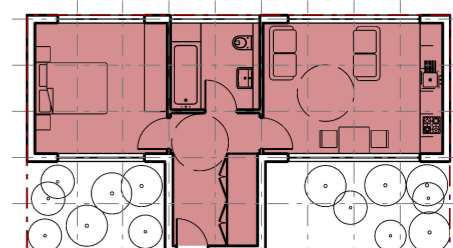




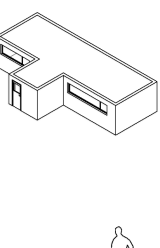
### STANDARDISED FOOTPRINT

All the flats are based on a standard footprint module of 11.0m x 6.1m (shown in red). Utilizing a standardised footprint over the whole development is found to be a cost effective solution.

Each of these standardised footprints is configured to form a variety of one person – five person flats arranged over one or two floors of accommodation. The floor plans are sub-divided to form a 1220mm module which allows flexibility in layout designs and is based on the dimensions for the offsite cassette panels used for the erection of the building.

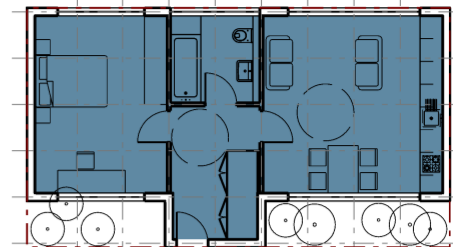


1 PERSON / 1 BEDROOM / 1 STOREY / GIA: 43M2  
FLOOR PLAN @ 1:200

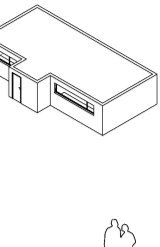


### ADAPTABLE

The scheme layout allows for simple stacking of each block which can be reconfigured to form alternative mixes within the same volume.

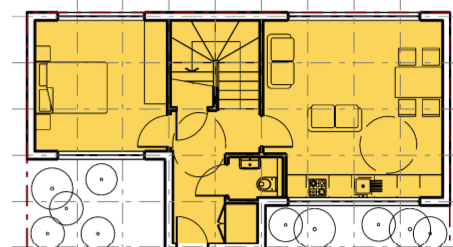


2 PERSON / 1 BEDROOM / 1 STOREY / GIA: 53M2



### HABITABLE ROOMS HAVE DUAL ASPECTS

Every habitable room within each flat is dual aspect, providing flexibility in orientation and privacy, as well as allowing for natural cross-ventilation. Window sizes can be customised to suit privacy and amenity as required.



3 PERSON / 2 BEDROOM / 2 STOREY / GIA: 74M2



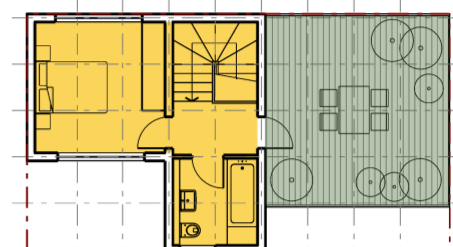
### BUILDING FABRIC

This flat-pack system is based on a 'fabric-first' approach, achieving low U-values through the highly insulated cassette panels.

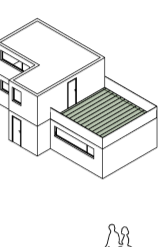
A sealed airtight structure is achieved by the use of neoprene gaskets between joints, providing air leakage of less than 3m³/hr/m² @50pa.

All cassette panels are fully demountable and can be reused and reconfigured at the end of the life of the building, to form different spaces, or entirely different buildings.

A variety of external finishes can be used to suit local styles.



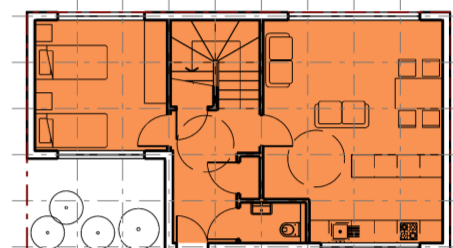
4 PERSON / 2 BEDROOM / 2 STOREY / GIA: 85M2



### TECHNOLOGY

Photovoltaic panels to the main roofs provide lighting for the common and external parts of the building. Rainwater collection and communal greywater facilities are proposed, with storage tanks set below the hard landscaped area which is connected to the garden sprinklers.

All units will have individual high-efficiency boilers. The building system provides a low U-value to all thermal elements. As a result, the units require little heating throughout the day.



5 PERSON / 3 BEDROOM / 2 STOREY / GIA: 98M2



### THE BUILDING SYSTEM

This Versatile Building System was conceived using mass production manufacturing techniques. We are currently applying innovative 21st century technology assembling homes on site from a set of precision made components. The same manufactured cassette elements are used for floors, walls, ceilings and roof, which is unique, leading to mass customisation, helping drive costs down.

The cassettes are a combination of monocoque construction combined with a frame that enhances the structural integrity, producing a structure that optimises the benefits of both types of construction; it is extremely strong and lightweight, and the cassette panels can be manhandled.

This unique modular system enables the construction of any size, shape or architectural style of building, and has the lowest carbon footprint within the construction industry. All elements and fittings are transported to site flat pack.

### EASE OF ASSEMBLY

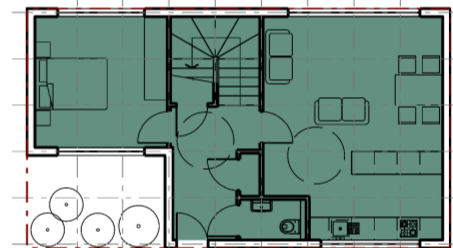
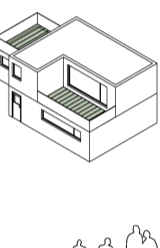
The complete building fabric can be assembled and made watertight within a very short period.

### FLEXIBILITY

This flat-pack system is entirely flexible in terms of layout and adaptability.



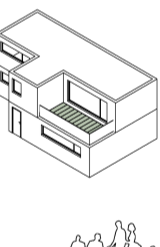
4 PERSON / 2 BEDROOM / 2 STOREY / GIA: 85M2



5 PERSON / 3 BEDROOM / 2 STOREY / GIA: 98M2



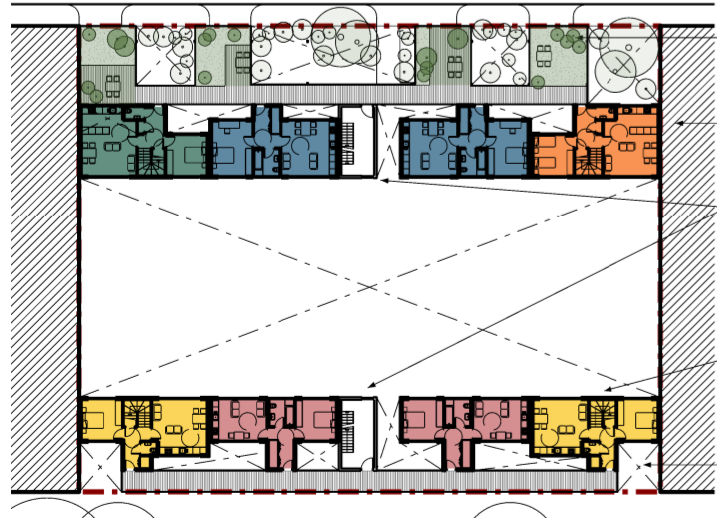
5 PERSON / 3 BEDROOM / 2 STOREY / GIA: 98M2



SITE PLAN - GROUND FLOOR  
1:650 @ A2



SITE PLAN - 1ST FLOOR



SITE PLAN - 2ND FLOOR



SITE PLAN - 3RD FLOOR

### SITE LAYOUT - BUILD PHASING

This Co-housing Custom & Self build project will be developed and planned collaboratively by the group to custom-fit their needs. The project will integrate with the neighbourhood and be sustainable. The project will create long-term affordable living within the context of the surrounding area. The project will be delivered in two phases, Block 'A' as the first phase followed by Block 'B'.

### UNIT ORIENTATION / CONFIGURATION

The larger family units at ground level which address the street benefit from having their own individual onsite private parking space, bin and cycle stores, and also their own private front gardens. One onsite car pooling parking bay is provided to serve the local community. All other units share the communal secure bicycle storage which is adjacent to their housing block. Access to the upper flats is through the secured communal stair core and walkways.

### AMENITY SPACE

Amenity space is a combination of private and communal. The large family units have private gardens to the rear, and these have direct access to the central communal green space. The other amenity spaces for the residential units on the upper floors are the 'sky gardens,' accessed from within the residential units or from the access walkways. The one person flats are the only unit type not to have private amenity space, this is compensated by locating these flats on the upper floors of Block 'A' which overlooks the park. The total circulation and amenity space of the development equates to 77% of the total site area.

### COMMUNAL AMENITY AREAS

Access onto the site to reach Block 'A' and 'B' from the street is via a secure entrance gate which leads into the central communal green space that includes communal composting, vegetable gardens, and a children's play area. Access to the park for residents is by a secure gate within the boundary fence. The boundary fence between the park and the access path of the development is fabricated from steel mesh which gives additional surveillance into the park, and this area is adequately lit at night for security.



## SELFBUILD ON A SHOESTRING IDEAS COMPETITION

**A Cost Report must be provided alongside your design proposals. Please use this Excel spreadsheet to summarise your estimated cost and provide this as the first sheet of your report.**



Works Package	Construction Element	Materials	Labour	Total
<i>For Works Packages 1-18 please provide figures for the total construction cost of just the 20 homes provided in your design</i>				
Works Package 1	Set up, Clearance, Demolitions....	£ 70,000.00	£ 20,000.00	£ 90,000.00
Works Package 2	Foundations (up to DPC)	£ 20,000.00	£ 10,000.00	£ 30,000.00
Works Package 3	Ground Floor Slab or Suspended Floor (including insulation)	£ 8,000.00	£ 7,000.00	£ 15,000.00
Works Package 4	Drainage & Service Trenchwork	£ 70,000.00	£ 25,000.00	£ 95,000.00
Works Package 5	Specialist Building System (eg timber frame, SIPs, etc if applicable)	£ 454,875.00	£ 100,000.00	£ 554,875.00
Works Package 6	External & Internal Walls (including insulation)	£ 18,710.00	£ 5,000.00	£ 23,710.00
Works Package 7	Intermediate Floor Zone (if applicable)	£ -	£ -	£ -
Works Package 8	Fireplace & Chimney (if applicable)	£ -	£ -	£ -
Works Package 9	Roof Structure, Insulation & Covering	£ 23,120.00	£ 8,000.00	£ 31,120.00
Works Package 10	Joinery (Windows, doors, stairs, skirtings...)	£ 159,200.00	£ 35,000.00	£ 194,200.00
Works Package 11	Specialist Products (eg Eco products...)	£ 59,910.00	£ 28,000.00	£ 87,910.00
Works Package 12	Electrical Installation	£ 43,000.00	£ 17,000.00	£ 60,000.00
Works Package 13	Plumbing Installation	£ 31,000.00	£ 19,000.00	£ 50,000.00
Works Package 14	Heating Installation	£ 35,000.00	£ 15,000.00	£ 50,000.00
Works Package 15	Plastering (or dry-lining)	£ 11,000.00	£ 4,000.00	£ 15,000.00
Works Package 16	Kitchen and Utility Units (+ appliances)	£ 52,000.00	£ 18,000.00	£ 70,000.00
Works Package 17	Decorations & Wall Ceramics	£ 15,000.00	£ 10,000.00	£ 25,000.00
Works Package 18	Floor Finishes	£ 25,300.00	£ 10,000.00	£ 35,300.00
	<b>TOTAL</b>	<b>£ 1,096,115.00</b>	<b>£ 331,000.00</b>	<b>£ 1,427,115.00</b>
<i>For Works Packages 19 and 20 provide figures for the additional communal facilities required to support the 20 homes</i>				
Works Package 19	Road connection, parking, paths, cycle facilities, street lighting, bin areas, landscaping	£ 26,175.00	£ 15,000.00	£ 41,175.00
Works Package 20	Communal areas/access to homes - eg stairways, halls, lobbies, lifts (if required), storage	£ 21,700.00	£ 10,000.00	£ 31,700.00
	<b>TOTAL</b>	<b>£ 47,875.00</b>	<b>£ 25,000.00</b>	<b>£ 72,875.00</b>
<b>GRAND TOTALS</b>		<b>£ 1,143,990.00</b>	<b>£ 356,000.00</b>	<b>£ 1,499,990.00</b>
			<b>Average cost/home</b>	<b>Under £75K</b>

### Works Package Prices (Includes Materials & Labour Costs)

Areas (m<sup>2</sup>)

	GF	1F	Total GIA	Terraces
4 No 1 person	43.0	0	43.0	0
4 No 2 person	53.0	0	53.0	0
4 No 3 person	48.5	25.5	74.0	24.0
4 No 4 person	55.0	30.0	85.0	24.0
4 No 5 person	55.0	43.0	98.0	11.5

20 No Flats                      36 Adults                      24 Young people