

Focus Housing Association CLG: Guidelines



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1.0 Introduction

Focus Housing Association

Focus Housing Association is an award-winning Approved Housing Body (AHB) – an independent, not-for-profit organisation providing affordable and secure rented housing. We are a standalone legal and corporate entity governed by our own board and regulated by the Approved Housing Bodies Regulatory Authority (AHBRA).

Focus Housing Association is a significant provider of housing across the country and is one of Ireland's largest AHB. We currently provide over 1,400 affordable, sustainable homes for individuals and families across the country, with a presence in Dublin, Kildare, Carlow, Wexford, Kilkenny, Waterford, Cork, Limerick, Tipperary, Clare, Mayo and Sligo.

Focus Housing Association was established in 1985 as the property wing of the leading homeless charity Focus Ireland.

The core objective of both Focus Ireland and Focus Housing Association, is to provide sustainable homes for people who have experience of or are at risk of homelessness and may require on-going tenancy and case management support. Using our innovative Meascan Model of intentional social mix, we aim to build vibrant sustainable development that integrate into the surrounding community. Housing young people, older people, families and individuals, some with support needs and some without but with all aware that some of their neighbours may have suffered the challenges of homelessness and that support is available for everyone.

We are committed to high quality design principles in all our developments and believe this serves to enhance the local environment and create a sense of community. Our Design Guide establishes our standards (some of which are exceeding minimum standards set out in Building Regulations and other statutory documents) that must be achieved by our housing delivery partners. We believe that through design compliance with these standards, we can ensure that we deliver quality housing developments that enable our residents to create comfortable homes.

Focus Housing prides itself on providing quality housing for all its residents in environments which are both homely and offer a sense of community both within the development and in the greater community.

Specification aims

This publication acts as a guide for developers, contractors and consultants on the design of quality residential schemes. This guide applies learnings from our in-house research on the housing and support needs of all our residents including vulnerable and older residents to create quality and sustainable places to live.

The purpose of the specification is to present Focus Housings requirements for finishes to internal layouts, courtyards and common areas with regards to both our internal standards and the standards of the sector. It seeks to serve as a guideline, setting the goals and constraints. It seeks to give a clear indication of the standards that should be achieved for all developments. It further attempts to ensure that planned and cyclical maintenance requirements are taken into consideration across the lifespan of the dwellings.

Sustainable neighbourhoods are areas where efficient use of land, high-quality design and effective social integration combine to provide the physical and social infrastructure required to promote vibrant communities, while protecting and enhancing the local environment. High-quality housing is central to creating a sustainable community.

We reinforce that all future new housing developments will meet a minimum Certified level on the Green Building Councils “Home Performance Index” which is an independently audited certification system. This system assesses the performance of a home under a number of categories and ensures Focus Housing is supplied with sustainable quality housing. The system is divided into three main categories based on the Environmental, Social and Economic pillars of sustainability. Two additional categories, Quality Assurance and Sustainable Location, reflect the planning and procurement processes. Points are awarded for each section with several levels of achievement, which means that points are scored when there is an improvement over the baseline, normally set at the minimum requirement of Irish Building Regulations where there is a relevant standard. This assessment forms a vital part of Focus Housings ambitions to creating greener and more energy efficient homes. This process is further discussed throughout the sustainability section in this document. **Please see Sustainability section**

This specification document is primarily intended for use with Turnkey projects, where planning permission is already granted and there is minimal opportunity to affect the design. For Design and Build Projects, the emphasis remains on finishes but there is greater opportunity to influence the design.

For Turnkey Projects the Developer’s Design Team is responsible for compliance, however for Design & Build Projects, Focus Housing will procure our own Design Team. For Turnkey with stage payments – ER is appointed from our framework. The framework is to be updated to ensure that additional professional personnel can be appointed where deemed necessary. Technical Inspection Services are appointed from our preferred supplier’s panel. Additional professional personnel will be appointed where deemed necessary.

Additional personnel will be appointed by Focus Housing where the ER considers a specialist opinion is required.

Please contact a member of Focus housings team if you have questions on this specification guide.

2.0 Site Planning & Design

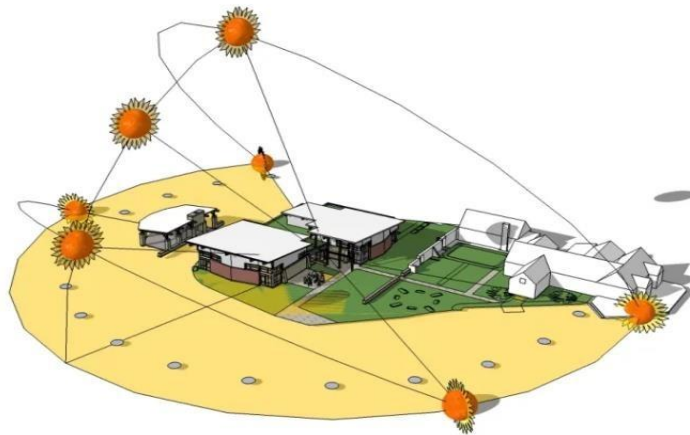
Site planning and design is of primary importance to Focus Housing in terms of the efficient use of land (Brownfield/Greenfield), densities, access and the availability of transport and service infrastructure.

Site layout plans should generally follow the recommendations of *Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice (B.R.E. 1991)*. Particular attention is drawn to the daylight factor levels in *EN 17037:201 Daylight in Buildings*.

Please refer also to *Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas (Cities, Towns & Villages)* published in 2009.

Key design principles to be considered include:

- Orientation.
- Overshadowing.
- Housing plans forms.
- Separation distances.



3.0 Quality and Design

Dwellings should be designed to suit our residents' needs and have reasonable levels of cost-in-use over their full lifetime. Excellent quality housing will be appreciated and treated well by the people who live there.

The core principles underpinning Focus Housings preferences are simplicity, clarity, usability and durability. These principles give a coherence to how our homes look, feel and function.

A well-designed home should provide:

- A clear layout of functional spaces of appropriate size, to accommodate the activities of normal, day-to-day living.
- Easy access to the dwelling itself and a clear and easy way to get around inside the home.
- An adequate level of amenities, such as kitchen facilities, storage areas, sanitary and bathroom facilities.
- A safe and secure environment.
- Space, water heating, electricity and other services.
- An economic, socially and environmentally sustainable space, which takes account of residents' needs and complies with the requirements of the Building Regulations and the Building Control Act Regulations.

3.1 Homebond or Equivalent

All units in each housing development or apartment scheme must be covered by the Homebond Structural Guarantee Latent Defects Insurance Policy, or equivalent. The Developer must provide evidence that the Developer is a Building Member of the Guarantee Scheme operated by Homebond, or an equivalent thereof approved by the Employer in advance of signing the contract.

It is compulsory that such membership is maintained for the duration of the Agreement and the original Homebond or equivalent Documentation for the Project included in the safety file / building file to be handed over at practical completion stage.

3.2 Construction Techniques and Technologies

Focus Housing is a progressive organisation which aspires to maintain awareness of technological advances in all aspects of construction and the management of its housing stock. Our preference is to use technologies that are efficient, sustainable, robust, progressive, and tried and tested.

We are progressing several construction methodologies, including Insulated Concrete Form (ICF), Timber Framing, and 3D Modular Construction. Design teams should explore the most suitable option during the design feasibility stage for all schemes. Please note that it is Focus Housing's preference that rain-screen systems incorporating finishes such as brick slips should be avoided.

3.3 Space Standards within the Home

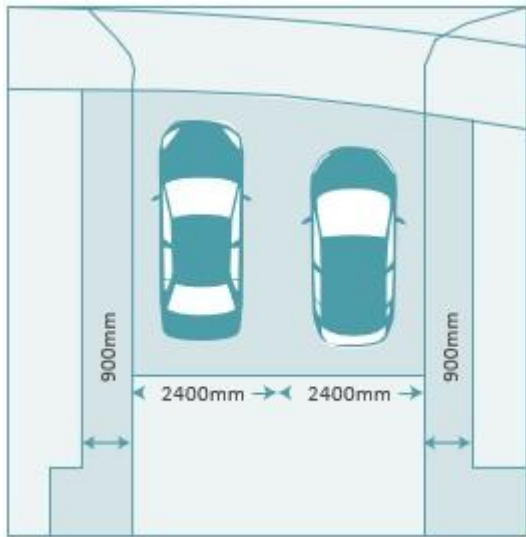
The Department of Housing, Local Government and Heritage has published guidelines in respect of minimum space requirements and room widths for categories of accommodation. It is important to note that these figures are minimum space standards and should not be viewed simply as a target to be achieved.

Focus Housing encourages designers to come up with solutions for dwelling design that exceed minimum standards, rather than assessing poorly considered layouts that simply meet the minimum standards.

We note that minimum space requirements for individual houses and housing estates are also set out in each local authority's Development Plan. These should be adhered to when providing housing for Focus Housing residents.

Apartments should be designed to provide good quality, permanent and sustainable living accommodation. Design should not be predicated on the assumption that apartment living is a transient phase in the life of people who will eventually move to a house. Focus Housing provides homes for life.

3.4 The Entrance

- Utilities cabinets should not be visible on the front of the building. Careful consideration should be given when deciding their location.
 - The entrance should be flanked by a low wall or hedging, to form a defined transition zone where cars cannot impinge.
 - A clearly defined route should be provided to the main entrance. It should be independent of car parking and should be at a minimum 1.2m wide.
- 
- The diagram illustrates a car entrance layout. It shows two cars parked side-by-side. The width between the cars is 2400mm, and the width of the entrance area is 900mm on each side. The cars are represented by blue silhouettes. The entrance area is defined by a low wall or hedging on both sides. The diagram is a top-down view of the entrance area.
- A canopy should be provided above the entrance door, to offer shelter from the rain. The design of the canopy should be thin in profile, and it should project at least 1.2m. It should not need a gutter. In more exposed sites, it may be preferable to recess the entrance to provide shelter from wind. Where gutters are not required, the finish at ground level must be suitable for rainwater run-off and fall to a drainage channel or free draining area.
 - An external light should be fixed to the wall or in the soffit of the canopy. The doorbell push, door number and light (where wall mounted) should align vertically.

3.5 External Doors and Windows

- When specifying door and window products, composite aluminium clad timber doors and windows, polyester powder coated in RAL colour should be used. It is essential that the entrance door leaf is mounted within the frame to allow for further adjustment of hinges following 'wearing in'. The distance from the underside of the door leaf to the finished floor level should be calculated at design stage, to allow for timber laminate flooring, without the finish fouling the door opening.
- Where bay windows are being installed, all corner posts should be thermally broken to match the fabric and finish off the window.
- External doors, front and rear, shall have a five-point locking system.
- Please clarify all door ironmongery details and specifications.

3.6 Restrictors and Guarding

- It is critical that Building Regulation requirements are fully understood and implemented in the design of windows and window openings. All drawings relating to window openings should have a red dashed line identifying the stepping off point for all window boards, and a second red dashed line identifying the bottom of the opening section of the window.
- Clearly dimensioned drawings should identify that the requirements of the *Irish Building Regulations Parts K & B* have been adhered to. There should be a note identifying all safety glass, restrictors, in-frame vents, and manifestation requirements. All windows should have easy to clean hinges. Opening section frame sizes should be factored into all window opening dimensions, to ensure the window provides regulation clear opening widths in service.

3.7 Door furniture

- Handles, knobs, letter plates and bell-pushes all form part of the entrance component and should be matching in finish and material (for example using a satin / brushed finish). The letter box should be a 'sleeved' type, with integrated draught excluder brushes and a cover flap.
- It is important that residents see callers to their home and that a spyhole is included in the door.
- All externally opening entrance doors to common areas, bin stores, plant rooms etc. should have door closers /restrictors to prevent the door leaf being overextended in windy conditions. These levers / restrictors should be robust and firmly mounted to provide longevity in service. Clash points for such doors should be identified during the design process, to ensure door levers do not strike walls or other surfaces when they are open.
- All magnetic locking devices should be designed to secure the full extent of the door leaf to the frame. Magnetic mortice locking systems are preferred over single point frame mounted magnets.

3.8 Thresholds

- The threshold is a critical feature of a home or dwelling. It makes the entrance accessible, while maintaining the thermal and airtight efficiencies of the design. Focus Housing 's preference is for a narrow galvanized or stainless-steel slot drain in front of the door. The drainage channel must be connected via a gulley trap to the storm water system to prevent foul odours.
- A low-level threshold should be provided as part of a manufactured external door set system. The threshold sill should be thermally broken. It should be threadable with a robust finish and have endcaps. It should be finished in silver.
- All patios and balconies must be robust and weather tight. Specific attention should be given to this in the design and construction stages. Door thresholds should be fitted with a drainage channel, connected to a storm water drain via a gulley trap.

3.9 Rainwater Goods

- All rainwater goods should be seamless aluminium, with colour matched RAL to suit windows and doors. All sections of gutters should have welded stop ends and should be secured to solid ground, using robust bracket or spike- and-ferrule hangers at 700mm centres. Leaf screens should be installed on the gutters, drop pipes should be centred over downspout locations and integral shoes should direct the rainwater outfall directly into rainwater gullies. Elbows and downspouts should be strapped and secured to the wall using stainless steel screws and wall plugs.
- All rainwater goods should be tested to ensure there are no leaks or back falls.

4.0 Intelligent Design

4.1 Telecom Service Connections

Apartments

A fully functional telecoms service shall be installed within each block(s) to support telecommunications, IT, and TV services accessible by each individual dwelling as well as any communal services (e.g., lifts, fire alarm systems, etc.). Cabling and conduit routes shall be provided from the main telecom entry points in the common areas and wired into each dwelling, terminating at a standard telecom entry point.

Each dwelling shall include infrastructure for telecoms and IT services, with a minimum of one connection outlet in the living room and one in the main bedroom. Wiring and conduits shall run from main incoming point within the dwelling to these points.

The Contractor is also required to install an Integrated TV Reception System capable of delivering free digital television (Saorview), including digital terrestrial aerials, as required, distribution cabling, and conduit from the reception points to each dwelling's outlet points. A minimum of one TV connection point shall be provided in the living room and one in the main bedroom. All wiring must be tested for adequacy, and appropriate certification shall be issued.

4.2 Communal letterboxes

The entrance area should contain secure, accessible and easily located letter boxes.

4.3 Mat-wells

A mat-well should be provided at all entrance doors from the external and is essential to prevent the spread of mud and dirt throughout the building. The mat should be flush with the adjacent floor surface. The flooring should be robust, hard wearing and easy to clean.

4.4 Stairs and Common Areas

The design of the communal stairs should make it easy and comfortable to move between floors, regardless of whether there are lifts installed. This means the stairs should be designed with a shallow pitch, using a straight, rather than a profiled step nosing, to avoid accidents and make the stairs easy to use for all our residents. Focus Housing's preference is that all common stairs are designed to be suitable for ambulant disabled people.

It is essential to provide more than one lift in each age-friendly housing scheme so that convenient access can be maintained at all times. All our residents should have access to two lifts. This applies to individual apartment blocks, i.e. one lift per group of apartment blocks is not sufficient.

There should be easy access to the lift and enough space to allow people to pass as they enter and exit. A clear landing space is required in front of the lift to facilitate someone turning around in a wheelchair or turning a buggy. The lift's interior must be carefully designed to ensure that it is easy to use and understand. Attention is drawn to requirements for contrasting floor finishes in lift cars.

Common storage areas should generally not be accessed from corridors, although a lockable cleaner's store should be provided. There should be enough electrical sockets on each floor of the apartment block to facilitate cleaning and day-to-day maintenance. Corridors and communal stairs should be heated with energy efficient solutions, to avoid excessive costs in heating these spaces.

All party walls between stair cores, lift shafts and apartments should have high performance thermal and acoustic insulative properties.

4.5 Balustrades and Handrails

Handrails should be fully continuous on stairs along the length of the flight and landings. There should be a consistent colour contrast between the handrails and the background.

4.6 Lifts

All buildings with three storeys or more - and two-storey buildings with underground car parking - should have lifts. The lift car fit, and finish must be agreed with Focus Housing at design stage. The specification for the lift system must be provided to Focus Housing's Property Services Department for review, prior to the system being incorporated into the Works Requirements. Any deviation from the system during the technical submittal process should be issued to Focus Housing for review, prior to comments being issued to the contractor. The Design Team are required to manage this process in a timely manner to provide sufficient time for Focus Housing's review and to prevent any programme delay.

4.7 Emergency Voice Communication System (EVCS)

A refuge system for people with disabilities must be available at all times. It should be a fixed, monitored and maintained, bidirectional, full duplex voice communication system, to assist the orderly evacuation of disabled or mobility impaired people and enhance communication with fire fighters during emergencies. The system must be robust and securely mounted.

Before Focus Housing takes possession of the building, a demonstration will be required to confirm that the system works properly. Landline and broadband requirements must be considered at design stage and Focus Housing's IT department must be consulted at all stages of the design, installation and commissioning of the system.

4.8 Basements

- Refuse storage areas should be provided with adequate ventilation, a washdown tap and a drainage gulley to facilitate cleaning.
- There should be easy access to refuse bins.
- Adequate lighting should be provided in basement areas, especially at stair cores and refuse areas.
- Access and egress to parking areas should be adequately controlled by gates and access control systems, where required.

4.9 Corridors and Doors

Wide corridors and doors facilitate comfortable and unimpeded movement between spaces. They make it easier to move between rooms and to move furniture around, as required. They can be used for a variety of purposes, for example, as storage or library spaces. Corridors inside individual dwellings should preferably be 1200mm wide. In common areas, the preferred width is 1500mm.

Inside the home, the width of the internal door opening needs to be directly related to the width of the internal corridor it leads from. Internal corridors should be kept as short as possible, with good visibility along their length. Deep recesses and 90° turns should be avoided, where possible.

Corridors should be naturally lit and ventilated, where possible for good orientation, wellbeing and reduced energy use.

The way in which a door opens into a room can also affect how the room can be accessed and used. Ideally, the door should open with the hinge side against the return wall, so that there is no need to negotiate furniture and the door itself when entering. Doors, windows, radiators, light and power points should be positioned to maximise usable wall space in rooms.

Residents should be able to access and open doors independently. This means that there should be a minimum clearance of 300mm between the leading edge of the door and any other obstruction on doors that open towards the user.

For the protection of ironmongery and walls, skirting mounted doorstops should be provided for all doors where the door lever strikes the adjacent wall.

All internal doors should have hardwood saddle boards. Door undercut dimensions should be provided off the fixed level of the saddle board and should comply with all applicable Irish Building Regulation requirements. An allowance of 15mm should be provided, so that residents can install the final floor finishes in the living areas.

4.10 Domestic Stairs

While it is acknowledged that the guidance on the use of tapered steps or winders in *Technical Guidance Document K* is open to interpretation, it is a Focus Housing requirement that no winders are used in the design of the principal staircase between levels.

5.0 Internal Circulation

Homes that are designed logically and simply create an instantly legible environment, with a clear, easy and convenient circulation route for all our residents to use. This applies to all homes – both apartments and houses.

5.1 Lobbies, Lifts and Communal Stairs for Apartment Buildings

The entrance area should be large enough to allow everyone most likely to be using it at peak times, to do so easily and comfortably. All doors and routes need to be accessible, comprehensible and usable by everyone. Particular attention is drawn to Part M of Building Regulations in this regard.

- A lobby should have a clear zone of at least 1600mm between door swings.
- If the door does not open more than 90° then the clear width should be achieved with a wider door.
- A leading edge of 600mm to lobby doors should be maintained to allow space for people to pass.

6.0 Living Areas

6.1 Living Rooms

Internal Layout, Design Requirements and Space Provision

Homes should be comfortable, convenient and safe, with each room facilitating the main activities likely to be carried out there.

The design and layout should also address the separation of incompatible activities, as far as possible. For example, noisy group activity areas should be remote from study or relaxation areas. There should be reasonable privacy in living rooms and bedrooms, taking account of the likely internal and external sources of noise.

To cater for the possibility that an occupant may have reduced mobility in the future, it should be possible to put in a bed at the main entrance level, if needed. Such an arrangement could also facilitate 'working from home'.

The layout of dwellings should make effective use of natural daylight and sunlight, as far as practicable. All the main rooms should get direct sunlight at some time during the day. Windows should be big enough and room shapes should be designed so that there is good daylight penetration.

The size, shape and location of windows should be planned, so that they make the best use of available views, without compromising privacy. A street view from a habitable area is desirable. Window locations should also facilitate the supervision of small children at play in private external spaces and allow for surveillance of the dwelling's immediate surroundings.

6.1.1 Specific Requirements for Living Rooms

- Living rooms should be designed to seat at least the specified number of residents in the home. There should be room for a coffee table, a TV and a small bookcase.
- Living rooms should not be used as the main access route to other rooms - for example a kitchen - except in smaller dwellings, where this is unavoidable.
- If possible, the dining room should not be part of the living room.
- Wherever possible, living room windows should have a southerly aspect.
- Living room windowsills should normally be below the eye-level of people sitting in the room. It should be noted that safety glazing and / or guarding of glazed areas is required in certain circumstances.
- TV points should avoid daylight glare on the screen.
- The room layout should be organised around a focal point.

6.2 Kitchens

6.2.1 Specific Requirements for Kitchens

- Tiled Flooring throughout with slip resistance R11.
- Storage should be provided using a combination of wall and base units. There should be at least one 500mm three-drawer unit. A broom cupboard should be provided if there is none elsewhere.
- Wall units should generally be positioned 450mm above the worktop and there should be a tiled backsplash on the underside of the wall unit. Wall units should be run together without gaps.
- A clear space of at least 1m should be provided in front of all kitchen units.
- The run of kitchen work tops and service connections must allow for the inclusion of a 650mm-wide integrated oven and inset cooker hob, a 600mm-wide double height fridge freezer space, a 650mm wide under-worktop washing machine space and, a 600mm-wide under-worktop dishwasher space.
- Where utilities are provided within the design, there should be adequate ventilation for washing machines and dryers.
- The fridge space should be positioned at the end of a run of units, and should be fitted with a demountable worktop to facilitate the fitting of a fridge / freezer if required.
- The washing machine space should be next to the sink.
- If possible, the kitchen sink should be positioned in front of a window.

- Kitchen sinks should be made from rigid, press-formed stainless steel. They should be one and a half bowl units in size and fitted with a chrome mixer tap, incorporating a water saving aerator. Sinks should be positioned so that the draining board is located away from any returning corners of worktops, so that a person can stand directly in front of the draining board.
- Electric cooker points must be provided in all dwellings and a gas cooker point should also be provided, where a gas supply is available.
- All isolation switches should be labelled.
- A clear food preparation worktop of minimum 1m should be provided for two- and three-person households. For three- and four-person households, the food preparation area should be 1500mm, while 1800mm is the minimum length for households with five or more persons. The minimum length of any one section of worktop should be 300mm.
- Note: The sink draining board should not be counted as part of the usable clear worktop run.
- Internal kitchens should be avoided wherever possible. Where an internal kitchen is unavoidable, borrowed natural light should be provided.
- Note: All kitchen layout design should comply with the most recent requirements of the Irish Building Regulations, particularly Technical Guidance Document B.
- Where a combined kitchen / dining room is provided, the kitchen area must be ventilated to minimise the spread of cooking smells and steam.
- The end of a run of worktop should align with the end of a base unit (or a wall) to avoid using end panels.
- No white goods are to be supplied. A kitchen extractor hood should be provided over the position designated for the hob. Ductwork should be rigid, secure, and falling to the outlet. The duct should not be readily visible.
- All kitchens (whether they are internal or not) should be fitted with an electrically operated, humidistat-controlled extractor fan, with a boost function, as required. This should form part of an overall decentralised mechanical extractor system.



Note: Please see Appendix A - Kitchen Unit Specifications

6.3 Dining Rooms

6.3.1 Specific Requirements for Dining Rooms

- Focus Housing 's preference is for combined kitchen and dining rooms. If they are separate, the dining area should be located as close to the kitchen as possible. Combined living and dining rooms should be avoided.
- It is essential that there is adequate space for all members of the household to sit comfortably around a table for meals, while leaving enough space for residents to move around the room. The minimum space is based on the specified number of bed spaces in the home.

6.4 Bedrooms

6.4.1 Specific Requirements for Bedrooms

- Bedrooms should be designed to accept beds in more than one position.
- Single bedrooms should have room for a single bed, a bedside table, a chest of drawers and a free standing or built- in single wardrobe (900mm long by 600mm deep)
- Children's bedrooms should be designed to cater for play and study.
- A double bedroom should have room for two single beds, two bedside lockers, a table, a chest of drawers and a double wardrobe (1800mm long by 600mm deep) or, alternatively, two 900mm length sections of wardrobe space.
- Beds should not be pushed up against a wall and there should be enough space around them so that they can be made up easily.

6.5 Bathrooms

Bathrooms, en-suites and WCs:

- Slip resistant tile flooring throughout with an R11 rating at a minimum
- All bathrooms should have a bath, a basin and a WC, in that order. In small or adapted units, it may be appropriate to omit the bath and install a shower cubicle or a wet room. The layout of the bathroom must comply with Building Regulations Part M to provide a visitable WC.
- Baths should not be positioned directly in front of windows.
- A wall-mounted showerhead should be included over the main bath in all dwellings. Full, ceiling height tiling should be provided to the walls around the bath. Tiling to shower areas should be fixed to plastered masonry or other specifically designed and tanked substrate. In larger houses (four- bedrooms and above), consideration should be given to providing a separate shower cubicle. The selection of tiles should allow for future remediation. Neutral colours should be used.

- In areas of low water pressure, a thermostatically controlled power shower, rather than a mixer tap arrangement, may be provided above the bath. (This should be agreed on a scheme-by-scheme basis.)
- Showers over baths should be provided either by concealed shower mixer set with a fixed shower head or a shower head and hose arrangement connected to a tbar fixed to the wall with thermostatic controls.
- All bathrooms should have a 600 x 400mm mirror above the wash hand basin, a shaver socket and a light above the mirror. In addition, a conveniently located shelf, toilet roll holder and towel rail should be provided.
- Where space permits, there should be a 400mm wide platform at the end of the bath. This can be used as a seat to transfer into the bath.
- Where shower arrangements are provided over the bath, a glass shower screen should be provided, with a hinged wall fixing and an integral seal that fits to the edge of the bath. This screen should extend a minimum 900mm from the shower bath end and be fitted with chrome type fixings.
- Every bathroom should have adequate space for standing at the wash basin or drying after a bath or shower.
- En-suite bathrooms should be avoided in smaller dwellings. Focus Housing 's preference is for en-suites in four and five bedroom houses only.
- Sanitary fittings to the bathroom, en-suite and guest toilet are to comprise of a floor mounted toilet pan and cistern, wash hand basin & a bath with screen door to the bathroom and a quadrant shower to the en-suite with door.
- Sanitaryware shall include w.c., single basin, bath and shower trays where appropriate, colour white all with selected type tapware and manual shower valve where appropriate. All wastes and drainage to be included.
- All hot water points to have thermostatic mixing valve fitted and water feed pipes be fitted with screw isolation valve points.
- Provide Bath with permanently fixed shower head to the wall and an additional Flexible Shower Hose connected to a "T Piece" mixing valve.
- Toughened Glazed Shower Screen with Chrome Edge and Plug and Chain. (Curtain and rail is not acceptable.)
- Shower Trays - Tiled from top of tray to Ceiling Level on 3 sides with Centre/ Corner Entry.
- Glazed Shower Door - curtain and rail is not acceptable.
- Accessories- Toilet Roll Holder, Towel Rail.
- Thumb Turn to Inside of Doors.



- Where possible, bathrooms and WCs should have natural light and ventilation. All bathrooms (whether they are internal or not) should be fitted with an electrically operated, humidistatcontrolled extractor fan, with separate isolation. The bathroom extractor system should be part of an overall extractor ventilation system and should comply with the most recent version of the Technical Guidance Document F, Irish Building Regulations.

Requirements for sanitary appliances:

- Close-couple WC pan.
- Chrome plated steel WC handles.
- Chrome plated steel waste outlets.
- Chrome plated taps.

6.5.1 Mechanical Extract Ventilation

To comply with the Building Regulations.

- Ventilation: The units are to be fitted with a Demand Control Ventilation system with wall fresh air supply vents and wet air extraction.
- All ducts in the attic are to be insulated with proprietary foil backed insulation and taped with proprietary foil tape.

Note: Duct tape is not to be used on any part of the construction as it is not a durable material

6.6 Floor Finishes

Floor Finishes in all rooms from Kitchens, Bathrooms and En-suites should be provided with slip resistant floor tiles with an R11 rating at a minimum. All other areas should be finished in order to allow the fitment of finished flooring.

All common areas, staircases and corridors of apartment / multi-unit buildings to be fitted with nonslip vinyl flooring with a minimum rating of R10.

7.0 Entry to Multi-Unit Apartment Buildings

The entrance to an apartment building should be clearly identifiable. It should be well lit, accessible, intuitive, and easy to use.

7.1 Power-operated Doors

- Entry to multi-unit developments should be designed to provide separate disabled access doors adjacent to the main entrance door. This shall allow an automated access door to be installed specifically for disabled access and will prevent incorrect or overuse of the automated system.
- The push-pad for power-operated doors should be in brushed stainless steel.

7.2 Building Signage

- Signage should be clear, legible and easy to use. It should be positioned to ensure accessibility, consistency and visibility. The font chosen should be simple, and large enough to be clear. It should contrast strongly with the background.
 - The design of signage and graphics should be coherent with the overall aesthetic of the building.
 - Information should be concise and in familiar language, with conventional numbering and symbols. The use of abbreviations should be avoided.
- 
- A floor plan with clear graphics, to help people orientate themselves should be provided for each site. Signage should not obstruct the movement of any users. All apartments should have an evacuation plan identifying, in the event of an emergency, the direction of escape and a safe assembly location away from the development. This should be clearly legible in A4 format, framed behind an acrylic panel and robustly wall mounted.
 - In multi-unit developments, signage is required on every floor. It should be adjacent to vertical circulation cores, i.e. lifts and staircases and clearly indicate the different levels and apartment numbers.
 - In designing and constructing Focus Housing, you should adhere to the guidelines in *TGD Part M Section 1.6: Aids to Communication*. Other resources include the *Universal Design Guidelines for Homes in Ireland*, published by the Centre for Excellence in Universal Design for the National Disability Authority and the National Disability Authority's *Building for Everyone* series.

7.3 Communal Letterboxes

The entrance area should contain secure, accessible and easily located letter boxes.

7.4 Janitors Closet

A dedicated lockable store for cleaning materials must be provided. The store should be fitted with a sink.

8.0 Safety in the Home

- Windows should be easy to open and clean. Easy clean hinges should be provided.
- Windows should be fitted with restrictors, in accordance with *Technical Guidance Document B – Fire Safety 2006*
- Attention should always be given to the height and design of windows, sills and balustrades, to minimise the risk of children falling out. Additional safety precautions will be necessary as the height above ground increases.
- Balcony and landing guarding should be considered in detail, to ensure absolute *prima facie* compliance with the Irish Building Regulations. Focus Housing will need to be fully assured that climb ability and line loading have been assessed for full compliance with these regulations.
- A lockable wall cupboard should be provided in the kitchen for securely storing harmful substances, medicines etc.
- Special attention should be given to the natural and artificial lighting of circulation areas. Two-way switches should be provided, and lighting points should be positioned so that bulbs can easily be replaced.
- The choice of materials can affect adaptability, usability and health. For example, shiny reflective surfaces can cause discomfort and disorientation and should be avoided.
- A key safety issue, when providing housing for Focus Housing, is the slip resistance of floor finishes. This is particularly important in wet areas such as bathrooms, kitchens, laundry rooms and bin stores. The slip resistance characteristics of the flooring should be maintained, whether surfaces are wet or dry or when spillages occur.
- Visually contrasting materials can aid legibility.
- Fire Evacuation Plans should be framed A4 format, secured to the exit door and covered with polycarbonate screen. Evacuation plans should include all information required in Part B of the Building Regulations. Note: Required in apartments only.
- Wall mounted fire blankets should be provided in the kitchen in both apartments and houses.

9.0 Adaptability

This section looks at how buildings can be adapted to changing circumstances.

In exploring what makes residential buildings valued, not just over years but over generations, it has been suggested that the common criteria are space and adaptability. Internal space adaptability encourages continued use and investment.

As far as possible, the design of houses and apartments should provide for flexibility in use, accessibility and adaptability. The aim should be to ensure that homes can meet the changing needs

of our residents over their lifetimes, including any needs associated with moderate mobility difficulties and normal age-related frailties.

Older people or people with moderate disabilities who would like to remain independent in their own home should be able to do so without the need for costly and disruptive remodelling of the dwelling.

The design and construction process should be informed by the *Universal Design Guidelines for Homes in Ireland*, published by the Centre for Excellence in Universal Design for the National Disability Authority <http://universaldesign.ie> and the National Disability Authority's *Building for Everyone* series, which should be used as reference documents.

9.1 Design flexibility can be achieved by:

- Providing 'soft spots' within timber or metal stud walls, so that a section of wall is framed to allow for easy alteration to link rooms. This means that non-load bearing partitions should be stud walls, not masonry. Where 'soft spots' are required for load bearing walls, blockwork with lintels can be used for ease of removal. This applies particularly between key rooms that, at some stage in the future, could provide a benefit from being linked: such as living / dining / kitchen areas; a downstairs toilet and utility room (to create a larger downstairs bathroom); or a main bedroom and bathroom. 'Soft spots' should be indicated on plans at handover stage so that they be identified easily.
- Making the downstairs visitable WC space large enough to accommodate a level-access shower.
- Identifying, at design stage, a space or room that could readily accommodate a bed.
- Locating services such as electrical sockets and switches, plumbing and drainage, to ensure that they create no barrier to simple adaptation in the future.
- Constructing stud walls, particularly in bathrooms, with 'hard-spots' strong enough to take fittings and rails. This means that the household will have optimal flexibility to customise layouts to suit their specific requirements over time.
- Providing a hoist from the bedroom to the bathroom. In some cases, a full height sliding door may be required where a track-mounted hoist is required to go from bedroom to bathroom.
- Designing the stairs so that a stairlift can be incorporated in the future.
- Identifying and creating a pre-trimmed opening for a through-floor platform lift at design stage.
- Allowing for wheelchair access by leaving sufficient space in doorways and corridors
- Catering, at design stage, for future extensions to the home, to avoid extensive internal alterations.
- Ensuring garden sizes can accommodate future extensions, preferably within Exempted Development criteria.

10.0 Universal Design and Lifetime Homes

All new Focus Housing homes for older people will adopt Universal Design standards and will seek to surpass the minimum standards of Building Regulations Part M requirements.

The definition of Universal Design (UD) is introduced in the Disability Act 2005 as:

1. *The design and composition of an environment so that it may be accessed, understood and used:*
 - i. To the greatest possible extent
 - ii. In the most independent and natural manner possible
 - iii. In the widest possible range of situations
 - iv. Without the need for adaptation, modification, assistive devices or specialised solutions, by any persons of any age or size or having any physical, sensory, mental health or intellectual ability or disability, and
2. Means, in relation to electronic systems, any electronics-based process of creating products, services or systems so that they may be used by any person.

In addition, we will seek to implement the practices and principles of Lifetime Homes, where new homes will be adaptable to the changing needs of older people. It is our aim that home design will not be a key factor in residents having to decide to move to institutional settings if their care and support needs change.

We estimate that approximately 10% of our older residents use mobility aids, with around 20% having sensory impairments.

10.1 Dwelling Design

All mainstream and specialist age-friendly housing should be level access, in self-contained units, with no internal steps or stairs. Ground floor apartments with own door access or communal access are also acceptable.

Open plan homes may feel more generous and spacious. They may offer some older people more flexibility and choice. Separate living and kitchen areas may be less important to older single people and couples than families. Activities in these areas are less likely to interfere with each other for a single person or a couple than a family.

Older people will need good internal storage for treasured possessions, acquired over a lifetime. Storage should be designed to minimise reaching up and to avoid the use of a step ladder.

10.2 Balconies / Patios

Partially recessed balconies and patio areas provide a practical, easily maintained substitute for a garden. They also offer protection from cross winds. They provide outdoor space, which is fully accessible from the home and is very valuable for people who leave the home less frequently. Balconies and patios should be sufficiently large, (at least 1.8m deep).

The positioning of the door and the direction of the door opening should allow for a table and chairs, as well as plants. Level access should be provided and there should be no step, up or down, on to the balcony. It is preferable that external spaces are accessed from the living area or shared with an adjacent bedroom. Access solely from a bedroom is not acceptable.

If glass balconies are proposed, they should be frosted or etched to offer privacy and maintain consistency in visual appearance. If enclosed 'winter garden' balconies are proposed, designers should be mindful of creating an 'inner room' situation with respect to fire safety.

10.3 Access and Circulation

Circulation areas should avoid long internal corridors. They are often artificially lit with front doors on either side and used only for access. They are expensive to provide and to maintain. Corridors should be short, varied and well lit. The placement, size and detail of windows should allow plenty of natural light into circulation areas. Consideration should be given to wide semi-enclosed access decks, which can function as communal spaces, as well as providing access.

In specialist schemes, free swinging door closers should be fitted to the front door of dwellings and other doors regularly used by residents. These should be linked to the fire system where closures are required. Fire compartment doors should be held open by magnetic pads or 'hold-open' type door closures linked to the fire system. This will avoid the hazard and difficulty associated with heavy overhead door closures for frail and older people. Specific handrails or dado rail shelves are required to one side of circulation areas. Dado shelves should be wide enough for older people to lean on if they need support.

Design features that will assist orientation, recognition and familiarity should be incorporated. Circulation areas require a residential, rather than institutional feel with careful attention to floor and wall finishes.

Lift access should be provided to all units above ground floor level. Lifts should be able to accommodate a stretcher. Lift buttons need to be operable from a wheelchair. It is preferable that both a lift and stairs to all floors are easily reached from the main entrance.

Circulation areas should be heated in specialist schemes.

11.0 Age-Friendly Housing

The supply of appropriate housing for older persons is becoming a growing challenge, as demographic reports confirm that more people are living longer and with an expectation of remaining within their community. This requires that a supply of appropriately designed housing is available for people who require suitable accommodation in their later years.

While initial responses sought to prioritise the provision of larger dwellings, with universal design to future proof against decreasing mobility, Age Friendly Ireland (AFI) has subsequently identified the significant importance of appropriate location, most especially proximity to the widest range of facilities, which facilitates shopping, visiting family and socialising.

AFI have developed a mapping tool to evaluate the suitability of any site for age-friendly housing, and any application to the Department for funding of social housing for older people will have to demonstrate the suitability of the proposed location. The provision of such well-located age-friendly housing in town centres complements and is entirely consistent with policies on regenerating our town centres and with the NPF.

Development Principle	Description
Location	The site should be in walkable proximity to public and other essential services, recreation, and amenities, so that the tenants can easily access them / use them more readily.
Place-Making	The design must be able to support the creation of an attractive place to live, sensitive to the local context and urban form of the area.
Re-use of Land	A brownfield site is more likely to be used, thus promoting the development of sustainable communities.
Social and Environmental Appropriateness	The development needs to include a mix of dwelling types and sizes, based on the demographic profile of the area.

Source: Age Friendly Ireland (2014)
Report on Housing for Older People - Future Perspectives

11.1 Apartments

Design Standards for New Apartments (DSfNA) sets out the requirement that in developments with more than 9 apartments, a certain proportion (at least 50%) need to be provided with 10% additional floor area. Accordingly, the opportunity can be taken within the mandatory increased target floor areas for apartments to provide internal layouts suitable for households in which age-related significantly decreased mobility may develop. The provision of such layouts is consistent with the aims of universal design to meet, in an economic manner, the principal considerations of equitable access and use.

In small towns, villages or other locations where apartments might not be considered appropriate, age-friendly accommodation can be provided on the ground floor of duplex-type arrangements, with general housing on one or two floors above. This has the added advantage of providing for intergenerational housing, resulting in a balance between households of differing ages.

11.2 Dwellings

The quality of the home environment becomes more important with age. Older people spend more time at home, as a result space, light, views and ventilation matter more.

All mainstream and specialist age-friendly housing should be level access, in self-contained units, with no internal steps or stairs. By providing lift access and with all accommodation on a single floor, apartments are particularly suitable to best accommodate persons with age-related decreased mobility, and in particular, can meet the first principle of universal design by providing equitable level access to all rooms. Ground floor apartments with own door access or communal access are also acceptable.

Open plan homes may feel more generous and spacious. They may offer some older people more flexibility and choice. Separate living and kitchen areas may be less important to older single people and couples than families. Activities in these areas are less likely to interfere with each other for a single person or a couple than a family.

Older people will need good internal storage for treasured possessions, acquired over a lifetime. Storage should be designed to minimise reaching up and to avoid the use of a step ladder.

11.2.1 Shower/Wet Rooms

Shower/Wet Rooms can be some of the most difficult rooms for both persons with age-related decreased mobility and people with disabilities. Level access shower rooms should be provided to all mainstream and specialist older persons' housing.

All shower/wet rooms should include the following:

- Level access shower rooms should be provided to all mainstream and specialist older persons' housing.
- At least one door into the room should open outward. A flush floor shower area should be provided to allow wheelchair access.
- Mixer taps with lever should be provided to the basin.
- Floor finishes should be slip resistant. The gradient of the floor must be considered to ensure water used during showering cannot reach door thresholds or wall or door finishes. It is critical that any runoff is considered during the design stage.
- A flush floor shower area should be provided to allow wheelchair access.

11.2.2 Access & Circulation

Circulation areas should avoid long internal corridors. They are often artificially lit with their only use being access. Corridors should be short and well lit. The placement, size and detail of windows should allow plenty of natural light into circulation areas.

In specialist schemes, free swinging door closers should be fitted to the front door of dwellings and other doors regularly used by residents. These should be linked to the fire system where closures are required. Fire compartment doors should be held open by magnetic pads linked to the fire system. This will avoid the hazard and difficulty associated with heavy overhead door closures for

frail and older people. Specific handrails or dado rail shelves are required to one side of circulation areas. Dado shelves should be wide enough for older people to lean on if they need support.

Design features that will assist orientation, recognition and familiarity should be incorporated. Circulation areas require a residential, rather than institutional feel with careful attention to floor and wall finishes.

Lift access should be provided to all units above ground floor level and should be able to accommodate a stretcher. Lift buttons need to be at an operable height from a wheelchair. It is preferable that both a lift and stairs to all floors are easily reached from the main entrance.

Circulation areas should be heated in specialist schemes.

12.0 Fire Safety

A Fire Detection and Alarm is to be provided in accordance with Building Regulations Fire Safety and TGD B 2017 and I.S. 3218:2013.

12.1 Single Houses:

- There is a suitably located smoke alarm in the ground floor hallway (or room in open plan design) and each upper floor landing of the stairway.
- Smoke alarms are either mains-wired with battery back-up or 10-year self-contained battery operated.
- Each smoke alarm must carry the CE mark and comply with I.S. EN 14604:2005 Smoke Alarm Devices and should be installed as per the manufacturer's instructions.
- Each smoke alarm should be in working order and be within its 'end of life' indicator.
- There is a fire blanket in the house located in the kitchen. The fire blanket must be securely wall mounted in a prominent location and provided with clear instructions on its use. The fire blanket should be a light duty blanket, complying with IS 415:1988. Preferably, the fire blanket should be 1.2m by 1.8m in size.

12.2 Multi-Unit Buildings:

- Each self-contained house in a multi-unit building shall contain a suitable fire detection and alarm system and an emergency evacuation plan.
- The emergency evacuation plan should be a notice containing the following information, and should be displayed in each house:
 - a) The action to be taken in the event of fire, discovering a fire or hearing the fire alarm.
 - b) The procedure for calling the fire brigade.
 - c) A floor plan of the building providing the following information:

- The location of all relevant escape routes from the building.
 - The location of fire alarm call points (break glass units) and fire alarm control panel.
 - The location of firefighting equipment in the building.
- In each multi-unit building, there is a suitable common fire detection and alarm system in the building. The common fire detection and alarm system in the building should consist of a control panel with suitably located smoke detectors and sounders at each level of the stairway and in each circulation space and a heat detector and sounder inside each unit within the building, located in the entrance hallway, where provided.
 - There is a manual fire alarm call point (break glass unit) at each floor level and at each final exit from the building.
 - There must be a suitable common fire detection and alarm system in the lift. The system should be placed outside the machine room and in shafts to ensure the detector is always accessible for testing and maintenance without the need to stop the elevator for access to the restricted area.
 - The fire detection and alarm system should meet the requirements of Technical Guidance Document B - Fire Safety.
 - The common areas in a multi-unit building are provided with an emergency lighting system installed and maintained in accordance with I.S. 3217:2013. Emergency lighting should be provided throughout all common escape routes, i.e. corridors, lobbies and stairways.
 - There is a fire blanket located in the kitchen in each house in a multi-unit building. The fire blanket must be securely wall mounted in a prominent location and provided with clear instructions on its use. The fire blanket should be a light duty blanket, complying with IS 415:1988. Preferably, the fire blanket should be 1.2m by 1.8m in size.

* Certain wireless or radio-controlled fire alarm systems may be found to comply with the Regulations where they comply with I.S. 3218:2013 Fire Detection and Fire Alarm Systems for Buildings - System Design, Installation, Servicing and Maintenance. The landlord may be required to provide such evidence as is necessary to establish that any fire alarm system is in compliance with I.S. 3218:2013

13.0 Security

Security is of upmost concern for older persons, both in specialist schemes and mainstream housing. The scheme design should recognise the need for security against unwanted intruders. It should create a sense of safety, through visual supervision of open spaces, avoiding alleyways, recesses and other areas of security risk. There should be ready access in the event of an emergency.

In specialist schemes, the main entrance should be visible from the public realm.

All entrances should have an audio control link to the manager's offices with a link to each residential dwelling. A video link is desirable. Consideration should be given to incorporating the audio link into the warden call system. Residents should be able to use the system to allow emergency call centre staff to listen in to callers, or speak to them, if required. Public, semi-private and private space should be clearly defined. Secure landscaped or courtyard areas which cannot be accessed from the public realm should be provided. The provision of CCTV should be provided in all instances and meet the minimum standards. Access to the building in specialist apartment schemes should be via fob. Spyholes and door chains should be fitted to all residential unit entrance doors.

14.0 External and Common Area Lighting

Internal and external areas should all be well lit. Lighting provides a safe environment at night for all common spaces. High levels of light, appropriate fitting and good controls are key factors to consider when designing the lighting. Lighting design should be domestic and offer alternative settings. Directional and task lighting is required in any activity spaces.

15.0 Parking

In specialist age-friendly housing, parking should be adequate to meet the needs of residents, visitors and any staff. A recommended minimum car parking provision should be one space for every two units.

Shared external surfaces which can be used flexibly should be considered in specialist schemes. Parking requirements may vary, with some older people potentially opting to give up their cars. Shared areas can be used for other activities if they are not required for parking.

Consideration needs to be given to the operational needs of specialist housing, including drop-off areas and parking for minibuses.

16.0 External Storage and Charging Rooms

Adequate secure storage should be provided outside the home in mainstream and specialist age friendly housing. Charging facilities are to include room and charging points for mobility scooters, electric wheelchairs, bicycles and mobility aids.

17.0 External Storage in the Home

The design and layout of refuse disposal for all homes should be accessible and should avoid causing a nuisance in terms of unsightly appearance, noise or odour. Refuse arrangements will depend on storage capacity, along with the collection methods and frequency of collections.

For individual houses, a storage location for bins should be provided in an accessible location, convenient to the house and collection point.

Specific attention should be given to the design of mid-terrace units, so that the required bin storage can be provided appropriately to the front of the dwelling, avoiding the need for rear alleyways.

In the case of mid-terrace units, the location of multi-bin storage should not impede or impinge on access routes and should be appropriately screened and discrete.

For apartment blocks and housing complexes, the collection point for communal waste should be conveniently located. A refuse storage location close to, but not adjacent, to shared entrances is usually best for bagged waste, carried down and deposited by residents.

All bin storage facilities should have a permanent and weather tight roof and metal door with louvered panels. The structure should be robust and maintenance free. An external tap and gulley trap should be provided within the confines of the bin store to allow washing of the immediate area within the store.

18.0 Boundary Treatments

Boundaries within a development area add an important element of spatial definition and integration. They provide strong links between buildings and the landscape, help define space, provide an interface between the public and private domain and provide security.

- Walls should be of a scale, colour and siting that reflects and enriches the built form. Some locations may require copings to prevent them being used as a seating or congregation area.
- There should be a balance of trellis and wall to give visual interest and aid permeability.
- Solid timber panels should be avoided in areas exposed to the wind.
- Existing stone walls should be retained and extended.
- Railings should be used to increase safety and security, without the creation of 'cages'.
- Hedgerows should be maintained and extended to aid the integration.
- Quick growing members of the hawthorn / ivy families, planted against a solid boundary, should be considered where there is likely to be a risk of climbing or scaling of the boundary wall.
- Planting areas on top of boundary walls, to enable plants to trail down and provide an aesthetically pleasing appearance as the planting establishes over time, should be considered.

- All boundary walls to dwellings viewed from public spaces should be visually pleasing and should generally be rendered blockwork, faced brickwork or natural stone.
- Front garden spaces should be divided by walls of 900mm in height. The materials used will vary from scheme to scheme, but they must be in keeping with the local area and requirements of the Planning Authority. Acceptable solutions include: blockwork rendered with suitable capping stone; stone walls; faced brickwork; block or brick with railings; galvanised steel railings etc. Timber fencing should be avoided.
- Party walls to the rear boundary of dwellings should be constructed of plain faced blockwork and should be a minimum of 1.8m above the highest adjoining ground level. Party boundary walls to the side of dwellings and rear gardens should be 1.8m high. Suitable materials for this dividing wall would include brick, block, post and panel or post and rail. Any posts should be made of concrete. Timber panels should be avoided unless they are placed on concrete 'gravel' boards to avoid direct contact between the panel and the ground.
- Side gates should be provided where necessary to facilitate secure rear access to dwellings. There is no requirement to fit vehicle or pedestrian gates to the front boundary walls.
- Boundary wall finishes should be as per the grant of planning permission.

18.1 Metal Railings

- Front garden fencing should be galvanised, black powder coated bow top railings, with ball finial posts.
- Railings should stand 1.2m high above ground level.
- Frames should be constructed from 40 x 8mm flat bar, with a 10mm round bar and spacing should not exceed 99mm.
- Railings should be affixed to 75mm square hollow section posts. The posts should be bedded in concrete or plate fixed to provide a robust fixing.

18.2 Driveway / Pedestrian Entrance Gates

- Front entrance gates should stand 1.2m high above ground level. They should be approximately 3.0m wide and include a central opening for driveways, with 1.2m wide pedestrian access.
- Gates should have lockable slip levers and drop bolts. They should have a rounded arris along the length of the slam plate, to prevent fingers being trapped.
- Gates should swing open in one direction only and must not open on to the public footpath

18.3 Side Entrance Gates

- Side entrance gates should be 1.8m high.
- They should include galvanised, and powder coated steel framing, gate stops, three stainless steel hinges, one stainless steel pad bolt and one lockable latch.

- All gates should be infilled with pressure treated timber, with all members having a minimum thickness of 20mm. The gates should be colour matched with the overall scheme aesthetic.
- Slam plates must be provided to prevent the gates opening outwards and 25mm anti-finger trap gaps should be provided to the hinged and leading edge of the gate.

18.4 Timber Panel and Concrete Post Fencing

- Hit and Miss treated timber panel fencing should be provided, with full depth end bearing into the slotted concrete posts. They should be constructed from 150mm x 22mm vertical boards.
- There should be anti-rattle shims between the panels and the slotted posts to ensure there is no wind rattle. The shims must be secured with stainless steel screws.
- Bolt fixings and screw fixings should be stainless steel. Sherardised or galvanised coatings are not acceptable.

18.5 Paving

- Block paving should be to BS EN 1338, using the dimensions and sub-base specified by the structural engineer for trafficked and non-trafficked areas.
- A geotextile membrane should be applied, as required, to suppress weeds.
- Permeable paving should meet Sustainable Urban Drainage Systems (SUDS) requirements.
- Petrol interceptors should be coordinated with any paving type and requirement.

19.0 Internal Areas

Focus Housing 's aesthetic and functional preferences are for simplicity, clarity, usability and durability. These principles should guide the choice of components, fixtures, fittings and finishes and give a coherence to how our homes look, feel and function.

Common Areas should have:

- Non-slip Tiled entrance lobbies, with a recessed mat well at all entrance doors. See
- Tiles or Marmoleum flooring in common areas, staircases and corridors. No carpet may be fitted.
- Doors which can be accessed with a key or fob, rather than a code access.
- A sufficient number of electrical sockets per floor for cleaning purposes. These should be security sockets if they are located in a shared landing.
- A dedicated lockable store for cleaning materials. This store should be fitted with a tap and sink suitable for washing cleaning equipment.
- A painted finish on walls in common area halls, stairs and corridors. The paint should be vinyl silk emulsion or a similar easy clean emulsion paint. Lift areas to the ground floor lobby and stairs to the first floor should be treated with a smooth finish anti-graffiti paint.
- Lighting to stairwells and hallways, controlled via day / night sensors (preferably movement sensors)
- Comprehensive CCTV systems, with constant record, to allow review and to manage antisocial behaviour. CCTV should cover; all entrance and exits, all lift and staircase lobbies, bicycles stores and racks, as well as bin stores.

Dwelling Interiors should have:

- Fully painted units with a minimum of three coats - one primer, and two finishing coats.
- A vinyl emulsion paint finish on all walls and ceilings. Ceilings should be painted white. Focus Housing 's preference is for walls to be painted in paler, neutral colours.
- Box ply, solid wood or veneer on all internal doors. These should be painted, stained or varnished at Focus Housing 's discretion. Hardboard doors are not acceptable.
- Aluminium clad timber windows. Window opening sections and restrictors should comply with the most recent version of the Irish Building Regulations Technical Guidance Documents.
- Timber window boards, painted in white high gloss.
- Standard pendant light fittings.
- Heat pumps as the preferred heat source for central heating. District heating systems should be considered for apartment blocks.
- Telephone landline, TV and broadband outlets to living and bedrooms.

- Access control systems, including video intercom units in the entrance hallways of apartments.

Living Rooms and Dining Rooms should have:

- Phone, cable TV and broadband links.
- A sufficient number of electrical sockets to accommodate the size and flexible use of the living and dining space.

Bedrooms should have:

- Cable TV and broadband links.
- A sufficient number of electrical sockets to accommodate the size and flexible use of each room.

19.1 Joinery

- All timber skirting, architraves, window boards, door frames, or other timber elements to be painted in white high gloss.

19.2 Domestic Stairs.

- These should be of closed string construction, with simple square section spindles and square newel posts.
- 'Winders' should not be used.
- All spindle retaining slips must be glued and securely fixed to prevent spindle rattle.
- All newel posts must be securely fixed and capable of withstanding the force of a children's stair gate without distorting.

19.3 Internal Ironmongery

Ironmongery throughout should be robust brushed stainless steel, which is easily maintained. Replacement components should be readily available. It is essential that all lever and escutcheon retaining grub screws are securely fitted.

19.4 Rooflights

Where rooflights are part of the design, the preference is for a white painted finish internally to frames and linings. The preference is always to provide the roof light 'in-plane' and avoid deep linings.

20.0 Roofs

20.1 Roof Spaces

Roof spaces should be provided with proprietary draught sealed access doors or hatches, with two swan neck securing bolts. The hatches should not be positioned directly over stairs or in other hazardous locations. Sufficient gangway boarding should be provided to enable any water tanks, etc. to be serviced safely. Note that attic steps are not required.

20.2 Flat Roofs

All flat roofs must be new construction and come with an insurance backed minimum 20-year warranty. The insurance backed minimum 20-year warranty certificate must be provided to FHA at handover for each roof/roofs.

21.0 Mechanical Works

21.1 Heating Space & Water

Focus Housing's preference for heating systems depends on the energy source available.

The options are:

- Heat Pump
- Natural gas.

Where natural gas is unavailable at the time of development, a provision for future gas connection should be considered. On specific individual schemes, Focus Housing may wish to utilise renewable sources of energy, such as biomass heating systems. Whole house central heating should be provided in most units by way of a single boiler and hot water radiators, although it should be considered whether it would be more cost effective to install individual room heaters in some smaller dwellings. Please note that underfloor heating or storage heaters are generally not acceptable.

Heat pumps (split systems) are the preferred option for central heating. Gas boilers should only be considered with prior approval from Focus Housing.

Where gas fired central heating is approved, Focus Housing prefers the use of non-pressurised central heating boilers. Condensing boilers should be used - preferably 4-port systems with stainless steel heat exchangers. Combi boilers should also be considered.

The SEAI HARP (Home-heating Appliance Register of Performance) database maintains a list of gas boilers, and their efficiency, currently available on the Irish market.

Hot water cylinders should be factory insulated units. Cold water storage tanks should be properly insulated with pre-formed sectional insulation sets or jackets, with a close-fitting lid. The use of a ceiling insulation quilt immediately below cold-water storage tanks must be avoided, to prevent freezing during periods of cold weather.

All pipework run above ground and visible within the dwelling should be copper. All pipes run below ground and in screeds should be jointless. Dual zone heating controls for the bedrooms and main living areas are preferred.

Separate zoned heating controls for the bedrooms, main living areas and hot water are essential. Heating controls must be easy to use for all our residents, regardless of their abilities. EPH timers or Climate, or a similar control system which is user friendly and offers remote access to the heating system should be considered.

Apartments should be designed to provide good quality, permanent and sustainable living accommodation. Design should not be predicated on the assumption that apartment living is a transient phase in the life of people who will eventually move to a house.

21.2 Mains water filtration

- Water quality must be tested to determine if a whole house lime filtration unit is required. If required, a Combi mate phosphorous crystal unit or similar approved system should be installed to serve the incoming mains to the property.

22.0 Electrical Works

22.1 Electrical outlet locations:

The following minimum electrical outlets should be provided in all dwellings:

- Living rooms: four doubles. (One adjacent to telephone point)
- Dining rooms: two doubles.
- Bedrooms: two doubles.
- Circulation areas: one double at each level.
- Kitchen:
 - Three doubles.
 - One single for fridge.
 - One single for washing machine.
 - One single for dishwasher.
 - One single for extractor hood. – Cooker point.
- All sockets for under counter appliances should be fitted with a fused spur above the worktop. Sockets should not be fitted to party walls. They should generally be fitted 600mm above floor level.
- All rooms should be fitted with suitable light fittings, double switched where appropriate. Light fittings generally should be pendant type, complete with low energy bulbs. Bathrooms should be fitted with appropriate sealed globes.

22.2 Access Control and Intercom Systems

- All developments where required shall have a key/fob-entry system, with an over-ride facility for emergency access using a pin code. All intercom systems shall have a video link system. A total of 3 fobs per unit shall be provided (2 for each resident and 1 for Focus Housing).
- The intercom should be clearly located on the handle side of the door, in a contrasting tone or colour to the background, and at a height appropriate for all users. The intercom buttons should be large enough and easy to use for people with a range of dexterity levels. The intercom buttons should be lit, either from within or externally.
- All access should be logged by the Building Management System to facilitate ease of CCTV footage review by providing a time of entry associated with any event.
- Social monitored alarms should be provided in all homes and common areas in specialist older persons' housing schemes. The system should allow for two-way speech between the resident

and a remote 24-hour contact.
- A resident should be able to activate an alarm call by pulling a cord at the hub, or by pressing a wearable radio trigger pendant. An additional pull cord should be located in the bathroom. Residents should be able to make quick and easy contact with the 24- hour emergency response centre, where the resident can speak to the operator, while the operator organises assistance.
- This system can be used as a telecare hub for a range of telecare devices in the home environment. Telecare safety sensors can continually, automatically and remotely monitor residents over time to manage the risks associated with living alone.

23.0 Sustainability

- Sustainability in construction is of significant importance to Focus Housing and to meeting our 'Green Building' aims. By being sustainable we are creating healthier and more energy efficient homes. It is our aim to exceed minimum standards and require A2 Building Energy ratings.
- Sustainability measures should include energy efficiency throughout the construction, occupancy, and maintenance stages in a building life.
- Focus Housing requires that sustainable energy production is considered for all new developments. It is essential that the elements and systems specified to produce sustainable energy are not detrimental to the environment in their manufacture, supply, performance, deconstruction, and disposal. It is expected that product selection will consider embodied energies, product life cycle and recyclability and that any negative environmental implications identified will be reduced by intelligent product selection.

We reinforce that all future new housing developments will meet a minimum Certified level on the Green Building Councils "Home Performance Index" which is an independently audited certification system. This system assesses the performance of a home under a number of categories and ensures Focus Housing is supplied with sustainable quality housing. The system is divided into three main categories based on the Environmental, Social and Economic pillars of sustainability. Two additional categories, Quality Assurance and Sustainable Location, reflect the planning and procurement processes.

The Environment category contains indicators that measure the ecological footprint of the development, including those for global warming potential, loss of biodiversity, impact on ecological systems, water usage, quantity of land consumed, and embodied impact of materials used in construction.

The Health and Wellbeing category contains indicators that relate directly to the user's everyday experience of the dwelling and how its performance affects their overall feeling of wellbeing. The Economic category contains indicators that relate to occupant running costs and the long-term value stability of the dwelling, such as its capacity to adapt to changing family circumstances.

The Quality Assurance category contains indicators to assess the process of design and construction of the dwelling, and a testing regime to ensure that the design intention is achieved. This is particularly important, as there is considerable evidence in Ireland and across Europe of a gap between predicted and actual performance.

The Sustainable Location category contains indicators that measure how well the dwelling relates to existing transport infrastructure and the accessibility of amenities. It also assesses the key risks on the site, such as flooding.

This is then calculated and points are awarded for each indicator and sub-indicator. For most indicators there are several levels of achievement, which means that points are scored when there is an improvement over the baseline, normally set at the minimum requirement of Irish Building

Regulations where there is a relevant standard. Following the recommendations of the OpenHouse and Super Building projects, a point system has been utilised which allows greater interpolation between credits measuring from 1 to 100. A weighting system of 1 to 4 is then applied to the points.

Innovation points may be awarded where a developer can demonstrate real innovation in areas not addressed by the scheme. These must be agreed in advance. They may also be awarded for exemplary performance in key indicators such as water use and fabric efficiency.

24.0 Heat Pumps

- Heating system to comply with relevant Building Regulations. (Currently developers are using heat pumps to achieve compliance with Part L and the heating system type will need to be confirmed by your Architect carry out a DEAP assessment on the design).
- This shall be a pumped low pressure heating system using a circuit of sized radiators. Radiators (standard range) shall be provided in all habitable rooms, wet rooms and hallways. The system will be installed to current regulations and standards. Where a developer is specifying Gas Boilers, they shall be Worcester Bosch Greenstar 18i System A Rated condensing gas boilers. 3 Zone space and hot water heating system. EPH Heating Controls including programmer; TRVS to all radiators; motorised valves; and room thermostats at ground and first floor level. Washable filters to be fitted to the heating system and a cleanable corrosion inhibitor. A booster pump is to be used if local area water pressure is an issue.
- A finalised Part L 2011 as amended 2017 specification is to be issued to Focus Housing along with DEAP file and the provisional BER for the development confirming the heating system specification.

Wall mounted unit:

- It should be installed on cantilever arms, with a drip tray and condensate pipe fitted. It should be connected to a storm drain.

Free standing unit:

- It should be installed on two rubber mounts / flexi feet with a drip tray condensate pipe fitted to a storm drain. Drainage can also be achieved by means of an eco-drain or drain gully underneath the unit connected to the storm drain.
- A system designed, powder coated metal cage must be installed to protect the unit. The cage should be secured to the ground as per the manufacturer's instructions.

25.0 Photovoltaic Array

All Renewable Energy Systems are to comply with Building Regulations.

The preferred solution to sustainable energy production is via photovoltaic (PV) panel arrays. However, Focus Housing is open to considering advances in technology that are proven to be robust and effective, with low embodied energies.

Each property should be provided with a PV array and micro inverter to supplement base AC energy usage or alternatively to provide hot water via a hot water diversion (DHW) storage system.

PV panels should be roof mounted on an adjustable and weather resistant tilt mount bracket, supplied as part of a holistic PV system. Panels should be orientated at +/-30 degrees of south. The system and components should meet the requirements of EN 61215 and 61730 and display CE markings.

The installer should provide an installation certificate, demonstrating that the system has been installed in compliance with the manufacturer's specifications and will include as-torqued figures for all anchors and mechanical fasteners.

PVs should feed directly into the main distribution board via a PV check meter, with a clear display to allow the resident to monitor the power generated.

The installation should be Certified as being compliant with Section 5.4.5 of Building Regulation TGD B - Fire Safety (2017) and ET101, 2008 Section 537.4 – Emergency Switching.

The installation should comply with ESB microgeneration where systems <6KW / 25Amps AC for single phase connections are installed. An NC6 form should be submitted for approval, prior to installation.

The PV install should be completed by a competent and fully insured and registered company, listed on the SEAI Renewable Installer Register. All electrical system connections and testing should be completed by a competent and registered (RECI) electrician.

Warranties should be activated in Focus Housing Association's name on the date of handover for the full warranty duration. The fully executed warranties should be included in the safety file.

Where PV arrays are being installed, Focus Housing should be advised if the installation is covered by planning permission, or the Exempted Development criteria identified under Class 2 (c) Schedule 2 of Planning and Development Regulations 2001 – 2019.

26.0 Landscaping

A well-designed landscape area is an important amenity in residential schemes. They enable us to create successful neighbourhoods and sustainable, good quality design. A well-designed planting scheme can help to personalise a home, create visual interest, give some control over privacy and views and define boundaries. Landscaping can serve to clearly define ownership and responsibility for maintenance.

All landscaped areas should include:

- A robust and sustainable design.
- The use of hard-wearing materials that are sympathetic to the environment.
- The use of low walls, raised planters and street furniture to clearly define routes adjacent to off-street parking, paths and fencing.
- Areas of hard landscaping that are appropriate to the scale of the development and take account of the permeability requirements outlined in Sustainable Urban Drainage Systems (SUDS)
- Ensure that the scheme design allows for the hard landscaped areas to be easily maintained. This should include a tap and garden hose at each landscape area to allow for irrigation of planting and green areas.
- Durable and well-located street furniture (benches, litter bins etc.).
- All planted areas should have a low maintenance regime. Ensure that a 12-month maintenance programme is in place during any defects period.
- Planting should be completed in the correct season. All plant species used should grow well locally.
- Maximise the use of the existing landscaping within the final landscape design.
- Plant mature and robust trees to avoid easy uprooting and growth failure.
- Aim for a planting design that will be vibrant and colourful throughout the seasons.
- Specify a variety of plants that grow at different rates to establish the site.
- Avoid using plants which produce high levels of pollen at the approaches to apartment buildings or houses, as these can cause distress to residents who suffer from allergies. Plants with poisonous fruit or flowers should also be avoided.
- Re-wild green areas where possible.
- If required, the designers should work with a specialist landscape designer for the best outcome.

27.0 Hand Over Requirements

- Notice of closing: Focus Housing requires advance notice of one month.
- A CCTV survey and JetVAC of all external drains must be completed at the end of the build and the CCTV footage provided to FHA.
- If there is a flat roof/roofs, an insurance backed minimum 20-year warranty certificate must be provided to FHA at handover for each roof/roofs.
- A Home Manual should be provided for each unit/house and should include the following:
 - An easy guide to using the home. Provide a single document User Guide, covering the full workings of the home in plain English. Do not use product manuals as these are generally not user friendly.
 - Supplier details for all components.
 - Managing agent contact details, if applicable.
 - Guarantees / warranties / makes / models and installer details for all electrical equipment.
 - A demonstration for Focus Housing staff.
- SEAI published BER certificates (Minimum A2 Rating).
- Assigned Certifier documentation pertaining to compliance with Planning Orders and National Building Regulations (BCAR)
- Appropriate commissioning certificates for both electrical and gas installations:
 - Gas: RGI Certificate
 - Electrical: ETCI or RECI Certificate.
- Keys should be provided for the following:
 - Two sets of internal door keys, one set to be left in the doors.
 - All other necessary keys clearly labelled, with three sets handed directly to Focus Housing.
 - All fobs required by residents clearly labelled, with three sets to be handed to Focus Housing. For age-friendly apartment schemes, a master key system may be required.



A Safety File which includes the following:

- Construction drawings and specifications used and produced throughout the construction process.
- The general design criteria.
- Details of the equipment and maintenance facilities within the structure, along with maintenance procedures and requirements for the structure.
- Manuals and certificates, produced by specialist contractors and suppliers which outline operating and maintenance procedures and schedules for plant and equipment, installed as part of the structure, typically, lifts, electrical and mechanical installations, window and balustrade cleaning.

Details of the location and nature of utilities and services, including emergency and fire-fighting systems.

- BER Certificates – A Home Manual.
- The final grant of planning permission.
- A Fire Safety Certificate (FSC), if applicable.
- A Disability Access Certificate (DAC), if applicable.
- BCAR documentation, if applicable.
- A Building Health & Safety Statement, if applicable.
- Utility Information including the following:
 - Meter numbers and readings.
 - Suppliers contact details.
 - Account name and number.
- Lift manufacturer's commissioning certificate and phone line details, if applicable
- The fire alarm system commissioning certificate and system details, if applicable.
- Heat Pump Commissioning Certification, if applicable.
- Arrangements for defects (for example, timeframes for completion of defects) and a dedicated, 24-hour, 7-day per week emergency contact number for the contractor.
- The Schedule of Warranties executed in Focus Housing's name from the date of the handover of the development which includes the extent of cover and the full duration of the warranty.
- Schedule of spare parts should be included.

29.0 Appendices

29.1 Appendix A

Kitchen Unit Specifications

Unit Storage Requirements

Dwelling Type	Kitchen Storage Volume
4-bedroom, 7-person	3.00m ³
3-bedroom, 6-person	2.75m ³
3-bedroom, 5-person	2.60m ³
3-bedroom, 4-person	2.45m ³
2-bedroom, 4-person	2.15m ³
2-bedroom, 3-person	2.0m ³
1-bedroom, 2-person	1.7m ³

- 18mm solid wood effect / cream super pan cabinets with soft closing hinges.
- Hexagonal adjustable legs.
- Kickers / plinth in matching super pan with matching cornice and pelmets.
- Brushed stainless steel D handles.
- Pull-out extractor fan (with a minimum extraction of 220m³/hr).
- Colour matched PVC edging.
- 40mm high pressure laminate countertops with aluminium / black worktop joiners and ends, where applicable. The alternative option is for 40mm Axiom by Formica, with a chipboard core, a moisture and heat resistant laminate surface and aluminium / black worktop joiners and ends (where applicable).
- Single over mount stainless steel sink with drainer and a lever mixer tap in polished chrome.
- Metabox drawer with cutlery tray.

Kitchen units:

- All carcasses and panel sheet material should be manufactured from high density, fine surface, moisture resisting 18mm MFC core board to BS 312 Type P3.
- Finished MFC board should comply with BS 7331.
- The structural performance should meet BS 6222 2009 Part 2 Grade H for heavy use.
- The surface performance should be to BS 6222 Part 3. The carcass should comply with BS 14749 European Safety Standard for kitchen storage units and worktops.
- All exposed edges should have a hard wearing 80g/sq m melamine finish, as standard (0.8mm ABS lipped).
- All carcasses except the sink base unit should be 19mm MFC with matching wall and base units.
- Base units should generally be 720mm high and 570mm deep, using box on legs construction.
- Timber cross rails are required to the rear of base units to allow for fixing.
- Corrosion resisting, pre-drilled corner gussets are required, to give added rigidity, so that they can be drilled for use as fixing points.
- Wall units should generally be positioned 450mm above the working top of the base units.
- Wall units should be run together without gaps.
- All units (apart from the drawer unit) should have an intermediate adjustable shelf.
- Carcasses should be designed to ensure that no on-site modifications are required when installing the sink top or hob.
- Carcasses should be 18mm white, melamine faced particle board, lipped on all four sides with 0.8mm ABS edging. Shelves should be adjustable for height and the inside depth of the unit should not be less than 3/4 the inside depth of the unit. They should be supported on nylon shelf, self-retaining bearers to four locations, or to six locations for double base and wall units, if applicable (centrally front and back, as well as both ends) to prevent deflection. No unsupported length should be more than 600mm.

Cooker Extractor:

- An integrated, wall-mounted cooker hood extractor unit (comprising a 220m³/hr (30L/sec) low decibel), three- speed controllable fan, with switchable light) should be supplied and installed above the cooker space. The door should activate the unit.
- A decentralised mechanical extract ventilation, which complies with TGD F Irish Building Regulations should be considered.
- If a 100mm pipe is being placed in the cavity wall, to allow for 100mm flexible round ducting to be connected to the pipe and the unit, the charcoal filter in the extractor fan should be removed and the 100mm flexible round ducting should be secured tightly with metal clips

and connected to both the extractor unit and the 100mm pipe. Flexible runs of 100mm should be kept to a minimum.

Doors

- Five-piece PVC doors, constructed of five individually PVC wrapped pieces of MDF and assembled like a solid wood door should be used to provide better rigidity and less exposed seals, to reduce the possibility of the PVC foil separating from the door.

The structural performance of doors in heavy use should be to BS 6222 2009 Part 2 Grade H.

- The surface performance should be to BS 6222 Part 3. No joint wrapping is permitted. Doors should be Formica bonded onto MDF, with a finished thickness of 19-20mm, edged with 2.0mm, securely fixed ABS and factory finished.
- Doors and drawers should be accurately aligned and not binding. Allow for a matching panel beside doors if there is a variation in unit width. Integrated doors are not required.

Drawers

- Drawer units should have three epoxy coated, Blum metal box drawers, with P3 15mm moisture resistant bottoms. Metal box drawers should have metal on three sides.
- A 450mm deep drawer should be incorporated at the base. The top drawer should be fitted out with a cutlery tray.
- Adjustable mounting brackets with metal runners and double nylon rollers with integrated stops should be incorporated into the units.

Edges

When delivered to site, all units should be finished on all edges with 0.8mm ABS lipping. This applies to carcass edges, side panels, internal shelves and all non- visible components.

Handles

Handles should be brushed stainless steel.

Hinges

- Hinges should be self-closing, with three-way adjustable cruciform plates. They should fold back against adjoining units (with a concealed, 170° metal spring hinge system).
- All corner units should be fitted with 180° hinges. 180° hinges are permissible for upper units.
- The minimum number of hinges for 715mm high doors is two, while a minimum of three hinges is required for 900mm doors.
- Hinges and plates should be installed using a 5mm dowelled system for strength.
- Hinges should be lubricated upon completion.

Plinths

- Plinths and return plinths should be 150 x 19mm.
- Plinths should be fully removable and clipped onto cabinet legs, using a clips system.
- Plinths should be lipped along two long edges.
- Plinths should comply with BS EN 312 Type P3.
- Plinths should be constructed of Formica bonded MDF on both sides.
- A deflection support should be provided in the centre to prevent kicking, if applicable.

Sealants

- Sealants used should comply with BS 11600 Class F20 HM.
- They should be one-part silicone or clear mastic.

A clear mastic or a silicone pointing should be run around the junction of the lowest tile and the kitchen worktop.
- The sink should be bedded to the worktop.
- Joints should be completely and neatly filled to ensure firm adhesion to substrates.

Side panels

- All carcasses should have matching / complementary side panels.
- They should be constructed of 90mm Formica, bonded onto MDF or an equally approved product.
- All side panels should be sized during the site survey; i.e. no cutting of side panels should be carried out on the site.
- The base of side panels should be protected with a U-shaped uPVC sleeve affixed to the bottom.
- Side panels should be finished on all edges with 0.8mm ABS lipping.

Sinks

- Sinks should comply with BS EN 13310 - functional requirements and test methods.
- They should be constructed using 0.7mm, satin finish stainless steel, with two reversible punched tap holes (one for the tap hole stopper).
- Sinks should have a 90mm waste outlet to accommodate a basket strainer suitable for a waste disposer.
- Waste and overflow should be included.

Sink dimensions:

- The overall dimensions should be W:860mm, D:500mm, bowl depth:180mm. The base unit should be at least 500mm. The cut out should be W:838mm D:480mm.
- A purpose made gasket is required at the perimeter to accommodate a full bed of silicone sealant.

Sink base units should have:

- A 3/4 high solid back, which can be easily removed for access to pipework. It should be 450mm deep, allowing for 120mm space at the back for services.
- One intermediate uPVC sleeve shelf at the bottom edge of the whole unit.
- A drip tray at the bottom of the sink base unit, with up-stand at rear. Any leaks from the sink U trap should be diverted towards the cabinet door.

Taps

- Taps should be a single lever design, with a polished chrome finish, with a minimum 0.3 bar pressure and a lever action single flow.
- The dimensions should be height: 145mm and reach: 205mm.
- All taps should be fitted with 'penny' isolating valves.

Traps

- Bedding should be carried out with a waterproof jointing compound.
- Traps should be fixed with a resilient washer between the appliance and the back nut.
- The depth of the minimum seal should be 75mm.

Supports

- Individual carcass units should be fitted with four plastic supports to raise the bottom of the unit 150mm from the floor to accept the kicker board.
- The maximum height of the supports should be 170mm and the minimum height should be 135mm.

Worktops

- Worktops should be made from Formica.
- Worktops should be at least 40mm thick.
- Worktops should have bull nose moulded front edges.
- The surface performance should be to BS 6222 Part 3 and the surface finishes should comply with BS 438 2005 (decorative high-pressure laminates).
- Worktops should be suitably balanced on the reverse surfaces with a compensating veneer such as a wax injected, hot melt. The underside should be finished with a rebated PUR hot melt, polyurethane resin moisture barrier.

- A patent drip barrier should be in place at the bottom front underside edge.
- Joints should be machine tooled, biscuit jointed and sealed with BS 204 grade D3 or D4 moisture-resistant gap filling adhesive.
- Mitred or butt joints should be used - aluminium or plastics joint strips are not permitted.
- Ends should be capped with 38mm chrome end pieces.

Services and Access to Services

All units should have 50-70mm service voids, to accommodate services. Allowances should be made for wall pipework during site checks. All defunct pipes, service and waste pipes should be capped off and / or removed in a neat and tidy manner. Services must be securely fixed to the back wall, using timber noggins. The contractor will be responsible for all services connections.

Boiler Housing:

If there is a boiler in the kitchen area the boiler housing unit must not hinder access to the boiler or ancillary items of the boiler. The door should have three hinges and a minimum housing of 870mm x 570mm x 370mm, to allow for upgrades and boiler replacement at a later date. Service valves such as the flow and return valve, the mains top-up valve and the gas valve should be accessible.

29.2 Appendix B

CCTV

CCTV shall be provided as follows:

A function shall be provided to allow the Building Management System to log motion detection and store the data for 48 hours for review.

External

All car parking, incoming road, entrances, and the development perimeter.

Access points should be well lit by motion detection lighting with low lux standby setting and LDR activation.

The external system will comprise fixed & 360-degree PTZ colour cameras. The cameras should be building mounted and shall have dome anti-vandal protection covers.

Internal

Main entrance, entrance foyer, lift entry, communal corridors and lobbies, refuge spaces and service point desk. Include any areas where life safety equipment or alarmed emergency escape exits are installed.

Internal cameras will be fixed units, located to cover the internal areas listed above and shall have dome anti-vandal protection covers.

Cameras will be linked to a front end, comprising of digital recording and control facilities with system access capabilities for keyboard / joystick controls, the system will provide as standard a DVD rewriter and 17" colour monitors, located in a secure Communications Room. Auxiliary access to the system shall be provided in the development's Community Room via wall mounted USB Ports and associated electrical outlets. All recorded information shall be in MPEG4 format.

The CCTV system shall also interface with a remote recording platform to enable remote monitoring of the development and recorded material. The CCTV must be a complete IP system.

During normal hours, the external PTZ cameras will be programmed to a set patrol giving coverage of the external areas.

Central monitors, multiplexers, video recorders and telemetry controls shall be provided within the Facilities Management office.

Power supplies shall be provided to all items of equipment, as required. Power supply cabling running internally shall be single core LSF insulated cables, contained within galvanised steel conduit and trunking. Supplies running to external cameras shall be XLPE SWA PVC. Cameras must be capable of night operation via integral IR illumination, switching to night feature via photocell.