code for Sustainable Homes and HQI v4

Code Level	Energy - Standard percentage better than part L 2006 ¹ to achieve compliance	Water - Standard litres per person per day to achieve compliance	Number of points which must be achieved in other parts of the code to achieve compliance	Score achieved equivalent in HQI v4.1
1(*)	10	120	33.3	15
2(**)	18	120	43.0	30
3(***)	25	105	46.7	45
4(****)	44	105	54.1	60
5(*****)	100 ²	80	60.1	80
6(*****)	A zero carbon home ³	80	64.9	100

Notes

1. Building Regulations: Approved Document L (2006) – ‘Conservation of Fuel and Power.’
2. Zero emissions in relation to Building Regulations issues (i.e. zero emissions from heating, hot water, ventilation and lighting).
3. A completely zero carbon home (i.e. zero net emissions of carbon dioxide (CO₂) from **all** energy use in the home).
4. All points in this document are rounded to one decimal place.

For further information, please refer to Code for Sustainable Homes - A step-change in sustainable home building practice . Accessed Jan '08 at <http://www.planningportal.gov.uk/england/professionals/en/1115314116927.html>

Scores

Select the relevant standard applicable to this project.	
9.1 Code for Sustainable Homes	
9.2 Ecohomes	
9.3 Rehabilitation	
9.1 Code for Sustainable Homes please enter the number of units to which any of the following apply	Number of units
9.1.1 Level 1	
9.1.2 Level 2	
9.1.3 Level 3	
9.1.4 Level 4	
9.1.5 Level 5	
9.1.6 Level 6	
OR	
9.2 Ecohomes please enter the number of units to which any of the following apply	Number of units
9.2.1 Pass	
9.2.2 Good	
9.2.3 Very Good	
9.2.4 Excellent	
OR	
9.3 Rehabilitation	
Sustainability standards and features please enter the number of units to which any of the following apply	Number of units
9.3.1 Energy -Installation (or existing) of the following;	
9.3.1.1 External wall insulation - cavity or solid wall	
9.3.1.2 Internal wall insulation	
9.3.1.3 Loft insulation	
9.3.1.4 Floor insulation	
9.3.1.5 Draught-proofing	
9.3.1.6 Double glazing and external doors	
9.3.1.7 Room temperature control	
9.3.1.8 Boiler timer controls with min.2 settings	
9.3.1.9 A-rated white goods	
9.3.1.10 Renewable energy source	
9.3.1.11 Ventilation systems - passive/mechanical	
9.3.2 Lighting	
9.3.2.1 Low energy fittings provided in every room	
9.3.2.2 External lighting with PIR	
9.3.3 Water	
9.3.3.1 Water metering for all water use	
9.3.3.2 WC designed with ≤ 6-litre flush	

**DESIGN:
SUSTAINABILITY**

9.3.3.3 Composting toilet	
9.3.3.4 Taps with flow regulators OR Aereating taps OR Auto Shut off taps	
9.3.3.5 Shower flow rate < 9 litres / min	
9.3.3.6 Small bath	
9.3.3.7 Installed water butt	
9.3.3.8 Gray water recycling achieved	
9.3.4 Others	
9.3.4.1 Sustainability managed timber used for basic building elements (either PSC or PESC certification)	
9.3.4.2 More than 50% of the site is 'brownfield' i.e. previously built upon, reclaimed from industrial processes or landfill.	
COMMENTS: Have any comments been entered on the comment page at the end?	

10. BUILDING FOR LIFE

The Building for Life criteria was developed by CABE to assess design quality in new housing and award the Building for Life standard. The criteria are an invaluable tool for developers, planners, local authorities, architects and the public - anyone committed to improving housing and neighbourhood design. The 20 criteria embody what Building for Life's vision of what housing should be; functional, attractive, and sustainable.

The 20 criteria covers four themes which are Character; Roads, Parking and Pedestrianisation; Design and Construction; Environment and Community. Please refer to the detail from "delivering great places to live" available at <http://www.buildingforlife.org/AssetLibrary/9350.pdf>.

A toolkit to aid this assessment is also available at www.buildingforlife.org

Duplication

It is recognised that with the introduction of the Building for Life criteria within indicator 10 that there is potential for some duplication in respect of site aspects in indicators 2-4. However, this does allow assessors to undertake some cross checking during the interim period where an understanding of the proper interpretation of the Building for Life criteria beds in. A future review of HQIs will address this issue.

Applicability

Where HC grant support is involved it is accepted that all of the Building for Life Criteria may not apply in full to some rural or small infill schemes. However all 20 criteria should be addressed as Yes or No based upon either the new scheme impact or the context within which the scheme is placed. Please refer to the Housing Corporations Design and Quality Standards for the minimum External Environment requirements for a scheme to be considered for grant funding.

Scores

	Yes	No
10. Character (25%)		
10.1 Does the scheme feel like a place with distinctive character?		
10.2 Do building exhibit architectural quality?		
10.3 Are streets defined by a well-structured building layout?		
10.4 Do the building and layout make it easy to find your way around?		
10.5 Does the scheme exploit existing buildings, landscapes or topography		
Roads, Parking and Pedestrianisation (25%)		
10.6 Does the building layout take priority over the roads and car parking, so that the highways do not dominate?		
10.7 Are the streets pedestrian, cycle and vehicle friendly?		
10.8 Is the car parking well integrated and situated so it supports the street scene?		

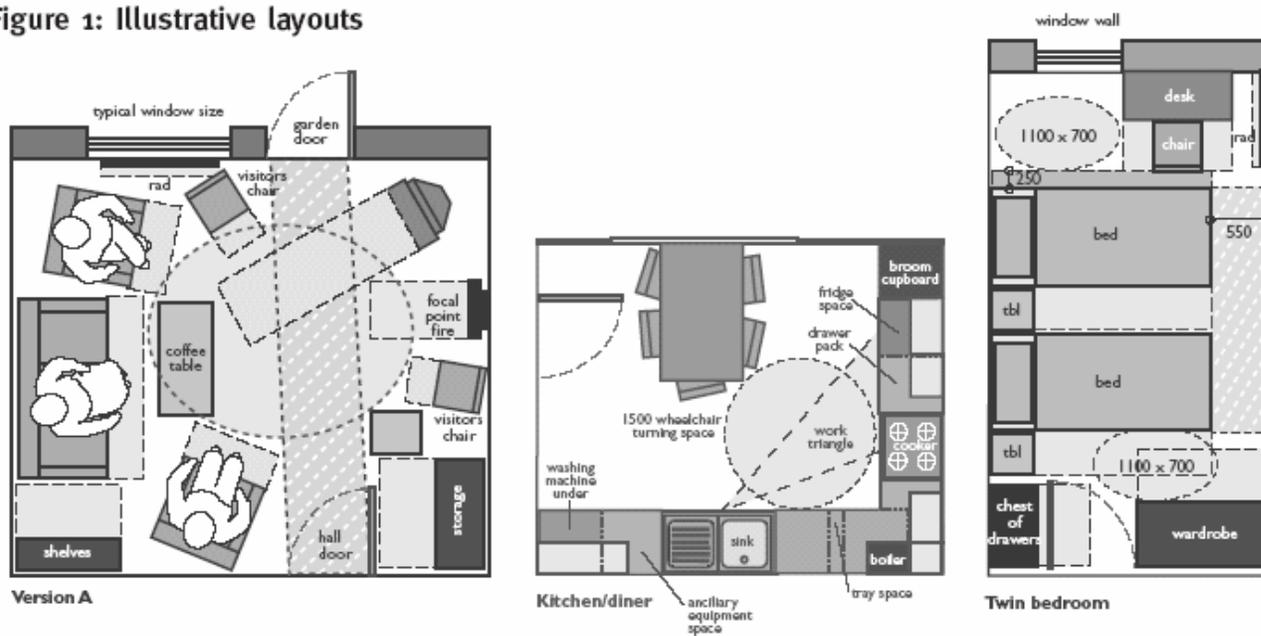
EXTERNAL ENVIRONMENT
BUILDING FOR LIFE

10.9 Does the scheme integrate with existing roads, paths and surrounding development?		
10.10 Are public spaces and pedestrian routes overlooked and do they feel safe?		
Design and Construction (25%)		
10.11 Is the design specific to the scheme?		
10.12 Is public space well designed and does it have suitable management arrangements in place?		
10.13 Do buildings or spaces outperform statutory minima, such as Building Regulations?		
10.14 Has the scheme made use of advances in construction in technology that enhance its performance, quality and attractiveness?		
10.15 Do internal spaces and layout allow for adaptation, conversion or extension?		
Environment and Community (25%)		
10.16 Does the development have easy access to public transport?		
10.17 Does the development have any features that reduce its environmental impact?		
10.18 Is there a tenure mix that reflects the needs of the local community?		
10.19 Is there an accommodation mix that reflects the needs and aspirations of the local community?		
10.20 Does the development provide for (or is it close to) community facilities, such as a school, parks, play areas, shops, pubs or cafes?		
COMMENTS: Have any comments been entered on the comment page at the end?		

1

ANNEX 1: UNIT LAYOUT

Figure 1: Illustrative layouts



Room Matrix Approach

In recognition of the time consuming nature of indicators, an alternative approach has been developed. Assessors should be aware that higher scores are likely to be obtained if the full method is carried out. The alternative approach involves reading scores from a room matrix for different sizes and types of rooms. The approach has various steps that are detailed below.

Assessors using this approach MUST indicate this in the Project Description section.

Step 1: Identify the full occupancy of the unit.

Indicator 6 must always be calculated assuming a 'full occupancy'.

Step 2: Identify the type of room.

Please note that instructions relating to specific rooms are provided at the end of this worked example. Please read these before using the room matrixes. There is no matrix for storage.

Step 3: Identify the size of the room.

All measurements are based on a rectangularised room. This involves measuring the room size to obtain the smallest width and length measurement. These measurements are rounded down to the nearest 0.5 metre.

Step 4: Identify the correct room matrix and cell.

For each type of room and occupancy level, there is a room matrix. Choose the correct room matrix. Then identify the cell on the table that represents the room size that is being evaluated.

Step 5: Record the furniture score

The first score in the cell relates to the furniture score.

- 2 score is equal to exceeding standard by more than 1 item
- 1 score is equal to exceeding standard by one item
- 0 score is equal to meeting the standard
- -1 score is equal to falling short of standard by one item
- -2 score is equal to falling short of standard by more than one item

From this, it is possible to allocate each unit to one of the five columns in section 6.1.

Step 6: Record the activity zone score

The second score in the cell relates to the activity zone score.

- 2 score is equal to exceeding standard by more than 10%
- 1 score is equal to exceeding standard by up to 10%
- 0 score is equal to meeting the standard
- -1 score is equal to falling short of standard by up to 10%
- -2 score is equal to falling short of standard by more than 10%

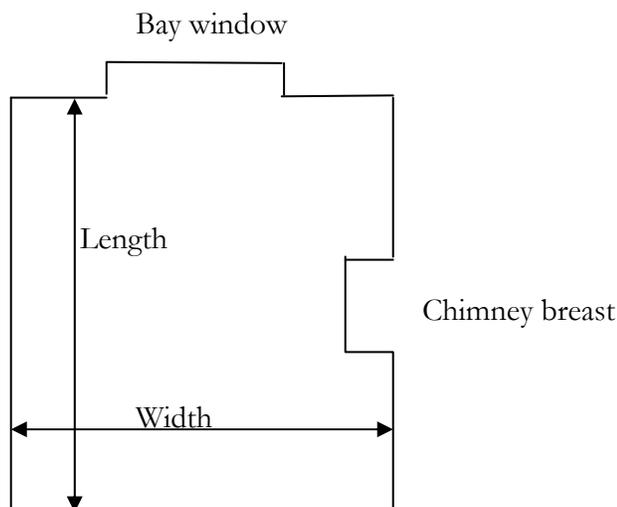
From this, it is possible to allocate each unit to one of the five columns in section 6.1.

Worked Example

Living room

- 1) Assuming 30 identical units, all with 2 bedspaces at full occupancy e.g. 1 bedroom dwelling.
- 2) Assessing living room.
- 3) For the layout below, the measured length is 3.7m long and 2.8m wide. Therefore the rounded measurements are 3.5m long, and 2.5m wide.

Figure 1: Living room layout



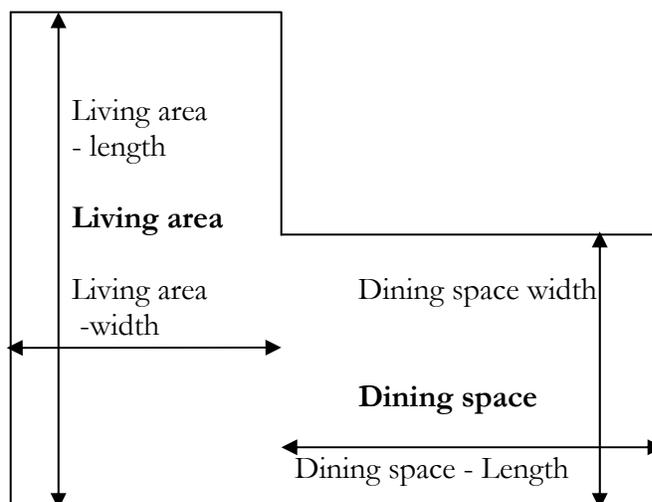
- 4) Matrix 1 is for a living room for 1 or 2 people. The bold cell is the correct cell for a 3.5 x 2.5 living room.

Matrix 1: Living Space 1/2P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2 -2	-1 -2	0 -2	1 - 2	1 0	1 1	2 1										
2.5		0 -2	-1 0	0 1	0 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2
3.0			0 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2
3.5				2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2
4.0					2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2
4.5						+2 2	2 2										

5) The first 0 means that this living room meets the standard furniture for living rooms. Therefore the 30 units which have a living room this size for 2 people need to be placed in the column 'meets the requirement' on row 6.1.1.

6) The 1 means that this living room exceeds by up to 10% the standard for access/activity zones for living rooms. Therefore the 30 units which have a living room this size need to be placed in the column 'exceeds the requirement by one item/up to 10%' on row 6.1.2. Row 6.1.1 and 6.1.2.

Additional Instructions**Living-Dining space**

The HQI system requires separate scores to be included for the living room and for the dining space.

Therefore, a living-dinning room needs to be considered as a living room and dining space. To do this, the room needs to be divided into two spaces. The example shows an L-shaped living-dining space divided into two areas. The room matrix approach is then applied to each area separately.

All bedrooms

It is possible that the scores for various bedrooms in a unit are different. In this situation, take the average score (rounded to the nearest whole number). For example, a four bedroom unit has the following score:

Bedroom zone score	Type	Furniture score	Activity and access
Bedroom 1	Double	-1	0
Bedroom 2	Twin	0	0
Bedroom 3	Twin	0	0
Bedroom 4 Single		1	1
OVERALL SCORE		0	0

Then the average score for furniture is 0.

The average score for activity space is 0.25, which is rounded to the nearest whole number of 0.

Assuming there are 50 units of this type, the scores are shown in row 6.1.5 and 6.1.6 in Figure 2 earlier.

All bathrooms and WC

Where a second WC and wash hand basin is required, this should be a room other than the main bathroom. It is possible that the scores for various bathrooms and WC are different. In this situation, take the average score (rounded to the nearest whole number) as for bedrooms. Please note that the shower room matrix should only be used if a bathroom (with a bath) is also scored. If only a shower-room is present in the unit, please use one of the bathroom matrixes.

Kitchen-diner

The HQI system requires a score to be added for the kitchen and dining space. Therefore there are two sets of room matrixes for use with kitchen-diners. One set of matrixes applies to the kitchen requirements, and the second set applies the dining space requirements. **These matrixes should only be used with kitchen-diners.**

Room Matrix List

Matrix 1: Living Space 1/2P Dwelling

Matrix 2: Living Space 3P Dwelling

Matrix 3: Living Space 4P Dwelling

Matrix 4: Living Space 5P Dwelling

Matrix 5: Living Space 6P Dwelling

Matrix 6: Living Space 7P Dwelling

Matrix 7: Dining Space 1/2P Dwelling

Matrix 8: Dining Space 3P Dwelling

Matrix 9: Dining Space 4P Dwelling

ANNEX 1
UNIT LAYOUT

- Matrix 10: Dining Space 5P Dwelling
 Matrix 11: Dining Space 6P Dwelling
 Matrix 12: Dining Space 7P Dwelling
 Matrix 13: Dining Space of Kitchen-Diner 1P/2P Dwelling
 Matrix 14: Dining Space of Kitchen-Diner 3P Dwelling
 Matrix 15: Dining Space of Kitchen-Diner 4P Dwelling
 Matrix 16: Dining Space of Kitchen-Diner 5P Dwelling
 Matrix 17: Dining Space of Kitchen-Diner 6P Dwelling
 Matrix 18: Dining Space of Kitchen-Diner 7P Dwelling
 Matrix 19: Single Bedroom – all units
 Matrix 20: Twin Bedroom – all units
 Matrix 21: Double Bedroom – all units
 Matrix 22: Bathroom with WC – all units
 Matrix 23: Shower-room with WC – all units
 Matrix 24: Bathroom without WC – all units
 Matrix 25: Separate WC – all units
 Matrix 26: Kitchen 1/2P Dwelling
 Matrix 27: Kitchen 3/4P Dwelling
 Matrix 28: Kitchen 5P Dwelling
 Matrix 29: Kitchen 6P Dwelling
 Matrix 30: Kitchen 7P Dwelling
 Matrix 31: Kitchen Area of Kitchen-Diner 1P/2P Dwelling
 Matrix 32: Kitchen Area of Kitchen-Diner 3P Dwelling
 Matrix 33: Kitchen Area of Kitchen-Diner 4P Dwelling
 Matrix 34: Kitchen Area of Kitchen-Diner 5P Dwelling
 Matrix 35: Kitchen Area of Kitchen-Diner 6P Dwelling
 Matrix 36: Kitchen Area of Kitchen-Diner 7P Dwelling

Matrix 1: Living Space 1/2P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2	-1	0	1	1	1	1	2	2	2	2	2	2	2	2	2	2
	-2	-2	-2	-2	-2	0	1	1	1	1	1	1	1	1	1	1	1
2.5		0	-1	0	0	2	2	2	2	2	2	2	2	2	2	2	2
		-2	0	1	2	2	2	2	2	2	2	2	2	2	2	2	2
3.0			0	2	2	2	2	2	2	2	2	2	2	2	2	2	2
			2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3.5				2	2	2	2	2	2	2	2	2	2	2	2	2	2
				2	2	2	2	2	2	2	2	2	2	2	2	2	2
4.0					2	2	2	2	2	2	2	2	2	2	2	2	2
					2	2	2	2	2	2	2	2	2	2	2	2	2
4.5						2	2	2	2	2	2	2	2	2	2	2	2
+						2	2	2	2	2	2	2	2	2	2	2	2

ANNEX 1
UNIT LAYOUT

Matrix 2: Living Space 3P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2	-1	0	0	0	0	0	0	1	2	2	2	2	2	2	2	2
	-2	-2	-2	-1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.5		0	0	1	1	1	2	2	2	2	2	2	2	2	2	2	2
		-2	-1	0	1	2	2	2	2	2	2	2	2	2	2	2	2
3.0			0	1	2	2	2	2	2	2	2	2	2	2	2	2	2
			1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3.5				2	2	2	2	2	2	2	2	2	2	2	2	2	2
				2	2	2	2	2	2	2	2	2	2	2	2	2	2
4.0					2	2	2	2	2	2	2	2	2	2	2	2	2
					2	2	2	2	2	2	2	2	2	2	2	2	2
4.5						2	2	2	2	2	2	2	2	2	2	2	2
	+					2	2	2	2	2	2	2	2	2	2	2	2

Matrix 3: Living Space 4P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2	-2	-2	-2	-2	-1	0	0	2	2	2	2	2	2	2	-2	-2
	-2	-2	-2	-2	-2	-1	0	0	0	0	0	0	0	0	0	-2	-2
2.5		-2	-2	-2	0	0	0	0	2	2	2	2	2	2	2	2	0
		-2	-2	-2	-2	0	1	2	2	2	2	2	2	2	2	2	-2
3.0			-2	-1	0	2	2	2	2	2	2	2	2	2	2	2	2
			-2	-2	1	2	2	2	2	2	2	2	2	2	2	2	2
3.5				2	2	2	2	2	2	2	2	2	2	2	2	2	2
				-2	2	2	2	2	2	2	2	2	2	2	2	2	2
4.0					2	2	2	2	2	2	2	2	2	2	2	2	2
					2	2	2	2	2	2	2	2	2	2	2	2	2
4.5						2	2	2	2	2	2	2	2	2	2	2	2
					+	2	2	2	2	2	2	2	2	2	2	2	2

Matrix 4: Living Space 5P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2	-2	-2	-2	-2	-2	-2	-2	0	0	1	2	2	2	2	2	2
	-2	-2	-2	-2	-2	-2	-2	-1	-1	0	0	0	0	0	0	0	0
2.5		-2	-2	-2	-2	-1	0	0	1	1	2	2	2	2	2	2	2
		-2	-2	-2	0	0	0	0	0	0	1	2	2	2	2	2	2
3.0			-2	-2	-2	2	2	2	2	2	2	2	2	2	2	2	2
			-2	-2	1	-1	0	1	2	2	2	2	2	2	2	2	2
3.5				0	0	1	2	2	2	2	2	2	2	2	2	2	2
				-2	1	1	2	2	2	2	2	2	2	2	2	2	2
4.0					2	2	2	2	2	2	2	2	2	2	2	2	2
					1	2	2	2	2	2	2	2	2	2	2	2	2
4.5						2	2	2	2	2	2	2	2	2	2	2	2
	+					2	2	2	2	2	2	2	2	2	2	2	2

ANNEX 1
UNIT LAYOUT

Matrix 5: Living Space 6P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2	-2	-2	-2	-2	-2	-2	-2	0	0	1	2	2	2	2	2	0
	-2	-2	-2	-2	-2	2	-2	-1	0	0	0	0	0	0	0	0	-1
2.5		-2	-2	-2	-2	-2	0	0	0	1	1	1	2	2	2	2	2
		-2	-2	-2	-2	-2	-2	0	1	2	2	2	2	2	2	2	2
3.0			-2	-2	-1	0	0	0	2	2	2	2	2	2	2	2	2
			-2	-2	-2	-2	-1	2	2	2	2	2	2	2	2	2	2
3.5				-2	0	0	1	2	2	2	2	2	2	2	2	2	2
				-2	-2	-2	0	0	2	2	2	2	2	2	2	2	2
4.0					2	2	2	2	2	2	2	2	2	2	2	2	2
					2	2	2	2	2	2	2	2	2	2	2	2	2
4.5						2	2	2	2	2	2	2	2	2	2	2	2
	+					2	2	2	2	2	2	2	2	2	2	2	2

Matrix 6: Living Space 7P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2	-2	-2	-2	-2	-2	-2	-2	-2	-1	-1	0	1	2	2	2	2
	-2	-2	-2	-2	-2	-2	-2	-2	-1	1	0	0	0	0	0	0	0
2.5		-2	-2	-2	-2	-2	-1	-1	0	1	1	1	2	2	2	2	2
		-2	-2	-2	-2	-2	-2	-2	0	0	1	2	2	2	2	2	2
3.0			-2	-2	-2	-1	0	0	1	1	2	2	2	2	2	2	2
			-2	-2	-1	-1	-1	0	2	2	2	2	2	2	2	2	2
3.5				-2	-1	-1	0	1	2	2	2	2	2	2	2	2	2
				-2	-1	-1	0	1	2	2	2	2	2	2	2	2	2
4.0					0	1	1	2	2	2	2	2	2	2	2	2	2
					2	2	2	2	2	2	2	2	2	2	2	2	2
4.5						2	2	2	2	2	2	2	2	2	2	2	2
	+					2	2	2	2	2	2	2	2	2	2	2	2

Matrix 7: Dining Space 1/2P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-1	0	1	0	2	2	2	2	2	2	2	2	2	2	2	2	2
	-2	-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.5		0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
		-1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2
3.0			1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
			2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3.5				2	2	2	2	2	2	2	2	2	2	2	2	2	2
				2	2	2	2	2	2	2	2	2	2	2	2	2	2
4.0					2	2	2	2	2	2	2	2	2	2	2	2	2
					2	2	2	2	2	2	2	2	2	2	2	2	2
4.5						2	2	2	2	2	2	2	2	2	2	2	2
	+					2	2	2	2	2	2	2	2	2	2	2	2

ANNEX 1
UNIT LAYOUT

Matrix 8: Dining Space 3P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-1 -2	0 -2	0 -2	1 -2	2 -2												
2.5		-1 -2	0 -2	1 2	2 2												
3.0			1 0	2 2													
3.5				2 2													
4.0					2 2												
4.5						2 2											
+						2 2											

Matrix 9: Dining Space 4P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2 -2	-1 -2	0 -2	1 -2	2 -2												
2.5		-1 -2	0 -2	0 0	0 1	1 1	2 1										
3.0			1 0	1 2	2 2												
3.5				1 2	2 2												
4.0					2 2												
4.5						2 2											
+						2 2											

Matrix 10: Dining Space 5P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2 -2	-1 -2	-1 -2	0 -2	1 -2	1 -2	1 -2	2 -2									
2.5		-1 -2	-1 -2	0 0	1 0	2 0											
3.0			1 0	1 2	1 2	2 2											
3.5				2 0	2 1	2 2											
4.0					1 2	2 2											
4.5						2 2											
+						2 2											

ANNEX 1
UNIT LAYOUT

Matrix 11: Dining Space 6P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2 -2	-2 -2	-1 -2	-1 -2	0 -2	1 -2	1 -2	2 -2									
2.5		-2 -2	-1 -2	-1 -2	0 -2	0 -2	1 -2	2 -2									
3.0			-1 -2	0 -2	0 0	1 0	2 0										
3.5				0 -1	0 2	2 2											
4.0					1 2	2 2											
4.5						2 2											
+						2 2											

Matrix 12: Dining Space 7P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2 -2	-2 -2	-1 -2	-1 -2	0 -2	0 -2	0 -2	2 -2									
2.5		-2 -2	-1 -2	-1 -2	0 -2	0 -2	1 -2	2 -2									
3.0			-2 -2	0 -2	0 0	0 0	2 0										
3.5				0 2	0 0	1 2	2 2	2 1	2 1	2 2							
4.0					1 1	2 2											
4.5						2 2											
+						2 2											

Matrix 13: Dining Space of Kitchen-Diner 1P/2P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-1 -2	-1 -2	0 -2	0 -2	0 -2	0 -1	0 0	0 0	1 0	2 0							
2.5		0 -1	0 0	1 0	1 0	2 0	1 1	1 2	2 2								
3.0			0 2	1 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2
3.5				1 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2
4.0					2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2
4.5						2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2
+						2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2

ANNEX 1
UNIT LAYOUT

Matrix 14: Dining Space of Kitchen-Diner 3P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-1 -2	-1 -2	0 -2	1 -2	1 -2	2 -2	2 -2	2 -2	2 -2	2 -2							
2.5		-1 0	0 -2	0 -2	0 -2	0 -2	0 -2	0 -1	0 2	1 2	2 2						
3.0			0 -2	0 -2	0 0	0 2	1 2	2 2									
3.5				0 0	0 0	1 2	2 2										
4.0					2 2												
4.5						2 2											
+						2 2											

Matrix 15: Dining Space of Kitchen-Diner 4P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2 -2	-1 -2	0 -2	1 -2	2 -2	2 -2	2 -2	2 -2	2 -2								
2.5		0 -2	0 -2	0 -2	0 -2	0 -2	0 -2	0 -1	0 -1	0 -1	1 1	1 1	2 1	2 1	2 1	2 1	2 1
3.0			0 -2	0 -2	0 0	0 1	1 1	1 1	1 1	1 2	2 2						
3.5				0 1	0 0	1 2	2 2										
4.0					1 2	2 2											
4.5						2 2											
+						2 2											

Matrix 16: Dining Space of Kitchen-Diner 5P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2 -2	0 -2	0 -2	0 -2	0 -2	0 -2	0 -2	0 -2	0 -2	0 -2	0 -2	1 -2	2 -2	2 -2	2 -2	2 -2	2 -2
2.5		-2 -2	-1 -2	0 -2	0 -2	0 -2	0 -2	0 -1	0 -1	0 -1	2 0						
3.0			-1 -2	-1 -1	0 -1	0 0	1 0	1 0	2 0	2 1	2 2						
3.5				-1 -1	0 0	1 0	1 0	1 0	2 2								
4.0					1 2	2 2											
4.5						2 2											
+						2 2											

ANNEX 1
UNIT LAYOUT

Matrix 17: Dining Space of Kitchen-Diner 6P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2 -2	-2 -2	0 -2	0 -2	0 -2	0 -2	0 -2	0 -2	0 -2	0 -2	0 -2	0 -2	0 -2	0 -2	0 -2	0 -2	0 -2
2.5		-2 -2	-1 -2	0 -2	0 -1	1 0	2 0	2 0	2 0	2 0							
3.0			-1 -2	0 -2	0 -2	0 -2	1 0	1 0	1 1	1 1	2 2						
3.5				0 -2	0 -1	0 1	0 1	1 1	2 1	2 2							
4.0					0 0	0 0	0 1	0 2	1 2	2 2							
4.5						0	2	2	2	2	2	2	2	2	2	2	2
+						2	2	2	2	2	2	2	2	2	2	2	2

Matrix 18: Dining Space of Kitchen-Diner 7P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2 -2	0 -2															
2.5		-2 -2	-1 -2	0 -2	0 -2	0 -1	0 0	0 0	1 0	2 0	2 0						
3.0			-2 -2	-2 -2	-2 -2	-1 -2	0 0	0 0	0 0	0 0	1 1	1 1	1 2	2 2	2 2	2 2	2 2
3.5				-2 -2	0 -2	0 0	0 0	1 1	1 1	1 2	1 2	2 2	2 2	2 2	2 2	2 2	2 2
4.0					0 -2	0 0	0 0	1 1	1 2	2 2							
4.5						0	1	1	2	2	2	2	2	2	2	2	2
+						1	1	2	2	2	2	2	2	2	2	2	2

Matrix 19: Single Bedroom – all units

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2 -2	-2 -2	-1 2	1 2	1 2	2 2											
2.5		0 2	1 2	2 2													
3.0			2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2
3.5				2 2													
4.0					2 2												
4.5						2	2	2	2	2	2	2	2	2	2	2	2
+						2	2	2	2	2	2	2	2	2	2	2	2

ANNEX 1
UNIT LAYOUT

Matrix 20: Twin Bedroom – all units

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2	-2	-2	-2	-2	-1	1	0	1	2	2	2	2	2	2	2	2
	-2	-2	-2	-2	-2	0	0	2	2	2	2	2	2	2	2	2	2
2.5		-2	-2	-2	-1	0	1	2	2	2	2	2	2	2	2	2	2
		-2	-2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3.0			-1	0	2	2	2	2	2	2	2	2	2	2	2	2	2
			-2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3.5				0	2	2	2	2	2	2	2	2	2	2	2	2	2
				2	2	2	2	2	2	2	2	2	2	2	2	2	2
4.0					2	2	2	2	2	2	2	2	2	2	2	2	2
					2	2	2	2	2	2	2	2	2	2	2	2	2
4.5						2	2	2	2	2	2	2	2	2	2	2	2
+						2	2	2	2	2	2	2	2	2	2	2	2

Matrix 21: Double Bedroom – all units

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
2.5		-2	-1	-1	0	0	1	2	2	2	2	2	2	2	2	2	2
		-2	-2	1	2	2	2	2	2	2	2	2	2	2	2	2	2
3.0			-1	1	2	2	2	2	2	2	2	2	2	2	2	2	2
			2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3.5				1	2	2	2	2	2	2	2	2	2	2	2	2	2
				2	2	2	2	2	2	2	2	2	2	2	2	2	2
4.0					2	2	2	2	2	2	2	2	2	2	2	2	2
					2	2	2	2	2	2	2	2	2	2	2	2	2
4.5						2	2	2	2	2	2	2	2	2	2	2	2
+						2	2	2	2	2	2	2	2	2	2	2	2

Matrix 22: Bathroom with WC – all units

	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6+
1.0	-2	-1	-1	-1	0	0	0	0	1	2	2
	-2	-2	-2	2	-2	-2	0	2	2	2	2
1.5		-2	-2	0	0	1	2	2	2	2	2
		0	0	1	1	2	2	2	2	2	2
2.0			0	0	1	2	2	2	2	2	2
			1	2	2	2	2	2	2	2	2
2.5				2	2	2	2	2	2	2	2
				2	2	2	2	2	2	2	2
3					2	2	2	2	2	2	2
+					2	2	2	2	2	2	2

Matrix 23: Shower-room with WC – all units

	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6+
1.0	-2 -2	-2 -2	-1 -2	0 -2	0 -2	0 0	1 2	1 2	1 2	1 2	2 2
1.5		0 2	0 2	1 2	1 2	1 2	2 2	2 2	2 2	2 2	2 2
2.0			1 2	1 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2
2.5				2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2
3					2 2	2 2	2 2	2 2	2 2	2 2	2 2
+					2 2	2 2	2 2	2 2	2 2	2 2	2 2

Matrix 24: Bathroom without WC – all units

	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6+
1.0	-2 -2	-1 0	-1 0	-1 0	0 0	0 2	1 2	2 2	2 2	2 2	2 2
1.5		-2 0	0 1	1 2	2 2						
2.0			1 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2
2.5				2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2
3					2 2						
+					2 2						

Matrix 25: Separate WC – all units

	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6+
1.0	-1 -2	0 0	1 2	2 2							
1.5		2 0	2 2								
2.0			2 2								
2.5				2 2							
3					2 2						
+					2 2						

ANNEX 1
UNIT LAYOUT

Matrix 26: Kitchen 1/2P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2	-2	-1	0	0	0	1	2	2	2	2	2	2	2	2	2	2
	-2	-2	-2	-2	-1	2	2	2	2	2	2	2	2	2	2	2	2
2.5		-1	0	0	1	2	2	2	2	2	2	2	2	2	2	2	2
		0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3.0			0	1	2	2	2	2	2	2	2	2	2	2	2	2	2
			2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3.5				2	2	2	2	2	2	2	2	2	2	2	2	2	2
				2	2	2	2	2	2	2	2	2	2	2	2	2	2
4.0					2	2	2	2	2	2	2	2	2	2	2	2	2
					2	2	2	2	2	2	2	2	2	2	2	2	2
4.5						2	2	2	2	2	2	2	2	2	2	2	2
	+					2	2	2	2	2	2	2	2	2	2	2	2

Matrix 27: Kitchen 3/4P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2	-2	-2	-2	0	0	1	2	2	2	2	2	2	2	2	2	2
	-2	-2	-2	-2	-2	2	2	2	2	2	2	2	2	2	2	2	2
2.5		-2	-1	0	1	1	2	2	2	2	2	2	2	2	2	2	2
		-2	-1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3.0			1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
			0	1	1	2	2	2	2	2	2	2	2	2	2	2	2
3.5				2	2	2	2	2	2	2	2	2	2	2	2	2	2
				2	2	2	2	2	2	2	2	2	2	2	2	2	2
4.0					2	2	2	2	2	2	2	2	2	2	2	2	2
					2	2	2	2	2	2	2	2	2	2	2	2	2
4.5						2	2	2	2	2	2	2	2	2	2	2	2
	+					2	2	2	2	2	2	2	2	2	2	2	2

Matrix 28: Kitchen 5P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2	-2	-2	-2	-1	0	0	2	2	2	2	2	2	2	2	2	2
	-2	-2	-2	2	1	1	2	2	2	2	2	2	2	2	2	2	2
2.5		-2	-2	-1	1	1	2	2	2	2	2	2	2	2	2	2	2
		-2	-2	-2	-2	2	2	2	2	2	2	2	2	2	2	2	2
3.0			0	0	1	2	2	2	2	2	2	2	2	2	2	2	2
			-2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3.5				1	1	2	2	2	2	2	2	2	2	2	2	2	2
				2	2	2	2	2	2	2	2	2	2	2	2	2	2
4.0					2	2	2	2	2	2	2	2	2	2	2	2	2
					2	2	2	2	2	2	2	2	2	2	2	2	2
4.5						2	2	2	2	2	2	2	2	2	2	2	2
	+					2	2	2	2	2	2	2	2	2	2	2	2

ANNEX 1
UNIT LAYOUT

Matrix 29: Kitchen 6P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2	-2	-2	-2	-2	-2	0	0	0	0	1	2	2	2	2	2	2
	-2	-2	-2	-2	-2	-2	-2	-2	0	1	1	2	2	2	2	2	2
2.5		-2	-2	-2	0	1	2	2	2	2	2	2	2	2	2	2	2
		-2	-2	-2	-1	1	2	2	2	2	2	2	2	2	2	2	2
3.0			-2	0	1	1	2	2	2	2	2	2	2	2	2	2	2
			-2	-2	2	2	2	2	2	2	2	2	2	2	2	2	2
3.5				1	1	2	2	2	2	2	2	2	2	2	2	2	2
				1	2	2	2	2	2	2	2	2	2	2	2	2	2
4.0					2	2	2	2	2	2	2	2	2	2	2	2	2
					2	2	2	2	2	2	2	2	2	2	2	2	2
4.5						2	2	2	2	2	2	2	2	2	2	2	2
	+					2	2	2	2	2	2	2	2	2	2	2	2

Matrix 30: Kitchen 7P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2	-2	-2	-2	-2	-2	-2	0	0	0	1	2	2	2	2	2	2
	-2	-2	-2	-2	-2	-2	-2	-2	-1	0	1	2	2	2	2	2	2
2.5		-2	-2	-2	-1	0	0	1	2	2	2	2	2	2	2	2	2
		-2	-2	-2	-1	-1	2	1	2	2	2	2	2	2	2	2	2
3.0			-2	0	1	1	2	2	2	2	2	2	2	2	2	2	2
			-2	-2	1	1	1	2	2	2	2	2	2	2	2	2	2
3.5				1	2	2	2	2	2	2	2	2	2	2	2	2	2
				1	1	2	2	2	2	2	2	2	2	2	2	2	2
4.0					2	2	2	2	2	2	2	2	2	2	2	2	2
					2	2	2	2	2	2	2	2	2	2	2	2	2
4.5						2	2	2	2	2	2	2	2	2	2	2	2
	+					2	2	2	2	2	2	2	2	2	2	2	2

Matrix 31: Kitchen Area of Kitchen-Diner 1P/2P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2	-2	-2	-1	0	0	1	2	2	2	2	2	2	2	2	2	2
	-2	-2	-2	-2	-2	-1	2	2	2	2	2	2	2	2	2	2	2
2.5		-2	0	0	1	1	2	2	2	2	2	2	2	2	2	2	2
		0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3.0			0	1	2	2	2	2	2	2	2	2	2	2	2	2	2
			2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3.5				2	2	2	2	2	2	2	2	2	2	2	2	2	2
				2	2	2	2	2	2	2	2	2	2	2	2	2	2
4.0					2	2	2	2	2	2	2	2	2	2	2	2	2
					2	2	2	2	2	2	2	2	2	2	2	2	2
4.5						2	2	2	2	2	2	2	2	2	2	2	2
	+					2	2	2	2	2	2	2	2	2	2	2	2

ANNEX 1
UNIT LAYOUT

Matrix 32: Kitchen Area of Kitchen-Diner 3P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2	-2	-2	-2	-2	-1	0	0	1	1	2	2	2	2	2	2	2
	-2	-2	-2	-2	-2	-2	-1	0	2	2	2	2	2	2	2	2	2
2.5		-2	-1	-1	-1	-1	-1	0	0	1	2	2	2	2	2	2	2
		-2	-1	-1	-1	1	1	2	2	2	2	2	2	2	2	2	2
3.0			-1	0	1	1	2	2	2	2	2	2	2	2	2	2	2
			-2	-1	2	2	2	2	2	2	2	2	2	2	2	2	2
3.5				0	1	2	2	2	2	2	2	2	2	2	2	2	2
				2	2	2	2	2	2	2	2	2	2	2	2	2	2
4.0					1	2	2	2	2	2	2	2	2	2	2	2	2
					2	2	2	2	2	2	2	2	2	2	2	2	2
4.5						2	2	2	2	2	2	2	2	2	2	2	2
	+					2	2	2	2	2	2	2	2	2	2	2	2

Matrix 33: Kitchen Area of Kitchen-Diner 4P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2	-2	-2	-2	0	1	1	1	1	1	2	2	2	2	2	2	2
	-2	-2	-2	-2	-2	-2	-2	-2	-2	2	2	2	2	2	2	2	2
2.5		-2	-1	-1	0	0	1	1	1	1	2	2	2	2	2	2	2
		-2	-2	-2	-1	-1	-1	1	1	2	2	2	2	2	2	2	2
3.0			-1	0	1	2	2	2	2	2	2	2	2	2	2	2	2
			-2	-1	2	2	2	2	2	2	2	2	2	2	2	2	2
3.5				1	2	2	2	2	2	2	2	2	2	2	2	2	2
				1	2	2	2	2	2	2	2	2	2	2	2	2	2
4.0					2	2	2	2	2	2	2	2	2	2	2	2	2
					2	2	2	2	2	2	2	2	2	2	2	2	2
4.5						2	2	2	2	2	2	2	2	2	2	2	2
	+					2	2	2	2	2	2	2	2	2	2	2	2

Matrix 34: Kitchen Area of Kitchen-Diner 5P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2	-2	-2	-2	-2	-1	-1	-1	-1	0	2	2	2	2	2	2	2
	-2	-2	-2	-2	-2	-2	-2	0	0	2	2	2	2	2	2	2	2
2.5		-2	-2	-1	0	0	0	0	0	1	2	2	2	2	2	2	2
		-2	-2	-2	-1	-1	0	2	2	2	2	2	2	2	2	2	2
3.0			-2	-1	0	1	1	2	2	2	2	2	2	2	2	2	2
			-2	0	2	2	2	2	2	2	2	2	2	2	2	2	2
3.5				0	1	2	2	2	2	2	2	2	2	2	2	2	2
				2	2	2	2	2	2	2	2	2	2	2	2	2	2
4.0					2	2	2	2	2	2	2	2	2	2	2	2	2
					2	2	2	2	2	2	2	2	2	2	2	2	2
4.5						2	2	2	2	2	2	2	2	2	2	2	2
	+					2	2	2	2	2	2	2	2	2	2	2	2

Matrix 35: Kitchen Area of Kitchen-Diner 6P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	0	0	0	0	0	0	0
	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
2.5		-2	-2	0	0	0	0	0	0	0	0	0	1	2	2	2	2
		-2	-2	-2	-1	-1	-2	-2	-2	-2	-2	-1	0	0	0	0	0
3.0			-2	0	0	0	1	1	2	2	2	2	2	2	2	2	2
			-2	-2	-1	0	0	1	1	1	1	1	2	2	2	2	2
3.5				0	0	0	0	1	2	2	2	2	2	2	2	2	2
				-2	-1	1	1	1	1	2	2	2	2	2	2	2	2
4.0					0	0	0	0	1	2	2	2	2	2	2	2	2
					0	1	1	2	2	2	2	2	2	2	2	2	2
4.5						0	2	2	2	2	2	2	2	2	2	2	2
+						2	2	2	2	2	2	2	2	2	2	2	2

Matrix 36: Kitchen Area of Kitchen-Diner 7P Dwelling

	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10+
2.0	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	0	0	0	0	0
	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
2.5		-2	-2	-2	-1	-1	-1	-1	-1	-1	-1	-1	0	0	1	1	2
		-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
3.0			-2	-1	0	0	0	0	0	0	1	1	2	2	2	2	2
			-2	-2	-2	-2	-2	-1	0	0	0	0	0	0	0	0	0
3.5				-1	0	0	0	1	1	1	1	2	2	2	2	2	2
				-2	-1	0	1	0	0	2	2	2	2	2	2	2	2
4.0					0	0	0	1	1	1	2	2	2	2	2	2	2
					0	0	1	0	1	2	2	2	2	2	2	2	2
4.5						0	1	2	2	2	2	2	2	2	2	2	2
+						1	1	2	2	2	2	2	2	2	2	2	2

ADDITIONAL FURNITURE TO OBTAIN HIGHER SCORES

The following furniture, over and above that already including the basic room requirements, would obtain a higher score as indicated.

Room	Additional Furniture	Additional furniture score
Bath/shower room with WC	Additional bidet and separate shower and bath	Exceeds by more than one item
Bath/shower room without WC	Additional wash hand basin	Exceeds by one item
Bath/shower room without WC	Additional wash hand basin and shower separate from a bath	Exceeds by more than one item
Bathroom or shower-room with WC	Additional bidet	Exceeds by one item
Dining space	Larger sideboard	Exceeds by one item

Dining space	Larger sideboard and larger dining table	Exceeds by more than one item
Double bedroom	Additional chest of drawer	Exceeds by one item
Double bedroom	Additional chest of drawers and double wardrobe	Exceeds by more than one item
Kitchen	Additional 600mm unit	Exceeds by one item
Kitchen	Additional 1200mm unit	Exceeds by more than one item
Living room	2 armchairs above requirement	Exceeds by more than one item
Living room	1 armchair above requirement	Exceeds by one item
Separate WC	Additional bidet	Exceeds by one item
Separate WC	Additional wash hand basin and bidet	Exceeds by more than one item
Single bedroom	Additional chest of drawer	Exceeds by one item
Single bedroom	Additional chest of drawers and single wardrobe	Exceeds by more than one item
Twin bedroom	Additional chest of drawer	Exceeds by one item
Twin bedroom	Additional chest of drawers and double wardrobe	Exceeds by more than one item

COT SPACE

One of the double bedrooms in the unit should have sufficient space to take an occasional cot (Q. 6.2.8). The table below indicates whether this is possible whilst the room still meets the furniture and activity/access requirements. Please note that any room not meeting the requirements cannot contain space for a cot.

	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5_
2	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO_
2.5		NO	NO	NO	NO	YES	YES	YES	YES	YES
3			NO	YES						
3.5				YES						
4					YES	YES	YES	YES	YES	YES
4.5						YES	YES	YES	YES	YES
5							YES	YES	YES	YES
5.5								YES	YES	YES
6									YES	YES
6.5										YES

Key

Yes indicates an occasional cot can be accommodated in a double room.

No indicates an occasional cot cannot be accommodated in a double room.

14. ANNEX 2: LIFETIME HOMES STANDARD

Extracts from Living Well Together, Habinteg Housing Association

Lifetime Homes Standard	Lifetime Home specification and dimensional	Guidance
<p>1. Car Parking Where there is car parking adjacent to the home, it should be capable of enlargement to attain 3300mm width.</p>	<p>The general provision for a car parking space is 2400mm width. If an additional 900mm width is not provided at the outset, there must be provision (e.g. a grass verge) for enlarging the overall width to 3300mm at a later date.</p>	<p>Parking adjacent to the home should meet Lifetime Home specification and dimensional requirements or be capable of enlargement at a later stage. Aim to provide parking adjacent to homes entered directly at ground floor level if this can be achieved whilst still achieving the required density.</p>
<p>2. Access from Car Parking The distance from the car parking space to the home should be kept to a minimum and should be level or gently sloping.</p>	<p>A level approach is preferable. However, where the topography prevents this, a maximum gradient of 1:12 is permissible on an individual slope of less than 5 metres or 1:15 if it is between 5 and 10m, and 1:20 where it is more than 10m*. Paths should be a minimum of 900mm width.</p>	<p>The distance should be kept to the minimum required to achieve the required density. Underground parking where provided should either provide an access route to the dwellings meeting the gradient requirements or be provided with a fully wheelchair accessible lift.</p>
<p>3. Approach The approach to all entrances should be level or gently sloping.</p>	<p>See specification and dimensional requirements of standard 2 above.</p>	<p>The Lifetime Homes specification and dimensional standards should be met.</p>
<p>4. External Entrances All entrances should: a) be illuminated b) have level access over the threshold and c) have a covered main entrance.</p>	<p>The threshold upstand should not exceed 15mm</p>	<p>The Lifetime Homes specification and dimensional standards should be met.</p>
<p>5. Communal Stairs a) Communal stairs should provide easy access; and b) where homes are reached by a lift, it should be fully accessible. * Providing there are top, bottom and intermediate landings of not less than 1.2m excluding the swing of doors and gates.</p>	<p>Minimum dimensions for communal stairs – Uniform rise not more than 170mm – Uniform going not less than 250mm – Handrails extend 300mm beyond top and bottom step – Handrail height 900mm from each nosing Minimum dimensions for lifts – Clear landing entrances 1500mm x 1500mm</p>	<p>In flatted developments or in developments with flats the aim should be to provide the flats in a form, and in sufficient number, to support the provision of a lift/lifts meeting the Lifetime Home standards. Where this is not possible due to site, planning or financial reasons</p>

ANNEX 2 LIFETIME HOMES STANDARD

	<ul style="list-style-type: none"> – Min. internal dimensions 1100mm x 1400mm – Lift controls between 900 and 1200 mm from the floor and 400mm from the lift's internal front wall. 	<p>the Lifetime Home specification for communal stairs should apply to every communal staircase. Where no lift is provided, and stairs are within a secure area and do not provide access to more than one storey, the aim should be to ensure stairs allow easy installation of a stair lift with clear landings of 1500mm x 1500mm at the top and bottom of the flight.</p>
<p>6. Doorways & Hallways should conform to the specifications in the next column to enable wheelchair user access.</p>	<p>Doorway clear Corridor/passageway opening width (mm) width (mm) 750 or wider 900 (when approach is head-on) 750 1200 (when approach is not head-on) 775 1050 (when approach is not head-on) 900 900 (when approach is not head-on) The clear opening width of the front door should be 800mm. There should be 300mm to the side of the leading edge of doors at entrance level.</p>	<p>Specifications in high density developments should conform to the Lifetime Home standard.</p>
<p>7. Wheelchair Accessibility There should be space for turning a wheelchair in dining areas and living rooms and adequate circulation space for wheelchairs elsewhere.</p>	<p>A turning circle of 1500mm diameter or a 1700mm x 1400mm ellipse is required.</p>	<p>Specifications in high density developments should conform to the Lifetime Home standard.</p>
<p>8. Living Room The living room should be at entrance level.</p>		<p>This requirement should be met in high density developments.</p>
<p>9. Two or More Storey Requirements In houses of two or more storeys, there should be space on the entrance level that could be used as a convenient bed-space.</p>		<p>This requirement should be met in dwellings within high density developments that have two or more storeys.</p>
<p>10. WC There should be: a) a wheelchair accessible entrance level WC, with</p>	<p>The drainage provision for a future shower should be provided in all dwellings. For dwellings with three or more bedrooms, or on one level, the</p>	<p>The Lifetime Homes standard should be met in high density developments. In small two-bedroom dwellings a Part M</p>

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b) drainage provision enabling a shower to be fitted in the future.	WC must be fully accessible. A wheelchair user should be able to close the door from within and achieve side transfer from a wheelchair to one side of the WC. There must be at least 1100mm clear space in front of the WC bowl. The shower provision must be within the closet or adjacent to the WC.	standard WC is acceptable.
11. Bathroom & WC Walls Walls in bathrooms and WC's should be capable of taking adaptations such as handrails.	Wall reinforcements should be located between 300 and 1500mm from the floor.	The Lifetime Homes standard should be met in high density developments.
12. Lift Capability The design should incorporate: a) provision of a stair lift b) a suitably identified space for a through the- floor lift from the ground to the first floor, for example to a bedroom next to a bathroom.	There must be a minimum of 900mm clear distance between the stair wall (on which the lift would normally be located) and the edge of the opposite handrail/balustrade. Unobstructed 'landings' are needed at top and bottom of the stairs.	This requirement should be met in dwellings within high density developments that have two or more storeys.
13. Main Bedroom The design should provide a reasonable route for a potential hoist from a main bedroom to the bathroom.	Technological advances in hoist design mean that a straight run is no longer a requirement.	The Lifetime Homes standard should be met in high density developments.
14. Bathroom Layout The bathroom should be designed to incorporate ease of access to the bath, WC and wash basin.	Although there is not a requirement for a turning circle in bathrooms, sufficient space should be provided so that a wheelchair user can use the bathroom.	The Lifetime Homes standard should be met in high density developments.
15. Window Specifications Living room window glazing should begin at 800mm or lower and windows should be easy to open/operate.	People should be able to see out of the window whilst seated. Wheelchair users should be able to operate at least one window in each room.	The Lifetime Homes standard should be met in high density developments. Below 800mm, standard glazing is not acceptable under building regulations.
16. Fixtures & Fittings Switches, sockets, ventilation and service controls should be at a height usable by all (i.e. between 450 and 1200mm from the floor).	This applies to all rooms including the kitchen and bathroom.	The Lifetime Homes standard should be met in high density developments.

