

## MUD-Lab Toolkit Housing Typologies

*This document provides a reference toolkit for designing urban layouts, providing a basic series of building typologies which can be used as a starting point in your masterplan design.*



*Disclaimer: This handbook does not replace the practical session*

# A

## Introduction

This Toolkit provides information on a number of example housing typologies. These can be used when designing places and building up blocks, however it should be noted that houses can be designed in different ways to those shown in this Toolkit. For further detailed information you can refer to the Urban Design Handbook, and it is important to continuously study the places you encounter, considering what works well and what does not.

It is important to remember that this Toolkit, as well as documents such as the Technical Housing Standards, provide guidance and ranges of sizes. There is flexibility built into these guidelines in order to avoid buildings and places all looking the same. You should be utilising this information to create the structure of your masterplan and then going on to add further detail and adapt the basics to your site and its opportunities and constraints.

# B

## Purpose

Urban blocks are an important starting point when designing the structure of your masterplan, however it is important to consider the detail of the buildings which make up these blocks. What size are the buildings? How are they accessed? Is appropriate activity and light provided? Do they conform to the nationally prescribed space standards? This Toolkit provides a series of example building typologies which can be used as a starting point for creating human-scale places.

This Toolkit should be considered alongside the Principles of Urban Blocks and Size of Streets and Spaces Toolkits.

Designing blocks is not a linear process, you should be considering building types, uses and scale as you are drawing your blocks and returning back to the decisions you have made to add further levels of detail throughout the process.

You will need to consider how your blocks are made up - what scale of buildings, what are their uses and how many of them are there. Your client will want to see the schedule of development associated with your design.

Residential building design in the UK is informed by the Technical Housing Standards - Nationally Described Space Standard document. Table 1 below is an extract from the document which outlines the minimum internal floor area for a home based on the number of bedrooms it has.

**Table 1 - Minimum gross internal floor areas and storage (m<sup>2</sup>)**

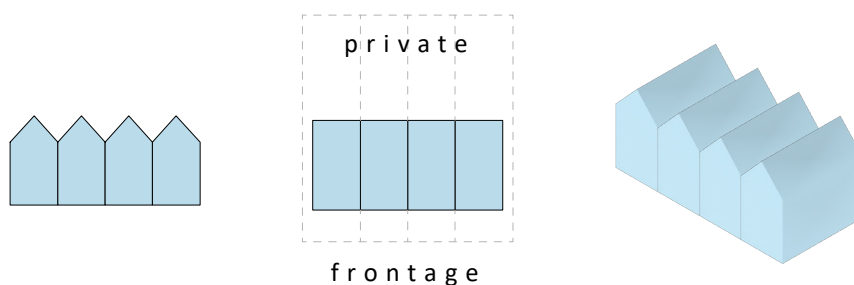
Number of bedrooms(b)	Number of bed spaces (persons)	1 storey dwellings	2 storey dwellings	3 storey dwellings	Built-in storage
1b	1p	39 (37) *			1.0
	2p	50	58		1.5
2b	3p	61	70		2.0
	4p	70	79		
3b	4p	74	84	90	2.5
	5p	86	93	99	
	6p	95	102	108	
4b	5p	90	97	103	3.0
	6p	99	106	112	
	7p	108	115	121	
	8p	117	124	130	
5b	6p	103	110	116	3.5
	7p	112	119	125	
	8p	121	128	134	
6b	7p	116	123	129	4.0
	8p	125	132	138	

As these are the minimum footprints, most houses and apartments should be designed to be larger than the areas in this table. The following section of this Toolkit provides a series of example house and apartment types which could be used to make up your blocks. This is not a definitive list and these can be adjusted on a project-by-project basis.

## Houses

## Terraced House

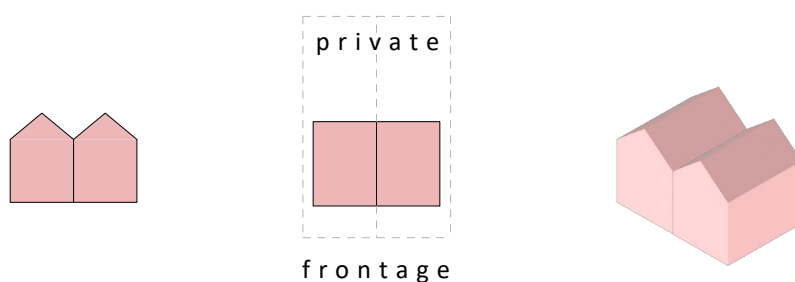
Terraced houses or row houses are attached to neighbouring homes on both sides. It is important to consider how external access to rear gardens will be achieved. This is typically designed into the block by breaking runs of homes to allow small, semi-private access routes. Alternatively rear gardens can be accessed from an internal courtyard depending on the type of block designed.



- 2 storey
- 2 bedroom
- 4.5 x 8.5m
- 76sqm
- Front door on street
- 10m private rear garden
- Parking to front or rear

## Semi-Detached House

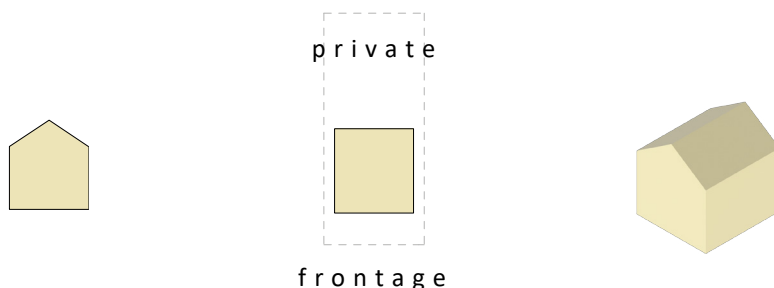
Semi-detached houses are most common in suburban locations. This house type would not typically be used when designing a site within an urban / higher density context. These houses are paired, with each pair separated by an access route to the private block interior or by a driveway for a car.



- 2 storey
- 3 bedroom
- 6 x 8m
- 96sqm
- Front door on street
- 10m private rear garden
- Parking to front, rear or side

## Detached House

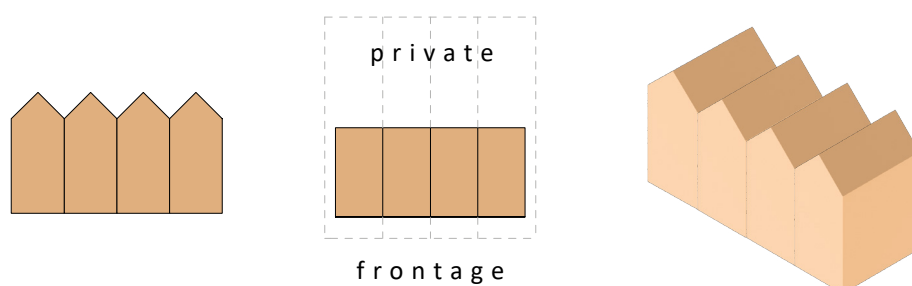
Detached houses sit individually on a plot and are not attached to surrounding buildings. These house types have a large footprint and so are characteristic of low-density neighbourhoods. These homes often have increased numbers of bedrooms compared to terraced and semi-detached homes.



- 2 storey
- 4 bedroom
- 7.5 x 8m
- 120sqm
- Front door on street
- 10m private rear garden
- Parking to front, rear or side

## Townhouse

Townhouses are designed in a similar way to the terraced house type, with homes attached on both sides to their neighbours. Townhouses are characterised by an increased density, with living space across three floors. This type of home can be designed with private open space as part of a roof terrace, potentially allowing for a reduced private garden to the rear. Part of the ground floor can be used for car parking with an integral garage or car port.

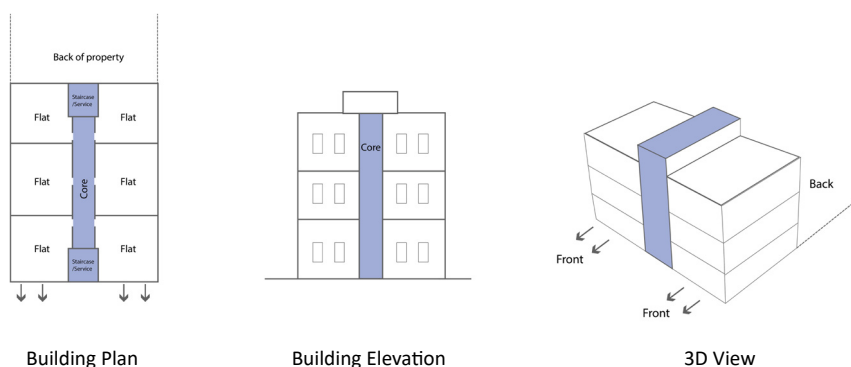


- 3 storey
- 3 bedroom
- 105sqm
- Front door on street
- 10m private rear garden
- Parking to front or rear

## Apartments

### Shared Core

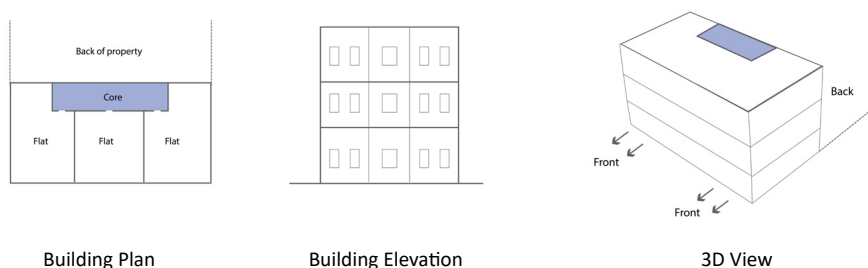
This type of apartment block is characterised by a central core which runs through the building, with apartments on both sides. The front door is directly connected to a rear door providing access into the private inside of the block. This layout is a common configuration of low-rise apartment buildings. All of the individual apartments are dual-aspect. These buildings are often designed adjacent to each other, end-to-end, in a terrace.



- 3+ storey
- 1 bedroom 55sqm
- 2 bedroom 65sqm
- 10m depth
- Dual aspect apartments
- Private green space and parking inside block

### Side Corridor Access

If you are addressing a constrained site it may be useful to include an apartment block where individual apartments have windows which face in only one direction. Access to these apartments is taken along a corridor which runs along the back of the building. This layout could also be useful if the centre of your block is used for servicing of a ground floor retail or commercial use.

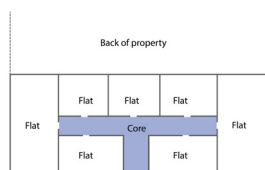


- 3+ storey
- 1 bedroom 55sqm
- 2 bedroom 65sqm
- 10m depth
- Single aspect apartments
- Private green space and parking

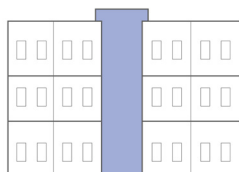
## Central Corridor Access

This is a common apartment layout, particularly in high-density areas. Access is taken from a central core, with a corridor running through the middle of the building. This layout means that apartments have only one external wall (unless at a corner), which is less desirable than a dual-aspect apartment. The building overall provides windows with natural surveillance on both sides.

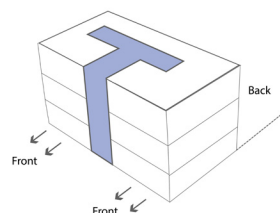
This does not mean that this building fronts both ways as you will need to consider servicing and private amenity space within the design.



Building Plan



Building Elevation



3D View

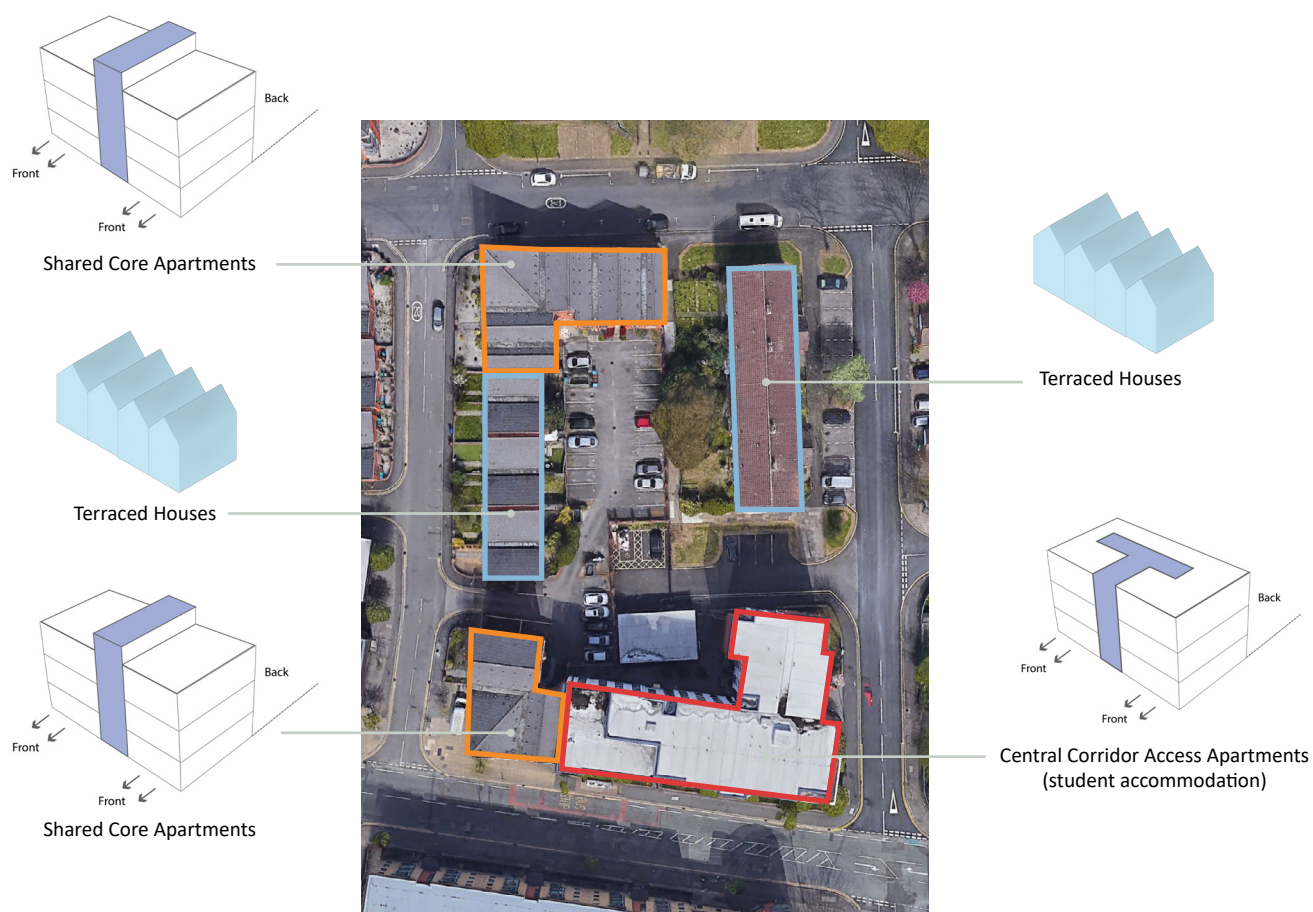
- 3+ storey
- 1 bedroom 55sqm
- 2 bedroom 65sqm
- 15m depth
- Single aspect apartments, dual aspect block
- Private green space and parking



## Deconstructing a Block

Looking at the same block from the Principles of Urban Blocks Toolkit, we can break down the building types which make up the block. This has been done below indicatively using the typologies from above, however it is important to consider the size of buildings, both in terms of height width / depth.

As we noted in the Principles of Urban Blocks Toolkit, one of the buildings in this block is a student accommodation building. This typology is different to the typical apartment typologies, as there are additional requirements such as an increased number of bedrooms and larger kitchen / living space. It does however utilise the same principles, with a central core and access corridor.



Practice deconstructing blocks in your local area. Use the local planning authority website to check architectural drawings for apartment buildings if you are unsure of the typology.

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