

# Isle of Man



## Design Guide – Affordable Housing Standards

Providing good places for people to live



# **AFFORDABLE HOUSING ON THE ISLE OF MAN**

## **FOREWORD**

*Dear Reader*

*Good quality, well designed affordable housing is fundamental to any modern society. Housing provides more than just a place to live- it provides a sense of belonging and adds aesthetic value to our communities. With such a long term investment in both money and community terms, it is important that affordable housing design is able to be delivered at a high standard of quality and be able to keep pace with the changing needs of our population, to provide real value for money.*

*These new Housing standards provide a consistent approach to design and are more than simply a set of technical standards. This design guide offers advice to housing developers in six key construction and design areas.*

- 1. External Environment*
- 2. Dwelling Design and Space Standards*
- 3. Building Services and Energy*
- 4. Management and Maintenance*
- 5. Design Guide - Housing Standards Check List*
- 6. Good Practice - Compliant Floor Plans*

*My sincere thanks go to all contributors to this document as this provides modern comprehensive guidance to all involved in affordable Housing design and delivery.*

*Yours faithfully*

*Director of Housing*

*December 2015*

# Record of Amendments

## DESIGN GUIDE - HOUSING STANDARDS

No.	Date	Amendment

# **DESIGN GUIDE - HOUSING STANDARDS**

## **(Creating Good Places for People to Live)**

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**APPENDIX A – Minimum Gross Internal Floor Areas.**

**APPENDIX B – Furniture Schedule.**

**APPENDIX C – Compliant Floor Plans**

<b>Type A</b>	<b>1 bed, 2 person apartment</b>
<b>Type B</b>	<b>2 bed, 3 person apartment</b>
<b>Type C</b>	<b>2 storey, 2 bed, 4 person dwelling</b>
<b>Type D</b>	<b>2 storey dwelling, 3 bed, 4 person</b>
<b>Type E</b>	<b>2 storey dwelling, 3 bed, 5 person</b>
<b>Type F</b>	<b>2 storey dwelling, 4 bed, 7 person</b>
<b>Type G</b>	<b>2 bed, 3 person bungalow</b>
<b>Type H</b>	<b>2 bed, 3 person wheelchair user bungalow</b>



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## SECTION 1.0

### Policy Statement - PURPOSE, DEFINITIONS AND PROCEDURES

#### Purpose

- 1.1 Purpose of Design Guide - Housing Standards.** This document has been produced to encourage good design of affordable houses.

Clients and designers are encouraged to not only consider whether their designs comply with the technical standards included in this Design Guide but also whether their designs will create good places for people to live.

This document supersedes and replaces the "Guide to Public Sector Housing Standards" and subsequent updates which has previously been used for this purpose since 2000.

**1.2 IOM Strategic Plan**

The Isle of Man Strategic Plan 2007 makes reference to affordable housing in Section 8.6 which includes Housing Policy 5. It states:-

*"In granting planning permission on land previously zoned for residential development or now considered suitable for residential development or in predominantly residential areas the Department will normally require that (at least) 25% of provision should be made up of affordable housing (or a commuted sum be paid as an equivalent contribution to affordable housing elsewhere on the Island) . This policy will apply to developments of 8 dwellings or more."*

**1.3 Planning Legislation & Section 13 Agreements**

When a planning application is submitted and falls within the remit of this policy, the Department of Infrastructure is a consultee of the planning process and the Department will generally require provision of appropriate affordable housing.

If a planning approval is granted, which requires this affordable housing provision, then the applicant will be required to enter into an agreement under Section 13 of the Town and Country Planning Act 1999 (a "Section 13 Agreement") where the conditions of such provision are defined.

- 1.4 Housing Types and Mix** This document does not give specific guidance on what type(s) of housing (public sector general or elderly and First Time Buyer) or dwelling mix (houses, apartments, bungalows, sheltered), should be included in particular housing projects. These are housing policy and investment matters which are considered by the Housing Authorities and Department of Infrastructure – Housing Division, as part of the ongoing review of affordable housing provision.

These reviews will broadly determine what type and mix of housing is required in the housing authority area and which sites that might be available for affordable housing developments. The outcome of the reviews will then feed into the budget and Business Case

process at which stage this Housing Guide will become relevant along with land zoning and planning policy.

This housing review process applies to affordable housing which is to be provided as a requirement of the IOM Strategic Plan or other planning policy.

An agreement on the mix, location and design of affordable housing should be reached prior to the developer submitting a planning application either "In Principle or Detailed". There should also be a joint pre-application consultation with the Planning Division.

**1.5 Apartments.** Whilst this document does not give specific guidance on types and mix of housing the following should be noted with regard to apartments.

Where apartments are to be provided for FTB or public sector developments, 2 Bed, 3 Person apartments will normally be required rather than 1 Bed, 2 Person, apartments.

In sheltered schemes however, 1 Bed, 2 Person, apartments will be suitable as tenants will usually be couples or single people. 1 Bed, 2 Person apartments will moreover, be more cost effective for the client and produce a lower rent for the tenant. Also separate guest rooms are provided in sheltered schemes, and therefore a second bedroom is not normally required for family or friends.

Nonetheless, there are circumstances where tenants might require separate bedrooms. A proportion of the mix on sheltered schemes should therefore be 2 Bed, 3 Person apartments which should, ideally, be provided on the ground floor. 2 Bed, 3 Person apartments should normally comprise circa 20% of the total number of apartments, but the exact figure will depend on housing need.

## **Definitions**

**1.6 Public Sector Housing.** Homes provided for rent including general family, older persons and sheltered housing.

**1.7 First Time Buyer Housing (FTB).** New approved homes provided for sale in accordance with the Shared Equity Purchase Assistance Scheme (First Home Fixed). The client and project sponsor will be the Department of Infrastructure - Housing Division, who manage FTB housing and provide financial assistance for first time buyers.

**1.8 The Client** has the key role of ensuring that the design brief addresses housing need within a Local Authority area. Housing Authority clients must nominate a responsible senior officer as "client representative" to represent the Local Authority or Housing Committee during all stages of the design and development process. The client representative will be a member of the project team.

**1.9 The Project Sponsor** is the Department of Infrastructure – Housing Division who must nominate or approve the appointment of a "project manager" to represent the interests of the Department and work in partnership with the "client representative" during all stages of the design and development process. For clarity this is not the project manager named in a Standard Form of Building Contract e.g. NEC. The project manager will be a member of the project team.

**1.10 The Designer** is the term used in this document to cover the responsibilities of a design team as appointed directly by the client e.g. architect, structural engineer, building services

engineer, etc. or employed by a building contractor under a design and build or other development agreement which provides affordable housing.

An architect or other design team member will normally be appointed as the design team leader for each housing project. Designers will be members of the project team.

## **Procedures**

**1.11 Affordable Housing Standards.** In the main, housing standards are the same whether applied to public sector or FTB dwellings. It has not therefore been considered necessary to split this document into sections relating to public sector, FTB, elderly and sheltered housing. Where a different standard is required, this is clearly identified within the relevant paragraphs e.g. for sheltered housing.

**1.12 Design Process.** The client representative and project manager will provide the interface between political members and the designers to ensure that projects are progressed in accordance with the Government's and Local Authorities Financial Regulations.

This arrangement does not prevent the client from forming project sub-committees comprising political members and tenants, or nominating a political representative to attend design team meetings.

**1.13 The Treasury "Procedure Notes for Management of Construction Projects"** document forms part of the Government's Financial Regulations and the client representative, project manager and designers are responsible for ensuring that, on public sector housing schemes, the procedures and Project Stages as set out in that document are followed.

This Design Guide – Housing Standards is relevant to Concept (Business Case), Definition (Stage D1 – Design Brief), Implementation – (Stages I2 and I3 - Detail and Technical Design).

**1.14 Use of this Design Guide.** The client representative and project manager must use this Design Guide when briefing designers who are designing public sector and first time buyer homes. This includes developments being carried out on a developer's own land under the requirements of the IOM Strategic Plan and any Section 13 Agreement entered into at planning approval stage. See 1.3.

The client representative and project manager are responsible for ensuring that housing developments comply with the Design Guide – Housing Standards. Where there is a proposed deviation from the housing standards as set out in this Design Guide, the project manager will be responsible for deciding whether there should be a recommendation to update the Design Guide. See 1.18.

This Design Guide is not intended to be fully prescriptive but leaves the opportunity for clients and designers to use ingenuity and imagination to produce high quality housing that is value for money and, where relevant, exceeds the requirements of this Design Guide – Housing Standards.

Designers are encouraged to think not only about design in the broadest architectural sense but also to consider design in detail, thereby ensuring that internal and external spaces will work properly for the people who are going to use them on a daily basis.



The design team should consider “cost in use” when appraising options for designs, materials and applications. The lowest capital cost must not be the sole deciding factor.

It is recognised that the Design Guide should not become fossilised but should be reviewed regularly and updated to reflect changing needs and technologies. See 1.18.

**1.15 Statutory Requirements.** The Design Guide does not relieve designers from their duty to ensure that affordable housing developments comply with all Statutory Requirements including:-

- Town and Country Planning Acts
- IOM Strategic Plan “Towards a Sustainable Island” and Area Plans
- IOM Building Regulations
- Water Bylaws
- Land Drainage Act
- Fire Precautions (Flats) Regulations
- Housing Act Flats Regulations
- Health and Safety at Work Acts (including CDM Regulations)
- Public Health Acts
- Highway Acts
- NHBC Standards – First Time Buyer housing only

**1.16 Building Regulations 2010, Part M, Access to and use of buildings, 2015 (applicable in England from October 2015).** Although not a statutory requirement on the IOM, this Design Guide makes frequent reference to the requirements of the document with regard to ensuring that the approach and access to buildings, internal circulation areas and room sizes will be adaptable and meet the changing needs of residents. See 2.3.6 and 3.1.

Designers of affordable housing must refer to the document and comply with Category 1- Visitable Dwellings and for public sector housing Category 2 – Accessible and Adaptable Dwellings. The document is referred to as **Part M, 2015 Edition** within this Design Guide.

Where the client requires individual dwellings designed specifically for wheelchair accessibility the design must comply with Category 3 – Wheelchair user dwellings.

**1.17 Space Standards, 2015.** The UK Department of Communities and Local Government issued a document in March 2015 entitled “Technical Housing Standards – Nationally Described Space Standards”.

This document should be referred to by designers and used as a guide for minimum internal floor areas and built-in storage areas wherever this Design Guide does not give minimum IOM internal floor areas. A summary of these minimum gross internal floor areas and storage requirements is shown in a table in Appendix A to this Design Guide.

**1.18 Good Practice and Continuous Improvement.** Appendix C includes examples of floor plans which meet the requirements of this Design Guide. Designers may adopt these plans

for new developments but are also encouraged to use their imagination to develop other compliant designs, appropriate to their use and location.

The project manager will be responsible for ensuring that under “Procedure Notes for Management of Construction Projects”, good ideas arising from the Post-Project Evaluation will be clearly shown as recommendations in the Stage H1 Report and then fed into the Housing Division’s review process for updating the Design Guide. This process should include feedback from the end user i.e. tenants and FTB’s.

Given the long length of time between the Business Case and the Post-Project Evaluation at Stage H1, the design team should consider carrying out an interim evaluation, following the Stage I3 tender approval, and the project manager should then submit relevant recommendations for updating the Design Guide

**1.19 Design Guide Headings.** The following sections (2.0 – 5.0) provide an explanation of what designers should be endeavouring to achieve in terms of design philosophy, as well as more detailed technical standards. It is important that the project team consider these four sections prior to completing Section 6.0.

The headings for the four sections are:-

- Section 2.0 – External Environment
- Section 3.0 – Dwelling Design and Space Standards
- Section 4.0 – Building Services and Energy
- Section 5.0 – Management and Maintenance

**1.20 Design Guide Check List.** Section 6.0 provides a condensed version of the design guidance and standards. The full descriptions included in Sections 2.0 to 5.0 must, however, be considered when deciding whether housing designs comply with the guidance and standards.

A tick (✓) should be inserted where the element of design complies with the Design Guide – Housing Standards, a cross (X) inserted where it does not comply, (NA) inserted where not applicable and a question mark (?) inserted where the element of design will be determined at a later date.

The notes column should be used to very briefly highlight elements of design that are considered to be in excess of the base standards or briefly explain why a standard has not been met. Where appropriate, this column should be used to cross reference explanatory paragraphs in the Project Stage Reports e.g. where there is a proposed deviation from the standard.

The project team should submit the check list with the Stage Reports commencing with Stage D1.

The project manager should endorse the check list in the PM’s Stage D1 Report. Consideration should also be given as to whether it would be advantageous to submit the check list with the Business Case even though some elements of the design will not be determined until later in the design process.

**1.21 Specification.** This document is a design guide with housing standards, not a detailed specification attempting to cover all aspects of housing design and construction. Where specific materials or specifications are preferred these are included in the relevant Sections (2.0 – 5.0) and in the Check List at Section 6.0



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## **SECTION 2.0**

### **EXTERNAL ENVIRONMENT**

#### **2.1 IOM Statutory Framework**

The design of housing developments on the Isle of Man is largely influenced by the statutory guidance contained in the IOM Strategic Plan and the Department of Infrastructure's (DoI) guidance on road design. These requirements dictate density, provision of open space and other communal facilities, road character layout and design and car parking requirements, all of which are intended to ensure housing developments are safe, well designed and fit into the Manx environment.

Compliance with the IOM Statutory Framework and associated technical standards does not guarantee that designs will create good places for people to live. Designers and developers are therefore encouraged to not only comply with statutory requirements but to think about what makes a good place for people to live, taking into account the following design guidance and housing standards.

#### **2.2 Successful Housing Developments**

In addition to the IOM Statutory Framework, other design guidance exists that has been published by various organisations in which key attributes have been identified that contribute to successful housing developments. These are described under ten headings in Section 2.3.

Whilst each attribute is not mutually exclusive, or necessarily different to the IOM Statutory Guidance, they are included in this Design Guide with the aim of ensuring that clients and designers approach housing design in a holistic manner.

Attributes 1 to 9 are described within paragraphs 2.3.1 to 2.3.9. They include guidance on design philosophy for housing developments but, in general, they do not contain prescriptive housing standards. Despite this, the design team should demonstrate that the design guidance has been considered and adopted wherever possible. See 1.12 and Section 6.0.

Attribute 10 summarises the aims of attributes 1-9 within paragraph 2.3.10. This is followed by paragraphs 2.4.1 to 2.4.14 which expand these aims and contain prescriptive housing standards. The design team should demonstrate that these housing standards have been considered and adopted wherever possible. See 1.12 and Section 6.0.

#### **2.3 Ten Key Attributes That Contribute To Successful Housing Developments.**

- 2.3.1 **Dwelling Type and Mix.** The types of affordable housing and dwelling mix in new developments will be determined by the client based on local housing need. See 1.10.
- 2.3.1a Where affordable housing is required under Section 13 Planning Agreements (See 1.3) there should be negotiations, at an early stage in the design process, between the developer and client/project manager at the Department of Infrastructure - Housing Division.
- 2.3.1b It is acknowledged that some forms of affordable housing, such as elderly persons' semi-detached bungalows, are more costly to provide in terms of land and construction than other forms of affordable housing, such as blocks of apartments. The 25% housing provision

requirement should therefore be seen as a point of reference which will allow negotiations to result in a sensible agreement that meets local, affordable, housing need.

- 2.3.1c On larger housing developments, affordable housing should be an integral part of the design. Whilst it is understood that there is a commercial aspect that drives private sector housing layouts, this must not lead to public sector or first time buyer housing being marginalised in terms of location, design and space.
- 2.3.1d Where the client requires provision of one or more dwellings, designed specifically for wheelchair users, designs must comply with Part M, 2015 Edition, Category 3 – Wheelchair user dwellings.
- 2.3.2 **Movement.** There will be a movement framework which is safe and attractive for pedestrians and vehicle users of all ages, relative to the type of development.
- 2.3.2a Providing access to existing road and footpath networks, in the areas surrounding the site, should be considered. These connections should provide a good access to community facilities including shops, health care, schools, etc.
- 2.3.2b Convenient and safe access to existing public transport services should be provided. On larger developments consideration must be given to whether it would be desirable to extend transport services into the development.
- 2.3.2c Designers should also help to create interest and a local identity rather than isolate sections of the community or development. Residents and visitors should be able to find their way around the estate and easily locate street names and dwellings.
- 2.3.3 **Community.** Designs for housing developments should promote a sense of neighbourhood and community. Providing good places for people to live and belong requires clients and designers to think about how people might live together as part of an existing or new community.
- 2.3.3a Wherever possible there should be clear links to existing communities and facilities.
- 2.3.3b Consideration should be given as to whether it might be appropriate to provide communal or community facilities as part of the design. Successful examples are local meeting rooms for older people, play areas for younger people, communal gardens, sitting out areas, etc.
- 2.3.3c Consideration needs to be given to cost, maintenance and possible social behaviour patterns relative to the type of housing development. These factors should not automatically lead to a conclusion that communal or community facilities will be too expensive or difficult to manage. The Business Case must however make it clear how these facilities will be funded and managed e.g. revenue implications.
- 2.3.4 **Structure and Layout.** This attribute encompasses the previous sections of Mix, Movement and Community but more specifically requires housing developments to be coherent with regard to buildings, streets, amenity spaces, landscape, etc.
- 2.3.4a Affordable housing should be integrated into mixed housing developments. Where appropriate, consideration should be given to providing more than one area of affordable housing within the estate design. The aim is to achieve integrated communities where coherent design makes it difficult to differentiate areas of affordable housing from other types of housing on the development.

Private housing might require some differentiation, in order to market homes at a range of sizes and prices. This factor should not lead to affordable housing being isolated, cramped or poorly designed.

- 2.3.4b Designers should make every effort to incorporate existing mature landscape and wildlife habitats into housing developments in a sensitive manner and to meet with the satisfaction of the IOM Statutory Authorities, etc. e.g. DEFA and other wildlife organisations.
- 2.3.5 **Design Detail.** Affordable housing should not be considered as “cheap” housing and designers should therefore produce designs that pay attention to detail, so as to create visual interest in the buildings and the external environment.
- 2.3.5a Affordable housing should not stand out as homes that have been consciously designed and built to a lower standard than similar private housing. This does not mean there should not be differentiation for marketing and pricing purposes but affordable housing should be designed to look desirable and provide homes where people will wish to live and belong.
- 2.3.6 **Adaptability.** Residents’ housing needs may change over time, for example having a family, mobility issues or just becoming older. Whilst moving to a new home might be possible, the best option for the resident is more likely to be able to stay in their existing home and neighbourhood.
- 2.3.6a Designers should consider whether their estate designs will accommodate residents changing needs with regard to reduced mobility and wheelchair access. The external environment around the dwelling and estate should be designed to support the concept of a lifetime home by providing suitable footpaths, accessible thresholds, dropped kerbs at road crossings, low gradient ramps and minimising the requirement for steps, steep footpaths, isolated parking spaces, etc. See 2.4.4 and 2.4.6.
- 2.3.6b Housing for older people should be located on the flattest part of a housing development site and as close as possible to shops, bus stops, etc.
- 2.3.7 **Parking.** Spaces for parking vehicles should relate to the homes that they serve and be designed in an attractive and accessible manner. Large and/or isolated parking areas must be avoided. See 2.4.4.
- 2.3.8 **Safety and Security.** Residents and their families require an external environment that is safe and secure.
- 2.3.8a Designers should ensure their estate designs comply with good practice in this respect and particularly with regard to the grouping of dwellings, adopted road and footpath layouts, through routes, private footpaths, car parking, siting of communal and play areas, public and private lighting, fencing, landscaping, etc. See 2.4.3.
- 2.3.9 **Maintenance.** Estate design should produce an external environment which is interesting, attractive and distinctive. Maintenance of the external environment should be fully considered at the design stage so that cyclical maintenance will be relatively easy and cost effective to carry out.
- 2.3.9a Designers must consider whether materials and designs used for roads, footpaths, fencing, communal areas, lighting, landscaping, etc. strike a sensible balance between a desirable appearance, initial capital cost and maintenance costs i.e. lifetime costs should be taken into account.

2.3.9b Designers must consult with the client and relevant statutory authorities with regard to maintenance and adoption of public areas and services.

2.3.10 **Sense of Place – Attribute Ten.** In summary, the aim is to create housing developments that not only include well designed dwellings but also set homes in external environments that promote a sense of place and belonging.

**2.4 Attribute Ten.** In order to meet the aim summarised in paragraph 2.3.10, compliance with the following housing standards (2.4.1 to 2.4.14), is required. See 1.8 and Section 6.0.

#### 2.4.1 External Space

2.4.1a Affordable housing layouts should not be cramped and individual dwellings should sit comfortably with their neighbours.

2.4.1b Narrow fronted and deep plan dwellings should be avoided, unless required for site specific reasons and agreed with the client and project manager.

2.4.1c Where the designer proposes terraces that include more than four dwellings, there must be a design statement explaining the concept of terraced housing in the context of the site or estate i.e. why terraced housing is being proposed and how does it integrate into the overall estate design.

2.4.1d Designers should ensure that designs and spaces will be suitable in the future for residents in wheelchairs or those who have other mobility issues. See 2.4.4 and 2.4.6.

2.4.1e Open space should be in accordance with the IOM Strategic Plan and as agreed with the Planning Division.

2.4.1f Gardens should be appropriate to the type of dwelling e.g. houses, bungalows, apartments, sheltered housing. Small gardens will not be considered acceptable for 2, 3, or 4 bed family houses. See 2.4.5.

#### 2.4.2 Privacy

2.4.2a Privacy is an important factor when designing housing developments and it is important that, wherever possible, gardens and living rooms should not be overlooked.

Spacing between dwellings is a material planning consideration with regard to being overlooked and loss of privacy. Minimum planning distances should be considered by designers, within the context of the proposed site layout, and these should be increased where a loss of privacy is considered to be a potential issue.

2.4.2b Private areas which are adjacent to heavily used public areas, should have physical protection i.e. provision of substantial walls or fences.

2.4.2c Public areas should be adequately and sensitively lit to provide safe access but should not impact unduly on adjacent private space, living rooms and bedrooms.

2.4.2d The installation of street lights that minimise atmospheric light pollution should be promoted by clients, project managers and designers.

2.4.2e Trees and bushes should not be densely planted where they would be in close proximity to footpaths and could hinder visual security.



2.4.2f Accesses and common entrances to blocks of apartments should be easily seen and well lit with no hidden recesses. Common entrances open to the public must be avoided or access controlled by a door entry system.

### 2.4.3 **Security**

2.4.3a Consultation should take place at an early stage with the Police Architectural Liaison Officer to ensure that estate design meets good practice with regard to Designing out Crime. "Secured by Design" principles should be applied in an appropriate manner with regard to the specific site and the Isle of Man environment. Reference to these principles can be made via the "secured by design" website [www.securedbydesign.com](http://www.securedbydesign.com) ".

2.4.3b CCTV is not normally required on housing schemes but if the client wishes to install CCTV, a clear reason for the request must be included in the Business Case.

### 2.4.4 **Car Parking and Vehicular Access**

2.4.4a Part M, 2015 Edition must be used for guidance by designers with regard to car parking and drop-off designs which should comply with Category 1-Visitable Dwellings and for public sector housing Category 2 – Accessible and Adaptable Dwellings.

2.4.4b Parking spaces should be a minimum of 5.00m (ideally 5.50m) x 2.50m with disability spaces 3.30m wide and designed for reasonable access.

2.4.4c Parking spaces should generally relate to the homes that they serve and be designed in an attractive manner, preferably in small groups. In-curtilage parking for houses should also be considered.

2.4.4d Large and/or isolated parking areas must be avoided.

2.4.4e Access to vehicles and, in particular, to boot spaces should not require residents to stand on landscaped areas.

2.4.4f Parking spaces should be provided in accordance with the IoM Strategic Plan and any Local or Area Plans.

2.4.4g Sheltered schemes should have parking spaces provided in excess of the IoM Strategic Plan standard and as close to one space per apartment as possible. Around 20% of these spaces should be disability spaces and two further spaces designated for management and care staff.

2.4.4h Sheltered schemes should have a layby near the main entrance suitable for use by emergency vehicles and for drop-off.

2.4.4i Sheltered schemes should have suitable access around the exterior of the site for mobility scooter use and for access to the mobility scooter store.

2.4.4j Sheltered schemes should have suitable access to the plant room with adjacent parking suitable for the use of maintenance and fuel delivery vehicles.

### 2.4.5 **Gardens**

2.4.5a Gardens to houses should be a minimum of 7.0m long, wherever possible.

2.4.5b Blocks of two storey apartments, with separate external entrances to each apartment, should have a private garden for each apartment, wherever possible.

- 2.4.5c Gardens to houses and apartments should be reasonably private and be enclosed with timber fencing, railings, walls or hedges.
- 2.4.5d Gardens to houses and apartments should have an external access and require sole access through the dwelling.
- 2.4.5e Gardens to houses should be provided with a paving or concrete base for a shed sized 2.40m x 1.80m (residents to supply the shed).
- 2.4.5f Paved or concrete areas should be provided adjacent to ground floor windows to facilitate cleaning.
- 2.4.5g Paved or concrete paths should be provided under or adjacent to clothes lines and rotary driers.
- 2.4.5h Blocks of apartments and sheltered schemes should have reasonably sized communal gardens and landscaped areas which are arranged so as to minimise disturbance to ground floor residents.
- 2.4.5i Blocks of apartments and sheltered schemes should give tenants the opportunity to grow plants in pots or flower beds close to their front or rear doors where their homes are located on the ground floor or in pots where their homes are located on upper floors.

#### 2.4.6 **Footpaths**

- 2.4.6a Approach routes to dwellings should comply with Part M, 2015 Edition, Category 1-Visitable Dwellings and for public sector housing Category 2 – Accessible and Adaptable Dwellings.
- 2.4.6b Communal parts of an approach route to a dwelling should have a clear width of 1200mm, private parts should have a clear width of 900mm and gateways should have a clear opening of 850mm. These minimum dimensions should also be applied to private and public footpaths which should have a suitable surface for wheelchair use.
- 2.4.6c Movement within the housing development should facilitate easy pedestrian access to the home, rear gardens, waste bins, playgrounds, communal facilities, etc. Steps and steep ramps or footpaths should be designed out wherever possible.
- 2.4.6d Footpaths should be provided where there are likely to be pedestrian desire lines but, on the other hand, care, should be taken to ensure that undesirable through routes are not inadvertently created.
- 2.4.6e Roads and footpaths should be designed in a way that promote safe movement for pedestrians, including the elderly, people with mobility issues, children, etc.

#### 2.4.7 **Fences and Railings, Hedges, Walls and Long Boundaries**

- 2.4.7a Fences and Railings should be of a height and material appropriate to their function and the following guidelines must be considered:
  1. Front boundaries should be recognised as an important aspect of urban design.
  2. A high (min 1650 mm) vertical close boarded fence should be constructed where rear gardens abut pedestrian circulation routes. These are also required along the side of a garden where it would be possible to look down a line of rear gardens.

3. A low (1000mm) wall, railings or fence should be constructed around individual or groups of front gardens. In some situations open plan areas may be appropriate (subject to Client approval).
  4. A simple timber but solid fence should be constructed between individual rear gardens.
  5. All rear enclosed gardens should have gates, designed to prevent removal by vandals.
- 2.4.7b Hedges should be of a species that can be easily maintained and suitable for the Manx coastal environment. Clients such as public sector housing authorities need to confirm that they will have systems in place for the maintenance of hedges and planting.
- 2.4.7c Walls should be designed in such a way as to discourage sitting or walking on top of the wall. This is particularly important where they are to be located close to private spaces or windows.
- 2.4.7d Walls should have robust copings with well detailed damp proof courses. Facing bricks should be frost resistant. Engineering bricks should be used below ground level and taken a minimum of two courses above finished external levels. Rendered brick or block walls may be acceptable subject to satisfactory detailed design.
- 2.4.7e Long Boundaries. Designers should consider how longer front and rear boundary designs can be made to look visually interesting and varied as well as practical and cost effective.
- 2.4.8 Children’s Play and Recreational Spaces**
- 2.4.8a Play provision should be in accordance with current Planning Guidelines in the IOM Strategic Plan Appendix 6. Early consultation should take place with the Planning Division and client to agree specific requirements for each housing development.
- 2.4.8b Housing development designs should identify space for designated areas of playground (enclosed by fencing designed to deter access by dogs) as well as informal open space for casual play. In larger developments more significant open space provision will be required in accordance with the IOM Strategic Plan guidance.
- 2.4.8c Care must be taken to ensure that the location of play spaces will not encourage anti-social behaviour.
- 2.4.9 Landscaping**
- 2.4.9a Emphasis should be placed upon the attractive and interesting juxtaposition of hard and soft landscape areas, including their relationship to public roads, footpaths, parking, etc.
- 2.4.9b Soft and hard landscape design should be used to reinforce security and privacy to dwellings, to support footpath links whilst preventing short-cutting (desire lines) and the erosion of edges.
- 2.4.9c Soft landscaping should be attractive and designed with acceptable rather than minimal maintenance costs in mind.
- 2.4.9d The IOM environment should be taken into account with regard to planting schemes and to the effect that high winds and the marine environment will have on plants, shrubs and young trees.

- 2.4.9e Soft landscaping in very close proximity to communal or public footpaths and directly behind parking spaces should be avoided. Bushes and trees that might eventually overhang at face level should not be planted next to footpaths.
- 2.4.9f Trees should only be planted in adopted footpaths with the agreement of the highway authority and always with provision of an adequate root control system. Tree locations should always avoid service runs.
- 2.4.9g At an early stage of the design process, the client and project manager should consider whether the site warrants a recommendation for the appointment of a landscape architect for one or more stages of the design process.

#### **2.4.10 Street and Estate Lighting**

- 2.4.10a Designers should ensure that there is adequate light for the safety of pedestrians and in areas requiring supervision.
- 2.4.10b Designers should also ensure that the level and spread of light is aesthetically pleasing and not over bright for residents and neighbours. Lighting levels and controls must therefore be carefully considered by the designer.
- 2.4.10c Street lighting should not be obstructed by trees.
- 2.4.10d All street lighting that is to be adopted must comply with lighting authority standards and be subject to necessary agreements e.g. between the developer, Manx Utilities Authority and Local Authority.

#### **2.4.11 Clothes Drying**

- 2.4.11a Individual or communal external drying space should be provided adjacent to apartments, wherever possible. These spaces should be screened but easily accessed and supervised by the residents they serve.
- 2.4.11b Condensing tumble dryers must be provided in each apartment or in a secure communal drying room where external drying space is not practical.
- 2.4.11c Discussions should take place with the Environmental Health Officer, at an early stage in the design process, to determine that proposed clothes drying facilities in apartments will comply with the Flats Regulations.
- 2.4.11d Dwellings with private gardens should have suitable external clothes drying provision i.e. a straight line of a suitable length or rotary clothes drier.

#### **2.4.12 Refuse Disposal**

- 2.4.12a Waste/wheelie bins should be located within the curtilage of every house in a position that is designed to screen the bins but accessible from kitchen areas and for refuse collectors.
- 2.4.12b Sheltered schemes or blocks of apartments should have communal bin areas located externally in positions that will not unreasonably disturb residents but are close to building entrances and accessible for refuse collection vehicles. The bin area should be large enough to accommodate larger bins and allow for separation of waste.
- 2.4.12c Bin areas should be well screened by a timber fence or similar and there should be a lockable water point and drain close by to facilitate cleaning.

2.4.12d Provision of waste bins should be in accordance with the recommendations of the Waste Operations Management Unit, Local Authority and client.

2.4.12e Kitchens should be supplied and fitted with a 3 compartment waste bin suitable for segregating the key wastes for recycling.

#### **2.4.13 Adopted Areas and Wayleaves**

2.4.13a Site plans should clearly indicate areas of the development or installations that are proposed for adoption following consultation with the Department of Infrastructure, Manx Utilities Authority and Local Authorities, e.g. landscaped areas, play spaces, car parking, roads and footpaths, drains, street lighting, etc.

2.4.13b Site plans should also clearly indicate where wayleaves will be required for services, adoptable drains, etc.

#### **2.4.14 Housing Development Layout Plans**

Designers must produce estate housing development layout plans to a suitable scale and with sufficient detail to enable the client and project manager to check that the housing development proposals comply with the requirements of this Design Guide – Housing Standards.



3

## **SECTION 3.0**

### **DWELLING DESIGN AND SPACE STANDARDS**

**3.1 Part M, Access to and use of buildings, 2015 Edition**, should be referred to by designers with regard to designing private entrances and spaces within dwellings to comply with Category 1-Visitable Dwellings and for public sector housing Category 2 – Accessible and Adaptable Dwellings. See 1.14.

**Appendix A - Technical Housing Standards – Nationally Described Space Standards**, should be referred to by designers and used as a guide for minimum internal floor areas and built-in storage areas where this Design Guide does not give specific IOM internal floor areas. See 1.15 and 3.2.

**Compliant Floor Plans** – Designers should refer to Section 7.0 where examples of compliant internal floor plans are illustrated.

#### **3.2 IOM Space Standards**

Appendix A lists the minimum space standards for the following range of affordable house types:

- 1 Bed 2 Person apartment
- 2 Bed 3 Person apartment
- 2 Bed 3 Person bungalow
- 2 Bed 4 Person house
- 3 Bed 4 Person house
- 3 Bed 5 Person house
- 4 Bed 6 Person house
- 4 Bed 7 Person house
- 4 Bed 8 Person house

#### **3.3 Entrances, Circulation Areas, Corridors, Staircases, Lifts and Deck Access.**

##### **3.3.1 Main Entrances to Individual Dwellings**

- 3.3.1a Entrances to individual dwellings should be visually attractive but also be secure. This main door should open into an enclosed lobby or hallway and not directly into a living room.
- 3.3.1b Main entrance doors will need to be protected by canopies or recessed porches in most external locations.
- 3.3.1c Entrance doors should have clear opening width of 850mm, with the door fully swung open.
- 3.3.1d Entrance doors should have an insulated, composite, low maintenance construction with a suitable double glazed panel, draught-proof letter box and a multi-point locking system. The

frame and threshold should complement the door, generally provide for level access and provide a high level of wind and water resistance.

3.3.1e Entrance doors to individual dwellings served by internal corridors or from balconies should be designed to be visually interesting and inviting e.g. forming recesses, providing features, installing local lighting, etc.

### 3.3.2 **Main Communal Entrances**

3.3.2a Communal entrance doors to blocks of apartments or sheltered schemes should be of architectural merit and designed to form an interesting, main focal point for residents and visitors entering or leaving the building. Doors, screens, lobbies and canopies can be constructed of different materials to the normal external doors and windows.

3.3.2b Main entrances doors should, ideally, be located in a central, accessible and sheltered position within the building.

3.3.2c Main communal entrance doors should be fitted with electrically powered automated opening and closing devices. The door should be operated by an appropriate key/card access system that can be overridden as required by the landlord. There should be an intercom and door-release system installed in each apartment which will enable the residents to verify the identity of visitors prior to remotely releasing the lock on the main entrance door.

3.3.2d Entrance doors should have a clear opening width of a minimum of 850mm, with the door fully swung open. Where there are two leaves, the main door shall provide the minimum clear opening.

3.3.3 **Entrance Halls** in individual dwellings should be a minimum width of 1050mm leaving sufficient space to park a push chair or wheelchair without a localised obstruction e.g. a radiator, reducing the 1050mm width. See Part M, 2015 Edition.

3.3.4 **Communal Entrance Halls and Staircases** in blocks of apartments should look welcoming and have coordinated signs that clearly direct visitors to the apartments or communal facility that they wish to visit. Floor coverings will normally be mats and hard wearing carpet suitable for use by wheelchairs and people with mobility issues.

3.3.5 **Internal Doors** in dwellings should provide a minimum clear opening width of 775mm/800mm. See Part M, 2015 Edition.

### 3.3.6 **Corridors and Internal Circulation Areas**

3.3.6a Corridors and internal circulation areas should be light and airy and designers must ensure that long corridors are broken up by points of interest or changes in direction. Natural light should be maximised. Lighting, decoration, ceilings, access ducts, handrails, etc. must be sensitively designed to ensure that there is not an institutional feel to the building. Floor coverings will normally be hard wearing carpet suitable for use by wheelchairs and people with mobility issues.

3.3.6b Main circulation corridors in sheltered schemes should be a minimum of 2.0m wide.

3.3.6c Blocks of apartments or sheltered schemes should have at least one cleaner's store that is secure and has a hot and cold water supply, sink, hose point, drain, storage space, etc.



### 3.3.7 Staircases

- 3.3.7a Staircases in individual dwellings should have a minimum clear width of 850mm with space at the top and bottom of the staircase to enable a stair-lift to be installed in the future. See Part M, 2015 Edition.
- 3.3.7b Communal staircases in blocks of apartments or sheltered schemes should have a minimum width between strings of 1050mm.

### 3.3.8 Lifts

- 3.3.8a Sheltered housing schemes should have two lifts installed close to the main entrance. Where the main entrance is not in a central position, consideration should be given to locating one lift in a suitable position at the other end of the building.
- 3.3.8b Lifts should be provided in public sector housing blocks of apartments over two storeys high, with at least one lift located in the main entrance area.
- 3.3.8c Lifts should meet the requirements of BS EN 81-70:2003 for a type 2 lift – see 4.13.
- 3.3.9 **Deck Access** is not normally acceptable but, where it can be demonstrated to be relevant for a specific building, the designer should apply similar criteria as required for corridor design, albeit taking into account the impact of external elements including the potential for cold bridging.

## 3.4 Internal Dwelling Design

- 3.4.1 Part M, 2015 Edition, should be referred to by designers with regard to designing internal living spaces and furniture layouts that comply with Category 1-Visitable Dwellings and for public sector housing Category 2 – Accessible and Adaptable Dwellings.
- 3.4.2 The designer should produce 1:50 furniture layouts that comply with Part M, 2015 Edition. See Part M Appendix D: Furnishing Schedule. Radiator positions should be shown on the floor layouts.
- 3.4.3 Section 7.0 of this Design Guide includes details of compliant scaled furniture, circulation space requirements and activity zone requirements which designers are required to integrate into dwelling layouts. Compliant floor plans, which show how these design standards can be applied, are also included.

## 3.5 Living Rooms

- 3.5.1 Living rooms should be of a suitable width to accommodate standard furniture requirements in a practical manner and should not be too narrow. See Part M, 2015 Edition and Section 7.0.
- 3.5.2 Television positions should be located so that the screen faces the main sitting area and is not over affected by daylight shining through windows. Electrical services should be sited behind the TV/Stand position. See 4.5.
- 3.5.3 There should be an interesting aspect from the main living room window with sills set at a level which allows for viewing outside whilst sitting in a chair. Alternatively, patio doors should be provided that open out onto private or communal areas at ground floor level or onto balconies on upper floors. There must be a clear opening width of 850mm.

- 3.5.4 The design and orientation of a dwelling or building should seek to enable all living areas to receive good levels of natural light and direct sunlight during some part of the day.
- 3.5.5 Where the location or shape of a site makes it impractical to achieve direct sunlight in some of the living areas, the designer should ensure that these dwellings have a good level of natural light (larger or bay windows), an interesting aspect from the main living room window and opportunities for the resident to benefit from sun light in gardens, communal lounges, etc.

### **3.6 Kitchens and Dining Areas**

- 3.6.1 Kitchens opening into living rooms are acceptable for apartments and bungalows with the dining area located in the living room.
- 3.6.2 Kitchens in houses should be a separate room and include a dining area. Alternatively a separate dining room could be provided in larger houses.
- 3.6.3 The supply of kitchen units, sinks and taps should normally be via the arrangements for the Kitchen Framework Agreement (KFA), current at the design stage.
- 3.6.3 Kitchens must be designed by an experienced designer who will normally be the architect. It is the responsibility of the designer to ensure all M&E designs are fully coordinated within the kitchen designs.
- 3.6.4 The designer should produce detailed plans and elevations to ensure that the kitchen designs comply with the following criteria.
  1. Layout to be ergonomic and preferably U or L shaped.
  2. In houses, ground floor apartments and bungalows there should be an external door from the kitchen or dining area into the garden and/or refuse area.
  3. A triangular working arrangement should provide sensible carry distances between the cooking, preparation and washing areas.
  4. There should be a 1.5m diameter turning circle to facilitate wheelchairs and people with mobility issues.
  5. Ideally more than one person should be able to work in the cooking, preparation and washing area without causing safety issues.
  6. The kitchen layout should minimise health and safety risks e.g. cookers should not be placed near doors, pedestrian through-traffic should be restricted, etc.
  7. The design should maximise (within reason) the number of floor and wall units and worktop surfaces.
  8. Sinks should generally be located in front of the kitchen window and with the sill higher than the sink.
  9. 600mm wide spaces between base units to be left for cookers and other floor standing appliances.
  10. Wall units and electrical sockets must be set back a safe distance from cooking rings.
  11. Suitable locations should be provided for a fridge/freezer, washing machine (including plumbing), tumble drier (including a sealed external vent, wherever possible) and a spare space for an additional appliance. In blocks of apartments with a communal internal drying room the tumble drier space is not required Discuss.
  12. In sheltered apartments the tumble drier space is not required.
  13. Doors and drawers should not clash when opened.
  14. There should be a 500mm wide drawer base set with a cutlery tray.

15. A tall cupboard unit should be incorporated if adequate cupboard space is not available elsewhere in the dwelling for the storage of brooms, ironing board, cleaner, etc.
16. Shaker doors rather than plain doors should be considered.
17. Base and wall units should have end panels fitted where part or all of the side of a unit is visible.
18. Wall units must be hung 450mm above the worktops and the doors should generally line vertically with the doors in the floor units below.
19. Worktops must be mitred or butt and scribed at corners and fixed with glue and toggle bolts to the underside. End covers should be provided at exposed ends of worktops.
20. Service and extract ducts must be designed into the kitchen layout and coordinated with the position of kitchen units, etc.
21. Isolation valves must be located in an obvious position and be easily accessible.
22. Wall tiles should be a standard size and neutral colour e.g. white and fixed above every work surface up to the underside of the wall units. Tiles should be taken across the back of the cooking space and down to the skirting or floor.
23. Walls and ceilings should be decorated with vinyl emulsion. Floors should be covered with slip resistant vinyl sheet flooring.
24. Electrical sockets must be placed adjacent to appliance positions and there must be adequate numbers of double sockets above all work surfaces to serve typical kitchen appliances. Sockets must be set at the same level and height above the worktops and tie in with tile joints. See 4.5.
25. There must be an electric cooker circuit and outlet in every property and cooker gas point in houses where there is a gas supply.
26. Boilers and radiators must be positioned to complement the kitchen layout and the designer and M&E engineer must coordinate services with the kitchen layout.
27. Kitchen lights and switches must be located to provide an effective spread of light and safe operation e.g. two-way switches. The designer should consider whether the installation of under wall unit lighting is required to give a satisfactory spread of light on worktops.
28. A heat detector must be located on the ceiling in a suitable position and wired to smoke alarms in the hall/stairs.
29. An extract fan should be located close to the sink and cooker and, ideally, be vented through an external wall. Cooker hoods with externally venting ducts will be acceptable where a suitable external wall is not available in the kitchen. See 4.8.

### 3.7 Bathrooms and W.Cs.

- 3.7.1 Bathrooms must be designed by an experienced designer who will normally be the architect. It is the responsibility of the designer to ensure all M&E designs are fully coordinated with the bathroom and WC designs.
- 3.7.2 The designer should produce detailed plans and elevations to ensure the bathroom designs comply with the following criteria.
  1. **Baths** (with overhead showers) should be provided in houses.
  2. **Showers** should be provided in all other dwelling types i.e. bungalows, apartments and sheltered housing.
  3. **A second WC** room with wash basin should be installed on the ground floor of all houses. Access must be from a hall or circulation space separated from the living/dining/kitchen areas.
  4. **Showers** should be formed within a **wet room** when on ground floor.
  5. **Shower trays** should be used on upper floors of apartments and sheltered apartments.

6. **Wet rooms** should only be installed elsewhere when specifically requested by the client and in general only installed on ground floors. See 3.7.14.
7. Bathroom and wet room layouts should be practical for use by residents and take due regard of the juxtaposition of the wash hand basin, WC, toilet roll holder, bath or shower, towel radiator, window, door, mirror, wall cabinet, etc. The finished bathroom should look coordinated, warm and inviting. It should not look uncoordinated or institutional.
8. Entrance (and shower doors) must fully open and not clash with bathroom fittings. Normally there should only be one entrance door to the bathroom i.e. from the hall. Doors should have a lock that can be opened from the outside in an emergency. Serious consideration should be given as to whether the door should open outwards into the hall or landing, particularly in bungalows and sheltered apartments.
9. Baths should abut walls on one long side and at both ends. There should be no narrow infills at the ends of baths.
10. Baths should have a thermostatic shower, sliding rail and shower head fitted to the wall at the tap end of the bath. A shower curtain or glass screen should be fitted that is robust and will prevent water splashing onto the floor.
11. Showers trays and screens should abut walls on the long side and ideally at both ends. The preference is for a rectangular shower tray with a size of 1800mm x 820mm x 40mm deep, with a 900mm x 1900mm glass side screen and no door. For alternative rectangular shower tray sizes. See 4.4
12. Where this rectangular shower tray arrangement is not possible, the shower tray should be a minimum size of 900mm x 900mm x 40mm deep. The shower enclosure should be in glass and be 1900mm high. The glass door(s) must provide clear opening width of at least 800mm. See 4.4.
13. The shower head and waste outlet should be at the screen end and the controls at the open/step in end. The shower should have a minimum flow rate of 30 litres per minute. The shower tray or waste should not be so shallow that there could be a potential flooding issue. See 4.4.
14. Wet rooms should be designed to minimise the spread of water from beyond the main shower area, ideally, by using a glass side screen. Care must be taken in the design to ensure water will not seep into the structure and that the waste and drain arrangement will prevent water build-up. Where wet rooms are to be provided above ground floor, the designer should include adequate tanking to prevent leaks or flooding. The following general requirements for bathrooms (with baths or showers) apply to wet rooms.
15. Internal stud walls around baths and showers should be finished with a waterproof boarding suitable for a wet environment and for receiving tiles. Studs should be filled with waterproof OSB/plywood to facilitate the fixing of hand rails and other mobility adaptations that might be required at some time in the future.
16. Internal stud walls between bathrooms and other rooms should be insulated to prevent sound transmission.
17. Internal stud walls formed at the end of baths should, wherever possible, be used to form a cupboard or vertical duct to accommodate pipes, valves, shower fittings, etc.
18. Careful consideration should be given to how vertical and horizontal service ducts should be formed. The designer is encouraged to design ducts so they are an attractive and coordinated feature e.g. with laminated finishes, shelves, removable tops, conceal WC cisterns, etc.

19. WC flushing controls must be easy to use for people with arthritis, etc.
20. Toilet roll holder should be installed in a position that is easy to use but not likely to be used as a handrail.
21. Mirrors and wall units are not required but the design must indicate a suitable position, next to the wash hand basin, for the resident to fix their own fittings.
22. Wall tiles should be a standard size and neutral colour e.g. white and fixed in positions where walls are likely to become wet. This will generally require walls to be tiled full height around baths and showers and above and behind wash hand basins. Tiling should be designed to look aesthetically pleasing and be coordinated within the bathroom design, taking into account, ducts, window sills, etc. Narrow or odd strips of painted walls should not be left when tiling would be more attractive.
23. Walls and ceilings should be decorated with vinyl silk emulsion or water based eggshell paint finishes. Floors should be covered with slip resistant vinyl sheeting.
24. Towel radiators should be white, of a sufficient size to provide adequate heat for the bathroom and be fed from the main heating system.
25. Light fittings and switches must comply with regulations for bathrooms. Fans should be quiet, operated by the light switch/humidistat and be installed on external walls or ducted to an external wall.
26. In view of the wide use of electric toothbrushes, a suitably located electrical outlet should be provided for charging a toothbrush or for use as a shaver point.
27. Where relevant, the above criteria should be applied to the second WC room.

### **3.8 Bedrooms.**

- 3.8.1 Bedrooms and bed positions should be located in a position that will minimise sound transfer from adjacent living rooms or neighbouring dwellings. Bedrooms should share a party wall with another bedroom rather than a living room or TV position.
- 3.8.2 Bedrooms should provide a minimum of 750mm clear space around the side and bottom end of beds whether the bedroom is designed for a double or single bed. The minimum width (bed length plus 750mm) for a bedroom is 2.75m.
- 3.8.3 Double bedrooms should accommodate an alternative layout for two single beds with 750mm between the two beds.
- 3.8.4 Single bedrooms must not be smaller than 7.5 sq. m. in floor area (excluding any built in storage space).
- 3.8.5 Single bedrooms should, ideally, allow a single bed to be located in more than one position.
- 3.8.6 Electrical sockets, light fittings, switches, etc. should be in sufficient numbers (mainly double sockets) and located to suit the furniture layout. See 4.5.
- 3.8.7 There should be a TV and telephone outlets in the main bedroom next to the desk location.

### **3.9 Storage**

- 3.9.1 Built-in storage space should be provided in accordance with Appendix A
- 3.9.2 A proportion of the storage should be in circulation areas such as the hall where it is more accessible for hanging coats, storing shoes, etc.
- 3.9.3 Long narrow stores are not generally acceptable, but, where unavoidable, should be provided with artificial light and an outward opening door.

3.9.4 Linen storage space should be positioned in circulation areas or bathrooms and ventilated (via door or wall mounted transfer grilles into a ventilated hallway or lobby) and fitted with a small radiator/coil if not containing a hot water cylinder.

### **3.10 Communal Facilities (Sheltered Schemes)**

3.10.1 Sheltered schemes provide relatively standard apartments for older people who live independently but require an environment where they feel secure and can receive support, if it is required. The provision of communal facilities can enhance the lives of residents and give them the opportunity to socialise with their friends and neighbours. The design and standards for sheltered accommodation are not the same as those for nursing/care homes.

3.10.2 The following communal facilities should be provided:-

1. Communal Lounge and furniture store, approximately 80sq. m. with a sliding acoustic screen to split the room into two parts. Each part of the room should have its own internal entrance door and, ideally, its own external door.
2. The communal lounge should normally be located on the ground floor, in a central part of the building, have a southerly aspect with the external doors opening onto a patio, communal garden, external seating area, etc.
3. Modern digital entertainment facilities must be provided. These should include a large screen HD television, DVD, computer, suitable speakers located to suit the shape and size of room and take into account the fact that older tenants might have hearing difficulties, etc.
4. Kitchen connected to the communal lounge suitable for catering for large parties of up to 80 places, including a commercial multi ring (6-8 gas rings) and multi-oven cooker.
5. Men's and women's toilets adjacent to the communal lounge including one toilet suitable for disabled access and nappy changing.
6. Laundry room to include two washing machines and two tumble driers both of a commercial specification.
7. Multi-purpose room fitted out as a hair dressing salon but also with the potential to be used for other personal and health purposes.
8. Office for the use of the landlord and warden which must be secure and in an accessible location.
9. Guest bedroom (similar to hotel room) suitable for a double or two single beds, built-in or separate wardrobe, bedside tables, two easy chairs, occasional table, desk, TV and hot drink point, a bathroom with shower. A kitchen is not required.
10. Mobility scooter storage room which is easily accessible, secure and close to charging points.
11. Storage facility in a communal room(s) within the building for shared use by tenants.
12. Furniture, curtains and fittings will be provided by the landlord.

3.10.3 The designer should ensure these facilities are well designed and will encourage residents and their friends and neighbours to make best use of the common rooms and services. The facilities should be welcoming and not look institutional.

3.10.4 The designer should locate communal facilities that are likely to generate noise in a position that will minimise disturbance for residents in adjacent apartments.

### **3.11 Energy Conservation and Environmental Impact**

- 3.11.1 The requirements of the IOM Building Regulations are perceived as minimum standards. Designers should therefore show in the check list at Section 6.0 where their designs exceed the current Building Regulations requirements with regard to energy conservation e.g. insulation, heating systems, etc. See Section 4.0.
- 3.11.2 Air infiltration losses have a significant influence on energy use in buildings. The building structure should therefore be as airtight as possible and if possible improve on the standard required by Building Control, currently 5m<sup>3</sup>(h.m<sup>2</sup>). See 3.12.1.
- 3.11.3 Paragraph 1.9 states “this Design Guide is not intended to be fully prescriptive but leaves the opportunity for clients and designers to use ingenuity and imagination to produce high quality housing that is value for money and where relevant, exceeds the requirements of this Design Guide – Housing Standards”.

This statement particularly applies to designs which might go the extra distance to limit environmental impact or minimise energy use, e.g. Passivhaus. This Design Guide is not intended to be a constraint but where designers wish to propose a design that includes elements that are significantly different to these housing standards, the proposals must be clearly set out in the Business Case.

### **3.12 Superstructure.**

- 3.12.1 Airtightness. Designers should ensure the design of the external structure and envelope minimises air infiltration. It is their responsibility to coordinate architectural, structural and M&E details to ensure the building is as airtight as possible. See 3.11.2.
- 3.12.2 Sound Insulation and Transmission. Designs should comply with Robust Details and designers should be registered with the company, register the site, notify Building Control as to details to be used and complete compliance certificate ready for submission to Building Control.
- 3.12.3 Where the designer proposes other compliant arrangements or tested details which are approved by IOM Building Control, these arrangements should be approved by the client and project manager.
- 3.12.4 Plant rooms. The plant room should be located on the ground floor and in a relatively unobtrusive position on the external elevation of a building. The designer, including structural and mechanical engineers, should ensure the mechanical installations will not transmit noise through the structure to adjacent apartments and communal facilities.
- 3.12.5 Insulation. The designer should endeavour to maximise insulation and better the minimum standards required to be comply with IOM Building Regulations. The designer should indicate where and how this has been achieved.
- 3.12.6 Superstructure. It will normally be a traditional masonry or timber frame structure with an external facing of brick, stone, timber, render, tile, proprietary cladding or a combination of facings. Open web floor joists should be considered where their use offers significant advantages e.g. for installation of services either during initial construction or during future refurbishment upgrades.

- 3.12.7 Non-Traditional Superstructures. If a non-traditional design is being considered the client, project manager and designer must provide sound reasoning for the proposal at the Business Case Stage.
- 3.12.8 The requirement for future maintenance must be minimised. Construction details must be carefully designed to ensure that the building will remain wind and water tight and be suitable for severe exposure in a marine environment.
- 3.12.9 Where cavity wall construction is proposed, fully filled cavities will in general not be acceptable as a clear cavity is preferred.
- 3.12.10 Expansion and movement joints must be designed to minimise the chance of cracks appearing in the superstructure.
- 3.12.11 External render should, preferably, have a rough cast finish rather than a smooth finish. For maintenance reasons a self-coloured render is preferred.
- Consideration should be given to the use of proprietary, quality controlled, self-coloured, render systems rather than traditional render, batched on site.
- If a paint finish is proposed, it should be a long lasting (15 year) system, applied in the correct thicknesses, strictly in accordance with the manufacturer's instructions e.g. Monolastic Smooth, etc.
- 3.12.12 NHBC Requirements. Designs for FTB dwellings must comply with NHBC requirements.

### **3.13 Windows, Secondary Entrance Doors.**

- 3.13.1 High performance uPVC windows and rear doors should normally be installed in affordable housing. The design and specification must be suitable for severe exposure in a marine environment. Installations should include secure multi-point locks, push button locking window handles, restrictors on upper floors, austenitic stainless steel fittings and screws.
- 3.13.2 Glazing systems should comprise double, triple solar control or Low E glazing as appropriate, to comply with IOM Building Regulations or as part of a low energy strategy. See 3.13.3.
- 3.13.3 The window system including glazing should, preferably, display a Window Energy Rating of A/A+. If this is not considered achievable, the rating should be no less than C.
- 3.13.4 Irrespective of the form of construction contract, the window manufacturer and installer should provide a 10 year guarantee to the client.
- 3.13.5 Internal doors, frames and ironmongery should be of a good quality. Internal door sets are preferred.

### **3.14 Roofs and Roof Voids.**

- 3.14.1 Roofs should be designed for severe exposure in a marine environment. Ideally the roof should not have a pitch of less than 30°. Lower roof pitches might be acceptable for larger blocks of buildings e.g. sheltered schemes, where the ridge height needs to be minimised.
- 3.14.2 Designers should consult with the roof covering manufacturer to ensure the fixings and roof details will be suitable for severe exposure in a marine environment including the requirement for fixing all slates and tiles.
- 3.14.3 Flat roofs should be avoided.



- 3.14.4 Rainwater goods will normally be uPVC but consideration should be given to aluminium, particularly on sheltered schemes.
- 3.14.5 Individual dwellings should have a proprietary insulated access door to the roof void, located in a safe access position.
- 3.14.6 Sheltered schemes should have a sealed and fireproofed roof void. There must not be any services running in the void or requirement for access into the void for maintenance. Robust details currently require block partitions in the apartments to be taken up to the underside of the roof covering. To facilitate the possibility of emergency access being required, the sealed roof void should still have a walkway and fireproof knockouts installed in the block walls.

### **3.15 External Building Appearance**

Affordable housing should be well designed and have external appearances that are of architectural merit. They should be designed to look desirable and provide homes where people will wish to live and belong. See 2.3.4 and 2.3.5



## **SECTION 4.0**

### **BUILDING SERVICES AND ENERGY**

#### **4.1 Design Temperatures**

Heating should be designed to the following parameters and in accordance with CIBSE Guide A:-

##### 4.1.1 Individual dwellings

- Living/Dining Rooms            22°C
- Bedrooms                        19°C
- Kitchens                         19°C
- Bathrooms and WC's         21°C
- Halls and Stairs                19°C
- Stores and Cupboards        16°C
- Flow and return                80°C - 60°C
- External Temperature        - 3.0°C

##### 4.1.2 Sheltered Schemes

- Living/Dining Rooms            23°C
- Bedrooms                        22°C
- Kitchens                         22°C
- Bathrooms                       22°C
- Halls                              19°C
- Stores and Cupboards        13°C
- Communal Lounge            22°C
- Laundry                         18°C
- Internal circulation areas    16°C
  
- Flow and return                60°C - 50°C
- External Temperature        - 3.0°C

#### **4.2 Heating and Domestic Hot Water Systems**

4.2.1 Heating in individual dwellings will normally be provided by low water content radiators served from a condensing combination boiler situated in the kitchen. Boilers should have a Sedbuk Rating of A for gas and A or B for oil. See 4.3.

4.2.2 Distribution pipes should be in copper with soldered joints. Radiators should be located in practical positions and shown on the furniture layout (see 3.5). Controls to be by TRV's, a room stat in the living room and a time clock located close to the boiler.

4.2.3 If the designer is of the opinion that a particular heating design or system warrants the use of plastic rather than copper pipe (or steel on communal heating systems), the reason for

deviation must be fully explained and approval of the project manager and DoI Building Services Engineer obtained, prior to progressing with detail design.

- 4.2.4 Radiators should be of a good quality to BS EN 442 and Kite marked e.g. Myson, Stelrad, or similar.

Towel radiators with a white finish and suitable heat output should be installed in bathrooms and fed from the main heating system.

- 4.2.5 Domestic hot water for the kitchen, bathroom and WC will normally be provided by the combination boiler at water mains pressure.

- 4.2.6 Boilers, controls and other equipment must be positioned for ease of use and maintenance.

- 4.2.7 Sheltered apartments should have heating systems installed to a similar standard to individual dwellings but served by a communal heating system with a central heat source located in a plant room.

All circulation areas and communal rooms will require radiators. Low surface temperature radiators are not required in sheltered schemes but the radiators will have to be sized to compensate for the 60°C - 50°C flow and return temperature.

Domestic hot water will be from a central storage vessel located in the plant room. TMV's are not required in the kitchen or bathroom.

- 4.2.8 Sheltered scheme plant rooms should be well designed, with safe access and adequate room for servicing, replacing equipment, etc.

Pipes and equipment, within the plant room and in circulation areas, must be insulated and, where necessary, labelled. All valves should be insulated, labelled and installed in accessible locations.

Pumps should be inverter controlled to minimise the use of electricity.

A Trend control and monitoring system (BMS) should be installed.

- 4.2.9 The design of heating and water services must provide for best practice with regard to minimising sound transmission, water hygiene, prevention of legionella, etc.

### **4.3 Fuel Policy and Solar Panels**

- 4.3.1 Gas, from underground mains, is the preferred fuel for heating for individual dwellings. Gas supply pipework (whether mains or distribution) should not be buried under dwellings.

Where gas cannot be provided, oil should be used with storage in a bunded tank located in a compliant location within the curtilage of each dwelling.

- 4.3.2 Biomass (wood chip) is the preferred fuel for communal heating systems e.g. in sheltered schemes. This policy was confirmed by Council of Ministers in January 2015.

- 4.3.3 Sheltered schemes should have sufficient heating back-up should a boiler need to be taken out of commission. This should be by 100% gas boiler back-up on biomass schemes and by multiple/modular boilers on gas or oil fired schemes

- 4.3.4 Solar panels for domestic hot water should be installed on public sector three and four bed houses where the dwellings are suitably orientated.

- 4.3.5 Solar panels should be considered for sheltered schemes if a small array can be suitably oriented and located close to the plant room. The solar installation in sheltered schemes must not require access to the sealed roof void for potential maintenance. See 3.14.
- 4.3.6 Alternative forms of heat sources or recovery e.g. heat pumps, will be considered subject to viability and provision of a sound Business Case at Stage D1.

#### **4.4 Sanitary Installations**

See Section 3.7 - Design of Bathrooms and WC's.

- 4.4.1 Appliances should be from the Lecico range (or equal quality), in white and with a modern appearance. WC's should have a duo flush cistern (max 6L capacity) and have a robust seat to match the pan. Flushing mechanisms should be easy to use by residents with arthritis or mobility issues. WHB must have a pedestal. Baths must be 1700mm long x minimum of 750mm wide.
- 4.4.2 Taps to WHB's and baths to be of good quality, chrome plated brass or polished stainless steel, with lever handles and a ceramic mechanism (subject to water pressure) e.g. Bristan or Peglar.
- 4.4.3 Showers to be of good quality, chrome plated brass or polished stainless steel with a thermostatic mixer, slide rail and shower head, minimum flow rate of 30 litres per minute e.g. Bristan or Peglar.
- 4.4.4 Rectangular shower trays should be of a good quality (GRP or Ceramic) and be 1800mm x 800mm x 40mm deep, with a 900mm x 1900mm glass side screen and no door e.g. AKW Braddan Tray/Larenco Screen would comply.

An alternative rectangular size is 1700mm x 800mm.

Square shower trays should be of a good quality (GRP or Ceramic) and a minimum size of 900mm x 900mm x 40mm deep. The shower enclosure should be in glass and be 1900mm high. The glass door(s) must provide a clear opening width of at least 800mm e.g. AKW Braddan/Larenco Duo would comply.

#### **4.5 Power and Lighting**

- 4.5.1 Sockets switches, pendants, etc. should be of a standard equivalent to MK, Crabtree, and Ashley.
- 4.5.2 Consumer units should be of the split load type, include circuit breakers and be installed at an accessible height (e.g. standard equivalent to Wylex).
- 4.5.3 As a guide, the number of electric sockets, fitted 450mm above floor level or 200mm above worktops, should be circa:-

- Kitchen 4-6 double/single plus fused spurs, cooker point.
- Dining area 2 double
- Living area 5 double (includes 2 doubles adjacent to TV point)
- Double Bedrooms 3 double
- Single Bedrooms 2 double
- Hall 1 double
- Landing 1 double

- 4.5.4 In sheltered schemes, communal rooms, kitchen and circulation areas should have ample sockets relevant for the purpose of the location e.g. in communal lounge by TV/Media point. Sockets should be also be provided to facilitate cleaning in circulation areas.
- 4.5.5 A separate landlord's supply and distribution board should be installed to serve communal areas in sheltered schemes and blocks of apartments.
- 4.5.6 Pendant light points should be in adequate numbers and located to provide a satisfactory spread of light relevant to the furniture layouts.
- 4.5.7 Kitchens, bathrooms and WC's should have enclosed and attractive light fittings suitable for damp areas.
- 4.5.8 All lighting should be low energy lighting with low energy bulbs provided at practical completion.
- 4.5.9 All dwellings should have an external light by the main and secondary door which is switched by a movement detector and built-in light sensor.

#### **4.6 Lighting Design**

- 4.6.1 The client representative, project manager and designer should ensure that the electrical engineer has provided internal and external lighting schemes that will complement the building design and provide a pleasing and safe environment for the residents. See 2.4.10.
- 4.6.2 In sheltered schemes and blocks of apartments the lighting for communal rooms and circulation areas must be sensitively designed. Lighting levels and the spread of light should be appropriate for their location and whilst providing a safe environment not overly lit.
- 4.6.3 Light fittings should be aesthetically pleasing, of a good quality and, where applicable, of a commercial quality. Switches and automatic controls should provide safe, practical and energy efficient lighting.

#### **4.7 Fire Alarms and Emergency Lighting**

- 4.7.1 All dwellings should be provided with mains wired smoke alarms and heat detectors whether or not a sprinkler system is installed.
- 4.7.2 In sheltered schemes and blocks of apartments, the design should include for communal fire alarm systems and emergency lighting designed to meet current regulations and to satisfy Building Control and the Fire and Rescue Service.

#### **4.8 Ventilation**

- 4.8.1 Extract fans in kitchens should be wall mounted on an external wall and provide an extraction rate of 60 litres of air per second. Cooker hoods with an extraction rate of 30 litres of air per second ducted to outside are acceptable where there is no suitable location for an extract fan.
- 4.8.2 Extract fans in bathrooms should be located on external walls.  
  
They should provide an extraction rate of 15 litres of air per second. "Silent" or low noise fans are preferred and they should be operated by the light switch, humidistat and have a timed overrun.

#### **4.9 TV, Satellite Systems and Telecom**

- 4.9.1 As a minimum, all dwellings should have a TV point in the lounge and main bedroom and be suitable for connection to a satellite aerial system.
- 4.9.2 Sheltered schemes and blocks of flats should be provided with a communal aerial system suitable for satellite and terrestrial television. The aerial systems should be suitable for receiving Freeview services and SKYPLUS, subject to the resident or landlord subscribing to the SKY service. See 3.10.2.
- 4.9.3 As a minimum, three telephone points should be provided in each dwelling, behind the TV, in the kitchen/dining area and in the main bedroom.

#### **4.10 Warden Call**

Warden call systems are required in sheltered schemes and the installation should comprise:

- Call/intercom unit in the hall
- Pull cords in bedrooms, bathroom, kitchen and living room.
- Call/intercom units in main communal rooms and warden's office
- Link to door access system
- Hand held units for use by the warden.

The call system should be provided by Chubb and installed by IOM approved agents e.g. G4S and Eye-Spy.

#### **4.11 Door Access Systems**

- 4.11.1 All dwellings should have a mains wired doorbell and chime.
- 4.11.2 Door access systems are required in sheltered schemes and in blocks of apartments with a communal entrance. The system should provide two-way speech between the apartment hallway and the main entrance door. Residents should each have a key fob or card to unlock the main entrance door and secondary entrance doors from outside the building.
- 4.11.3 In sheltered accommodation there should also be a flashing light in the living room, operated from the door bell and main entrance intercom.

#### **4.12 Sprinkler Installations**

- 4.12.1 Sprinkler systems must be installed on sheltered schemes. The installation must comply with BS9251 and cover all apartments, communal areas, corridors, stairs, etc. A system is not required in the fully sealed roof void.
- 4.12. Sprinkler systems may be required on blocks of apartments over two storeys high subject to consultation with Building Control.

#### **4.13 Lifts**

See 3.3.8 with regard to the requirement for lifts.

- 4.13.1 Lifts should comply with BS EN 81-70:2003 for a type 2 lift.
- 4.13.2 The lift car should be aesthetically pleasing and well lit but also practical to clean and maintain. The minimum size should be 1100mm wide x 1400mm deep with a clear door opening of 800mm, controls located 900-1200mm above floor level and have an emergency telephone.

4.13.3 The lift should include inverter controls to minimise the use of electricity.

#### **4.14 CCTV**

CCTV or intruder alarm systems are not required unless specifically requested by the client and agreed at the Business Case Stage.

#### **4.15 Maintenance M&E (Client Revenue Item)**

The designer should ensure that 12 month post practical completion maintenance agreements are included in sub-contract tenders for the installation of major mechanical and electrical installations, in blocks of apartments or sheltered housing. The maintenance cost should be included in the tender assessment even though the cost will not be included in the schemes capital cost

#### **4.16 Mains Services**

4.16.1 Gas mains services should be provided wherever Manx Gas can provide a supply.

4.16.2 The designer must liaise with the Manx Utilities Authority, Manx Telecom and the Department of Infrastructure, at the Business Case Stage, to ensure all mains services can be supplied or connected to the site and at a reasonable cost.

4.16.3 Isolation valves and switches should be readily locatable and easily operated.

4.16.4 Care should be taken in the detailing and location of standard Electricity and Gas meter cupboards on the exterior of the building. Location should preferably not be on the front elevation in order to minimise visual impact.





5

## **SECTION 5.0**

### **MANAGEMENT AND MAINTENANCE**

#### **5.1 Health and Safety and CDM**

All parties involved in providing affordable housing must accept the duties and obligations placed upon them by the Health and Safety at Work Act 1974.

The project should be carried out under the Construction (Design Management) Regulations with a member of the design team taking responsibility for the role of Planning Supervisor.

A risk workshop should be held early in the design stage in order to identify the main design and construction risks. This design process includes designing out potential and unnecessary risks that could occur in the management and maintenance of the dwellings and buildings.

#### **5.2 Completion of Works**

Adequate provision should be made for the prevention of frost damage prior to occupation.

The dwellings should be completely dry before handover and occupation.

Safe vehicular and pedestrian access should be provided to dwellings prior to occupation, irrespective of the state of completion elsewhere on an estate.

#### **5.3 User Manual**

A loose-leaf operation and maintenance manual should be provided by the contractor or developer, in a format agreed by the design team, to advise the client or resident how to manage the building, installations and appliances. It should set out in simple, non-technical language and include all relevant manufacturer's instructions and leaflets.

For public sector housing, the O&M file should include the Health and Safety File in a form to comply with the CDM Regulations.

A short, plain English, user friendly guide should be provided in each dwelling for use by the tenant that illustrates how mechanical and electrical equipment should be operated.

#### **5.4 Handover Procedure**

The Contractor or developer should allow safe viewing of dwellings by prospective tenants and purchasers close to practical completion.

For larger First Time Buyer developments, the contractor or developer will be required to provide an opportunity for purchasers to view a completed and typical show dwelling in advance of completion of the sale of a FTB property.

The date of practical completion must be notified by the contractor or developer to the client or design team, giving a minimum notice of four weeks.

Contractors and developer should ensure that properties are not released for occupation less than 7 working days before the start of a major national holiday (Easter and Christmas) as

this could potentially cause difficulties to Client Authorities and/or occupants in respect of moving in or securing the properties.

## **5.5 Defects**

Defects should be attended to as quickly as possible after practical completion by the contractor or developer.

Irrespective of standard contractual requirements for dealing with defects within a 12 months Defects Liability Period (or 2 year NHBC Warranty period), the design team should ensure that the contractor or developer will be contractually committed to responding quickly to genuine repair requests.

Repair requests should be reported directly to the contractor or developer by the FTB purchaser or landlord and attended to within the following response times:-

Emergency Repairs	within 24 hours
Urgent Repairs	within 7 days
Other Defects or Repairs	within 28 days

The names and telephone numbers of the contacts for repairs should be provided by the contractor or developer. Where appropriate, sub-contractor contacts should be provided for emergency repairs, e.g. plumbers and electricians.

## **5.6 Maintenance M&E**

The designer should ensure the client is furnished with 12 month operational and maintenance contracts as agreed with the installers of major mechanical and electrical installations in blocks of apartments or sheltered housing – see 4.15.



## SECTION 6

### DESIGN GUIDE – HOUSING STANDARDS

Section Ref	Design Guide – Housing Standards Section 6.0 - Check List (Full descriptions in Sections 2.0 to 5.0)	See 1.18 Insert √ or X NA or ?	Note or Stage Report Ref
<b>Section 1.0</b>	<b>Purpose, Definitions, Use of Design Guide</b> Confirm Section 1.0 has been understood?		1.18 refers to compliance with full descriptions in Sections 2.0 to 5.0
<b>Section 2.0</b>	<b>External Environment</b>	-	-
2.3.1	<b>Dwelling Type and Mix</b>	-	-
2.3.1a	Section 13 Agreement – dwelling types, mix, location and design agreed with developer and planning?		
2.3.1b	Types & mix will meet local need?		
2.3.1c	If √ state percentage in note column.		
2.3.1d	Does client require any dwellings specifically designed for wheelchair users, Part M Cat 3? If √ state number in note column.		
2.3.2	<b>Movement</b>	-	-
2.3.2a	Good access is provided to existing road & footpath networks, shops, facilities, etc.?		
2.3.2b	Safe access is provided to existing public transport services and where relevant consideration given to extending public transport services?		
2.3.2c	Design creates interest and local identity with no isolated areas. Easy to find way around the development, locate addresses, etc.?		
2.3.3	<b>Community</b>	-	-
2.3.3a	There are clear links to existing communities and community facilities?		
2.3.3b	Consideration has been given as to whether new communal or community facilities should be provided? State facilities to be provided in note column.		
2.3.3c	Agreement has been reached on how facilities are to be funded, managed and maintained?		
2.3.4	<b>Structure and Layout</b>	-	-
2.3.4a	Design is coherent and it will be difficult to		

Section Ref	<b>Design Guide – Housing Standards</b> <b>Section 6.0 - Check List</b> <b>(Full descriptions in Sections 2.0 to 5.0)</b>	<b>See 1.18</b> <b>Insert</b> <b>√ or X</b> <b>NA or ?</b>	<b>Note</b> <b>or</b> <b>Stage</b> <b>Report Ref</b>
	differentiate the areas of affordable housing?		
2.3.4b	Existing mature landscape and wildlife habitats incorporated into the development to satisfaction of Statutory Authorities/wildlife organisations?		
2.3.5	<b>Design Detail</b>	-	-
2.3.5a	Affordable housing designs pay attention to detail, create visual interest, etc.?		
2.3.6	<b>Adaptability</b>	-	-
2.3.6a	The external environment around the dwellings is designed to support the concept of lifetime homes?		
2.3.6b	Housing for older people is located on the flattest part of the development and close to public transport and facilities?		
2.3.7	<b>Parking</b>	-	-
2.3.7	Spaces for parking relate to the homes they serve and large/isolated parking areas have been avoided?		
2.3.8	<b>Safety and Security</b>	-	-
2.3.8a	The external environment has been designed to comply with good practice with regard safety and security for residents and their families?		
2.3.9	<b>Maintenance</b>	-	-
2.3.9a	Materials and designs used for roads, footpaths, landscaping, etc. produce a desirable appearance and take into account life time costs?		
2.3.9b	Consultation has taken place with relevant authorities with regard to maintenance and adoption of public areas and services?		
2.3.10	<b>Sense of Place</b> – see 2.4.1 to 2.4.14 below.	-	-
2.4.1	<b>External Space</b>	-	-
2.4.1a	Affordable housing layout is not cramped, sits comfortably with neighbours, etc.?		
2.4.1b	Narrow fronted, deep plan dwellings avoided?		
2.4.1c	Terraces contain no more than four dwellings?		
2.4.1d	Spaces will be suitable for people with mobility issues?		
2.4.1e	Open space agreed with the Planning Division?		
2.4.1f	Gardens are appropriate for the type of dwelling?		

<b>Section Ref</b>	<b>Design Guide – Housing Standards</b> <b>Section 6.0 - Check List</b> <b>(Full descriptions in Sections 2.0 to 5.0)</b>	<b>See 1.18</b> <b>Insert</b> <b>√ or X</b> <b>NA or ?</b>	<b>Note</b> <b>or</b> <b>Stage</b> <b>Report Ref</b>
2.4.2	<b>Privacy</b>	-	-
2.4.2a	Distances between dwellings have been carefully considered to minimise overlooking & loss of privacy?		
2.4.2b	Private areas next to public areas are protected?		
2.4.2c	Public spaces are adequately and sensitively lit without undue impact on adjacent private space?		
2.4.2d	Street lights minimise atmospheric light pollution?		
2.4.2e	Trees and bushes are not planted close to footpaths where they could hinder visual security?		
2.4.2f	Communal entrances to apartments are easily seen, well lit and secure?		
2.4.3	<b>Security</b>	-	-
2.4.3a	The Police Architectural Liaison Officer has been consulted and Secured by Design principles applied?		
2.4.3b	CCTV required? If √ state why in note column.		
2.4.4	<b>Car Parking and Vehicular Access</b>	-	-
2.4.4a	Part M, 2015 Edition, Categories 1 & 2 referred to for the design of compliant car parks, drop-offs, etc.?		
2.4.4b	Spaces 5.50mx2.50m, disabled 5.50mx3.30m? If less than 5.50m, state length in note column.		
2.4.4c	Spaces relate to homes they serve and are designed in an attractive manner, in small groups or on drives?		
2.4.4d	Large and/or isolated parking areas avoided?		
2.4.4e	Access to vehicles boot spaces is unobstructed?		
2.4.4f	Parking space provision is in accordance with IOM Strategic or Area Plans?		
2.4.4g	Sheltered schemes have 1:1 parking space provision? If less than 1:1, state ratio in note column.		
2.4.4h	Sheltered schemes have a layby near main entrance?		
2.4.4i	Sheltered schemes have suitable access around the site for mobility scooters?		
2.4.4j	Sheltered schemes have access to and parking by the plant room for maintenance & delivery vehicles?		
2.4.5	<b>Gardens</b>	-	-
2.4.5a	Gardens to houses have a minimum length of 7.0m? If less, state shortest length in note column.		
2.4.5b	Two storey apartments have private gardens?		
2.4.5c	Gardens are reasonably private and enclosed?		
2.4.5d	Gardens have an external access?		
2.4.5e	Gardens to houses have a base for a shed?		
2.4.5f	Paved or concrete paths provided under windows?		

Section Ref	<b>Design Guide – Housing Standards</b> <b>Section 6.0 - Check List</b> <b>(Full descriptions in Sections 2.0 to 5.0)</b>	<b>See 1.18</b> <b>Insert</b> <b>√ or X</b> <b>NA or ?</b>	<b>Note</b> <b>or</b> <b>Stage</b> <b>Report Ref</b>
2.4.5g	Paved or concrete paths provided under clothes lines?		
2.4.5h	Blocks of apartments have communal gardens?		
2.4.5i	Blocks of apartments and sheltered schemes provide residents with the opportunity for planting pots, etc.?		
2.4.6	<b>Footpaths</b>	-	-
2.4.6a	Part M, 2015 Edition, Categories 1 & 2 referred to for the design of compliant approach routes to dwellings?		
2.4.6b	Footpaths and gateway widths are at least as wide as the minimum widths stated in 2.4.6b?		
2.4.6c	Footpaths provide easy access to homes, gardens, etc. with steps & steep ramps designed out wherever possible?		
2.4.6d	Footpaths provided where desire lines are possible but undesirable through routes designed out?		
2.4.6e	Roads and footpaths promote safe movement for pedestrians, including the elderly, children, etc.?		
2.4.7	<b>Fences and Railings, Hedges, Walls, Long Boundaries</b>	-	-
2.4.7a	Fences and railings comply with design guidance 1-5?		
2.4.7b	Hedges will be easy to maintain?		
2.4.7c	Walls designed to discourage sitting/walking on top?		
2.4.7d	Walls designed with robust details and materials?		
2.4.7e	Long boundaries are interesting, practical, etc.?		
2.4.8	<b>Children’s Play and Recreational Spaces</b>	-	-
2.4.8a	Play provision is in accordance with planning guidelines and Planners have been consulted?		
2.4.8b	Open space provision is in accordance with planning guidelines and Planners have been consulted?		
2.4.8c	Play areas located where they will not encourage anti-social behaviour?		
2.4.9	<b>Landscaping</b>	-	-
2.4.9a	There is an interesting and attractive juxtaposition of hard and soft landscape areas?		
2.4.9b	Hard and soft landscaping has been designed to reinforce security and privacy?		
2.4.9c	Soft landscaping has been designed to be attractive but with acceptable maintenance cost?		
2.4.9d	Planting design takes into account IOM environment?		
2.4.9e	Soft landscaping e.g. shrubs, is not in close proximity to communal footpaths or behind parking spaces?		



<b>Section Ref</b>	<b>Design Guide – Housing Standards</b> <b>Section 6.0 - Check List</b> <b>(Full descriptions in Sections 2.0 to 5.0)</b>	<b>See 1.18</b> <b>Insert</b> <b>√ or X</b> <b>NA or ?</b>	<b>Note</b> <b>or</b> <b>Stage</b> <b>Report Ref</b>
2.4.9f	Trees are not proposed in adopted footpaths, etc.?		
2.4.9g	Appointment of landscape architect has been considered?		
2.4.10	<b>Street and Estate Lighting</b>	-	-
2.4.10a	Public lighting is adequate for the safety of pedestrians and for areas requiring supervision?		
2.4.10b	The level and spread of light is aesthetically pleasing and will not be over bright for neighbours, etc.?		
2.4.10c	Street lights are not obstructed by trees?		
2.4.10d	Street lights to be adopted comply with the lighting authority standards and are subject to agreements?		
2.4.11	<b>Clothes Drying</b>	-	-
2.4.11a	External, screened drying areas are provided for apartments where practical?		
2.4.11b	Condensing tumble dryers will be provided where external drying areas not practical?		
2.4.11c	Environmental Health Officer consulted?		
2.4.11d	Private gardens have clothes lines/rotary dryers?		
2.4.12	<b>Refuse Disposal</b>	-	-
2.4.12a	Wheelie bins are accessible but screened?		
2.4.12b	Communal bin areas comply with design guidance in 2.4.12b?		
2.4.12c	Communal bin areas are well screened and have cleaning facilities?		
2.4.12d	Kitchens have 3 compartment waste bins fitted?		
2.4.13	<b>Adopted Areas and Wayleaves</b>	-	-
2.4.13a	Site plans show areas proposed for adoption following consultation with Statutory Authorities, etc.?		
2.4.13b	Site plans show where wayleaves are required?		
2.4.14	<b>Housing Development Layout Plans</b>	-	-
2.4.14	Layout plans have been produced, to enable the client and project manager to confirm if the design proposals comply with the requirements in Section 2.0, External Environment?		
<b>Section 3.0</b>	<b>Dwelling Design and Space Standards</b>	-	-
3.1	Part M, 2015 Edition, has been referred to with regard to designing private entrances and spaces		

Section Ref	<b>Design Guide – Housing Standards</b> <b>Section 6.0 - Check List</b> <b>(Full descriptions in Sections 2.0 to 5.0)</b>	<b>See 1.18</b> <b>Insert</b> <b>√ or X</b> <b>NA or ?</b>	<b>Note</b> <b>or</b> <b>Stage</b> <b>Report Ref</b>
	within dwellings to comply with Categories 1 & 2		
3.1	Minimum internal floor areas and built-in storage comply with Appendix A, except where different to IOM floor areas as shown in 3.2?		
3.2	Floor areas for main IOM dwelling types comply with minimum areas as shown in 3.2?		
3.3.1	<b>Main Entrances to Individual Dwellings</b>	-	-
3.3.1a	Entrances are visually attractive and secure with door opening into hallway or enclosed lobby?		
3.3.1b	Entrance doors protected by recesses, canopies, etc.?		
3.3.1c	Entrance doors have 850mm clear opening?		
3.3.1d	Entrance doors specification complies with 3.3.1e?		
3.3.1e	Entrances served from internal corridors or balconies are designed to be visually interesting and inviting?		
3.3.2	<b>Main Communal Entrances</b>	-	-
3.3.2a	Communal entrance is of architectural merit and a focal point?		
3.3.2b	Communal entrance is located in a central, accessible and sheltered position?		
3.3.2c	Communal entrance door is automated with an intercom and door-release system in each apartment?		
3.3.2d	Communal entrance door has a minimum clear opening of 850mm with door fully swung open, excluding a second leaf?		
3.3.3	<b>Entrance Halls</b>	-	-
3.3.3	Halls in individual dwellings have a minimum width of 1050mm and comply with Part M, 2015 Edition?		
3.3.4	<b>Communal Entrances and Staircases</b>	-	-
3.3.4	Entrances and staircases in blocks of apartments and sheltered schemes look welcoming, have coordinated signs, carpets, are suitable for wheelchairs, etc.?		
3.3.5	<b>Internal Doors</b>	-	-
3.3.5	Doors have a minimum clear opening of 775mm/800mm and comply with Part M, 2015 Edition?		
3.3.6	<b>Corridors and Internal Circulation Areas</b>	-	-
3.3.6a	Corridors are light and airy, long corridors have been broken up by points of interest. Lighting, handrails, decoration, etc. have been sensitively designed?		

<b>Section Ref</b>	<b>Design Guide – Housing Standards</b> <b>Section 6.0 - Check List</b> <b>(Full descriptions in Sections 2.0 to 5.0)</b>	<b>See 1.18 Insert √ or X NA or ?</b>	<b>Note or Stage Report Ref</b>
3.3.6b	Main circulation corridors are a minimum of 2.0m wide?		
3.3.6c	Blocks of apartments and sheltered schemes have cleaner's store(s), with water supply, sink, etc.?		
3.3.7	<b>Staircases</b>	-	-
3.3.7a	Stairs in individual dwellings have a minimum width of 850mm, are able to accommodate a stair-lift and comply with Part M, 2015 Edition?		
3.3.7b	Staircases in blocks of apartments and sheltered schemes have a minimum width of 1050mm?		
3.3.8	<b>Lifts</b>	-	-
3.3.8a	Sheltered schemes have two lifts?		
3.3.8b	Public sector apartment blocks over two storeys high have at least one lift?		
3.3.8c	Lifts are to BS EN 81-70:2003, Type 2 Lift?		
3.3.9	<b>Deck Access</b>	-	-
3.3.9	Is deck access proposed and relevant? If √ state BC/Stage D reference in note column.		
3.4	<b>Internal Dwelling Design</b>	-	-
3.4.1	Part M, 2015 Edition, Categories 1 & 2 have been referred to for the design of compliant internal living space and furniture layouts?		
3.4.2	1:50 compliant furniture layouts have been produced?		
3.4.3	Section 7.0, compliant floor plans have been considered?		
3.5	<b>Living Rooms</b>	-	-
3.5.1	Rooms are of a suitable width and not too narrow?		
3.5.2	TV and services located in a suitable position?		
3.5.3	Window and sill height provide an interesting aspect from an arm chair or patio doors have been provided?		
3.5.4	All living areas will receive good levels of natural light and some direct sunlight? See 3.5.5.		
3.5.5	Where some direct sunlight is not possible, have measures been taken to compensate? State measures in note column.		
	<b>Kitchens and Dining Areas</b>	-	-
3.6.1	Kitchens in apartments and bungalows open into the living room, which has the dining area?		
3.6.2	Kitchens in houses are in a separate room which		

Section Ref	<b>Design Guide – Housing Standards</b> <b>Section 6.0 - Check List</b> <b>(Full descriptions in Sections 2.0 to 5.0)</b>	<b>See 1.18</b> <b>Insert</b> <b>√ or X</b> <b>NA or ?</b>	<b>Note</b> <b>or</b> <b>Stage</b> <b>Report Ref</b>
	includes the dining area or there is a separate dining room?		
3.6.3	Kitchens have been designed by an experienced designer and M&E is fully coordinated?		
3.6.4	Detailed plans and elevations have been produced which show compliance with design guidance 1-29?		
3.7	<b>Bathrooms and WCs.</b>	-	-
3.7.1	Bathrooms & WC's have been designed by an experienced designer and M&E is fully coordinated?		
3.7.2	Detailed plans and elevations have been produced to show compliance with design guidance 1-26?		
3.8	<b>Bedrooms</b>	-	-
3.8.1	Bedrooms located to minimise sound transmission?		
3.8.2	Minimum of 750mm clear space around bed(s)?		
3.8.3	Double bedrooms will accommodate two single beds with 750mm between beds?		
3.8.4	Single bedrooms not smaller than 7.5 sq. m.?		
3.8.5	Single bedrooms can accommodate a single bed in more than one position?		
3.8.6	Electrical sockets and lighting are sufficient (see 4.5) and positioned to suit furniture layouts?		
3.8.7	TV and telephone point located in main bedroom?		
3.9	<b>Storage</b>	-	-
3.9.1	Built-in storage complies with Appendix A		
3.9.2	Built in storage provided in hall for coats, shoes, etc.?		
3.9.3	Long narrow stores have an electric light?		
3.9.4	Linen store provided with background heat source?		
3.10	<b>Communal Facilities (Sheltered Schemes)</b>	-	-
3.10.1	Concept of sheltered housing noted?		
3.10.2	Communal facilities have been provided in accordance with design guidance 1-12?		
3.10.3	Facilities are well designed, welcoming and do not look institutional?		
3.10.4	Facilities have been located in positions that will minimise disturbance to adjacent apartments?		
3.11	<b>Energy Conservation &amp; Environmental Impact</b>	-	-
3.11.1	Do designs exceed the minimum Building Regulation requirements with regard to energy conservation? If √ state how in the note column.		
3.11.2	Will air infiltration losses be less than the minimum		

Section Ref	<b>Design Guide – Housing Standards</b> <b>Section 6.0 - Check List</b> <b>(Full descriptions in Sections 2.0 to 5.0)</b>	<b>See 1.18</b> <b>Insert</b> <b>√ or X</b> <b>NA or ?</b>	<b>Note</b> <b>or</b> <b>Stage</b> <b>Report Ref</b>
	required by Building Control? If √ state the target in the note column		
3.11.3	Do the designs propose construction, energy conservation methods that are significantly different to those covered by this Design Guide? If √ provide BC/Stage D1 reference in note column.		
3.12	<b>Superstructure</b>	-	-
3.12.1	Detailed to minimise air filtration?		
3.12.2	Robust Details used to minimise sound transmission?		
3.12.3	Other compliant arrangements approved?		
3.12.4	Plant room located for good access & minimise noise?		
3.12.5	Insulation better than Building Regulation standard?		
3.12.6	Traditional or timber frame construction proposed?		
3.12.7	If non-traditional proposed provide BC/Stage D1 reference in note column		
3.12.8	Construction details suitable for IOM environment?		
3.12.9	Cavity walls have a clear cavity?		
3.12.10	Expansion and movement joints carefully considered?		
3.12.11	External render is rough cast and self-coloured? If proprietary render system or paint finish are to be used state details in note column		
3.12.12	FTB dwellings will comply with NHBC Standards.		
3.13	<b>Windows, Secondary Entrance Doors</b>	-	-
3.13.1	uPVC windows, doors to standards set out in 3.13.1?		
3.13.2	Glazing systems have been specified as part of a low energy strategy? See 3.13.3 State glazing specification in note column.		
3.13.3	Window systems, including glazing, achieve a Window Energy rating of A/A+? If x state rating in note column (not less than C)		
3.13.4	Window system has 10 year client guarantee?		
3.13.5	Internal doors, frames and ironmongery are of good quality, using prefabricated door sets?		
3.14	<b>Roofs and Roof Voids</b>	-	-
3.14.1	Roof pitch not less than 30°? If x state pitch and reason in notes column.		
3.14.2	Roofing manufacturer consulted with regard to using coverings in a severe exposure, marine environment?		
3.14.3	Flat roofs avoided? If x state reason in notes column.		
3.14.4	Aluminium rainwater goods on sheltered schemes?		

Section Ref	<b>Design Guide – Housing Standards</b> <b>Section 6.0 - Check List</b> <b>(Full descriptions in Sections 2.0 to 5.0)</b>	<b>See 1.18</b> <b>Insert</b> <b>√ or X</b> <b>NA or ?</b>	<b>Note</b> <b>or</b> <b>Stage</b> <b>Report Ref</b>
3.14.5	Access door provided to roof in individual dwellings?		
3.14.6	Sheltered schemes have a sealed roof void and comply with standards in 3.14.6?		
3.15	<b>External Building Appearance</b>	-	-
3.15	Housing is well designed, external appearance has architectural merit, looks desirable and provides a home where people will wish to live and belong?		
<b>Section 4.0</b>	<b>Building Services and Energy</b>	-	-
4.1	<b>Design Temperatures</b>	-	-
4.1.1	Heating designs for individual dwellings have been based on parameters set out in 4.1.1?		
4.1.2	Heating designs for sheltered schemes have been based on parameters set out in 4.1.2?		
4.2	<b>Heating and Domestic Hot Water Systems</b>	-	-
4.2.1	Heating in individual dwellings is provided by a low water content radiator system and a condensing gas boiler with a Sedbuk rating of A?		
4.2.2	Distribution pipes are copper, radiators are in practical positions (as shown on furniture layouts), controls include TRVs, stat and time clock?		
4.2.3	If plastic pipes proposed has the deviation from copper received approvals as set out in 4.2.3?		
4.2.4	Radiators and heated towel radiator to BS EN 442 & kite marked e.g. Myson, Stelrad? State proposed manufacturer in note column		
4.2.5	DHW in individual dwellings is provided by a combination boiler (except where solar see 3.4.4)?		
4.2.6	Controls positioned for ease of use and maintenance?		
4.2.7	Heating and DHW systems in sheltered schemes comply with the standards in 4.2.7?		
4.2.8	Installations within plant rooms in sheltered schemes comply with the standards in 4.2.8?		
4.2.9	Designs include best practice with regard to minimising sound transmission, water hygiene, etc.?		
4.3	<b>Fuel Policy and Solar Panels</b>	-	-
4.3.1	Heating installations are fuelled by mains gas?		
4.3.2	Heating installations in sheltered schemes are fuelled by biomass with mains gas back?		

Section Ref	<b>Design Guide – Housing Standards</b> <b>Section 6.0 - Check List</b> <b>(Full descriptions in Sections 2.0 to 5.0)</b>	<b>See 1.18</b> <b>Insert</b> <b>✓ or X</b> <b>NA or ?</b>	<b>Note</b> <b>or</b> <b>Stage</b> <b>Report Ref</b>
4.3.3	Sheltered schemes have sufficient back up to provide full heating if a boiler is taken out of commission?		
4.3.4	Solar panels have been included on three and four bed public sector houses where suitably oriented?		
4.3.5	Solar panels included on sheltered schemes?		
4.3.6	Alternative forms of heat sources and recovery are being proposed? If ✓ provide BC/Stage D1 reference in note column.		
4.4	<b>Sanitary Installations</b>	-	-
4.4.1	Appliances meet the quality and standard in 4.4.1? State proposed manufacturer in the note column.		
4.4.2	Appliances meet the quality and standard in 4.4.2? State proposed manufacturer in the note column.		
4.4.3	Showers meet the quality and standard in 4.4.3? State proposed manufacturer in the note column.		
4.4.4	Shower trays and screens meet the quality and standard in 4.4.4? State proposed manufacturer and size of tray in the note column.		
4.5	<b>Power and Lighting</b>	-	-
4.5.1	Sockets, switches, pendants, etc. meet the quality and standard in 4.5.1? State proposed manufacturers in note column.		
4.5.2	Consumer units meet the quality and standard in 4.5.2? State proposed manufacturers in note column.		
4.5.3	The provision of sockets is broadly in line with the standards in 4.5.3?		
4.5.4	Sheltered schemes have sockets in line with standards in 4.5.4?		
4.5.5	Landlord's supply installed where there are communal areas in blocks of apartments or sheltered schemes?		
4.5.6	Lights are in adequate numbers and located in positions relevant to furniture layouts?		
4.5.7	Kitchens, bathrooms, etc. have attractive, enclosed, moisture resistant light fittings?		
4.5.8	All lighting and bulbs are low energy?		
4.5.9	All dwellings have an external light by the main and secondary door with movement/light sensors?		
4.6	<b>Lighting Design</b>	-	-
4.6.1	Internal and external lighting schemes complement the buildings and provide pleasing and safe environments for residents?		

Section Ref	<b>Design Guide – Housing Standards</b> <b>Section 6.0 - Check List</b> <b>(Full descriptions in Sections 2.0 to 5.0)</b>	<b>See 1.18</b> <b>Insert</b> <b>√ or X</b> <b>NA or ?</b>	<b>Note</b> <b>or</b> <b>Stage</b> <b>Report Ref</b>
4.6.2	Internal and external lighting schemes for communal areas in sheltered schemes and blocks of apartments are sensitively designed?		
4.6.3	Light fittings are aesthetically pleasing and controls provide safe, practical and energy efficient lighting?		
4.7	<b>Fire Alarms and Emergency Lighting</b>	-	-
4.7.1	Mains wired smoke alarms and heat detectors are provided in every dwelling?		
4.7.2	Communal fire alarm systems and emergency lighting are included in sheltered schemes and blocks of apartments?		
4.8	<b>Ventilation</b>	-	-
4.8.1	Kitchen extract fans or hoods comply with standards in 4.8.1		
4.8.2	Bathroom extract fans comply with standards in 4.8.2		
4.9	<b>TV, Satellite Systems, Telecom</b>	-	-
4.9.1	TV points in living rooms and main bedrooms are suitably wired for connection to satellite aerial dishes?		
4.9.2	Sheltered schemes and blocks of apartments have communal TV systems designed to the standard in 4.9.2?		
4.9.3	Telecom points have been provided behind the TV, in kitchen/dining area and in the main bedroom?		
4.10	<b>Warden Call</b>	-	-
4.10	Sheltered schemes have warden call systems designed to the standard in 4.10?		
4.11	<b>Door Access Systems</b>	-	-
4.11.1	All dwellings have a mains wired door bell and chime?		
4.11.2	Sheltered schemes and blocks of apartments have a door access system that complies with the standards in 4.11.2?		
4.11.3	Sheltered schemes have a flashing light in the living rooms?		
4.12	<b>Sprinkler Installations</b>	-	-
4.12.1	Sheltered schemes have a sprinkler system to cover all areas except the sealed roof void?		
4.12.2	Blocks of apartments over two storeys high have a sprinkler system subject consultation with Building Control?		



<b>Section Ref</b>	<b>Design Guide – Housing Standards</b> <b>Section 6.0 - Check List</b> <b>(Full descriptions in Sections 2.0 to 5.0)</b>	<b>See 1.18</b> <b>Insert</b> <b>√ or X</b> <b>NA or ?</b>	<b>Note</b> <b>or</b> <b>Stage</b> <b>Report Ref</b>
4.13	<b>Lifts</b>	-	-
4.13.1	Lifts comply with BS EN 81-70 type 2?		
4.13.2	Lift cars comply with the standards in 4.13.2?		
4.13.3	Lifts have inverter controls to minimise use of electricity?		
4.14	<b>CCTV</b>	-	-
4.14	CCTV or intruder alarm are not specified? If <b>x</b> state BC/Stage D1 reference in note column.		
4.15	<b>Maintenance M&amp;E (Client Revenue Item)</b>	-	-
4.15	M&E tender documents, for major mechanical and electrical installations, include provision for a 12 months servicing agreement after practical completion?		
4.16	<b>Mains Services</b>	-	-
4.16.1	Gas mains have been provided?		
4.16.2	Liaison with all utilities has taken place?		
4.16.3	Isolation valves and switches are easy to locate and operate?		
4.16.4	Meter boxes located to minimise visual impact?		
<b>Section 5.0</b>	<b>Management and Maintenance</b>	-	-
5.1	CDM regulations applied and designs take into account risks identified at a design risk workshop?		
5.2 To 5.6	Preliminaries and contract documents cover the post-contract requirements set out in 5.2 to 5.6?		



# Appendices

## APPENDIX A – Minimum Gross Internal Floor Areas.

No of Bedrooms	Number of Person (p) Bed Spaces	1 Storey Dwellings	2 Storey Dwellings	Built in Storage
1b	2p	55m <sup>2</sup>		2.5m <sup>3</sup>
2b	3p	63m <sup>2</sup>		3.0m <sup>3</sup>
	4p		79m <sup>2</sup>	3.5m <sup>3</sup>
3b	4p		84m <sup>2</sup>	4.0m <sup>3</sup>
	5p		93m <sup>2</sup>	4.0m <sup>3</sup>
4b	6p		115m <sup>2</sup>	4.5m <sup>3</sup>
	7p		120m <sup>2</sup>	4.5m <sup>3</sup>
	8p		124m <sup>2</sup>	4.5m <sup>3</sup>

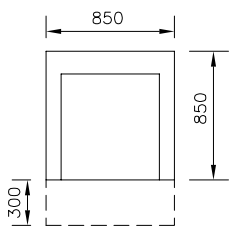
### Notes:

1. Minimum dwelling size will normally be 2 bed unit unless agreed by Department specifically for individual projects.
2. Storage areas are included in overall GIA's noted.
3. Areas listed are gross internal areas (GIA's) in m<sup>2</sup>.
4. 'p' refers to the number of 'persons' per dwelling.
5. 'b' refers to the number of 'bedrooms' per dwelling.
6. The above GIAs will not be adequate for wheelchair housing (Category 3) where additional internal area is required to accommodate increased circulation and functionality required within wheelchair households.

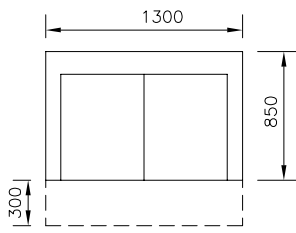
## APPENDIX B – Furniture Schedule Page 1 of 3.

Type of Space	Furniture Schedule	Furniture size mm	DWELLING SIZE							
			1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	+
Living Space	Arm chair combination to equal one seat/person	850x850	2	2	3	1	2	3	4	+1
	Settee – 2 seat (optional as above)	850x1300								
	Settee – 3 seat (optional as above)	850x1850				1	1	1	1	
	TV-(dim approx. 26" Flat Screen)	220x650	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	500x Length shown	1000	1000	1000	1500	2000	2000	2000	+
Space for Visitor's chair	450x450	2	2	2	2	2	2	2	2	
Dining Space	Dining Chair	450x450	2	2	3	4	5	6	7	+
	Dining Table	800x Length shown	800	800	1000	1200	1350	1500	1650	+
Double Bedroom	Double Bed	2000x1500	n/a	1	1	1	1	1	1	1
	2xSingle Bed (optional to above)	2000x900								
	Bedside Table	400x400		2	2	2	2	2	2	2
	Desk and Chair	500x1050		1	1	1	1	1	1	1
	Chest of Drawers	450x750		1	1	1	1	1	1	1
Double Wardrobe	600x1200		1	1	1	1	1	1	1	
Twin Bedroom	2xSingle beds	2000x900	n/a			2	2	2	2	2
	Bedside Table	400x400				2	2	2	2	2
	Chest of Drawers	400x750				1	1	1	1	1
	Double wardrobe	600x1200				1	1	1	1	1
	Table and chair/stool	500x1050				1	1	1	1	1
Single Bedroom	Single Bed	2000x900	1		1	1	1	1	1	1
	Bedside Table	400x400	1		1	1	1	1	1	1
	Chest of Drawers	450x750	1		1	1	1	1	1	1
	Table with chair/stool	500x1050	1		1	1	1	1	1	1
	Single Wardrobe	600x600	1		1	1	1	1	1	1
Total Bed Spaces		1	2	3	4	5	6	7	+	
<b>Length in mm</b>										
Kitchen	1) Sink Top Drainer	600x1000	1000	1000	1000	1000	1000	1000	1000	1000
	2) Cooker Space	600x600	600	600	600	600	600	600	600	600
	3) Washing Machine Position/worktop	600x630	630	630	630	630	630	630	630	630
	4) Other base/wall units	600xlength	600	1200	1600	1600	1600	2700	2700	+
	4a) Dishwasher/worktop (Optional worktop included in 4)	600xlength								
	5) Ancillary Equipment Space	600xlength					600	600	1200	1200
	6) Fridge/freezer space	600xlength	600	600	600	600	600	600	600	600
	7) Recycling Bins Space	600xlength	300	300	300	300	600	600	600	600
8) Length of Fitments (items 1-7) Note: items 3,5,6,7 may be in adjacent rooms to the kitchen		3730	4330	4730	4730	5630	6730	7330	+	
Bathroom	WC and Cistern	500x700	1	1	1	1	1	1	1	1
	Bath	700x1700	1	1	1	1	1	1	1	1
	Wash Hand Basin	600x400	1	1	1	1	1	1	1	1
	Shower Tray (Optional)	750x750								
Separate Toilet	WC and Cistern				1	1	1	1	1	1
	Cloakroom Basin				1	1	1	1	1	1
<b>Area in m2</b>										
Storage	Cumulative Total of Built in Storage		1	2.5	3.0	4.0	4.0	4.5	4.5	+0.5

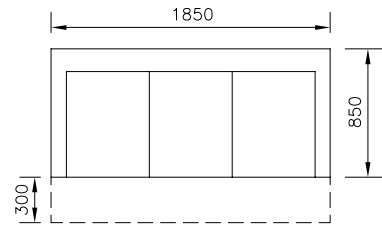
**Living Space Furniture Schedule**



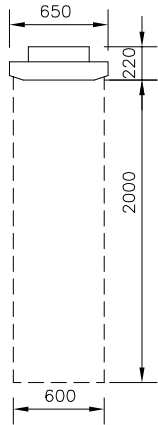
Armchair



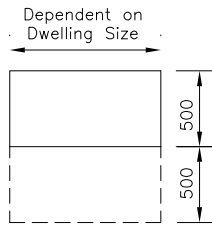
2 Seat Settee



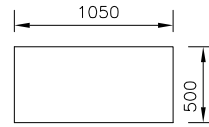
3 Seat Settee



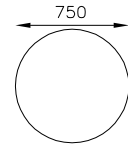
Space for TV



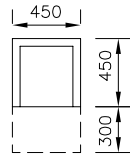
Storage Unit



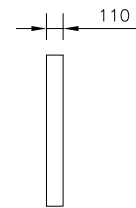
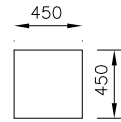
Occasional Table



Coffee Table

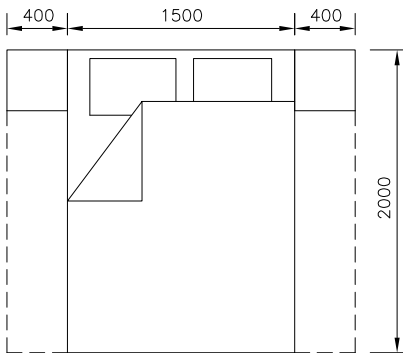


Visitors Chair

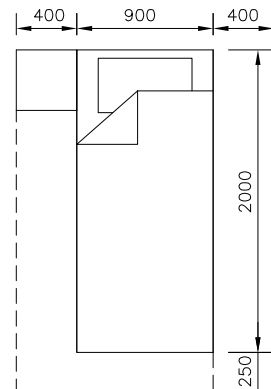


Heat Source

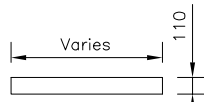
**Bedroom Space Furniture Schedule**



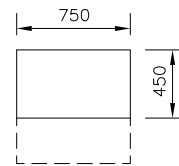
Standard Double Bed



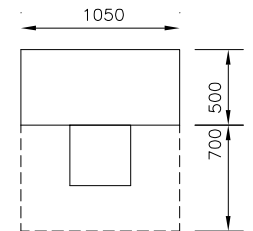
Standard Single Bed



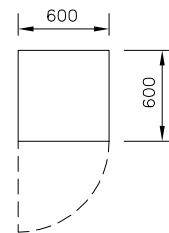
Heat Source



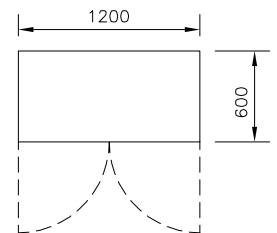
Chest of Drawers



Desk and Chair

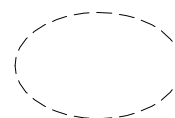
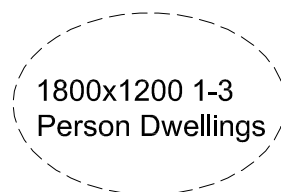
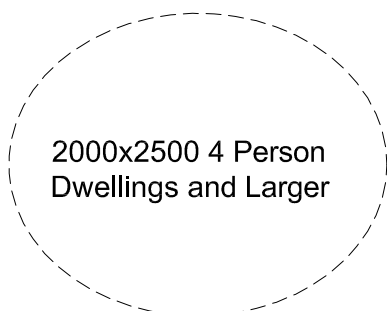


Single Wardrobe

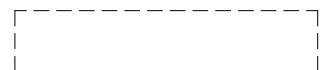


Double Wardrobe

**Activity Zones**

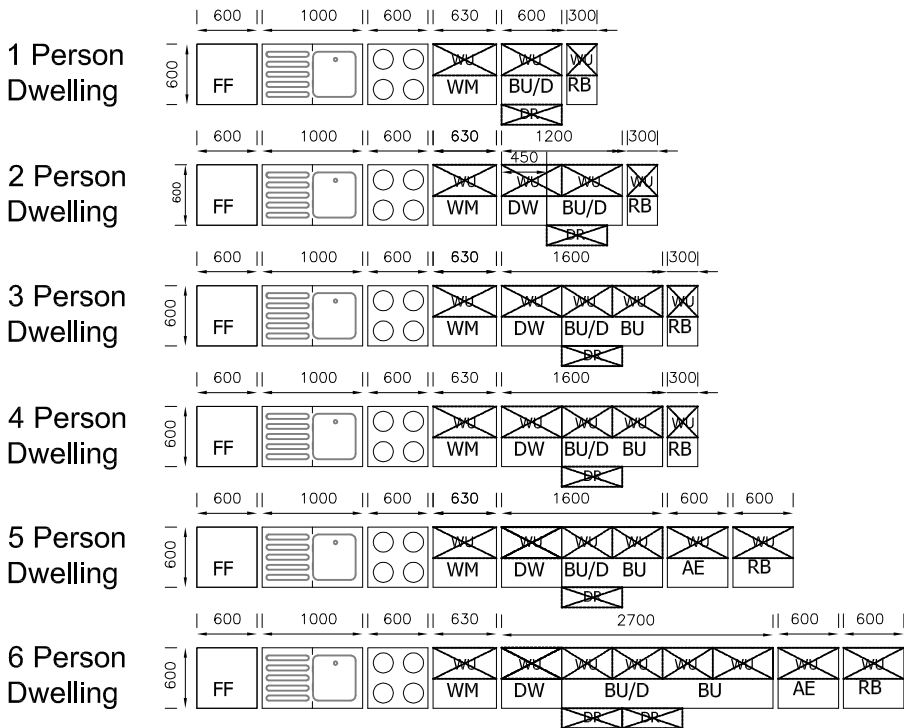


Dressing/ Drying Space 700x1100



Bed Making Space 400x Bed Length

### Kitchen Furniture Schedule

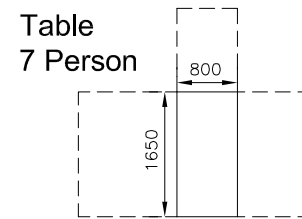
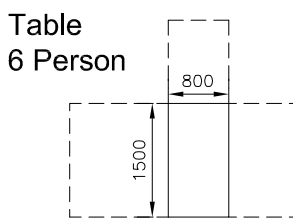
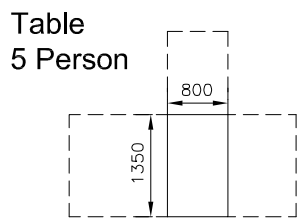
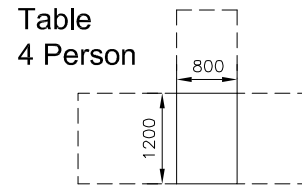
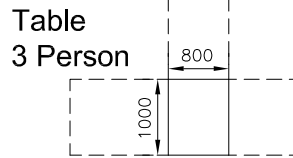
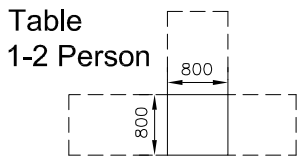


Key:

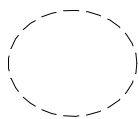
- AE Ancillary Equipment
- BU Base Unit
- CYL Hot Water Cylinder
- DR Drawers
- DW Dishwasher Space
- FF Larder Fridge Freezer
- RB Recycle Bins
- SU Storage Unit
- WM Washing Machine Space
- WU Wall Unit (width of base x 720m high minimum)
- BU/D Base Unit with drawer(s)

Note: Space to be provided for vented clothes drier. Condensing clothes driers to be specified with approval by client only.

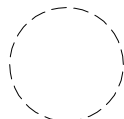
### Dining Space Furniture Schedule



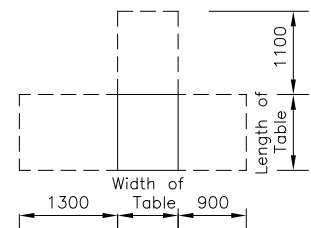
### Circulation Zones



1400x1700  
Turning Ellipse  
for standard  
wheelchair



1500  
Turning Circle  
for standard  
wheelchair



Passing Zones around  
Dining Table

**APPENDIX C - COMPLIANT FLOOR PLANS:  
TYPE A-1 bed, 2 person Category M4 (1/2) Apartments:  
Ground Floor 55m<sup>2</sup>, First Floor (Category 1) 60m<sup>2</sup>**

Minimum 1.2m clear space in front of all kitchen appliances and units.

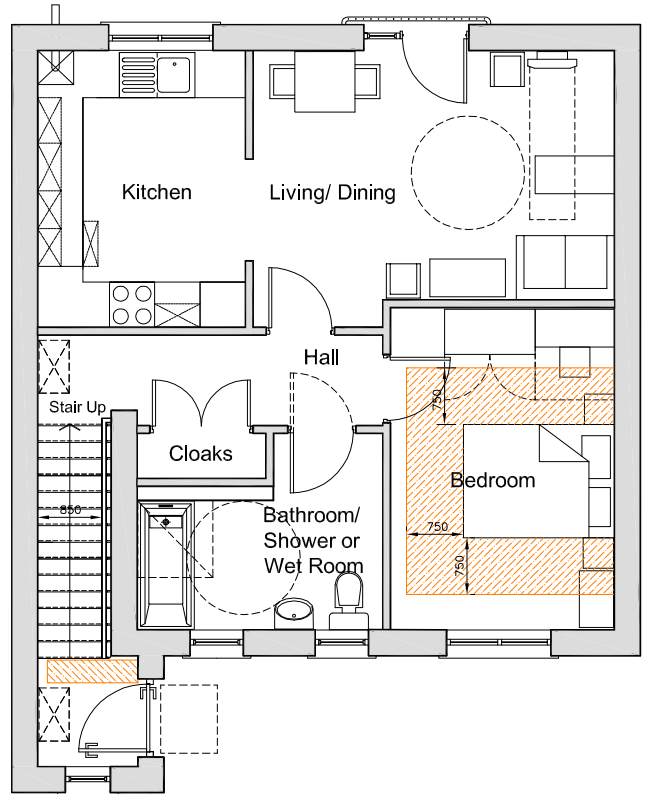
Minimum circulation widths and corresponding internal doorway widths depending on direction of approach.

Minimum bedroom access zones shown as orange cross hatch.

Level shower/wet room or bathroom.

Principal entrance door has minimum clear opening with of 850mm minimum. 300mm nib to leading edge of door maintained for a distance of 1200mm beyond it (cross hatched area). Principal door to have accessible threshold.

Possible stairlift installation shown as a dotted rectangle at top and bottom of staircase (suitability of tenant occupancy subject to recommendation by an Occupational Therapist ). Stairlift not to be used in the event of fire escape.



First Floor Apartment (Category 1)

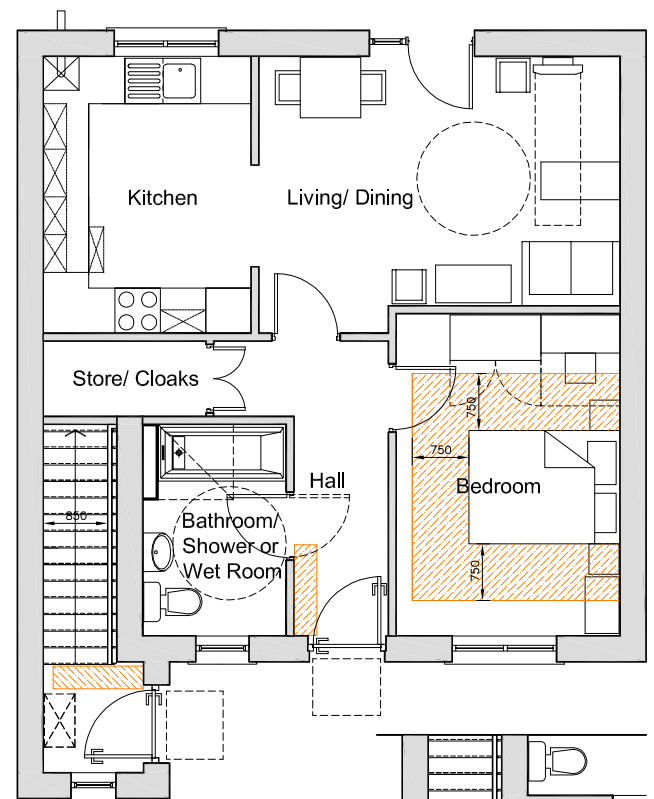
Main Approach from disabled parking provision should be either level, gently sloping or ramped with clear access width 900mm minimum. Ramp gradients to be between 1:20 and 1:12 depending on ramp length.

Access doors to external areas ie. gardens, amenity areas, parking connected with the dwelling to have clear 300mm nib as set out for principal entrance and have an accessible threshold.

Stair shown as straight flight as recommended by Life Time Homes Design Guide 2011 to provide a more cost effective stair lift solution and safer to use for the less agile.

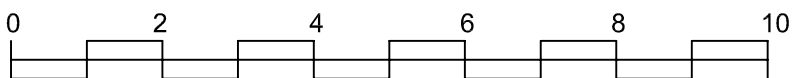
Minimum stair width 850mm. Stair to permit future provision of a stairlift.

Principal private entrance should be either level, gently sloping or ramped with clear access width 900mm minimum. Ramp gradients to be between 1:20 and 1:12 depending on ramp length. Covered area to landing 900mm wide x 600mm deep minimum (shown dotted).



Ground Floor Apartment (Category 1/2)

Front Door Porch Option for greater wheelchair access to stair lift - add 1.5m<sup>2</sup> to GIAs



Scale in Metres

**APPENDIX C - COMPLIANT FLOOR PLANS:  
TYPE B - 2 bed, 3 person Category M4 (1/2) Apartments:  
Ground Floor 63m<sup>2</sup>, First Floor (Category 1) 66m<sup>2</sup>.**

Minimum 1.2m clear space in front of all kitchen appliances and units.

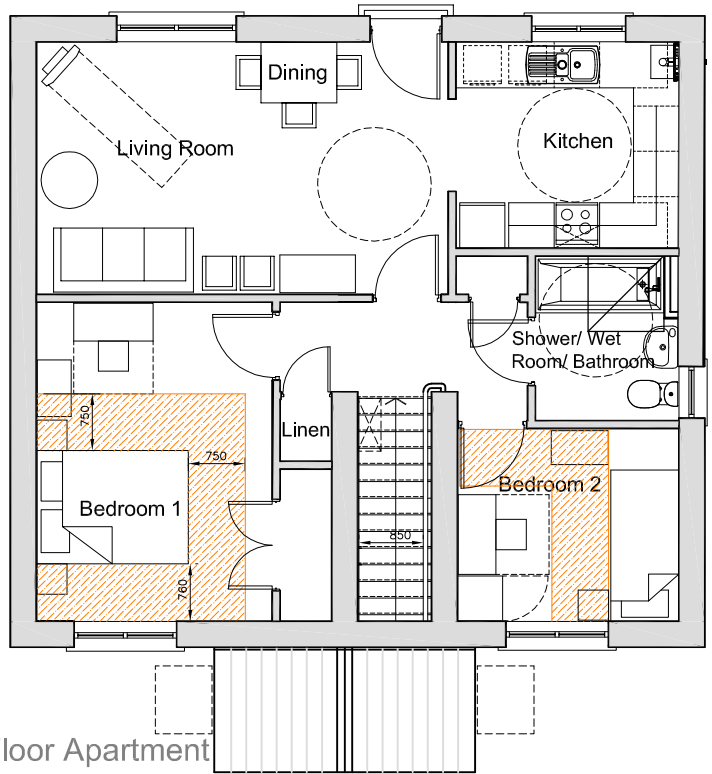
Minimum circulation widths and corresponding internal doorway widths depending on direction of approach.

Minimum bedroom access zones shown as orange cross hatch.

Level shower/wet room or bathroom.

Principal entrance door has minimum clear opening with of 850mm minimum, 300mm nib to leading edge of door maintained for a distance of 1200mm beyond it (cross hatched area). Principal door to have accessible threshold.

Possible stairlift installation shown as a dotted rectangle at top and bottom of staircase (suitability of tenant occupancy subject to recommendation by an Occupational Therapist ). Stairlift not to be used in the event of fire escape.



First Floor Apartment  
(Category 1)

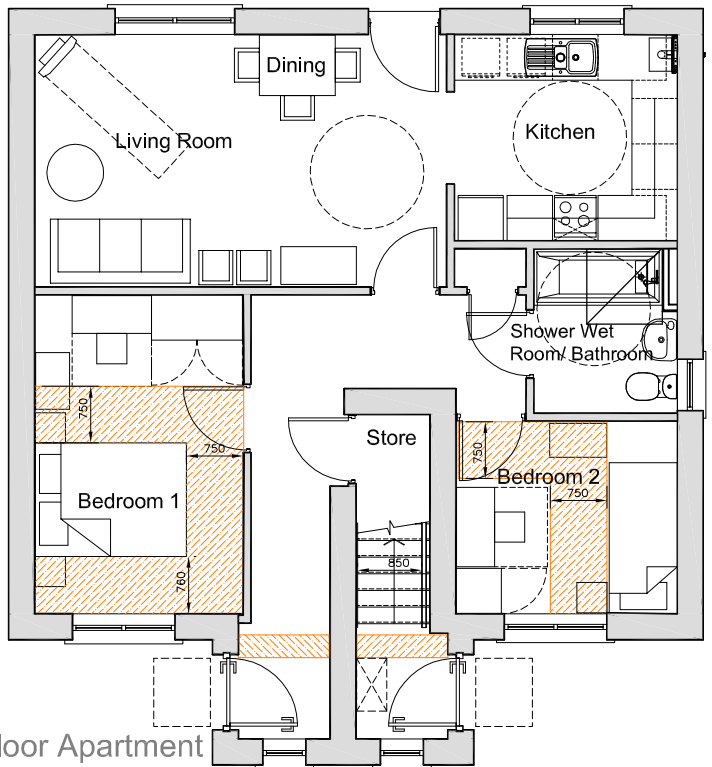
Main Approach from disabled parking provision should be either level, gently sloping or ramped with clear access width 900mm minimum. Ramp gradients to be between 1:20 and 1:12 depending on ramp length.

Access doors to external areas ie. gardens, amenity areas, parking connected with the dwelling to have clear 300mm nib as set out for principal entrance and have an accessible threshold.

Stair shown as straight flight as recommended by Life Time Homes Design Guide 2011 to provide a more cost effective stair lift solution and safer to use for the less agile.

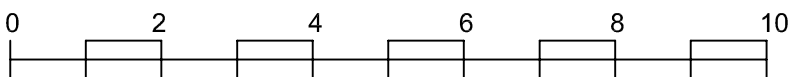
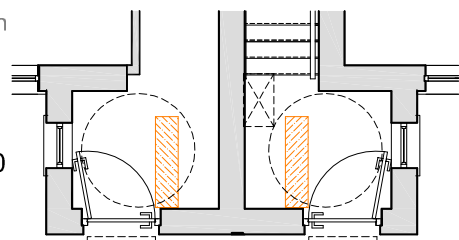
Minimum stair width 850mm. Stair to permit future provision of a stair lift.

Principal private entrance should be either level, gently sloping or ramped with clear access width 900mm minimum. Ramp gradients to be between 1:20 and 1:12 depending on ramp length. Covered area to landing 900mm wide x 600mm deep minimum (shown dotted).



Ground Floor Apartment  
(Category 1/2)

Front Door Porch Option  
for greater wheelchair  
transfer/access - add  
1.5m<sup>2</sup> to GAs



Scale in Metres



## APPENDIX C - COMPLIANT FLOOR PLANS

### TYPE C - 2 Storey, 2 bed, 4 person Category M4 (1/2)

#### Accessible and Adaptable Dwelling 79m<sup>2</sup>

Access doors to external areas ie. gardens, amenity areas, parking connected with the dwelling to have clear 300mm nib as set out for principal entrance and have an accessible threshold.

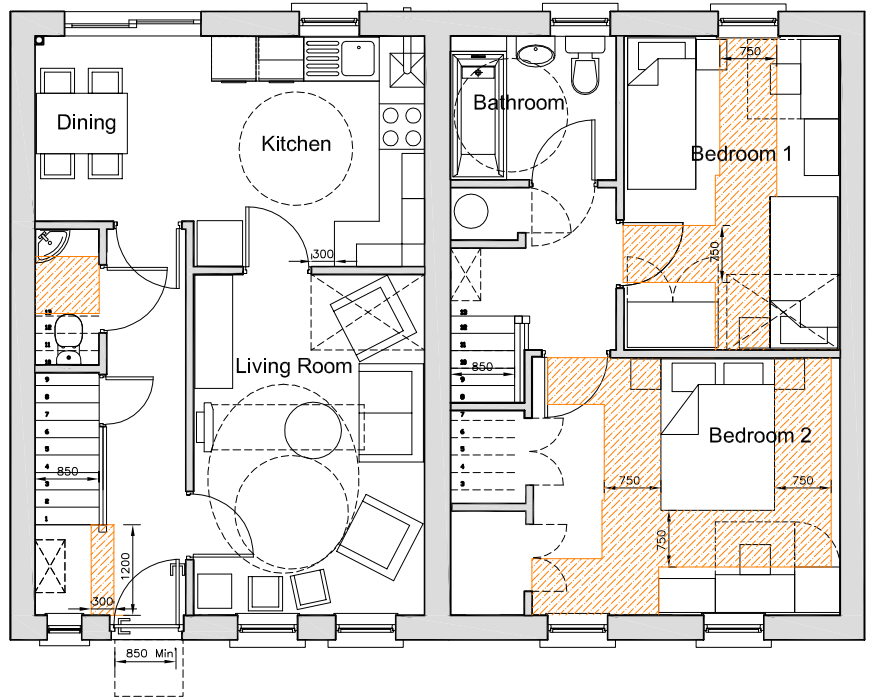
Minimum 1.2m clear space in front of all kitchen appliances and units.

Minimum circulation widths and corresponding internal doorway widths depending on direction of approach.

Minimum bedroom and critical access zones shown as orange cross hatch.

Stair shown as straight flight as recommended by Life Time Homes Design Guide 2011 to provide a more cost effective stairlift solution and safer to use for the less agile.

Principal entrance door has minimum clear opening with of 850mm minimum. (300mm nib to leading edge of door maintained for a distance of 1200mm beyond ). Principal door to have accessible threshold. Covered landing required 900mm wide x 600mm deep minimum.



Ground Floor Plan

First Floor Plan

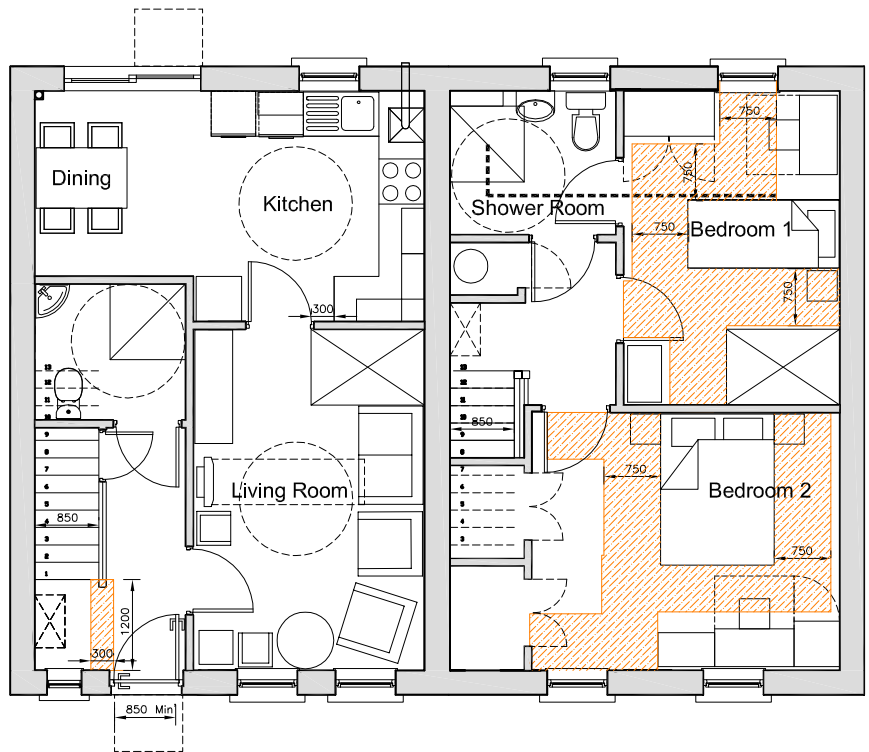
Main Approach from disabled parking provision should be either level, gently sloping or ramped with clear access width 900mm minimum. Ramp gradients to be between 1:20 and 1:12 depending on ramp length. Covered landing required if considered principal entrance (900mm wide x 600mm deep minimum).

Bath removed and level access shower installed as alternative to ground floor shower provision.

Ground floor WC extended to accommodate level access shower. Door to open outwards. Floor drainage included in above layout.

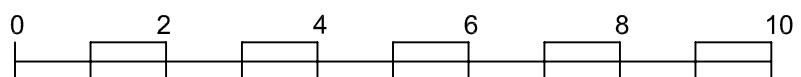
Possible homelift to First Floor as alternative to stairlift. Furniture may need to be reduced if full wheelchair turning circle is required.

Stairlift as alternative to homelift shown dotted at landing levels.



Ground Floor Plan (Adapted)

First Floor Plan (Adapted)



Scale in Metres

## APPENDIX C - COMPLIANT FLOOR PLANS: TYPE D - 2 Storey, 3 bed, 4 person Category M4 (1/2) Accessible and Adaptable Dwelling 84m<sup>2</sup>

Access doors to external areas ie. gardens, amenity areas, parking connected with the dwelling to have clear 300mm nib as set out for principal entrance and have an accessible threshold.

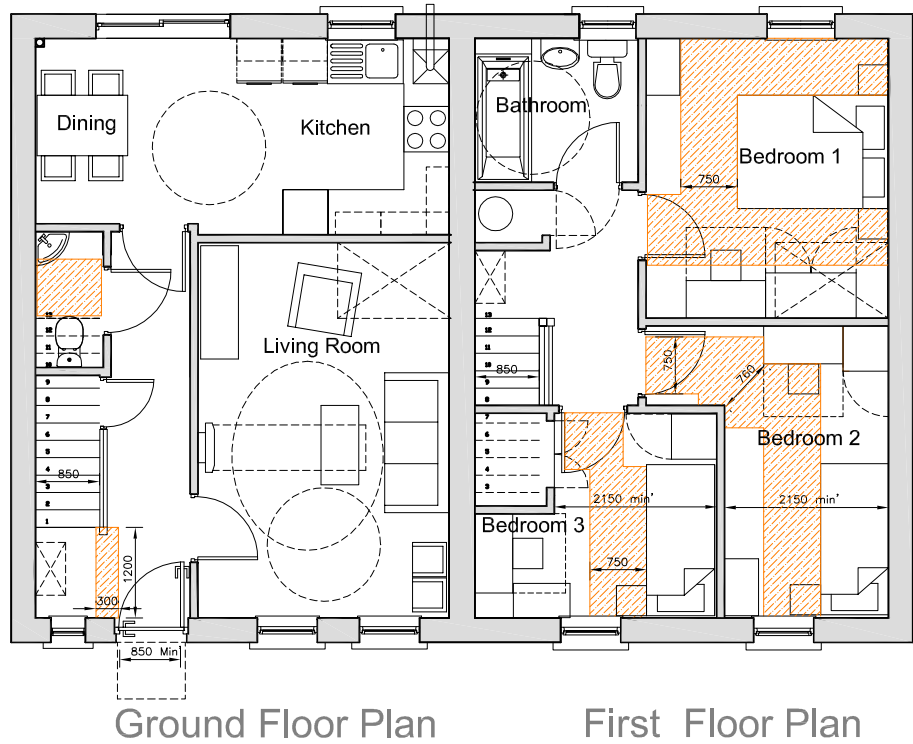
Minimum 1.2m clear space in front of all kitchen appliances and units.

Minimum circulation widths and corresponding internal doorway widths depending on direction of approach.

Minimum bedroom and critical access zones shown as orange cross hatch.

Stair shown as straight flight as recommended by Life Time Homes Design Guide 2011 to provide a more cost effective stairlift solution and safer to use for the less agile.

Principal entrance door has minimum clear opening with of 850mm minimum. (300mm nib to leading edge of door maintained for a distance of 1200mm beyond ). Principal door to have accessible threshold. Covered landing required 900mm wide x 600mm deep minimum.



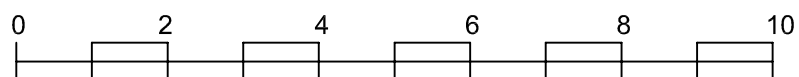
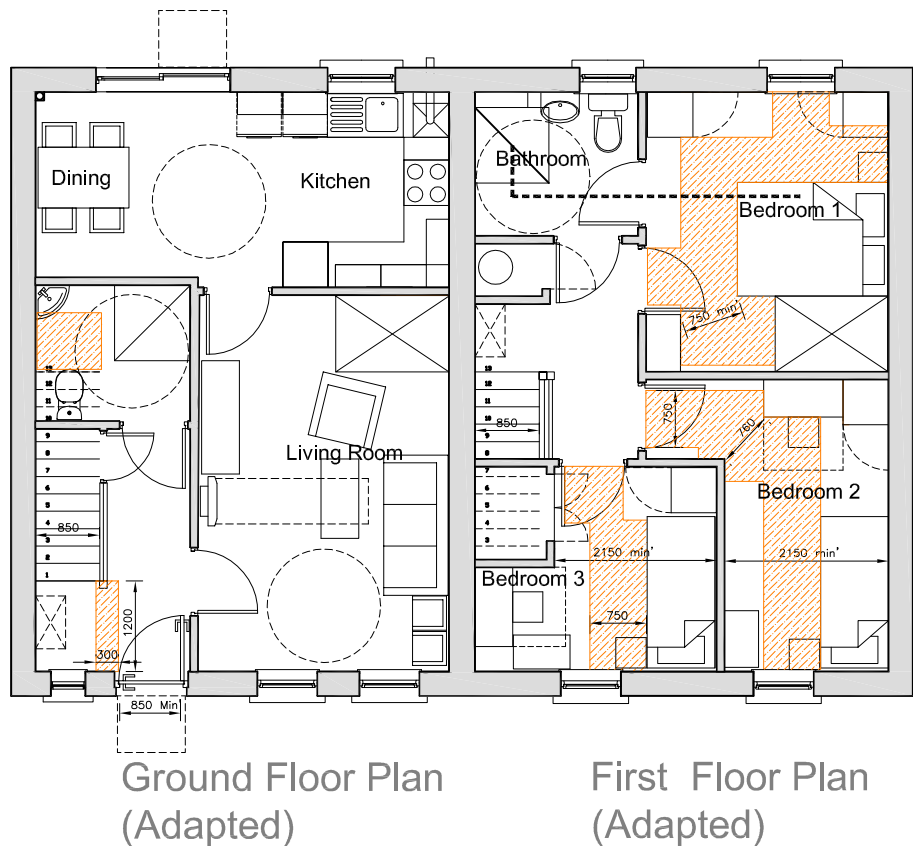
Main Approach from disabled parking provision should be either level, gently sloping or ramped with clear access width 900mm minimum. Ramp gradients to be between 1:20 and 1:12 depending on ramp length. Covered landing required if considered principal entrance (900mm wide x 600mm deep minimum).

Bath removed and level access shower installed as alternative to ground floor shower provision.

Ground Floor WC extended to accommodate level access shower. Door to open outwards. Floor drainage included in above layout.

Possible homelift to first floor as alternative to stairlift. Furniture may need to be reduced if full wheelchair turning circle is required.

Stairlift as alternative to Home Lift shown dotted at landing levels.



Scale in Metres

## APPENDIX C - COMPLIANT FLOOR PLANS: TYPE E - 2 Storey, 3 bed, 5 person Category M4 (1/2) Accessible and Adaptable Dwelling 93m<sup>2</sup>

Access doors to external areas ie. gardens, amenity areas, parking connected with the dwelling to have clear 300mm nib as set out for principal entrance and have an accessible threshold.

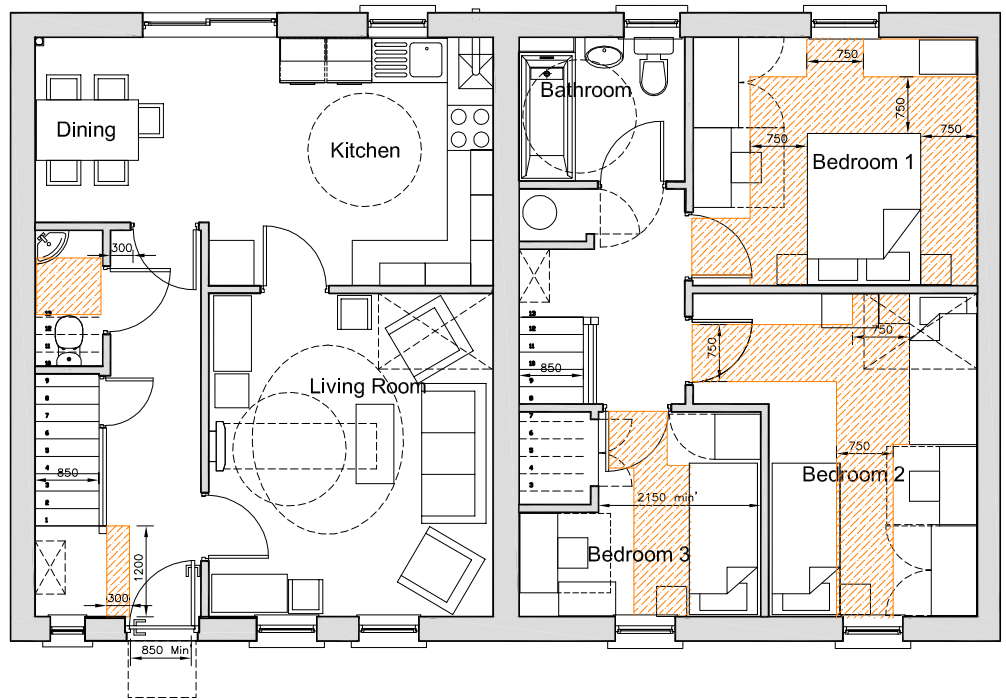
Minimum 1.2m clear space in front of all kitchen appliances and units.

Minimum circulation widths and corresponding internal doorway widths depending on direction of approach.

Minimum bedroom and critical access zones shown as orange cross hatch.

Stair shown as straight flight as recommended by Life Time Homes Design Guide 2011 to provide a more cost effective stairlift solution and safer to use for the less agile.

Principal entrance door has minimum clear opening with of 850mm minimum. (300mm nib to leading edge of door maintained for a distance of 1200mm beyond ). Principal door to have accessible threshold. Covered landing required 900mm wide x 600mm deep minimum.



Ground Floor Plan

First Floor Plan

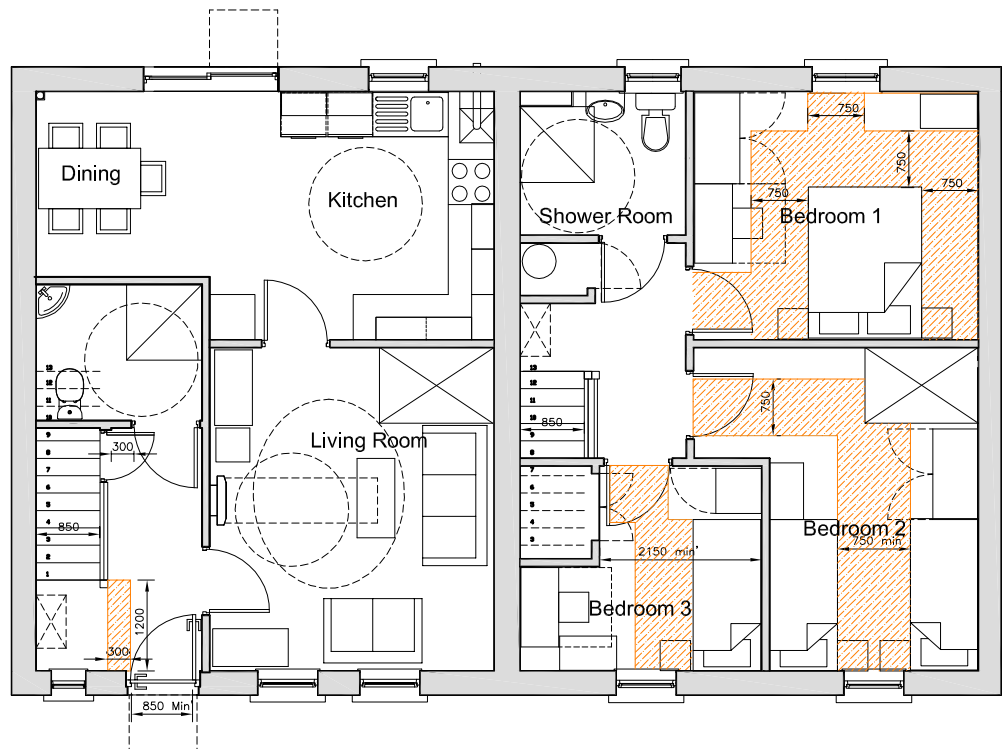
Main Approach from disabled parking provision should be either level, gently sloping or ramped with clear access width 900mm minimum. Ramp gradients to be between 1:20 and 1:12 depending on ramp length. Covered landing required if considered principal entrance (900mm wide x 600mm deep minimum).

Bath removed and level access shower installed as alternative to Ground floor shower provision.

Ground Floor WC extended to accommodate level access shower. Door to open outwards. Floor drainage included in above layout.

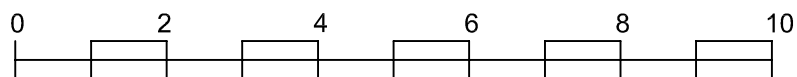
Possible homelift to First Floor as alternative to stairlift. Furniture may need to be reduced if full wheelchair turning circle is required.

Stairlift as alternative to Homelift shown dotted at landing levels.



Ground Floor Plan  
(Adapted)

First Floor Plan  
(Adapted)



Scale in Metres

**APPENDIX C - COMPLIANT FLOOR PLANS:  
TYPE F- 2 Storey, 4 bed, 7 person Category M4 (1/2)  
Accessible and Adaptable Dwelling 120m<sup>2</sup>**

Minimum bedroom and critical access zones shown as orange cross hatch.

Possible homelift to first floor as alternative to stairlift. Furniture may need to be reduced if full wheelchair turning circle is required.

Main approach from disabled parking provision should be either level, gently sloping or ramped with clear access width 900mm minimum. Ramp gradients to be between 1:20 and 1:12 depending on ramp length. Covered landing required if considered principal entrance (900mm wide x 600mm deep minimum).

Ground Floor Accessible WC and Wet Room

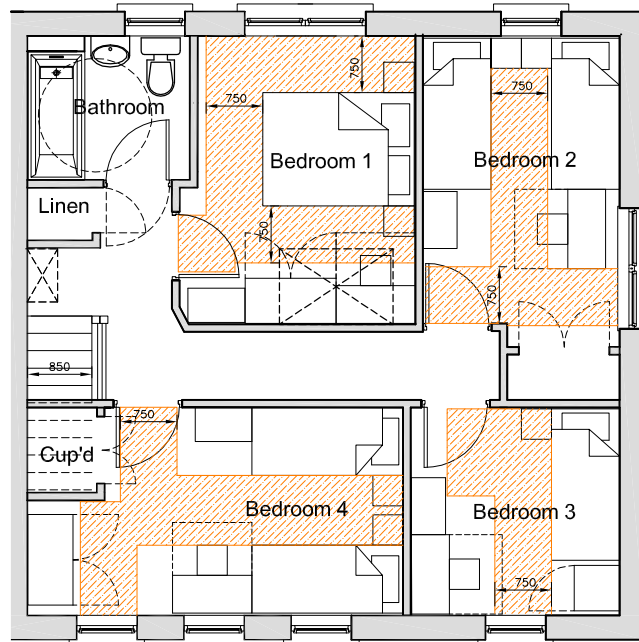
Access doors to external areas ie. gardens, amenity areas, parking connected with the dwelling to have clear 300mm nib as set out for principal entrance and have an accessible threshold.

Minimum 1.2m clear space in front of all kitchen appliances and units.

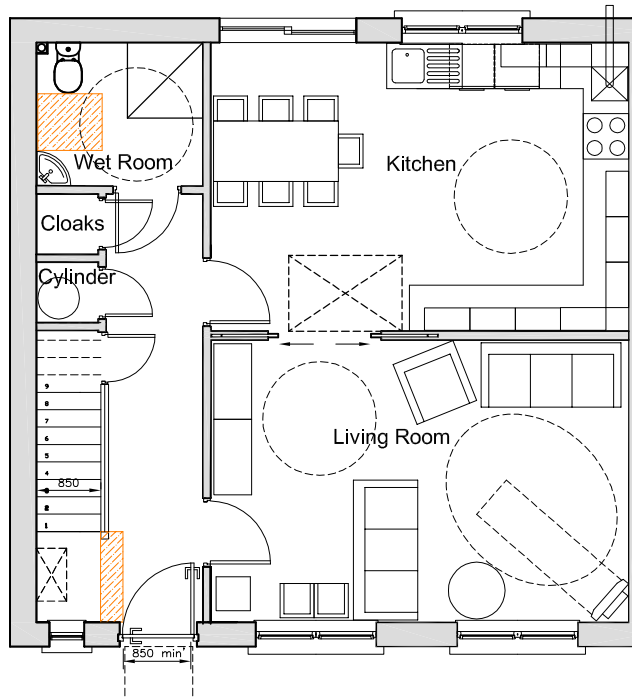
Minimum circulation widths and corresponding internal doorway widths depending on direction of approach.

Stair shown as straight flight as recommended by Life Time Homes Design Guide 2011 to provide a more cost effective stairlift solution and safer to use for the less agile.

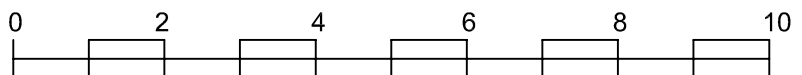
Principal entrance door has minimum clear opening with of 850mm minimum. (300mm nib to leading edge of door maintained for a distance of 1200mm beyond ). Principal door to have accessible threshold. Covered landing required 900mm wide x 600mm deep minimum.



First Floor Plan



Ground Floor Plan



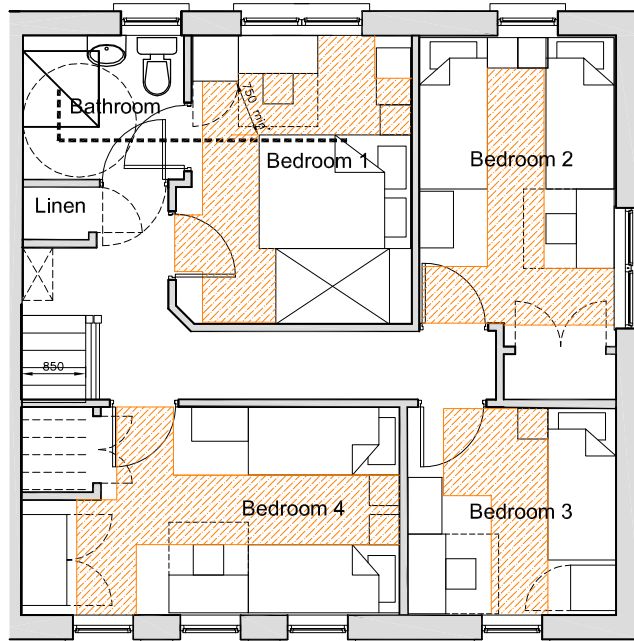
Scale in Metres

**APPENDIX C - COMPLIANT FLOOR PLANS:  
TYPE F- 2 Storey, 4 bed, 7 person Category M4 (1/2 )  
Accessible and Adaptable Dwelling 120m<sup>2</sup>**

Bath removed and level access shower installed as alternative to ground floor shower provision.

Stairlift as alternative to Homelift shown dotted at landing levels.

Minimum bedroom and critical access zones shown as orange cross hatch.

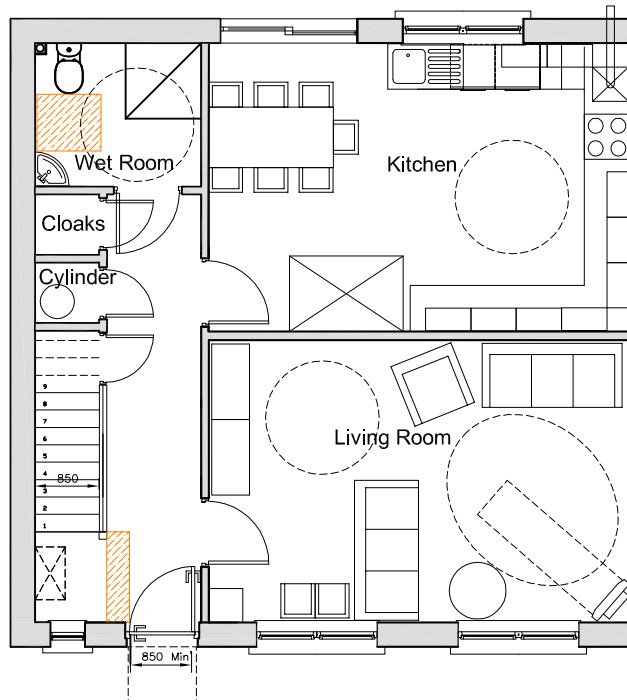


First Floor Plan (Adapted)

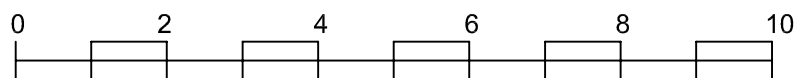
Ground Floor Accessible WC and Wet room

Possible homelift to first floor as alternative to stairlift. Furniture may need to be reduced if full wheelchair turning circle is required.

Stairlift as alternative to homelift shown dotted at landing levels.



Ground Floor Plan (Adapted)



Scale in Metres

## APPENDIX C - COMPLIANT FLOOR PLANS: TYPE G - 2 bed, 3 person Category M4 (1/2) Accessible and Adaptable Bungalow 63m<sup>2</sup>

Main Approach from disabled parking provision should be either level, gently sloping or ramped with clear access width 900mm minimum. Ramp gradients to be between 1:20 and 1:12 depending on ramp length.

Access doors to external areas ie. gardens, amenity areas, parking connected with the dwelling to have clear 300mm nib as set out for principal entrance and have an accessible threshold.

Minimum 1.5m clear space in front of all kitchen appliances and units.

Level shower/ wet room or bathroom.

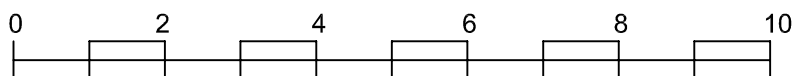
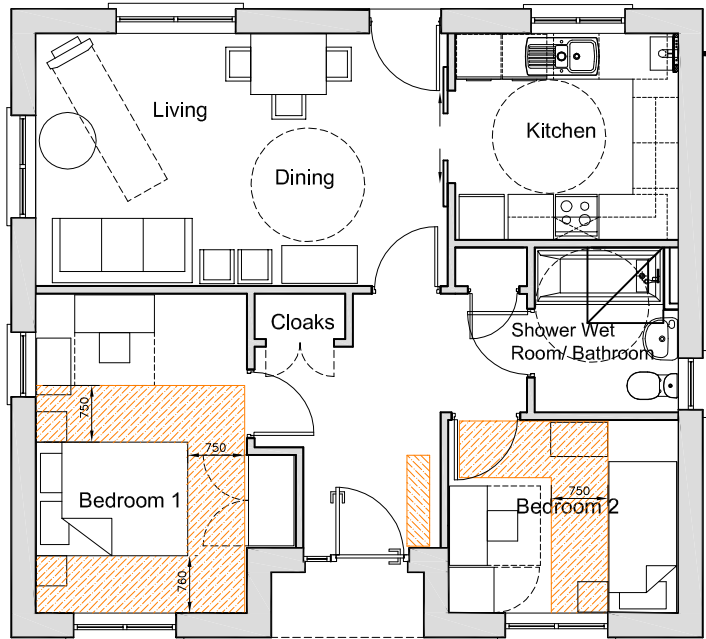
Minimum circulation widths and corresponding internal doorway widths depending on direction of approach.

Minimum bedroom access zones shown as orange cross hatch.

Principal entrance door has minimum clear opening width of 850mm. 300mm nib to leading edge of door maintained for a distance of 1200mm beyond it (cross hatched area). Principal door to have accessible threshold.

Principal private entrance should be either level, gently sloping or ramped with clear access width 900mm minimum. Ramp gradients to be between 1:20 and 1:12 depending on ramp length. Covered area to landing 900mm wide x 600mm deep minimum (shown dotted).

Preferred parking within dwelling curtilage if feasible. At least one standard parking bay must be provided that can be widened to 3.3 metres.



Scale in Metres

## APPENDIX C - COMPLIANT FLOOR PLANS: TYPE H - 2 bed, 3 person Category M4 (3) Wheelchair User Dwelling 80m<sup>2</sup>

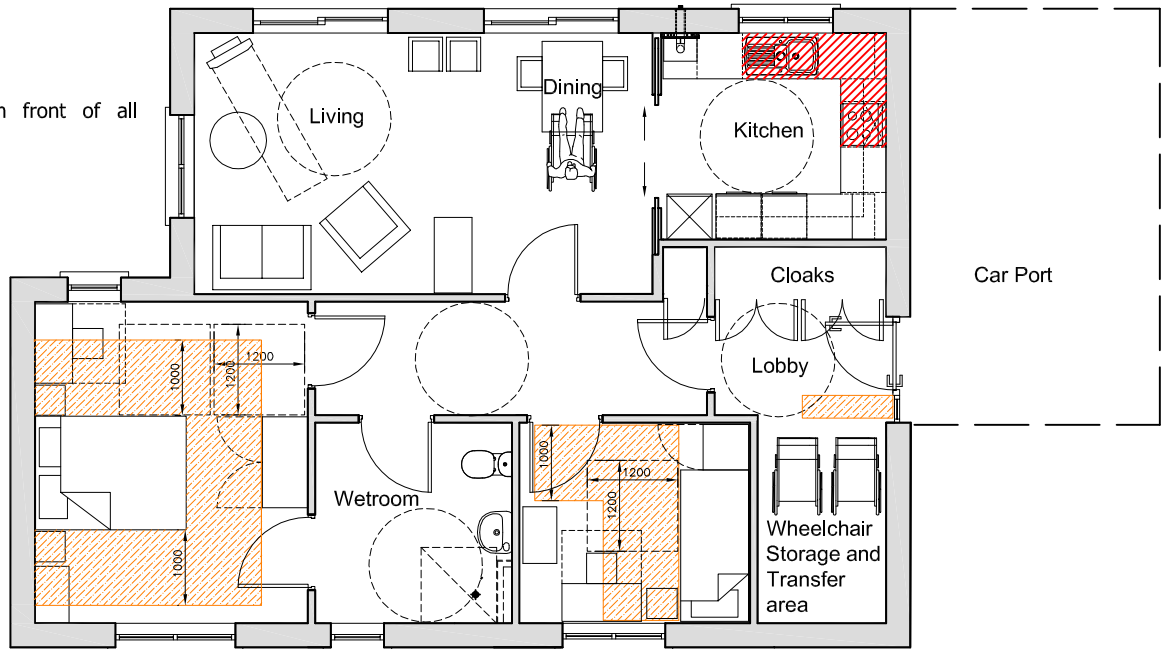
Main Approach from disabled parking provision should be either level, gently sloping or ramped with clear access width 900mm minimum. Ramp gradients to be between 1:20 and 1:12 depending on ramp length.

Access doors to external areas ie. gardens, amenity areas, parking connected with the dwelling to have an opening width of 850mm and a minimum clear 300mm nib as set out for principal entrance doors

Minimum 1.5m clear space in front of all kitchen appliances and units.

Siding Pocket Doors.

Height adjustable kitchen units shaded red



Level shower/ wet room or bathroom.

Every internal access door has a minimum clear opening of 850mm.

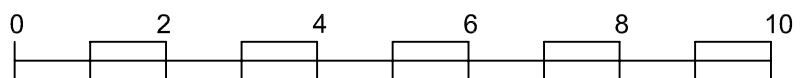
Minimum circulation widths and corresponding internal doorway widths depending on direction of approach.

Minimum bedroom access zones shown as orange cross hatch.

Principal entrance door has minimum clear opening width of 850mm. 300mm nib to leading edge of door maintained for a distance of 1200mm beyond it (orange cross hatched area). Principal door to have accessible threshold.

Principal private entrance should be either level, gently sloping or ramped with clear access width 900mm minimum. Ramp gradients to be between 1:20 and 1:12 depending on ramp length. Covered area to landing 900mm wide x 600mm deep minimum (shown dotted).

Wheelchair user bungalows to be designed to suit bespoke requirements of end users.



Scale in Metres

## **ACKNOWLEDGEMENTS.**

Examples of affordable houses projects are shown in photographs on the front cover and also within the Guide.

The projects shown in the Guide are:

Front cover (starting top left in clockwise direction):

1. Cooyrt Shellagh, Clagh Vane, Ballasalla – Office of Architecture, Department of Infrastructure.
2. Cronk Grainagh, Braddan - Cornerstone Architects.
3. Cooil Ny Chibber, Andreas - Office of Architecture, Department of Infrastructure.
4. Hampton Farm, Douglas – Hugh Logan Architects

Section Dividers:

- |            |   |
|------------|---|
| Section 1  | Cooyrt Shellagh, Clagh Vane, Ballasalla – Office of Architecture, Department of Infrastructure. |
| Section 2  | Janets Corner, Castletown – Office of Architecture, Department of Infrastructure                |
| Section 3  | Hampton Farm, Douglas – Hugh Logan Architects   |
| Section 4  | Reayrt y Chrink Phase 3 – Savage Chadwick Architects  |
| Section 5  | Cooyrt Drine, Clagh Vane, Ballasalla - Office of Architecture, Department of Infrastructure     |
| Section 6  | Crossag Terrace, Clagh Vane, Ballasalla - Office of Architecture, Department of Infrastructure  |
| Appendices | Springfield Rise, Foxdale – Heritage Homes  |