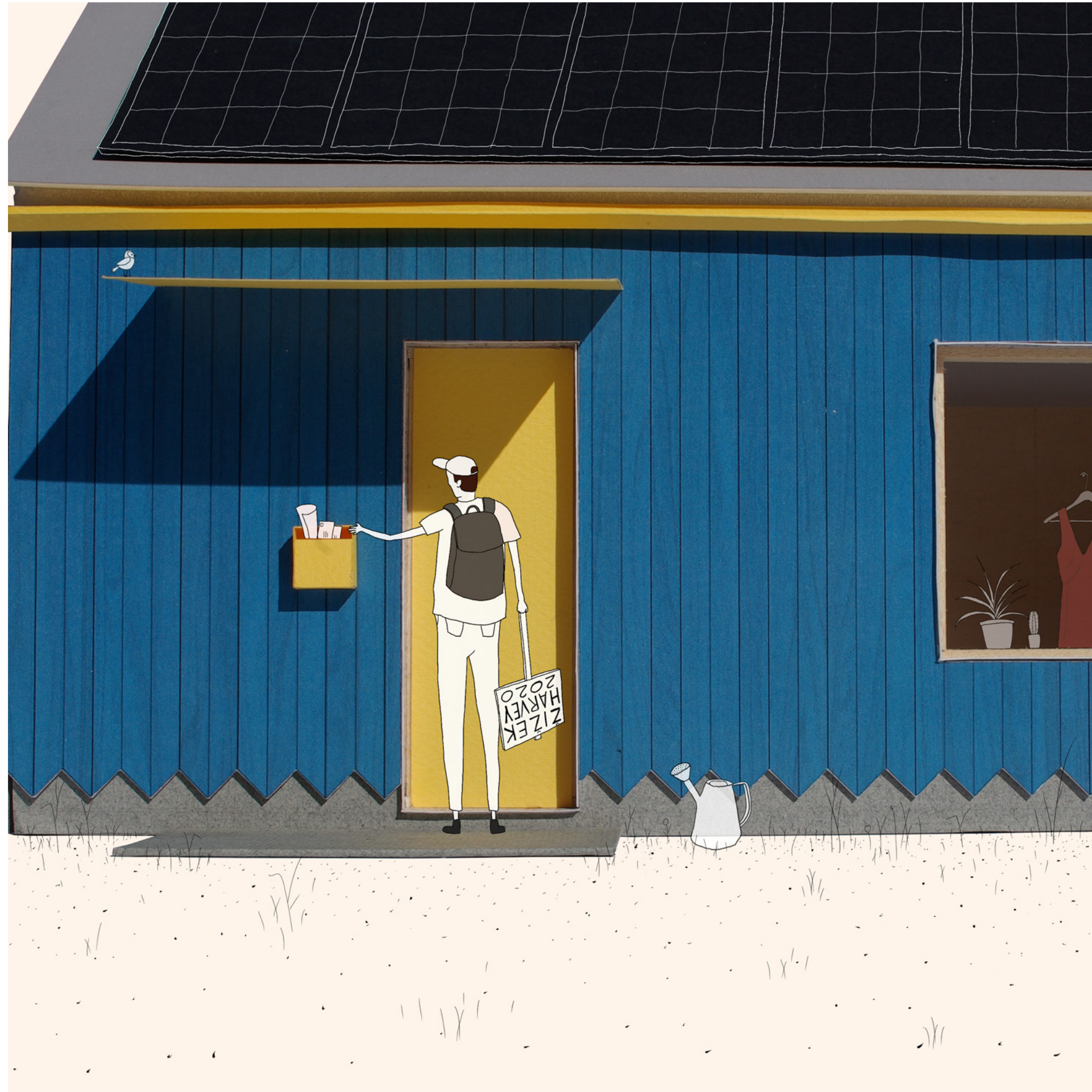




**seattle**

**four**

**square**



## 0.blok

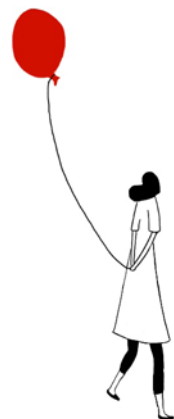
0.blok is a cooperative practice of radical

- . curiosity
- . simplicity
- . transparency
- . fun
- . beauty
- . complexity
- . nothing

Our members include:

- . Ben Prager (architect) - ben@0blok.com
- . Ivan Kostic (architect) - ivan@0blok.com
- . Brian Nguy (ceramicist) - brian@0blok.com

among others.



## project description

**Is it radical to** mandate that a new DADU built in the City of Seattle **be designed to a net-zero standard?**

“**Yes.**” The answer given by the homeowner who needs to figure out how to pay for all of this.

“**No.**” The answer given by the inhabitants of Isle de Jean Charles, Louisiana, the first American community to receive an allocation of federal tax dollars to move due to the effects of climate change.

“**Yes.**” The answer given by multi-generational homeowners looking to stay close to family but worried about the added personal costs of investing in a high performing envelope.

“**No.**” The answer given by pretty much every non-human living creature today.

“**Yes.**” The answer given by the City of Seattle who is trying to expedite new housing starts.

“**No.**” The answer given by every human in 30 years.

“**No.**” The Seattle Four Square (and its yellow door).

## plan cost | hourly rate

Plan cost	\$44.44
Hourly rate	\$103.00

## narrative

In response to the call for a scalable, efficient DADU solution, we propose a flexible strategy that employs six possible 12'x12' square modules:

- .empty square
- .entry/bath
- .living room
- .dining room
- .kitchen
- .bedroom

The unique characteristics of each site and owner's goals dictate the mixture, combination, orientation, and quantity of each module. It's tricky to design a siteless DADU so we designed the strategy and process instead.

In this submission, we apply the strategy through the use of four modules [entry/bath, living room, kitchen, and

bedroom] deployed to form the Seattle Four Square. It is an **accessible/visitable, single-story unit** arranged in a compact square with a gabled roof. It draws inspirations from the American Foursquare, a style popularized in the 1890s to 1930s and often built on narrow lots with simple woodwork or from a mail-order catalog. Many examples can still be seen today in Seattle. The metal roofing and wood rain screen, speak to our climate and the natural resources that surround us.

By designing the strategy, we are also able to take the Seattle Four Square and modify it to fit other DADU categories.

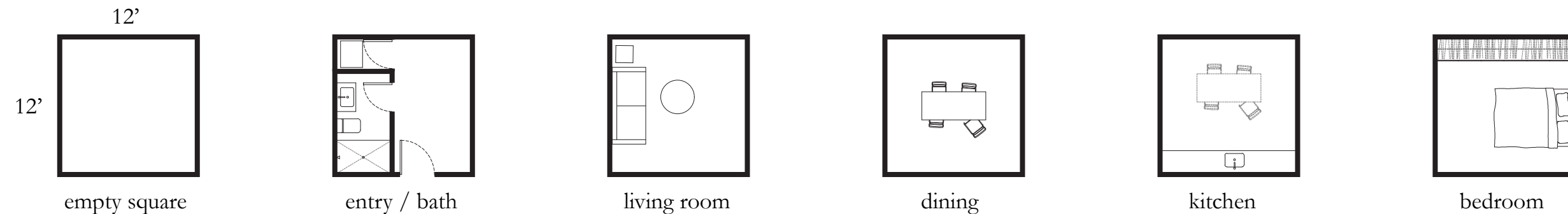
Remove two modules [bedroom and living room] and you are left with a **small footprint DADU** [two square].

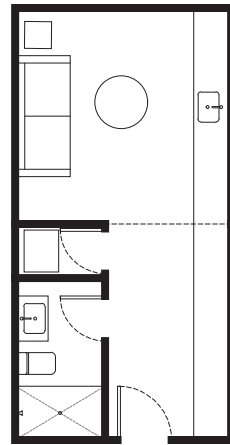
Add one module [bedroom] and you find a **family-friendly DADU** [five square].

Add two modules [empty square, empty square] and there's room for a car in a **garage DADU** [six square].

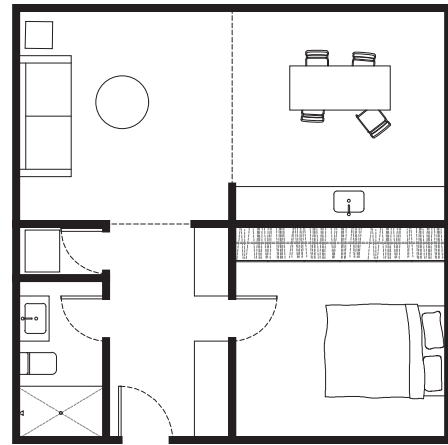
The system holds.

Of the phase one review criteria, our strategy puts its greatest emphasis on **green building**, achieving **net-zero energy consumption** through a combination of compact form, high-performance wall assemblies, and a right-sized solar array. We believe this to be the most pressing consideration of those listed in the phase one review criteria though we accommodate the others (cost, privacy, context, culture, constructability) indirectly.

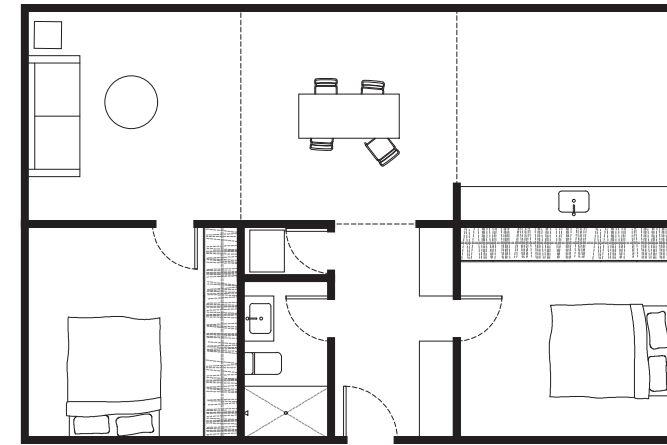




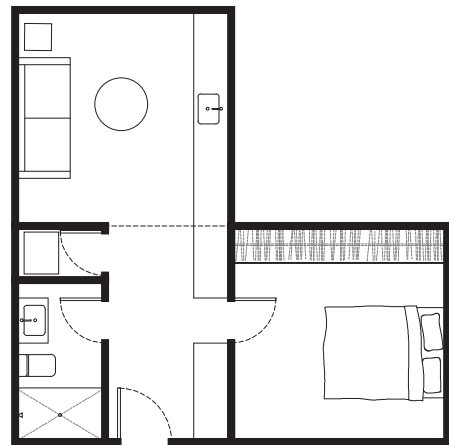
studio



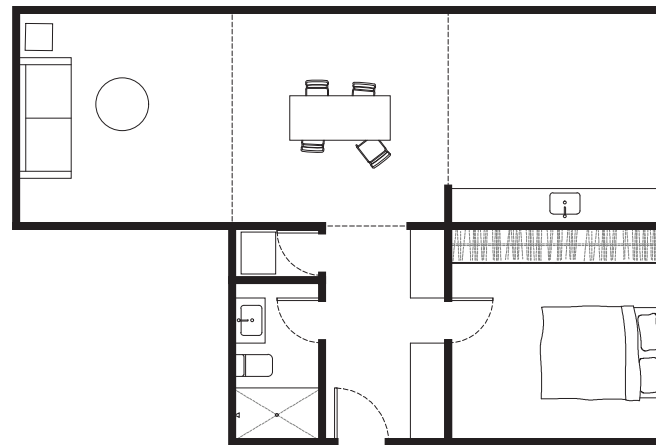
1 bedroom - medium



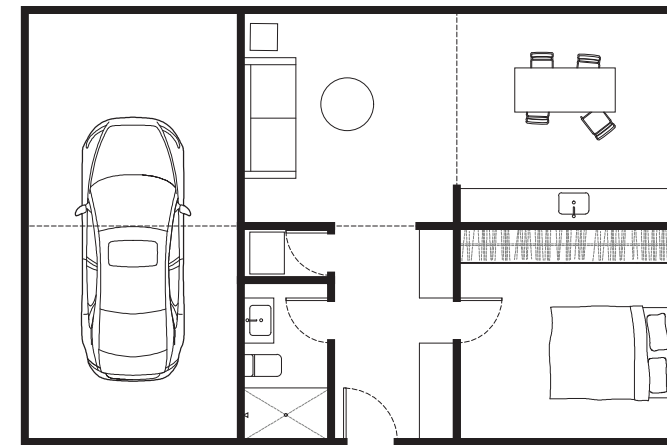
2 bedroom



1 bedroom - small

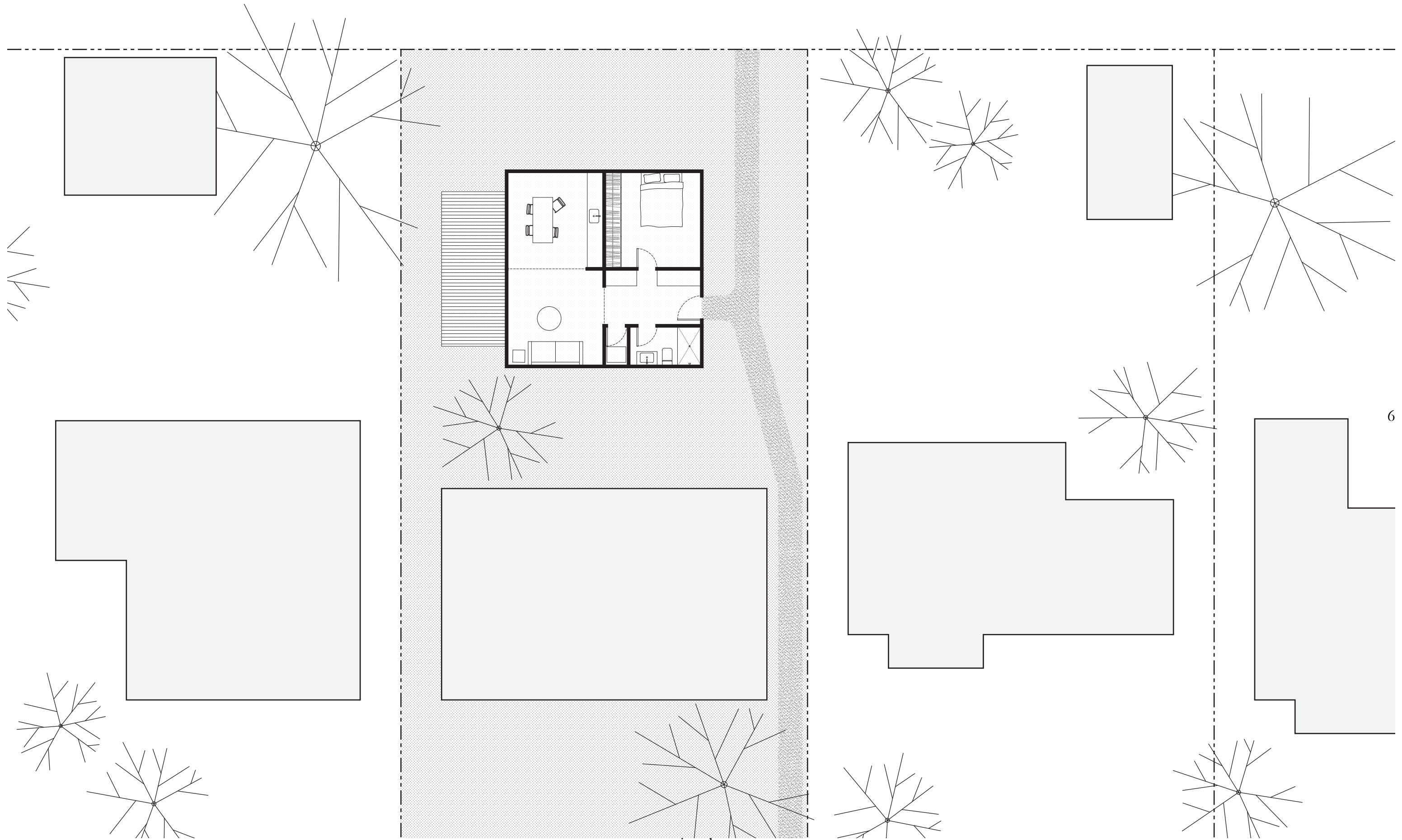


1 bedroom - large

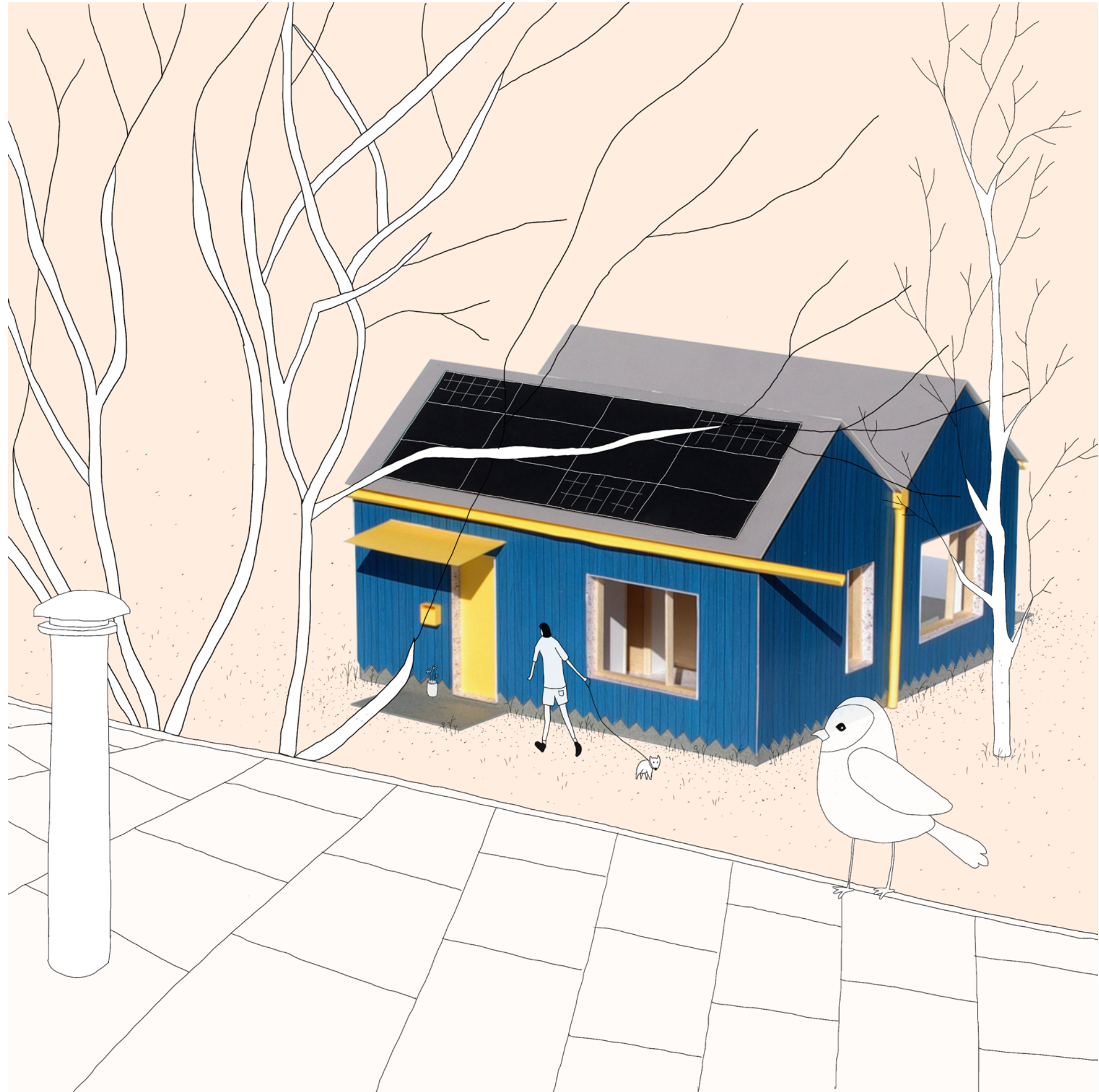


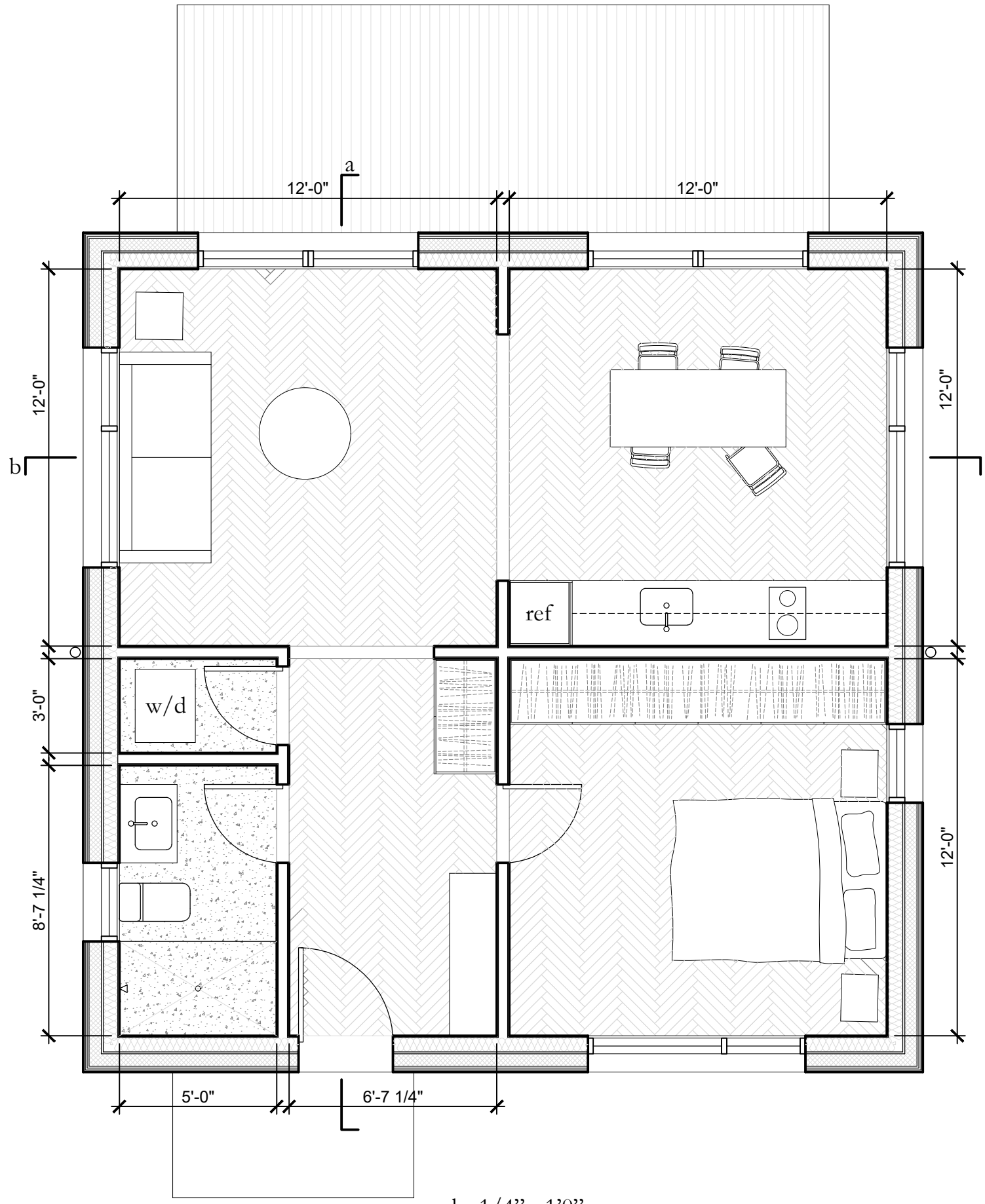
1 bedroom / garage

configurations



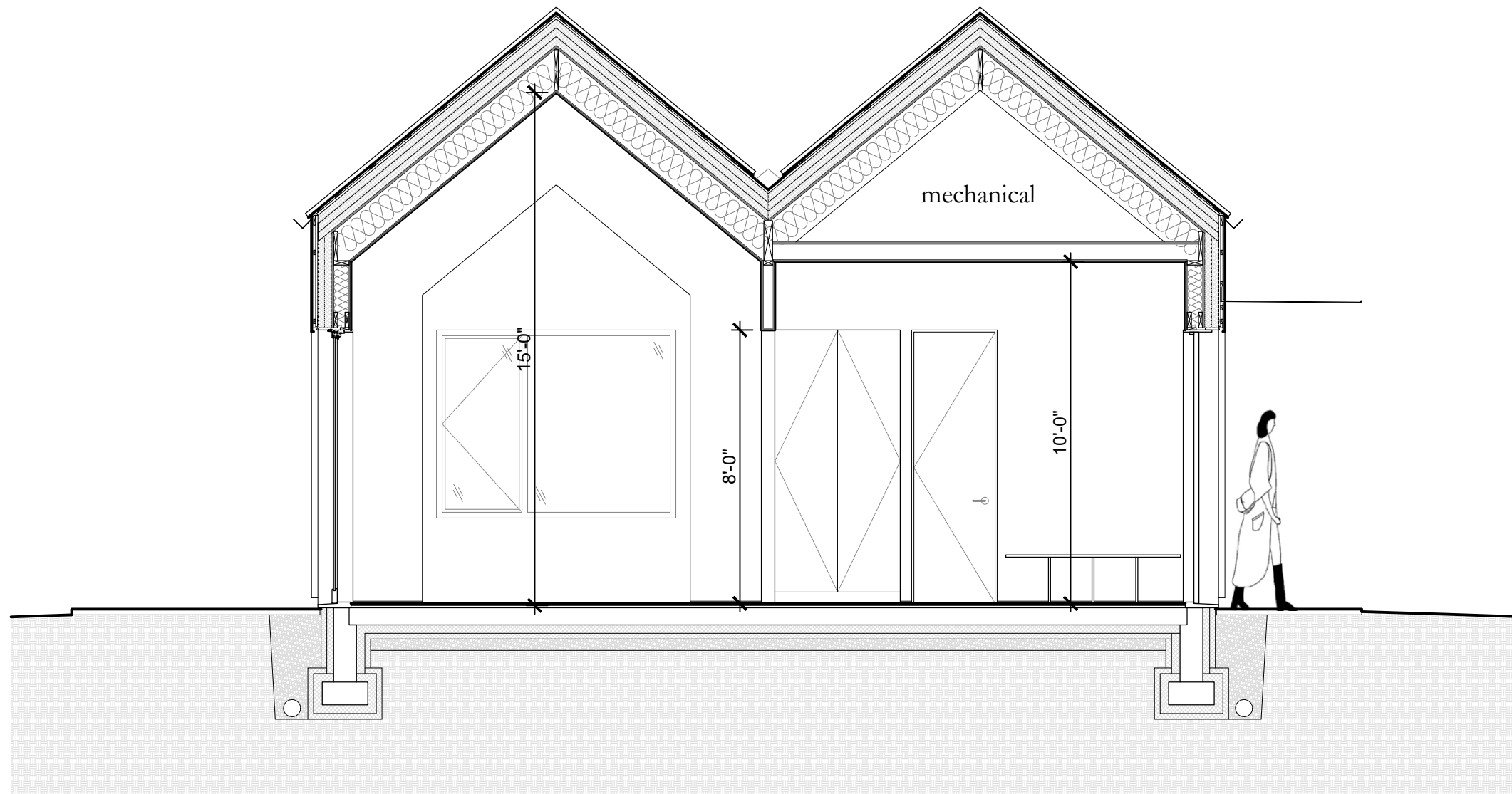
site plan





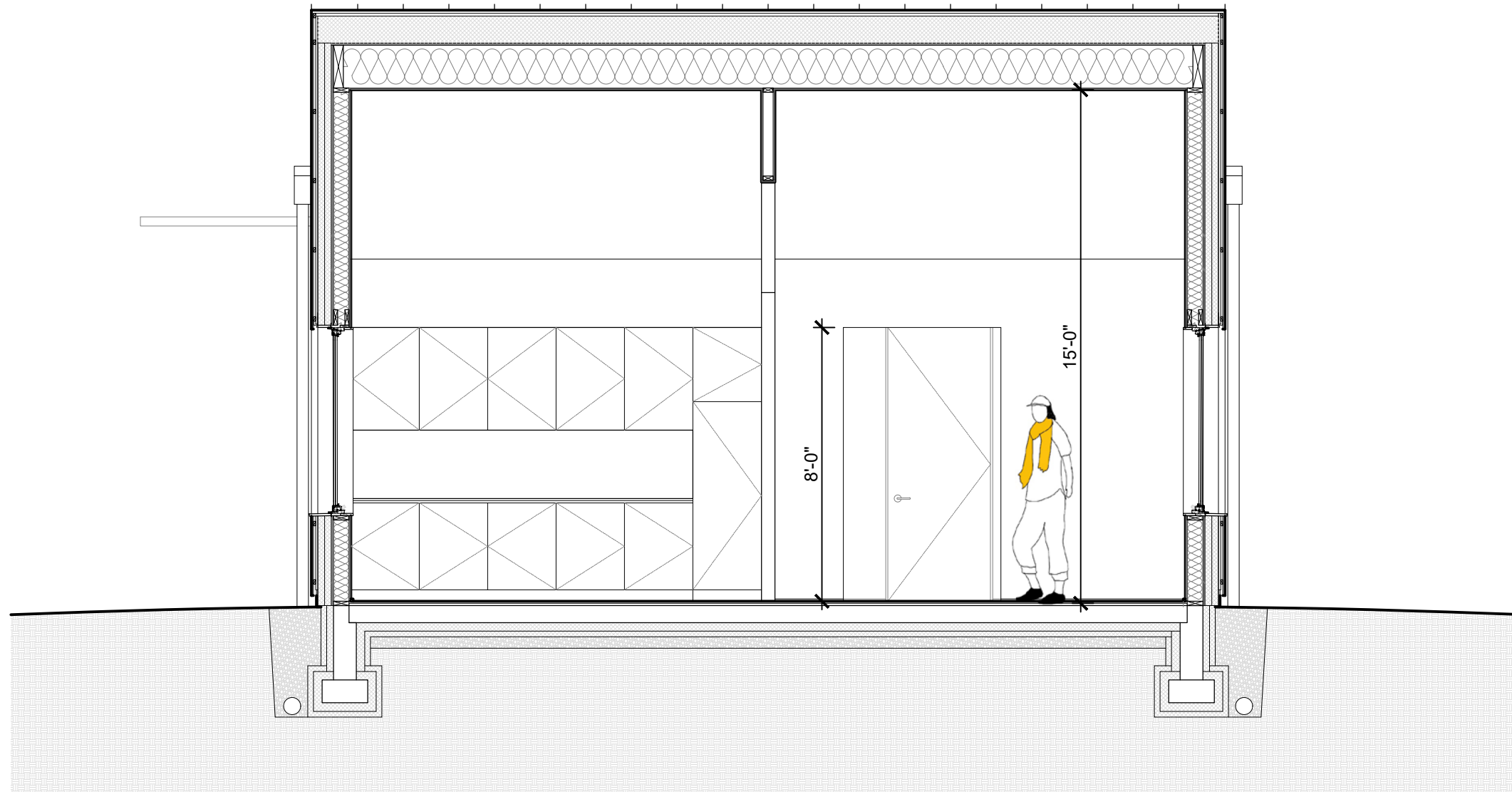
scale: 1/4" = 1'-0"

plan



scale: 1/4" = 1'0"

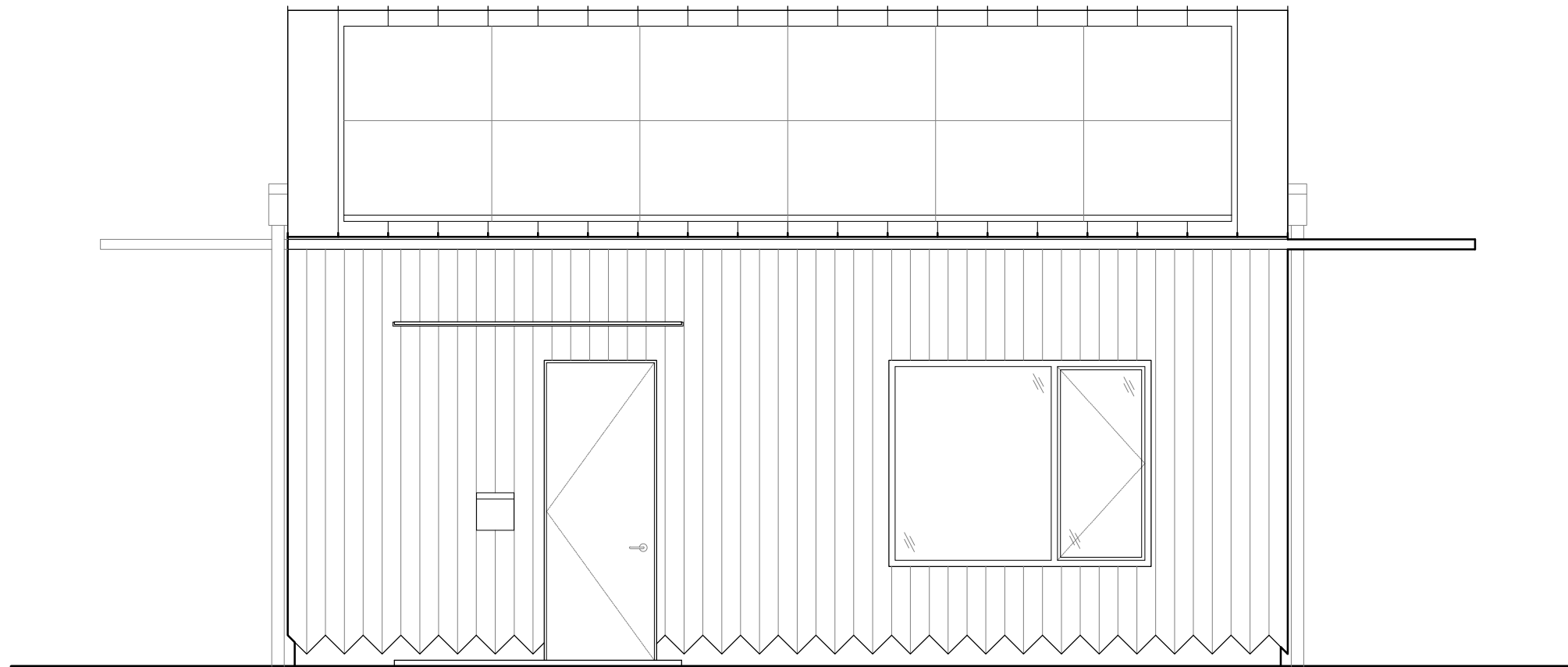
section . a



scale: 1/4" = 1'0"

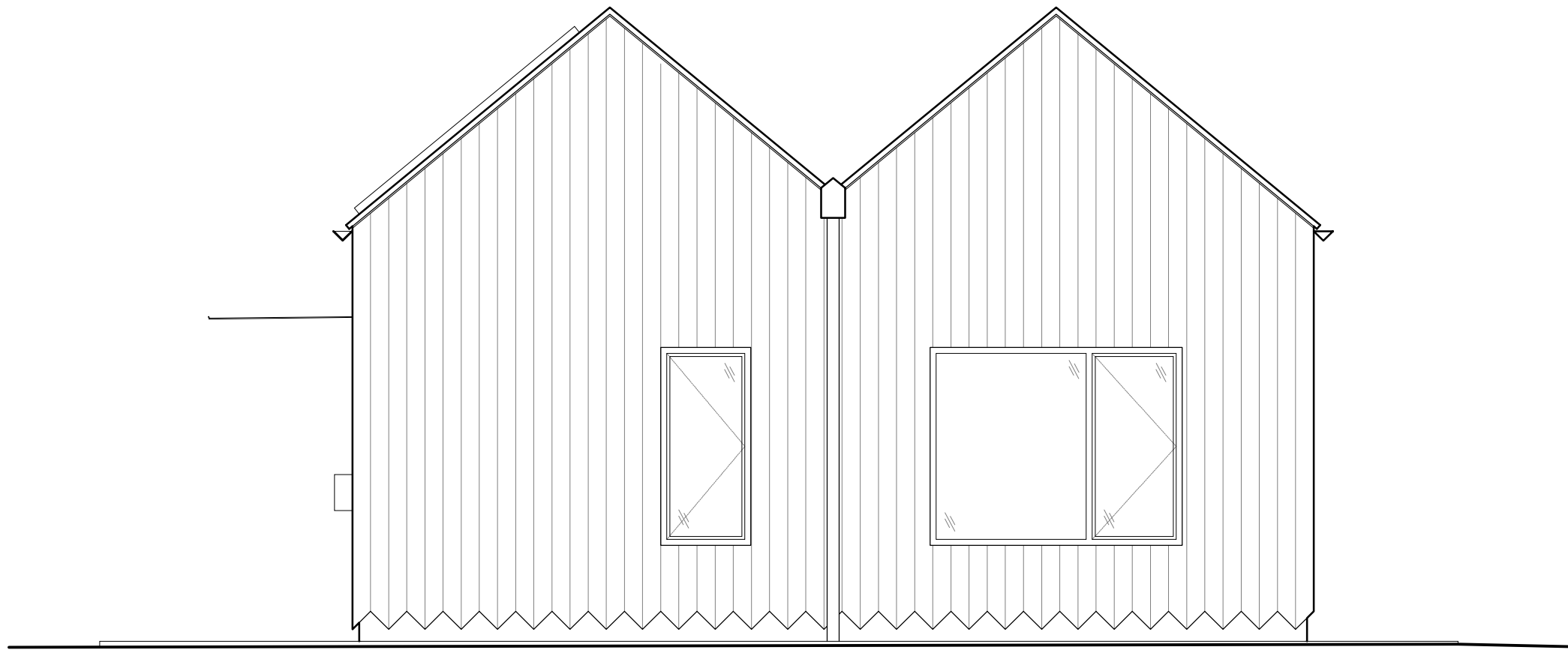
section . b





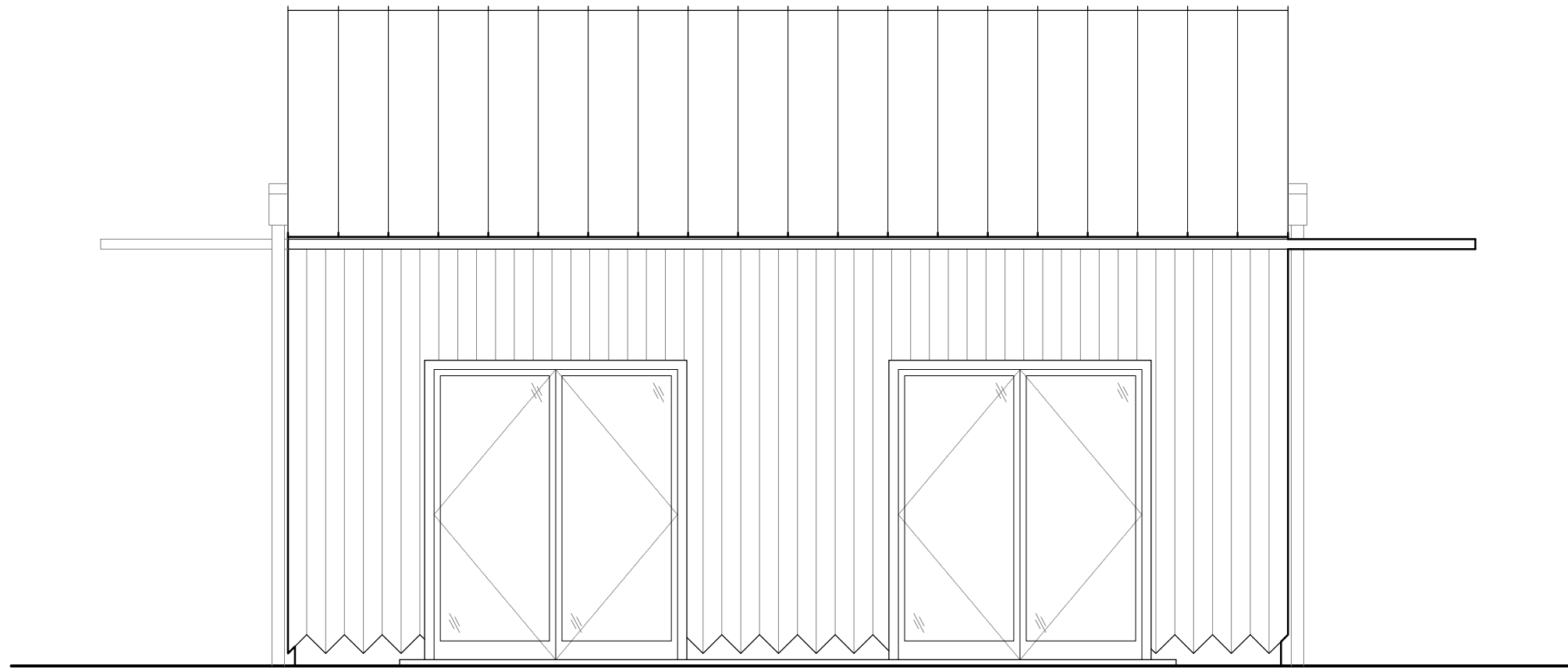
scale: 1/4" - 1'0"

elevation . 1



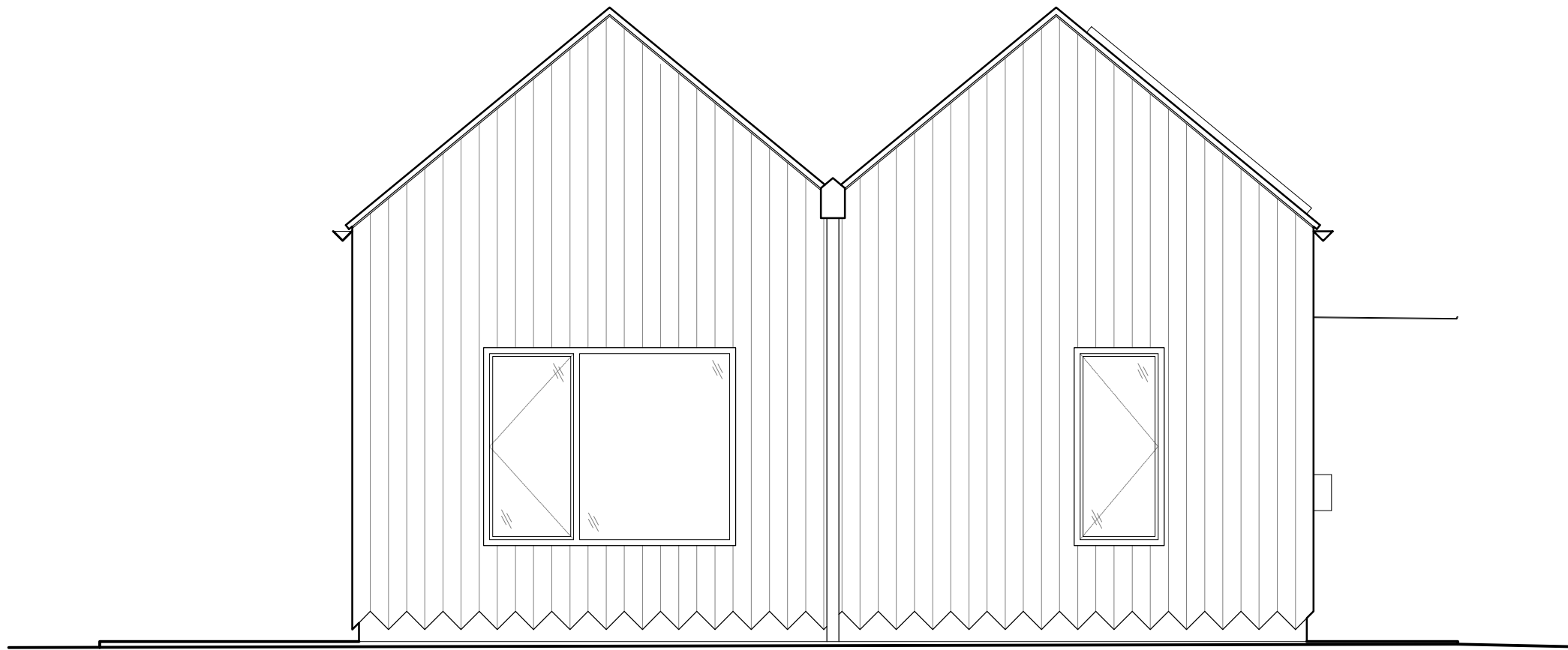
scale: 1/4" - 1'0"

elevation . 2



scale: 1/4" - 1'0"

elevation . 3



scale: 1/4" - 1'0"

elevation . 4



## project cost

A project with so many unknowns is difficult to price out.

From our experience the construction cost range for a **net-zero** DADU in Seattle is between **\$400/sf - \$500/sf**. The gross square footage of our proposal is 650sf, which results in an estimated cost range between **\$260,000** and **\$325,000**.

For a conventional project (non net-zero) in Seattle, the construction cost range would be between \$300/sf - 400/sf. This would result in a project cost range between \$195,000 and \$260,000.

## materials

The materials represented in this proposal reflect our concern with the full life-cycle of the building and its components, as well as its longevity. Having said that, the adequacy of those materials would be subject to the particularities of each individual project, site, and budget. The possible shades of blue are endless after all ;) The yellow is non-negotiable.

### Finishes

.roofing	metal standing seam
.siding	painted wood rainscreen
.flooring	wood
.bath flooring	terrazzo
.walls	drywall
.windows	triple glazed wood windows

### Insulation

.exterior	wood fiber insulation
.below grade	mineral wool

The design assumes stud cavities filled with insulation, and a continuous layer of exterior insulation for roofs, walls, and below grade construction. We are proposing an R-60 roof, R-40 wall, and R-20 below grade.

## mechanical systems

The selected mechanical systems not only reflect the requirements of a net-zero building, but also the occupant comfort which arises from the combination of passive, and active strategies. This list is highly variable depending on site and user characteristics. We are proposing a fully electric mechanical strategy, eliminating all direct fossil fuel use in the building. This is particularly relevant in Seattle, as its electricity generation is practically carbon free.

.ventilation	ductless HRV
.dom. hot water	solar thermal + electric resistance
.heating	hydronic radiant floor
.solar	4kW array assumed



