

Blended

Category 3 Ground Level Dwellings

The Blended proposal offers a triplex solution for a 2 story volume, which proportions and design align seamlessly among the current street façade styles in Squamish neighbourhoods.

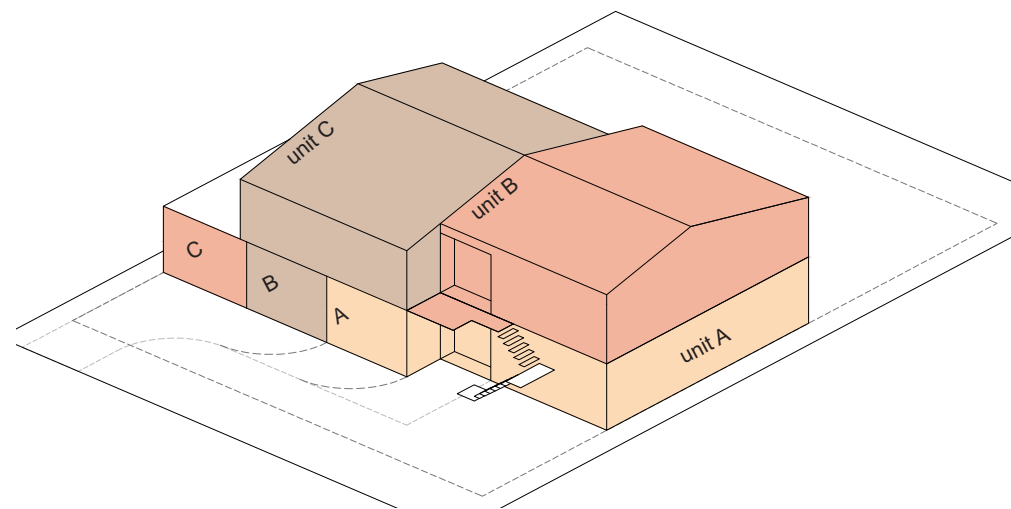
The floor plan organization allows for a private main entrance from the front lane to each unit, combined with direct access from the rear façade to the backyard.

All of the units have the same configuration of a 3-bedroom typology that can accommodate a wide range of inhabitants, from a single couple enjoying extra space (studio and guest room) to a big family that can use all of the bedrooms available.

Aesthetics

The design focuses on gathering 3 units and parking/storage in an efficient volume under one roof. With similar proportions and scale to the existing surrounding detached houses, the design turns into an unnoticed and well-integrated triplex complex.

The proposal shows a mix of a warm and natural wood colour palette, which highlights the main entrances to the units and windows. The interior living areas have a high sloped ceiling, showing prefabricated wood joists.



Accessibility & Universal Design

Unit A it's fully accessible from ground floor, an exterior elevator can be added at front or rear staircase to easily turn first floor units into accessible units too.

All doors and corridors are design to achieve accessible dimensions and comfortable turns, as same as the main bathroom. Interior walls, specially at bathrooms, will integrate reinforcements for future accessible bars needed.

Innovation & Creativity

The project layout efficiently gathers 3 units together while keeping access to views, light, and ventilation. Service areas and bathrooms are organized together in the middle of the floor plan, which prioritizes the location of the living areas and bedrooms at the edges of the unit, where natural light can be enjoyed.

The parking contains a large storage area connected to the backyard. This path can also be used to directly access the rear stairs to the first floor units.

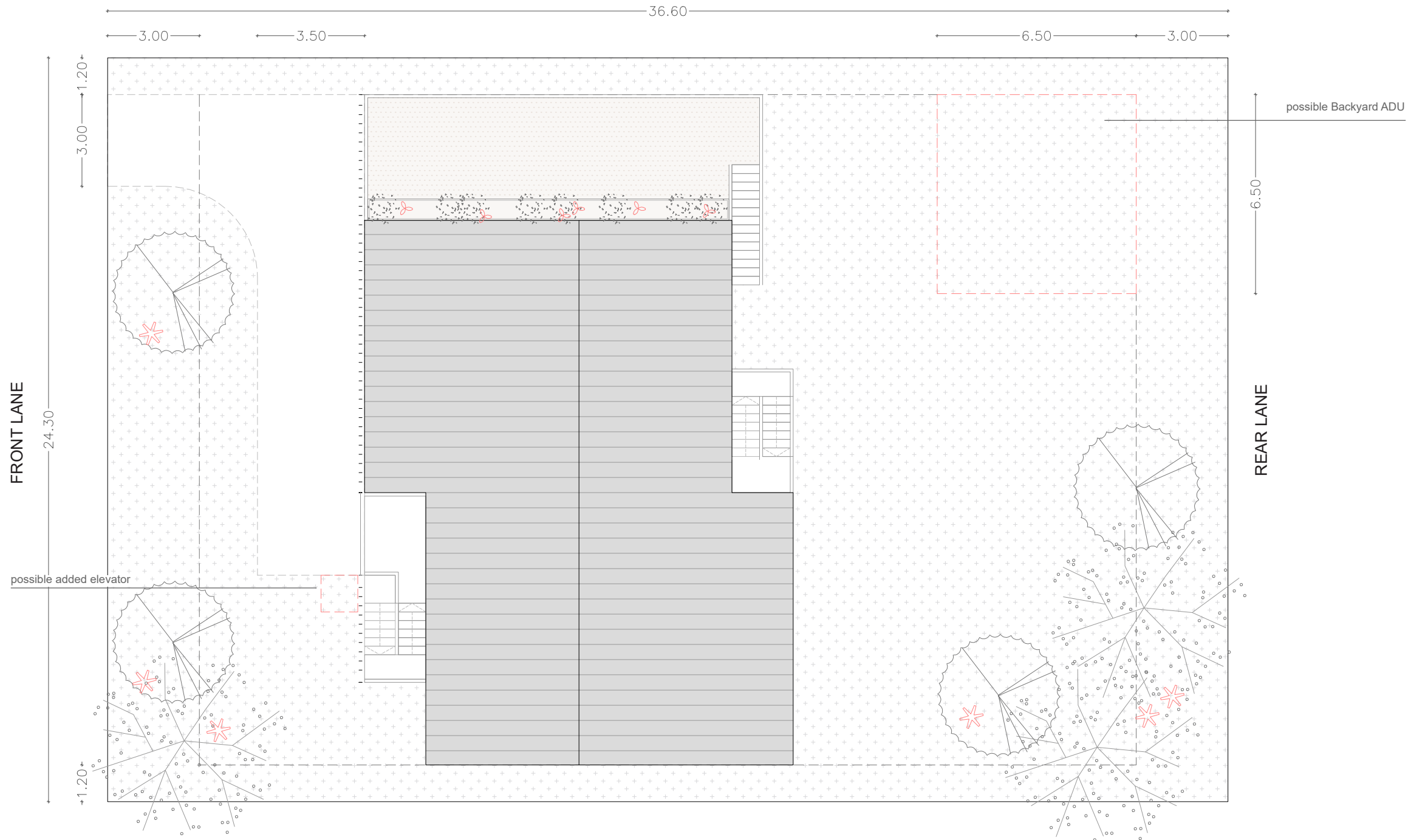
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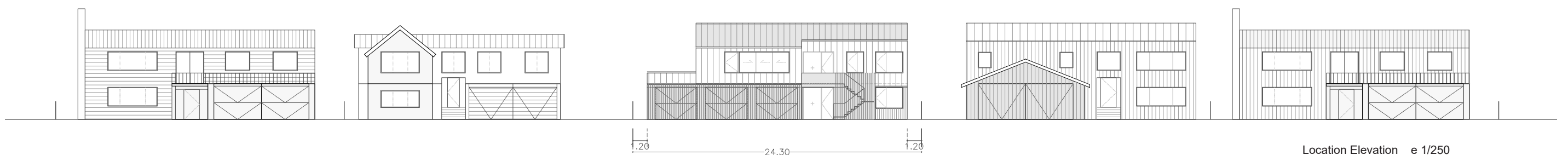
- Max. Height.....8.10 m
- Flood construction level.....finished grade
- Setbacks.....Front and Rear 3 m
Side 1.2 m
- Lot size..... 889.38 m2
- Site coverage..... 37.6%
Footprint 264.10 m2
Driveway 71 m2
- Permeable area..... 554.97 m2
- Vehicle parking spaces..... 3
- Bike parking spaces.....multiple (storage area)

The proposal has been design to allow for a backyard ADU:

- Site coverage..... 42.4%
Footprint 264.10 m2
Driveway 71 m2
Backyard ADU 42.25 m2
- Permeable area..... 512.28 m2



Location Plan_e 1/150



Location Elevation_e 1/250

Affordability & Cost-Effectiveness

The proposal prioritizes replicability, as the 3 units are the very same ones.

The project has been design to gather 3 units and parking under one same roof. This minimazes costs and allow for an easy maintance. Floor, wall and roof assemblies are a local prefab construction solution. Choosing a prefabricated structure will save construction time, will reduce material cost and will improve quality control for the structure and the overall envelope.

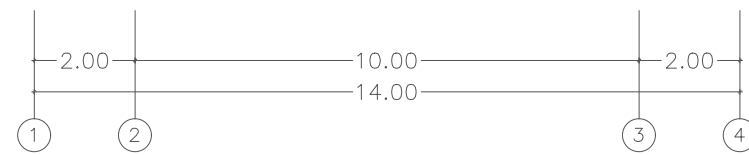
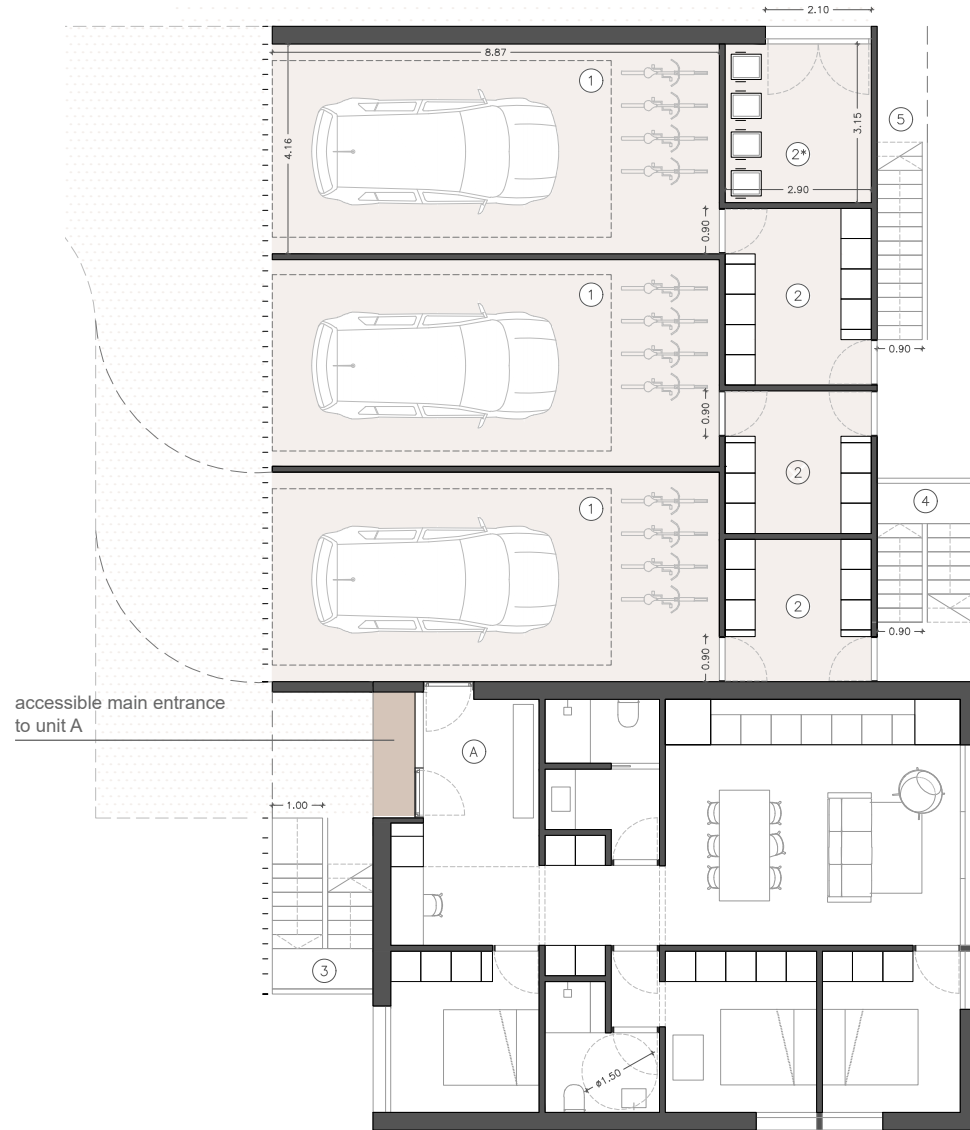
The floor plan dimensions and spans allow for conventional size of joists tha will reduce additoinal structure costs.

Construction estimate costs (based on Altus Group 2024 Canadian Cost Guide) will vary between the following range, depending on the chosen finishes:

\$557.45/sqft to \$1.250/sqft

The unit conversion for the assumed minimum range cost is \$6000/finished m2, which is inclusive of all design, pre-construction and finished build costs.

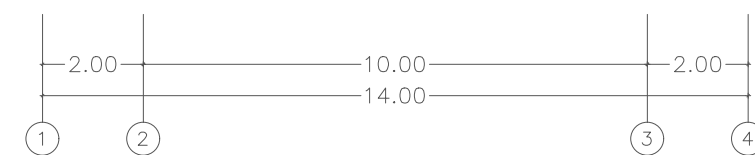
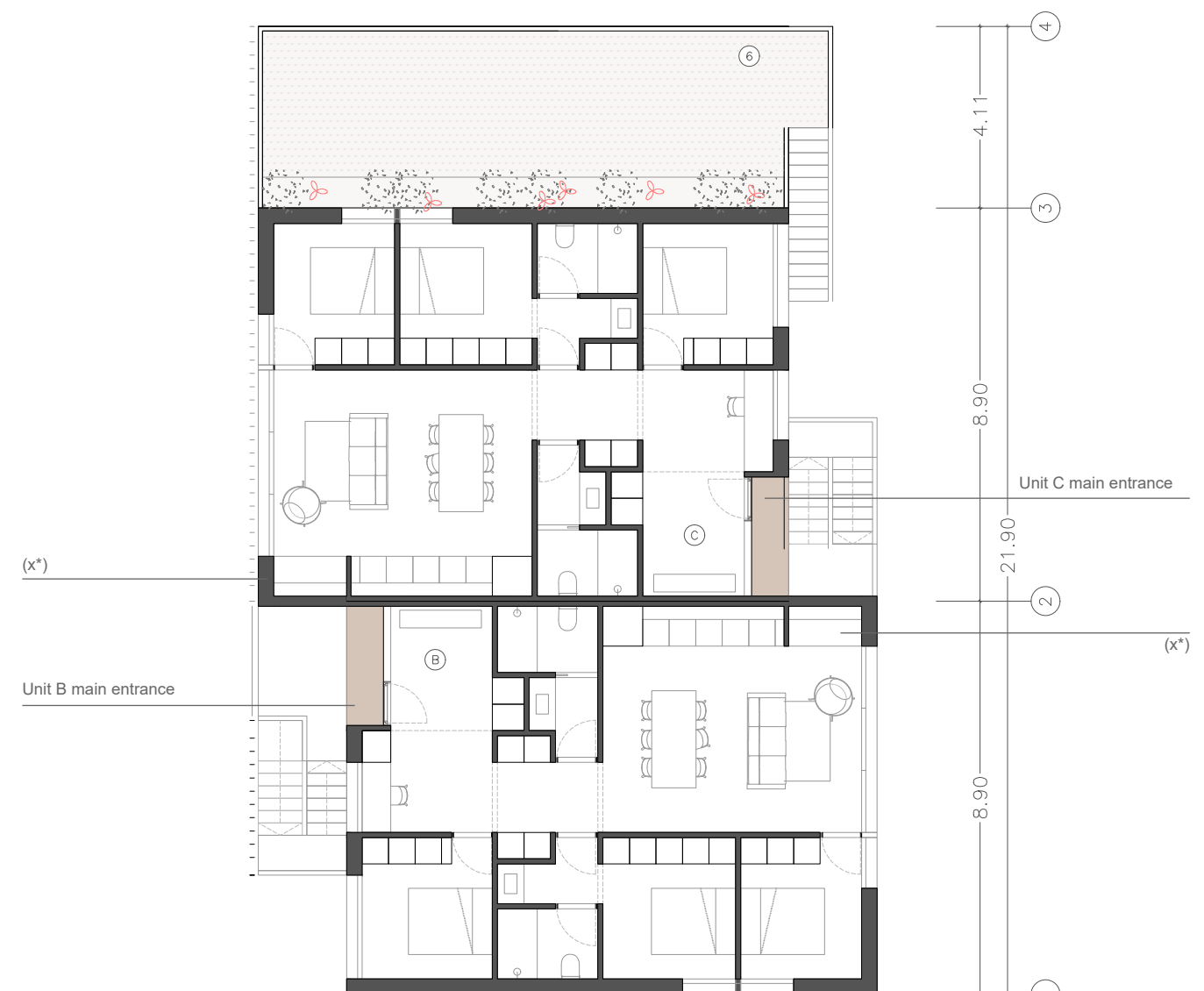
(x*) The project has been designed to allow for an optional secondary entry that can connect directly unit B with the backyard and Unit C with the front yard. These secondary entries will need to meet the fire requirements for Protection of Exit Facilities at BCBC 3.2.3.13 (4) as an alternative exit exposure.



Ground Floor Plan_e 1/150

NET AREA

A/B/C. Interior net area per each unit	89.70 m2
1. Parking lots per each unit	36.90 m2
2. Storage area per each unit	between 8.20-10.20 m2
2*. Solid waste collection room	9.15m2
3. Front lane stair to unit B	12 m2
4. Backyard stair to unit C	8 m2
5. Backyard stair to common deck	6.20 m2
6. Common exterior deck area	39 m2 (*)



First Floor Plan_e 1/150

GROSS FLOOR AREA491.85 m2

Unit A..... 106.75 m2

Unit B..... 106.75 m2

Unit C..... 106.75 m2

TOTAL UNITS GROSS FLOOR AREA320.25 m2

Parking and storage.....157.80 m2

Stairways 27.00 m2

FLOOR AREA RATIO0.36

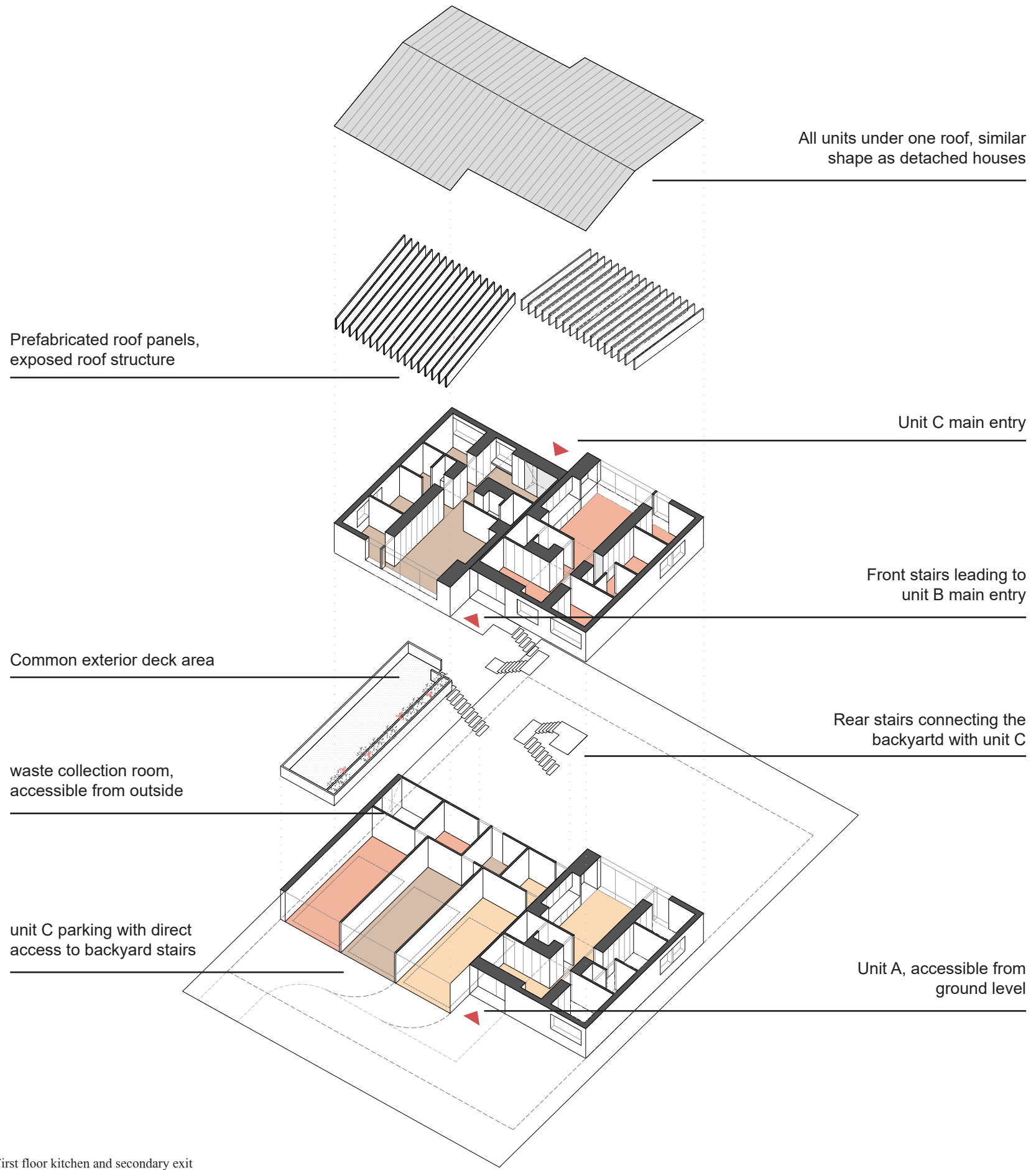
* there is no limit for Floor Area Ratio at multiple dwelling residential, as per 6A.5 Density at Section 6S - Residential 1 (R-1)

(*) exterior net area equivalent to 13m2 per each unit. This meets the minimum 10% of the gross floor area of each dwelling unit to be provided as common usable open space, as per article 6A.8 (b) of Section 6A of Residential 1 (R-1)



Prefabricated roof panels, exposed roof structure

First floor kitchen and secondary exit



Sustainability & Resilience

With the use of locally sourced lumber and environmentally conscious materials within the structural framing package and by reducing the use of petroleum-based products within the wall assembly, wall assembly will allow for both a healthy home and a more environmentally friendly construction practice. The exterior wall sheathing has been specified as wood fiber board which offers additional insulative value and is a low embodied carbon product when compared to more traditional exterior sheathing options.

The wall and roof assemblies specified within the design will easily achieve **Step Code 5** with the use of electric appliances, an air sourced electric heat pump, heat recovery ventilation system and high quality fenestration. Prefabricated panels will improve the insulation and air barriers quality control to ensure a better performance for the building efficiency.

Exterior finishes are fire-resistant hard board panels as thermal treated dark cedar wood and zinc roofing, which require minimum maintenance. All exterior and interior materials used are design under low maintenance and high resistance criteria.

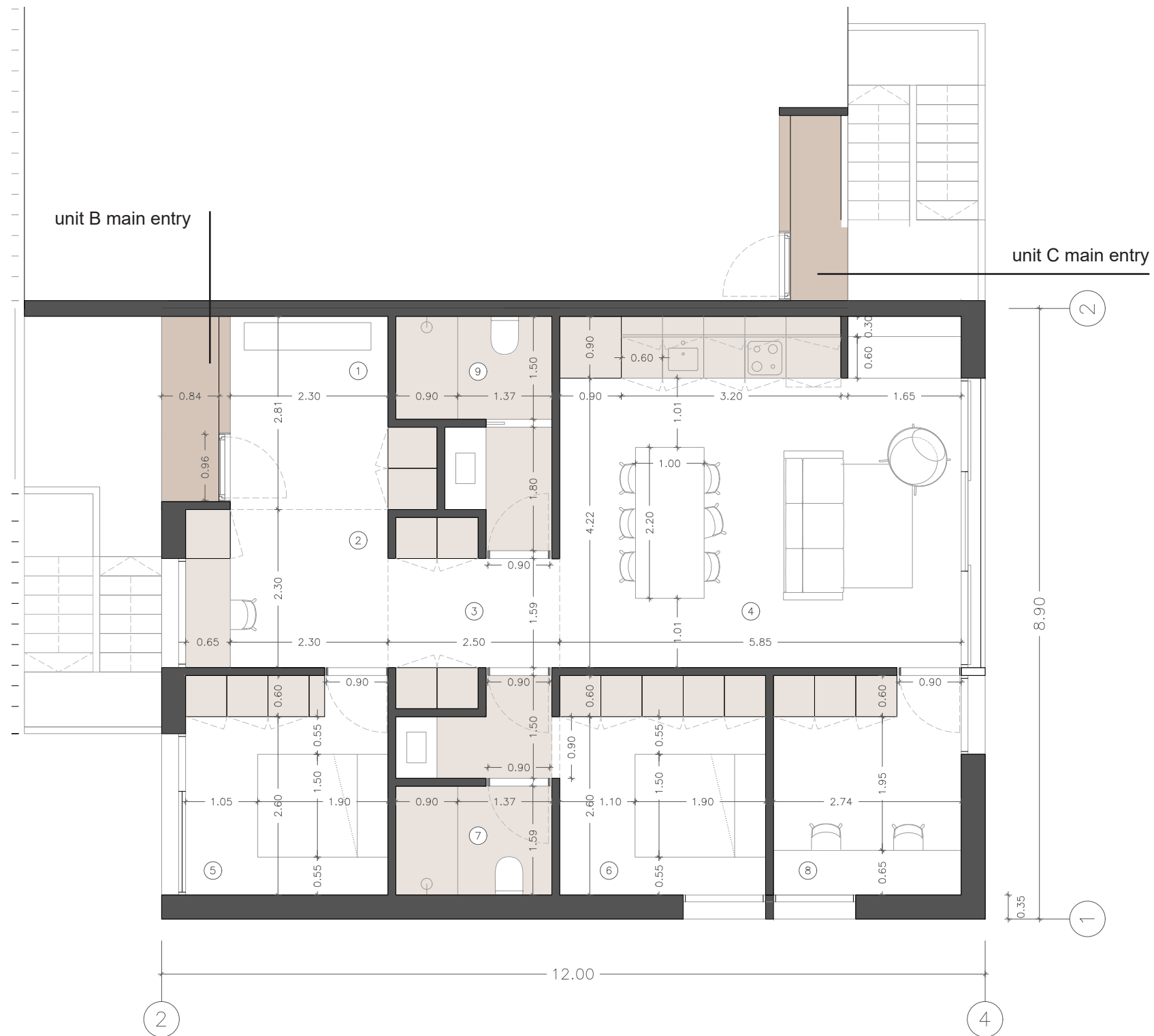
Floor plan design allows for an easy cross ventilation to ensure natural airflow. Roof configuration can add a solar roof system .

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The fire-resistance rating of walls and floor acting as fire separations between dwelling units will be more than 1h (as per Classification C requirements). Garage walls and ceiling fire-resistance will be 2h (as per Classification F3 requirements).

Party walls between dwellings are two 2x6 walls, independent, sealed and insulated. Non combustible insulation within prefab panels without any air gap, will allow for a minimum flame-spread rating. An interior service cavity finished by gypsum drywall will reinforce the thermal barrier against fire spread.

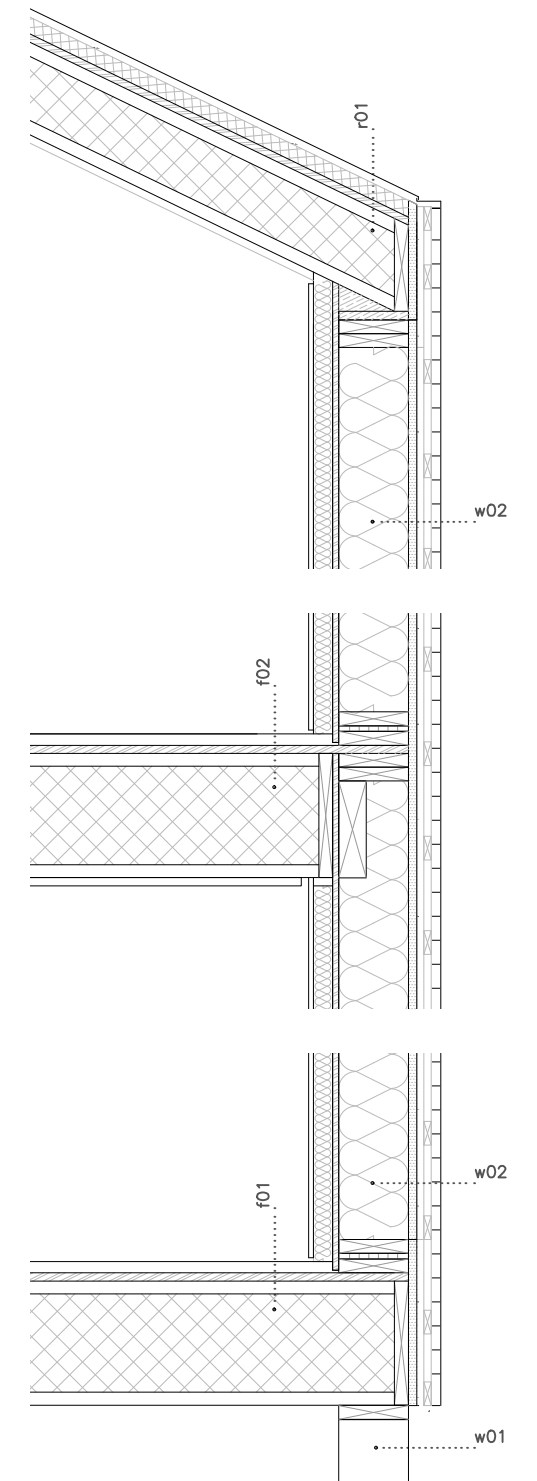
Fire suppression system will include sprinklers, smoke alarm system and CO2 detectors.



Detail Floor Plan__e 1/75

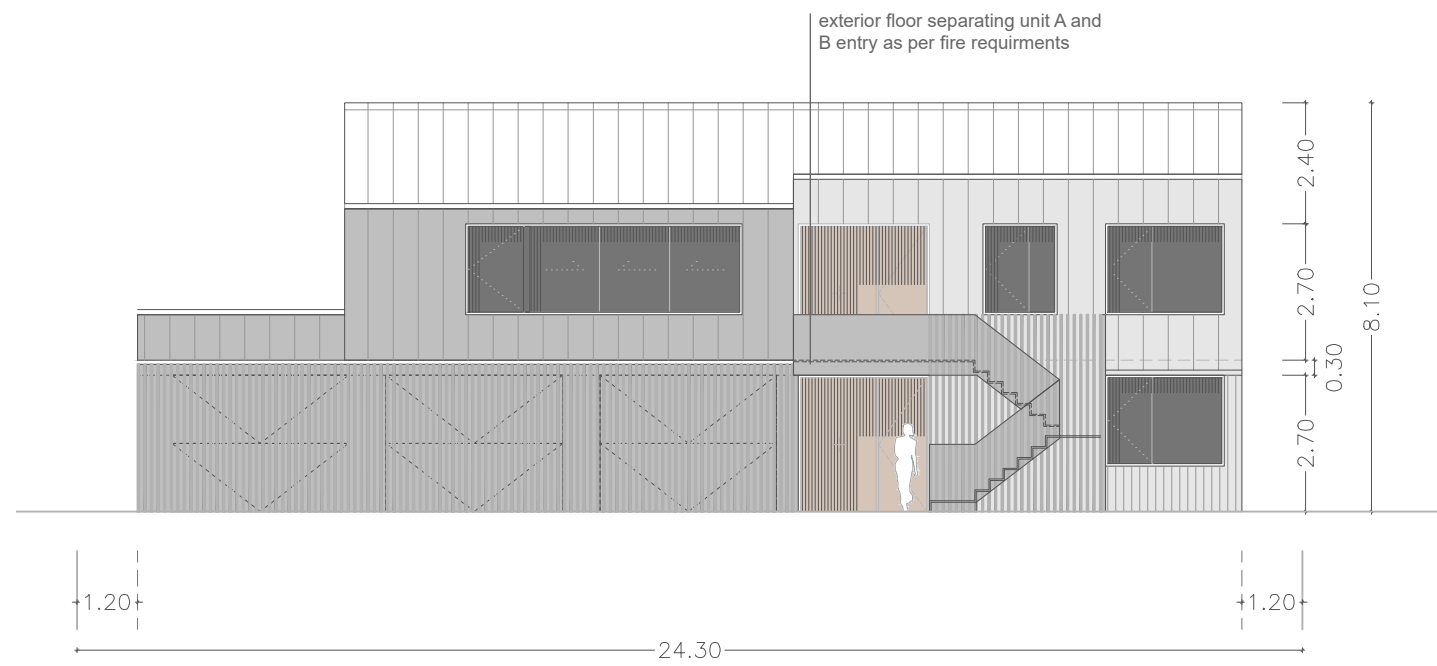
UNIT NET AREA

1. Main entry area	7.30 m2	6. Bedroom 2	9.60 m2
2. Multiple usea area	6.80 m2	7. Suite bathroom and room entry	6.40 m2
3. Corridor	5.40 m2	8. Bedroom 3	8.75 m2
4. Kitchen and living room	30.00 m2	9. Bathroom	6.00 m2
5. Bedroom 1	9.45 m2	TOTAL net area per each unit	89.70 m2



Panels Assembly Detail__e 1/20

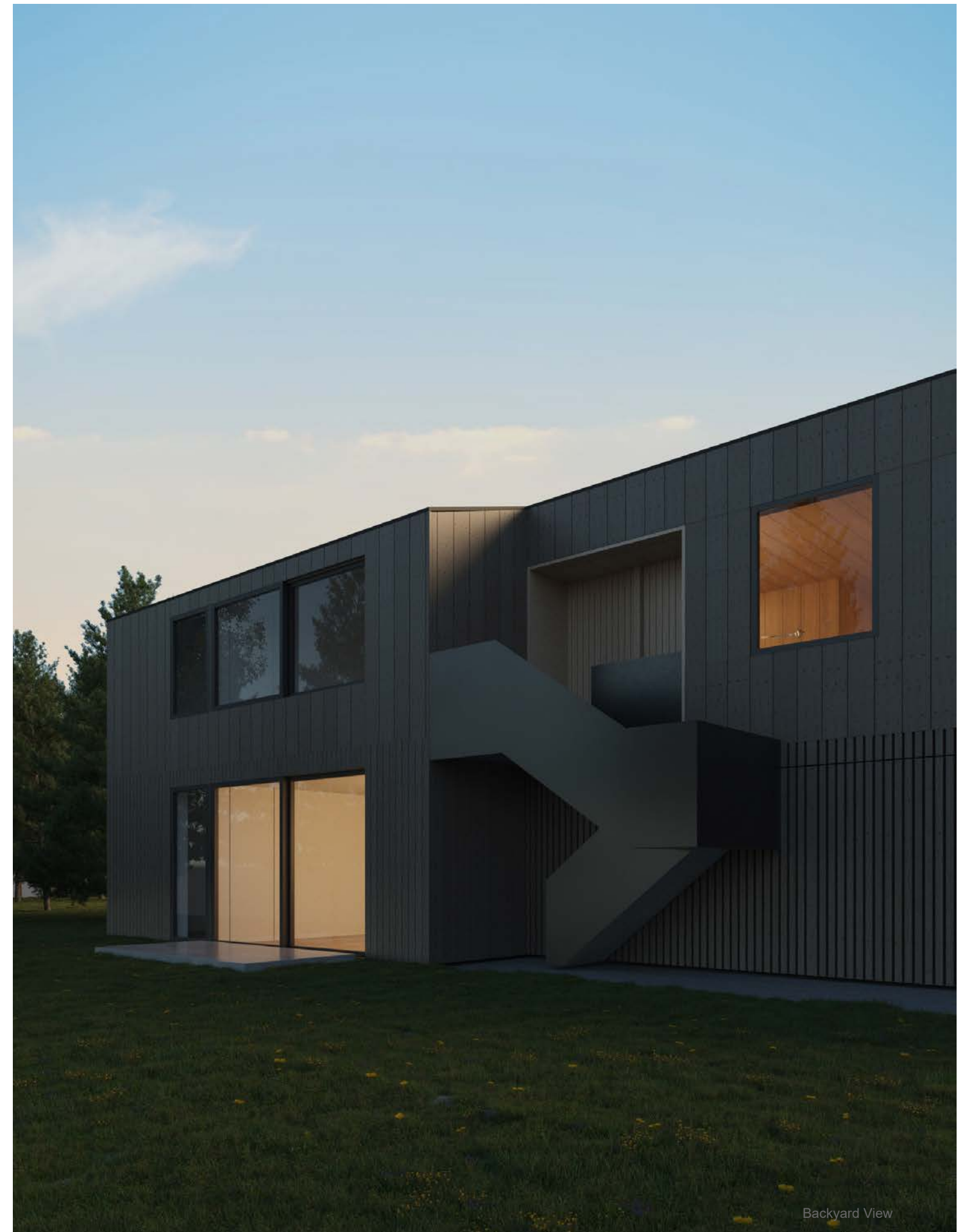
w01. concrete walls with interior insulated service cavity / **w02.** 2x8 insulated prefab panels with interior service cavity. Balloon frame with ledger connection / **f01.** and **r01.** TJI joist insulated panel with gypsum ceiling



Front Lane Elevation__e 1/150



Backyard Elevation__e 1/150



Backyard View

