

APPENDIX 1 PROJECT HISTORY AND CONTEXT FOR BUSINESS PLAN UPADTE

PROJECT HISTORY

- 1.1** The context for the formation of the HBH partnership was a serious shortfall in delivery of affordable housing delivered by Registered Providers direct and through the planning system in Brighton and Hove. In particular the lack of supply for low income working households priced out of private housing was a key issue.
- 1.2** Hyde approached the Council with a proposal to form HBH as a vehicle to pool Hyde's and the Council's resources, skills and expertise to develop new genuinely affordable housing for local people in Brighton & Hove. The aim was to provide 1,000 new sub-market homes for low income working households in Brighton and Hove, including sub-market rental products linked to the national living wage and shared ownership housing whilst generating a commercial rate of return appropriate to the risk of financing, developing, letting, selling and managing the homes.
- 1.3** In addition to a core purpose of meeting local housing need, it was envisaged that HBH could contribute to regeneration in the City and assist in improving the housing mix, providing affordable homes for local people.
- 1.4** Following extensive discussions and satisfactory due diligence being completed by the Council, and Hyde the LLP Agreement and original Business Plan were entered into in December 2017.
- 1.5** There are several indirect benefits from the Council's investment in HBH that are ancillary to its core investment returns. This includes new Council Tax revenues, Section 106 financial contributions and New Homes Bonus payments. These indirect benefits were not taken into consideration for the purpose of this Initial Business Plan and for the avoidance of doubt are excluded from the updated Strategic Financial Model and any returns quoted.

2 Context for Business Plan Update

- 2.1** The Business Plan has been updated in order to reflect the current housing needs context in the City of Brighton and Hove and to address financial viability issues experienced for the first two sites developed by the LLP.

- 2.2** As a result of Homes England Funding to RPs and the implementation the Council's direct build program, the delivery of affordable housing in the City has accelerated since the formation of HBH. Currently several large sites in the city with planning consents for private sale housing are in the process of being delivered by RPs as 100% affordable housing schemes.
- 2.3** The availability of grant at enhanced rates through the Homes England Strategic Funding Program has enabled RPs to be competitive in the Brighton and Hove land market for sub-prime sites which has made it much more difficult for the LLP to acquire land on the open market.
- 2.4** Many large private sale led sites under development in the City fail to deliver the policy requirement of 40% affordable housing using a viability argument to reduce the affordable housing quota. The current RP affordable housing pipeline in the City leans towards shared ownership, of the 1025 homes in the pipeline, 70% are for Shared Ownership with 30% for Rent.
- 2.5** The Council is keen that there is a need for as many delivery vehicles as possible for new affordable housing in the city – RPs, LA direct, JV – and that LLP as DevCo could be attractive as a vehicle for delivering new homes at scale for the Council.
- 2.6** The adoption of a Development Company Model, whereby the LLP delivers affordable homes for its partners rather than developing its own port-folio has enabled the input of Homes England funding in addition to the delivery of an investment return for the equity partners.
- 2.7** Homes England funding requires rented homes to be delivered at Social Rents and to be made available for general needs housing through the Council's Common Housing Register. This requires HBH to move away from providing rented housing linked to the Living Wage and made available for working households only.

Appendix 2 Sustainable Construction including meeting Future Homes Standards.

“Future Homes” is a set of standards to complement Building Regulations and ensure that new homes built from 2025 will produce 75-80% less carbon emissions than homes delivered under current regulations.

The approach of HBH to building sustainability for the 2 initial sites was to use a fabric first approach focusing on thermal efficiency and insulation to minimise heating and other energy requirements. Electric space and water heating systems were used, complemented by the instalment Photovoltaic Panels on building roofs.

Hyde have drafted a “Hyde Future Homes Standard and Energy Sustainability Strategy”, and Brighton and Hove City Council have produced and are beginning to implement their “New Build Housing Sustainability Policy”. The documents have similar objectives and targets to ensure future developments are sustainable and fit for future generations. Below are standards common to the partners. HBH will adopt these standards and work towards carbon neutrality for all its developments.

- All new homes should achieve an ‘A’ EPC rating. This will be delivered primarily through a fabric first approach to reduce heat loss through good insulation, low air permeability and low thermal bridging losses.
- Schemes will allow for Connection to district heat networks and/or shared ambient ground source loops where these are available. Other low carbon heat sources such as heat pumps will be considered where it is not possible to connect to district or shared systems. Gas fired and fossil fuelled space and/or water heating systems will not be used.
- New technologies such as active infra-red heating systems will be considered.
- Where possible, onsite renewable energy generation will be included, for example from PV panels.
- We will aim to achieve RIBA 2030 Climate Challenge targets for potable water consumption. This can be delivered using low flow fittings, rainwater or greywater harvesting and installation of external water collection devised where appropriate.
- We will set embodied carbon targets and undertake Whole Life Carbon assessments for each project.

- We will undertake a circular economy assessment of the site and scheme at the design stage to identify the opportunities to reduce use of primary raw materials, maximise use of secondary materials, and avoid and reduce waste.

These standards will be reviewed and updated on an annual basis to take account of evolving best practice.

**APPENDIX 3:
UPDATED DESIGN GUIDE**

DRAFT

Design Code

Document to determine apartment layouts and optimum efficiency
May 2022 - Version 4

21.141

1

Design Code

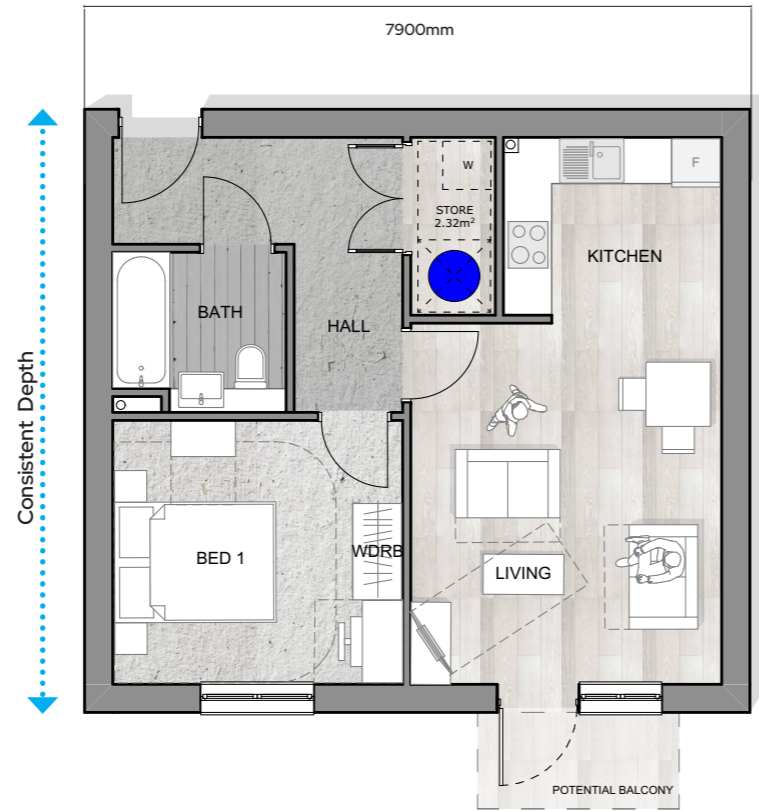
Apartment Types

MODULAR COMPONENTS

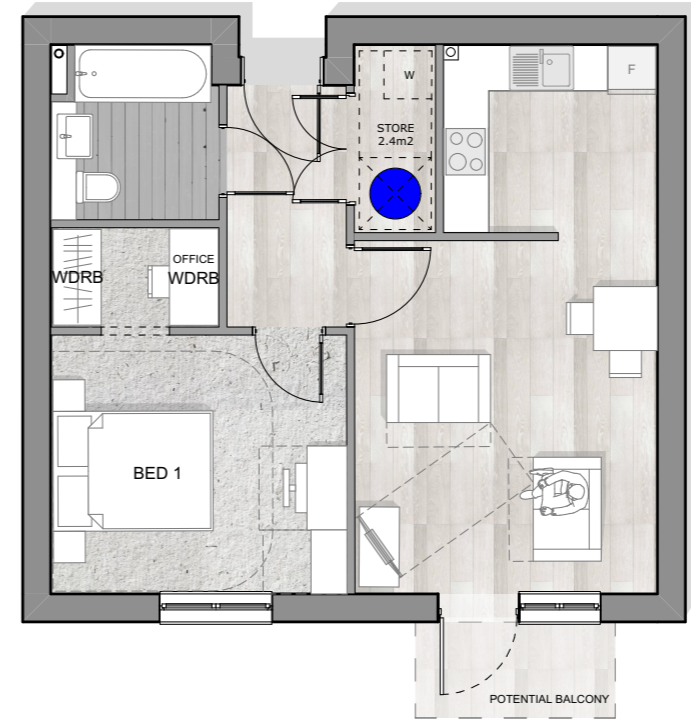


Standard Flat Plans

1 Bed Apartment - 50m²

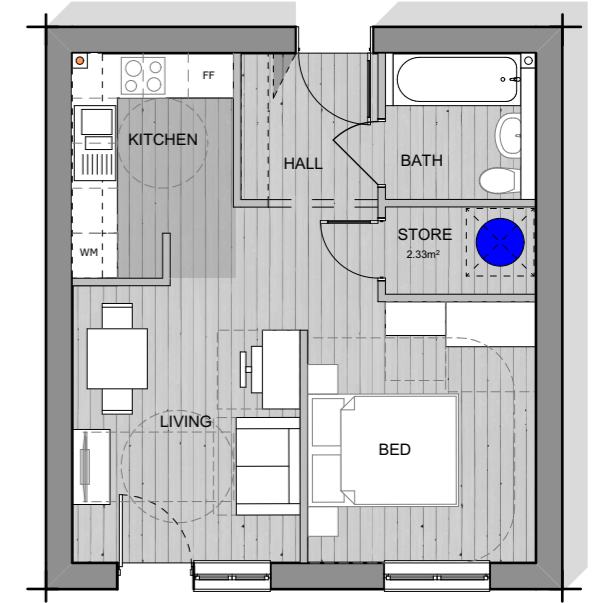


Alternative 1 Bed Apartment - 50m²



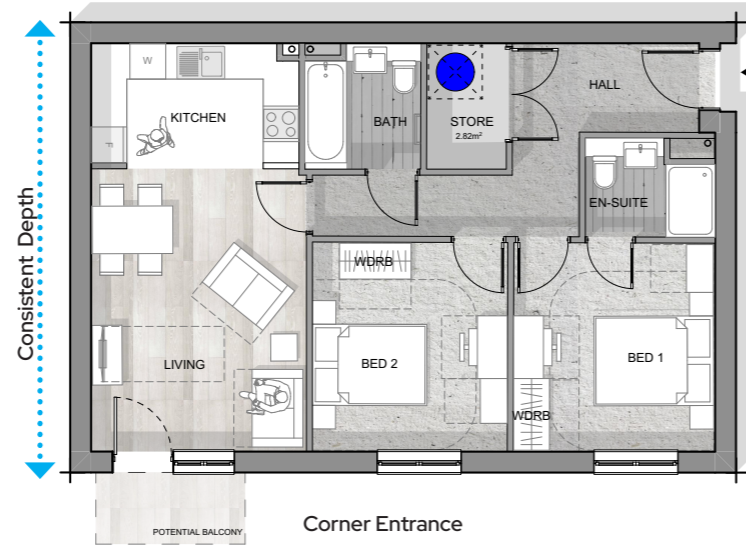
Typical Studio Unit

(Consider viability as may not be cost effective)



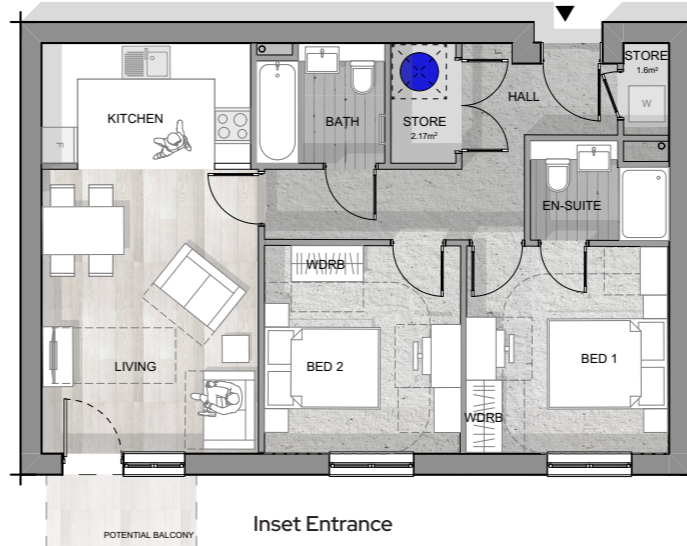
2 Bed Apartments- 70m²

2B4P Apartment - 70m²



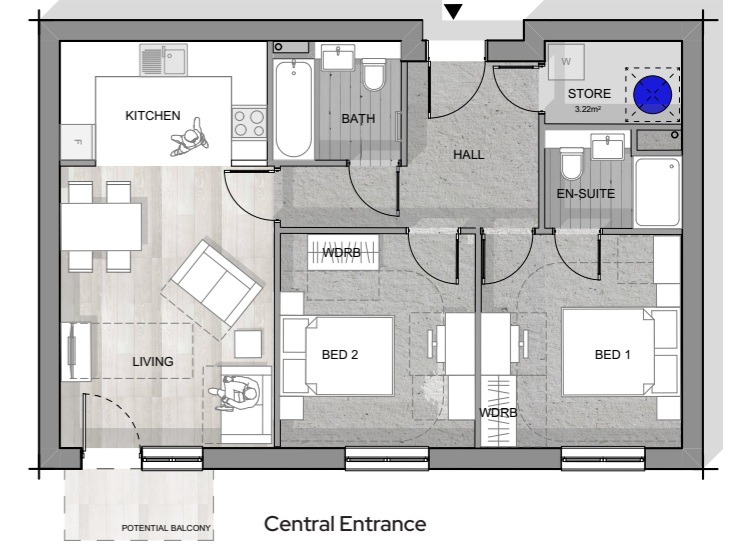
2 Bed Consistent Width

2B4P Apartment - 70m²

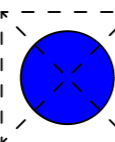


2 Bed Consistent Width

2B4P Apartment - 70m²



Assumed position for the washing machine can be located within the storage space, unless where the internal area cannot meet the NDSS space, the washing machine can be placed in the kitchen.



Assumed position for Heat exchanger which will be located within the storage cupboard. A space of approximately 900 x 900mm has been provided for as indicated.

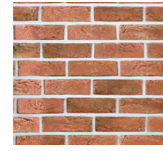
No. of Bedrooms	No. of Bed spaces	1 storey dwellings	Built-in storage area
1 Bed	1 Persons	39m ²	1m ²
	2 Persons	50m ²	1.5m ²
2 Bed	3 Persons	61m ²	2m ²
	4 Persons	70m ²	
3 Bed	4 Persons	74m ²	2.5m ²
	5 Persons	86m ²	
	6 Persons	95m ²	

National space standards (NDSS) compliance require built-in storage within every unit.

Exploded Axonometric

Materiality

The external facade will use materials that will suit the surrounding context.



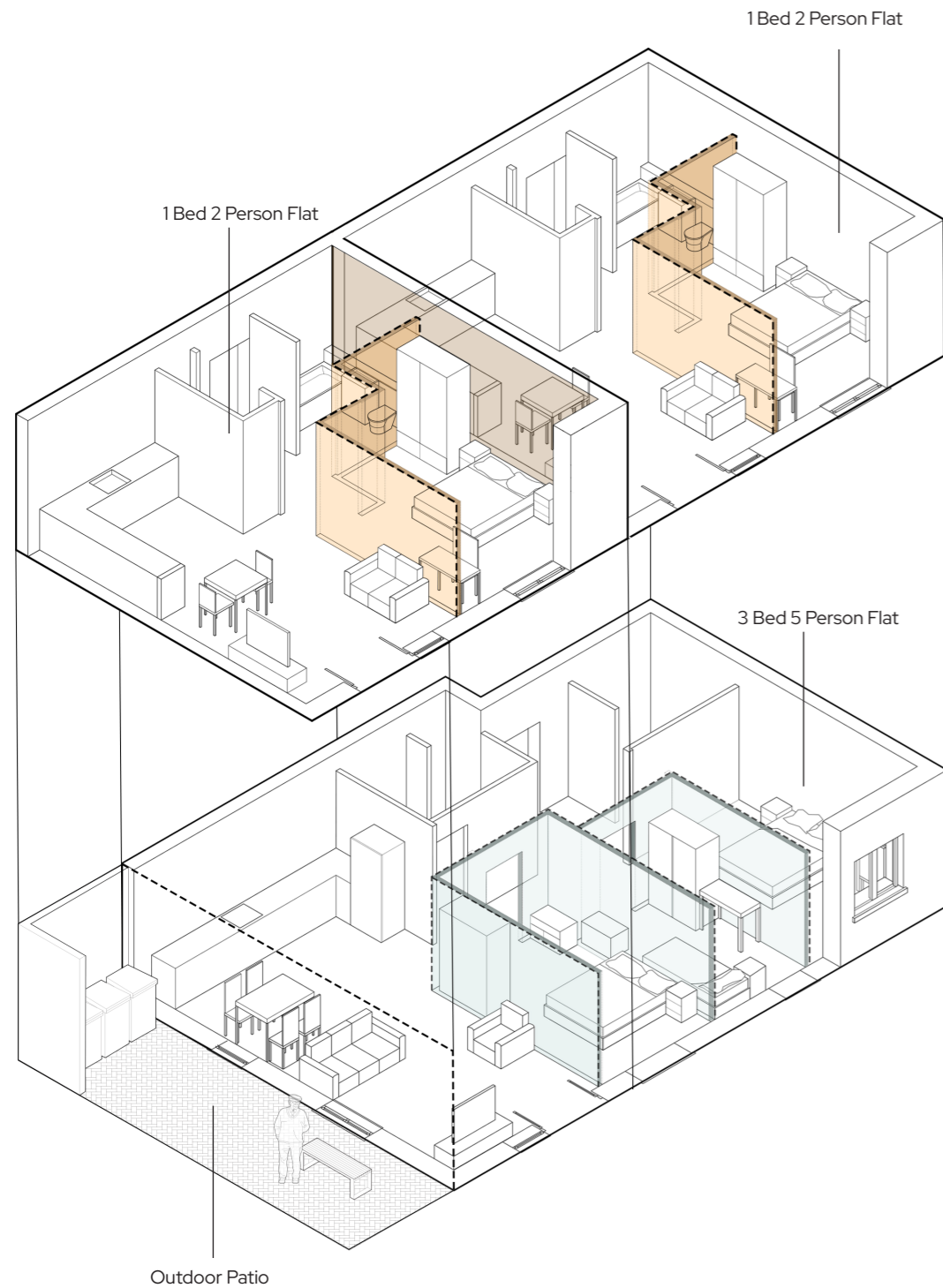
Red



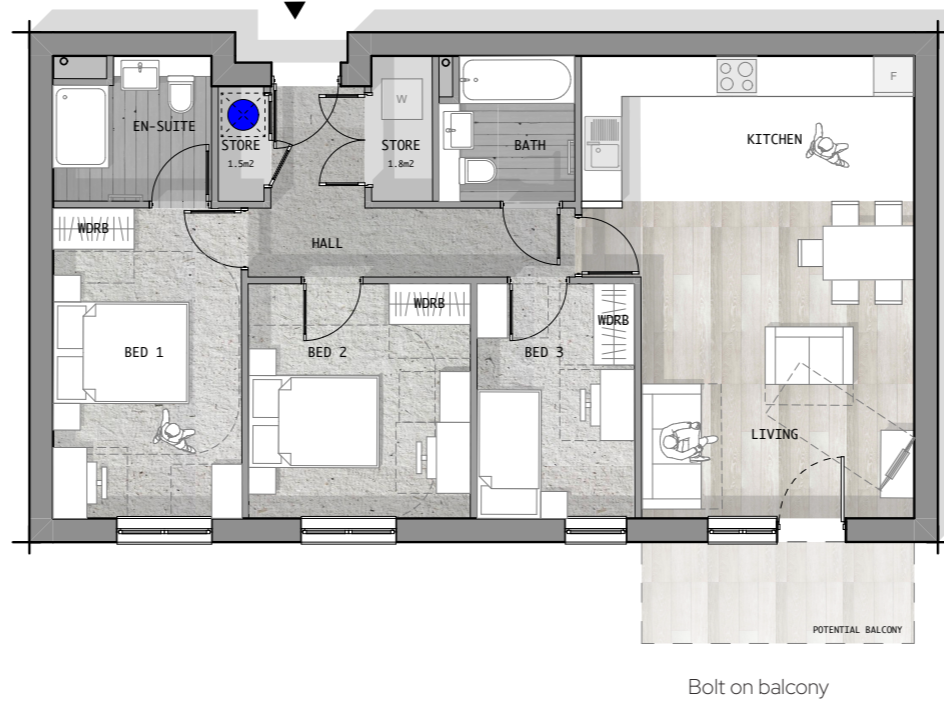
Buff



Grey

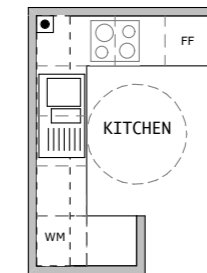
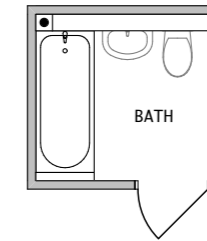


3 Bed 5 Person Flat - 84m²

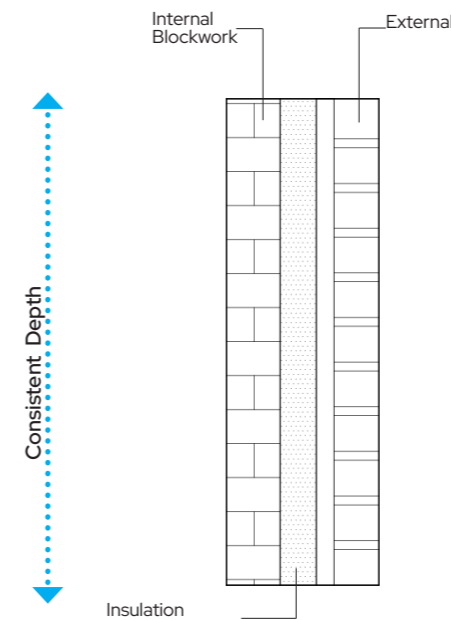
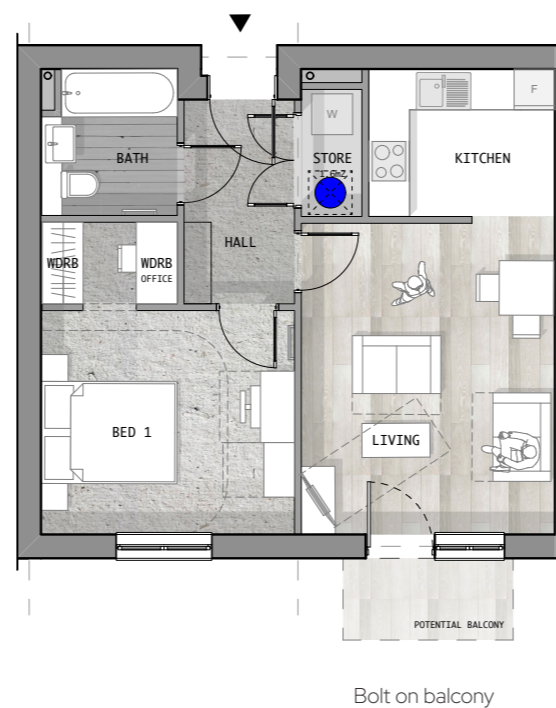


Modular Construction (MMC)

Modular construction techniques used in construction, for example Modular bathrooms, Kitchens, storage and heating / cooling systems.



1 Bed 2 Person Flat (Alternative entrance)



Wall Build Up

Wall types maximised to provide fabric first carbon reduction.

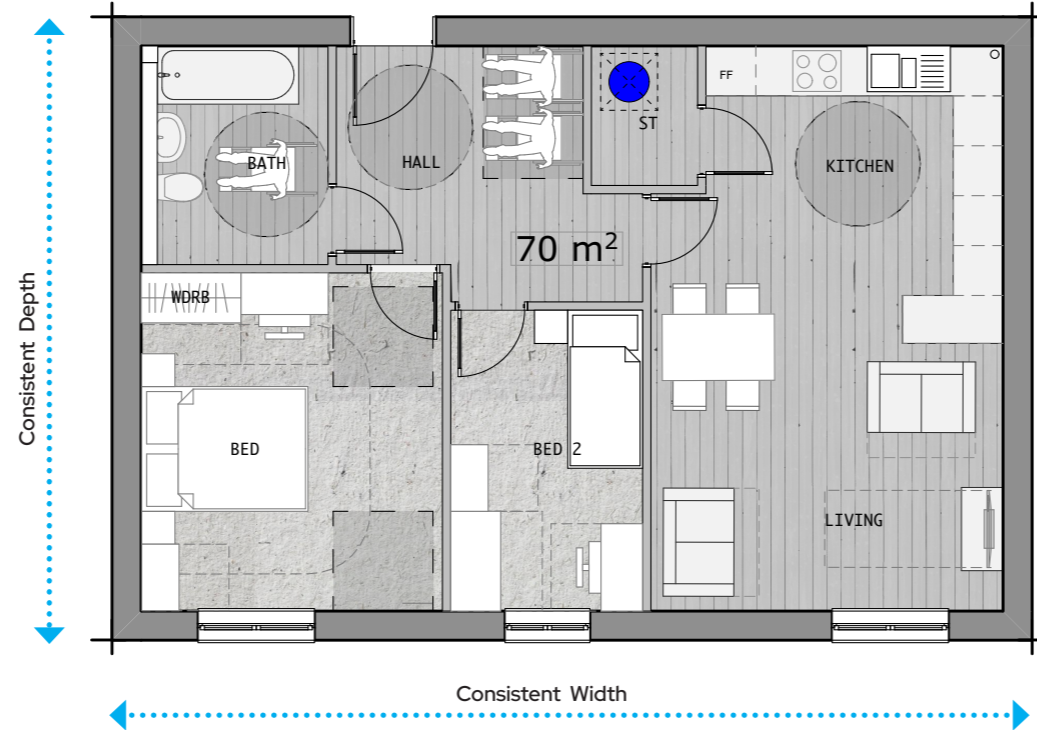
	Current 2013 Part L standard	2021 Part L Standard	Indicative FHS specification
Floor U-value (W/m2.K)	0.13	0.13	0.11
External wall U-value (W/m2.K)	0.18	0.18	0.15
Roof U-value (W/m2.K)	0.13	0.11	0.11
Window U-value (W/m2.K)	1.4	1.2	0.8
Door U-value (W/m2.K)	1.0 - opaque 1.2 - semi-glazed	1.0	1.0
Air permeability at 50 Pa	5.0 m3/(h.m2)	5.0 m3/(h.m2)	5.0 m3/(h.m2)
Heating appliance	Gas boiler	Gas boiler	Low-carbon heating (e.g. Heat pump)
Heat Emitter type	Regular radiators	Low temperature heating	Low temperature heating
Ventilation System type	Natural (with extract fans)	Natural (with extract fans)	Natural (with extract fans)
PV	No	40% floor area	None
Wastewater heat recovery	No	Yes	No

Alternative Flat Plans

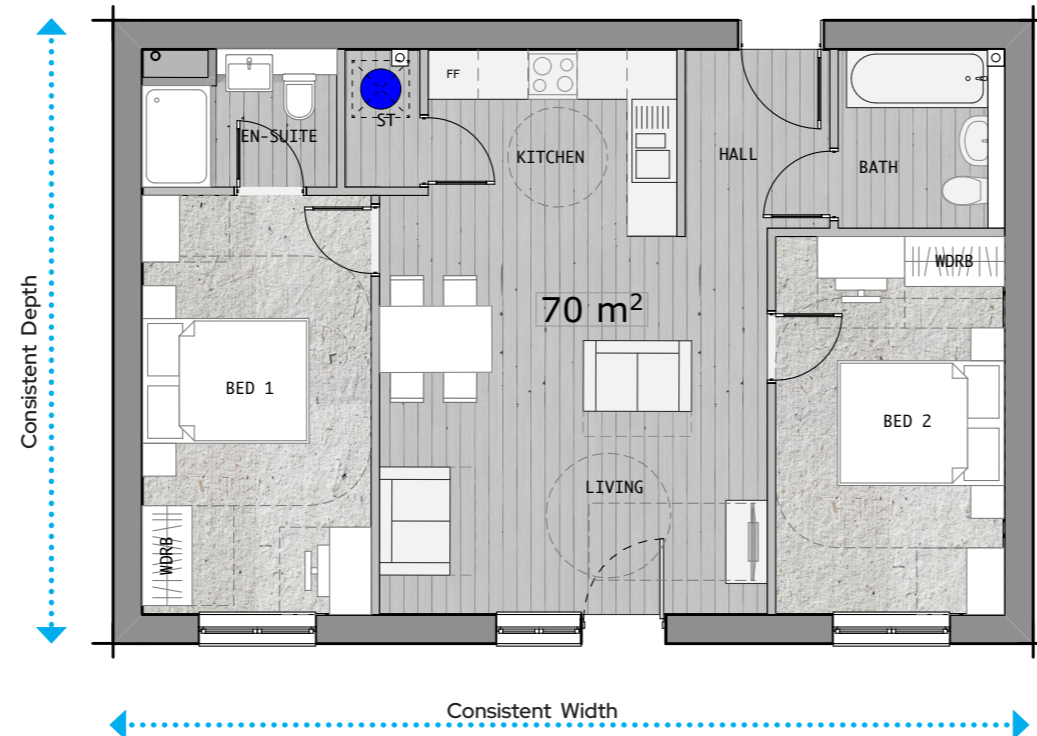
M4(3)a - Disabled & M4(2) - Dumbbell



2 Bed 3 Person M4(3)a Apartment - 70m²

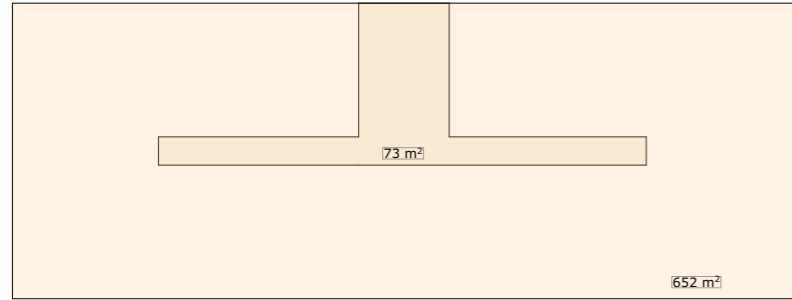


2 Bed 4 Person M4(2) Dumbbell Apartment - 70m² (Subject to sprinkler provision)

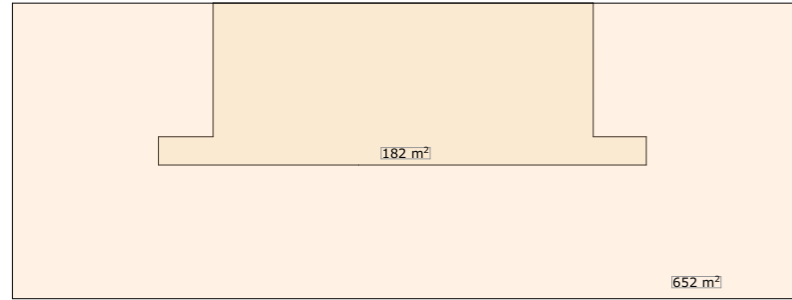


Potential Layouts

Typical Layout - Option 1

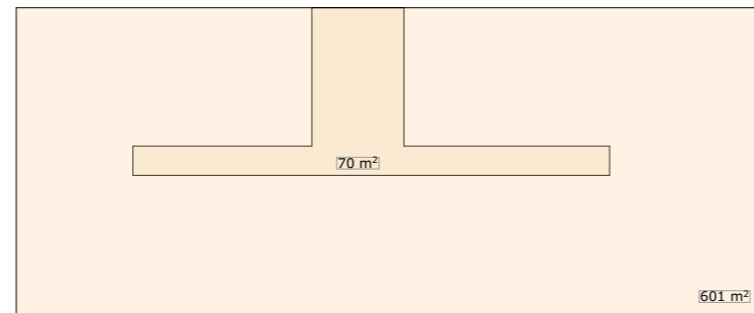


Upper Floor Area

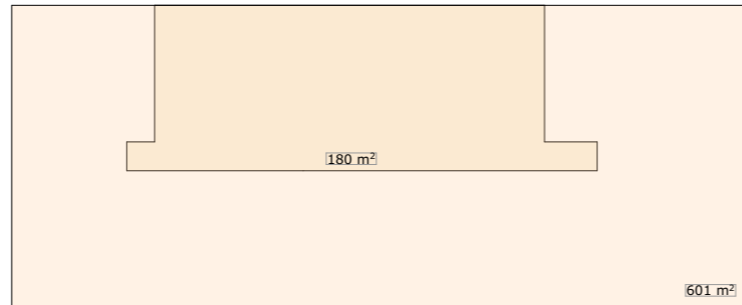


Ground Floor Area

Typical Layout - Option 2

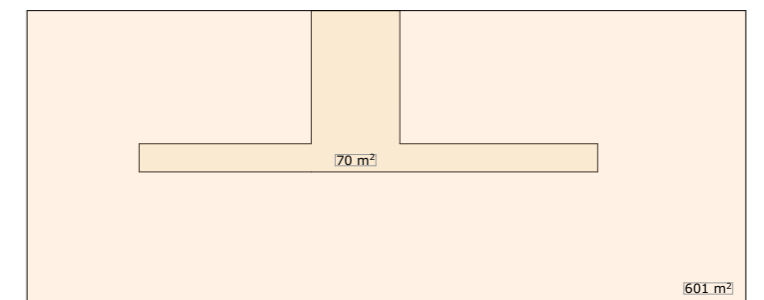


Upper Floor Area

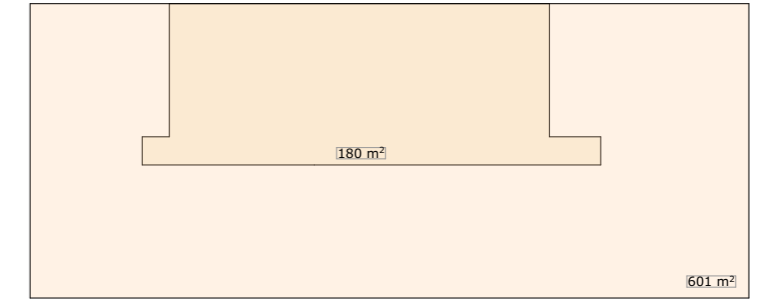


Ground Floor Area

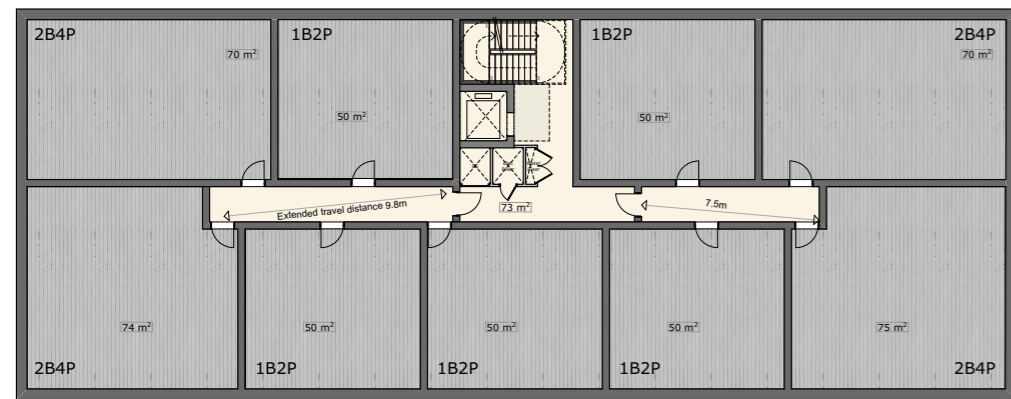
Typical Layout - Option 3



Upper Floor Area

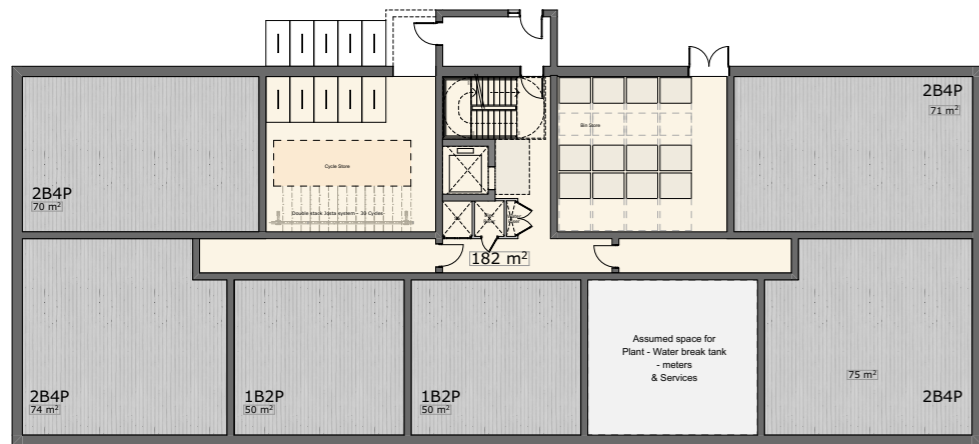


Ground Floor Area

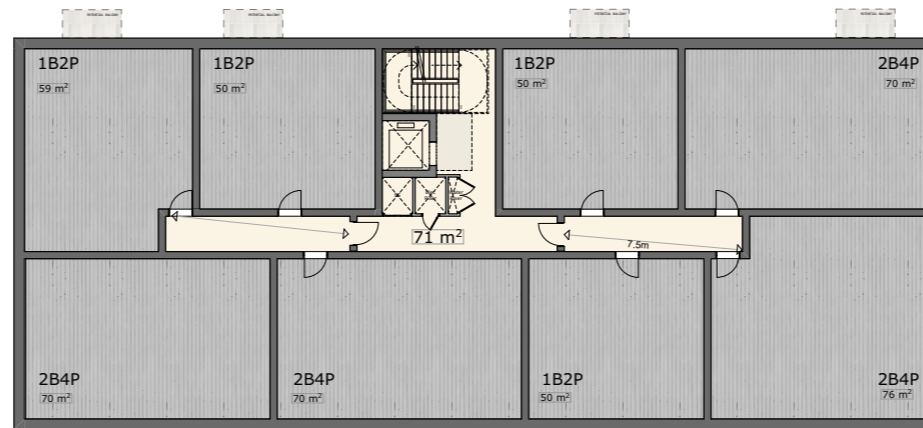


Upper Floor

Potential lobby to cycle store

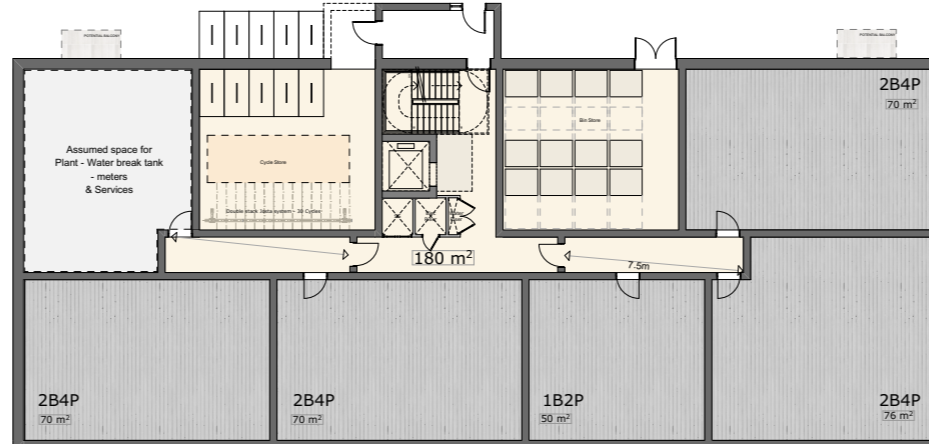


Ground Floor

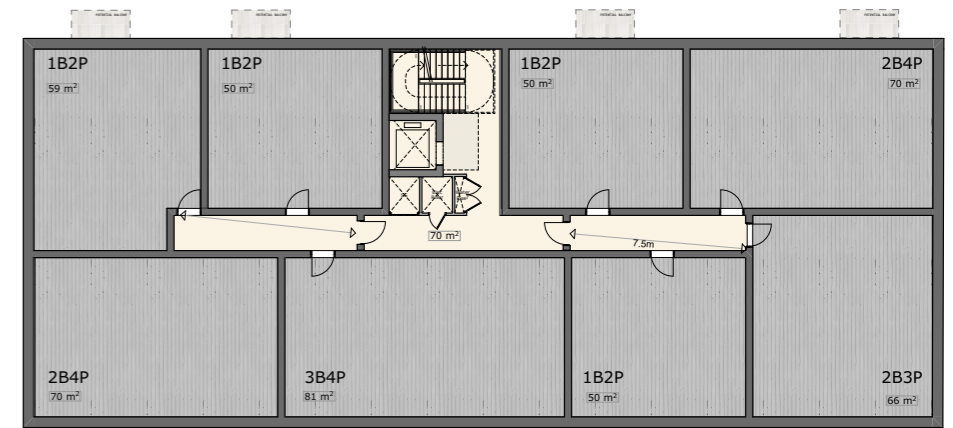


Upper Floor

Potential lobby to cycle store

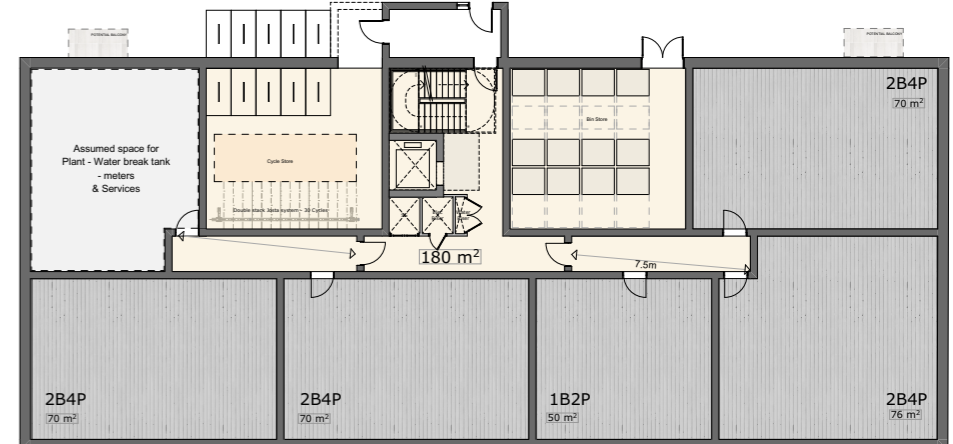


Ground Floor



Upper Floor

Potential lobby to cycle store

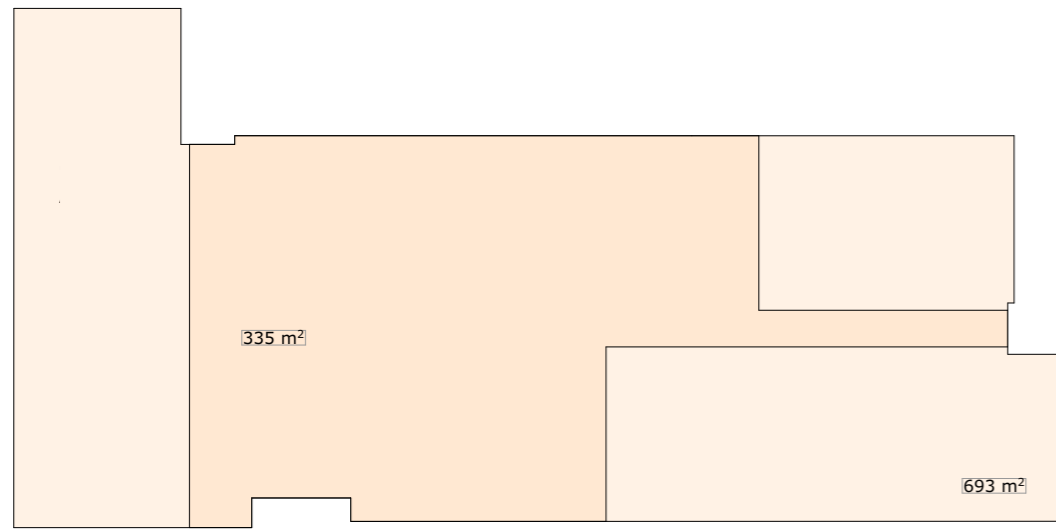


Ground Floor

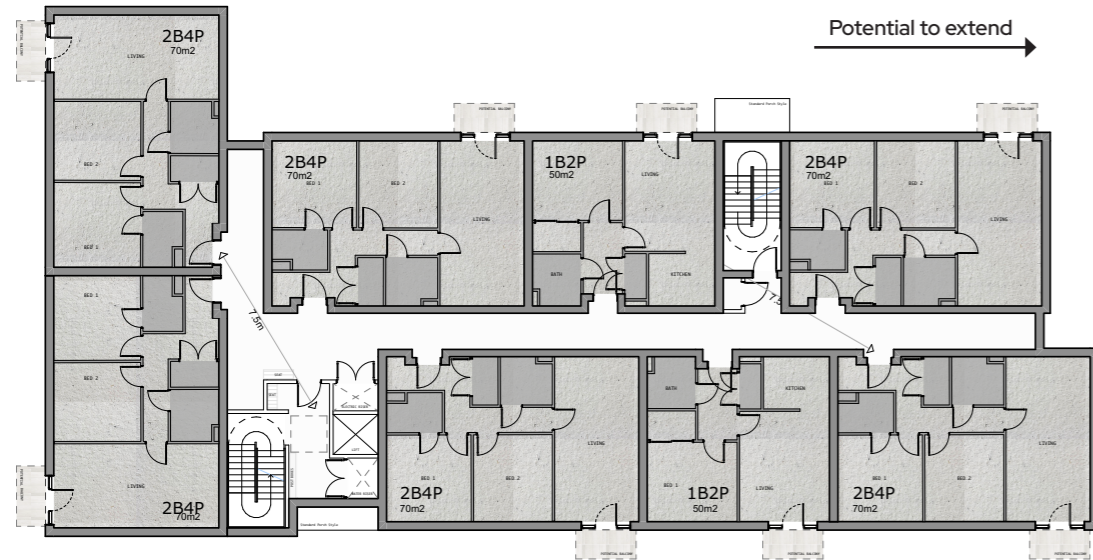
Fire corridor travel distance:
 Up to 7.5 - natural ventilation with no sprinkles (topmost storey to be less than 11m).
 15m or less - natural ventilation plus sprinkler using BS9991.

Potential Layouts

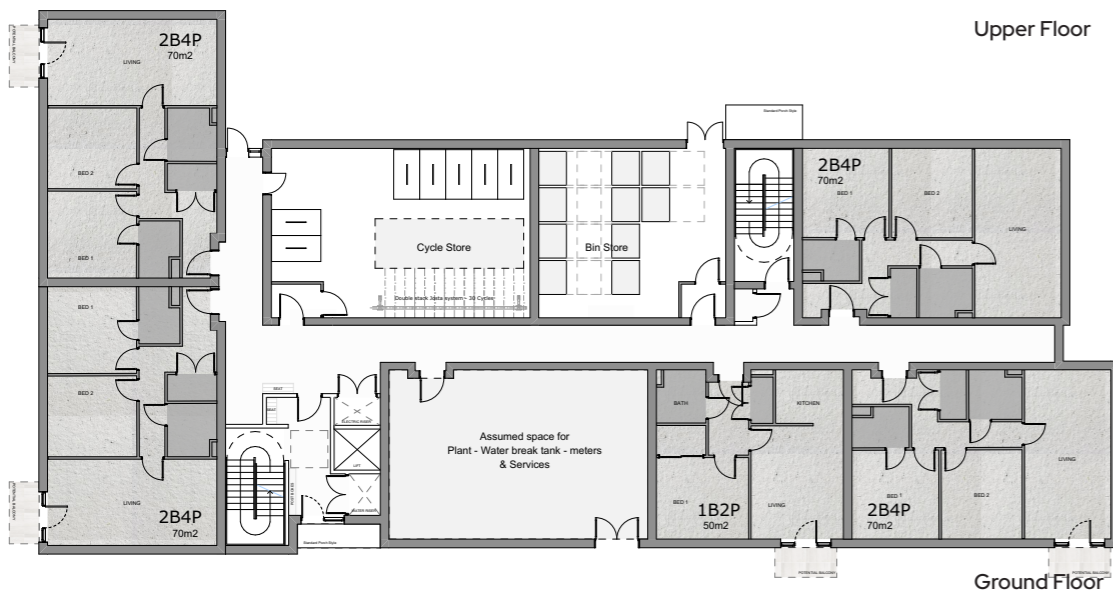
Typical Layout - Option 4



Ground Floor Area

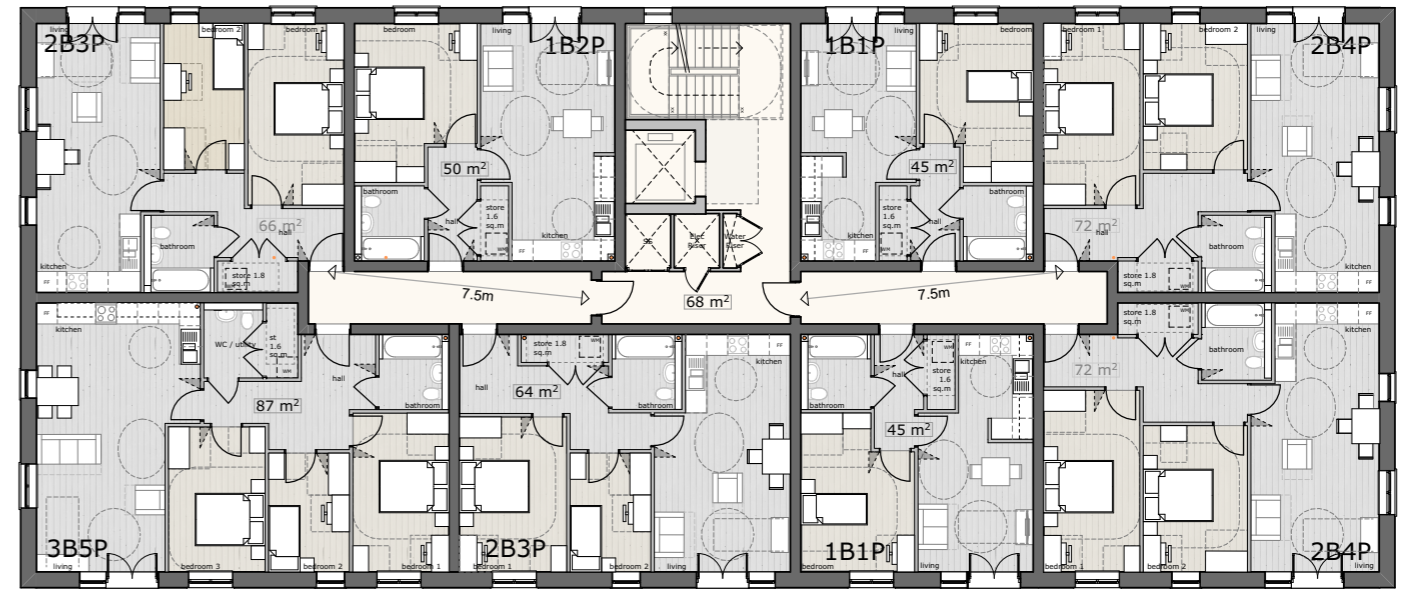


Upper Floor

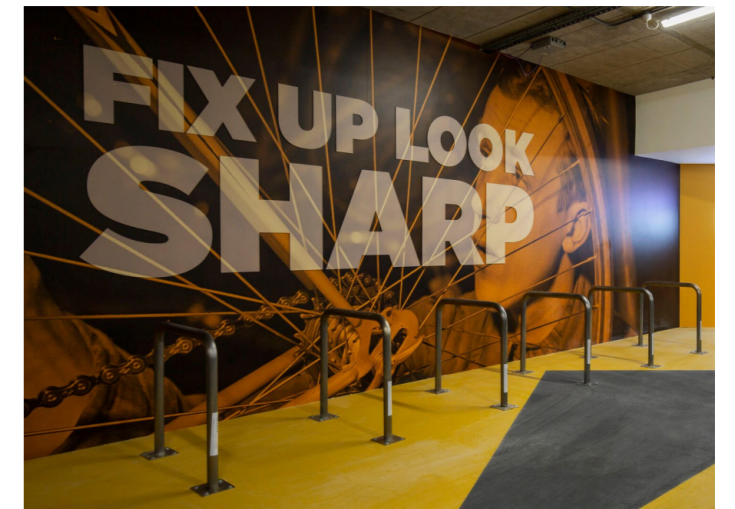


Ground Floor

Typical Layout



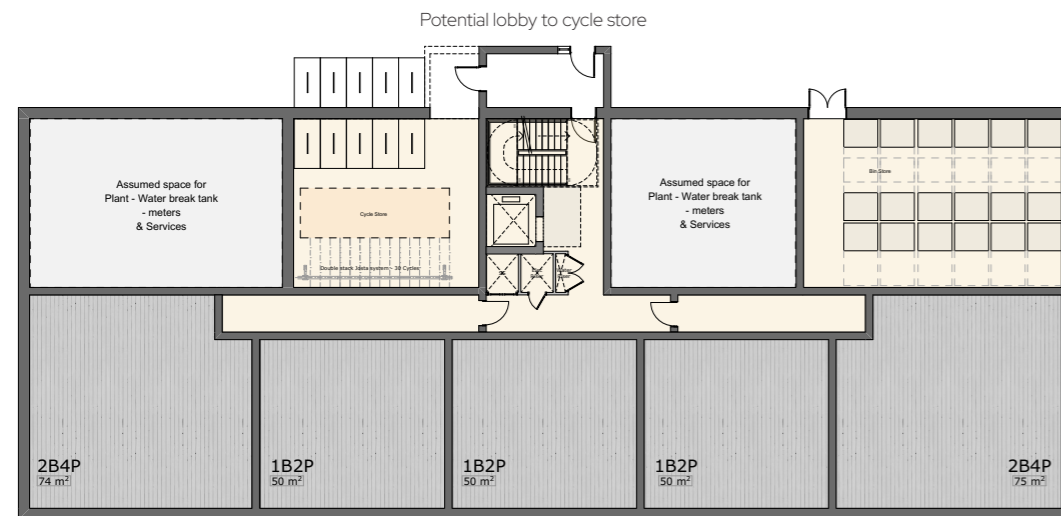
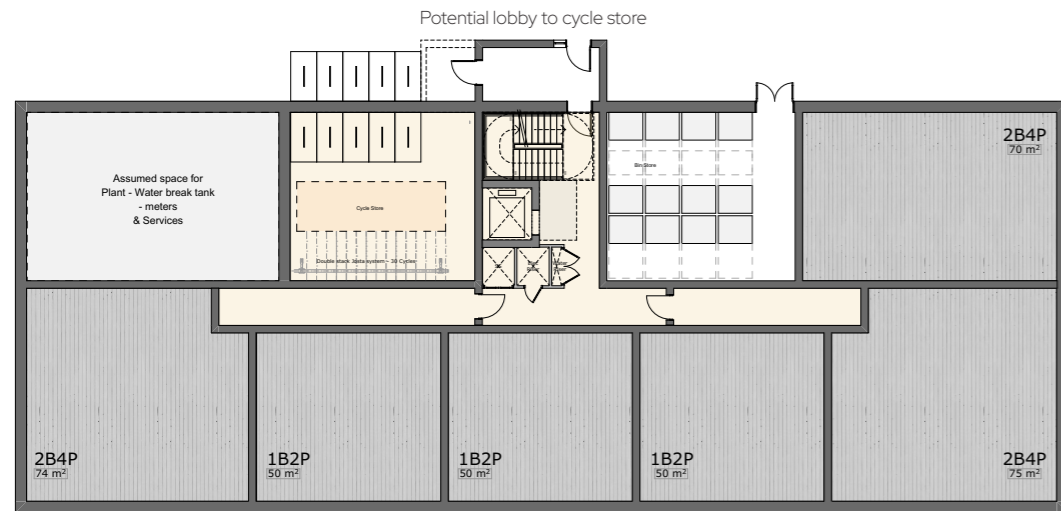
Communal Bin Store



Communal Bike Store

Potential Layouts

Based on option 1



4 Storey

GIA	SALEABLE	
Area m ²	Area m ²	
652 -	369	Ground Floor
652 -	539	1st Floor
652 -	539	2nd Floor
652 -	539	3rd Floor
2608m²	1986m²	

Net / Gross = 0.761 = 76%
Typical Floor = 0.826 = 83%

Difference = 100% - 76% = 24%

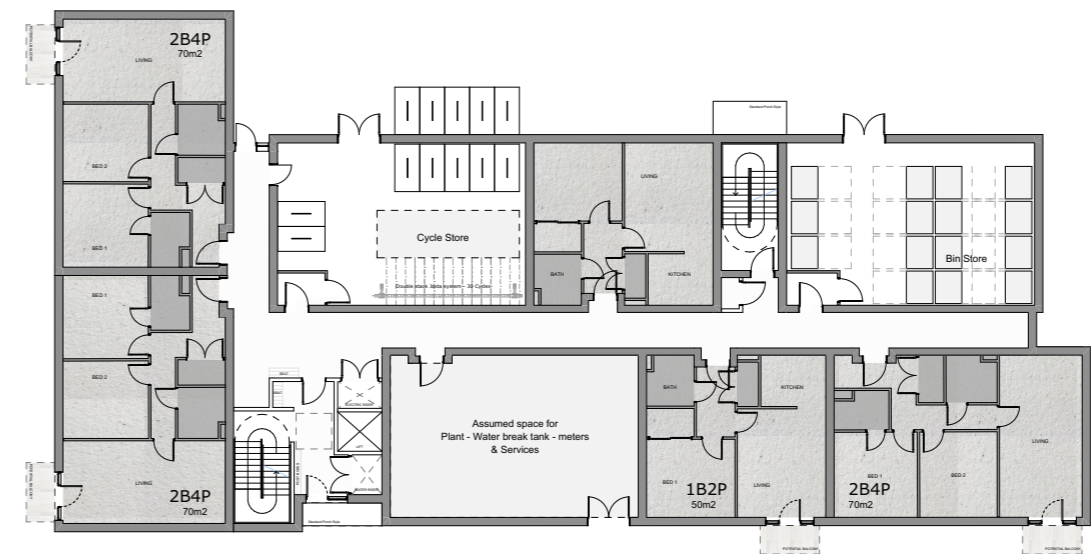
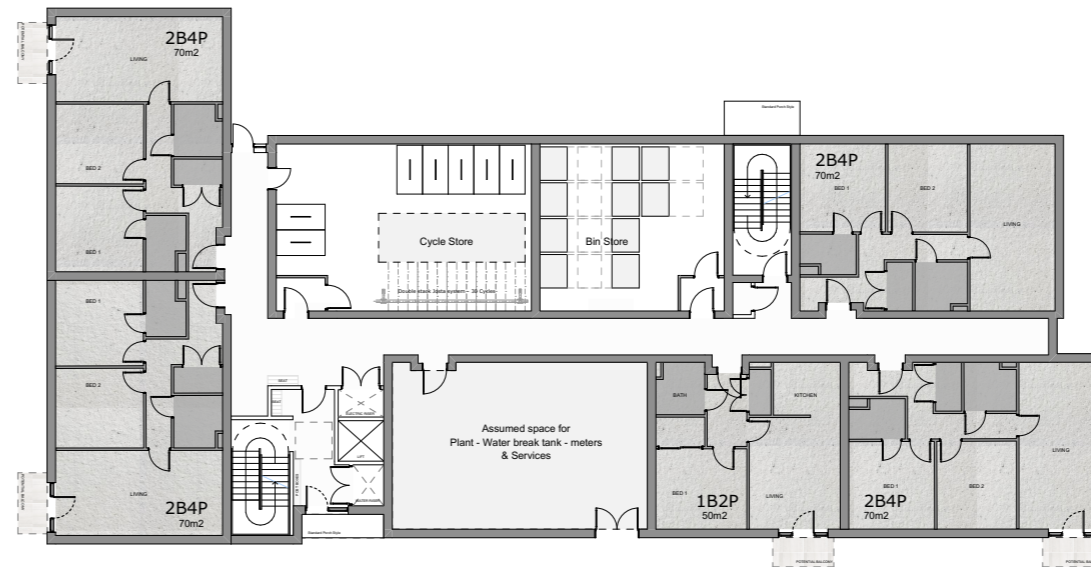
6 Storey

GIA	SALEABLE	
Area m ²	Area m ²	
652 -	300	Ground Floor
652 -	539	1st Floor
652 -	539	2nd Floor
652 -	539	3rd Floor
652 -	539	4th Floor
652 -	539	5th Floor
3912m²	2995m²	

Net / Gross = 0.765 = 77%
Typical Floor = 0.826 = 83%

Difference = 100% - 77% = 23%

Based on option 4



4 Storey

GIA	SALEABLE	
Area m ²	Area m ²	
693 -	330	Ground Floor
693 -	520	1st Floor
693 -	520	2nd Floor
693 -	520	3rd Floor
2772m²	1890m²	

Net / Gross = 0.681 = 68%
Typical Floor = 0.750 = 75%

Difference = 100% - 68% = 32%

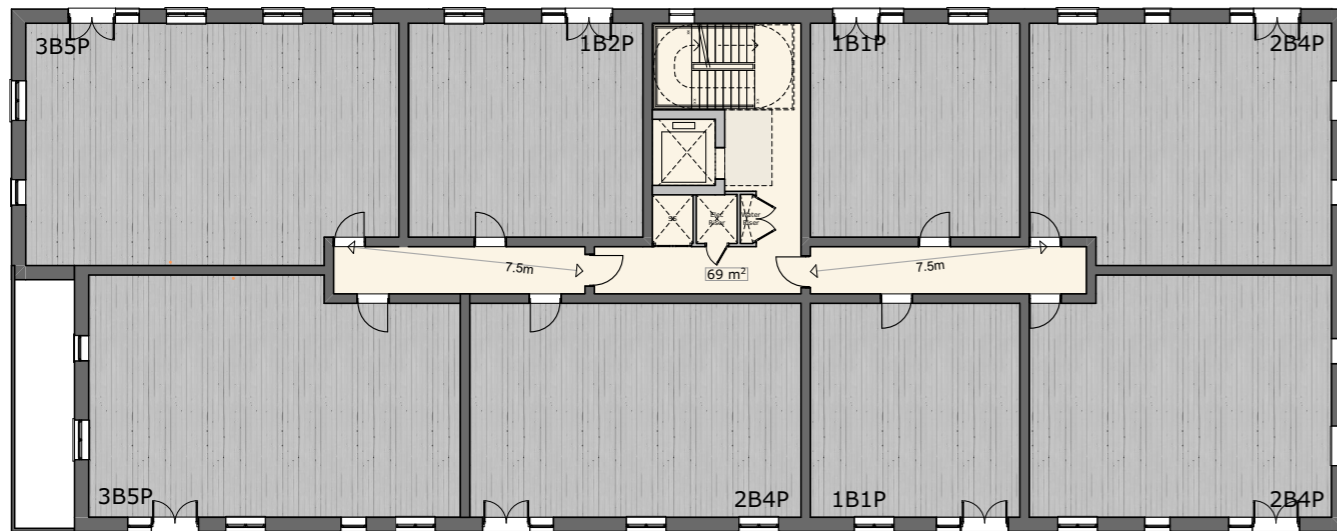
6 Storey

GIA	SALEABLE	
Area m ²	Area m ²	
693 -	380	Ground Floor
693 -	520	1st Floor
693 -	520	2nd Floor
693 -	520	3rd Floor
693 -	520	4th Floor
693 -	520	5th Floor
4158m²	2980m²	

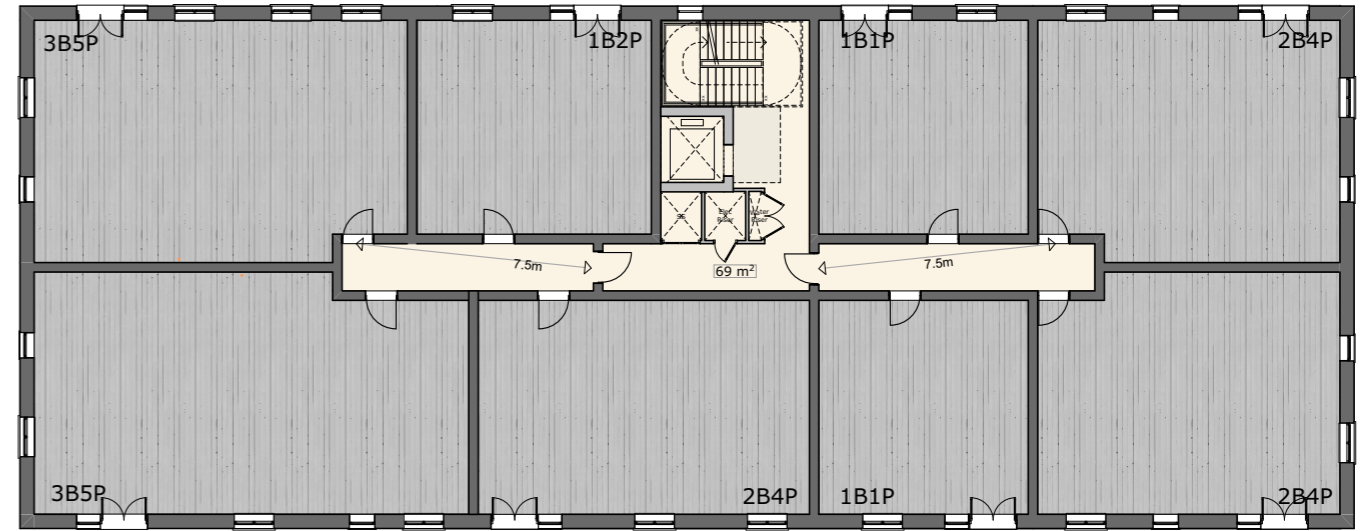
Net / Gross = 0.716 = 72%
Typical Floor = 0.750 = 75%

Difference = 100% - 72% = 28%

Potential layout



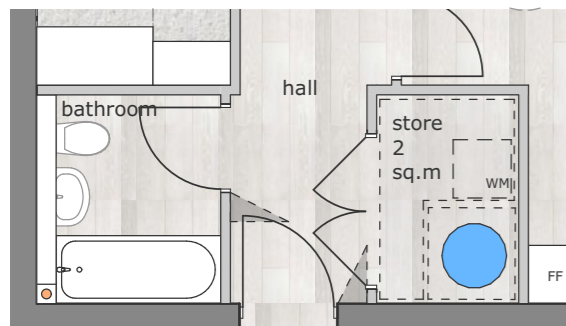
Option 1 - 40% 1 Bed - 40% 2 Bed - 20 % 3 Bed (with set back)



Option 2 - 40% 1 Bed - 40% 2 Bed - 20 % 3 Bed (Square)

Internal Storage Space

The internal area for built-in storage will vary depending on the number of bedrooms within the flat. NDSS standards must be achieved with an allowance for 0.5m² for other services.



Hot Water cylinder

Within the internal space of the storage unit, there will be enough room for a washing machine and a water cylinder. The water cylinder will store the water needed for taps and bathroom appliances. The application of a water cylinder will provide hot water within the flats.

There will need to be a 900 x 900mm allowance space within the storage unit to be able to fit the water cylinder.

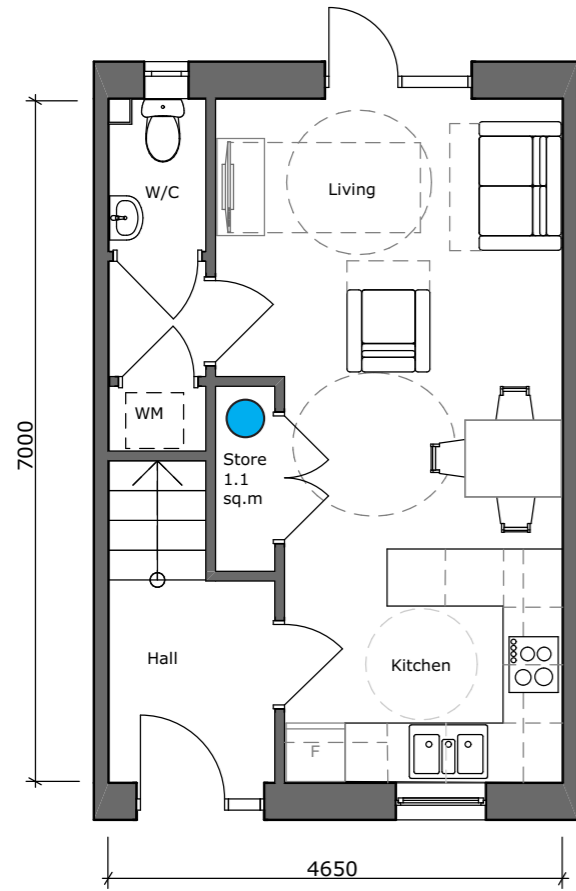


2

Design Code

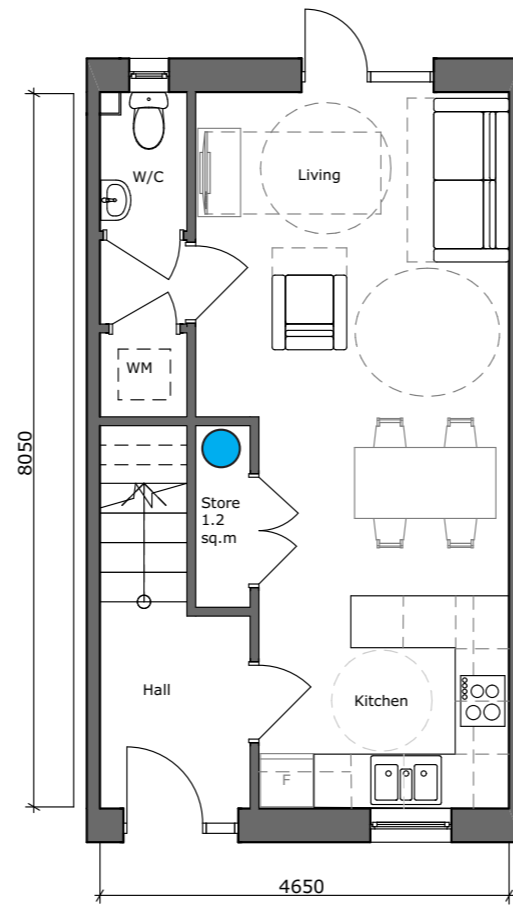
House Types

2B3P House M4(2)

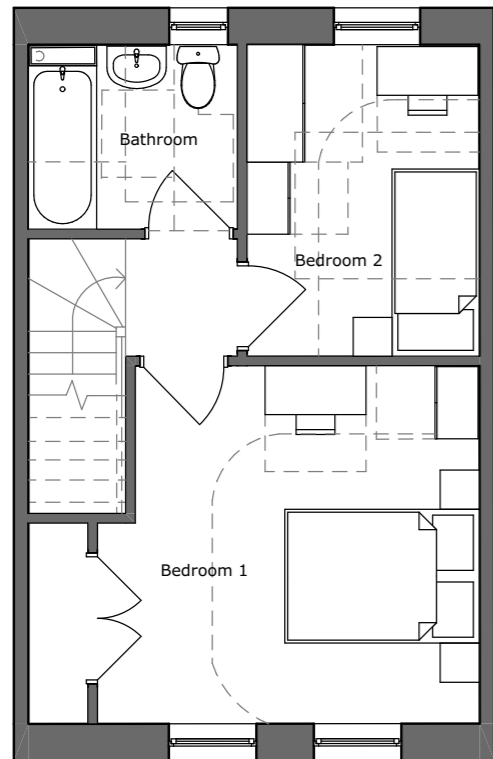


GROUND FLOOR

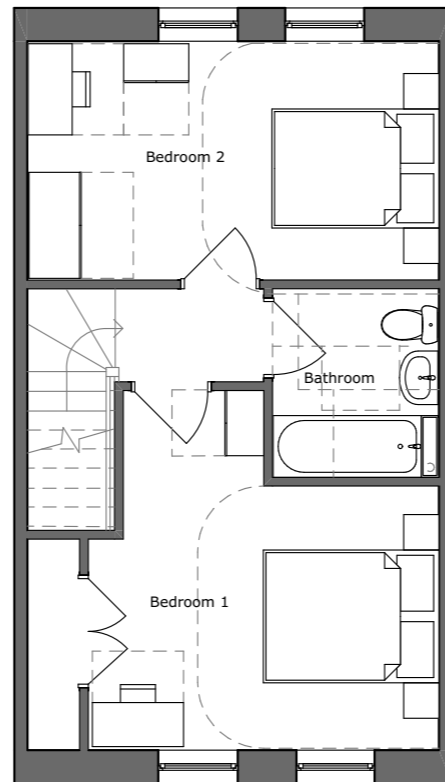
2B4P House M4(2)



GROUND FLOOR



FIRST FLOOR



FIRST FLOOR

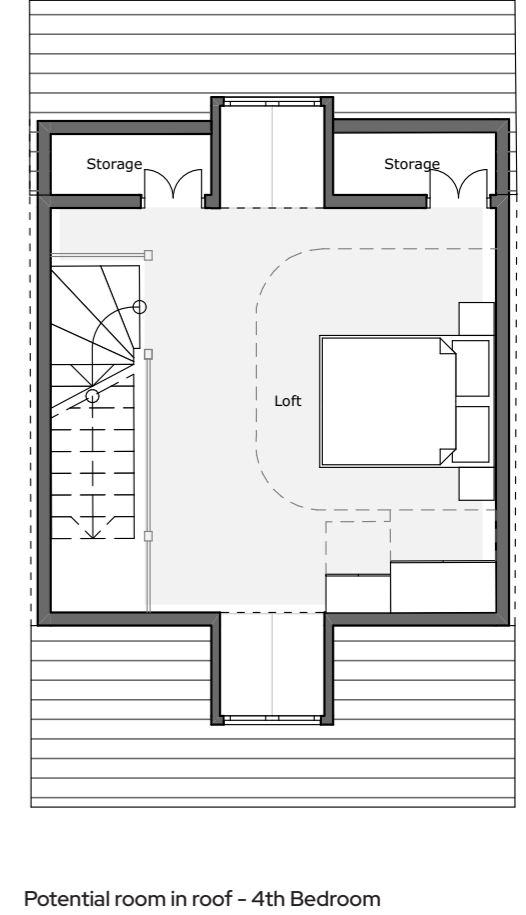
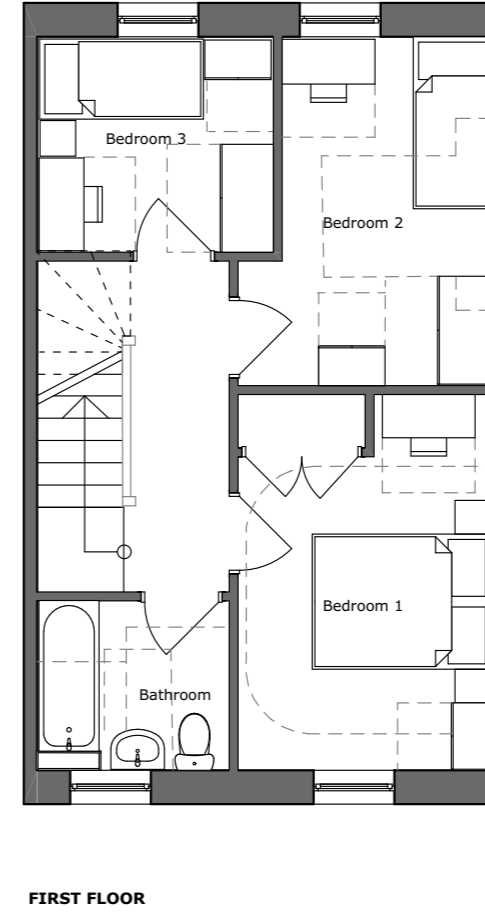
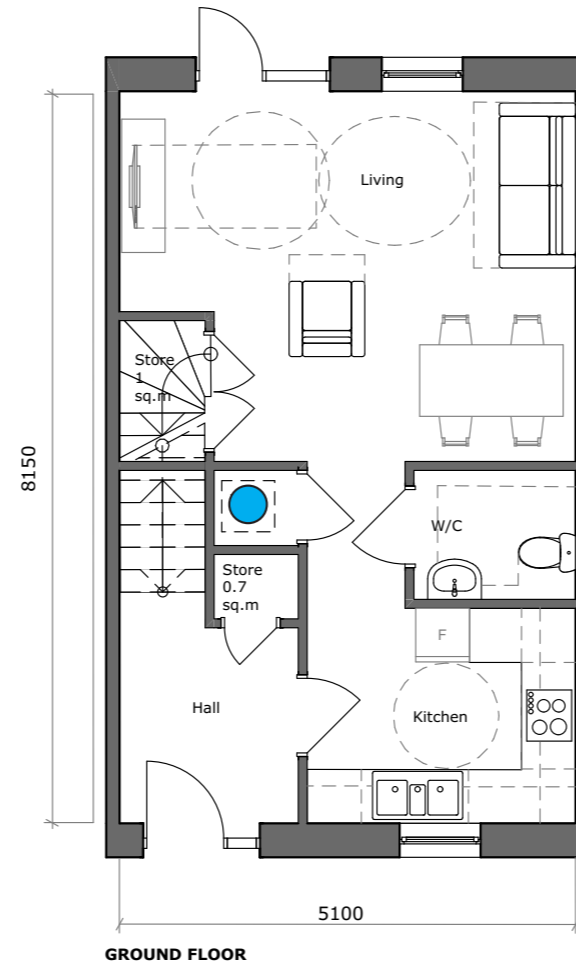
Precedents



Precedents



3B4P House M4(2) with potential 4th bedroom in the roof



House type example

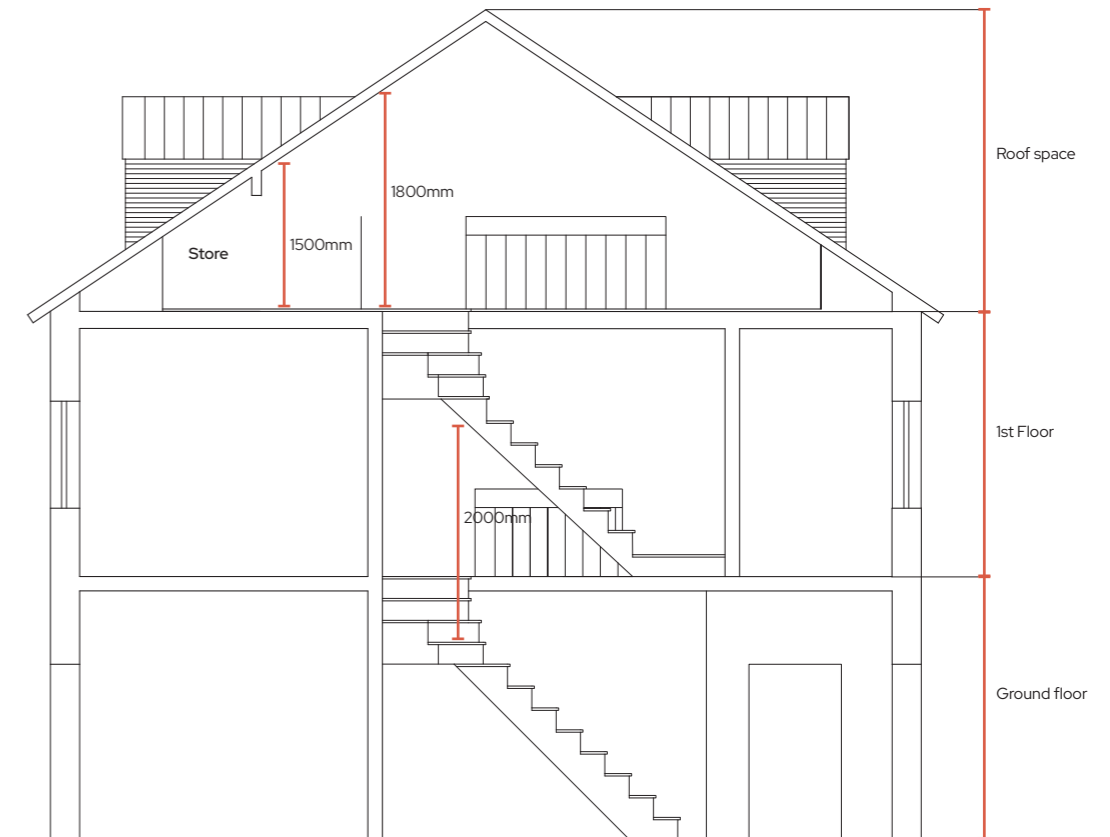
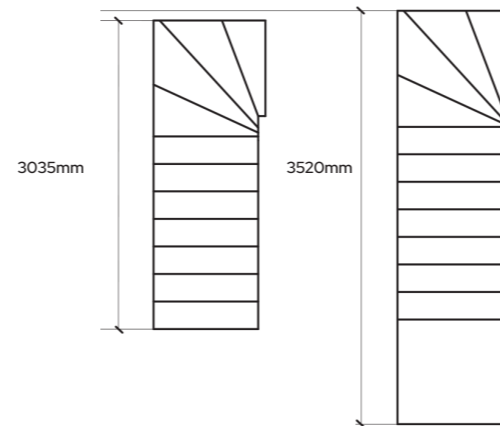
The staircase must allow for 2000mm of headroom.

Ground floor staircase

Riser: 225mm
Tread: 250mm

First floor staircase

Riser: 225mm
Tread: 250mm



Space within the loft can be utilised as an extra room

The example house shown here can utilise the roof space with the addition of dormer windows in the roof to provide additional headroom and light into the space.

Storage on the ground floor may be increased to provide sufficient room for heat pumps or other sustainable equipment. Additional storage may also be gained from within the roof space at low level.

Cycle & Bin store



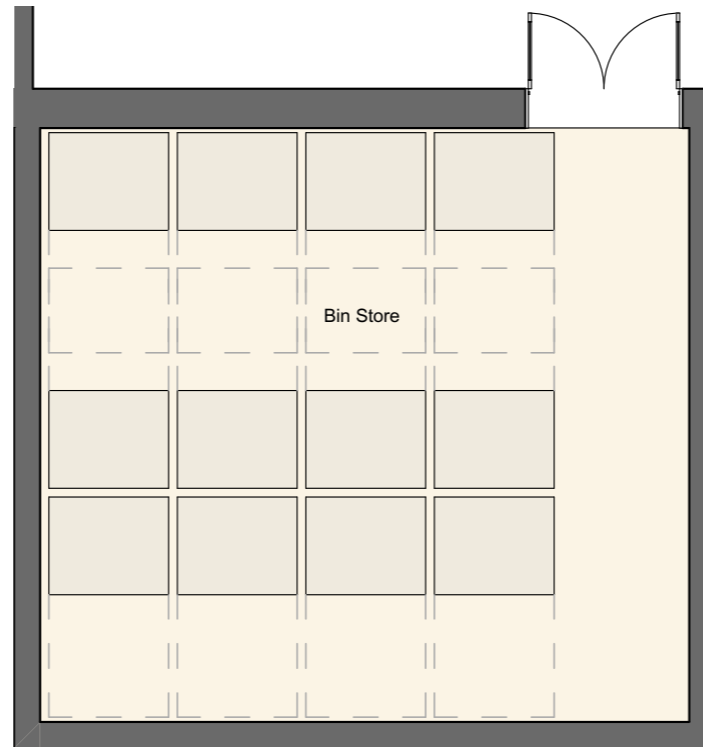
Stores spaced between landscape



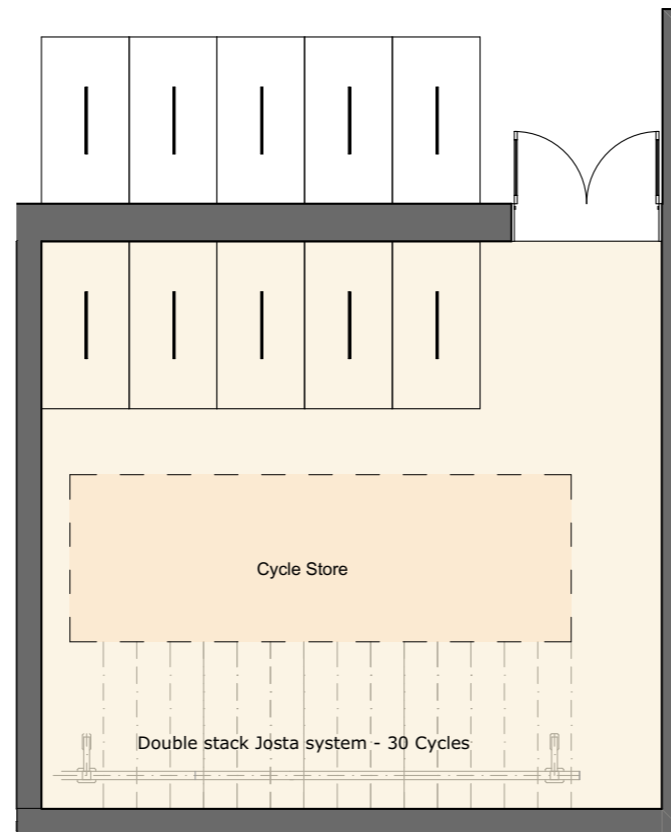
Green Roofs



Timber screen



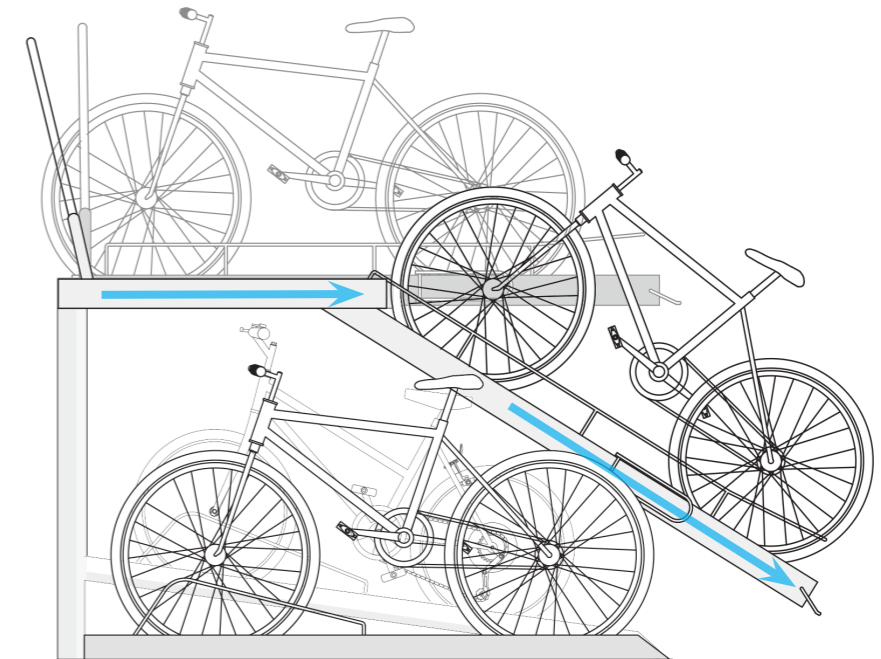
External Bin Store



External Cycle Store



Euro Bins 1100 Ltr



Josta cycle rack



1. Solar PV Panels

Generating energy through solar gain will provide residents with reduced bills while reducing CO2 emissions. It is high in reliability and requires low maintenance. Panels must be orientated facing the sun's path to maximise solar gain.

Solar PV panels can be also applied to the cycle and bin stores to maximise the production of solar energy.



2. Water Butt

Utilising a Water Butt is a resourceful way of collecting rainwater. The recycled water can be then used to water plants in the garden or for general cleaning of surfaces.



3. Air Source Heat Pump

An Air Source Heat Pump will extract heat from the outside air to and will convert it into water, providing hot water within homes. A sustainable way to provide consistent warmth with low maintenance and a long service life.

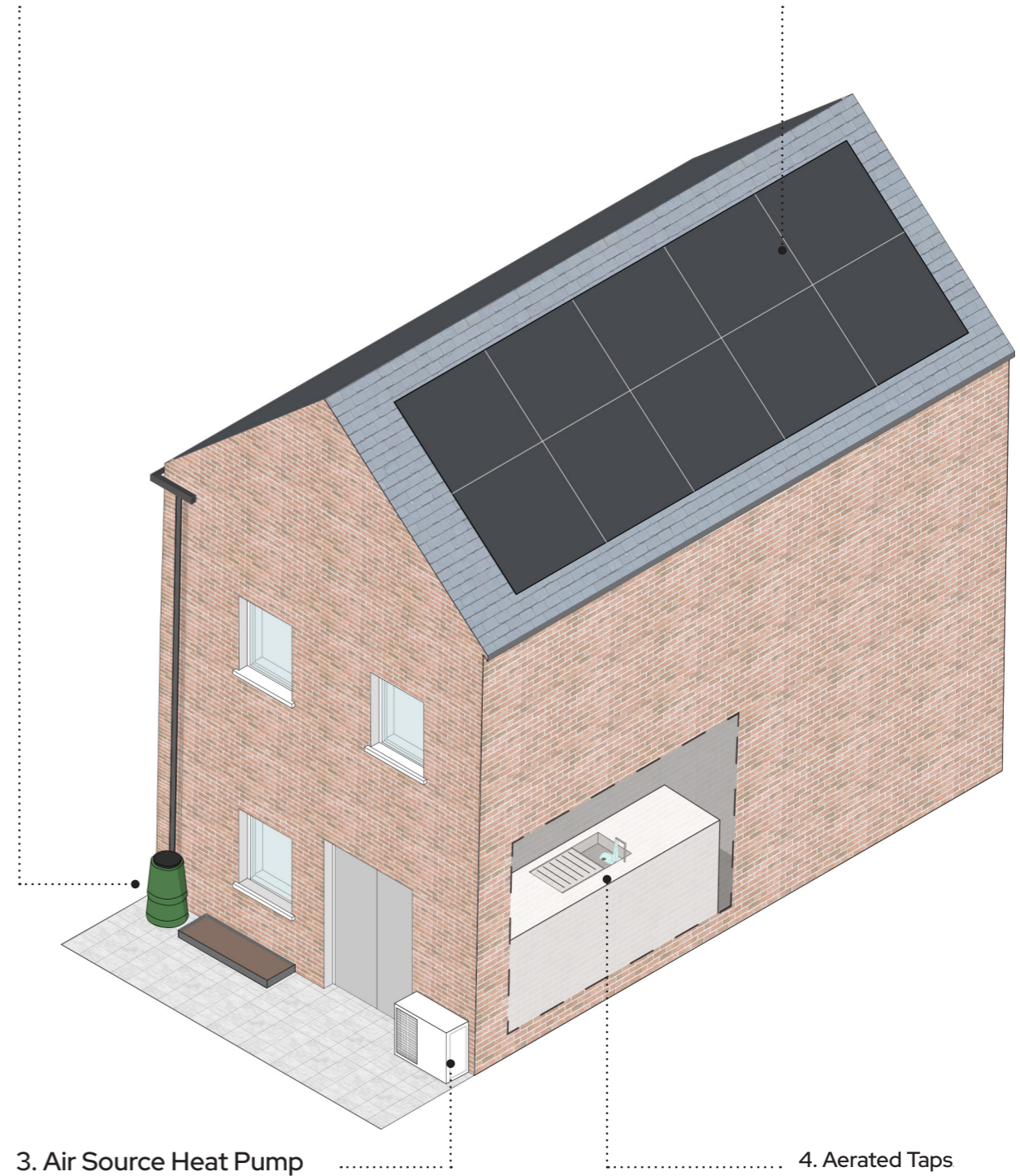


4. Aerated Taps

Aerating water through taps reduces the rate of flow that will bring the costs down on the water bill.

2. Water Butt

1. Solar PV Panels



3. Air Source Heat Pump

4. Aerated Taps

hgp