

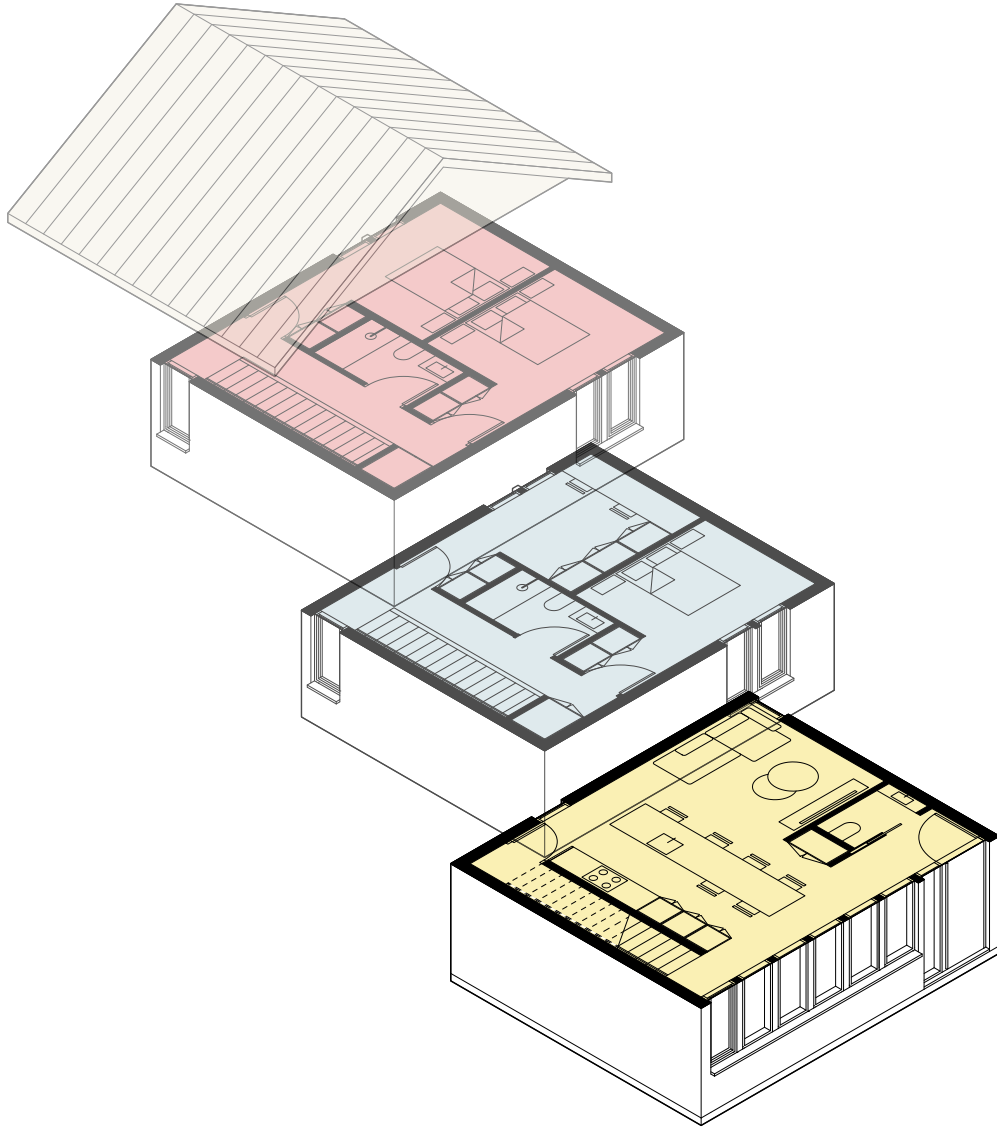


# Standardized Housing Designs Catalogue

September 2024



Ministry of  
Housing



In collaboration with



Christine Lintott  
Architects Inc.



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# Introduction

The Province of British Columbia has commissioned standardized, customizable residential building designs and a companion catalogue for people building small-scale, multi-unit housing on lots previously zoned for single-family homes and duplexes.

The digital designs are free to the public and can be used by builders, designers, and homeowners to build accessory dwelling units, duplexes, triplexes, quadplexes, and townhomes.

Leckie Studio has developed a component-based approach that enables many potential configurations with interchangeable floor plans. Designs can be layered two or three storeys high, including options for garages and increased number of bedrooms. There are various roof shapes, materials, and exterior cladding options to choose from, with customizable features like window awnings, porches, or other design features.

This system will be introduced in [Section 1](#) of this catalogue, and seven iterations are displayed as examples in [Section 2.1](#). Three alternative design options which do not use the component-based approach are also available to meet specific use cases such as aging in place or smaller lot sizes.

These designs work in concert with legislation introduced in November 2023 which enables more small-scale, multi-unit housing, including town homes, triplexes and laneway homes, and require changes to local zoning requirements to help build more homes faster. In most areas within municipalities of more than 5,000 people, these changes also require bylaws to allow for:

- At least three to four units permitted on lots currently zoned for single-family or duplex use, depending on lot size;

- At least six units permitted on larger lots currently zoned for single-family or duplex use and close to transit stops with frequent service.

Increased standardization and the component-based approach enable further efficiencies in the building and permitting process, which could include pre-fabrication of wall assemblies and better supply chain reliability to reduce the cost and time required to build housing. Local governments can also choose to fast track approval of the designs to expedite permitting and development.

## More information

A Class D costing estimate, produced by a third party, provides general costing assumptions and estimates which can help people price out their project.

- [Read the costing estimate \(PDF\)](#)

Download the design and energy modelling files

- To view and download the design files, you must [read and accept a terms of use \(external link\)](#).

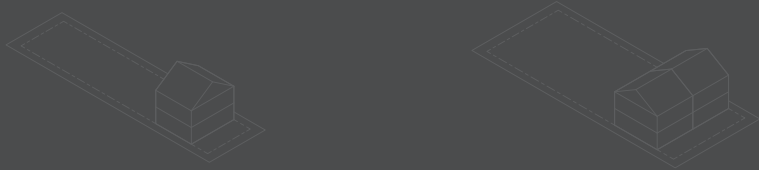
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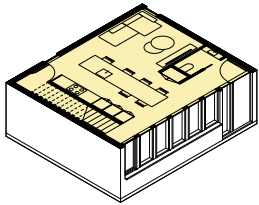
# System Introduction



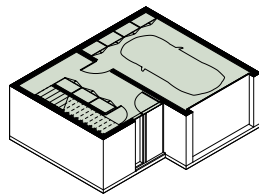
# Building Block Customization

## Step 1: BASE

Choose a ground floor plan



Plan 1A: no garage



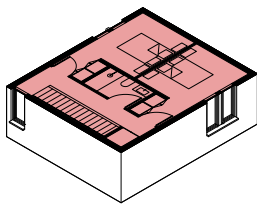
Plan 1B: garage

This component-based system is designed as a kit of parts that can be mixed-and-matched to suit the users' needs.

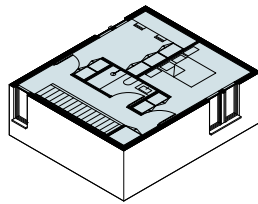
Each "Building Block" dwelling unit is composed of interchangeable floor plans that can be layered two to three storeys high, and includes options for garages or more bedrooms.

## Step 2. ADD

Add one or two upper floor plan(s)



Plan 2A: 2 bedrooms



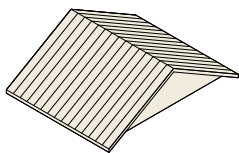
Plan 2B: 1 bedroom  
+ study

The blocks are then paired with a variety of roof shapes.

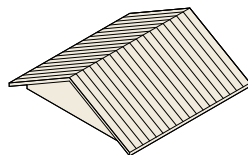
Finally, the Building Block can be personalized with cladding and roofing material selections as well as optional solar shading devices.

## Step 3. ROOF

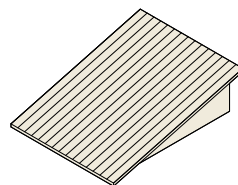
Choose a roof shape



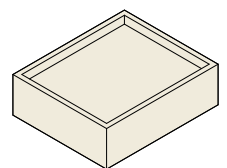
Pitched 1



Pitched 2



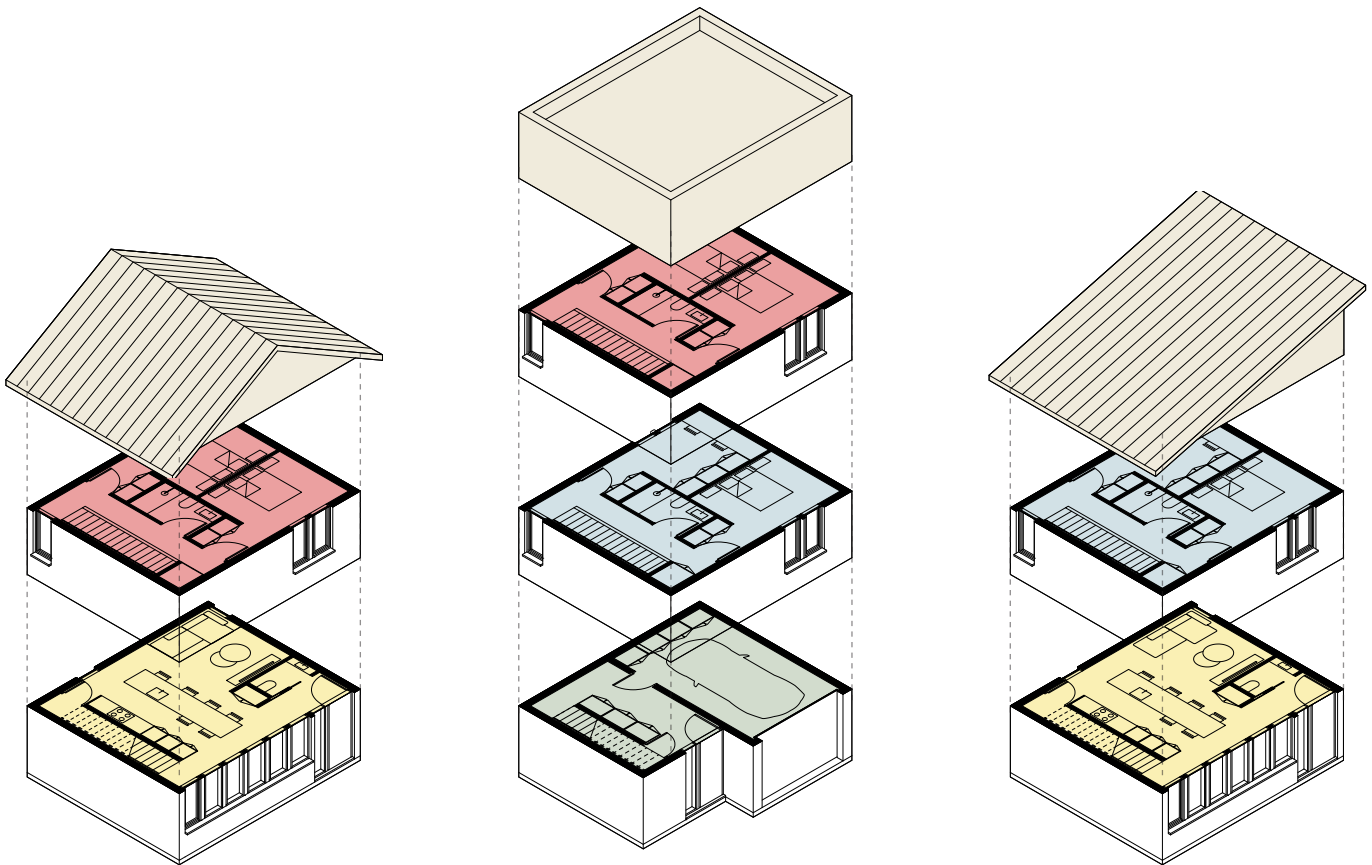
Pitched 3



Flat

# Building Block Customization

## Possible Combination Examples



**Example A:**

- Pitched 1 Roof
- + Plan 2A
- + Plan 1A

**Example B:**

- Flat Roof
- + Plan 2A
- + Plan 2B
- + Plan 1B

**Example C:**

- Pitched 3 Roof
- + Plan 2B
- + Plan 1A

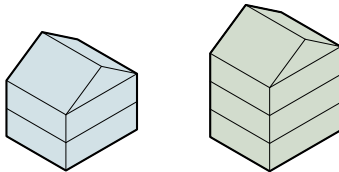
# Building Block Siting

Once the Building Block has been customized, it can be arranged on a lot to create many configurations and typologies that adapt to site dimensions, zoning requirements, and density preferences.

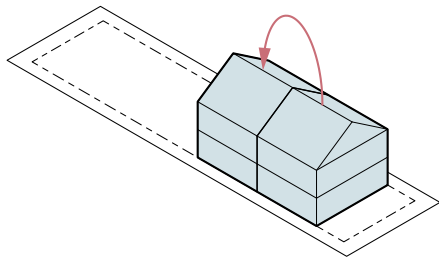
By duplicating and/or rotating the Building Blocks, they come together to create the desired unit types including accessory dwelling units (ADUs), duplexes, triplexes, quadplexes, and townhouses.

## Step 4. SITE

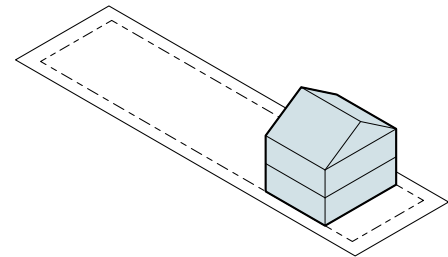
Apply Building Block to chosen site



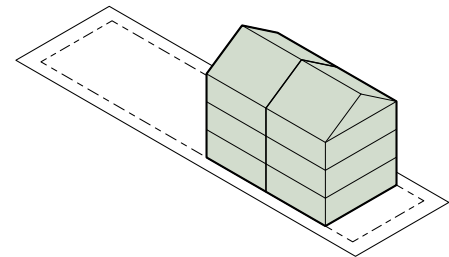
Building height varies depending on two storey vs. three storey layouts.



A duplex can be created by adding an additional module to the rear.



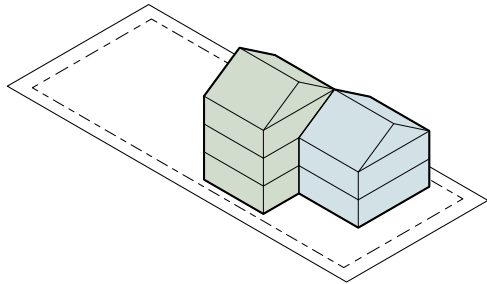
The base Building Block module is designed to maximize site frontage on a 33' - 0" width lot.



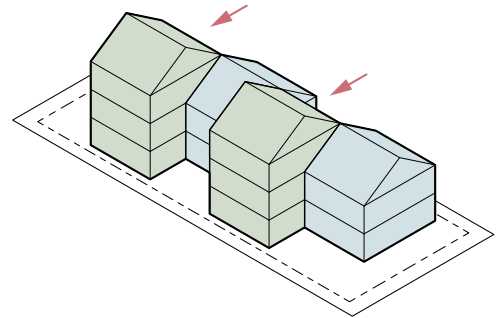
Adding an additional storey increases flexibility, providing opportunities for additional bedrooms or on-site parking with a garage module.



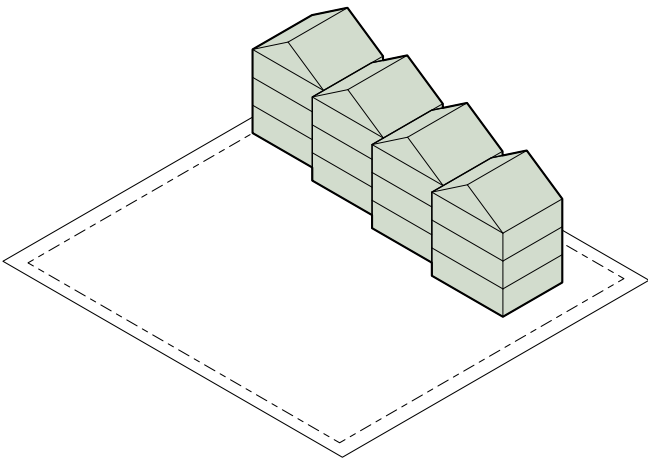
# Building Block Siting



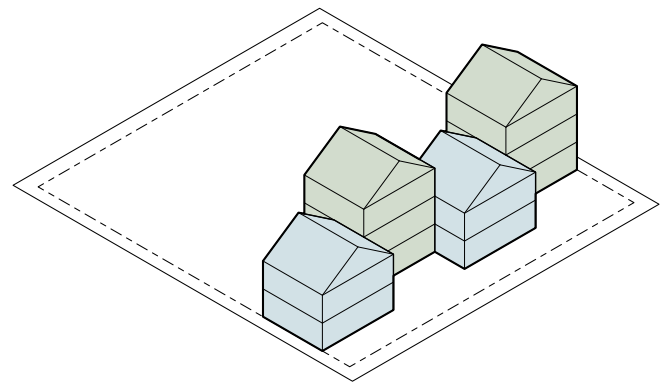
Offsetting the Building Blocks past one-another allows the configuration to suit a wide variety of site widths.




Staggering the Building Blocks creates a garden condition, where each unit gains a private courtyard.



Rotating a group of Building Blocks 90 degrees creates a bar scheme down the length of the site. The increased side-yard dimension allows greater flexibility in window options.



On larger sites, the Building Blocks can be lined up the width of the site to create a four-unit townhouse.

The background of the page is a dark grey color. It features several faint, white, isometric line drawings of housing units. These drawings are arranged in a grid-like pattern, showing different configurations of rectangular blocks. Some units are single-story, while others are two-story. The drawings are semi-transparent and serve as a decorative backdrop for the text.

# System Opportunities

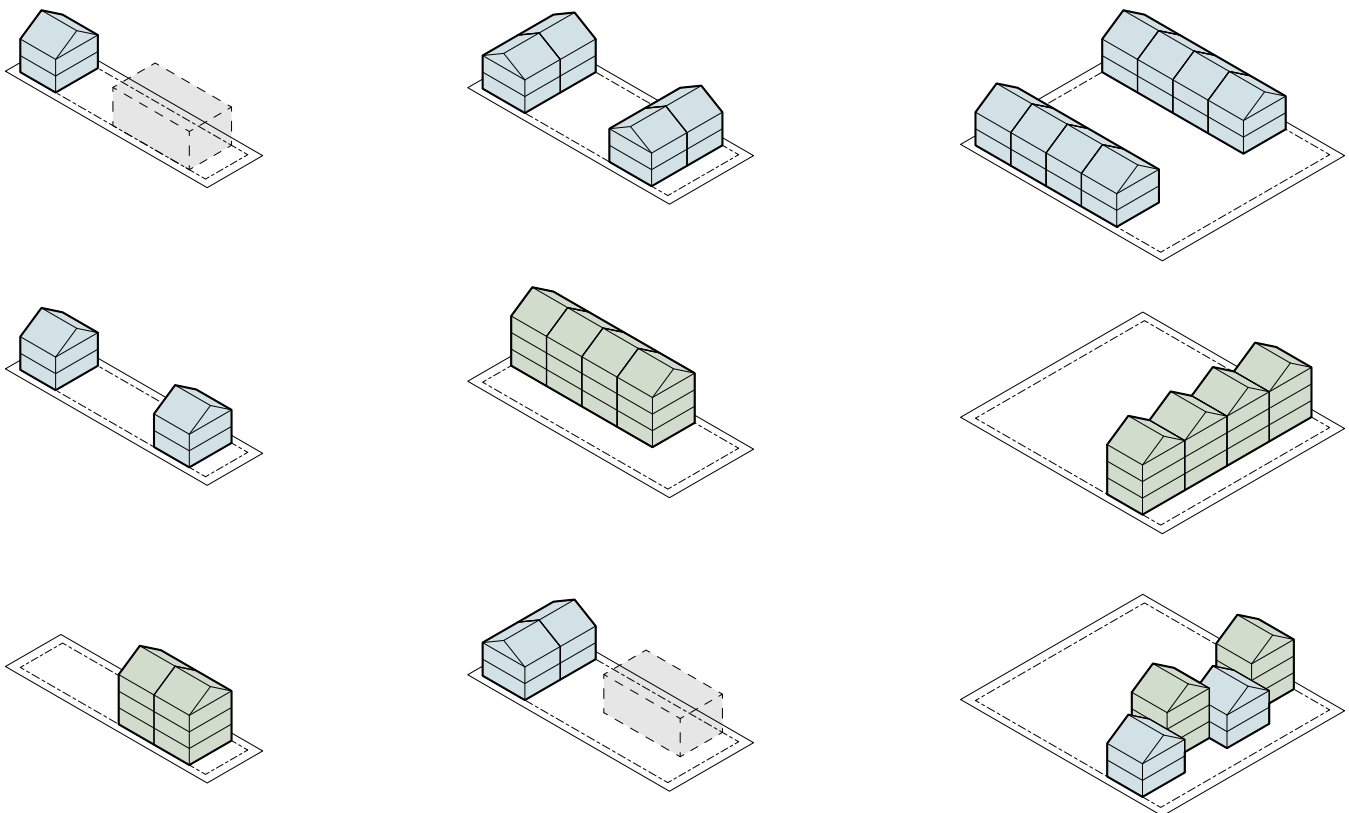
# Flexible Implementation

Building footprints are optimized to accommodate a number of site conditions:

- Works well across sites with a variety of widths and depths;
- Laneway access is optional and easily accommodated;
- Window extents can be adapted to suit limiting distances;
- Building Block dimensions allow for maximum site frontage across a variety of site conditions. This is achieved by mirroring, rotating, and staggering the Building Block.

Building footprints are optimized to provide flexibility with various municipal zoning by-laws:

- A variety of floor space ratio (FSR) targets can be achieved;
- Parking can be provided in garages or at grade;
- Units can be two or three storeys as desired;
- Electric pad-mounted transformers (PMTs) can be installed as required.



# Countless Variants

Component-based design allows for:

- Various siting options and configurations;
- Roof forms to suit a variety of climates and regional characters;
- Cladding options to suit a range of budgets and styles;
- Simplicity in adding accessories (porches, shading devices, etc).



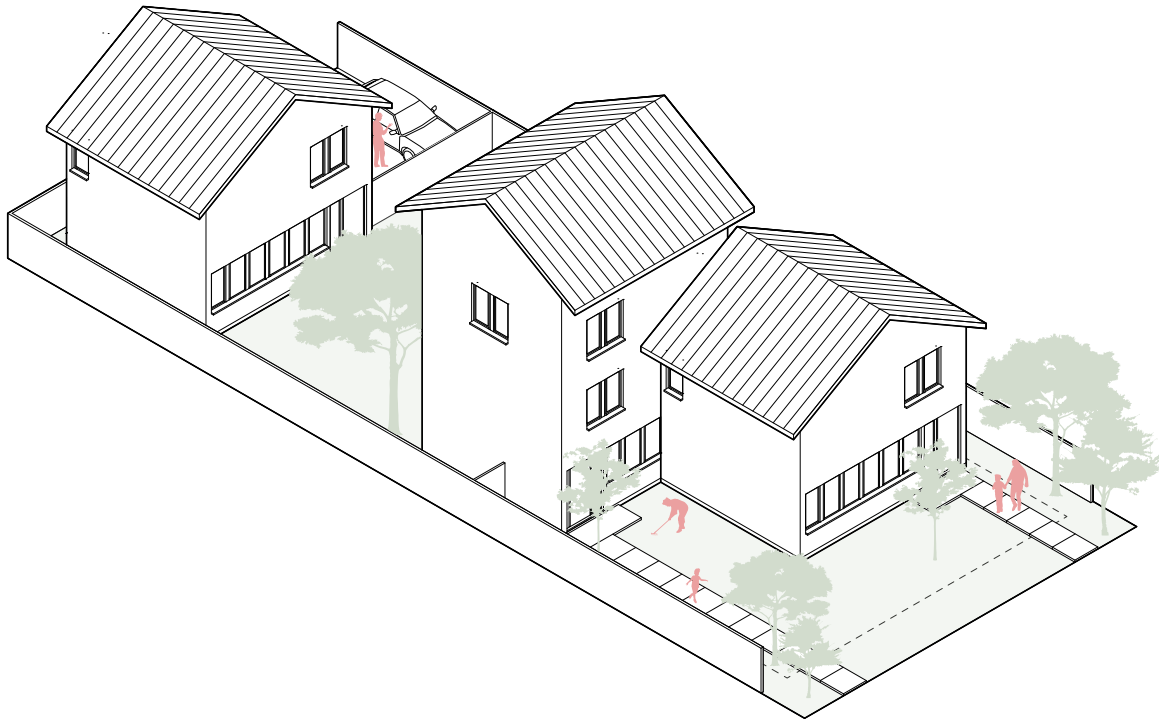
# Ease of Construction

- Units that are arranged side-by-side instead of stacked on top of each other are simpler to build from a building code perspective;
- Modular approach allows for the potential of pre-fabrication;
- Standardized window dimensions simplify future window orders and reduce costs;
- Standardized kitchen layouts simplify production and construction.

# Livable Units

Units that are arranged side-by-side instead of stacked on top of each other provide livable units with the following qualities:

- One, two, three, and four bedroom layouts;
- Ground-oriented living;
- Private entry and outdoor space;
- Windows on multiple sides of all units.





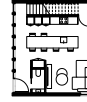
# Unit Overview

## 2.1: Building Block Design Examples

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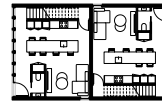
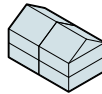
Accessory Dwelling Unit 01



p. 18

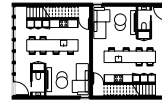
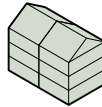
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Duplex 01



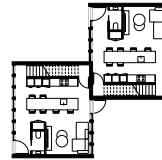
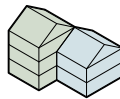
p. 23

Duplex 02



p. 28

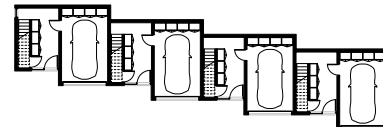
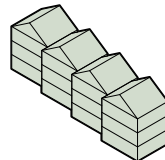
Duplex 03



p. 33

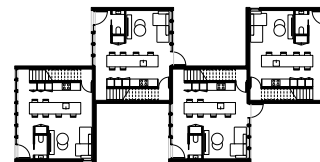
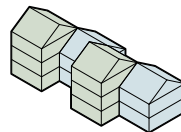
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Quadplex 01



p. 38

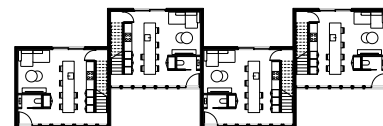
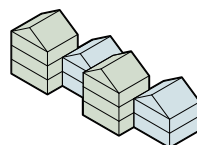
Quadplex 02



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Townhouse 01



p. 48

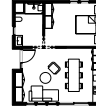
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## 2.2: Alternate Designs

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p. 53

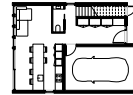
Accessory Dwelling Unit 02



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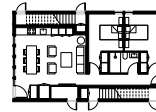
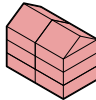
Accessory Dwelling Unit 03



p. 59

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Triplex 01

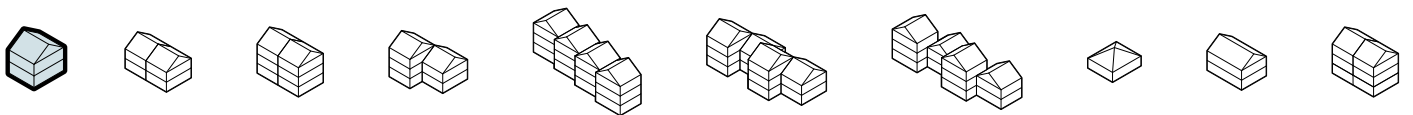


p. 64



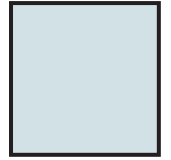
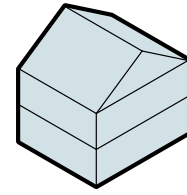
The background of the page is a dark grey color. It features several faint, white line-art sketches of building blocks and their arrangements. These sketches are scattered across the page, showing various configurations of rectangular blocks, some stacked on top of each other and others placed side-by-side. The sketches are semi-transparent and serve as a decorative backdrop for the text.

# Building Block Design Examples



# Accessory Dwelling Unit 01

# Statistics



## Unit Summary

Unit Type	Accessory Dwelling Unit
Unit Count	1
No. of Stories	2
No. of Beds/Unit	2
No. of Baths/Unit	1.5
No. of Parking/Unit	0 indoor, up to 1 at grade

## Dimensions

Unit Height	25'-6" [7.75]
Unit Width	25'-0" [7.60]
Unit Depth	21'-0" [6.40]
Unit Footprint	1,050.00 ft <sup>2</sup> [97.50 m <sup>2</sup> ]
1st Floor	525.00 ft <sup>2</sup> [97.5 m <sup>2</sup> ]
2nd Floor	525.00 ft <sup>2</sup> [97.5 m <sup>2</sup> ]

## Site Coverage

33' x 120"	13.25%
50' x 120"	8.75%
80' x 120"	5.45%

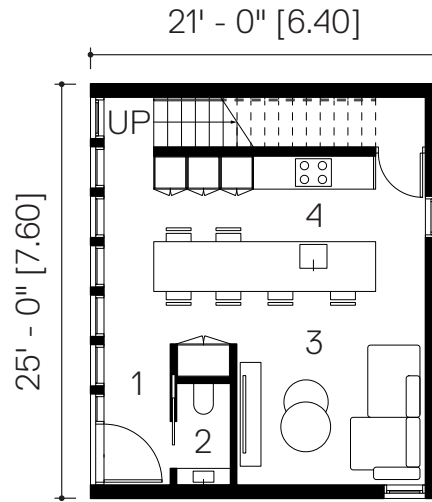
- ◆ This is for the ADU only and does not include existing buildings on-site.

## Applicable Site Standards

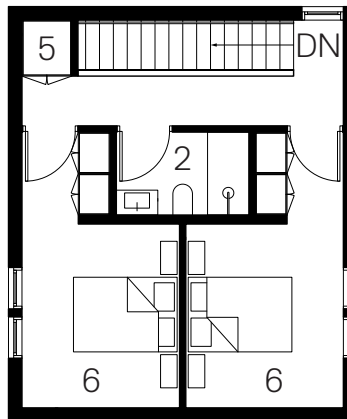
### SSMUH Site Standards Package A

- ◆ Required to permit a secondary suite and/or an accessory dwelling unit.

# Floor Plans



**Level 1**



**Level 2**

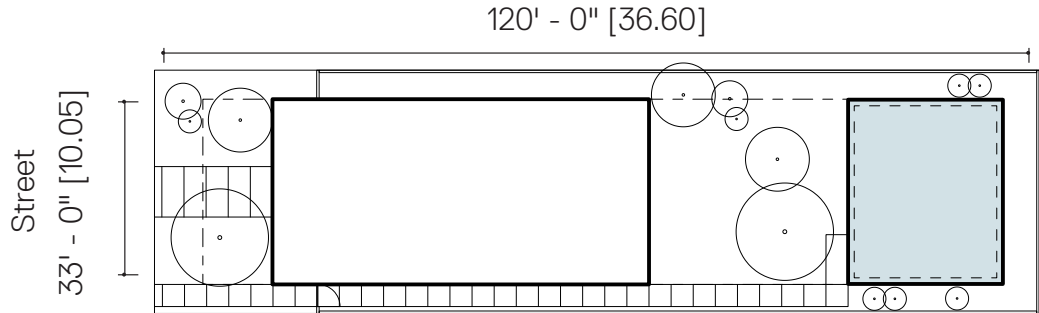
**Legend:**

- 1. Entry
- 2. Washroom
- 3. Living Room
- 4. Kitchen/  
Dining
- 5. Laundry
- 6. Bedroom

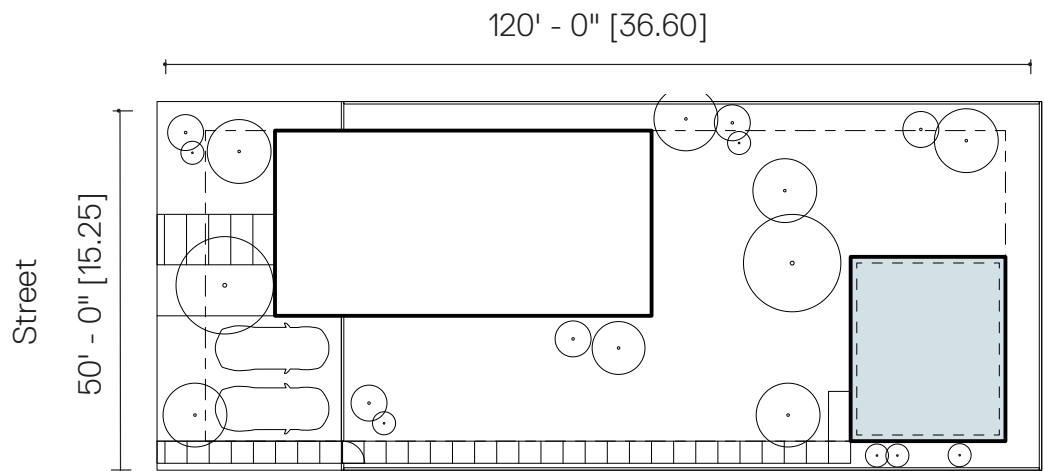


# Siting Examples

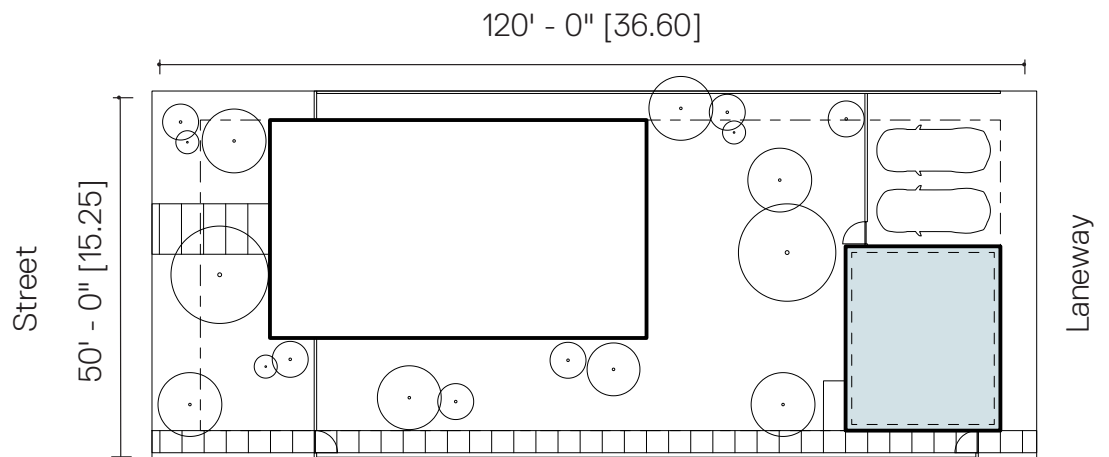
33' Site Plan:  
Rear Yard



50' Site Plan:  
Rear Yard



50' Site Plan:  
Laneway



# Personalization

## Style Example 1

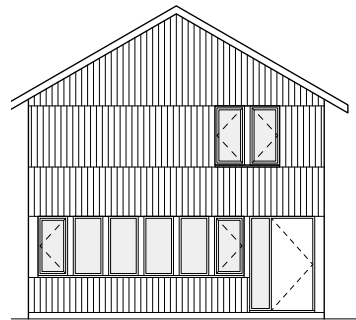
- ◆ Roof: Pitched 2
- ◆ Cladding: Wood Siding



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## Style Example 2

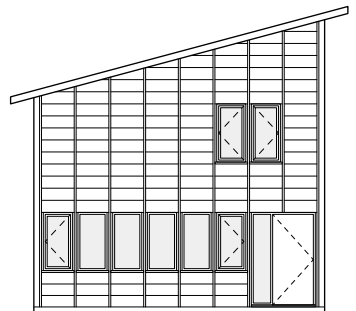
- ◆ Roof: Pitched 1
- ◆ Cladding: Wood Siding

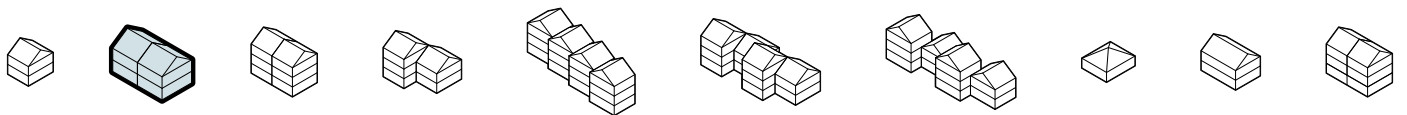


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## Style Example 3

- ◆ Roof: Pitched 3
- ◆ Cladding: Fibre Cement Siding



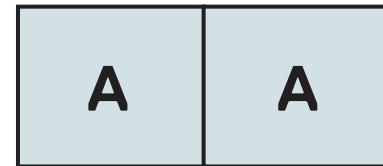
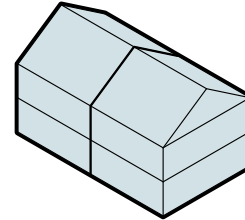


# Duplex 01

# Statistics

## Unit Summary

Unit Type	Duplex
Unit Count	2
<b>Unit Type A</b>	
No. of Stories	2
No. of Beds/Unit	2
No. of Baths/Unit	1.5
No. of Parking/Unit	0 indoor up to 1 at grade



## Dimensions

Total Footprint	2,057.30 ft <sup>2</sup> [191.10 m <sup>2</sup> ]
<b>Unit Type A</b>	
Unit Height	26'-6" [8.10]
Unit Width	25'-0" [7.60]
Unit Depth	20'-6" [6.25]
Unit Footprint	1,028.65 ft <sup>2</sup> [95.55 m <sup>2</sup> ]
1st Floor	514.30 ft <sup>2</sup> [47.80 m <sup>2</sup> ]
2nd Floor	514.30 ft <sup>2</sup> [47.80 m <sup>2</sup> ]

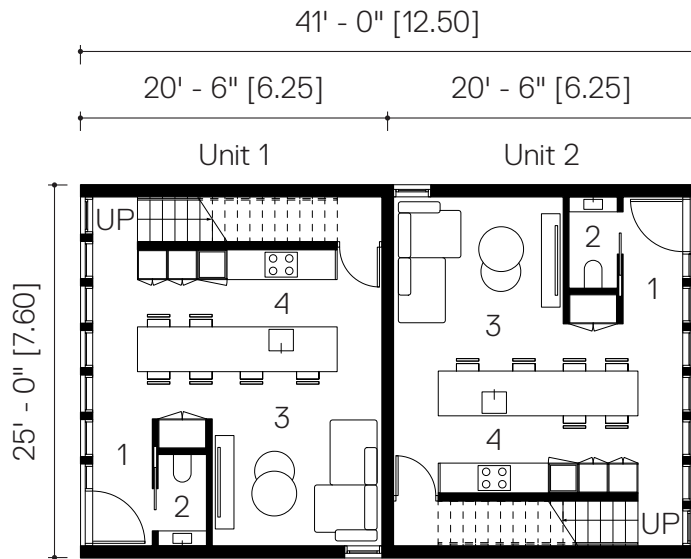
## Applicable Site Standards

### SSMUH Site Standards Package B

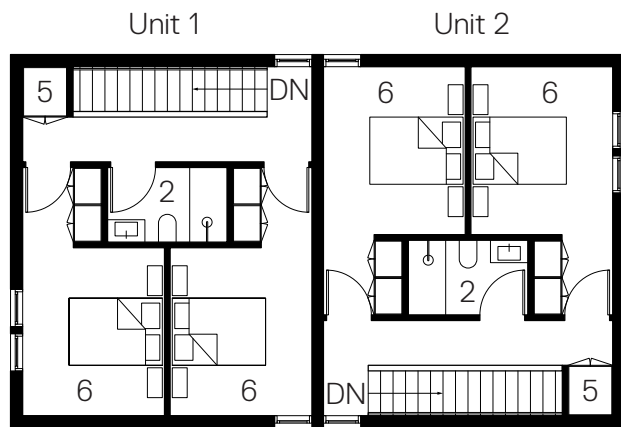
- Required to permit three or four units;
- Generally less than 1,215 m<sup>2</sup> in size.



# Floor Plans



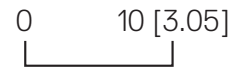
**Level 1**



**Level 2**

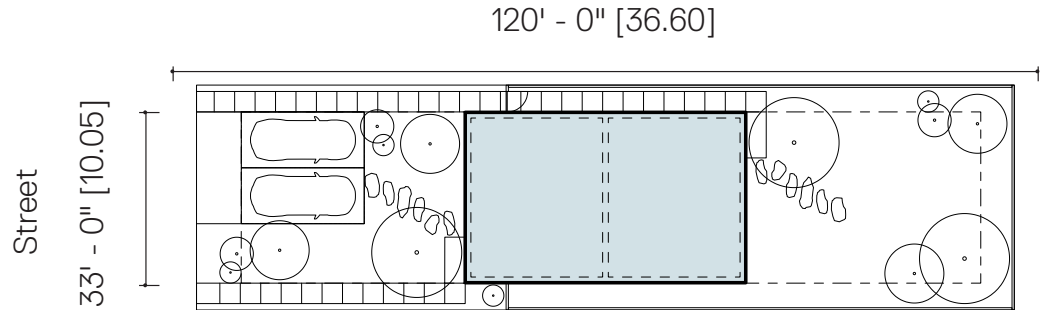
**Legend:**

- 1. Entry
- 2. Washroom
- 3. Living Room
- 4. Kitchen/  
Dining
- 5. Laundry
- 6. Bedroom

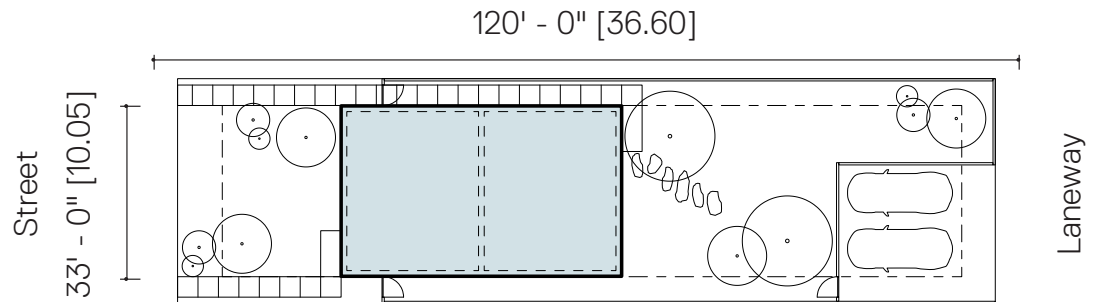


# Siting Examples

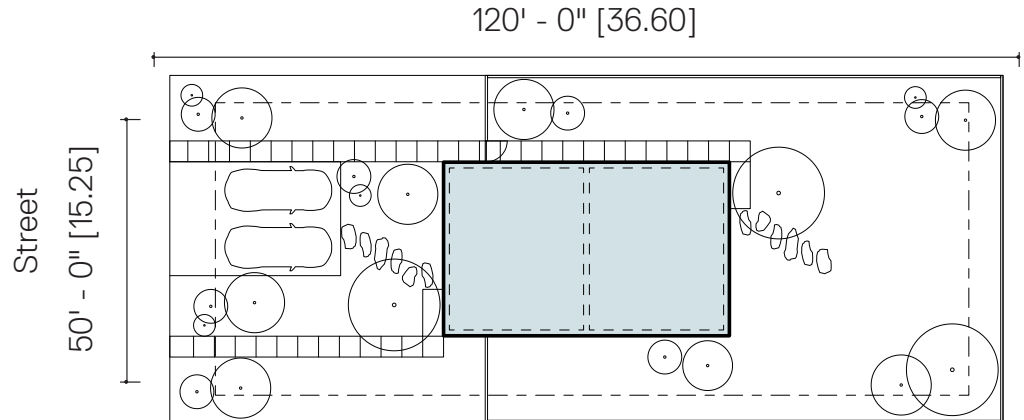
33' Site Plan:  
Rear Yard



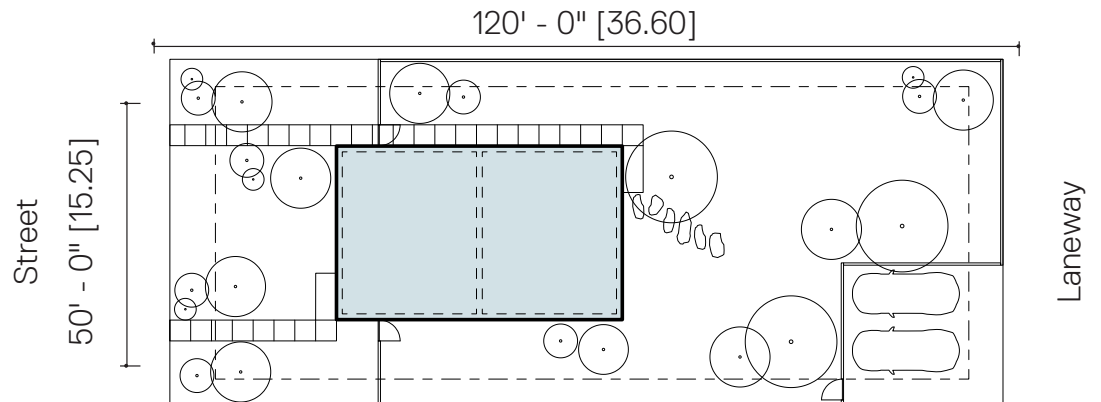
33' Site Plan:  
Laneway



50' Site Plan:  
Rear Yard



50' Site Plan:  
Laneway



# Personalization

## Style Example 1

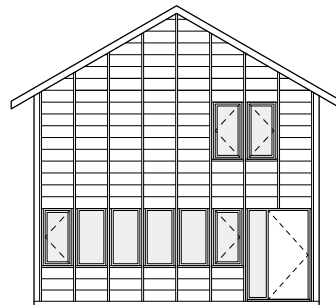
- Roof: Pitched 3
- Cladding: Wood Siding



---

## Style Example 2

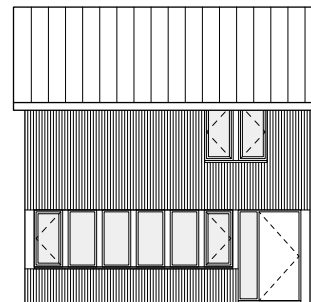
- Roof: Pitched 1
- Cladding: Fibre Cement Siding

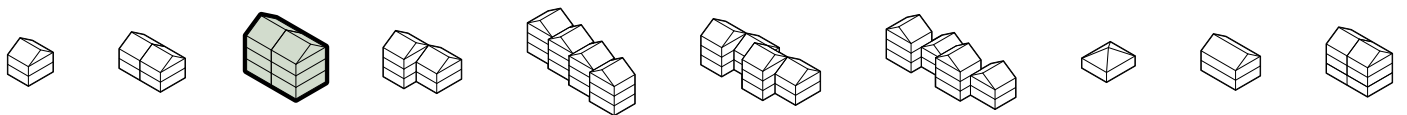


---

## Style Example 3

- Roof: Pitched 2
- Cladding: Wood Siding



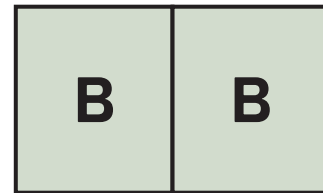
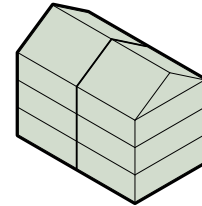


# Duplex 02

# Statistics

## Unit Summary

Unit Type	Duplex
Unit Count	2
<b>Unit Type B</b>	
No. of Stories	3
No. of Beds/Unit	3
No. of Baths/Unit	2.5
No. of Parking/Unit	0 indoor up to 1 at grade



## Dimensions

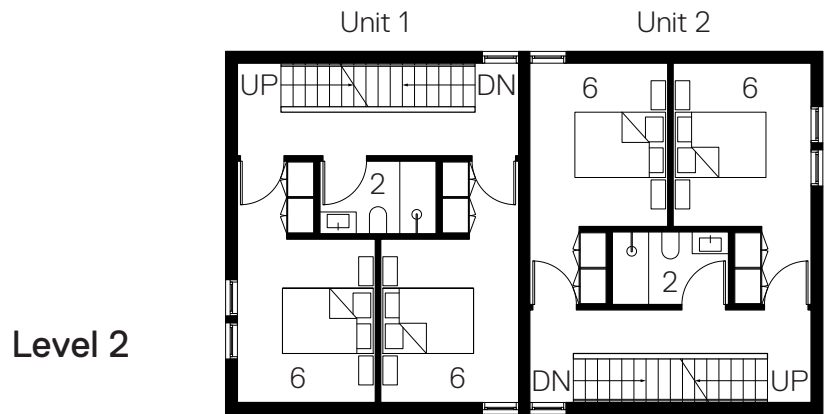
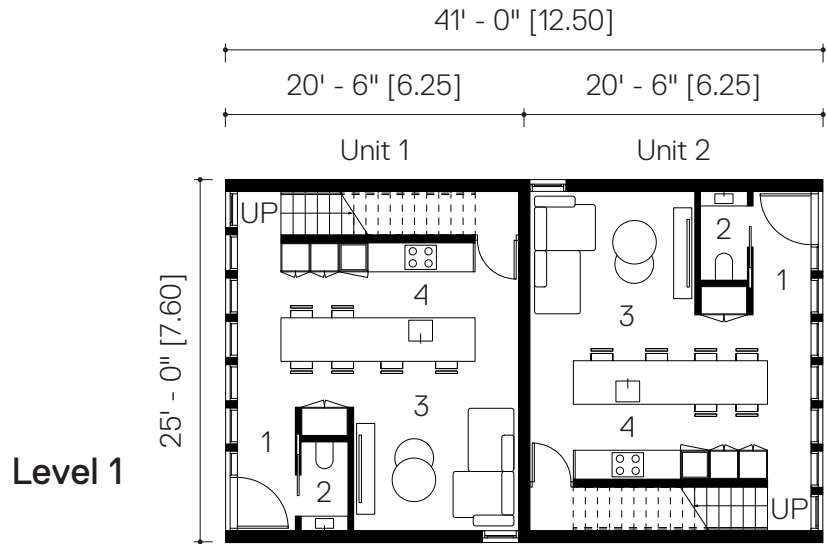
Total Footprint	3,085.90 ft <sup>2</sup> [286.70 m <sup>2</sup> ]
<b>Unit Type B</b>	
Unit Height	36'-0" [10.95]
Unit Width	25'-0" [7.60]
Unit Depth	20'-6" [6.25]
Unit Footprint	1,542.95 ft <sup>2</sup> [143.35 m <sup>2</sup> ]
1st Floor	514.30 ft <sup>2</sup> [47.80 m <sup>2</sup> ]
2nd Floor	514.30 ft <sup>2</sup> [47.80 m <sup>2</sup> ]
3rd Floor	514.30 ft <sup>2</sup> [47.80 m <sup>2</sup> ]

## Applicable Site Standards

### SSMUH Site Standards Package B

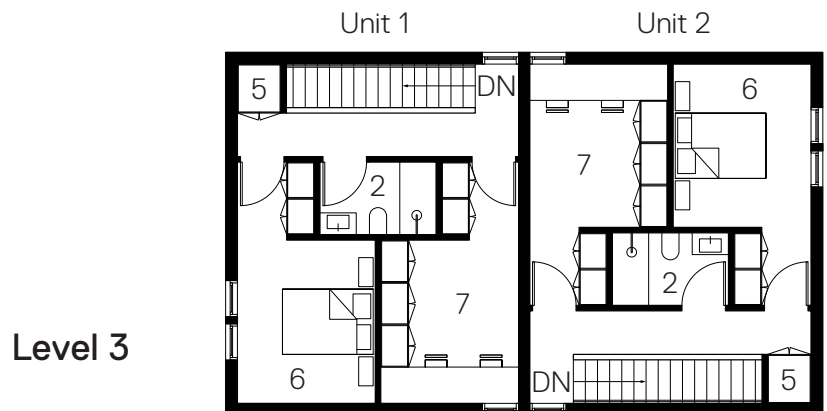
- Required to permit three or four units;
- Generally less than 1,215 m<sup>2</sup> in size.

# Floor Plans



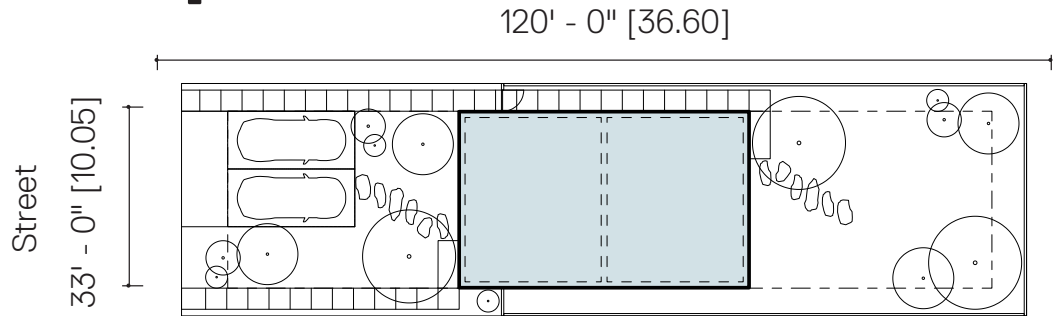
## Legend:

- 1. Entry
- 2. Washroom
- 3. Living Room
- 4. Kitchen/  
Dining
- 5. Laundry
- 6. Bedroom
- 7. Study

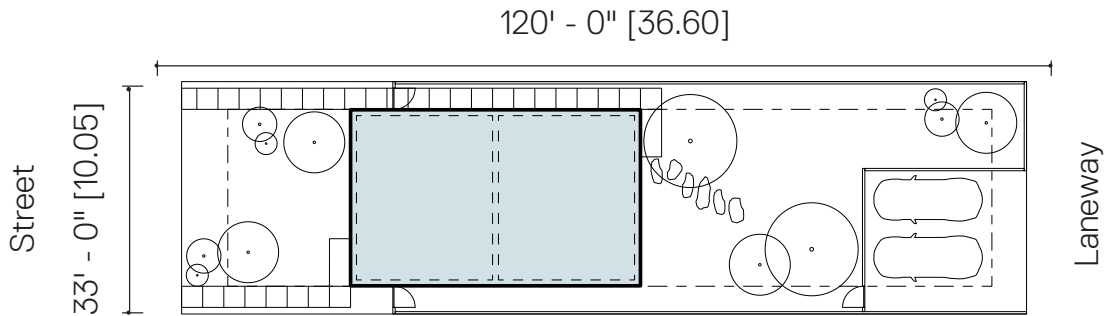


# Siting Examples

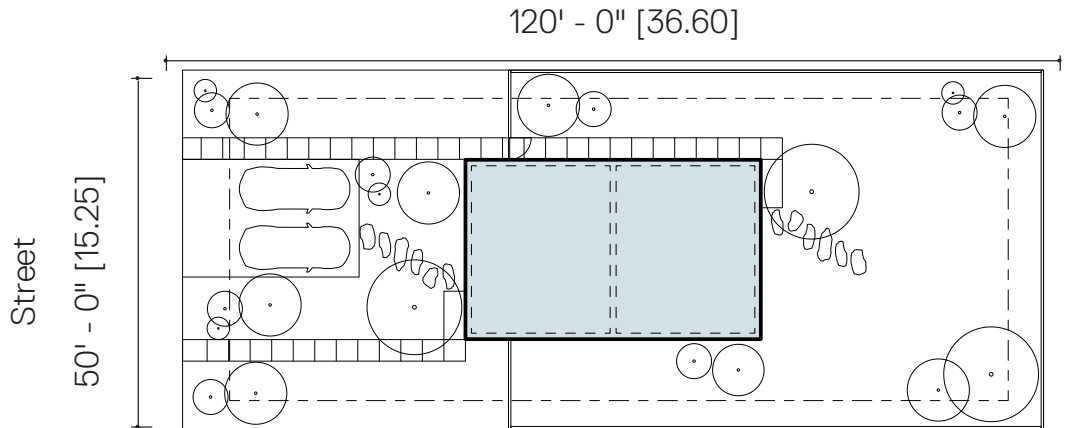
33' Site Plan:  
Rear Yard



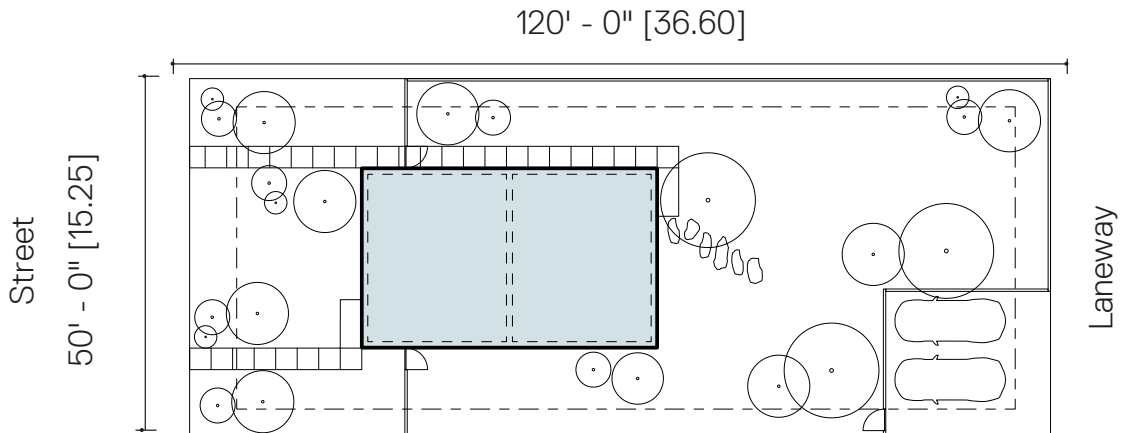
33' Site Plan:  
Laneway



50' Site Plan:  
Rear Yard



50' Site Plan:  
Laneway



# Personalization

## Style Example 1

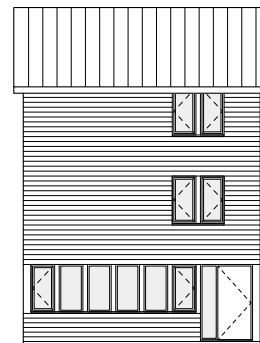
- Roof: Pitched 1
- Cladding: Wood Siding



---

## Style Example 2

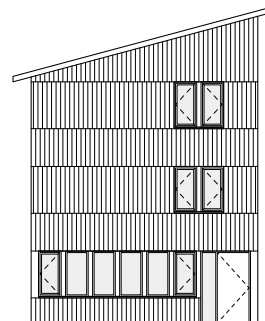
- Roof: Pitched 2
- Cladding: Fibre Cement



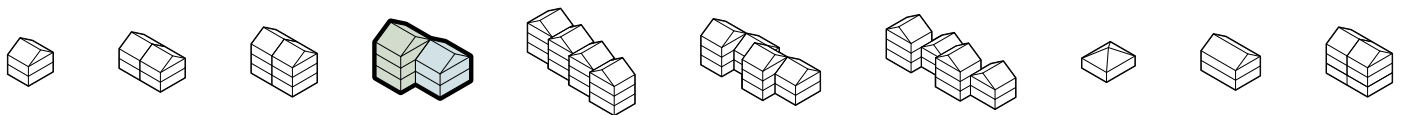
---

## Style Example 3

- Roof: Pitched 3
- Cladding: Wood Siding



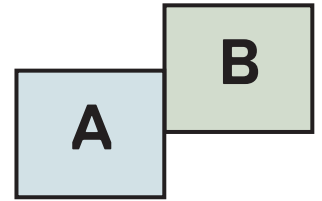
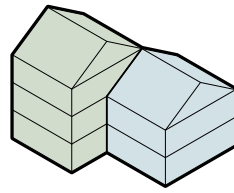




# Duplex 03

# Statistics

## Unit Summary



Unit Type	Duplex
Unit Count	2

### Unit Type A

No. of Stories	2
No. of Beds/Unit	2
No. of Baths/Unit	1.5
No. of Parking/Unit	0 indoor up to 1 at grade

### Unit Type B

No. of Stories	3
No. of Beds/Unit	3
No. of Baths/Unit	2.5
No. of Parking/Unit	0 indoor up to 1 at grade

## Dimensions

Total Footprint	2,620.70 ft <sup>2</sup> [243.45 m <sup>2</sup> ]
-----------------	---

### Unit Type A

Unit Height	26'-6" [8.10]
Unit Width	25'-0" [7.60]
Unit Depth	20'-6" [6.25]
Unit Footprint	1,048.30 ft <sup>2</sup> [97.40 m <sup>2</sup> ]
1st Floor	524.15 ft <sup>2</sup> [48.70 m <sup>2</sup> ]
2nd Floor	524.15 ft <sup>2</sup> [48.70 m <sup>2</sup> ]
3rd Floor	N/A

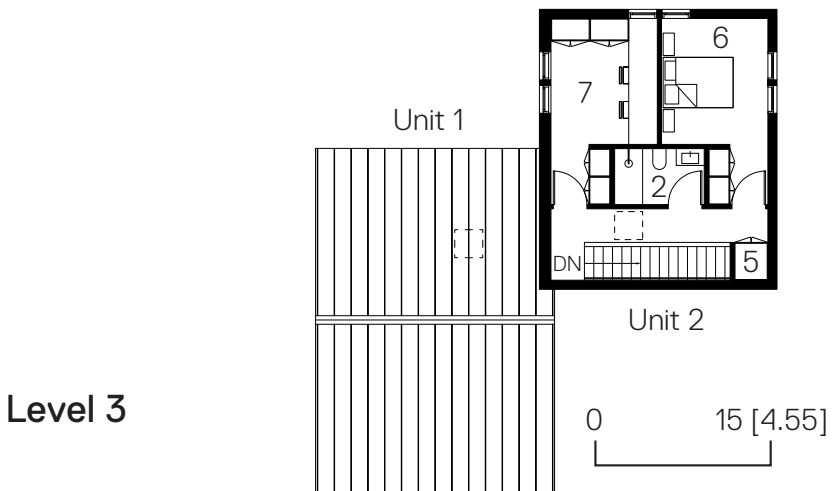
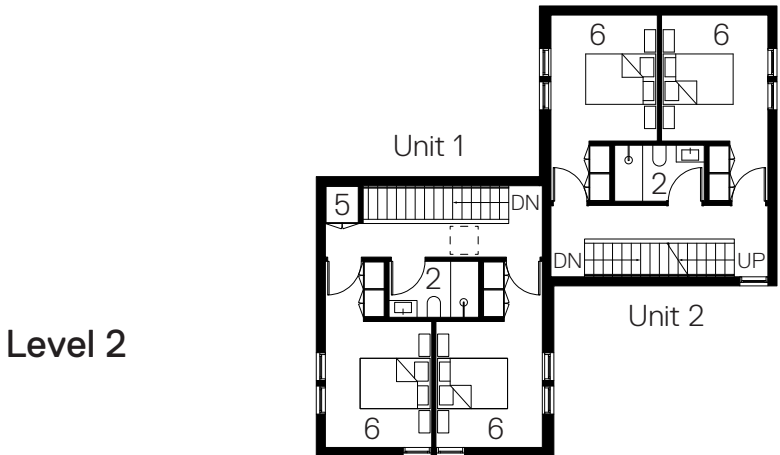
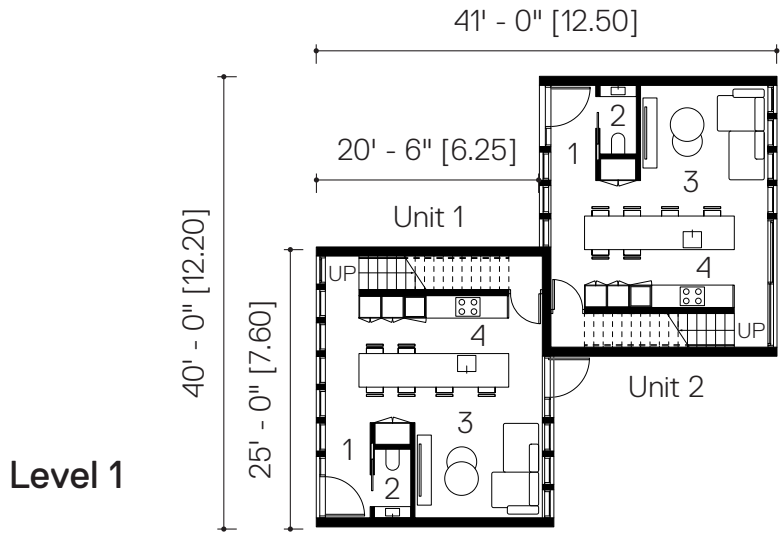
### Unit Type B

Unit Height	36'-0" [10.95]
Unit Width	25'-0" [7.60]
Unit Depth	20'-6" [6.25]
Unit Footprint	1,572.40 ft <sup>2</sup> [146.10 m <sup>2</sup> ]
1st Floor	524.15 ft <sup>2</sup> [48.70 m <sup>2</sup> ]
2nd Floor	524.15 ft <sup>2</sup> [48.70 m <sup>2</sup> ]
3rd Floor	524.15 ft <sup>2</sup> [48.70 m <sup>2</sup> ]

### Meets SSMUH Site Standards Package B

- Required to permit three or four units;
- Generally less than 1,215 m<sup>2</sup> in size.

# Floor Plans

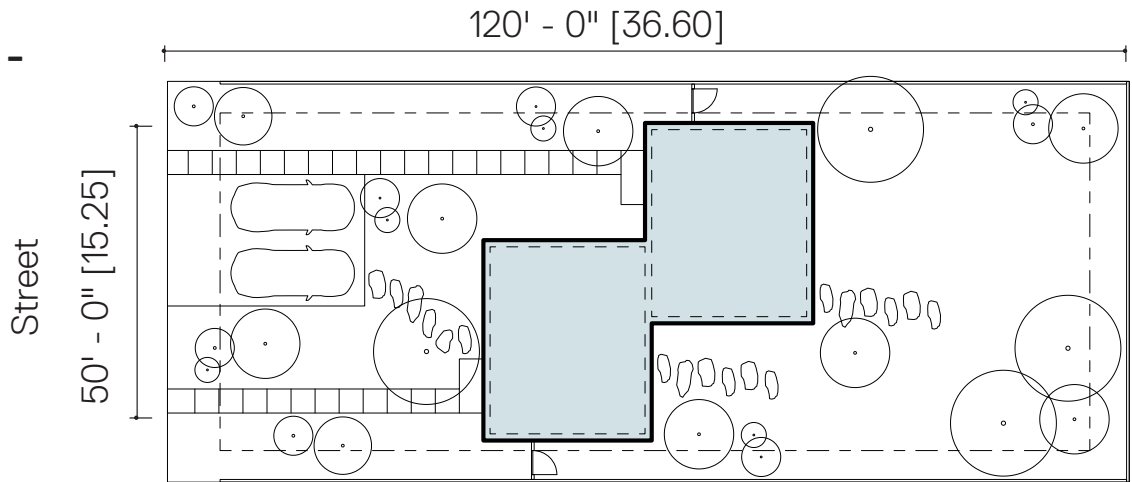


## Legend:

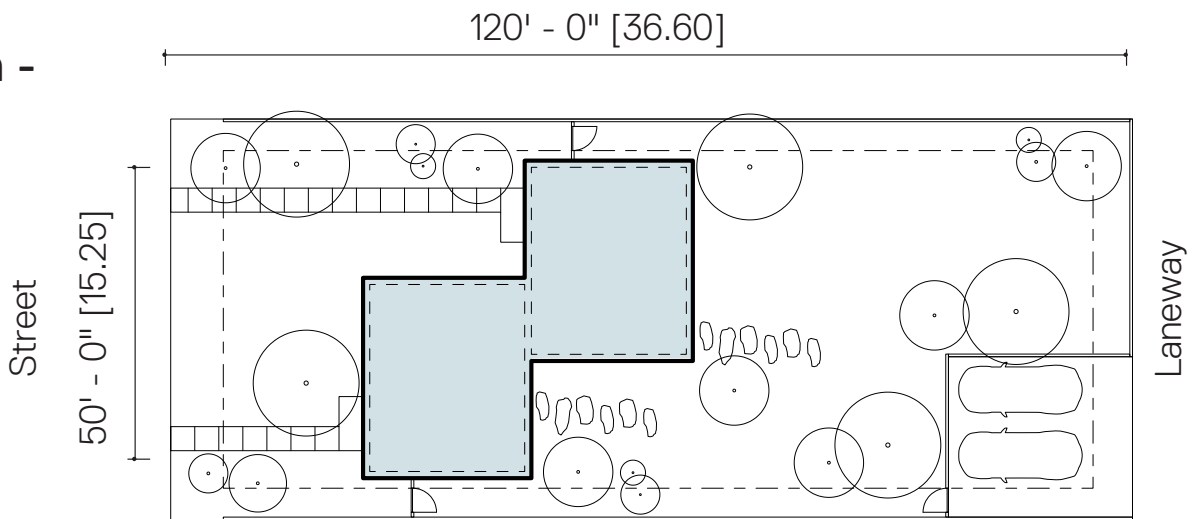
- 1. Entry
- 2. Washroom
- 3. Living Room
- 4. Kitchen/  
Dining
- 5. Laundry
- 6. Bedroom
- 7. Study

# Siting Examples

50' Site Plan -  
Rear Yard



50' Site Plan -  
Laneway



# Personalization

## Style Example 1

- ◆ Roof: Pitched 1
- ◆ Cladding: Wood Siding



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## Style Example 2

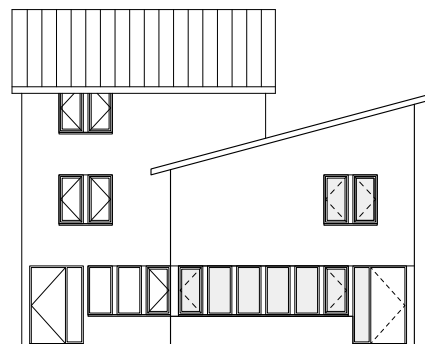
- ◆ Roof: Pitched 2
- ◆ Cladding: Corrugated Metal

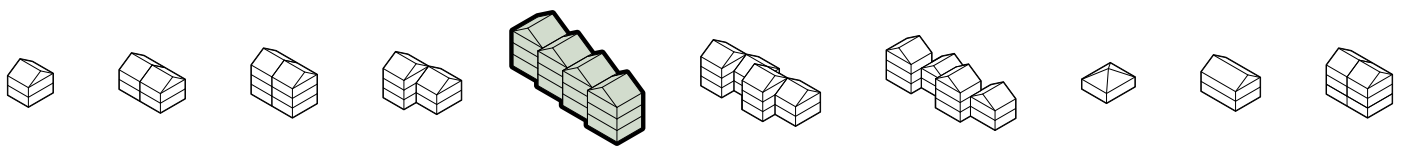


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## Style Example 3

- ◆ Roof: Pitched 3
- ◆ Cladding: Stucco





# Quadplex 01

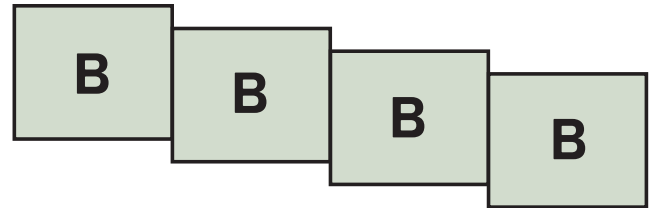
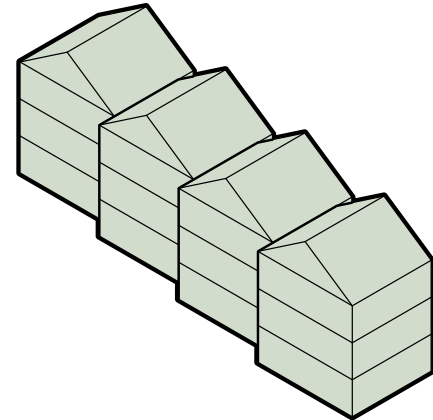
# Statistics

## Unit Summary

Unit Type	Quadplex
Unit Count	4
<b>Unit Type B</b>	
No. of Stories	3
No. of Beds/Unit	2
No. of Baths/Unit	1
No. of Parking/Unit	1 indoor, up to 1 at grade

## Dimensions

Total Footprint	5,992.90 ft <sup>2</sup> [556.75 m <sup>2</sup> ]
<b>Unit Type B</b>	
Unit Height	35'-10" [10.90]
Unit Width	21'-0" [6.40]
Unit Depth	24' - 4" [7.40]
Unit Footprint	1,487.55 ft <sup>2</sup> [138.20 m <sup>2</sup> ]
1st Floor	466.95 ft <sup>2</sup> [43.40 m <sup>2</sup> ]
2nd Floor	510.30 ft <sup>2</sup> [47.40 m <sup>2</sup> ]
3rd Floor	510.30 ft <sup>2</sup> [47.40 m <sup>2</sup> ]

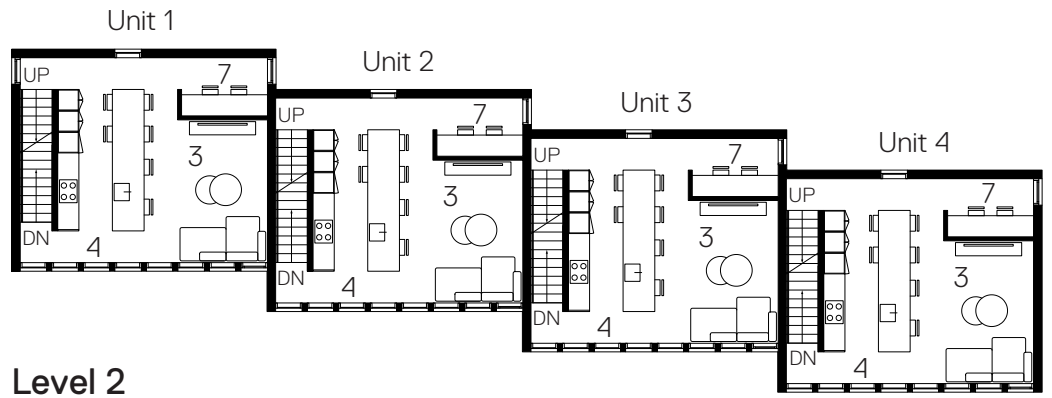
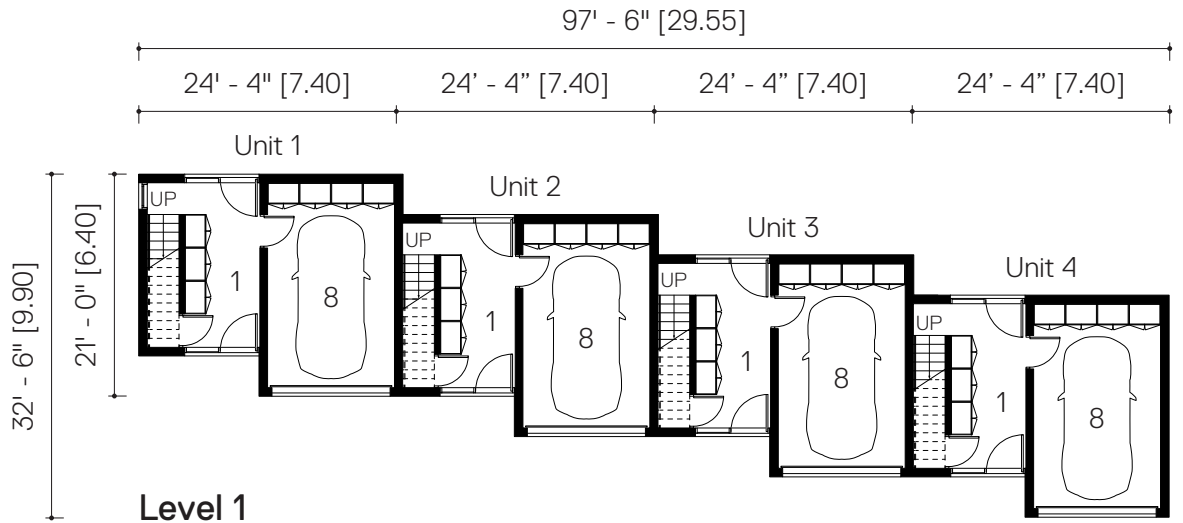


## Applicable Site Standards

### SSMUH Site Standards Package B

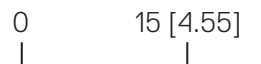
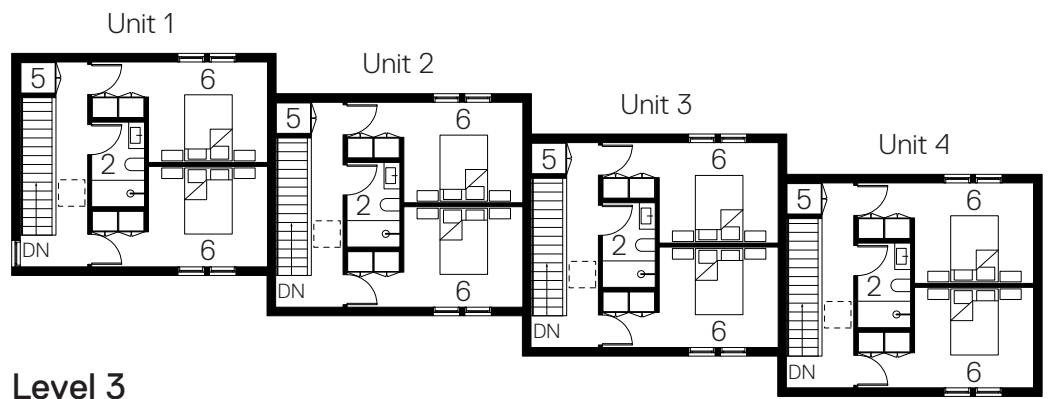
- Required to permit three or four units;
- Generally less than 1,215 m<sup>2</sup> in size.

# Floor Plans



## Legend:

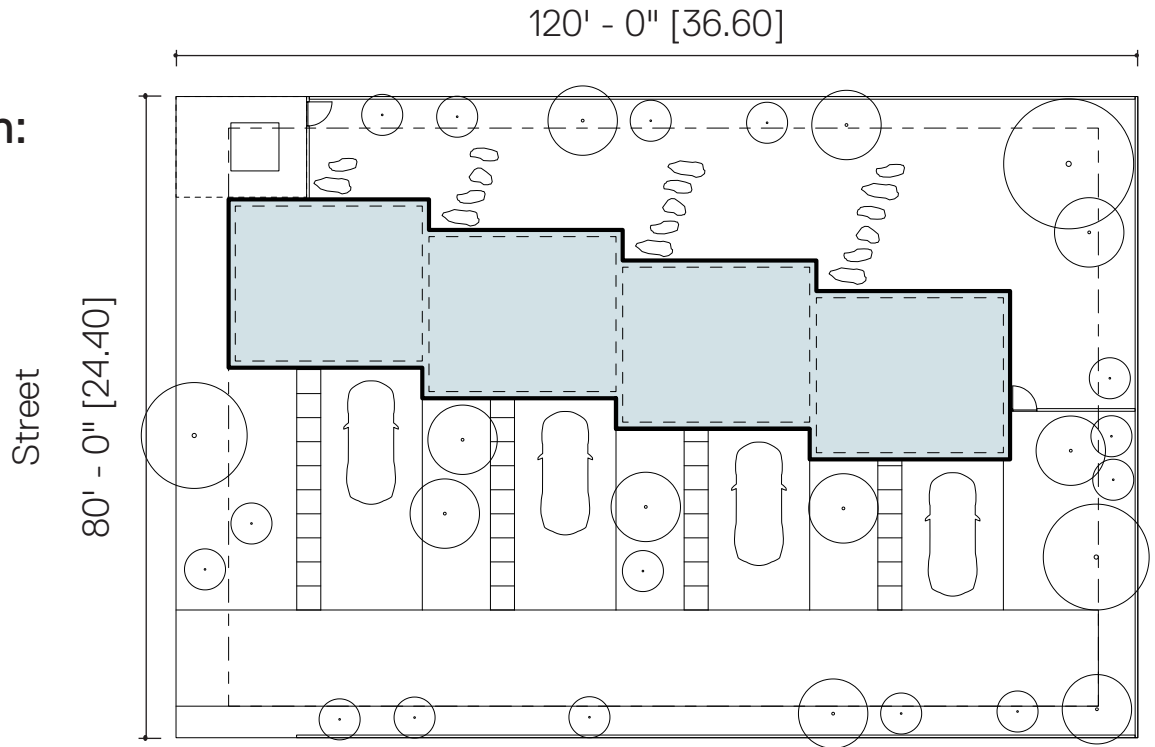
- 1. Entry
- 2. Washroom
- 3. Living Room
- 4. Kitchen/  
Dining
- 5. Laundry
- 6. Bedroom
- 7. Study
- 8. Garage



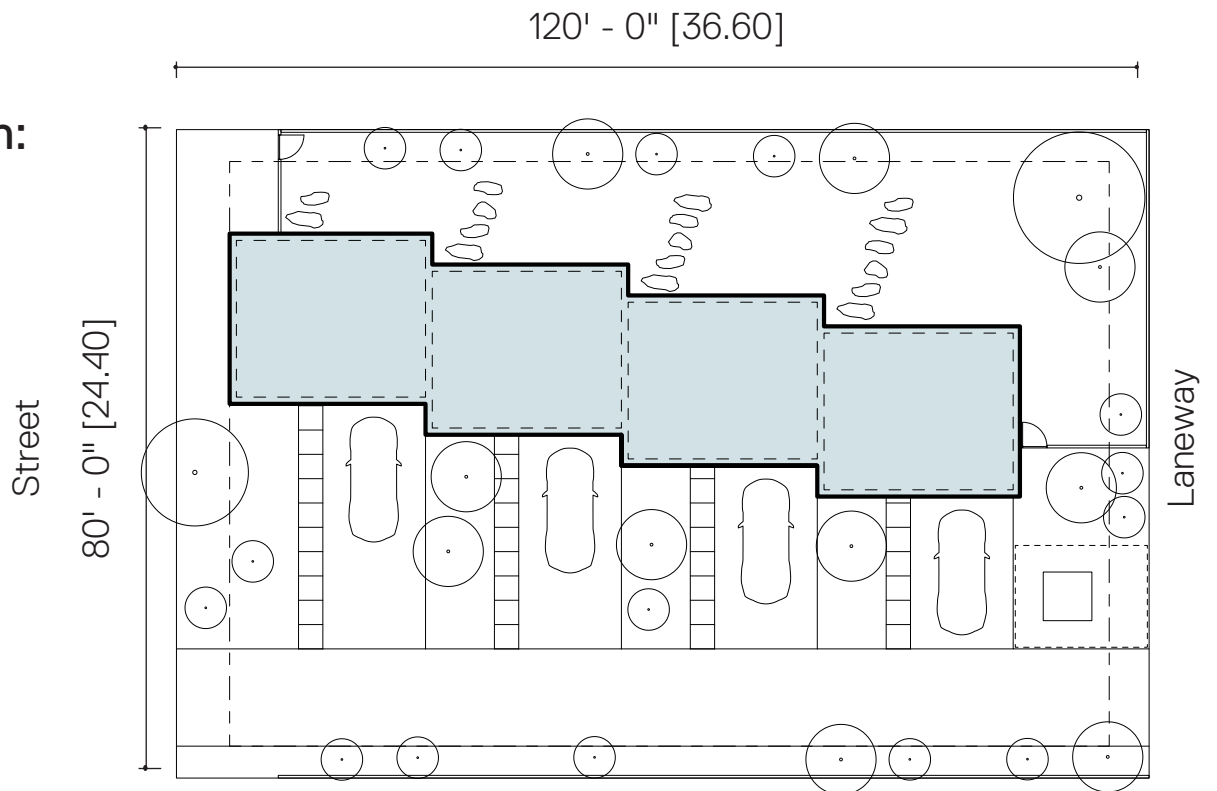


# Siting Examples

50' Site Plan:  
Rear Yard



50' Site Plan:  
Laneway



# Personalization

## Style Example 1

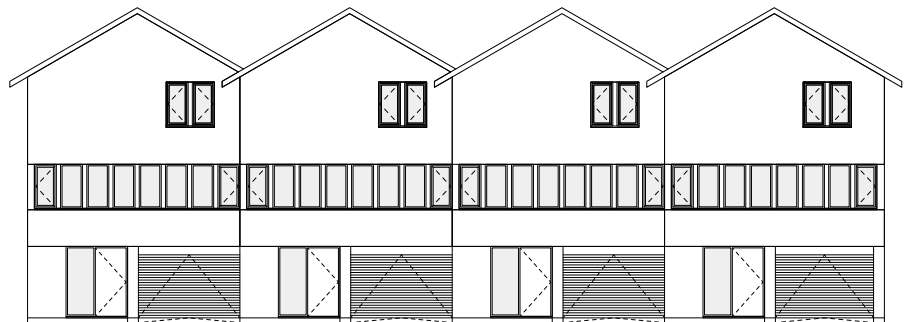
- ◆ Roof: Pitched 3
- ◆ Cladding: Wood Siding



---

## Style Example 2

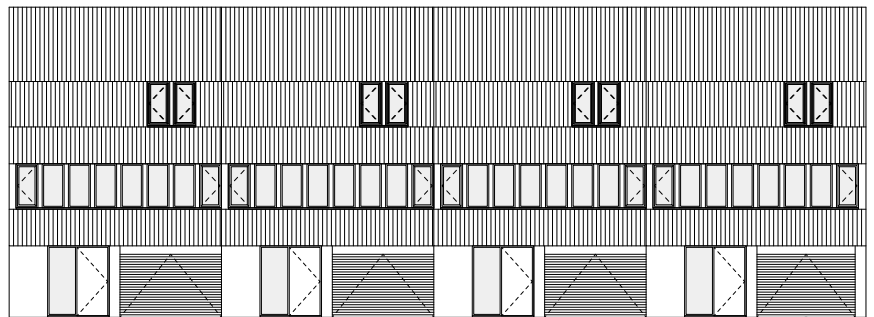
- ◆ Roof: Pitched 1
- ◆ Cladding: Stucco

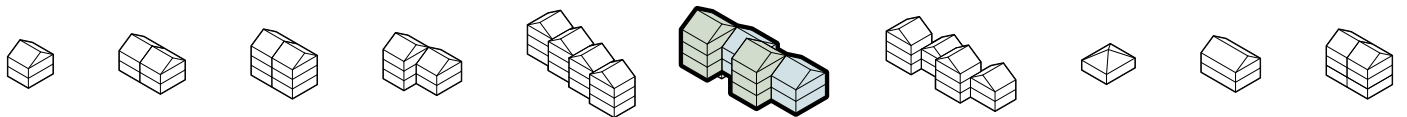


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## Style Example 3

- ◆ Roof: Flat
- ◆ Cladding: Wood Siding





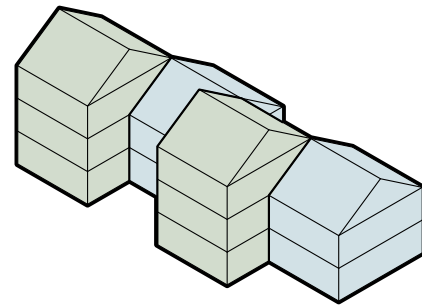
# Quadplex 02

# Statistics

## Unit Summary

Unit Type	Quadplex
Unit Count	4

Unit Type B	
No. of Stories	2
No. of Beds/Unit	2
No. of Baths/Unit	1.5
No. of Parking/Unit	0 indoor up to 1 at grade

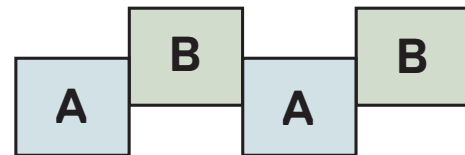


Unit Type B	
No. of Stories	3
No. of Beds/Unit	3
No. of Baths/Unit	2.5
No. of Parking/Unit	0 indoor up to 1 at grade

## Dimensions

Total Footprint	5,595.70 ft <sup>2</sup> [519.85 m <sup>2</sup> ]
-----------------	---

Unit Type A	
Unit Height	27'-11" [8.50]
Unit Width	25'-0" [7.60]
Unit Depth	20'-4" [6.20]
Unit Footprint	1,046.65 ft <sup>2</sup> [97.25 m <sup>2</sup> ]
1st Floor	523.35 ft <sup>2</sup> [48.60 m <sup>2</sup> ]
2nd Floor	523.35 ft <sup>2</sup> [48.60 m <sup>2</sup> ]
3rd Floor	N/A

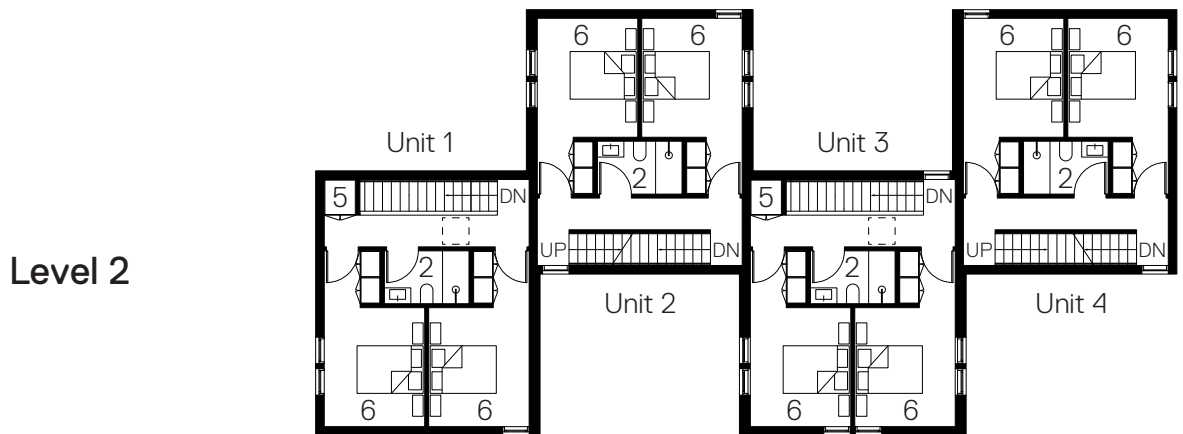
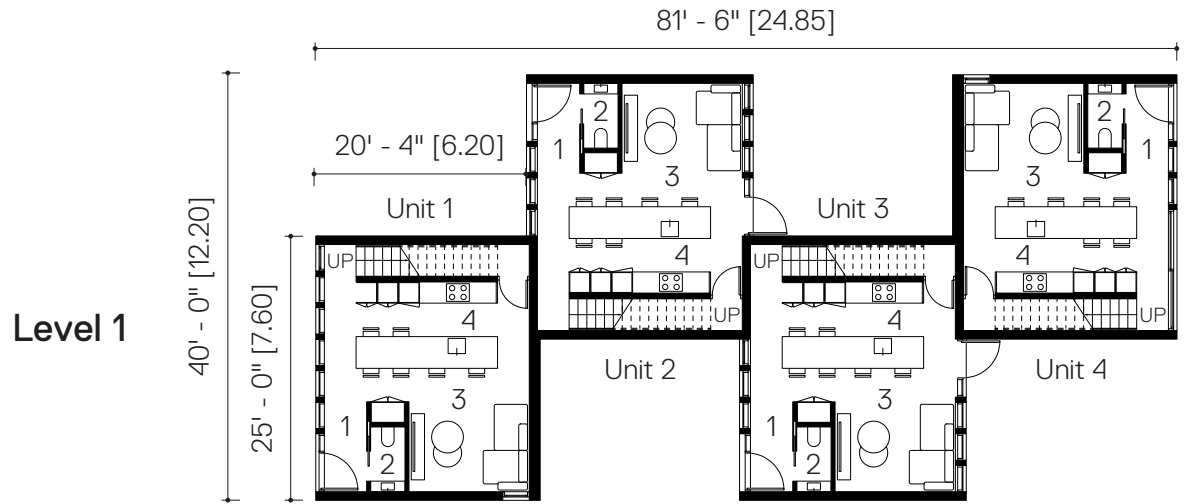


Unit Type B	
Unit Height	35'-8" [10.90]
Unit Width	25'-0" [7.60]
Unit Depth	20'-4" [6.20]
Unit Footprint	1,570.00 ft <sup>2</sup> [145.85 m <sup>2</sup> ]
1st Floor	523.35 ft <sup>2</sup> [48.70 m <sup>2</sup> ]
2nd Floor	523.35 ft <sup>2</sup> [48.70 m <sup>2</sup> ]
3rd Floor	523.35 ft <sup>2</sup> [48.70 m <sup>2</sup> ]

Meets SSMUH Site Standards Package B

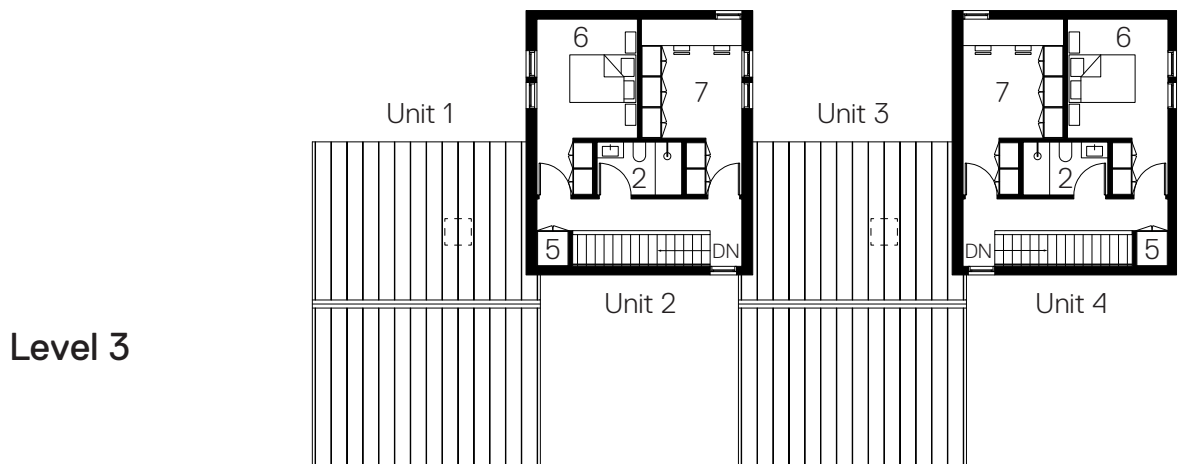
- Required to permit three or four units;
- Generally less than 1,215 m<sup>2</sup> in size.

# Floor Plans



## Legend:

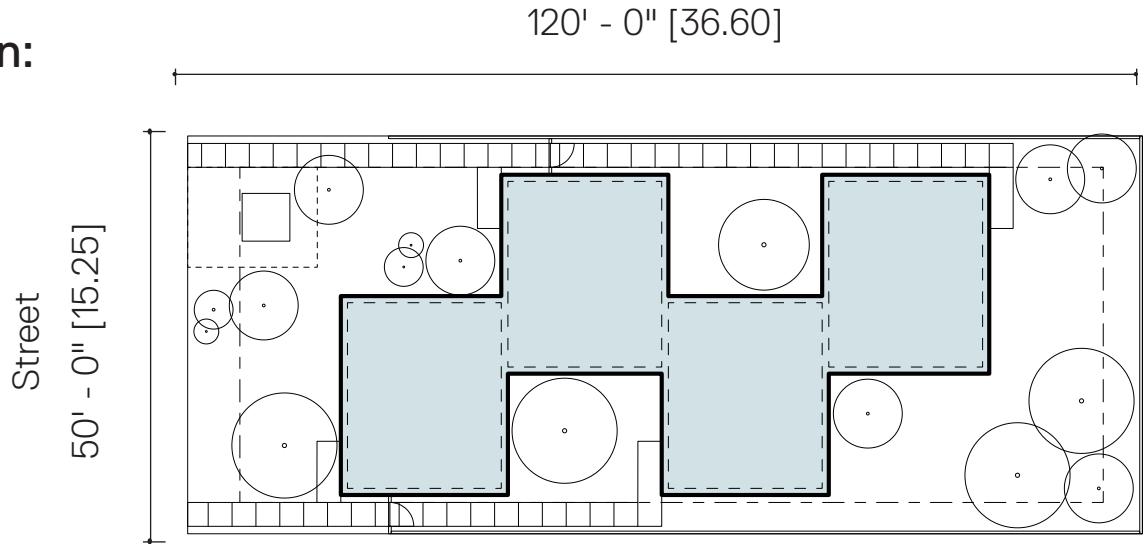
- 1. Entry
- 2. Washroom
- 3. Living Room
- 4. Kitchen/  
Dining
- 5. Laundry
- 6. Bedroom
- 7. Study



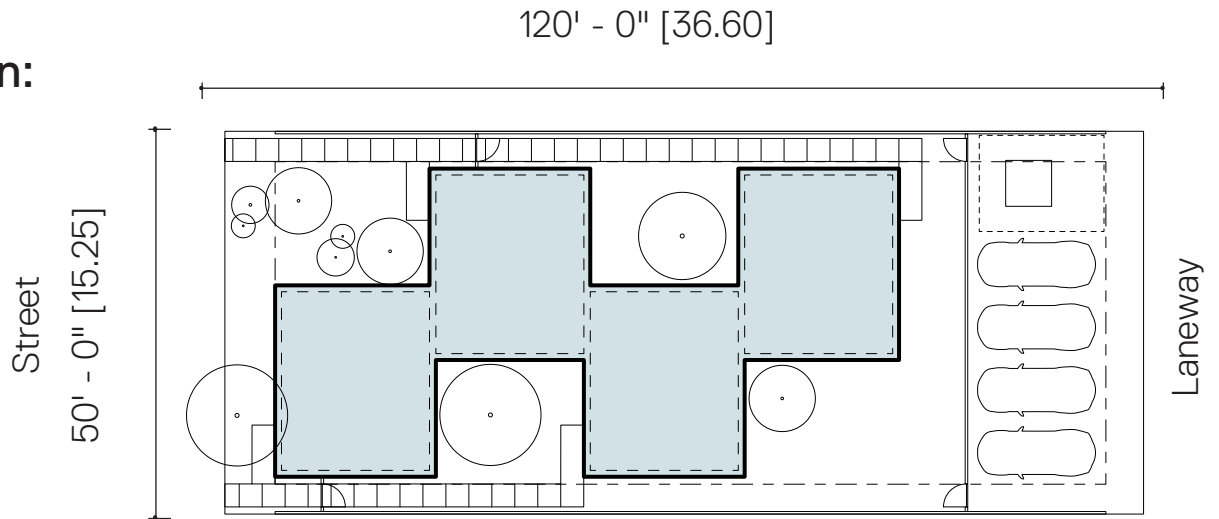
0 15 [4.55]

# Siting Examples

50' Site Plan:  
Rear Yard



50' Site Plan:  
Laneway



# Personalization

## Style Example 1

- ◆ Roof: Pitched 3
- ◆ Cladding: Wood Siding



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## Style Example 2

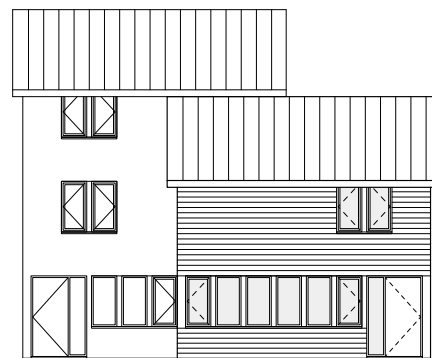
- ◆ Roof: Pitched 1
- ◆ Cladding: Corrugated Metal

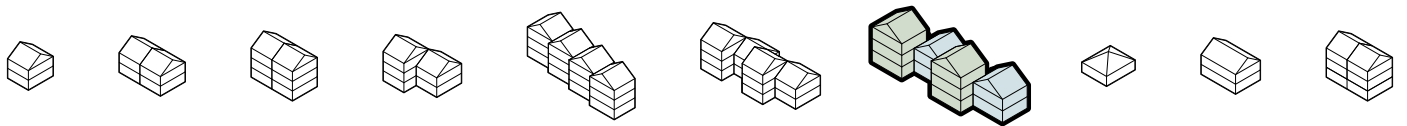


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## Style Example 3

- ◆ Roof: Pitched 2
- ◆ Cladding: Fibre Cement Siding





# Townhouse 01



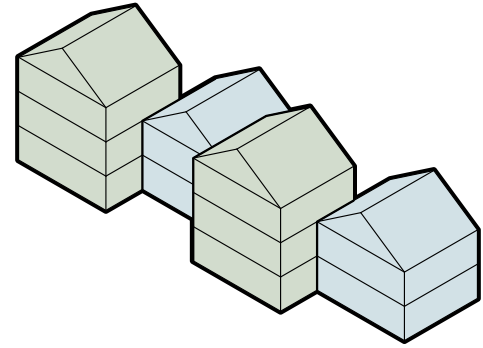
# Statistics

## Unit Summary

Unit Type	Quadplex
Unit Count	4

### Unit Type B

No. of Stories	2
No. of Beds/Unit	2
No. of Baths/Unit	1.5
No. of Parking/Unit	0 indoor up to 1 at grade



### Unit Type B

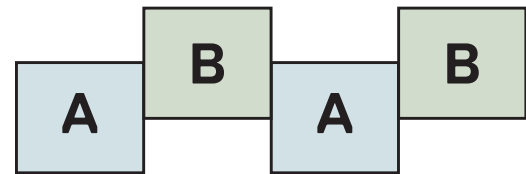
No. of Stories	3
No. of Beds/Unit	3
No. of Baths/Unit	2.5
No. of Parking/Unit	0 indoor up to 1 at grade

## Dimensions

Total Footprint	5,174.45 ft <sup>2</sup> [480.70 m <sup>2</sup> ]
-----------------	---

### Unit Type A

Unit Height	26'-11" [7.95]
Unit Width	21'-0" [6.40]
Unit Depth	24'-4" [7.40]
Unit Footprint	1,040.55 ft <sup>2</sup> [96.65 m <sup>2</sup> ]
1st Floor	520.30 ft <sup>2</sup> [48.30 m <sup>2</sup> ]
2nd Floor	520.30 ft <sup>2</sup> [48.30 m <sup>2</sup> ]
3rd Floor	N/A



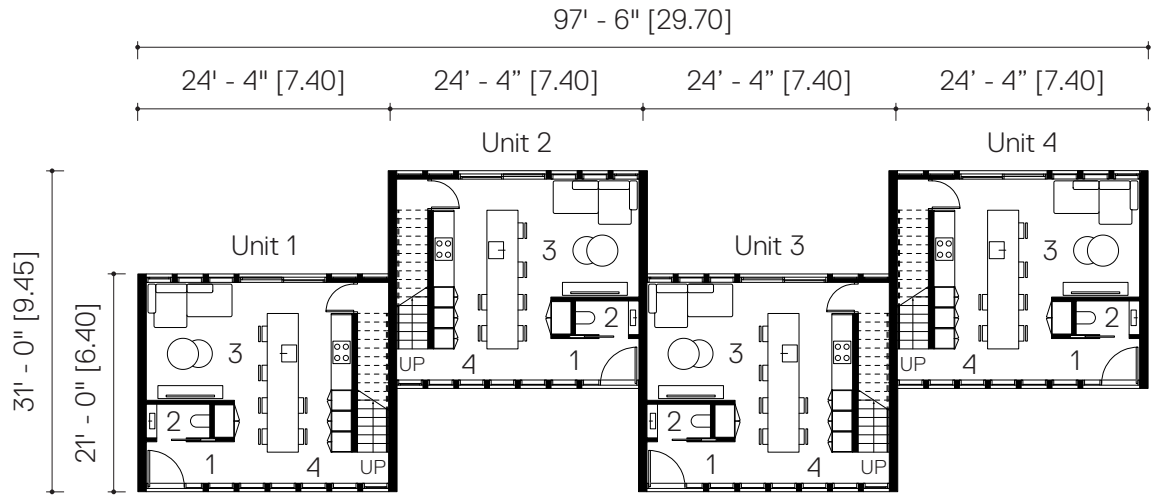
### Unit Type B

Unit Height	35'-2" [10.75]
Unit Width	21'-0" [6.40]
Unit Depth	24'-4" [7.40]
Unit Footprint	1,546.70 ft <sup>2</sup> [143.70 m <sup>2</sup> ]
1st Floor	515.55 ft <sup>2</sup> [47.90 m <sup>2</sup> ]
2nd Floor	515.55 ft <sup>2</sup> [47.90 m <sup>2</sup> ]
3rd Floor	515.55 ft <sup>2</sup> [47.90 m <sup>2</sup> ]

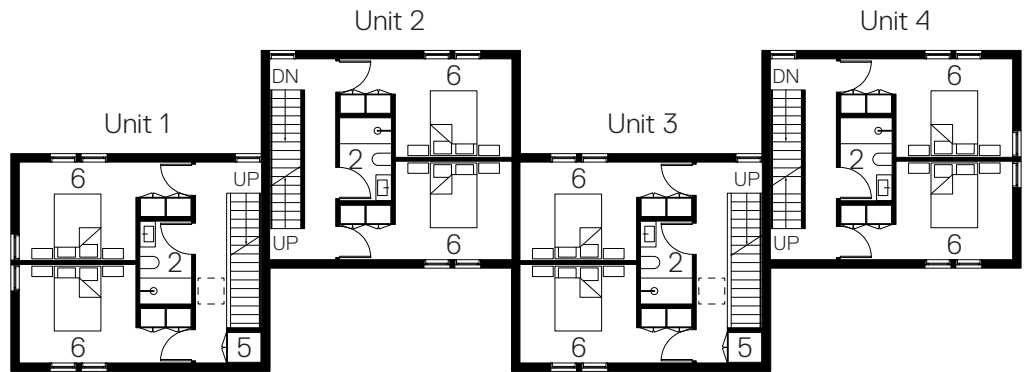
Meets SSMUH Site Standards Package C

- Required to permit four units;
- Generally between 1,215 m<sup>2</sup> and 4,050 m<sup>2</sup> in size

# Floor Plans



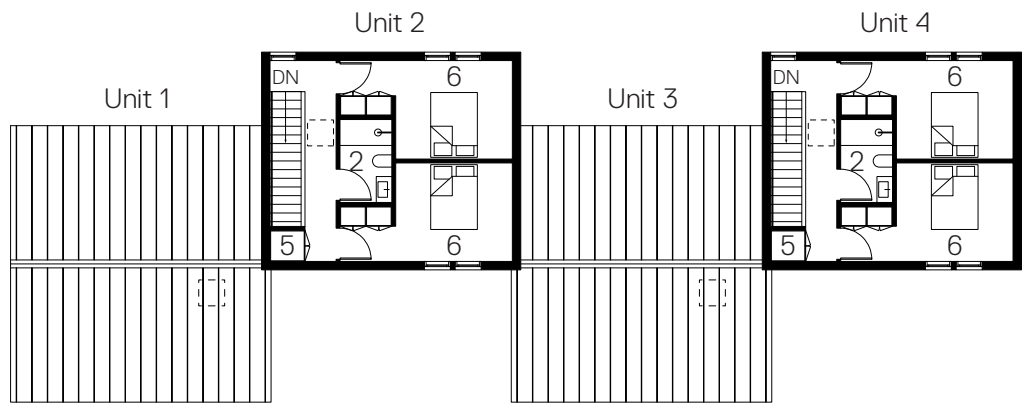
**Level 1**



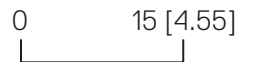
**Level 2**

**Legend:**

- 1. Entry
- 2. Washroom
- 3. Living Room
- 4. Kitchen/  
Dining
- 5. Laundry
- 6. Bedroom

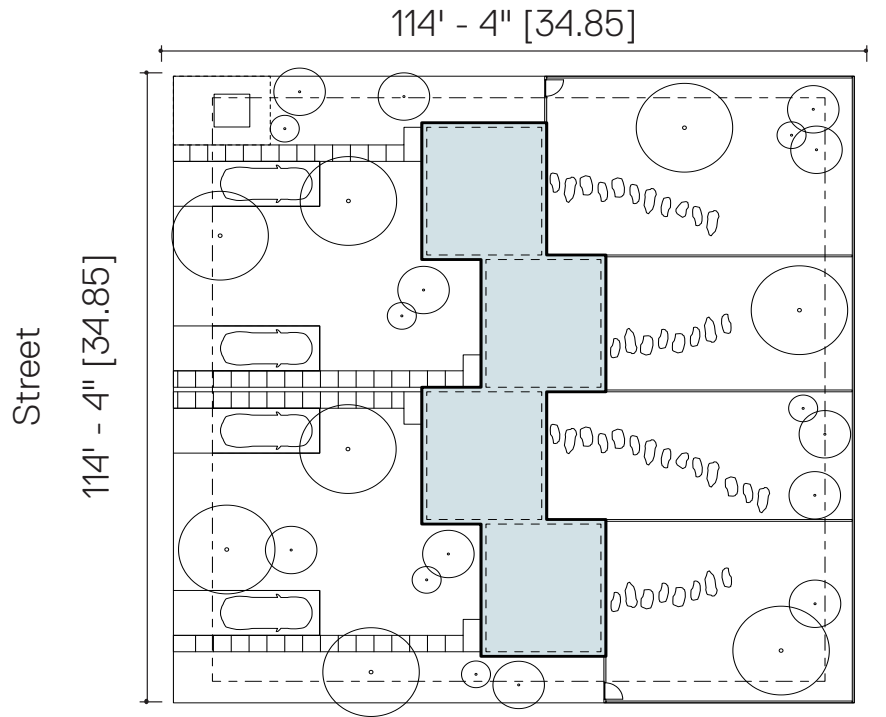


**Level 3**

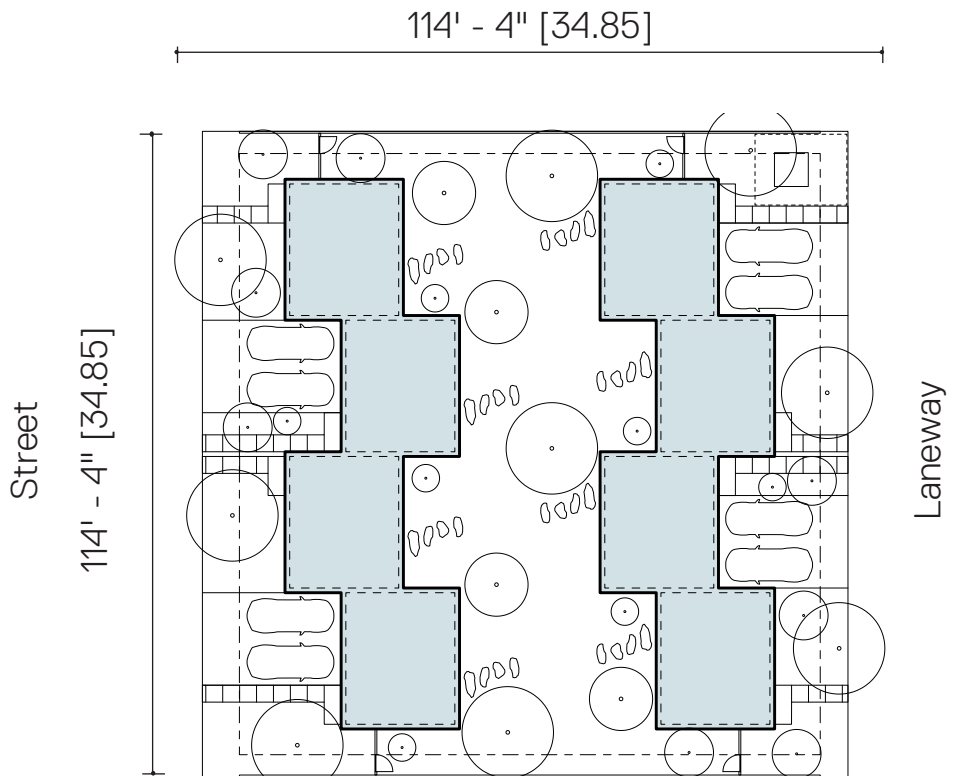


# Siting Examples

114' - 4" Site Plan:  
Rear Yard



114' - 4" Site Plan:  
Laneway



**Note:**

The Standardized Designs Catalogue limits the number of units per lot to four. However two quadplexes could be built on a single lot to achieve greater density as shown in 144' - 4" Site Plan - Laneway.

# Personalization

## Style Example 1

- Roof: Pitched 2
- Cladding: Wood Siding



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## Style Example 2

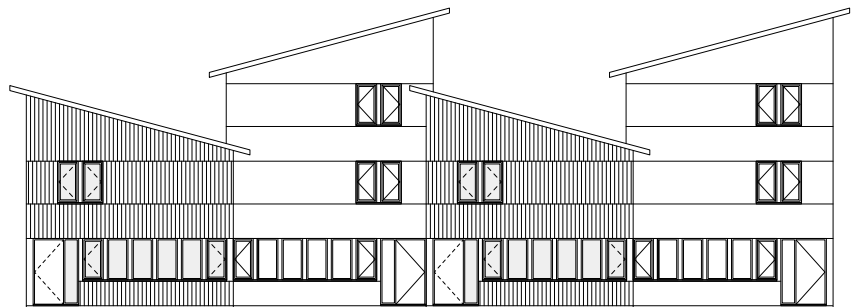
- Roof: Pitched 1
- Cladding: Stucco



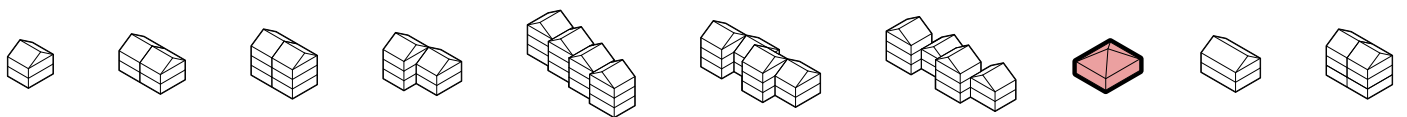
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## Style Example 3

- Roof: Pitched 3
- Cladding: Wood Siding

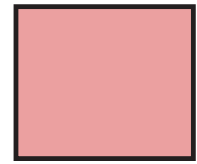
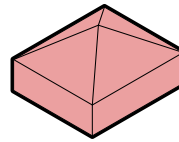


# Alternative Designs



# Accessory Dwelling Unit 02

# Statistics



## Unit Summary

Unit Type	Accessory Dwelling Unit
Unit Count	1
No. of Stories	1
No. of Beds/Unit	1
No. of Baths/Unit	1
No. of Parking/Unit	0 indoor, up to 1 at grade

This single-storey accessory dwelling unit design is fully adaptable to better meet the needs of people with physical disabilities or people who wish to age in place in their existing community. The accessory dwelling unit meets the forthcoming updates to adaptable dwelling units in BCBC 2024.

## Dimensions

Unit Height	17'-9" [5.40]
Unit Width	25'-0" [7.60]
Unit Depth	29'-0" [8.85]
Unit Footprint	750.00 ft <sup>2</sup> [69.70 m <sup>2</sup> ]

## Site Coverage

33' x 120"	18.30%
50' x 120"	12.10%
80' x 120"	7.55%

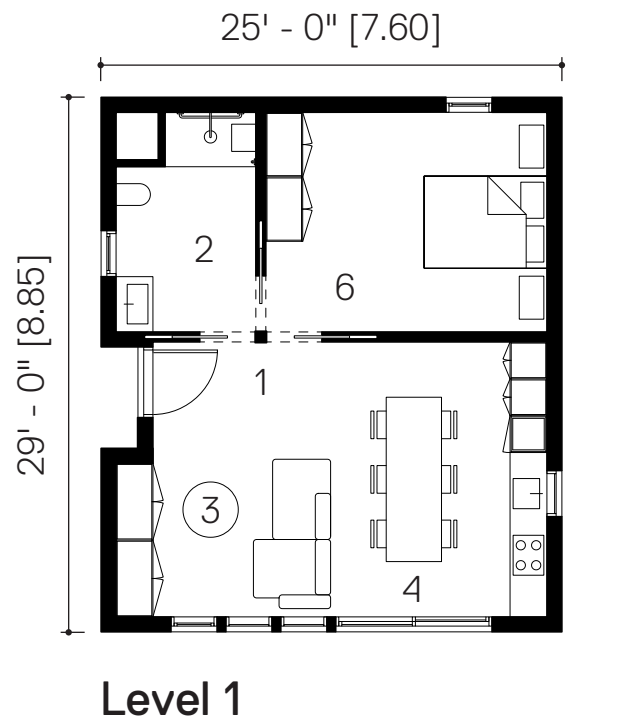
- This is for the ADU only and does not include existing buildings on-site.

## Applicable Site Standards

### SSMUH Site Standards Package A

- Required to permit a secondary suite and/or an accessory dwelling unit.

# Floor Plans



## Legend:

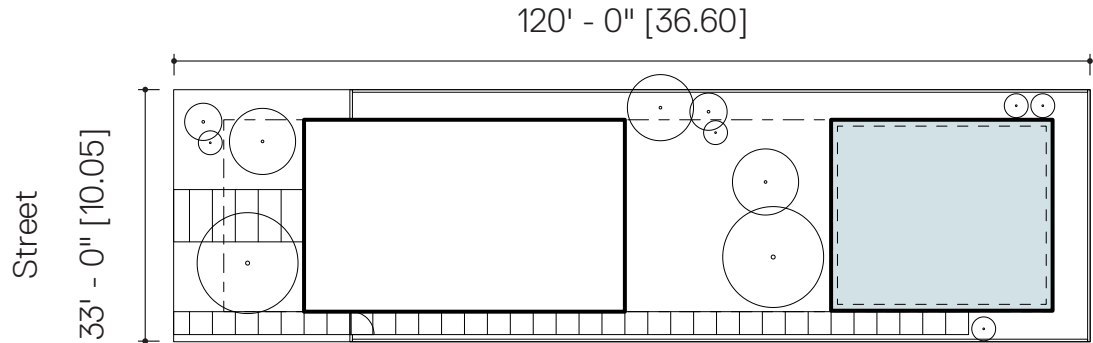
- 1. Entry
- 2. Washroom
- 3. Living Room
- 4. Kitchen/  
Dining
- 5. Laundry
- 6. Bedroom



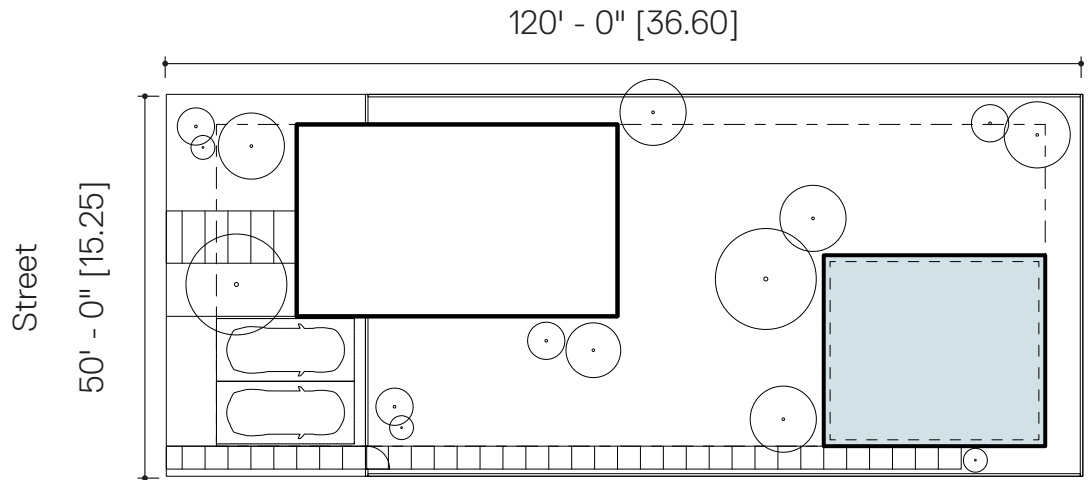


# Siting Examples

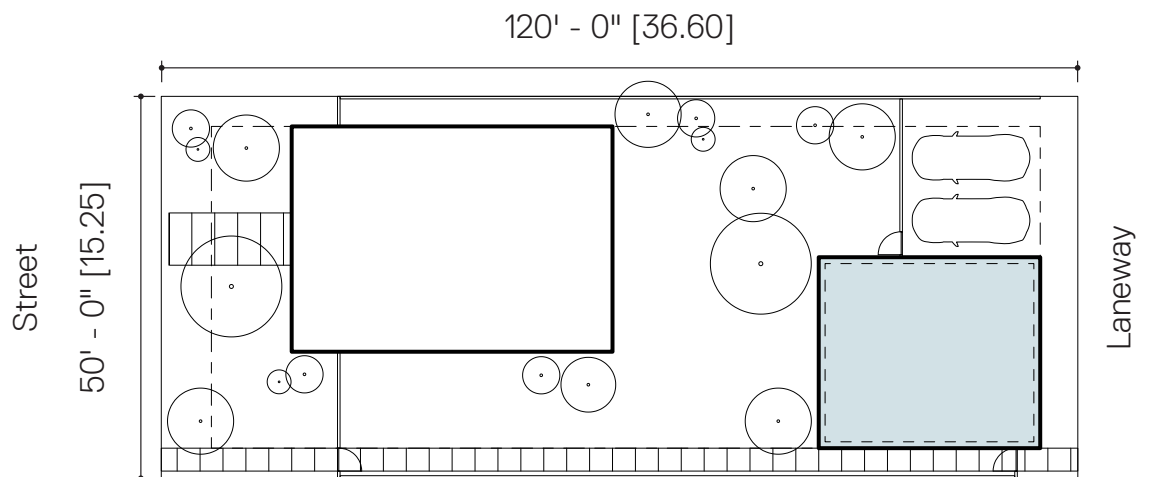
33' Site Plan:  
Rear Yard



50' Site Plan:  
Rear Yard



50' Site Plan:  
Laneway



# Personalization

## Style Example 1

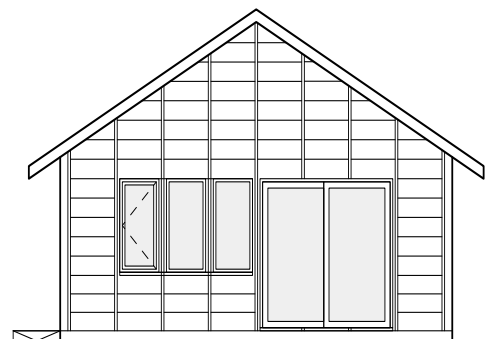
- Roof: Hip
- Cladding: Wood Siding



---

## Style Example 2

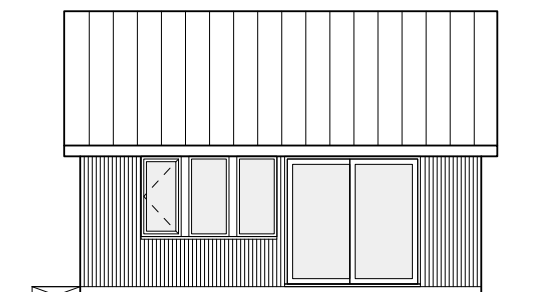
- Roof: Pitched 1
- Cladding: Fibre Cement Siding

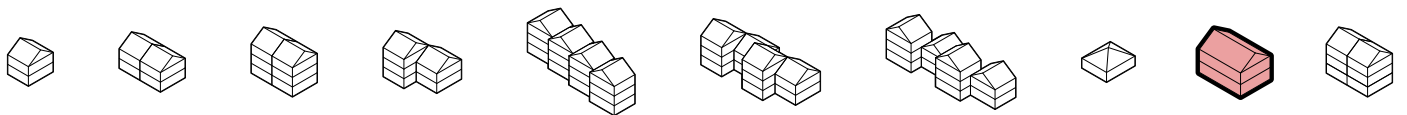


---

## Style Example 3

- Roof: Pitched 2
- Cladding: Corrugated Metal



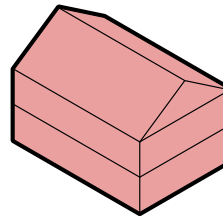


# Accessory Dwelling Unit 03

# Statistics

## Unit Summary

Unit Type	Accessory Dwelling Unit
Unit Count	1
No. of Stories	2
No. of Beds/Unit	3
No. of Baths/Unit	2.5
No. of Parking/Unit	1 indoor, up to 1 at grade



This design provides an accessory dwelling unit with an integrated garage that can serve the primary residence or the attached suite.

## Dimensions

Unit Height	26'-2" [8.00]
Unit Width	25'-0" [7.60]
Unit Depth	35'-0" [10.65]
Unit Footprint	1,715.70 ft <sup>2</sup> [159.40 m <sup>2</sup> ]
1st Floor	839.15 ft <sup>2</sup> [77.95 m <sup>2</sup> ]
2nd Floor	876.55 ft <sup>2</sup> [81.45 m <sup>2</sup> ]

## Site Coverage

33' x 120"	22.10%
50' x 120"	14.60%
80' x 120"	9.10%

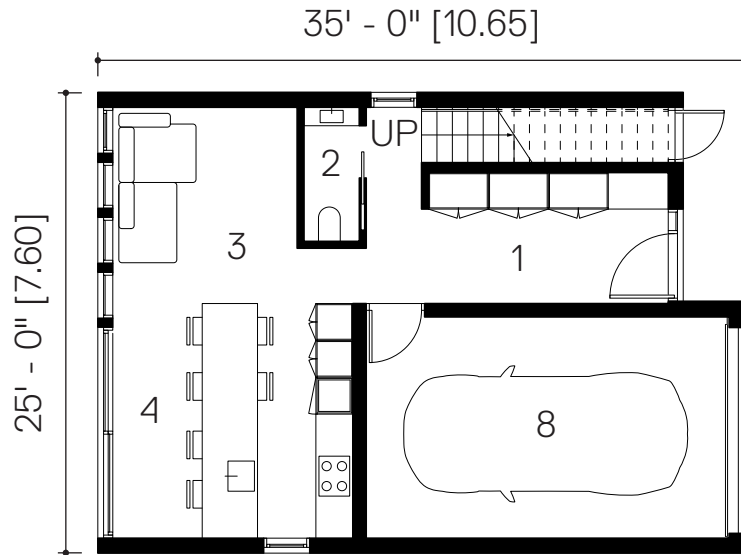
- ◆ This is for the ADU only and does not include existing buildings on-site.

## Applicable Site Standards

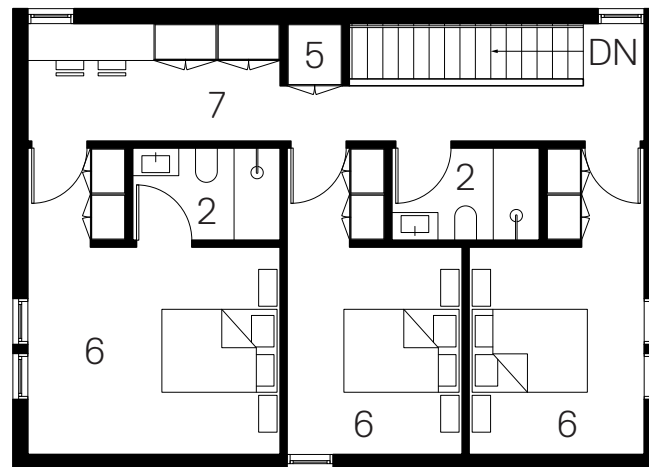
### SSMUH Site Standards Package A

- ◆ Required to permit a secondary suite and/or an accessory dwelling unit.

# Floor Plans



**Level 1**



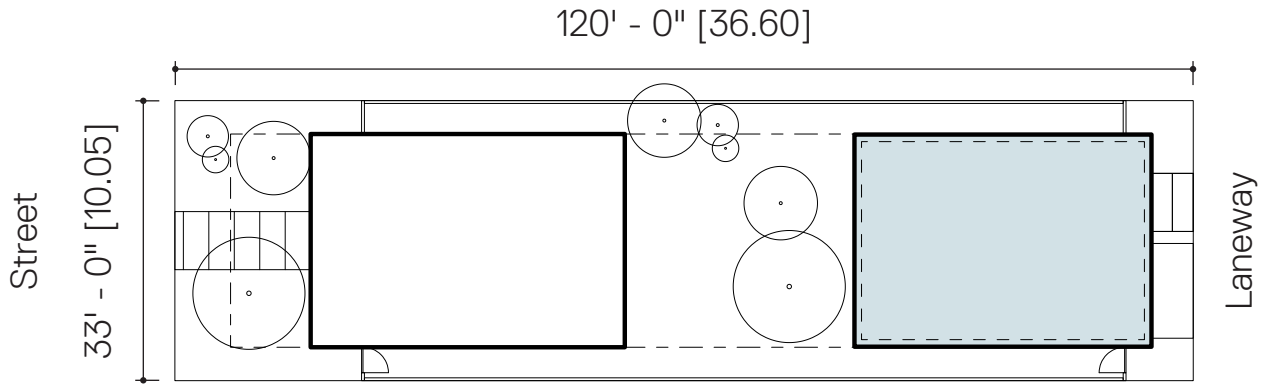
**Level 2**

**Legend:**

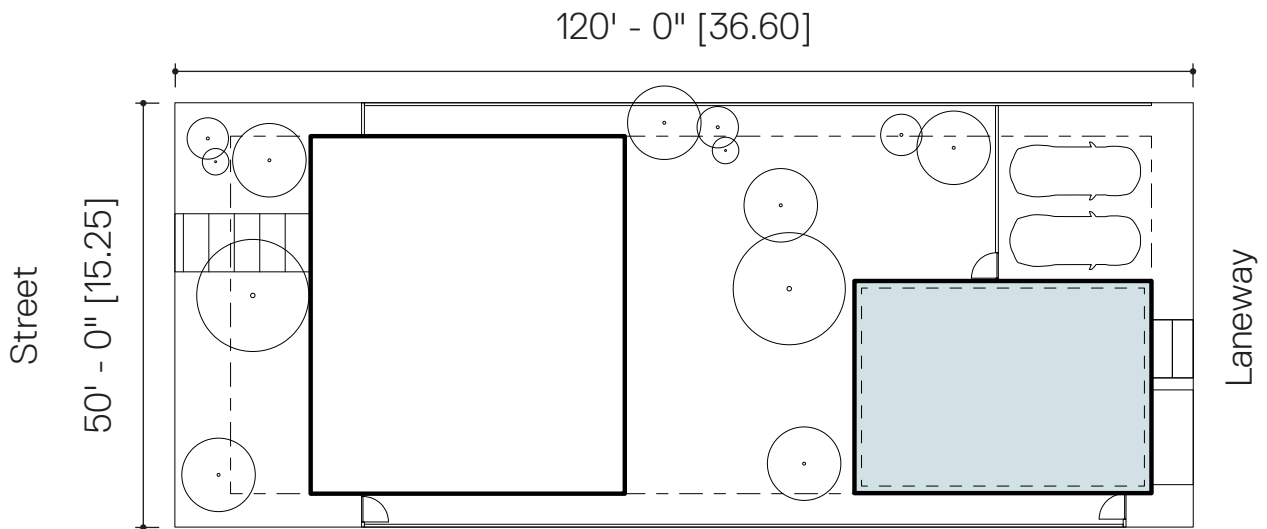
- 1. Entry
- 2. Washroom
- 3. Living Room
- 4. Kitchen/  
Dining
- 5. Laundry
- 6. Bedroom
- 7. Study



# Siting Examples



**33' Site Plan - Laneway**



**50' Site Plan - Laneway**

# Personalization

## Style Example 1

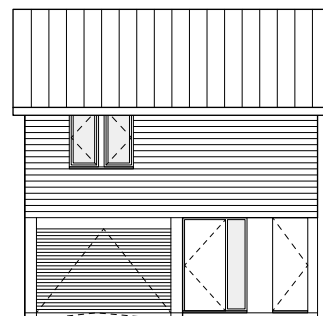
- Roof: Pitched 1
- Cladding: Wood Siding



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## Style Example 2

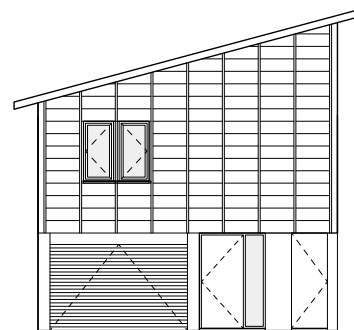
- Roof: Pitched 2
- Cladding: Fibre Cement Siding

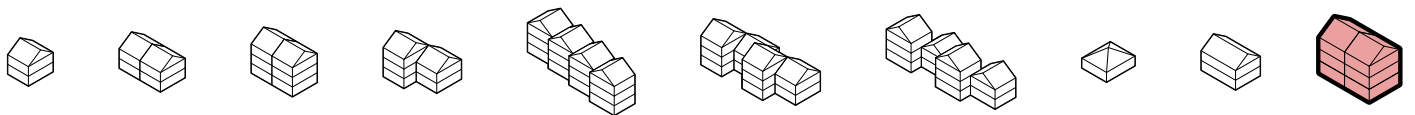


---

## Style Example 3

- Roof: Pitched 3
- Cladding: Fibre Cement Siding





# Triplex 01



## 2.2: Triplex 01

---

### **Note:**

SSMUH guidelines specify that lots less than 280 m<sup>2</sup> must permit at least three housing units. However, most lots this size do not accommodate three Building Block modules.

Triplex 01 is the only design in this Catalogue with stacked dwelling units in order to build more housing on a smaller building footprint.

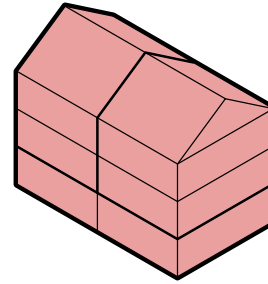
When siting Triplex 01, special attention is required for spatial separation between houses as per BCBC 2024 9.10.14. because the building contains a dwelling unit above another dwelling unit.

For example, on a 40' - 0" wide lot, Triplex 01 is allowed 1 hour fire-resistance-rated (FRR) walls with combustible or non-combustible construction.

On a 33' - 0" wide lot, Triplex 01 could require non-combustible construction or sprinklers based on the applicant's review of spatial separation for non-combustible construction (Ref. 9.10.14.5.-A) and the requirements of their local jurisdiction regarding fire department response.

# Statistics

## Unit Summary



Unit Type	Triplex
Unit Count	3

### Unit Type C

No. of Stories	1
No. of Beds/Unit	2
No. of Baths/Unit	1
No. of Parking/Unit	0 indoor up to 1 at grade

### Unit Type D

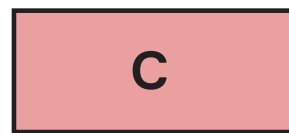
No. of Stories	2
No. of Beds/Unit	2
No. of Baths/Unit	1
No. of Parking/Unit	0 indoor up to 1 at grade

## Dimensions

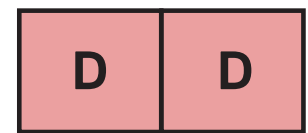
Total Height	36'-0" [10.95]
Total Footprint	2,206.55 ft <sup>2</sup> [307.20 m <sup>2</sup> ]

### Unit Type A

Unit Width	25'-0" [7.60]
Unit Depth	41'-0" [12.50]
Unit Footprint	839.40 ft <sup>2</sup> [78.00 m <sup>2</sup> ]
1st Floor	839.40 <sup>2</sup> [78.00 m <sup>2</sup> ]
2nd Floor	N/A
3rd Floor	N/A



Level 1



Level 2/3

### Unit Type B

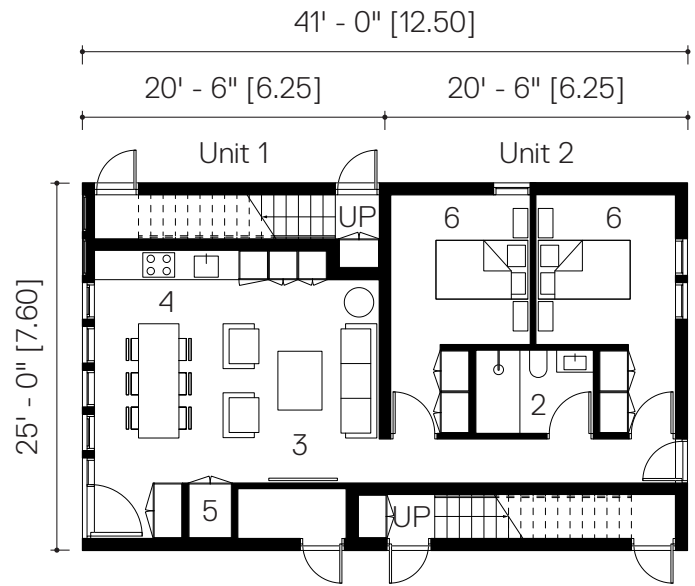
Unit Width	25'-0" [7.60]
Unit Depth	20'-6" [6.25]
Unit Footprint	1,150.45 ft <sup>2</sup> [106.90 m <sup>2</sup> ]
1st Floor	93.45 ft <sup>2</sup> [8.70 m <sup>2</sup> ]
2nd Floor	514.30 ft <sup>2</sup> [48.70 m <sup>2</sup> ]
3rd Floor	542.70 ft <sup>2</sup> [50.40 m <sup>2</sup> ]

Meets SSMUH Site Standards Package B

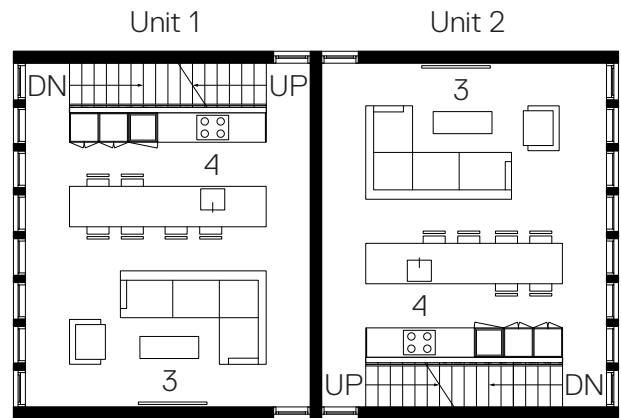
- Required to permit three or four units;
- Generally less than 1,215 m<sup>2</sup> in size.

# Floor Plans

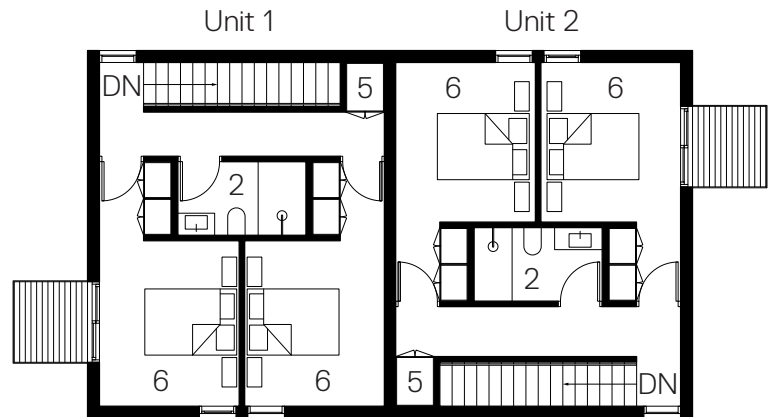
Level 1



Level 2



Level 3



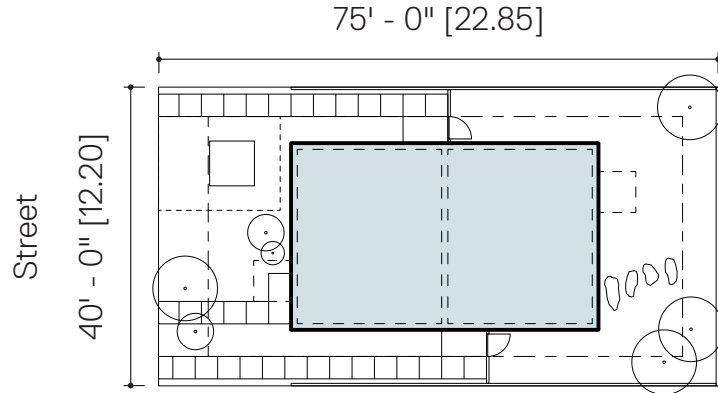
## Legend:

- 1. Entry
- 2. Washroom
- 3. Living Room
- 4. Kitchen/  
Dining
- 5. Laundry
- 6. Bedroom

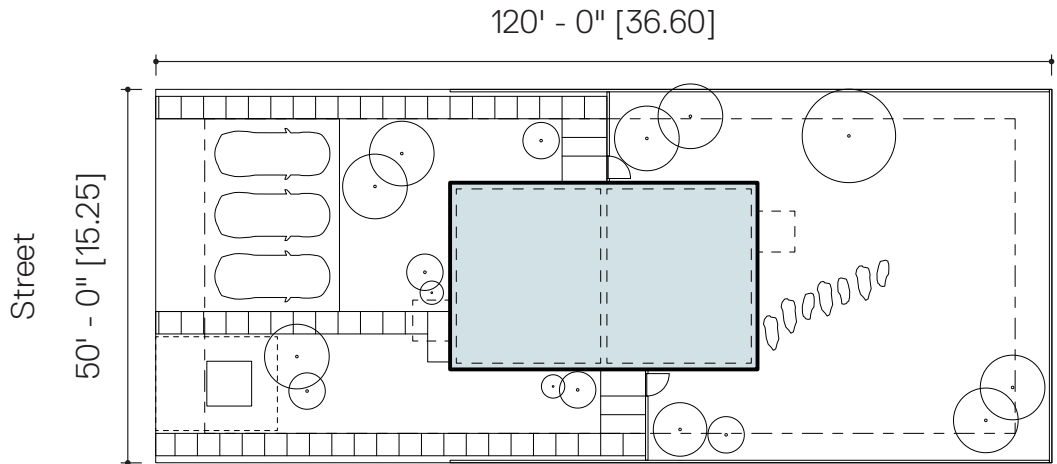


# Siting Examples

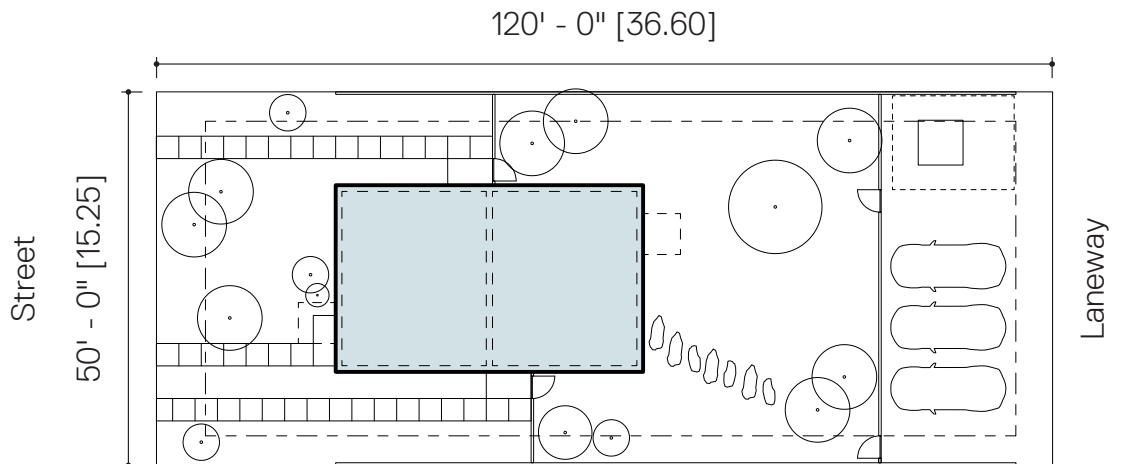
40' Site Plan -  
Rear Yard



50' Site Plan -  
Rear Yard



50' Site Plan -  
Laneway



# Personalization

## Style Example 1

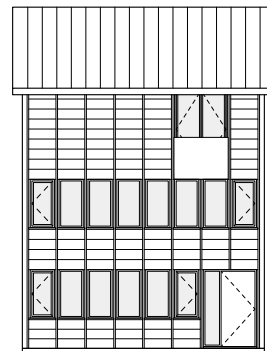
- Roof: Pitched 1
- Cladding: Wood Siding



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## Style Example 2

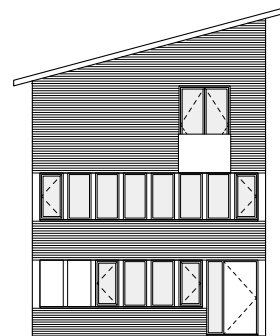
- Roof: Pitched 2
- Cladding: Fibre Cement Siding



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## Style Example 3

- Roof: Pitched 3
- Cladding: Corrugated Metal



# Appendix

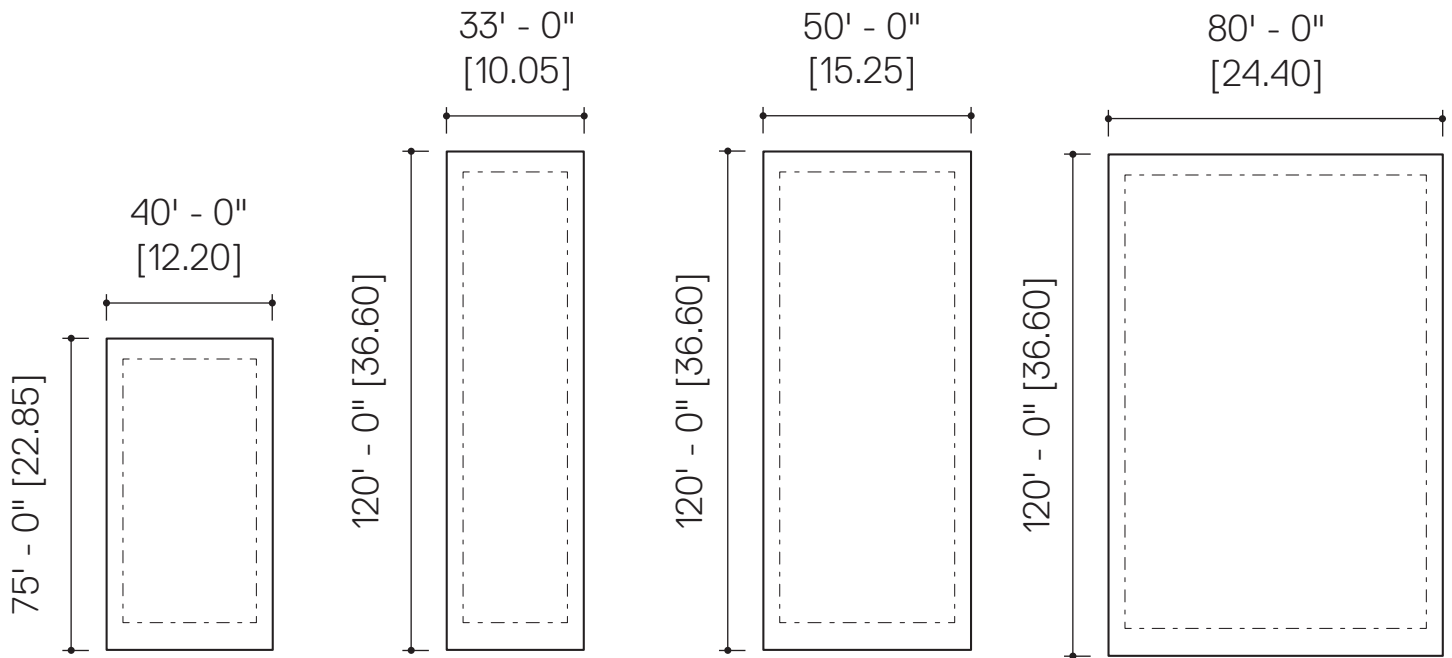
# Design Assumptions

The following assumptions were established by the design team when developing the standardized designs:

- Unit sizes were restricted to below 2,000 ft<sup>2</sup> to target missing middle housing markets. The Building Block footprint can be grown, or single dwelling units can be expanded into multiple Building Block schemes to allow for larger units as desired;
- Basements were omitted as they are inherently expensive to build. The designs incorporate a crawlspace that could be increased to be a basement if desired. When adding a basement to a three-storey building, applicants should review fire alarm system requirements (Ref. BCBC 2024 9.10.18.2.) and the requirements of their local jurisdiction in regard to fire-department response. Applicants should also review sill heights of third floor bedroom windows to ensure they still comply with egress requirements (Ref. BCBC 2024 9.9.9.1.).
- All sites were assumed flat. The crawlspace can be increased to allow the designs to be adapted to sloping site conditions. With sloping sites, sill heights of third-floor bedroom windows should be reviewed to ensure they still comply with egress requirements;
- Sites were assumed to not have laneway access as these sites tend to be more restrictive than sites with laneways. Laneway access can be accommodated as shown in siting examples diagrams;
- Buildings were designed to Part 9 of the BC Building Code 2024 and Step 4 of the BC Energy Step Code (Climate Zone 5)
- Building designs were not sprinklered because some municipalities do not require them. Sprinklers can be added, which would increase allowable glazing, particularly on side yards;
- Buildings were designed as light timber construction as it is the commonly accepted method of building, but the modular nature of the designs will allow for pre-fabrication;
- All zoning presumptions were derived from SSMUH guidelines. The designs offer a variety of siting approaches to provide opportunities for municipalities to utilize the designs without adopting all of the SSMUH guidelines;
- BC Housing Design Guidelines were consulted.

# Design Assumptions

## Applicable Site Standards

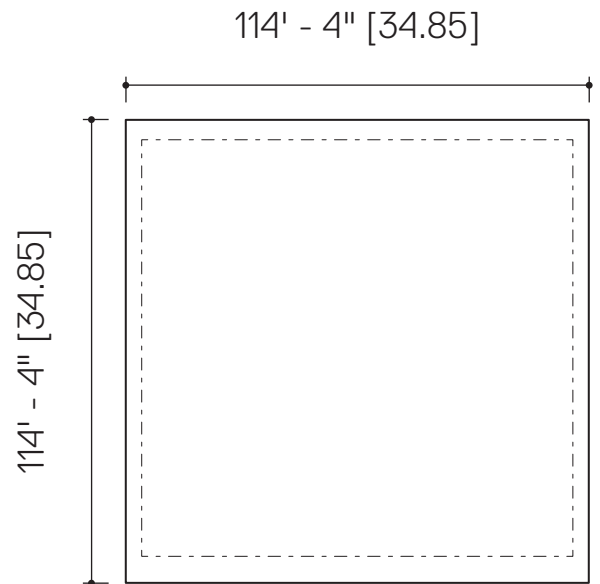


After contacting staff members from 20 local governments and reviewing geographic information systems (GIS) data, five sample lot sizes were created to represent common lot sizes across British Columbia. These sample lots were used to test the viability of the standardized designs.

**Site Standard A:** Restricted zones required to permit a secondary suite and/or an accessory dwelling unit (ADU).

**Site Standard B:** Restricted zones required to permit three or four units and are generally less than 1,215 m<sup>2</sup> in size. Triplex designs are to be limited to sites measuring less than 280 m<sup>2</sup>.

**Site Standard C:** Restricted zones required to permit four units and are generally greater than 1,215 m<sup>2</sup> in size.





## Energy Modelling Assumptions

The following energy modelling assumptions were established by the design team when developing the standardized designs:

- Assumed performance target BC Energy Step Code Step 4, Climate Zone 5. All units meet Step Code 4 requirements for all locations in Climate Zone 4.
- Assumed fuel sources are all electric or gas;
- Assumed east-facing building orientation to provide the most likely worst-case scenario for energy modelling;
- Assumed the majority of concrete foundation walls are below grade;
- Assumed double-glazed windows with USI performance of USI 1.3 / Solar Heat Gain Coefficient (SHGC) 0.25;
- Assumed 1.5 Air Changes Per Hour (ACH) to align with Step 4;
- Assumed above-grade cavity insulation to be fiberglass batt or equivalent product;
- Assumed exterior above-grade insulation to be mineral wool due to prevailing industry preferences, but rigid Expanded Polystyrene (EPS) will offer equivalent performance and can be substituted;
- Assumed below grade insulation to be EPS rigid, but can be substituted for thinner Extruded Polystyrene (XPS). EPS was selected due to its lower embodied carbon and general suitability for Insulated Concrete Form (ICF) construction and below-grade insulation.

More details can be found in templated energy modelling files.

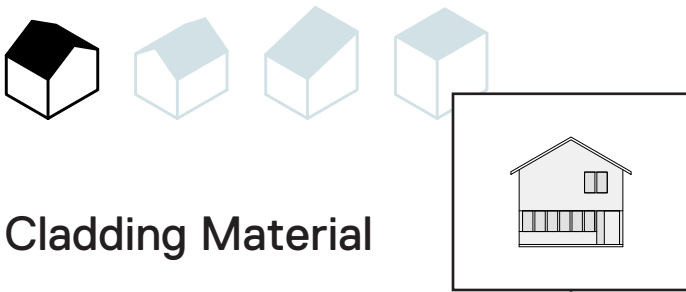
# Personalization

# Personalization

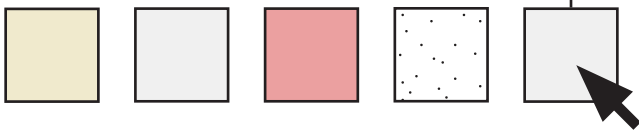
Home designs are highly personal. The component-based system provides end-users with a high degree of customization:

- Four different roof shapes accommodate different aesthetics, regional characteristics, and local climates;

## Roof Shape



## Cladding Material



## Roofing Material



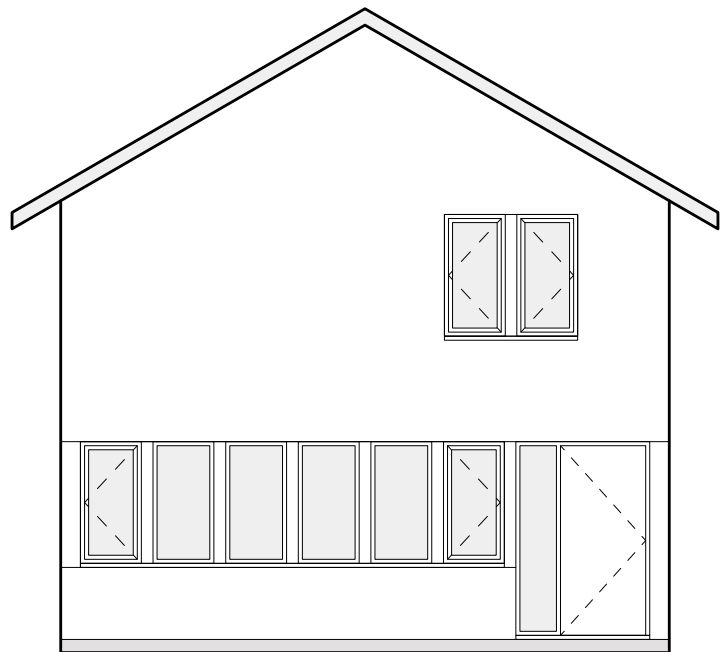
## Solar Shading Device



- Modular solar shading options improve passive cooling and contribute to the overall form and character of the project;
- The standard wall and roof assemblies accommodate a variety of cladding materials that not only offer users different aesthetics, but also allow users to prioritize budget, maintenance, combustibility, and durability as required.

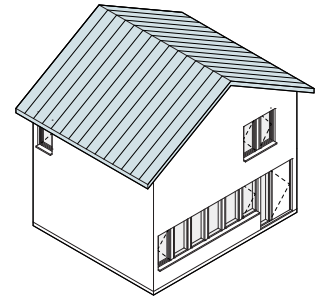
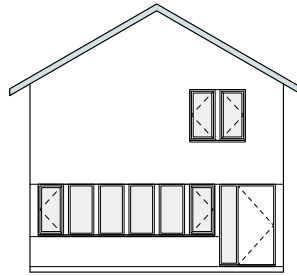
The following pages provide a catalogue of customization options.

Examples of these combinations can be found in the "Personalization" section of each unit's summary pages.

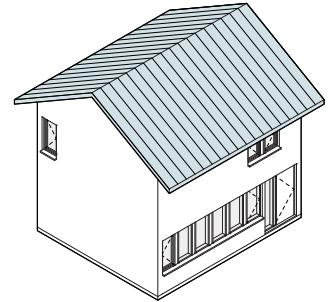
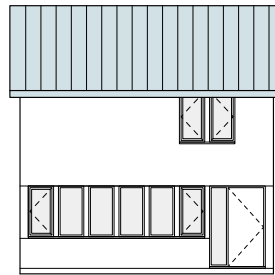


# Roof Shapes

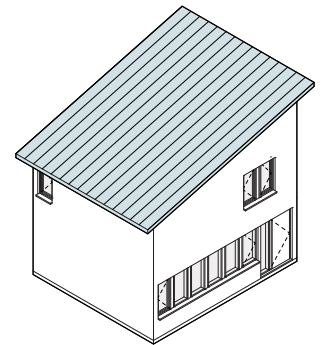
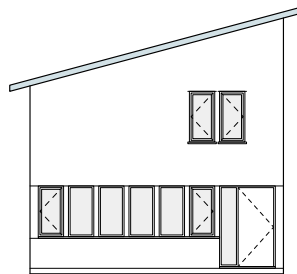
Pitched 1



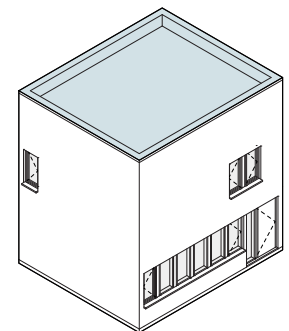
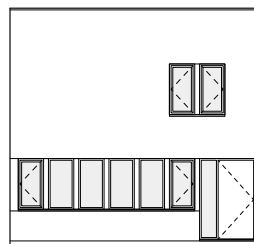
Pitched 2



Pitched 3

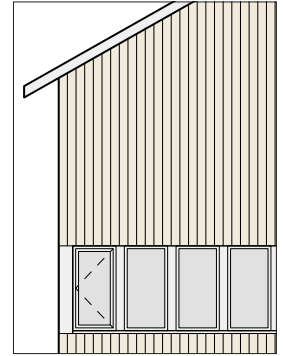
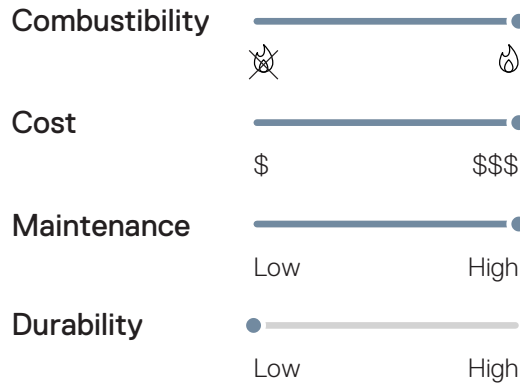
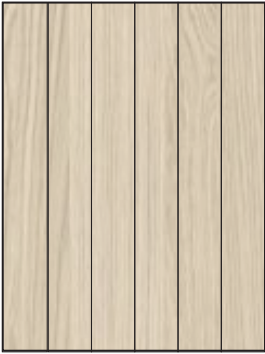


Flat

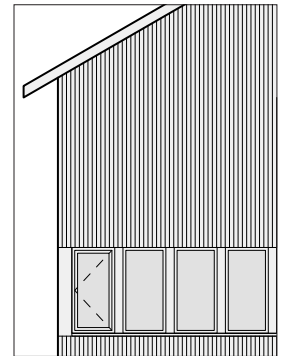
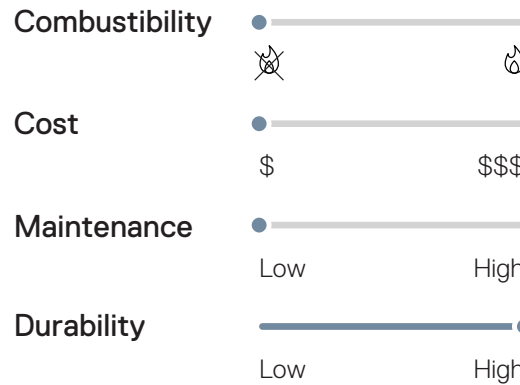
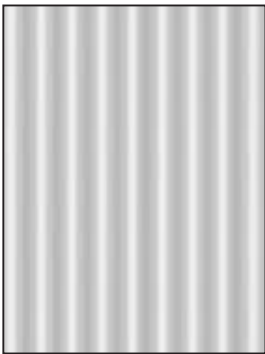


# Cladding Examples

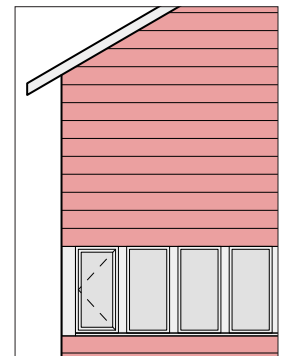
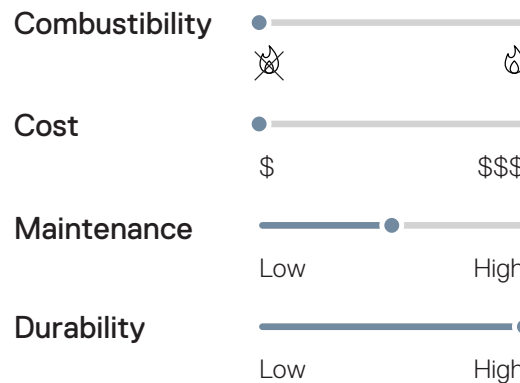
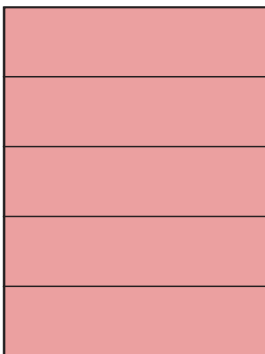
## Wood Siding



## Corrugated Metal

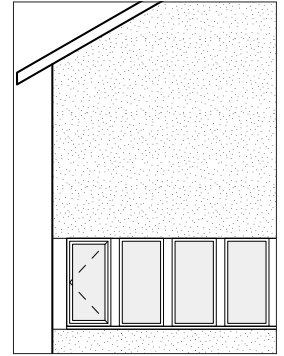
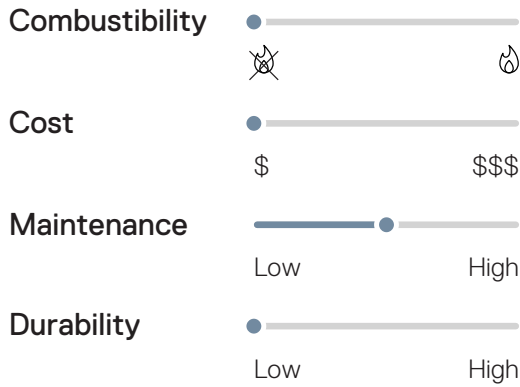
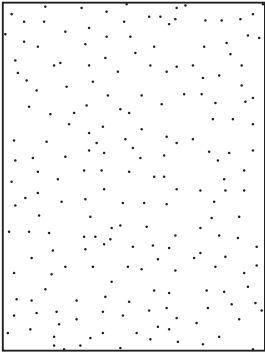


## Fibre Cement Siding

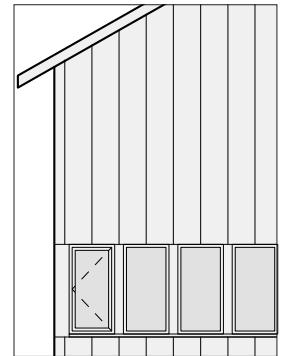
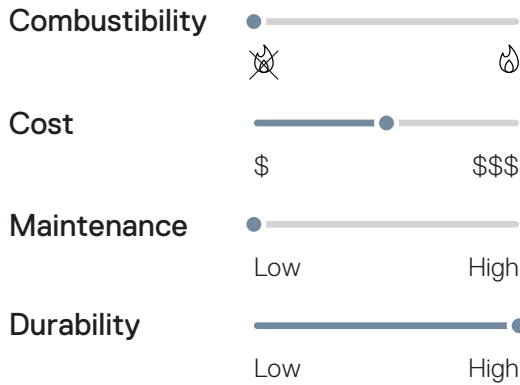
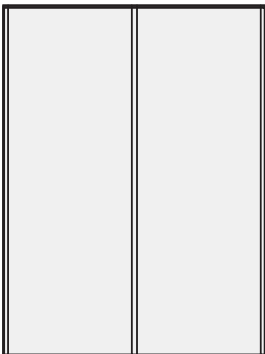


# Cladding Examples

## Stucco



## Standing Seam Metal

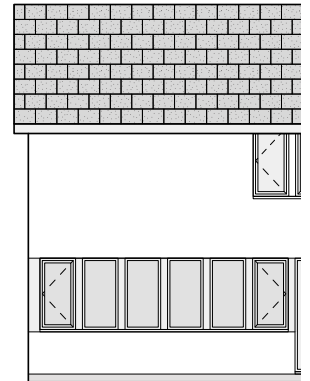
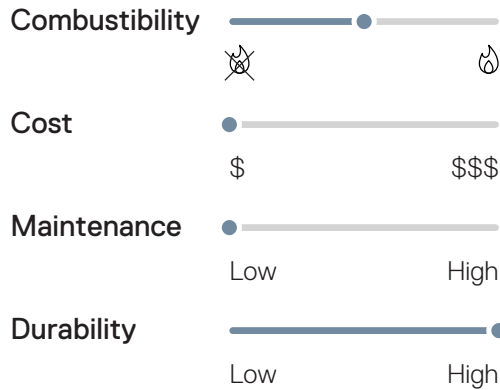
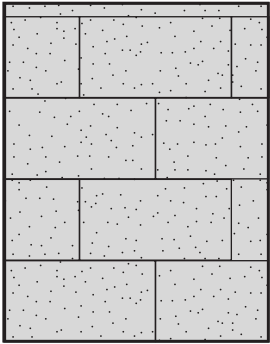


### Note:

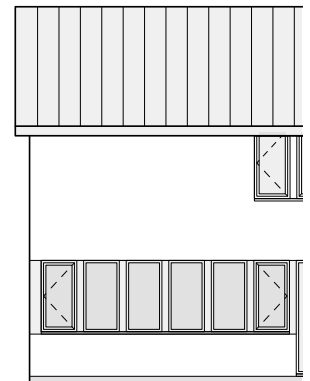
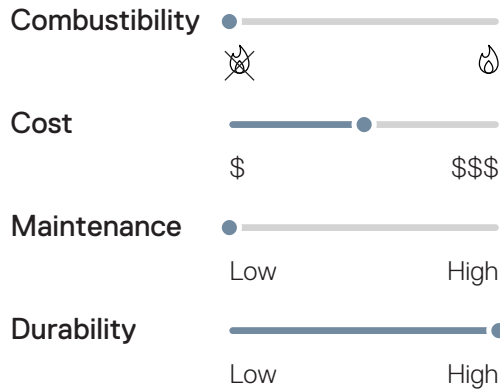
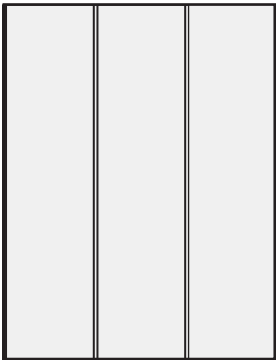
Builders may choose any exterior finish that can be accommodated within 3/4" cladding allowance in wall assembly, including vinyl or heat-treated wood, provided they have considered cost, combustibility, aesthetics, etc.

# Roofing Examples

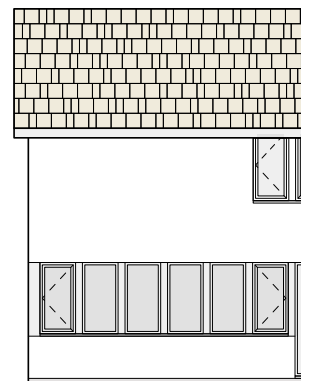
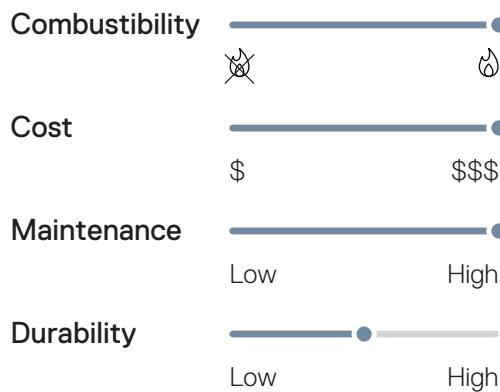
## Asphalt Shingle



## Standing Seam Metal

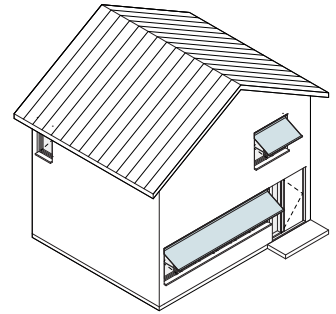
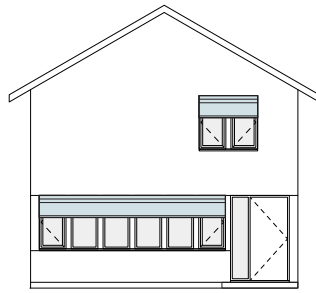


## Wood Shingle

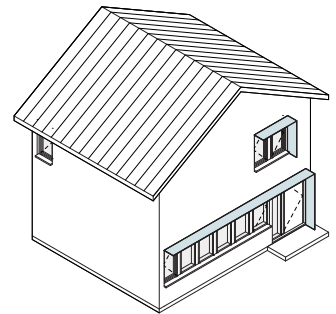
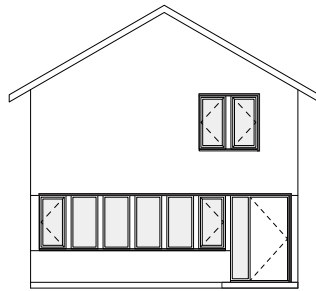


# Optional Solar Shading Devices

## Exterior Roller Blinds



## Metal Plate Awning



## Covered Porch

