

CONSTRUCTION

GUIDELINES

Be First Design Guidance:
Hearts and Minds, Bricks and Mortar



**Barking &
Dagenham**



CONTENTS

| | |
|----|-------------------------------------|
| 02 | Introduction |
| 06 | Part 01: Design Aspiration |
| 43 | Part 02: Construction Parameters |
| 69 | Part 03: Specification Requirements |

INTRODUCTION

PURPOSE

The purpose of these Construction Guidelines is to enable the efficient delivery of consistently exceptional Be First homes. By seeking to optimise standardisation in the design and construction process, we aim to streamline the delivery of the 3000+ Be First homes due to be completed over the next 3 years, whilst ensuring the end-user experience is of the optimum quality. These guidelines apply to all scales of new Be First development, from individual houses through to apartment living. These Construction Guidelines should be read in conjunction with:

Design Principles

A high level document that sets out Be First's aspirations and key principles for successful future development.

Public Realm Guidelines

Vision, principles and details for delivery of public realm across new Be First developments.

BIM EIR

Details of Be First's BIM Level 2 expectations and Employer's Information Requirements for all new developments.

Employer's Requirements

A comprehensive set of ERs for the tendering of building contracts. Both the Construction Guidelines and the Public Realm Guidelines interface with the ERs and provide graphical representation of requirements for early design stages.

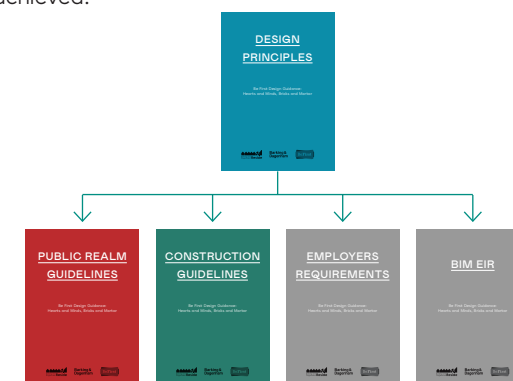
A Be First home should set new standards. We aim for our landmark developments to become templates for sustainable living for the 21st century, developing characterful and high-quality places for people to live.

Through this document, we aim to provide guidance of broader strategies, design principles and parameters, setting out our priorities and instilling the design aspirations of the Be First home; this should be delivered on time, in budget and contribute to the wider vision of building thriving communities within the borough. It brings together the knowledge and experience of the Be First contractor framework, the best-practice knowledge of consultants and the lessons learnt from existing Be First developments.

Be First developments are designed to be tenure blind and there will be no visible difference in the appearance of buildings between tenure. However, two different fit-out standards for homes are presented in this document (standard and enhanced) that have slightly different internal arrangements and specifications. The two standards allow flexibility to apply different internal standards on a scheme by scheme basis. All illustrations in this guidance demonstrate the standard specification.

These guidelines are not intended to inhibit design team creativity and site specific responses. Instead they are to be seen as a briefing document for design teams at early stages to ensure clarity and consistency of approach and greater cost certainty.

Be First is creating long-term housing assets and as such are interested in whole life cycle costing of their buildings, to ensure durability and ease of maintenance is considered from the outset. Materials have been selected that are robust and economical and this guide demonstrates how, when well-detailed and used pragmatically, high-quality and long-lasting results can be achieved.



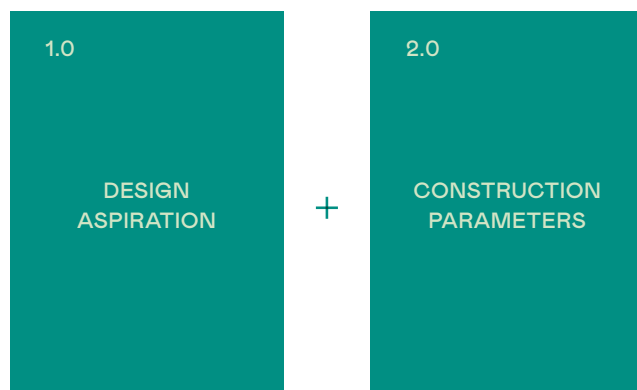
STRUCTURE

The document works in three sections, which together set the standard for new Be First homes:

Section 01 (Design Aspiration) provides guidance for designers to achieve Be First's design intent for the layout and fit-out of new homes. The section culminates with typical arrangements for three dwelling types to demonstrate efficient and high-quality spatial relationships.

Section 02 (Construction Parameters) sets out areas for consideration by design teams during RIBA Stages 1 and 2 to ensure spaces are planned effectively from the outset of project. This includes site and building strategies that should be addressed and resolved prior to planning submission and key parameters that allow for standardisation across Be First buildings.

Section 03 (Specification Requirements) This section summarises Be First's Standard and Enhanced specifications for dwellings. Each specification will be set according to individual project briefs and in relation to tenure and management requirements specific to each project.



WHO IS IT FOR?

This document is intended to be a point of reference for all the construction and design professionals involved in Be First housing delivery programmes.

Design professionals should consider the guidance contained within this document across all RIBA Work Stages, but it is particularly relevant and important for early stage design. We encourage engagement at the earliest possible stage, to enable the successful delivery of coordinated schemes; layouts can become difficult to change once the fabric of the building has been finalised.

Deviation from this document should be avoided wherever possible and, where unavoidable, should be signed off by Be First.

HOW TO USE THIS SECTION

This section sets out the principles for how to arrange a Be First dwelling, establishing the qualities required to create a beautifully designed Be First home. Diagrams and illustrations indicate the design intent and materiality for each space.

Particular importance is placed upon the required look and feel of kitchens and bathrooms, due to the need to standardise and ensure consistency of the brand.

Principles and considerations for early stage space planning and general standards for internal layouts are outlined, providing guidance for designers. Typical arrangements for

three dwelling types are provided to demonstrate efficient and high-quality spatial relationships. These are intended to set out clear principles and should be adapted and made appropriate to the specific conditions of each individual Be First scheme.

It must be stressed that this document should not be considered as a replacement for Approved Document M or any other parts of the Building Regulations. Instead it should be used as a tool for standardisation and achieving Be First's design intent. All consultants and contractors must refer to all parts of the Building Regulations alongside this document.

1.0

DESIGN ASPIRATION

1.1 DESIGN ETHOS AND ASPIRATION



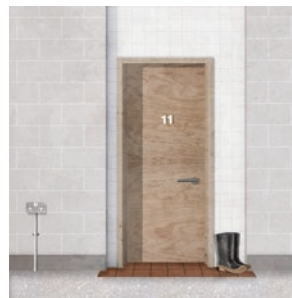
**01
COMMUNAL BUILDING
ENTRANCE**

Communal entrances to buildings should be celebrated - a deep, crafted threshold, integrated lighting, high-quality materials with accents or linings, a subtle use of colour and texture, robust construction, ample shelter and bespoke, clear signage



**02
COMMUNAL LOBBY
& CIRCULATION**

A Be First lobby is welcoming and of generous proportions (preferably with additional height or double height) with natural light from both sides, a visible staircase, seating space and visual connections to surroundings, in addition to level access from the public realm.



**03
PRIVATE DWELLING
ENTRANCE**

Individual front doors to dwellings should define the threshold into the Be First home through use of special touches, such as tiled insets and integrated welcome mats.

Be First has set out their overarching Design Principles for successful development within Barking and Dagenham and this guide is structured to help design teams meet many of those aspirations and create high quality, well-planned homes, with user experience at the forefront.

The examples included throughout this guide illustrate key principles and design

teams are encouraged to interpret these on a project specific basis. An affordable and robust palette of materials has been selected that enables design quality to be met if used pragmatically and detailed well. Depicted below are key factors that we believe make a Be First home special, giving owners or tenants a sense of joy and well-being.



**04
PRIVATE DWELLING
LOBBY**

A Be First dwelling should be spatially well-designed, with a rational, generous entrance hall containing ample storage to make arrival to the dwelling comfortable and practical. Clerestory windows above doors allow natural light through the depth of the dwelling.



**05
LIVING SPACE**

Combined living, kitchen and dining rooms create large open plan habitable spaces and good visual connections through the home. Kitchens are arranged to be ante-rooms, ensuring they are practical and usable while still having an open relationship to the main living space.



**06
BATHROOM**

Bathrooms are designed to be standardised elements across all homes with a contemporary aesthetic and a robust, economical material palette. Throughout the home, materials have been selected for their natural texture and appearance, with colour added for accents and personalisation.

1.2 BE FIRST MATERIAL PALETTE

Be First developments should be high-quality, robust, characterful and locally relevant.

Materials have been chosen holistically, looking to qualities or attributes such as colour, tactility, durability and warmth. Emphasis has been placed on using economical, robust materials whilst allowing for special materials moments and accents that will add a sense of quality and overall improve the homeowner experience.

It is equally important that materials are sustainably sourced, have low-VOC emission levels and that consideration is given to how materials are recycled, composted or reused as part of the circular economy.

Materials and colours have been chosen to be specific to Barking & Dagenham. For example:

- Blue tones and timber that reference the strong association with the fishing industry that Barking Town Quay once had
- Hard-wearing natural fabrics - Barking once had a thriving jute manufacture industry

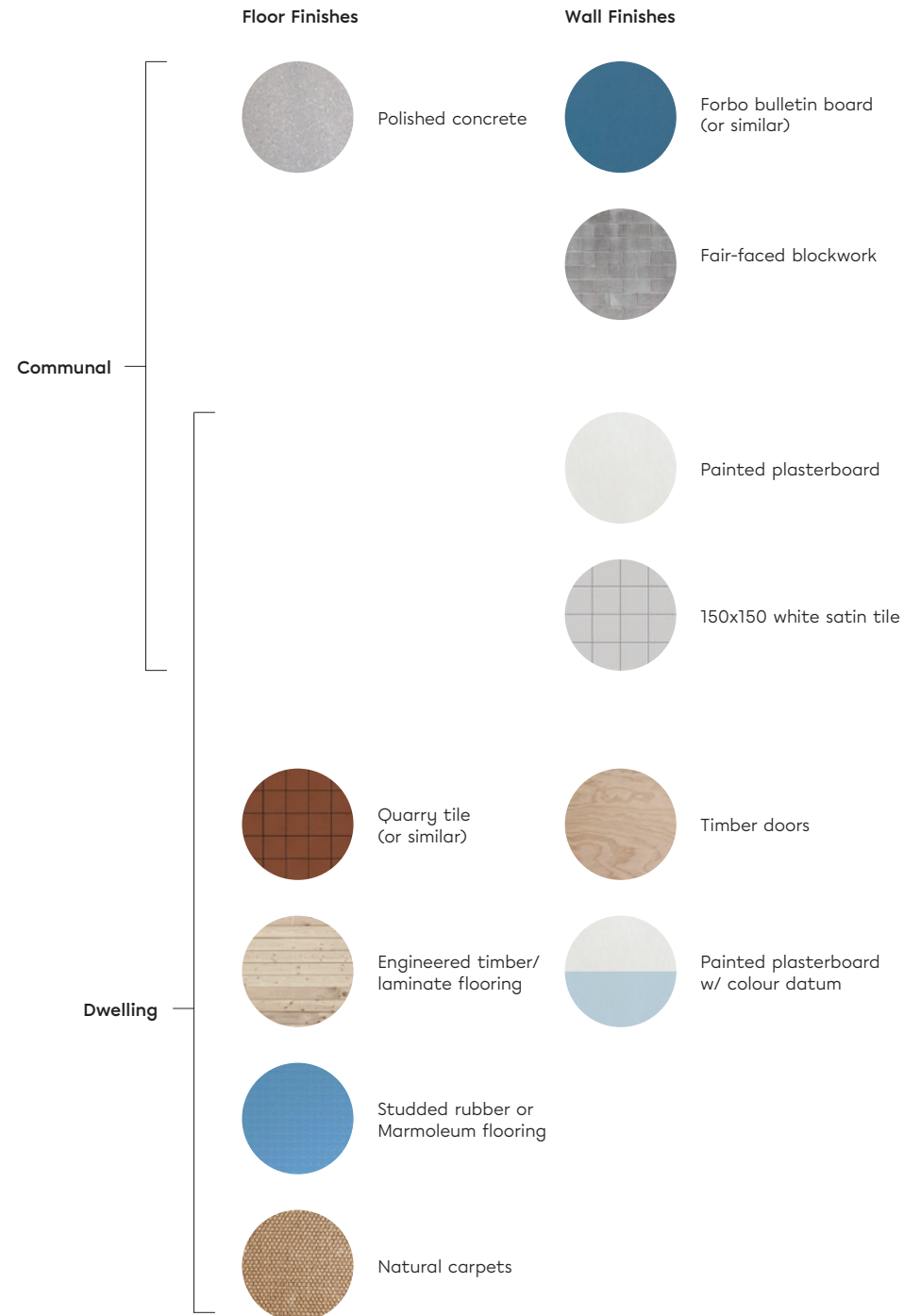
- Barking & Dagenham’s industrial past could be reflected through use of tough, manufactured plastics such as vinyl, and exposed materials and structure.

COMMUNAL AREAS

- durability is the key concern
- exposed materials + services where possible to reduce unnecessary costs
- invest in robust flooring, e.g. polished concrete or tiles
- definition to thresholds e.g. tiled insets, to promote sense of ownership

DWELLINGS

- materials used in their natural appearance to give warmer feel, e.g. timber
- special accents or material moments that add a sense of quality, such as clerestory windows to doors to bring light into centre of dwellings
- natural carpets to bedrooms
- possibility of home owner personalisation through colour



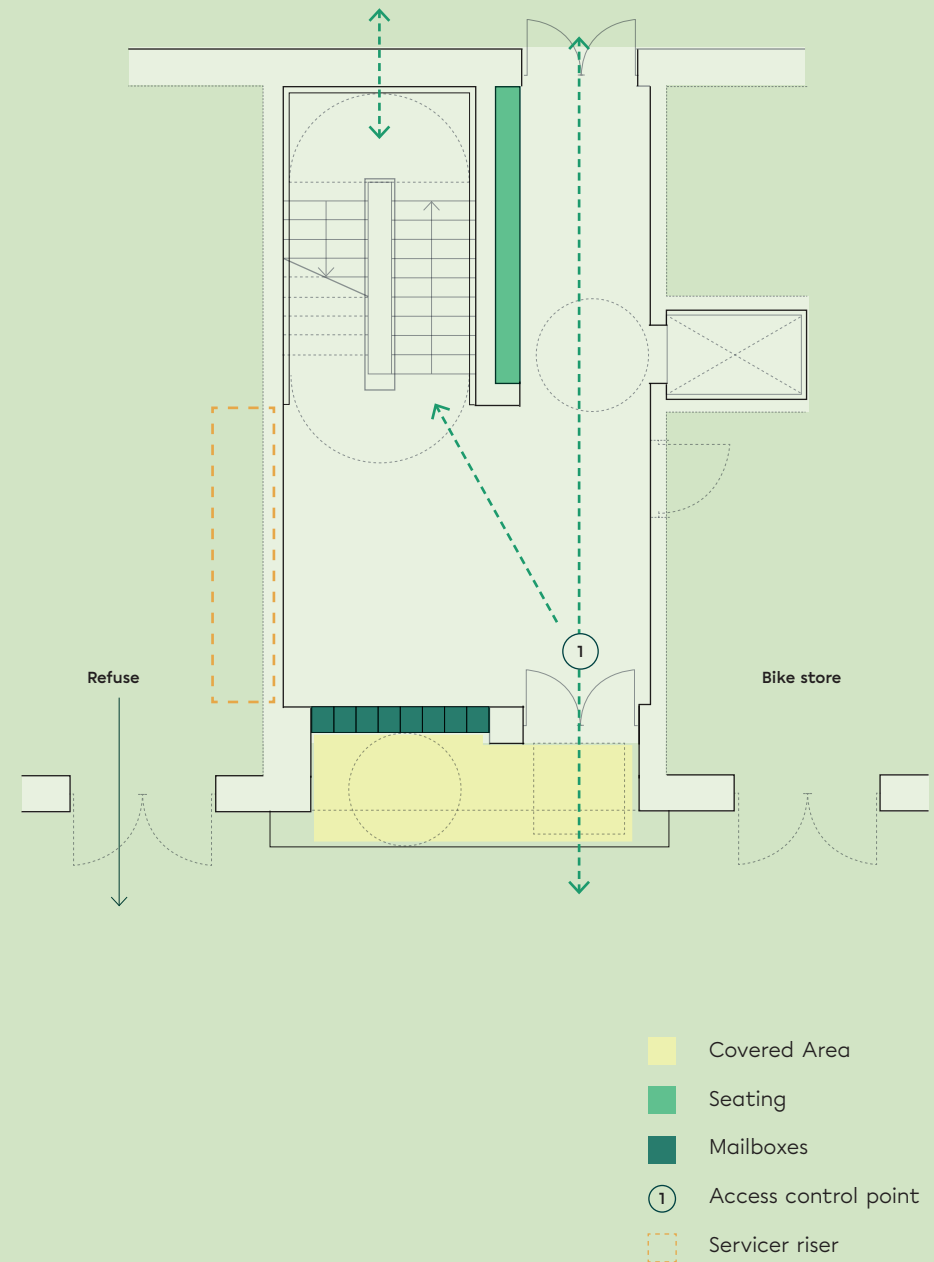
1.3 COMMUNAL AREAS: DESIGN INTENT

It is important how a Be First building is first experienced. Therefore the entrance sequence should be carefully considered

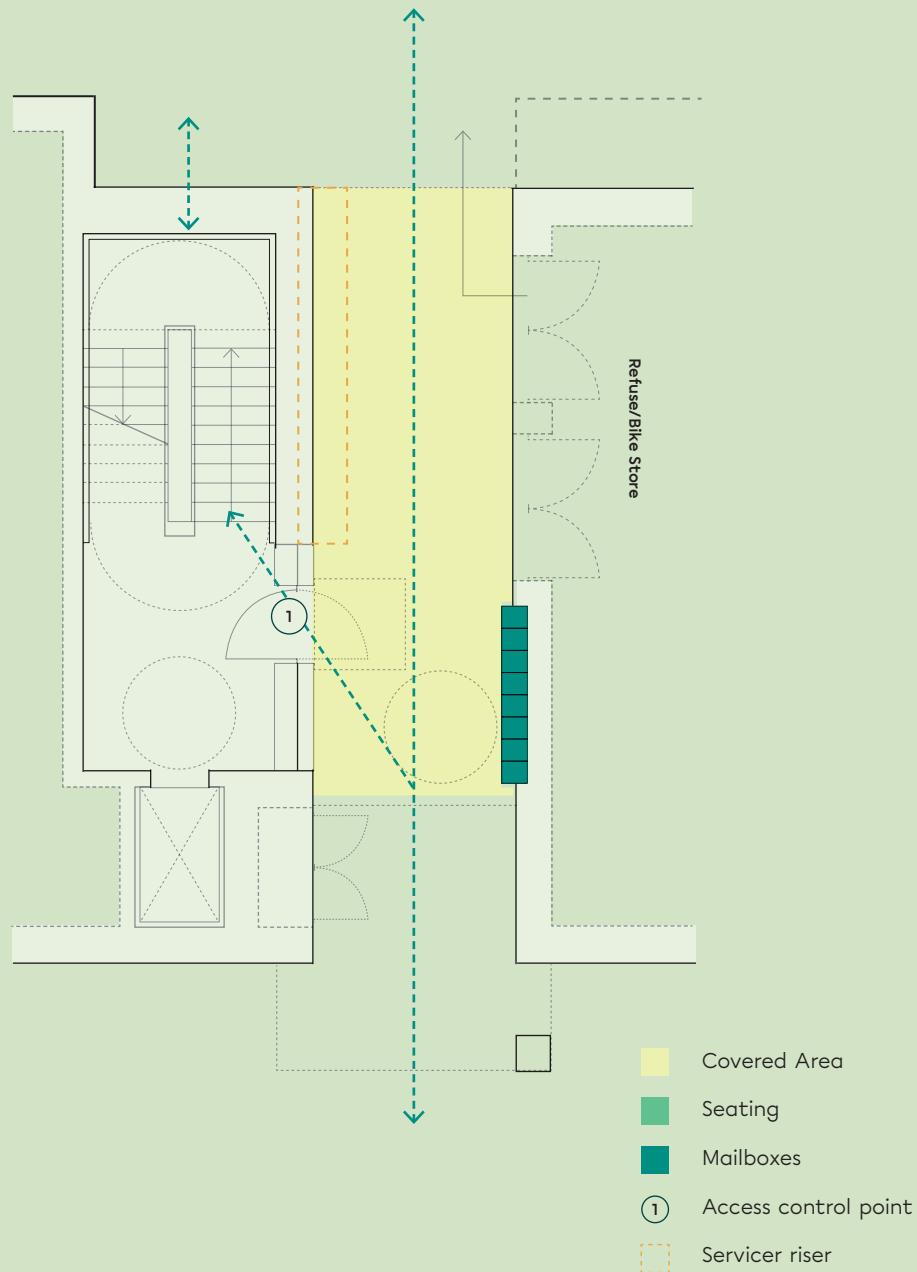
- Level access should be provided from public realm
- Proportions should be generous
- Emphasis should be placed upon maintaining visual connections to shared spaces and be naturally lit where possible
- Where fire strategy allows, the stair should be open from lobby and visible from entrance
- The diagrams opposite are of generic entrance sequences and indicative only - entrances and communal areas will be design brief and site specific

- A maximum of 8 dwellings will be accessed per floor from a single core
- Corridors should be kept short and have access to natural daylight wherever possible.
- Security concerns are to be fully resolved, with access control points from street to home (Secured By Design) and to be compliant with Approved Document Q

EXAMPLE 1 OF AN ENTRANCE OPTIONS WITH 1 ACCESS CONTROL POINT + VISIBLE STAIR



**EXAMPLE 2 OF AN ENTRANCE OPTIONS WITH
1 ACCESS CONTROL POINT + VISIBLE STAIR**



Refuse

Be First's preference is to utilise below ground "iceberg" refuse systems wherever possible. Design teams should explore this at the earliest opportunity in accordance with Barking & Dagenham's guidance.

Where below ground storage is not feasible, ground level refuse stores should be integrated into the building footprint. Refuse stores should only be externally accessible to avoid unwanted odours internally.

Consideration should be given to the location of the refuse store entrance, to ensure it is compliant with Building Regulations and Barking & Dagenham's guidance in terms of drop-off and collection distances, whilst not obstructive to the main entrance of the building.

Refuse stores will need to be ventilated and doors should be perforated to allow air flow through. To maintain the thermal integrity of the building, the soffit and walls of refuse stores should be insulated at interfaces with habitable spaces.

1.3 COMMUNAL AREAS: DESIGN INTENT *Continued*



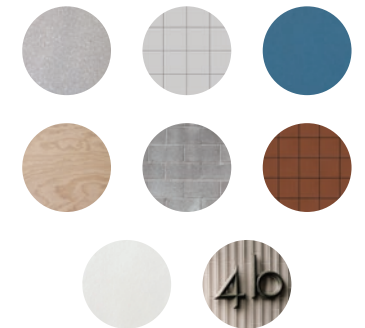
Communal entrance door, exterior

- 1 Integrated lighting
Provides a sense of security
- 2 Tiled recess surround
Celebrates entrance
- 3 Colour accent
E.g. stained-glass clerestory, to add character
- 4 Bespoke signage
E.g. engraved in pre-cast panels, gives sense of quality
- 5 Durable lining material
To provide durable protection at base, where building meets ground
- 6 Threshold demarcation



Private dwelling entrance door, interior

- 1 Tiled recess surround
Gives sense of ownership and identity to individual dwelling
- 2 Timber frame + door
- 3 Exposed services
Cost efficient detail to allow budget to be spent on more bespoke solutions elsewhere in dwellings
- 4 Tiled threshold



1.3 COMMUNAL AREAS: DESIGN INTENT *Continued*



- ① Exposed concrete or polished plaster ceiling
Rooflight if possible
- ② Tiled inset
Helps to reflect artificial light
- ③ Timber-lining frame to statement window
Adds to feeling of quality
- ④ High-quality signage
- ⑤ Hardwood timber handrail and / or powdercoated finish w/ statement colour
- ⑥ Tiled datum at handrail height
Provides a durable finish, to prevent marks
- ⑦ Exposed concrete finish to stair and compliant nosing

Communal stair



Communal entrance lobby, interior

- ① Colour accent wall with special finish
e.g. Forbo lining or polished plaster
- ② Integrated mailboxes
- ③ Hardwood timber accents
- ④ Tiled datum for durability
- ⑤ Robust flooring e.g. polished concrete or tiles

1.4 DWELLINGS: SPACE STANDARDS

Be First homes should be well designed, spacious and meet the requirements of Approved Document Part M4(2) Accessible and Adaptable dwelling standards as a minimum. 10% of all dwellings should meet the requirements of category M4(3) to be suitable for wheelchair users.

As a guide, Be First homes will comply with the minimum space standards set out below for single storey dwellings.

In addition to depicted:

- 4b5p - 90sq.m
- 4b6p - 99sq.m

Double-storey dwellings:

- 2b4p - 79sq.m
- 3b4p - 84sq.m
- 3b5p - 93sq.m
- 4b5p - 97sq.m
- 4b6p - 106sq.m

(Source - Nationally Described Space Standards)

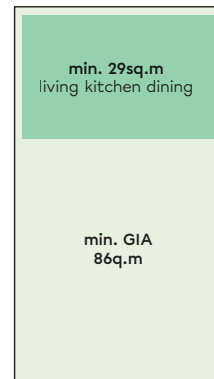
1 bedroom
2 persons



2 bedroom
4 persons (3p - 61sq.m)



3 bedroom
5 persons (6p - 95sq.m)



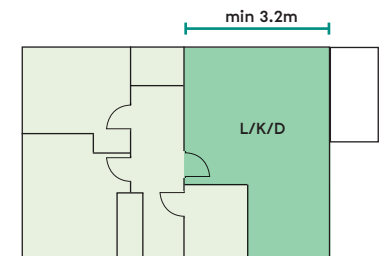
1.5 DWELLINGS: GENERAL CONSIDERATIONS

Key points to consider:

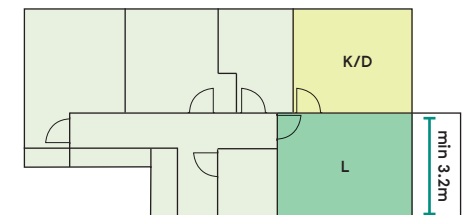
- A Be First home should prioritise a regular room shape to optimise usability of the room. Carefully consider location of doors, windows, and the position of services.
- 1 and 2 bed homes should have combined open-plan living/kitchen/dining spaces. 3 bed homes should have a kitchen/dining room with a separate living room.
- Individual rooms should be accessed off of circulation areas; the exception to this being the kitchen/dining space within a 3 bed flat, which can be accessed through the living space.
- The minimum width of the main sitting area should be 2.8m in 2-3 person dwellings and 3.2m in dwellings designed for four or more people

- Corridors within Category M4(2) homes should be a minimum of 1050mm with all internal doors being 826mm standard metric door leaf sizes wherever possible to comply with clear opening widths.

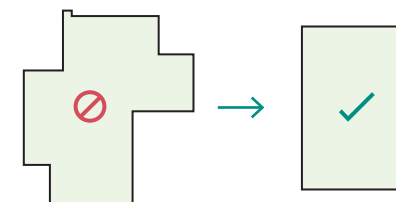
2b4p dwelling with combined living, kitchen and dining



3b5p dwelling with combined kitchen/dining and separate living



Ideal room shape - avoid irregular



1.6 DWELLINGS: LIVING, KITCHEN + DINING



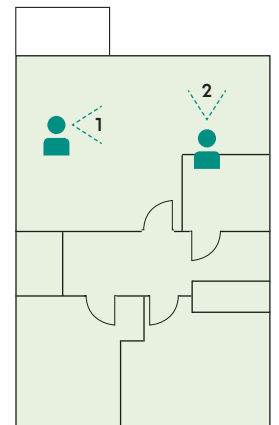
1. View towards kitchen from the living space, showing the intent to demarcate the kitchen from the living/dining space while still providing an open visual connection between the spaces



2. Relationship between open plan kitchen and dining space

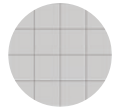
One and two bedroom dwellings should have a combined open-plan living, kitchen and dining space. This room should be dual aspect wherever possible to maximise daylight and sunlight into the primary living space. Three bedroom dwellings using the standard specification should have a combined kitchen/dining space with a separate but closely located living room, whereas enhanced specification homes should have fully open plan living/kitchen/dining spaces.

In open plan layouts, kitchens should be designed to be 'U' or 'L' shaped, ensuring they are practical and usable while still having an open relationship to the main living space. Kitchens should be predominantly neutral, with handle-less matt white finish to units and grey worktops. The engineered or laminate timber flooring should be continuous throughout the living and kitchen spaces.



1.6 DWELLINGS: LIVING, KITCHEN + DINING *Continued*

Splashback



Satin white tiled splashback

Units



White matt kitchen units

Worktop

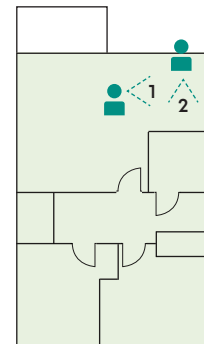


Grey laminate or silestone. *Dependent on specification*

Floor



Engineered timber or laminate. *Dependent on specification*



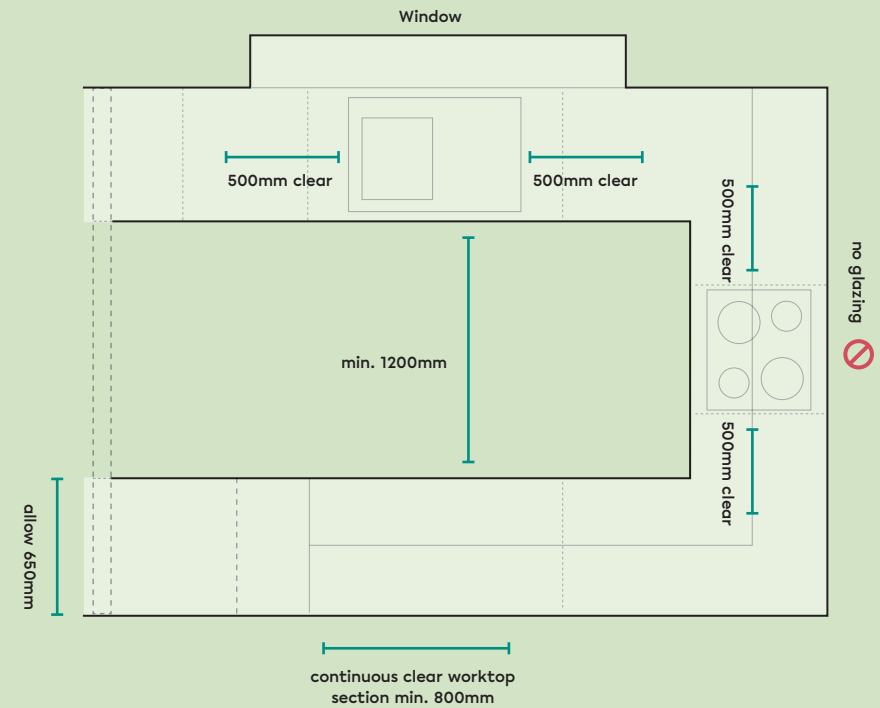
- 1 Downstand to full-height cupboard
- 2 Window located above sink
- 3 Flooring to flow through from living space where living, kitchen and dining is open plan
- 4 650mm between countertop and wall units

1.6 DWELLINGS: LIVING, KITCHEN + DINING *Continued*

Outline guidance for the space planning and arrangement of kitchens within Be First homes:

- Kitchens are to be standardised elements within a Be First home
- Kitchens across Be First schemes should be in a U-shape or L-shape configuration wherever possible with a minimum of 1200mm clear in front of kitchen equipment. This allows flexibility in terms of enclosure vs. open-plan living.
- Windows should be located to maximise natural light and ventilation
- Adequate space should be provided for food preparation, cooking and washing-up.
- Allow space for full-height fridge freezer and dishwasher (slimline for 1b and full width for 2b+), if not supplied and integrated. Refer to specifications set out in Section 3.0.

- 650mm should be allowed for the depth of base units, to allow space for drainage runs.
- Total worktop length shall not be less than 2000mm long with at least one continuous section being a minimum of 800mm long
- Continuous worktop shall be provided on each side of the cooker (minimum 500mm wide) and on each side of the sink and drainer
- Wall units to be placed min. 650mm above countertop height, to allow for sufficient space for extractor
- For wheelchair accessible homes, please see Approved Document M4(3) guidance



Kitchen unit no. for 2 person dwelling:



Kitchen unit no. for 4 person dwelling:



Kitchen unit no. for 5 person dwelling:



1.7 DWELLINGS: BATHROOMS

Be First bathrooms should be standardised in both layout & fit-out. Bathrooms are to be contemporary in style, with all white sanitary equipment. Basin and toilet type (wall hung or pedestal) will depend upon specification.

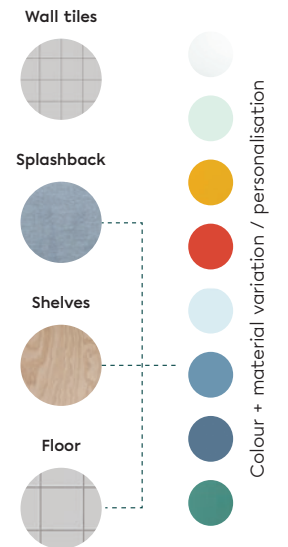
Materials to walls and floors should be durable and robust, but economical. Satin (not gloss) glazed ceramic square tiles in standardised sizes of 150x150mm should be used, with mid-to-dark grey grout to prevent staining. Dimensions of standardised layouts should allow for tile module to minimise tile cuts / awkward joints.

Flooring should have the adequate slip resistance, i.e. Pendulum TRL (slider 55) 36+, based on HSE recommendations for wet-barefoot areas.

Colour palette should be predominantly neutral, with a special accent to floor finish or splashback. Storage should be provided above the sink in the form of a mirrored vanity unit, with shelving adjacent.

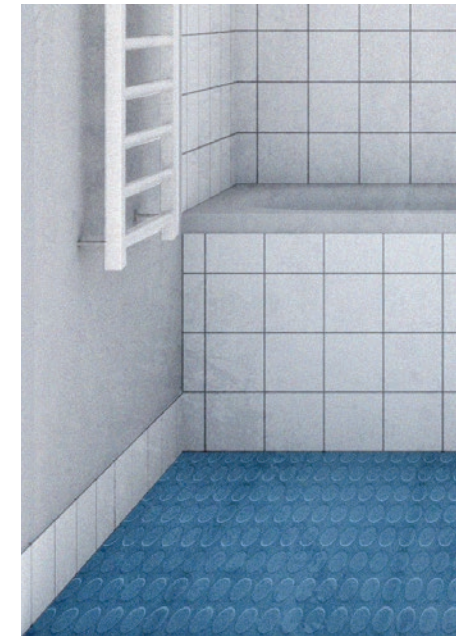


- ① Heated towel rail
White or stainless steel finish
- ② Moisture resistant plasterboard
Waterproof paint finish, matte white
- ③ Tiled skirting, if applicable
- ④ High-quality marmoleum or studded rubber
300 x 300 grey tiles for Enhanced specification





- ① Recessed downlighters
min. IP44 / IP65 rating depending upon location
- ② Tiling only to bath surround and behind WC
Fully tiled bathroom for Enhanced specification
- ③ Mirror-finish vanity unit
- ④ Hinged, square-edged bath screen
approx. 800x1400mm
- ⑤ Material accent to splashback, shelving + worktop*
*e.g. polished plaster or frosted glass, water resistant timber *worktop to be partially removable for cistern access*
- ⑥ Tiled or acrylic bathtub panel
Access hatch to be discreet

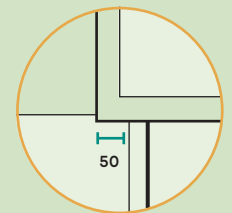
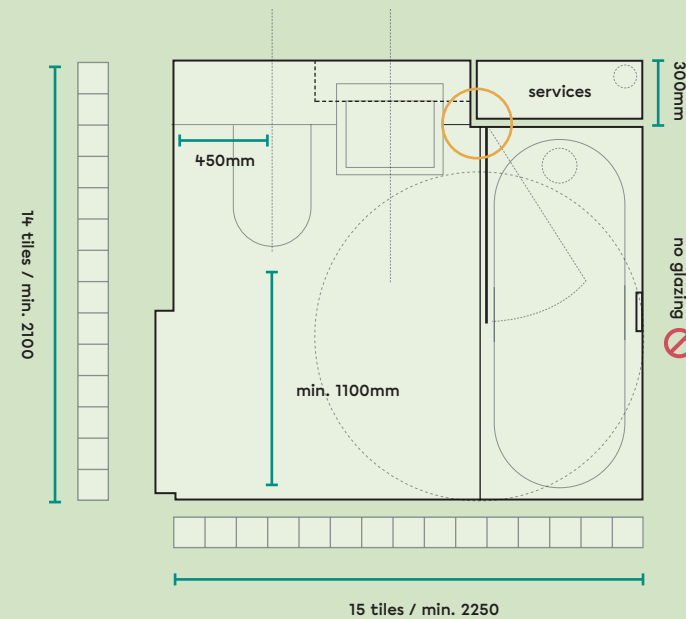


1.7 DWELLINGS: BATHROOMS *Continued*

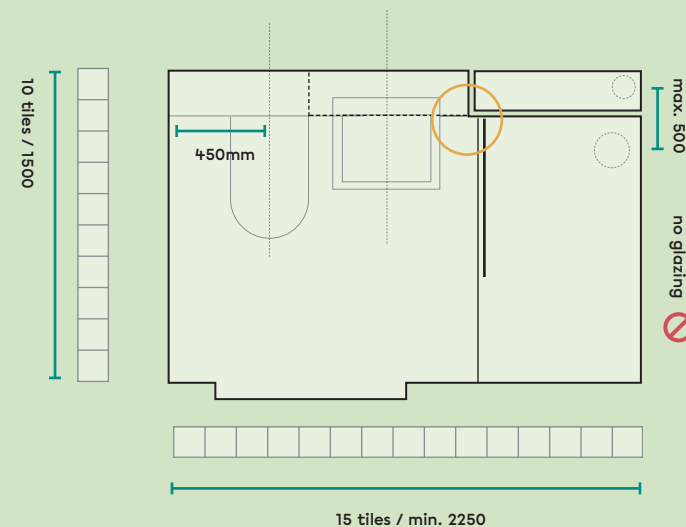
Outline guidance for the space planning and arrangement of bathrooms within Be First homes:

- Bathrooms are to be standardised elements within Be First homes. Therefore the number of bathroom type/variations should be reduced where possible
- Toilets require a clear space of 1100mm in front and 700mm to one side to allow for wheelchair users - Approved Document Part M should be consulted
- Bathroom dimensions should be based upon the wall tile module size for cost efficiency and to avoid material waste.
- Tolerances of between 10-30mm should be allowed for in bathroom space layouts
- Service riser to be included for SVP etc., min. depth of 300mm
- A minimum of 50mm is to be added to intersection between service riser and bathtub/shower screen
- Windows not to be positioned above bathtubs - ideal location is above toilet cistern
- Shower screens to semi-pivot and not exceed 800mm, allowing easy access to centrally located bath/shower controls
- Door should be outward opening if it is the only accessible entrance level WC in the dwelling
- Shower outlets should be located within 500mm of SVP to ensure drainage falls are adequate and do not require pockets in structural slab.

TYPICAL BATHROOM



TYPICAL EN-SUITE

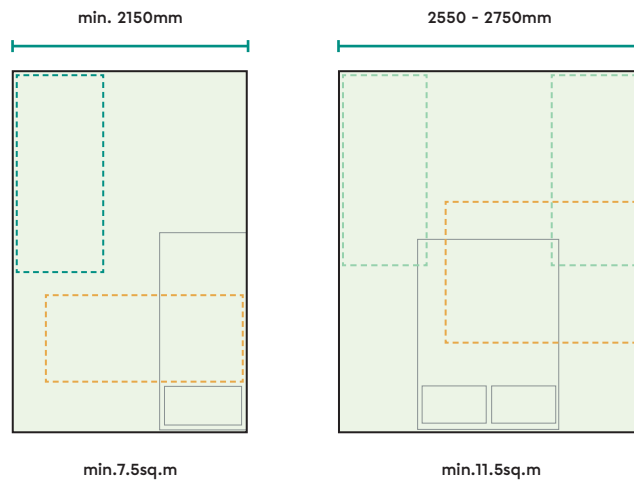


1.8 DWELLINGS: BEDROOMS

Outline guidance for the space planning and arrangement of bedrooms within Be First homes:

- Bedrooms should be a minimum of 7.5m² for single bedrooms, and 11.5m² for double/twin bedrooms.
- Room layouts should allow for flexibility wherever possible, i.e. various bed positions / configurations
- Full height windows should be avoided due to privacy issues and restriction of furniture placement

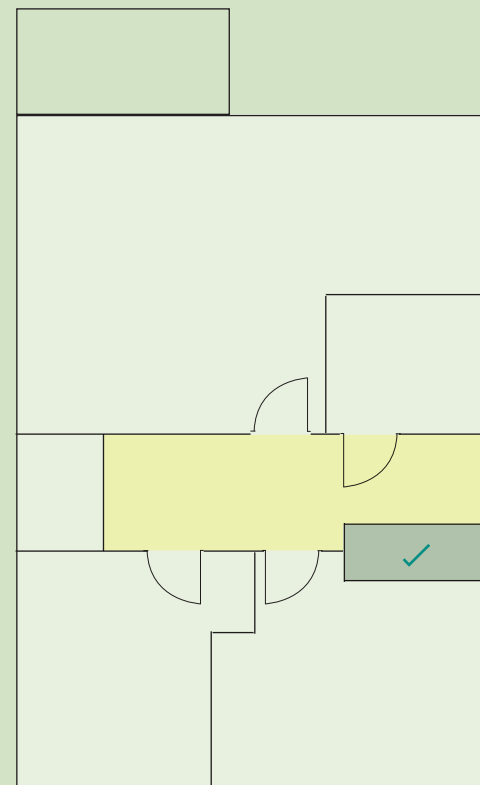
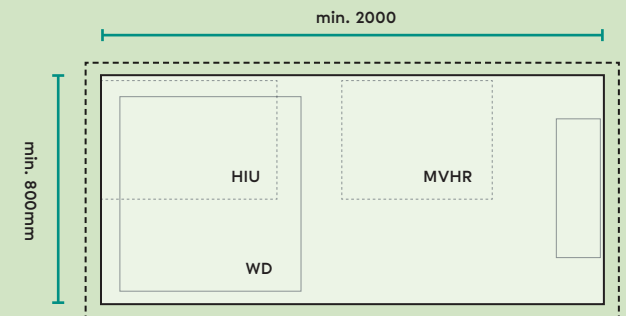
- Integrated storage (wardrobe) is to be accommodated for dwellings using the Enhanced specification. Provision should be carefully considered e.g. dog-leg walls
- If bedrooms are located on Ground Floor, they should have sufficient privacy from street level.



1.9 DWELLINGS: STORAGE AND UTILITIES

- Every apartment is to be provided with a dedicated utility cupboard hosting main system equipment.
- It is Be First's aspiration to achieve a consistent approach and standardisation of the utility cupboards
- The domestic hot water strategy and overheating study should inform the type and quantities of equipment per dwelling type, however the indicative sizes shown can be used as a starting point and refined through design development.
- A notional plan size of 2000x800mm will house: Mechanical Ventilation and Heat Recovery (MVHR), Heat Interface Unit (HIU), Underfloor Heating manifold (UFH), washer-dryer (WD), consumer units, blinds panels, electrical/security/comms interfaces.
- Where domestic hot water storage is required, sizes may need to increase.
- Recommended location against corridor wall for ease of service routes.

Standard minimum dimensions for utilities cupboard:



- Wall against corridor space
- Entrance space

1.10 DWELLINGS: TYPICAL LAYOUTS

Key drivers and qualities that should be attained within Be First dwelling layouts:

Entrance Hall

Rational, generous entrance spaces with ample storage to make arrival to the dwelling comfortable and practical. Avoid convoluted corridors.

Dual Aspect

Open up views through the dwelling, to connect dwellings with their surroundings, maximise natural light + allow for natural ventilation

Services

Locate utilities cupboards adjacent to entrances and communal areas for ease of access for metering, + reduced distances of ducting etc.

Primary living space

Ensure primary living space has good proportions + a regular shape, to allow for personalised furniture configurations

Standardised room

Layout + specification to be broadly standardised to kitchens, bathrooms + utility cupboards to increase efficiency and consistency of quality, with possibility of off-site manufacture to be explored

Special door

Selective use of doors with clerestory windows to habitable rooms to bring natural light into the centre of the dwelling

Balcony

Balconies should be accessed from the primary living space to maximise use.

Rationalised stacking

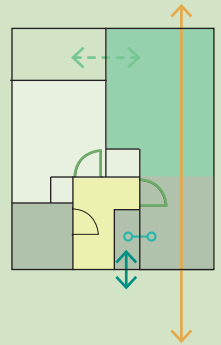
Service voids within dwellings to be vertically stacked, and where possible shared between rooms, to minimise the number of SVP's + distribution of services

Note: Location of open plan kitchens are subject to Fire Officer's approval

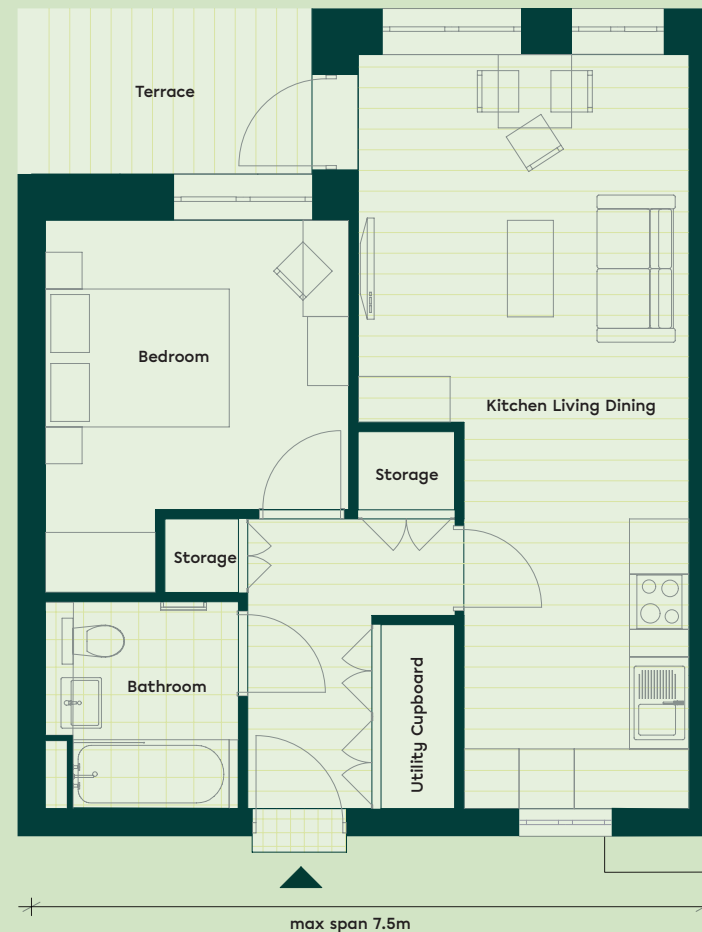
The following example layouts aim to display how these principles can be applied coherently across different dwelling sizes.

All layouts shown are in accordance with Category M4(2) and demonstrate the Be First Standard specification. Dwellings using the Enhanced specification may require additional ensuite bathrooms to the master bedroom.

Dwelling types should be adapted to suit site layout and block typology.

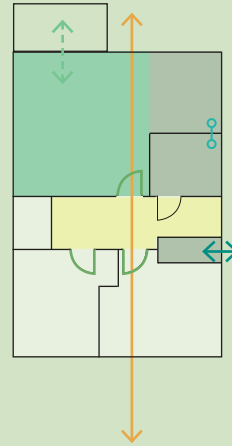


1 bedroom, 2 person dwelling:

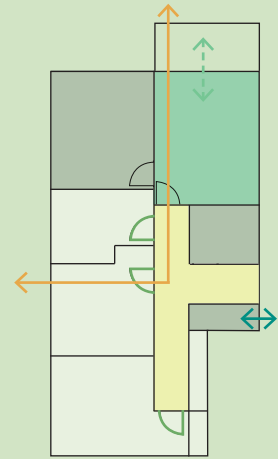
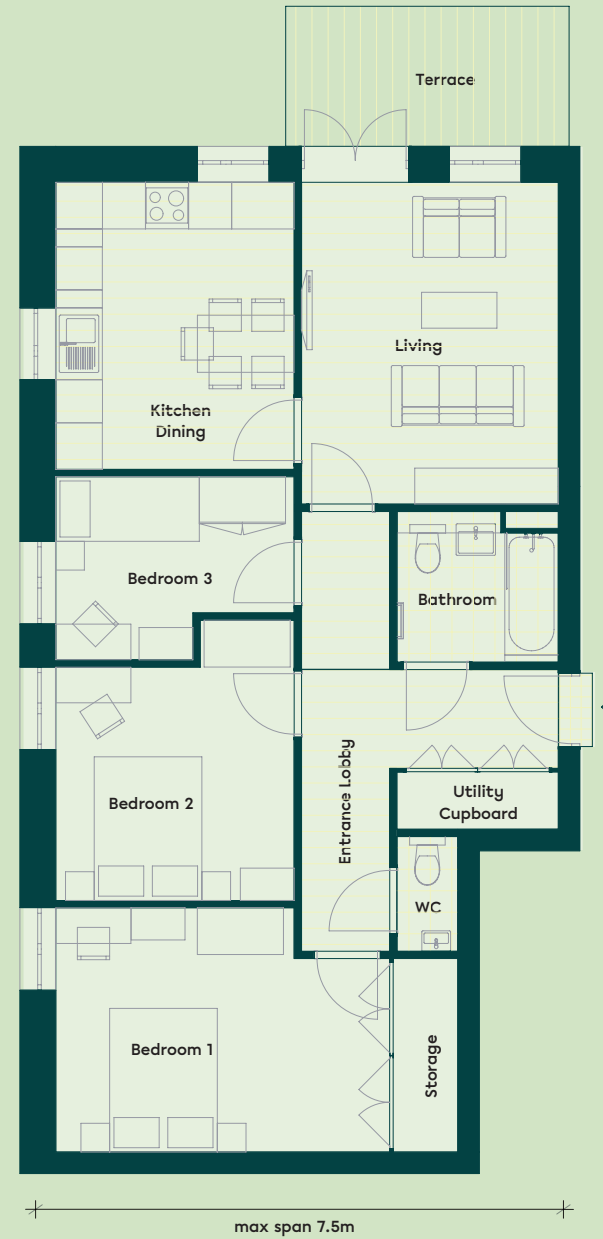


Window in kitchen when flat is accessed from an external gallery

2 bedroom, 4 person dwelling:



3 bedroom, 5 person dwelling:



2.0

CONSTRUCTION PARAMETERS

HOW TO USE THIS SECTION

This section sets out areas for consideration by design teams during RIBA Stages 1 and 2. Site and building strategies should be addressed and resolved prior to planning applications being submitted. Key parameters are defined in this section to allow for standardisation across Be First buildings and to ensure spaces are planned effectively from the outset of project.

It is open to each consultant/design team to interpret and implement this guidance as they see most appropriate to each scheme, to enable outcomes to be brief and site specific.

2.1 SUSTAINABILITY AND ENERGY

A holistic approach should be adopted when considering daylight and sunlight, overheating, noise impacts, air quality and ventilation to place an emphasis on passive cooling and ventilation wherever possible. Masterplanning, site layout and orientation will be key to ensuring sustainable design solutions.

A development should utilise sustainable urban drainage systems (SUDS) unless there are practical reasons for not doing so, and should aim to achieve greenfield run-off rates and ensure that surface water run-off is managed as close to its source as possible in line with the drainage hierarchy on the right.

Drainage should be designed and implemented in ways that deliver other policy objective, including water use efficiency and quality, biodiversity, amenity and recreation.

Sustainability strategies should consider how the New London Plan's Urban Greening Targets will be achieved.

As a minimum, energy strategies should ensure compliance with:

- the current edition of Building Regulation Part L
- the requirements set out within the New London Plan

- the latest methodology for residential apartments modelling using SAP10

In accordance with the principles of current best practice guidance and regulation, Be First promote a fabric first approach to energy efficiency. Ensuring buildings are well insulated and detailed to reduce thermal bridging should be a primary consideration for design teams to ensure heat losses through the building envelope are minimised.

SuDS Hierarchy

1. Store rainwater for later use
2. Use infiltration techniques, such as porous surfaces in non-clay areas
3. Attenuate rainwater in ponds or open water features for gradual release
4. Attenuate rainwater by storing in tanks or sealed water features for gradual release
5. Discharge rainwater direct to a watercourse
6. Discharge rainwater to a surface water sewer/drain
7. Discharge rainwater to the combined sewer

2.2 MEP

GENERAL

Systems are to be designed on the basis of the design temperatures criteria indicated in the Employer's Requirements (ERs).

As a minimum, the following assessments should be carried out to all sites early in the project to help determine the most appropriate MEP strategy:

- existing site noise assessment
- existing air quality assessment
- existing utilities assessment / survey.

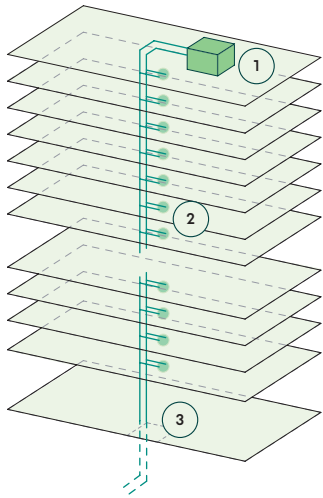
COMMUNALS

Heating

- The system should be designed in accordance with the building heating infrastructure hierarchy outlined below, with the preference being for new developments to connect into the Barking District Heating Network wherever possible.
- Where buildings cannot be currently served by the Barking District Heating Network, a future connection should be allowed for.
- Where a building utilises air source heat pumps there is a preference for these to be located at roof level with Heat Interface Units (HIUs) in each apartment.
- No gas is to be used on Be First developments

Building Heating Infrastructure Hierarchy

1. Connect to local district heating network
2. Provide centralised heating infrastructure for multiple buildings in the vicinity and part of the development scheme. Consider future development.
3. Provide centralised heating system dedicated to the building. Ensure the system is futureproofed against future environmental regulations and sustainability policies (seek advice from sustainability consultants).



- 1 Roof mounted air source heat pump (ASHP) providing heating only to each block
- 2 Heat interface unit (HIU)
- 3 "Oversized" LTHW pipework in riser

Corridor Ventilation

- Environmental corridor ventilation should replicate smoke extract system wherever possible. Refer to Fire Strategy.
- Development of the corridor environmental ventilation system should follow the hierarchy set out below, with passive solutions prioritised wherever possible:

Corridor Environmental Ventilation System Hierarchy

1. Passive natural ventilation
2. Single shaft mechanical extract and passive air make-up
3. Mechanical supply and extract system

Other Ventilation

- Car parks are to be naturally ventilated wherever possible.
- Bin stores should be provided with dedicated mechanical extract systems
- All ventilation systems should meet the requirements of Building Regulations

Water Systems

- It is Be First's intention to sprinkler all apartments and therefore water storage for sprinklers should be allowed for. Houses up to three storeys will not be sprinkled.
- Sprinkler system water storage should be combined with potable cold water storage wherever possible. The feasibility of a combined system should be assessed by the design team at Stage 2.

Risers and Services Distribution Zone

- All risers containing Landlord systems should be accessible from communal corridors/areas that are in Landlord demise.
- Main isolating valves and meters should be provided outside the dwelling demise, in an accessible position from within Landlord's demise.
- All dwellings are to be individually metered, with all energy supplies to dwellings (heating, electricity, water) separately metered.
- Management and maintenance requirements should be considered at the earliest stages of design.
- Design teams should ensure responsibility for scope of works are clarified early in the project, e.g. in relation to the services interfaces for rainwater and foul water drainage.

Rainwater System

- As a minimum, rainwater harvesting should be provided for irrigation purposes.
- The implementation of a rainwater

recirculation system for toilets should be considered. Where requested by Be First, the design team should provide an analysis to support Be First's decision.

Substations

- Engage as early as possible with the local electricity provided (DNO or IDNO)
- Secure a budget quote while waiting on a full quote
- Pay for and secure the point of connection as soon as possible
- Liaise with the preferred DNO/IDNO to ensure specific accessibility and maintenance requirements are met by design.
- Locate substations according to the hierarchy indicated in the table below. Where substations are designed to be stand-alone, careful consideration should be given to its location in relation to the surrounding public realm design.
- Where substations are installed under or adjacent to residential areas, the design team should provide shielding for the electromagnetic field effect.

Where substations are installed under or adjacent to residential areas, a specific acoustic analysis should be undertaken to assess the impact of the substation noise to the residential areas.

Electrical Substations Location Hierarchy

1. Substations to be part of building with 24hr access
2. Substations to be as stand-alone buildings with 24hr access
3. Substations to be installed at basement level. (This must be agreed with the DNO/IDNO and 24hrs rights of access and replacement to be confirmed.)

Life Safety Supply

- A study is to be produced by the design team during Stage 2 which reviews the options for life safety supply.
- Where possible, dual supply from independent sources are preferred over the provision of a generator system.
- The design team should engage as early as possible with the DNO/IDNO.
- Plant Replacement
- All plant and equipment is to be installed in a location which is easily accessible and minimises health and safety risk

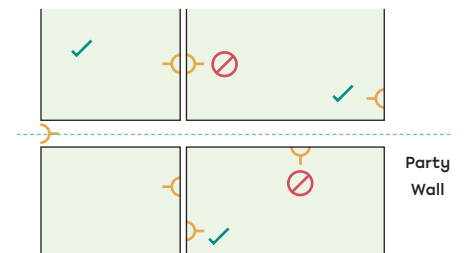
Utilities

- Engage with statutory authorities as early as possible in the design process.
- Clarify with Be First and statutory authorities the maintenance contract strategy/intent and ESCo/IDNO adoption agreements.

APARTMENTS

General

- Electric hobs to be specified, as per the specification set out in Section 4.0. No gas is to be provided to the individual dwellings.
- Cooker hood to be recirculating type, as per the specification set out in Section 4.0, with ventilation to meet the requirements of Approved Document Part F.



- Power layouts to be rationalised as far as possible. Locating electrics back-to-back on internal walls should be avoided. Locating electrics on party walls should also be avoided where the fire or acoustic integrity of the wall would be compromised by the penetration. In this situation, sacrificial layers are to be installed to allow for separate services zones.

Heating

- Underfloor heating is preferred to radiators for space heating. Space should be allowed within the floor buildup for an underfloor heating system. Refer to 2.7 Structure and Buildups
- Alternatives can be considered for bathrooms and en-suites, where an electric towel rail is preferred.

Overheating

- Overheating risk should be mitigated using the hierarchy set out in the table overleaf.
- All dwellings should be assessed against overheating risks using a risk assessment that follows the latest updates of overheating assessment industry standard (currently the CIBSE TM 59 methodology).

Ventilation

- The ventilation strategy should be informed by the environmental context of the site. Specialist studies of local acoustic conditions and air quality will be needed to determine the appropriate ventilation strategy.
- Overheating analysis will also inform the ventilation strategy, as set out in the Ventilation System Design Criteria chart.

- Ventilation rates and internal dwelling conditions are to meet regulations and best practice.
- A ventilation strategy study should be produced by the design team during Stage 2, which reviews the impact of acoustic, air quality, overheating and sustainability criteria to decide upon the most appropriate ventilation system.
- The table below sets out how the ventilation strategy might be selected based on design criteria.

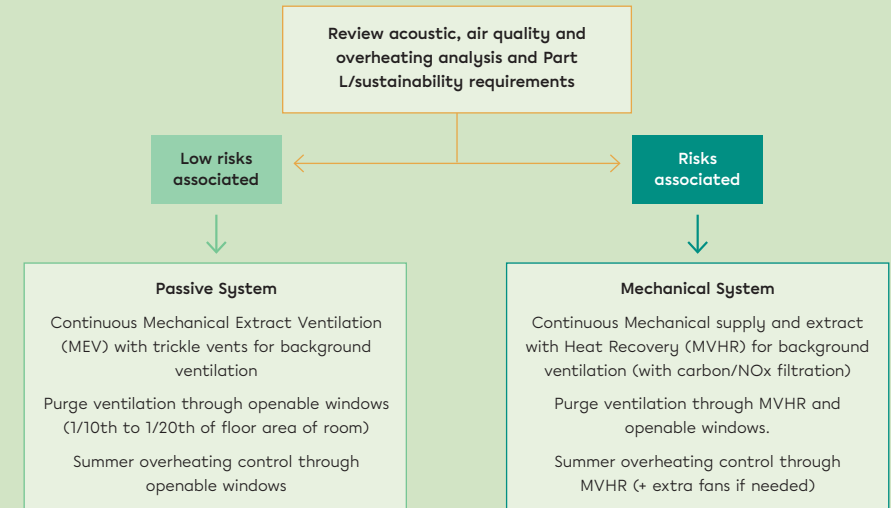
Utility Cupboards

- Every dwelling is to be provided with a dedicated utility cupboard to host system equipment.
- As a starting point, utility cupboards should be sized as set out in Section 3.0, however the domestic hot water strategy should inform whether additional storage space is required.

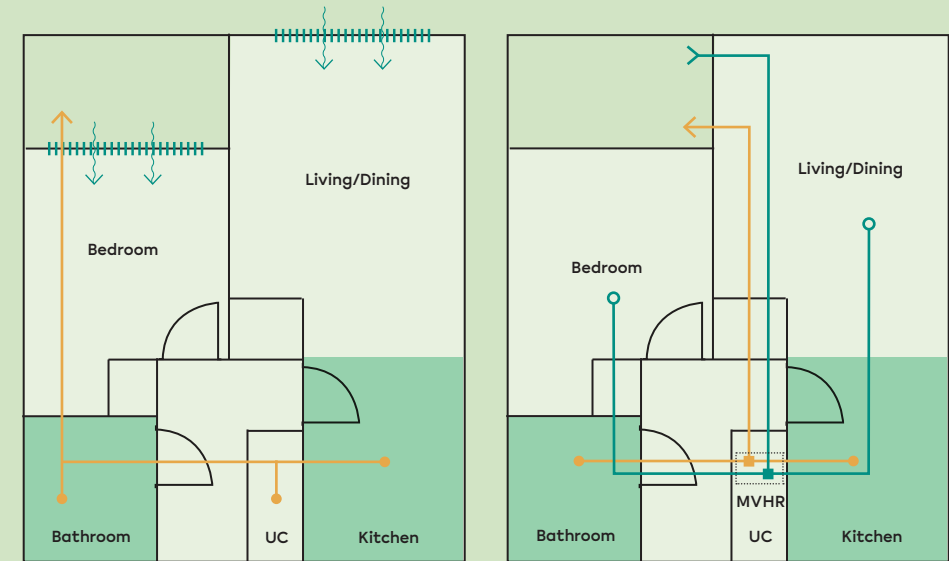
Cold and Hot Water Services

- A district heating network or centralised system can provide instantaneous domestic hot water provision for dwellings up to 3-bed and requirement for less than 60kW hot water production.
- In all other circumstances (i.e. supply to 4-beds, requirement for more than 60kW hot water production or where electricity and/or air source heat pump-based system is utilised) hot water storage will be required.
- Domestic hot water storage should be sized according to number of occupants and flow rates of taps.

Ventilation System Design Criteria



Note: a hybrid system may be applicable where there is a risk associated only with the overheating criteria. In this case, a passive system with additional MEV or larger opening vents could be implemented to deal with summer/overheating ventilation.



← Extracted air Trickle vents ← Fresh air supply

Continuous Mechanical Extract Ventilation (MEV) + trickle vents to habitable room windows **Continuous Mechanical Supply and Extract with Heat Recovery (MVHR) - Carbon/NOx filtration**

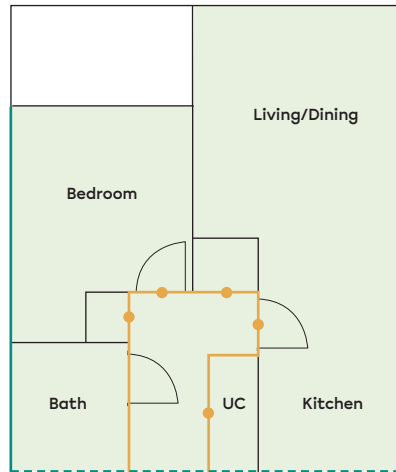
2.3 FIRE

STANDARD APPROACH

Apartment Blocks

B1 - Means of warning and escape

- All Be First residential apartments are to be provided with a residential sprinkler system designed and installed in accordance with BS 9251:2014.
- A stay-put evacuation strategy should be adopted.
- It is Be First's preference to have open-plan living, kitchen and dining spaces within flats, therefore examples layouts show protected entrance halls with 30 minutes fire resistance. All doors within the protect entrance hall (except the bathroom) must be FD30 fire doors.
- For protected entrance hall designs, an LD2 detection and alarm system should be provided. This generally consist of a smoke detector in the protected entrance hall and a heat detector in the kitchen (subject to the fire alarm installer's detailed design and risk perception).
- If open plan apartments are considered, they should achieve the recommendations of BS 9991 or be subject to a fire engineered solution.
- Single direction travel distance in common corridors is limited to 15m with sprinkler protection to



- 30 mins fire resistance
- FD30 fire door
- 60 mins fire resistance between flats
- - - 60 mins fire resistance between flats and common corridors/ 30mins fire resistance up to 1.1m height between flats and gallery access deck

- apartments and either a single natural or mechanical smoke shaft.
- A single stair is acceptable, subject to travel distances.

Periods of fire resistance for elements of structure:

| Conditions | Minimum periods of fire resistance (min) | | | |
|--|--|------|------|------|
| | ≤5m | ≤18m | ≤30m | ≥30m |
| Height of top occupied storey above access level | | | | |
| Sprinklered | 30' | 60 | 60 | 120 |
| Unsprinklered | 30' | 60 | 90 | N/A |

Note 1: 30 minutes fire resistance to elements of structure only applicable to individual dwellingshouses

- The stair must discharge directly to outside or via a protected route to outside. No accommodation to open into this protected route without a ventilated lobby separating them.
- A fire alarm override switch should be provided in a secure location accessible for the fire service to initiate a building wide simultaneous evacuation alarm, if deemed necessary.
- In view of upcoming regulations and legislation changes, current recommendations are to be reviewed on a project by project basis.

B2 - Internal fire spread (linings)

- All internal linings will be provided in accordance with the applicable guidance recommendations i.e. Approved Document B or BS 9991.

B3 - Internal fire spread (structure)

- All elements of structure to be designed in accordance with relevant guidance. Refer to table below.
- All apartments are to be provided with 60 minutes fire resistance between each other and between common corridors.
- Where apartments are accessed via an external gallery and escape is only possible in a single direction, 30 minutes fire resistance up to a height of 1.1m is to be provided between the apartment and the gallery.
- Compartment floors are to provide the same level of fire resistance as elements of structure.
- Potential firefighting shafts will be provided with 120 minutes fire resistance
- Any service risers will be provided with the same level of fire resistance as the elements of structure. This can be achieved either via fire stopping at

- each compartment floor level or via vertical compartmentation (refer to figures overleaf)
- Cavity barriers should be provided in accordance with applicable guidance recommendations (i.e. ADB or BS 9991)

B4 - External fire spread

- Facades will be designed in accordance with space separation analysis undertaken by the fire engineer.
- The external fabric will achieve European Class A2-s1, d0 or Class A1, regardless of building height.

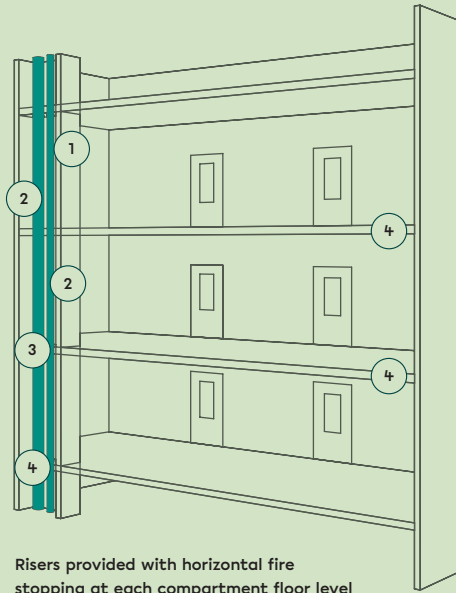
B5 - Access and facilities for the fire service

- Any building above 18m in height will be provided with a firefighting shaft including:
 - Firefighting stair
 - Firefighting lift
 - Smoke ventilated firefighting lobby
- Dry riser if building height <50m
- Wet riser if building height >50m
- The distance between the firefighting stair door and the firefighting lift will not exceed 7.5m
- Riser inlets will be provided within 18m of fire service vehicle access and outlets will be provided within the stair enclosure at every floor level including Ground Floor.
- All points of every apartment will be within 45m of the outlet (or fire service vehicle for buildings <18m) on a route suitable for laying hose.

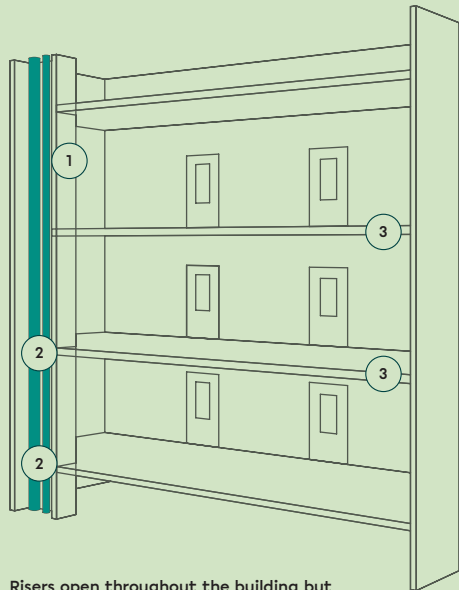
Dwellinghouses

- For houses up to 3 storeys high, sprinklers will not be utilised. Therefore, houses should be designed in accordance with Approved Document Part B to ensure compliance with Building Regulations.

- ① Shaft/riser access door(s): 60 minutes fire resistance if they are accessed or located in the protected common corridor
- ② Shaft/riser wall: 60 minutes fire resistance if they are accessed or located in the protected common corridor
- ③ Fire stopping and passive fire protection at compartment floor level. Fire resistance period at least equal to that of a compartment floor.
- ④ Fire Resisting compartment floor

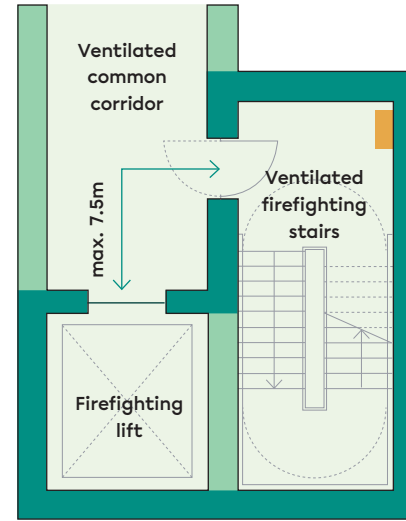


Risers provided with horizontal fire stopping at each compartment floor level (equivalent to elements of structure)



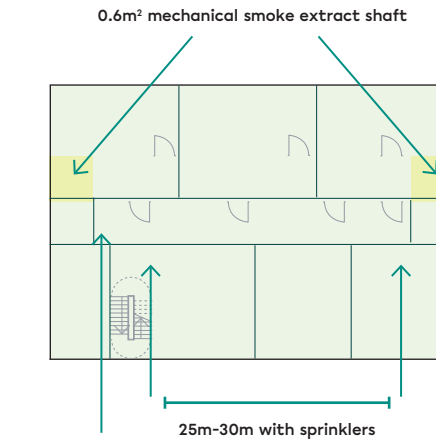
Risers open throughout the building but enclosed in fire resisting construction equivalent to elements of structure

- ① Shaft/Riser access door(s): Fire resistance period at least half that of the compartment floor
- ② Shaft/Riser wall: Fire resistance period equal to that of the compartment floor
- ③ Fire Resisting compartment floor



Components of a firefighting shaft for residential buildings - residential buildings only

- Min. fire resistance 60 mins
- Min. fire resistance 120 mins
- Fire main outlet



Protected means of escape corridor

Smoke detection required in corridor to operate smoke control system.

FIRE ENGINEERED SOLUTIONS

Although Be First's preferred starting point for design development is the standard approach outline above, there may be justification for a fire engineered solution to overcome specific design challenges, on a project by project basis.

For example:

- Single direction travel distances in common corridors could be extended to 30m if a Double Reversible Mechanical Extract (DRME) system is implemented. This approach would need to be supported by Computational Fluid Dynamics (CFD) modelling as part of the fire engineering justification.
- Open-plan apartments greater than the maximum dimensions recommended in guidance, with unenclosed kitchens, are possible with a fire engineered justification. Residential sprinkler protection and Category LD1 detection and alarm system is required as a minimum and CFD modelling will be required as part of the fire engineering justification.

Both approaches would need to be discussed and agreed with Approving Authorities.

2.4 ACOUSTICS

INTERNAL SOUND LEVELS

Be First homes should provide a quiet, comfortable space that enable suitable conditions for relaxing, resting and sleeping.

Site layout

- At feasibility stage, consideration should be given to reducing noise throughout the development by optimising the site layout. This can help to minimise the requirements for enhanced façade sound insulation measures later in the design process.
- Early thought should be given to building orientation. For example, setting the building further back from a road or railway, or locating more sensitive spaces (such as bedrooms) on a quieter façade.
- Landscaping can also be used to introduce acoustic screening between major noise sources and external amenity areas. This will help with providing a calming, restorative soundscape for residents, and an increased sense of enjoyment.

Environmental surveys

- An environmental survey shall be undertaken at an early design stage

to establish the existing levels of environmental sound at the site and surrounding buildings. The survey shall be undertaken in accordance with the principles set out within the latest version of BS 7445.

- Parts of the Borough are located close to several railway lines (including both London Underground lines, and National Rail services). Where necessary, a baseline vibration survey shall also be undertaken to determine whether any specialist design measures are required to control vibration or any associated re-radiated structure-borne noise.

Internal sound levels

- The building envelope shall be designed to achieve appropriate internal sound levels within dwellings in line with the latest version of BS 8233.
- In developing the façade specifications, consideration will also need to be given to the maximum sound levels due to individual noise events (L_{Amax}).
- Internal sound level criteria within dwellings are set out within the Employer's Requirements (ERs) document.

Noise, ventilation and overheating

- Background ventilation strategies (in line with Approved Document F, ADF) for the development shall be designed with due consideration of external noise.
- Any trickle ventilators provided as part of the ventilation system will need to be acoustically rated to achieve the required internal sound levels.
- Consideration will also need to be given to the internal sound levels that would be achieved if relying upon openable windows as part of the strategy to control overheating. Reference should be made to the Acoustics & Noise Consultants "Acoustics, Ventilation and Overheating Residential Design Guide".
- Where internal sound levels with an open window are likely to exceed 45 dB LAeq,T during the day, or 40 dB LAeq,T at night, the design team shall develop alternative strategies to mitigate overheating and present these to Be First for approval.

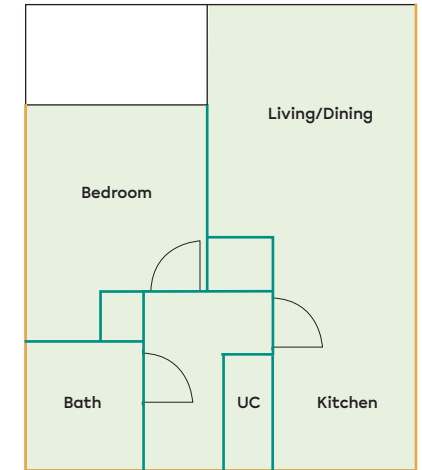
INTERNAL WALLS AND FLOORS

The standards set out below are to ensure Be First residents feel a sense of privacy within their homes. In certain situations the Be First requirements exceed the statutory minimums set out in Approved Document E (ADE).

Party walls, doors and floors

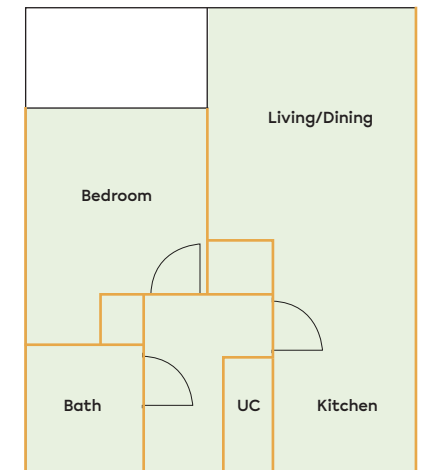
- Be First require that party walls and floors between dwellings, and between a dwelling and corridor / stairwell achieve a 5 dB improvement on the minimum numeric standards within ADE.

Standard specification apartments



- Designed to achieve a 5dB improvement on ADE
- Designed in line with ADE requirements

Enhanced specification apartments



- Designed to achieve a 5dB improvement on ADE

- Doors entering apartments off corridors shall be designed in line with the requirements of ADE.
- It may be beneficial to consider localised acoustic enhancement of doors in certain areas, such as where apartment entrance doors are ‘back to back’, or are in proximity of lifts.

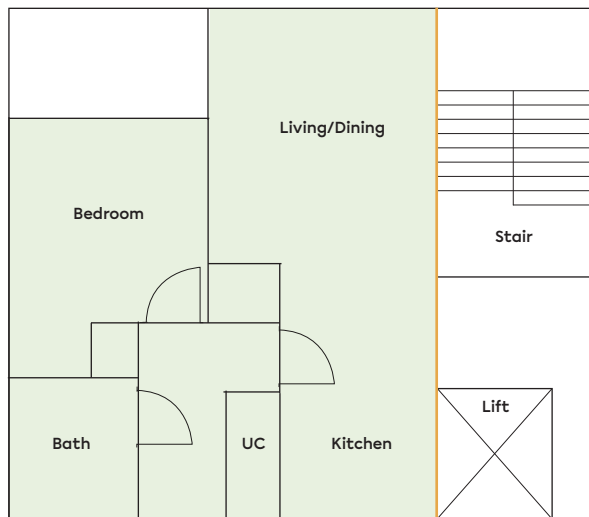
Partitions within apartments

- Internal partitions within Standard specification apartments shall be specified to achieve the minimum performance standards set out within ADE.
- For Enhanced specification apartments, internal walls shall be specified to achieve a 5 dB improvement upon ADE standards.
- Utility cupboard partitions and doors shall be designed to reduce noise

- breakout from ventilation equipment within the cupboard to indiscernible sound levels in the surrounding spaces.
- This is of particular importance should utility cupboards back on to bedrooms (which should be avoided through layout planning where possible).

Separations between dwellings and areas of different use

- Noise from non-residential areas will need to be controlled to minimise disturbance of neighbouring residents. Noise intrusion criteria are set out the ERs document.
- Where apartments back on to lift or stair cores, an independent wall lining should be provide to reduce the risk of noise from lifts being transferred to apartments. This can typically be accommodated within a 100 mm zone.



— Independent wall linings between apartments and stairs/lifts

- Where apartments are adjacent to non-residential areas such as commercial units or plant rooms, consideration should be given at an early stage to the need for enhanced separating constructions between these spaces. Specialist acoustic floor or ceiling details may be required.

ACOUSTIC FINISHES

Acoustic finishes shall be provided within corridors to comply with the requirements of ADE.

Should a more industrial look (e.g. exposed services, hard floors, exposed soffits) be preferred, it will be necessary to agree the approach with Building Control.

As part of this approach, thought should be given to enhancing the sound reduction performance of the apartment entrance doors to offset noise build-up within the corridor.

BUILDING SERVICES NOISE AND VIBRATION

Building services within apartments will need to be designed to minimise both noise and vibration, in order to limit disturbance of residents.

Building services plant shall be designed to achieve the internal and external noise and vibration criteria set out within the ERs, and local policy.

The following should be considered in developing the building services design:

- Locating fans and MVHR units away from noise sensitive spaces such as bedrooms.

- Ventilation equipment will normally require in-duct attenuators to meet the internal noise levels.
- Fans/MVHR units, and rainwater/soil pipework, should not be installed directly onto lightweight walls as this can result in unwanted structure-borne noise.
- Sockets will need to be acoustically treated to maintain the acoustic integrity of partitions. Back to back sockets should be avoided.
- Building services distribution routes will need to be designed to avoid crosstalk between different areas.
- Penetrations through party walls must be avoided. Penetrations through corridor walls are acceptable.

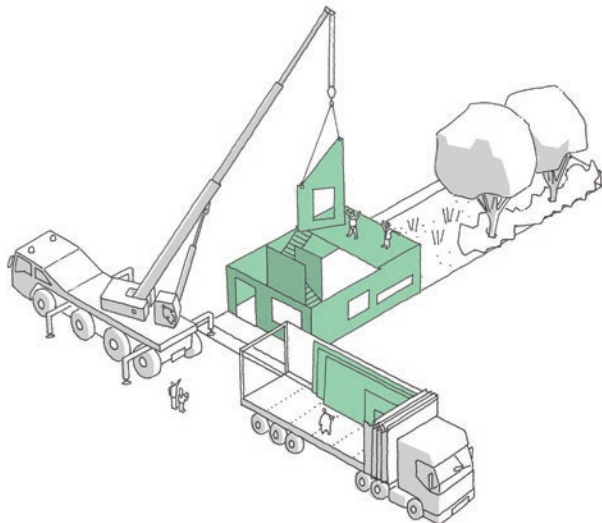
2.5 OFF-SITE PREFABRICATION

Be First encourage innovation and are keen to explore Design for Manufacture and Assembly approaches. Off-site standardised construction of components can offer increased cost-certainty, speed, minimisation of waste and improved quality and consistency of the Be First brand.

Design teams should review the potential for off-site standardised construction at Stage 1/2. In some cases, the arrangement of particular rooms can be standardised as 'pods' (e.g. bathrooms, utility cupboards etc). This should

be explored at the earliest possible opportunity, due to the space planning considerations and layout implications that entail.

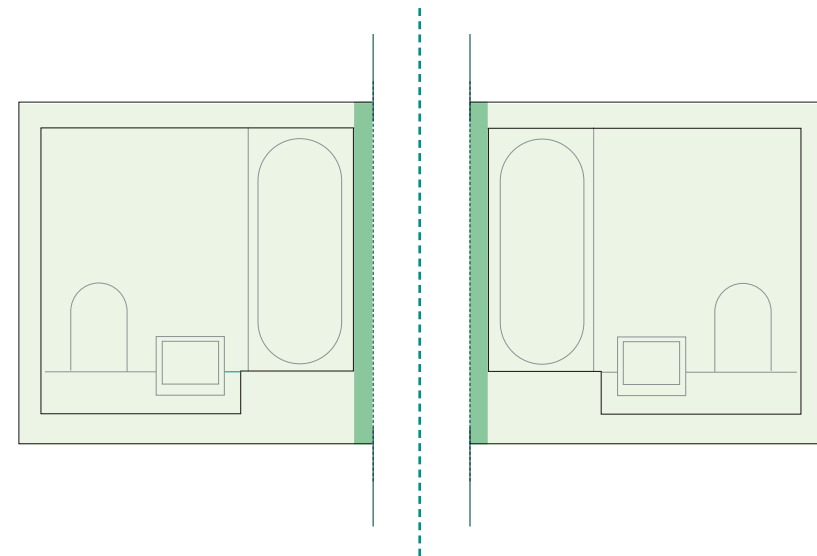
All townhouses should utilise modular or pre-fabricated methods. Schemes should seek to utilise the GLA PRISM application, which aims to help the design process for precision manufactured housing (PMH). Spatial planning rules are combined with precision manufacturer expertise in order to establish viability of PMH.



Positives for implementing bathroom pods include:

- Programme benefits
- Singular trade involvement and limitation of snagging issues due to factory quality control
- Reduced maintenance requirements due to use of robust materials such as GRP
- For this to be a suitably viable option, the following points need to be considered:
 - Need to be on procurement path early
 - Variation needs to be limited, rationalising the number of bathroom types

- Layout implications with regard to delivery and installation are critical (setting a clear path for movement of pods, and avoidance of structural downstands etc.)
- Allowance for increased wall build-up along party wall locations (50mm either side) and floor build-up, dependent upon pod type and application
- Tolerance needed above pod - service ceiling void min. 250mm
- if used, +130 - 150mm FFL for level access adaptability / trap in shower



+50mm either side of party wall to be added

2.6 TARGET EFFICIENCIES

WALL TO FLOOR RATIO

Efficient building forms reduce heat loss through the building envelope and help to control facade costs.

Design teams should target a wall to floor ratio within the range of 0.7-1.

This means that the total external wall area should be less than or equal to the internal floor area.

NET TO GROSS

Design teams should target a net to gross efficiency of 75-80%.

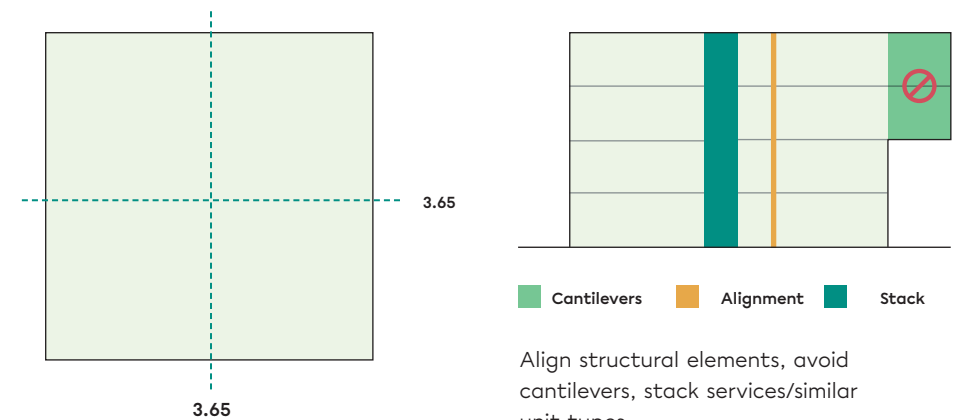
'Net' is the Net Internal Area (NIA) of the building - generally the total area of all dwellings.

'Gross' is the Gross Internal Area (GIA) of the building - generally the total area within the thermal envelope of the building, including communal areas.

2.7 STRUCTURE AND BUILD-UPS

The following guidance should be adopted across schemes, to help optimise Be First housing developments, deliver efficiencies and maximise value:

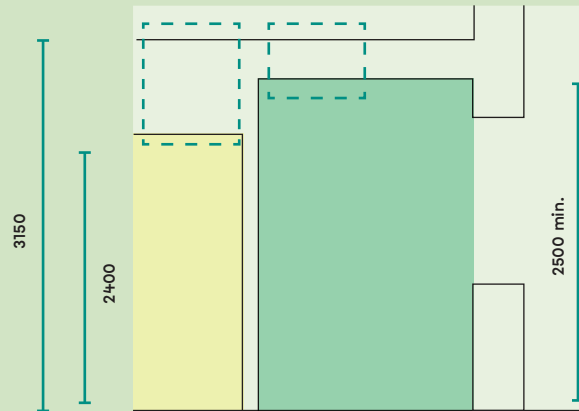
01. STRUCTURE



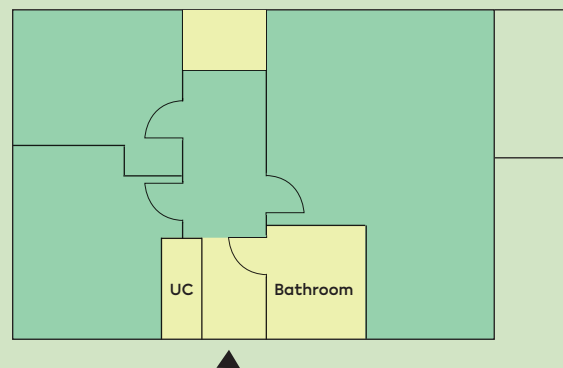
Spans to be max. 7.5m (e.g. 3.65x3.65m grid) to prevent transfer structures, allow for construction type flexibility and to allow for alignment with parking bays

Align structural elements, avoid cantilevers, stack services/similar unit types

02. FLOOR TO FLOOR HEIGHTS

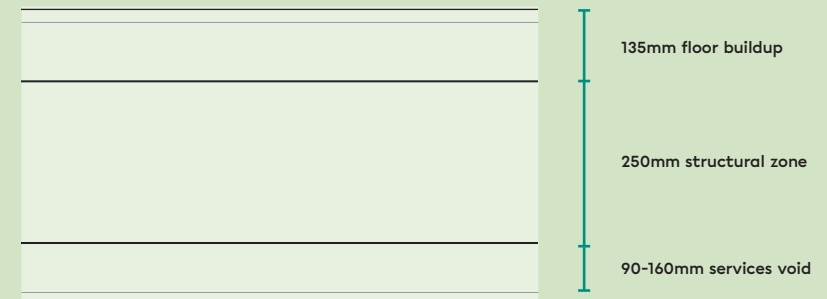


Floor to floor heights of 3150mm, allowing minimum 2500mm floor to ceiling heights to principal rooms and 2400mm to bathrooms and kitchens *



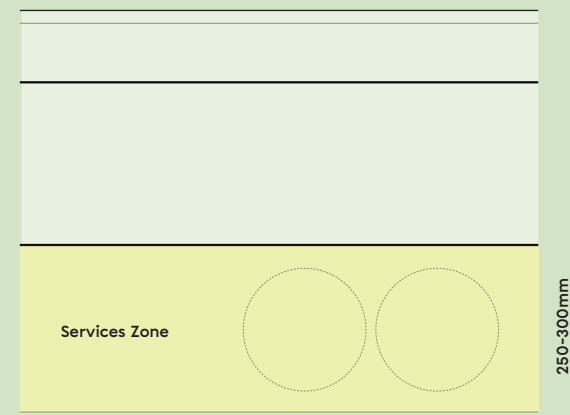
*(London Plan - private internal space minimum floor to ceiling height must be 2.5m for at least 75% of dwelling)

03. BUILD-UPS



Suggested floor build-up to allow for pod installation, level-access shower and underfloor heating. Principal room condition shown above with reduced service zone of 90-160mm depending on MVHR requirement. To be developed in relation to MEP strategy.

Wall build-ups - allow 550mm for external walls, 300mm for party walls and 100mm for internal partitions (all patressing inbetween studs)



Lowered ceilings to immediate entrance lobby, bathrooms and utility cupboard, with clear service zone of 250-300mm to allow for crossover of services. Maintain 2500mm in hallways where clerestory windows are provided about doors.

2.8 WINDOWS AND DOORS

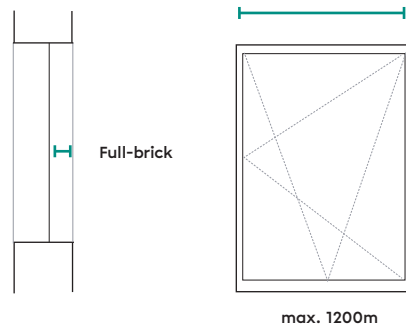
01. WINDOWS

Windows are to be composite/aluminium not uPVC. Aluminium windows perform better thermally and allow for slimmer profiles and larger areas of glazing. Polyester Powder Coating (PPC) allows flexibility over colour and is a low maintenance finish.

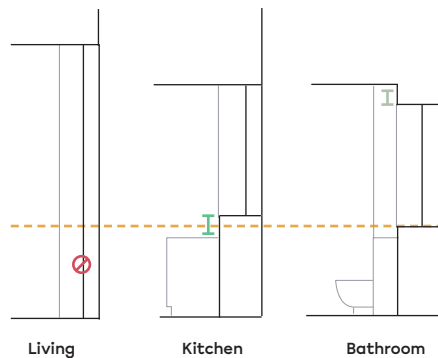
Window frames are to be set back one full brick (or equivalent) from the external face of the building.

Windows should be designed to be able to be cleaned from the inside of the building wherever possible.

Reversible tilt and turn or inward opening sash preferred, maximum dimension of 1200mm:



Room specific conditions outlining key dimensions:



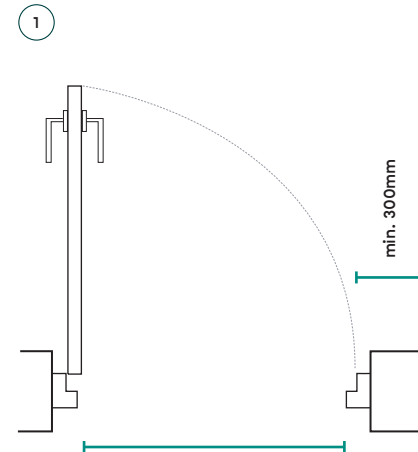
- ⊘ Full-height windows to living spaces only, with no horizontal members that obstruct the view from a seated position (below 800mm)
- Openable window heights are to be a minimum of 1100mm
- I Allow minimum 150mm upstand from counter top
- I Align windows to top of shower screen, if bathroom is to have window

02. DOORS

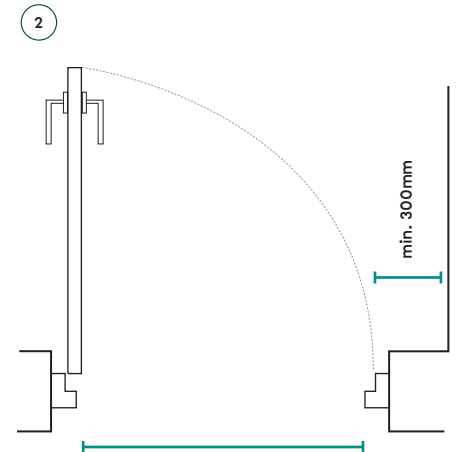
Door-set systems are to be standardised as far as possible. Primary entrance doors to buildings & apartments will be specific to each project.

Standard door types throughout to give clear openings & comply with regulations will include:

1. w 826 x h 2040 x d 44 mm metric door leaf (internal use, to comply with Category M4(2) with minimum corridor width of 1050mm)
2. w 926 x h 2040 x 44 mm metric door leaf (internal use, to comply with Category M4(3))



e.g. clear opening width of 775mm, dependent on supplier chosen



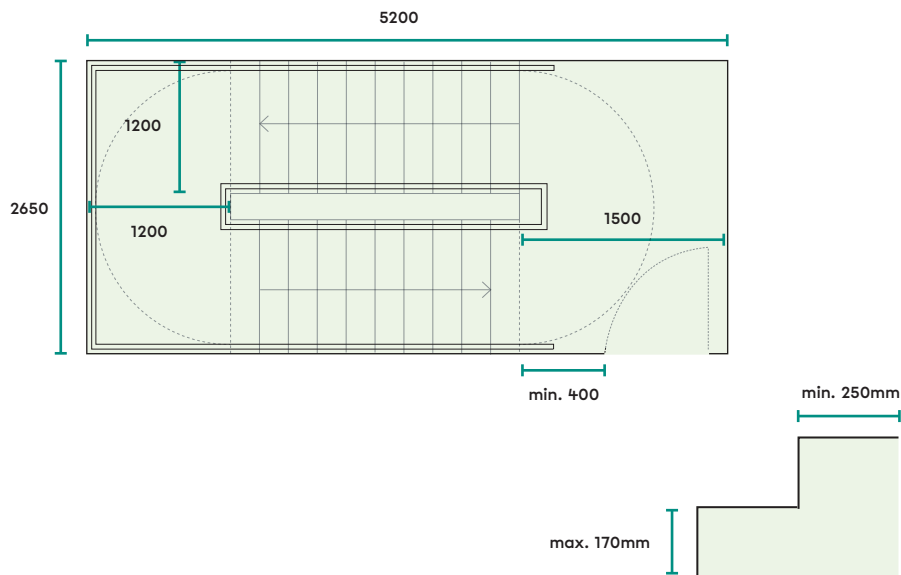
e.g. clear opening width of 850mm, dependent on supplier chosen

2.9 STAIRS AND LIFTS

01. STAIRS - COMMUNAL

- Typical standardised stair-core and going/rise dimensions are shown above as a guide, based on a 3150mm floor to floor height
- Handrails are to be set at 1100mm at landings and 900mm to risers above finished floor
- Add 50mm tolerance to either side of the overall stair dimensions shown below for early stage space planning

- Stairs offset by one tread at landings to allow smooth handrail transitions
- Hand-railing to extend 300mm beyond the top and bottom step and be fixed at a height of 900mm from each nosing, please refer to Approved Document Part K for further information on regulations
- No stairs should extend to roof level. Access hatches to be provided for access, maintenance and replacement of equipment installed at roof level.



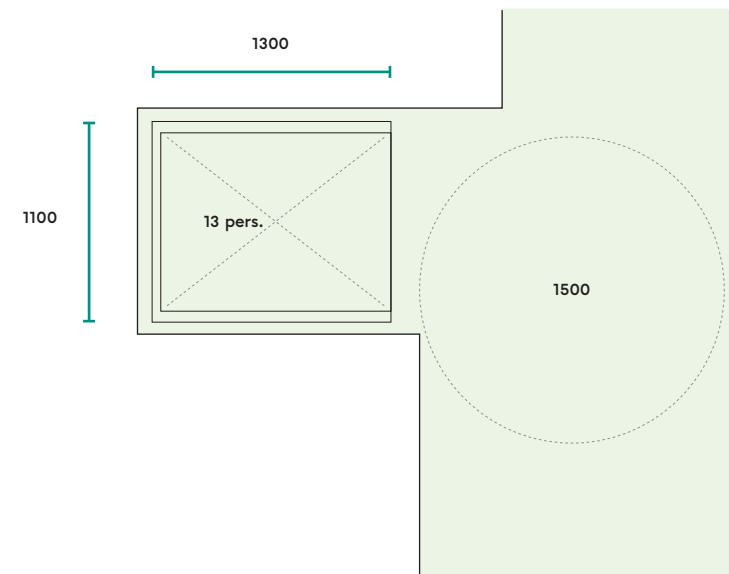
02. LIFTS

- As a minimum all lifts are to be at least 13 person/1000kg capacity and the car shape should be suitable for transport of stretchers.
- Lifts are to serve all occupied floors and to provide resilience all cores are to have at least two lifts.
- An assessment should be carried out on a project by project basis to establish the adequate number and size of lifts.
- Shaft sizes should be agreed early in the project

| Capacity | Car Width (mm) | Car Depth (mm) |
|-----------------|----------------|----------------|
| 13 pers./1000kg | 1100 | 1300 |
| 17 pers./1275kg | 1200 | 2100 |

The following table details car dimensions that are acceptable to Be First. Any deviation from the standard dimensions will require written approval.

- For both types, car height is 2200mm, door width is 900mm and door height is 2100mm. Doors should be 2 panel centre opening configuration.
- Landings must have 1500mm clear turning circle in front of lift doors.
- Be First and LBBD have a detailed lifts specification as part of the ERs that should be followed throughout the project stages.
- Open protocol, vandal resistance lifts are required.



3.0

SPECIFICATION REQUIREMENTS

HOW TO USE THIS SECTION

This section summarises Be First's Standard and an Enhanced specification for dwellings.

Each specification will be set according to individual project briefs and in relation to tenure and management requirements specific to each project.

| Living | | |
|----------|----------------------------------|----------------------------------|
| Item | Standard Specification | Enhanced Specification |
| Flooring | Engineered wood or laminate wood | Engineered wood or laminate wood |
| Lighting | LED downlighters | LED downlighters |

| Bathroom | | |
|----------------------|--|---|
| Item | Standard Specification | Enhanced Specification |
| Flooring | Studded rubber/ Marmoleum | 300 x 300 grey tiles |
| Bath panel | Acrylic | Satin white 150 x 150 tiles with mid-dark grey grout or acrylic |
| Storage | Mirrored wall cabinet - moisture resistant plywood | Mirrored wall cabinet - moisture resistant plywood |
| Fixture and fittings | Floor standing toilet | Wall mounted toilet |
| Walls | Satin white 150 x 150 tiles with mid-dark grey grout to shower/bath area | Fully tiled with satin white 150 x 150 tiles with mid-dark grey grout |
| Lighting | Recessed downlights | Recessed downlights |
| Splashback | Frosted glass | Frosted glass |
| Ensuite | N/A | Ensuites in 2b4p and larger |

| Kitchen | | |
|------------------|---|---|
| Item | Standard Specification | Enhanced Specification |
| Fridge/Freezer | Not supplied | Built in |
| Oven | Mid range fan oven | Mid range fan oven |
| Oven hob | Induction hob | Induction hob |
| Extractor hood | Supply and install recirculation | Supply and install recirculation |
| Dishwasher | Not supplied | Integrated dishwasher (slimline for 1b) |
| Worktop | Grey high spec laminate | Grey silestone |
| Kitchen units | Howdens Clerkenwell range - white matt finish | Howdens Clerkenwell range - white gloss finish |
| Sink | Countertop sink (1.5 for 2b+) | Countertop sink (1.5 for 2b+) |
| Flooring | Engineered wood or laminate wood (to match living if open plan) | Engineered wood or laminate wood (to match living if open plan) |
| Lighting | Recessed downlights | Recessed downlights |
| Feature lighting | LED task lighting fitted to the underside of the wall mounted kitchen units | LED task lighting fitted to the underside of the wall mounted kitchen units |
| Walls | Painted plasterboard | Painted plasterboard |
| Splashback | Satin white 150 x 150 tiles with white/light grey grout or glass | Satin white 150 x 150 tiles with white/light grey grout or glass |
| Shelving | Moisture resistant plywood | Moisture resistant plywood |

| Bedroom | | |
|----------|------------------------------|-------------------------------------|
| Item | Standard Specification | Enhanced Specification |
| Storage | Not supplied - space allowed | Built in wardrobe in master bedroom |
| Flooring | Natural carpet | Natural carpet |
| Lighting | LED downlighters | LED downlighters |

| Utility Cupboard | | |
|------------------------|------------------------------|------------------------|
| Item | Standard Specification | Enhanced Specification |
| Washing machine/ dryer | Not supplied - space allowed | Mid-range washer/dryer |

| Individual Apartment Entrances | | |
|--------------------------------|---|---|
| Item | Standard Specification | Enhanced Specification |
| Doorset | Timber with fanlight above | Timber with fanlight above |
| Entrance 'mat' | 150 x 150 terracotta coloured quarry tiles (or similar) | 150 x 150 terracotta coloured quarry tiles (or similar) |
| Door surround | Satin white 150 x 150 tiles with white/light grey grout | Satin white 150 x 150 tiles with white/light grey grout |

| Communal Cores | | |
|-------------------|--|--|
| Item | Standard Specification | Enhanced Specification |
| Post boxes | Ground floor lobby boxes - SBD rated | Ground floor lobby boxes - SBD rated |
| Flooring (ground) | Polished concrete or large format tiles with durable internal mat at entrances | Polished concrete or large format tiles with durable internal mat at entrances |
| Flooring (upper) | Vinyl/ Marmoleum | Vinyl/ Marmoleum |
| Walls | Feature walls: satin white 300 X 300 tiled datum, hardwood accents, painted plasterboard or Forbo bulletin board lining Everywhere else: exposed concrete blockwork | Feature walls: satin white 300 X 300 tiled datum, hardwood accents, painted plasterboard or Forbo bulletin board lining Everywhere else: exposed concrete blockwork |
| Stairs | Concrete Stairmaster | Concrete Stairmaster |
| Stair Balustrade | PPC steel top/ hardwood balustrade | PPC steel top/ hardwood balustrade |

Notes:

PRS schemes will require concierge and lockers

This document has been prepared by Mæ Architects Ltd with technical input from Hoare Lea and graphic design by Atwork. Version 01 published 03/2020. All images copyright Mæ.

