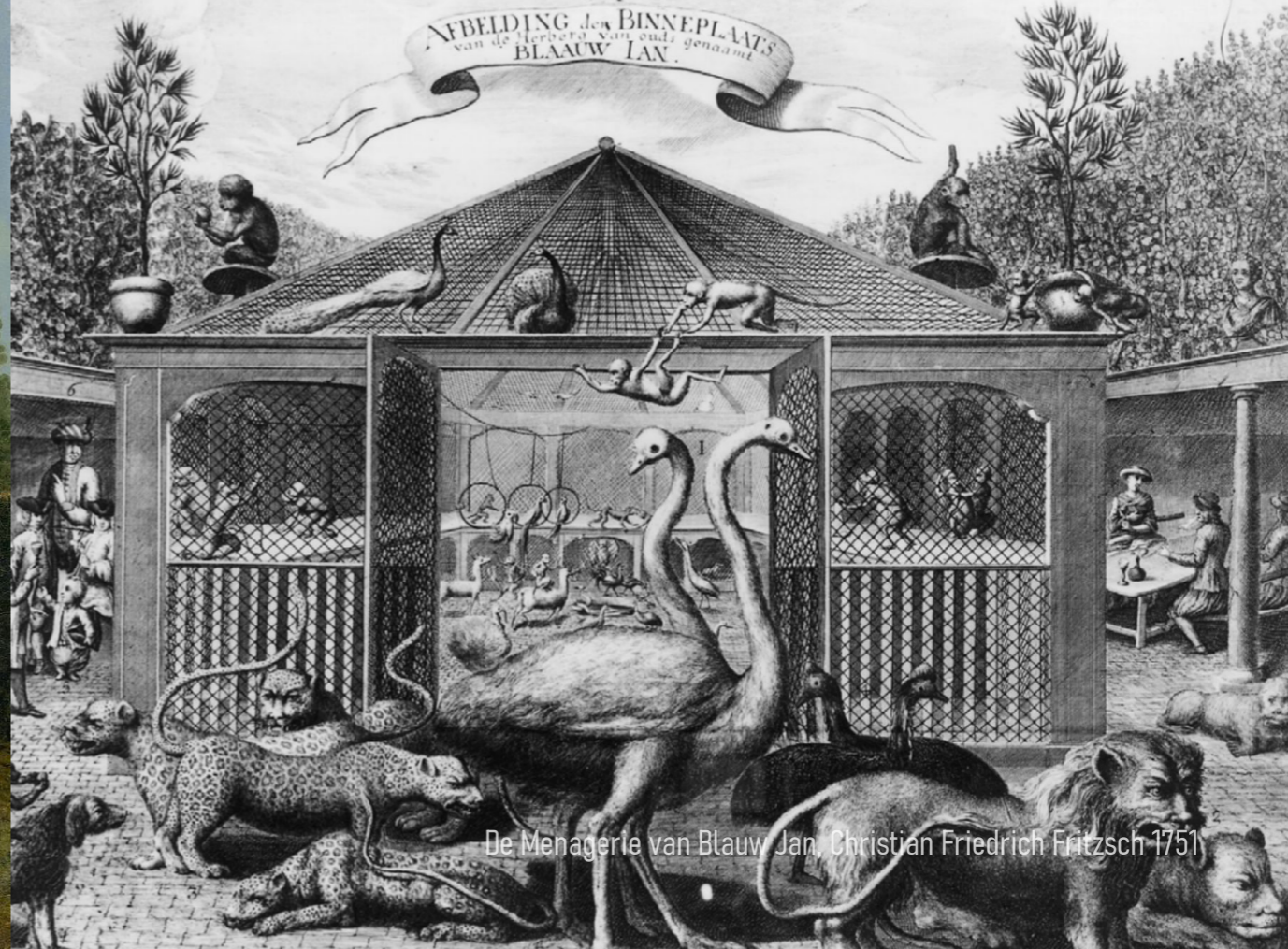


CO-HABITAT

Nature-inclusive communal dwelling



Gamekeeper with Dogs and Dead Game, Jean-Baptiste Oudry 1740



De Menagerie van Blauw Jan, Christian Friedrich Fritsch 1751



Vijf kinderen van Koning Charles I, Anthony Van Dyck 1637



A Cavalier On Gray Horse in A Riding School, Johann Georg de Hamilton 1720*



Anthropocentric





Tallinn's skyline, Competitions Archi (2013)



'Architects could prevent billions of bird deaths', Dezeen (2022)

Is all anthropocentric behaviour bad?

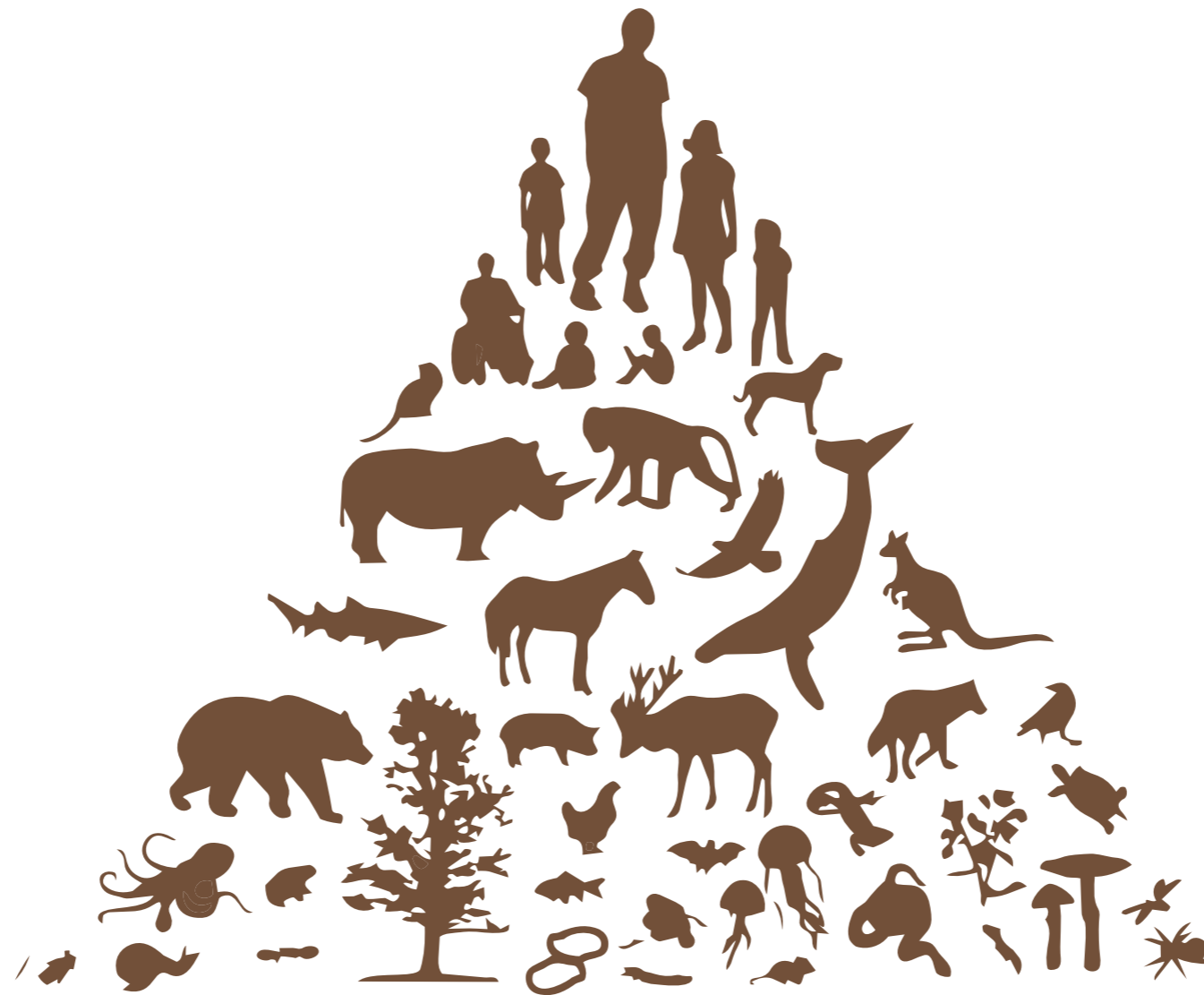
What does that separation of nature and culture mean?

How can architecture become less dominant?

What is the role of the human and what should it become?

Research Question:

How can a nature-inclusive residential community in Tallinn be designed to challenge the anthropocentric attitude of modern urban development, while simultaneously amplifying the symbiotic and admiring relationship between humans and other species?



More-Than-Human-Centred-Design, UAL (2023)



More-Than-Human-Centred-Design, UAL (2023)

How to design for more than just humans?

Nature-inclusivity

Nature-inclusivity

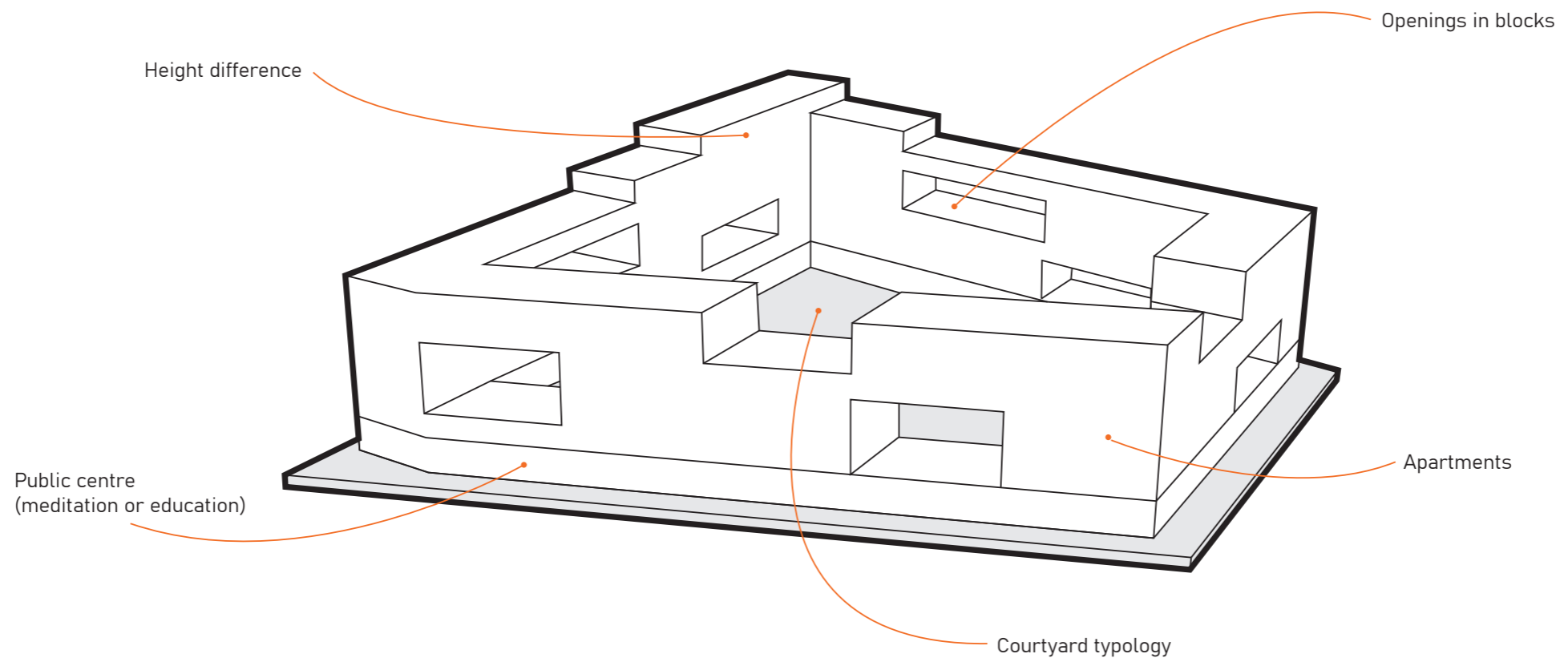
+

Communal dwelling

= **Co-habitat**

Porosity

First concept drawing



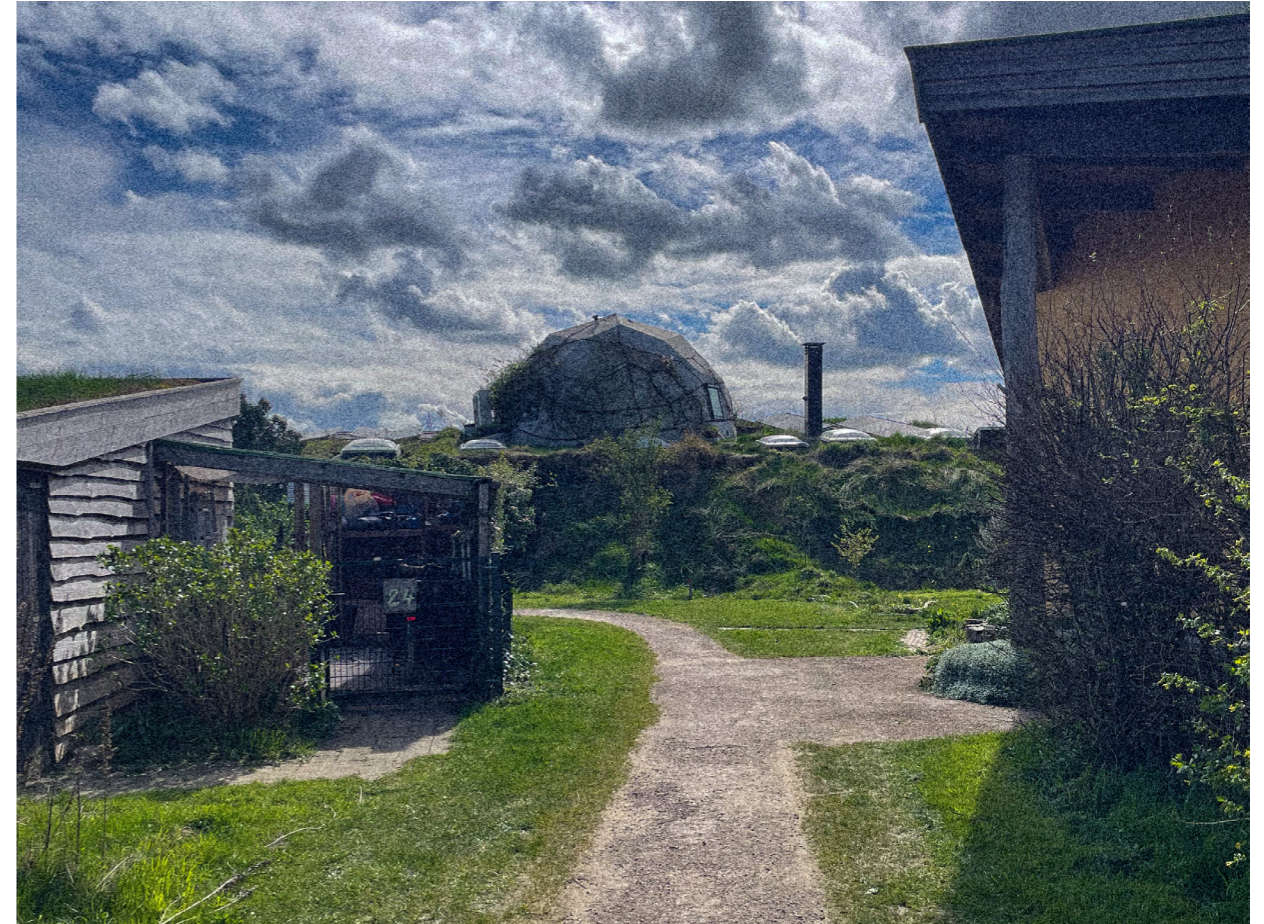
Co-habitat building overview



Research: site visits



Warmoestuin Rijswijk



Aardehuis Olst

Warmoestuin Rijswijk



















Aardehuis Olst



Fieldtrip to Tallinn



Animals!

Animal:	Role in ecosystem:	Role in foodchain:	Habitat:	Enemies with:	Tolerates humans:	Food:	Seasonal behaviour:	Use in buildings now:	Possible architectural inventions:
 Bats	Pest Controller	Secondary	Hollows, Caves	Owls, cats	Somewhat: uses building but dislikes light	Insects (night)	Hibernation: dec-mar Foraging in summer	Attics, cavities	Roosting spots
 Bee	Pollinator	Primary	Ground, hollow stems	Wasp, Spider	Yes: uses gardens	Nectar	Workers die in autumn	Holes in mortar	(Natural) beehives
 Blackbird	Seed disperser	Secondary	Low vegetation	Cats	Yes: uses gardens	Worms, snails, berries	Breeding: feb-jul forages intens in winter	-	Landscape
 Butterfly	Pollinator	Primary	Flower rich	Birds, spiders	Yes: uses gardens	Nectar	Metamorphosis in winter, Active in summer	Green areas	Spot for metamorphosis
 Earthworm	Soil improver	Detritivore	Soil	Blackbirds, moles, hedgehog	Somewhat: no Specific interaction	Dead organic matter	Deep in to ground during cold / dry periods	-	Landscape
 Frog	Pest controller	Secondary	Ponds, moist garden	Cats	No: suffers from traffic	Insects, snails	Hibernation	-	Only if pond is made
 Great tit	Pest controller	Secondary	Trees, shrubs	Cats	Yes: adapted	Insects, seeds	Foraging in winter, breeding in spring	Small openings facade	Nesting spots
 Hedgehog	Soil scavenger	Secondary	Dense vegetation	Fox, owl	No: suffers from traffic, is shy	Worms, insects	Hibernation: nov-mar	Hibernates under sheds	Traffic protection
 Herring gull	Scavenger	Tertiary	Open space	Birds of prey	Yes: adapted	Fish, human food	Not really	Nests on flat, concrete rooftops	High parapet
 House sparrow	Seed disperser	Secondary	Dense shrubs	Cats	Yes: adapted	Seeds, insects	Shelter in winter, breeds in spring	Under roof tiles	Shelter spots
 Human	Manager (end of the chain)	Tertiary	Built environment	Mice, mosquitos	Yes	highly diverse	Couch sessions in winter, Gardening in summer	Yes	Residential, educational, meditation*
 Ladybird	Pest controller	Secondary	Leaves	Spiders, frogs, birds	Yes: uses gardens	Mites	Hibernation under barks, leaves	Window sills	Insecthotel on warm facade
 Mole	Soil aerator	Secondary	Underground	Fox, owl	No: very shy	Earthworms, larvae	Always active	-	-
 Snail	Decomposer	Primary	Moist spots	Blackbird, hedgehog, frog	Somewhat: no Specific interaction	Dead plant matter, leaves	Hibernation during frost	Damp, shaded areas	Landscape
 Squirrel	Seed disperser	Primary	Trees	Cats	Yes: adapted	Nuts, seeds, eggs	Somewhat hibernation	Sometimes attics	Spot for winter storage
 Swallow	Insect controller	Secondary	Very high structures	Birds of prey	Yes: uses human structures	Flying insects	Arrives in may, leaves in august to Africa	Gaps under eaves	Not in city centre



Bats

Northern, Pipistrelle, Parti-coloured



Birds

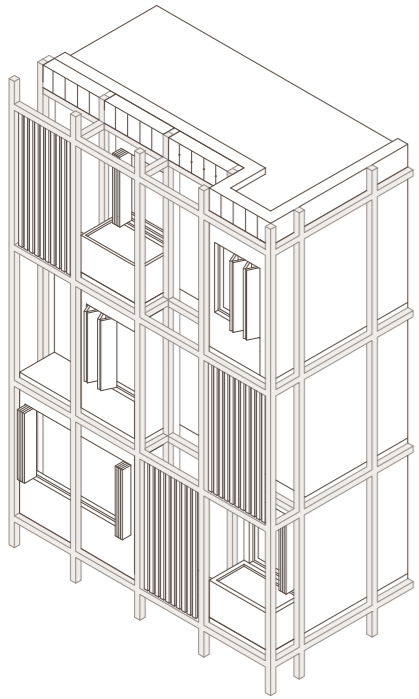
e.g. House Sparrow, Great Tit, Starling



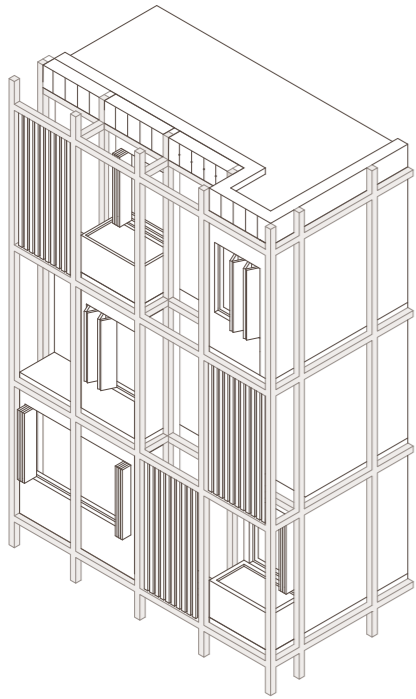
Insects

e.g. Bee, Butterfly

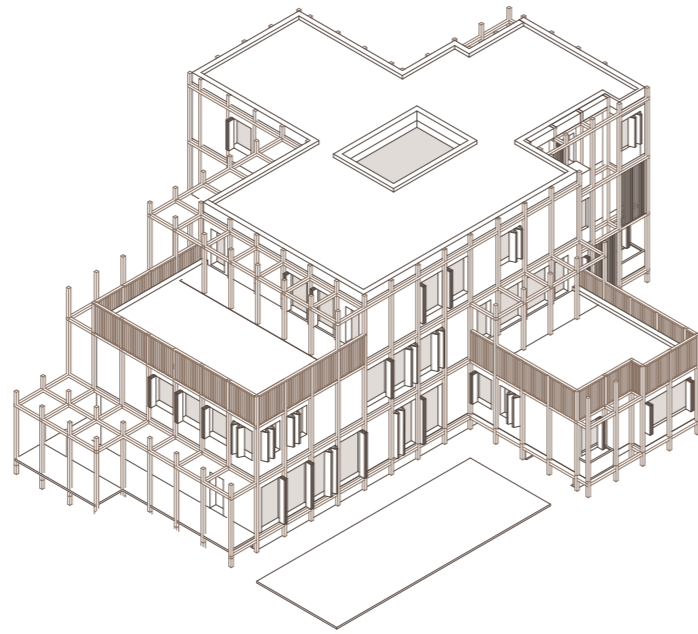
(+ humans!)



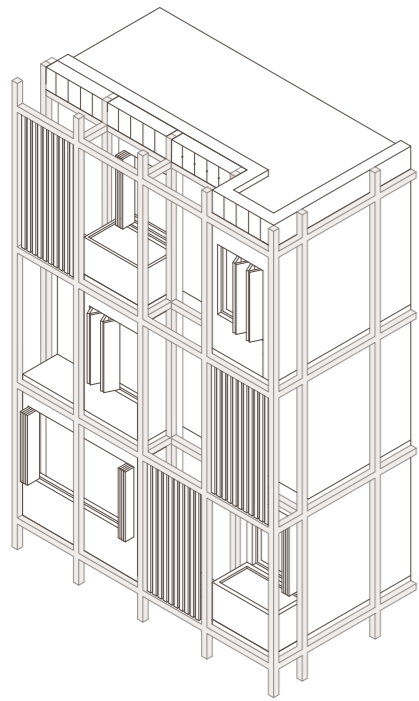
Roost



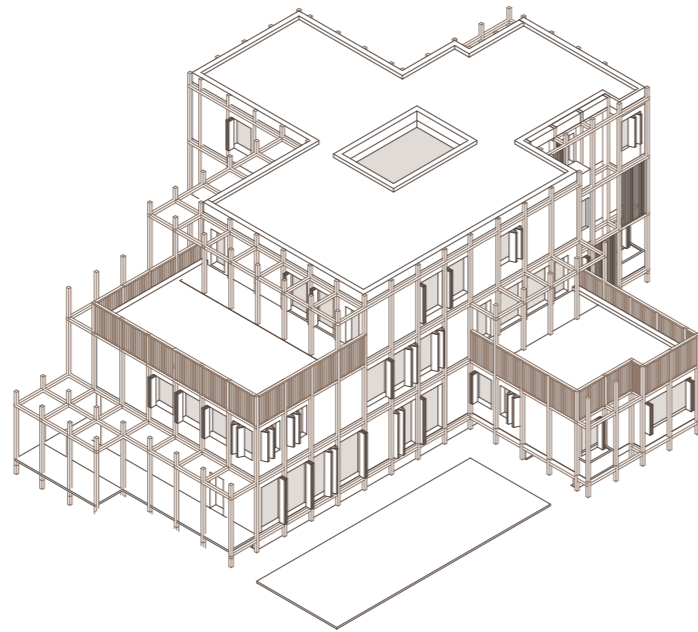
Roost



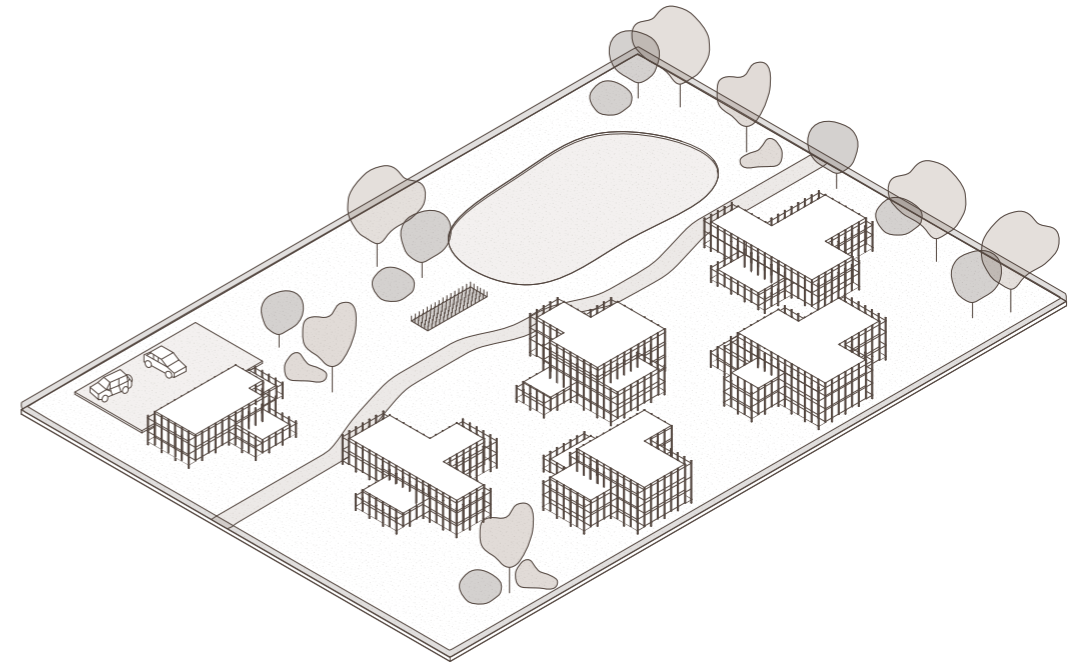
House



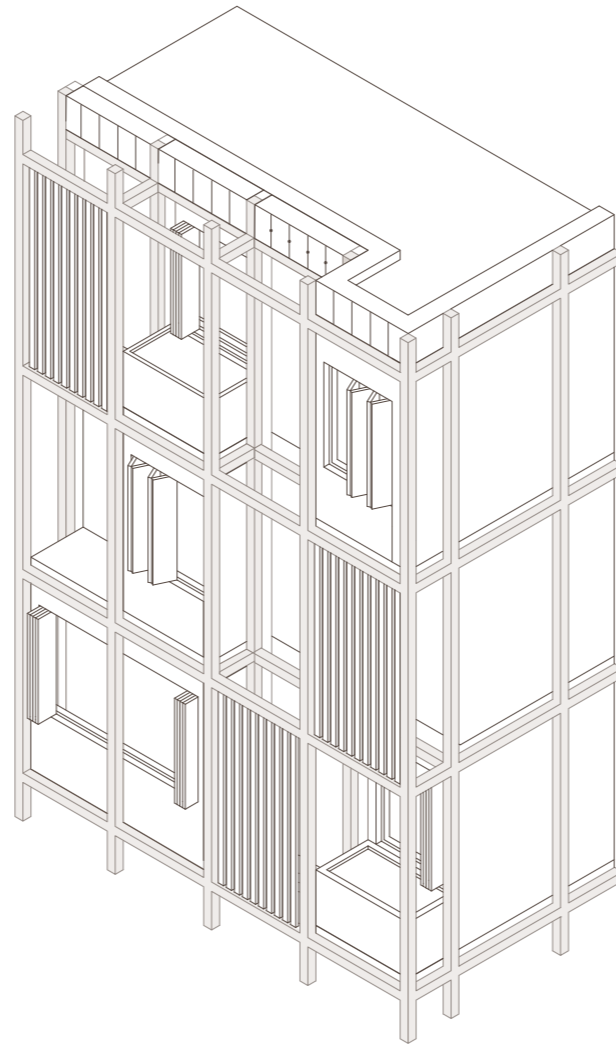
Roost



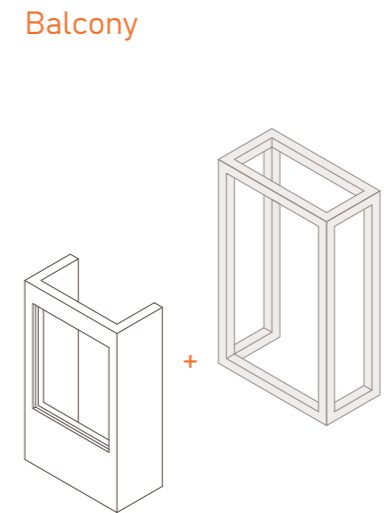
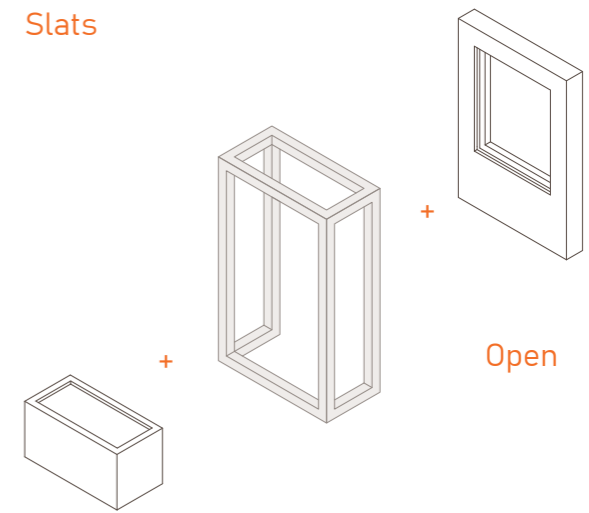
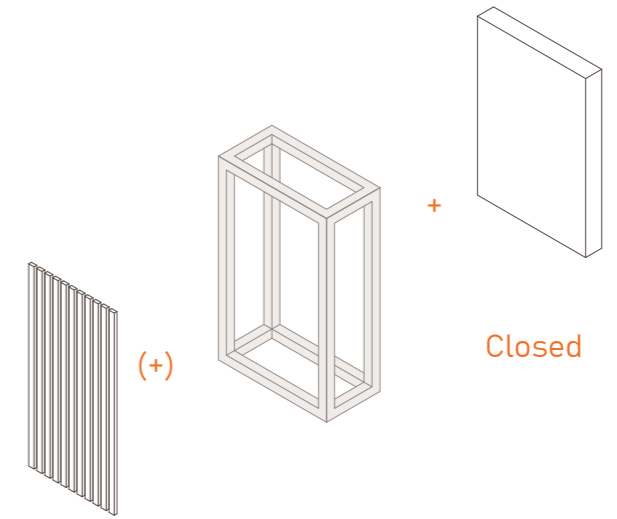
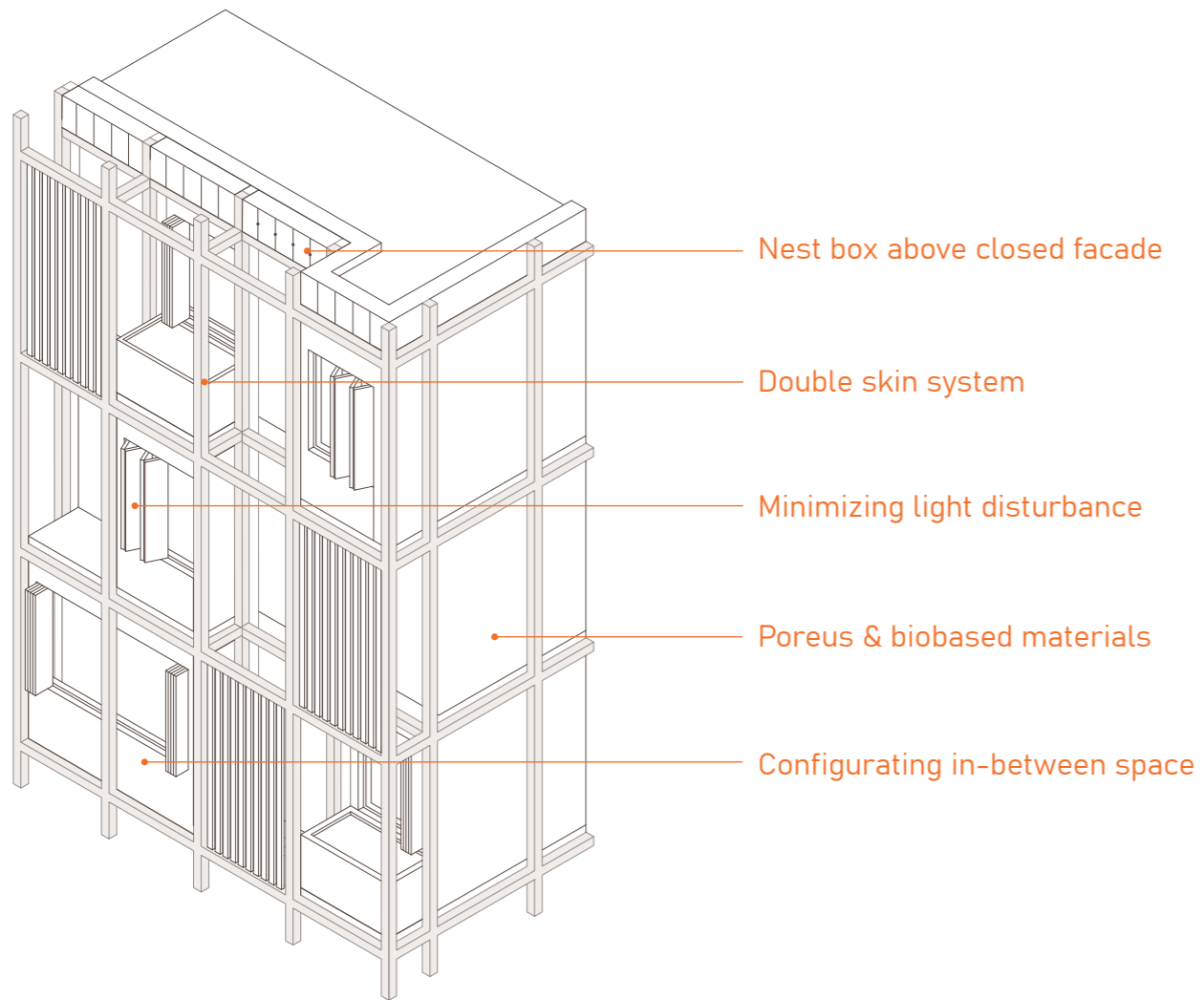
House

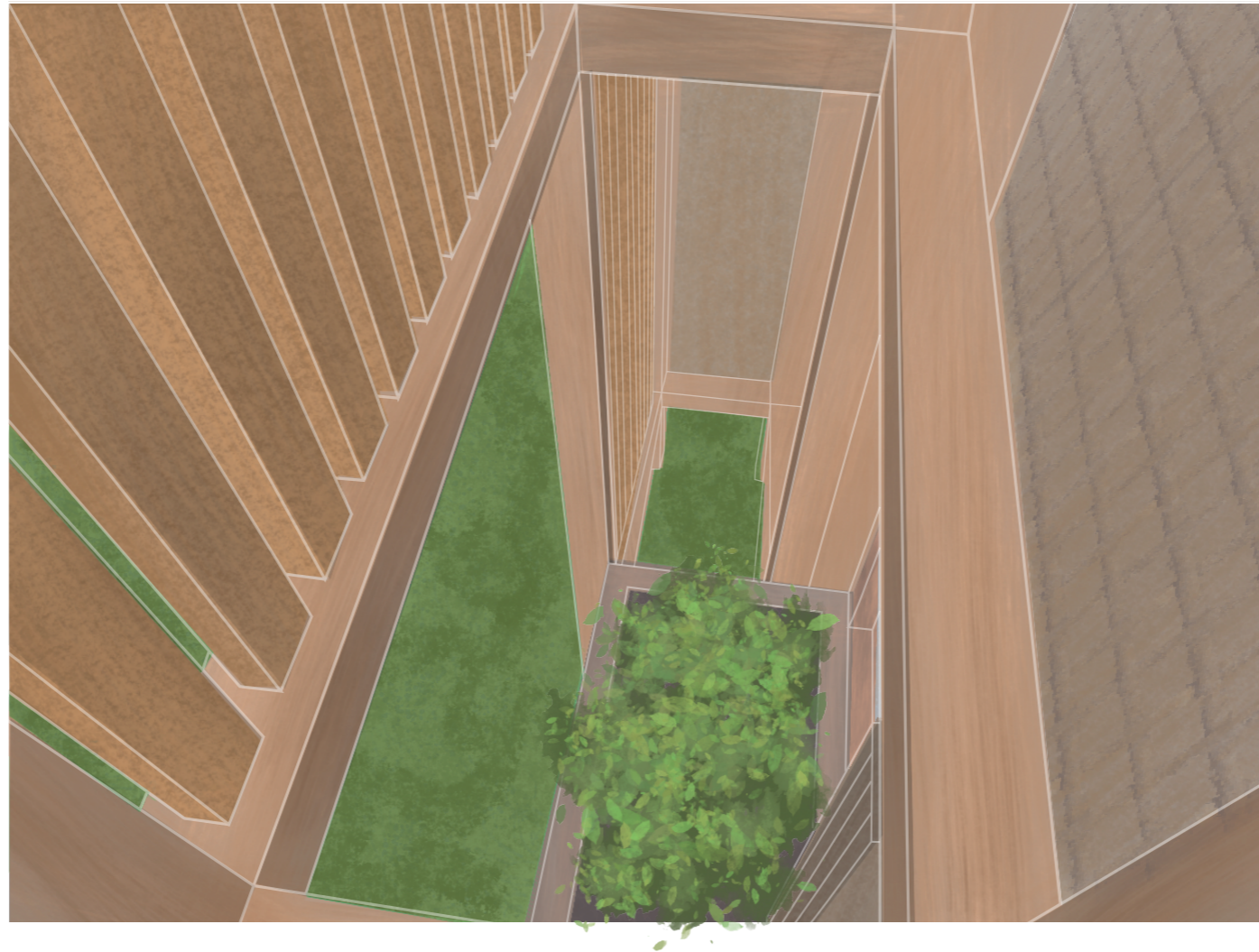


Neighbourhood

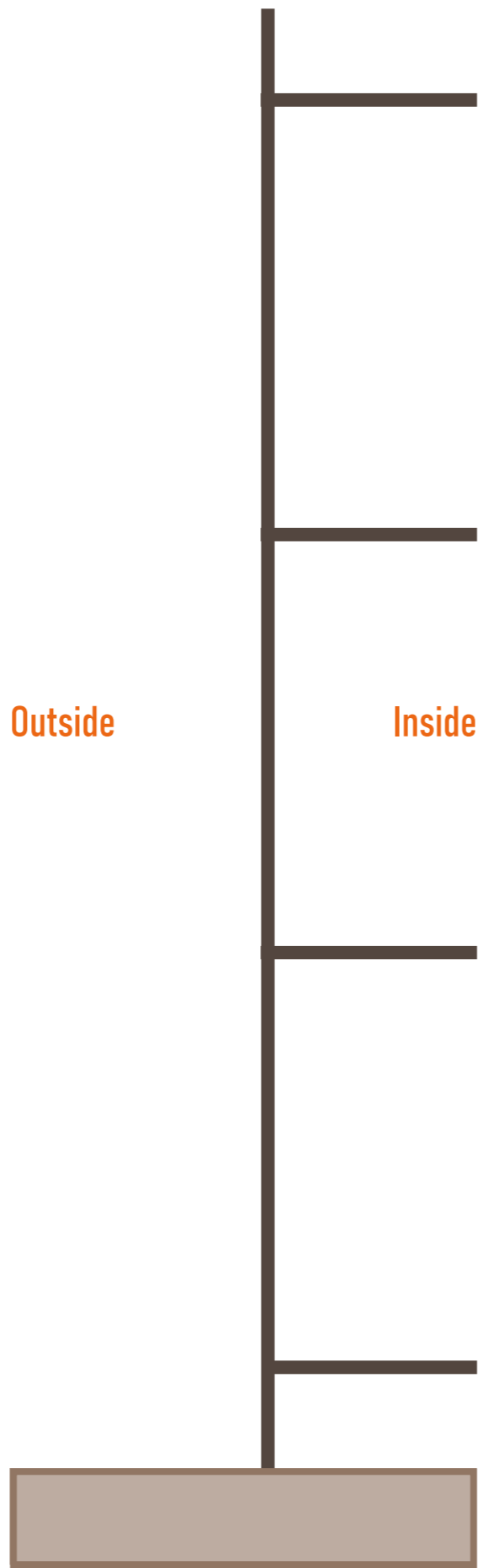


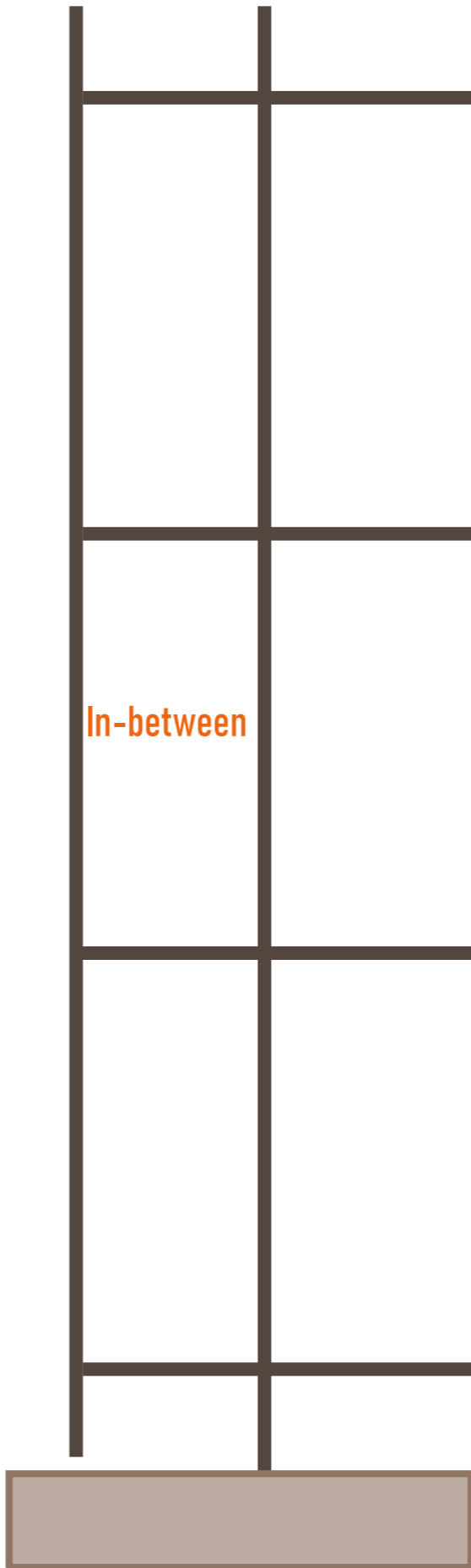
Roost

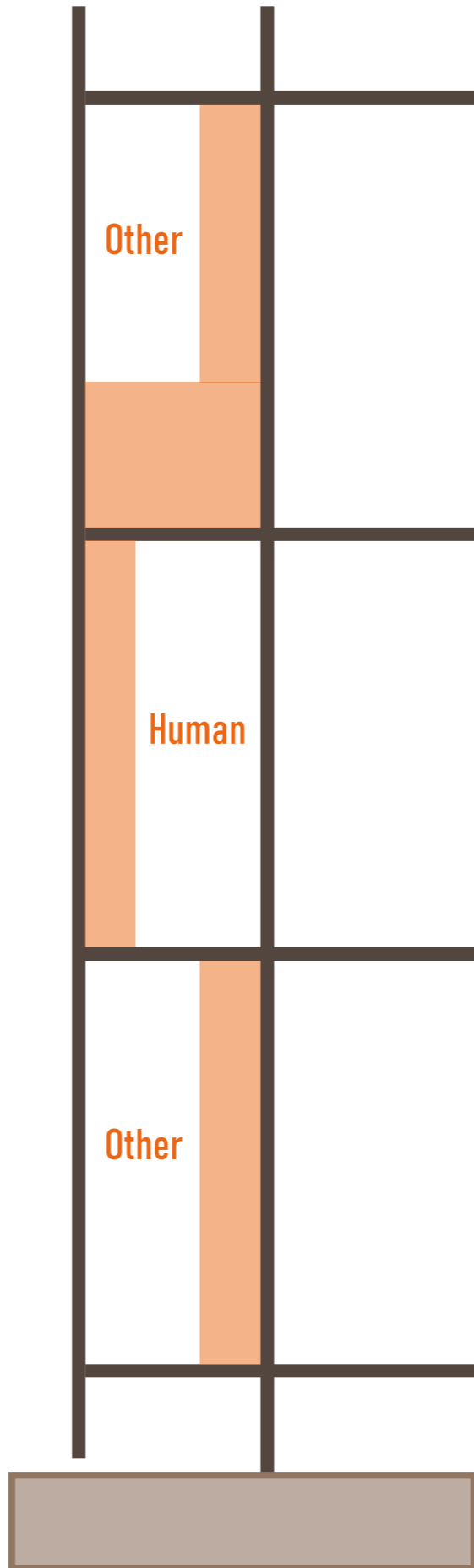


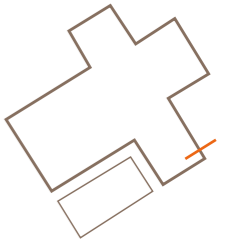
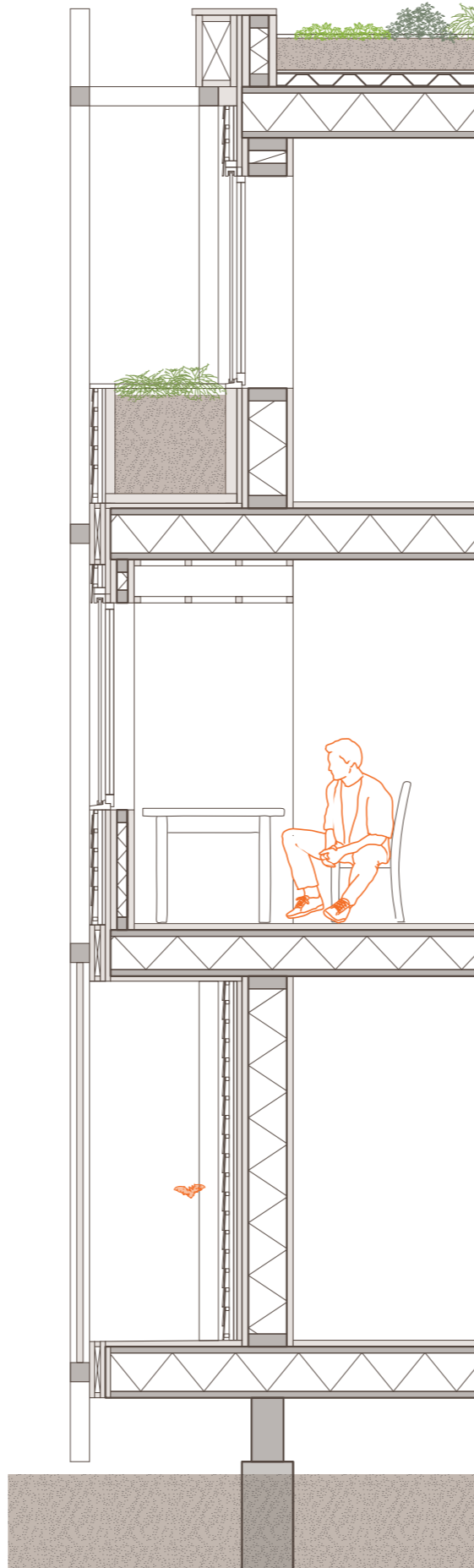


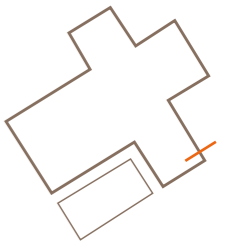
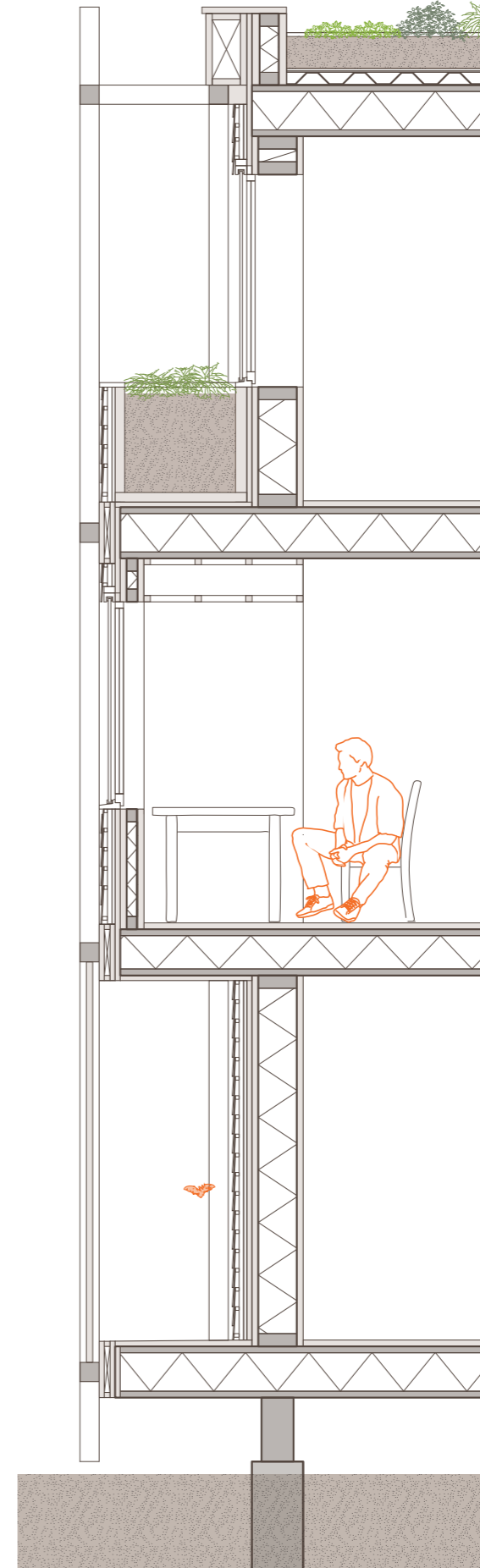
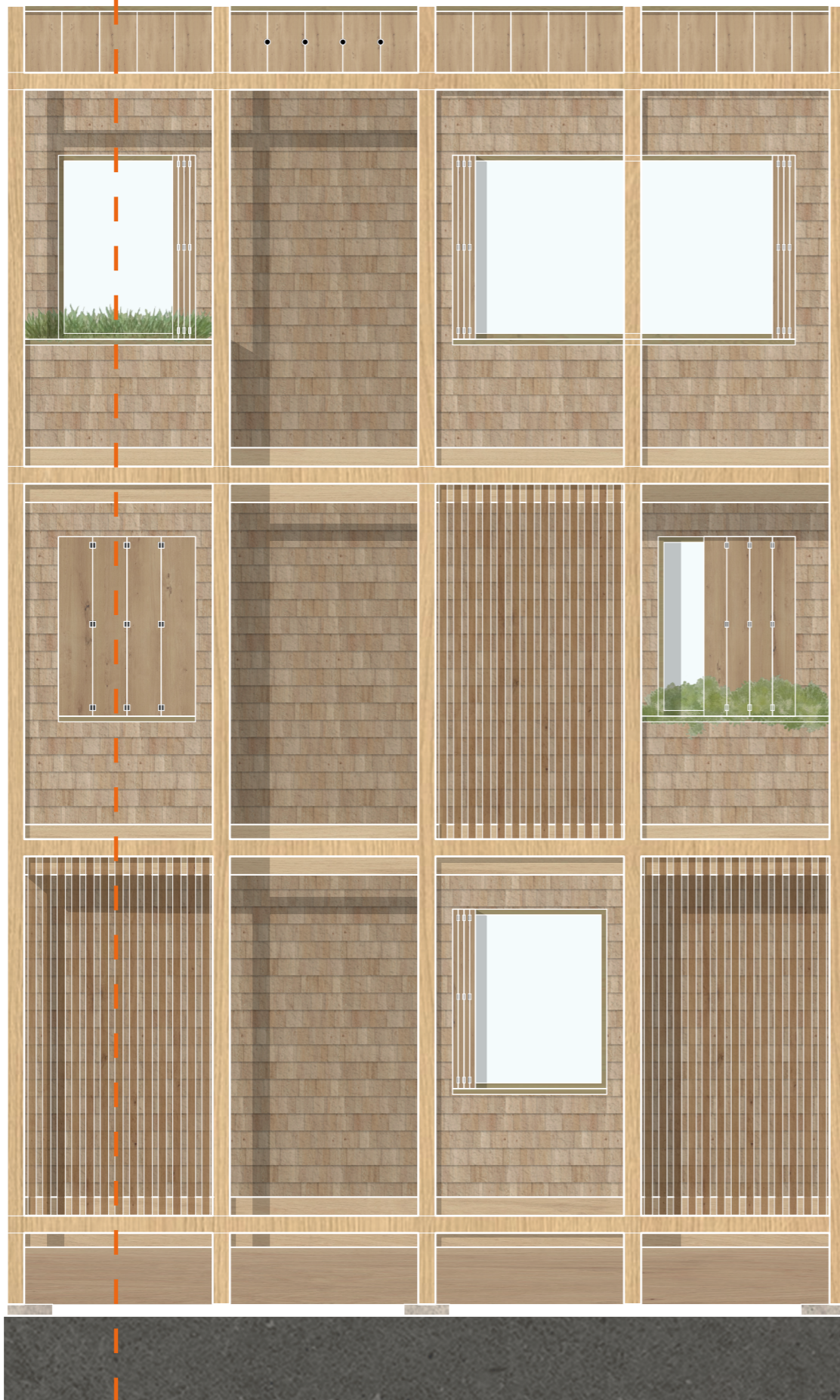
Perspective drawing frame (bird's view)

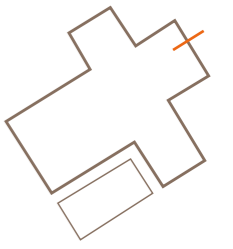
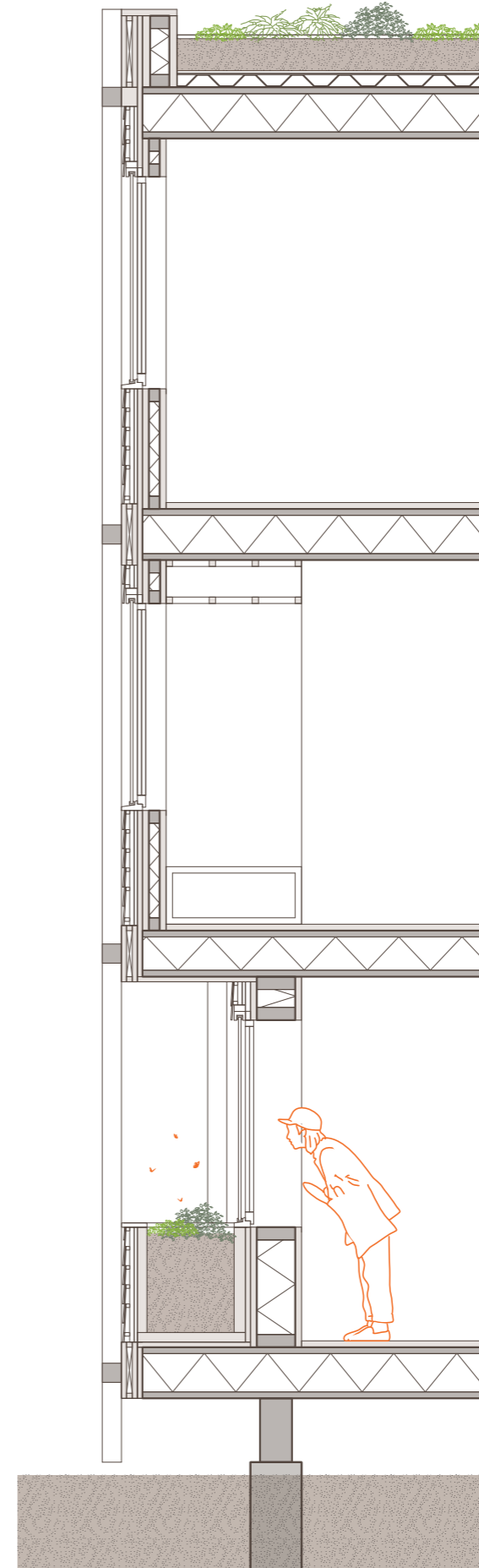
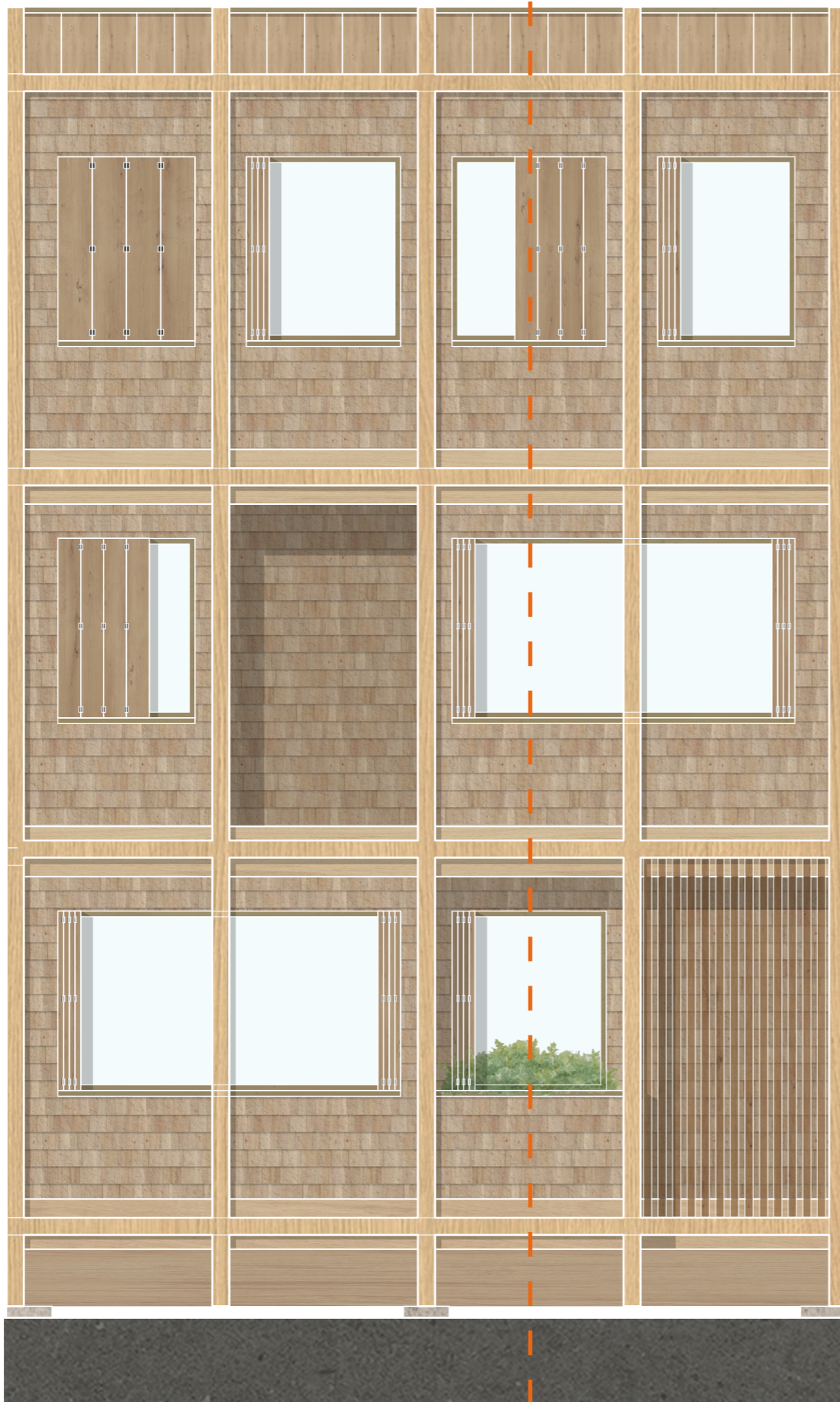


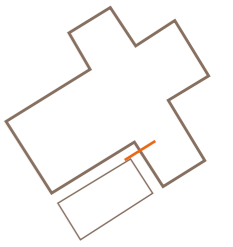
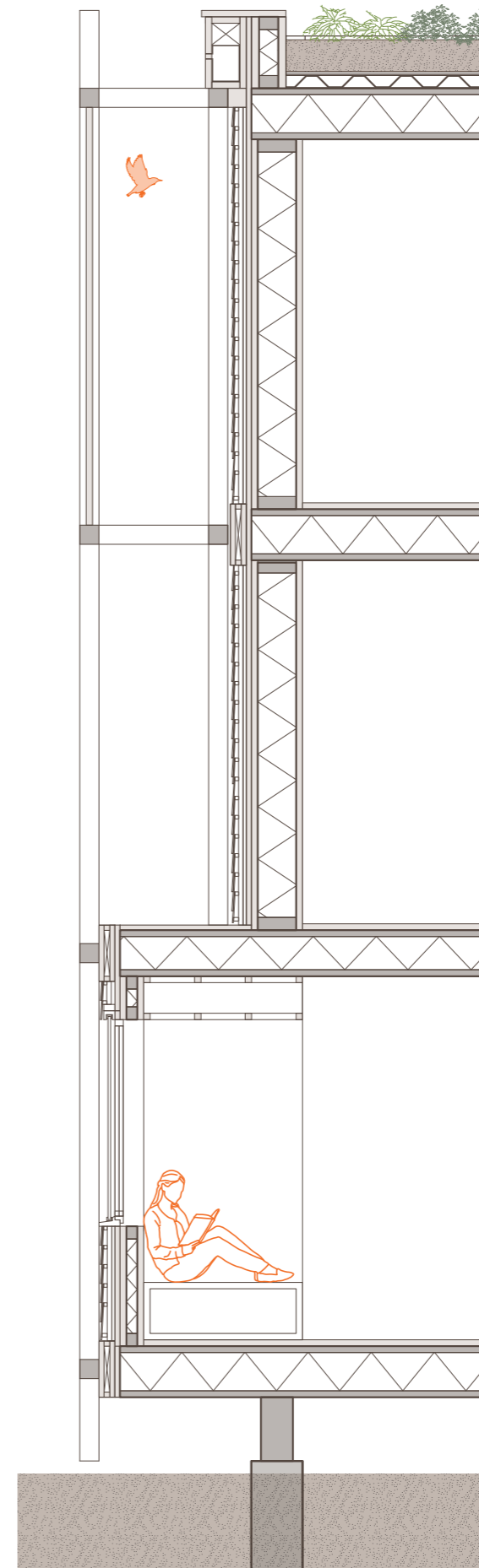
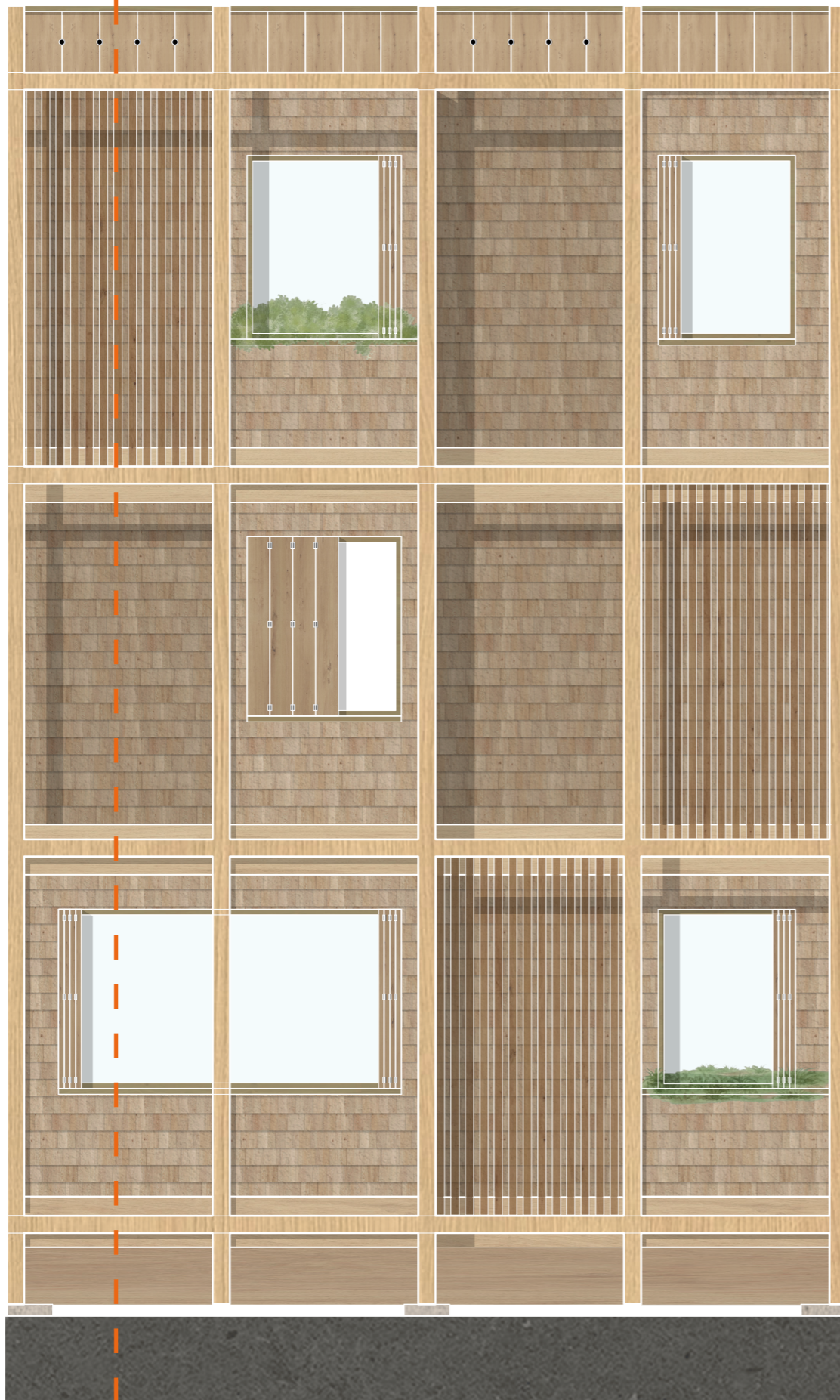






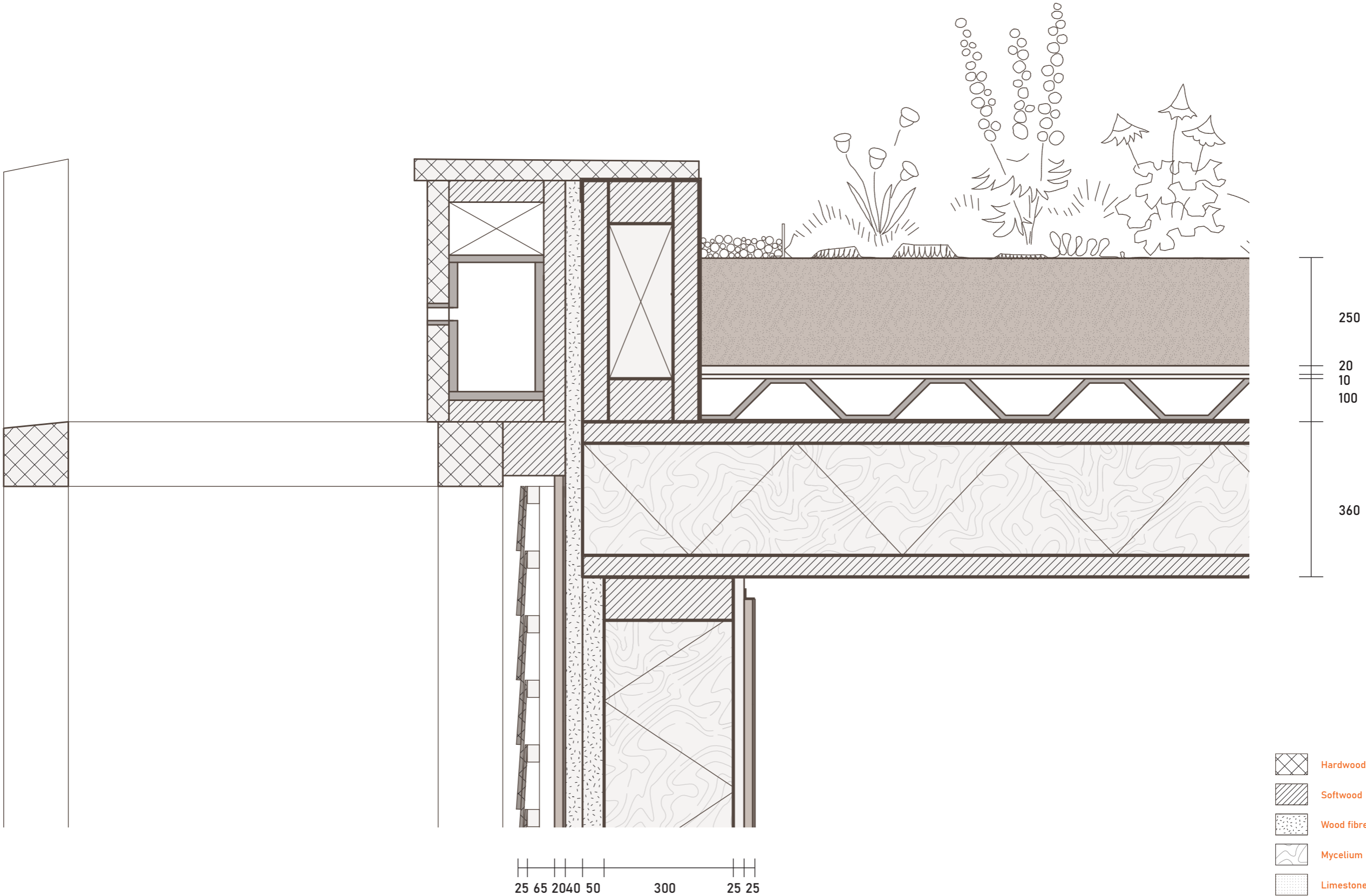


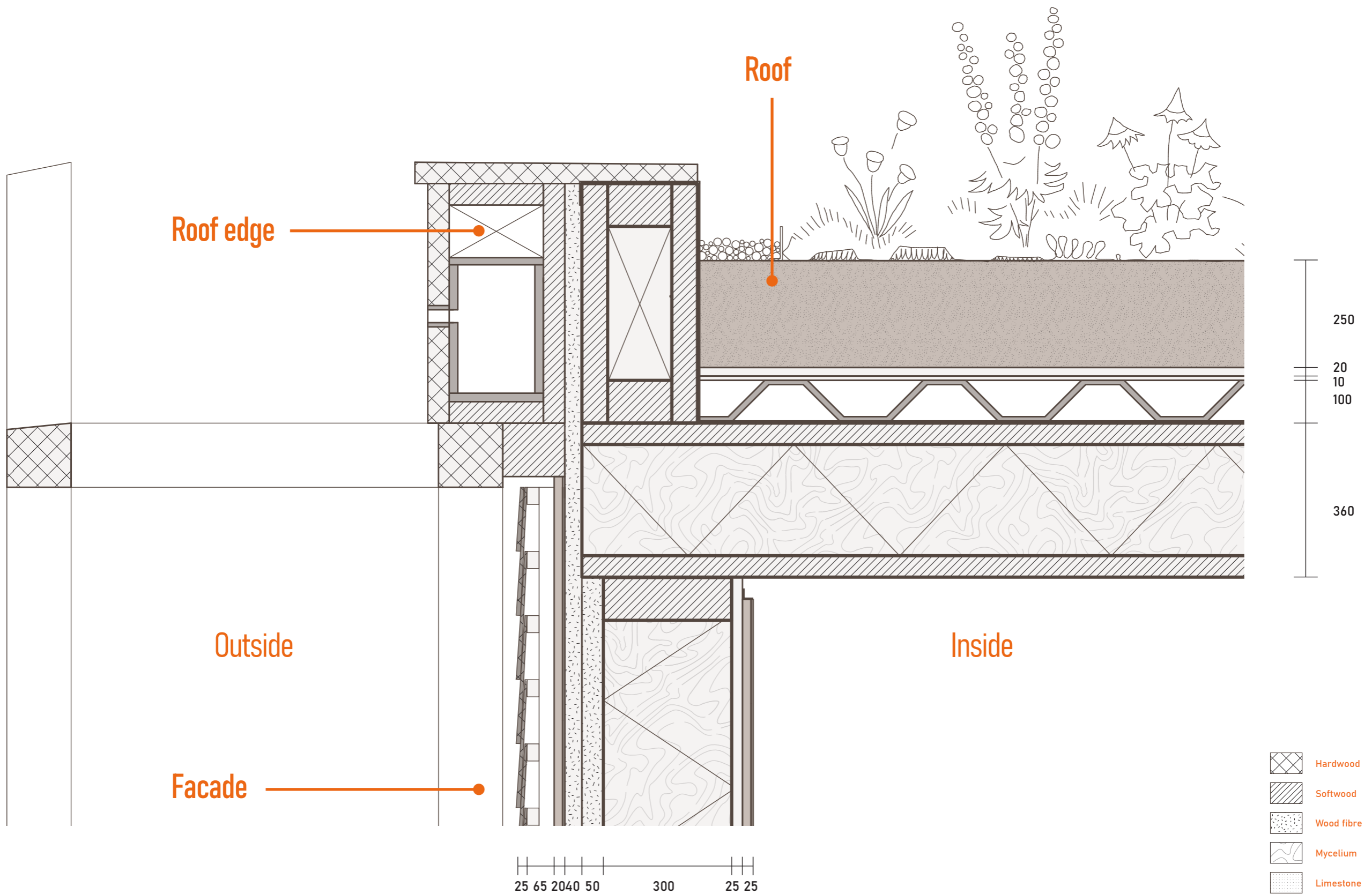






Detail roof 1:5





Roof edge

Roof

Outside

Inside

Facade

250






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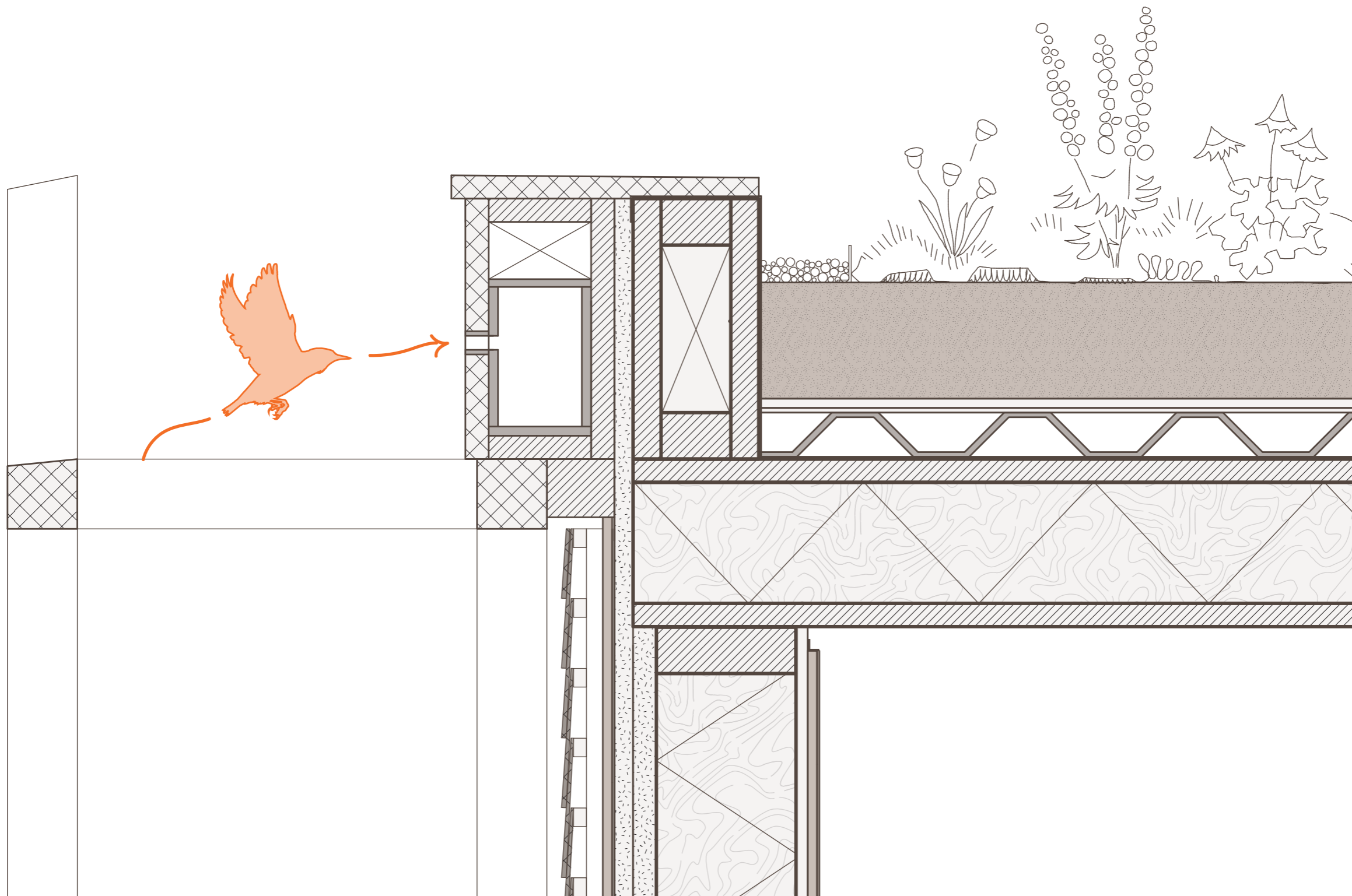
10

100

360






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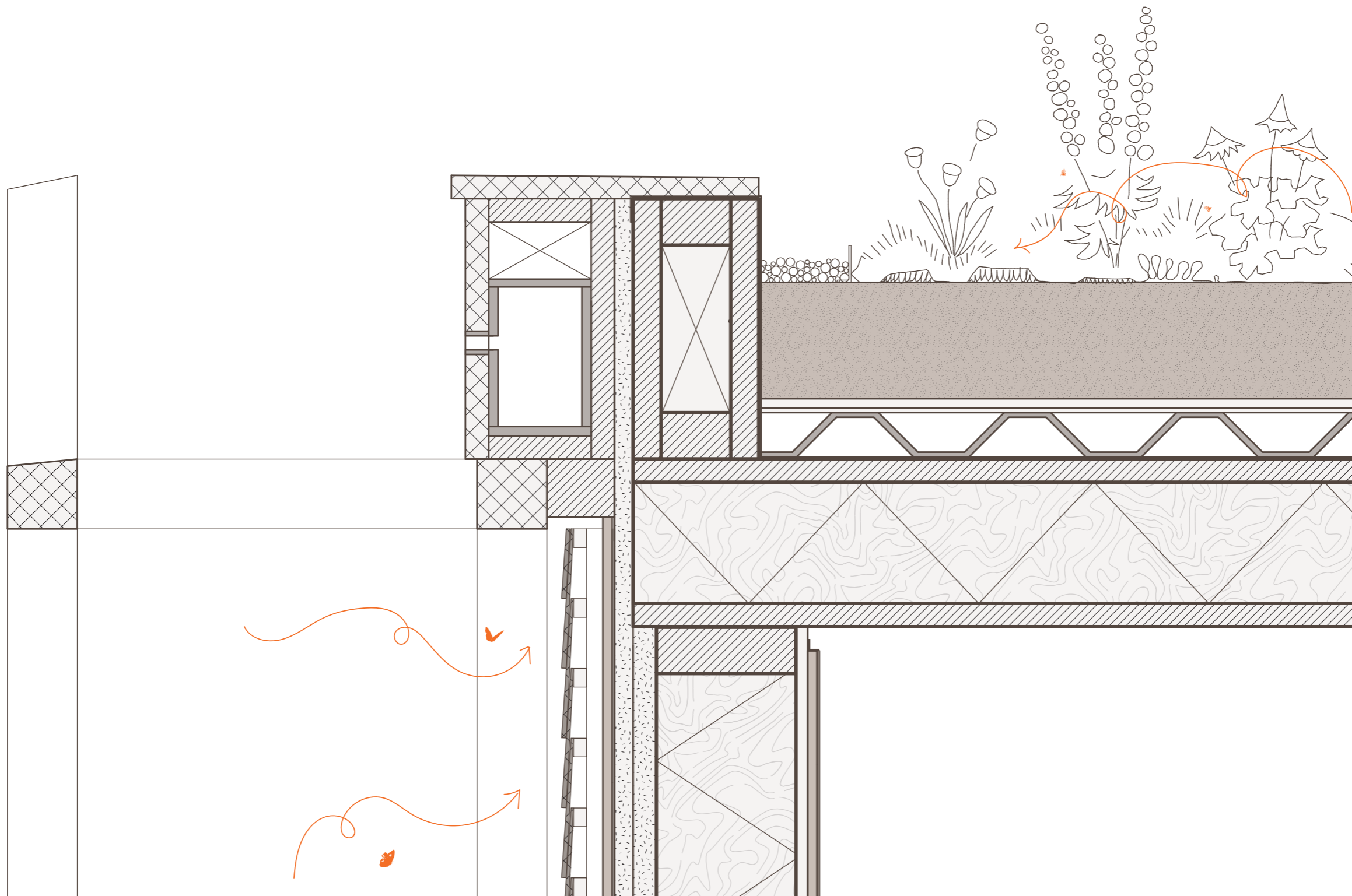
-  Hardwood
-  Softwood
-  Wood fibre
-  Mycelium
-  Limestone



250
 20
 10
 100
 360






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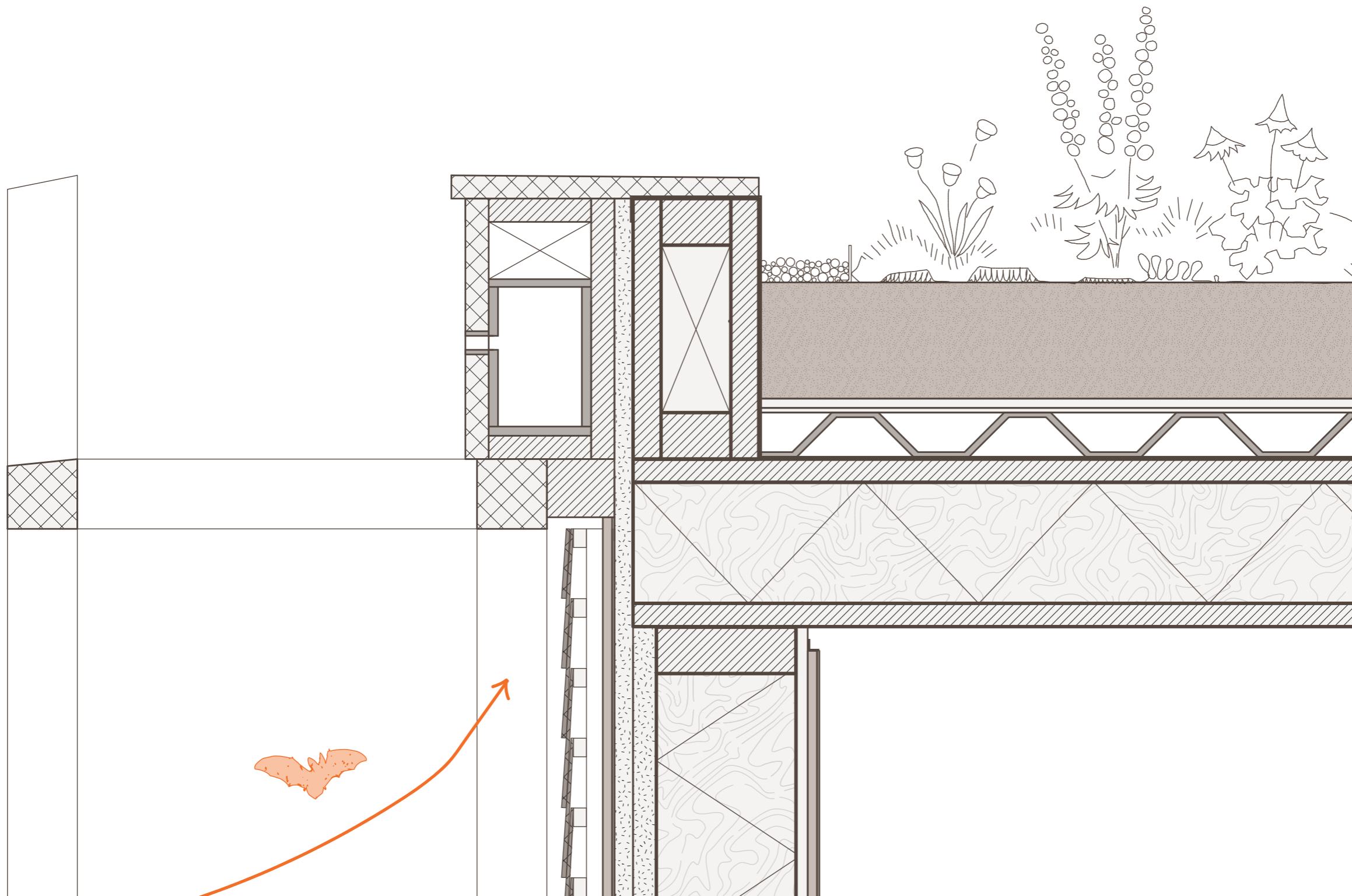
-  Hardwood
-  Softwood
-  Wood fibre
-  Mycelium
-  Limestone



250
 20
 10
 100
 360






25 65 20 40 50 300 25 25

-  **Hardwood**
-  **Softwood**
-  **Wood fibre**
-  **Mycelium**
-  **Limestone**



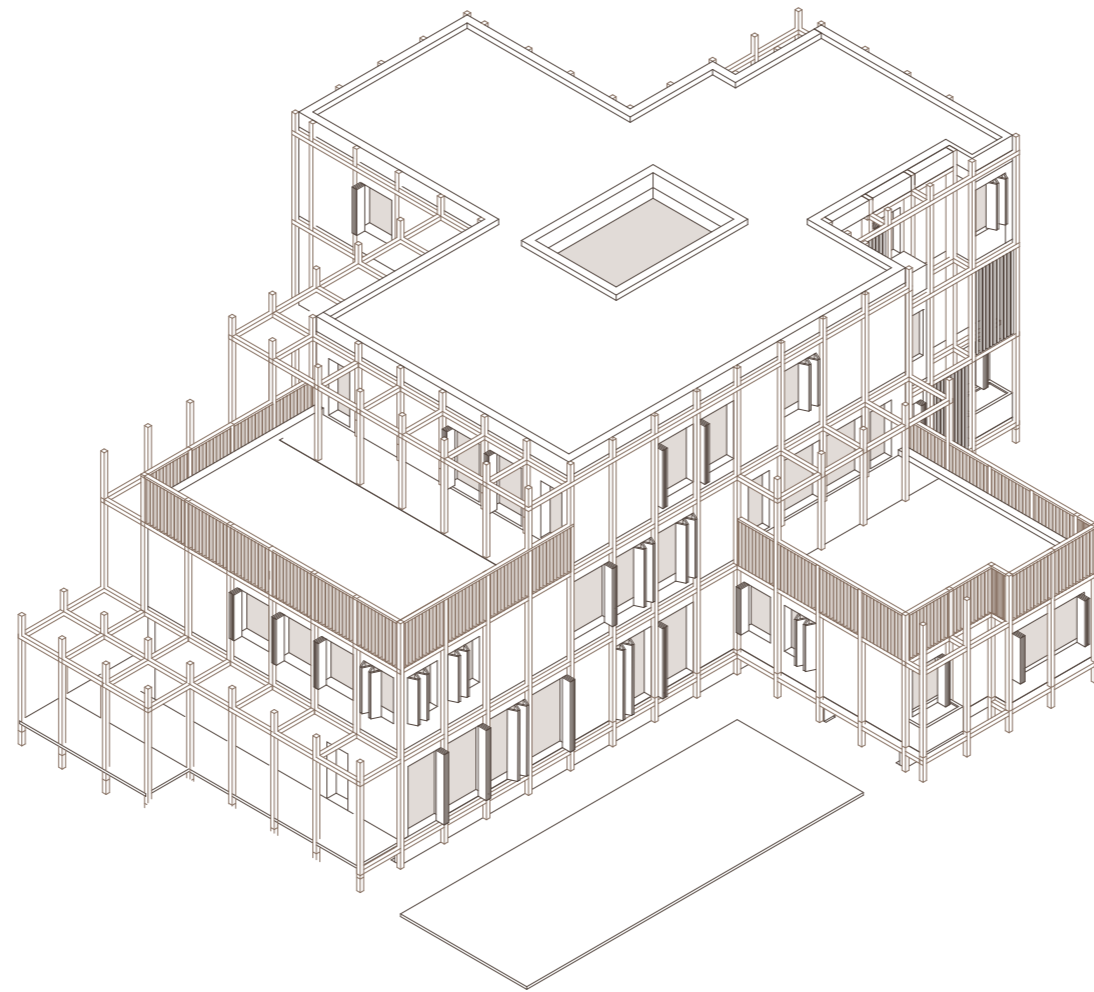
250
 20
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 360

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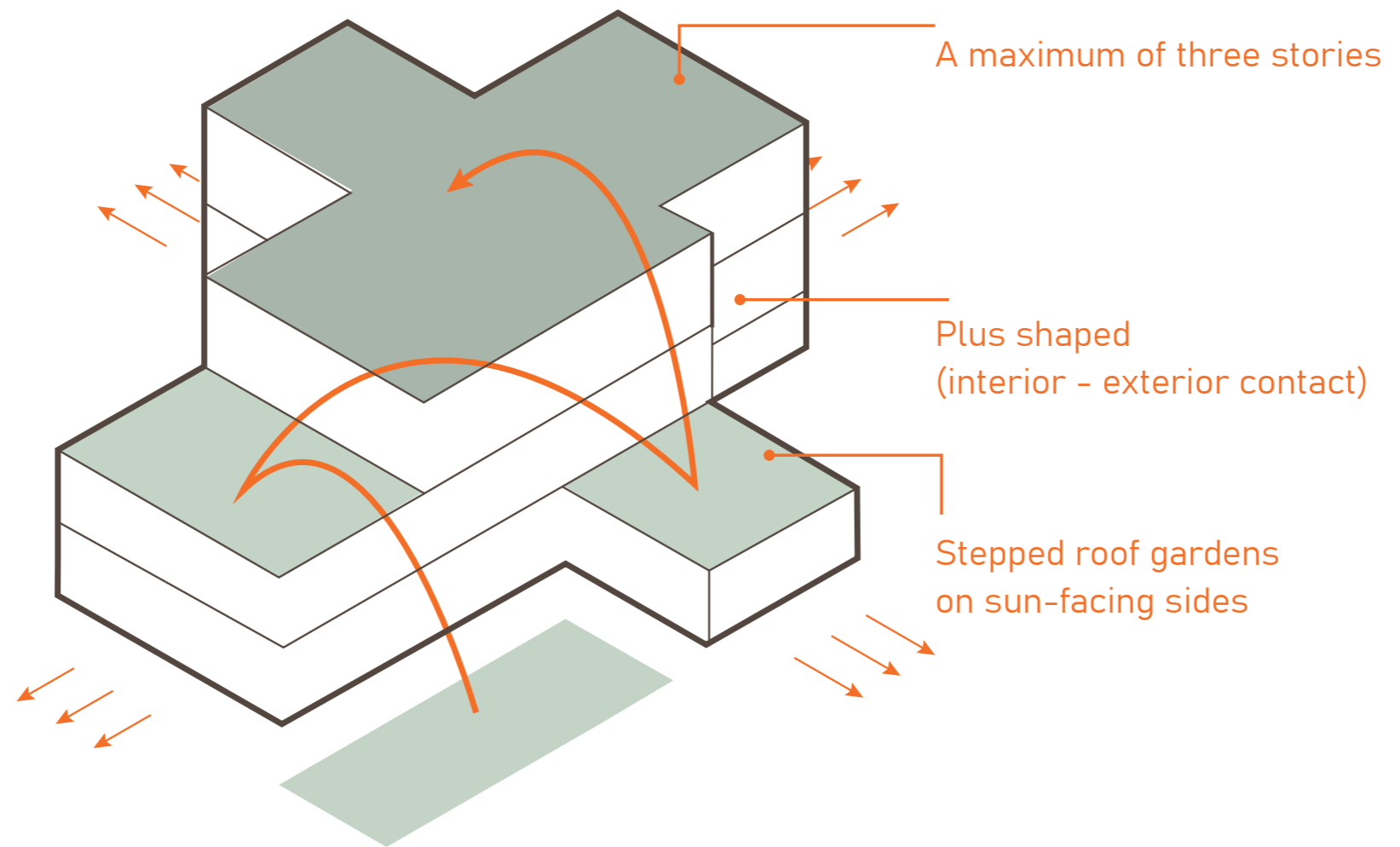
-  Hardwood
-  Softwood
-  Wood fibre
-  Mycelium
-  Limestone





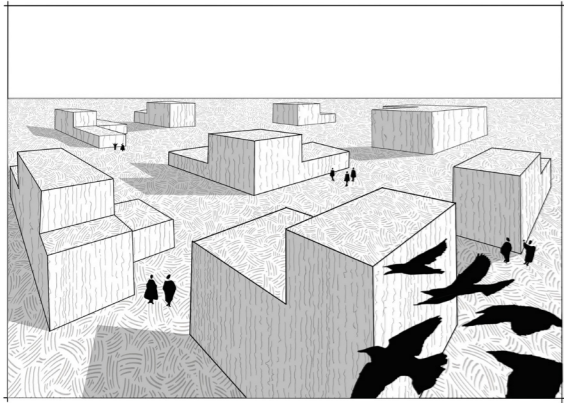


House

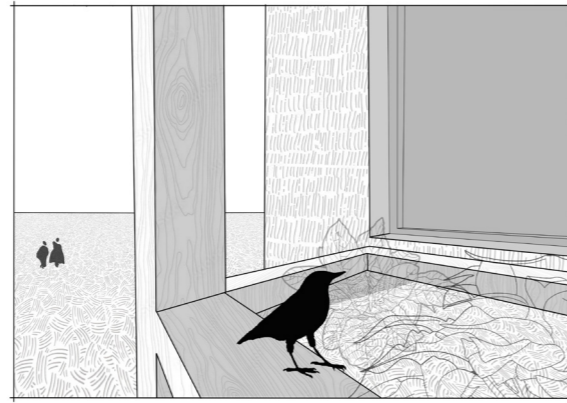




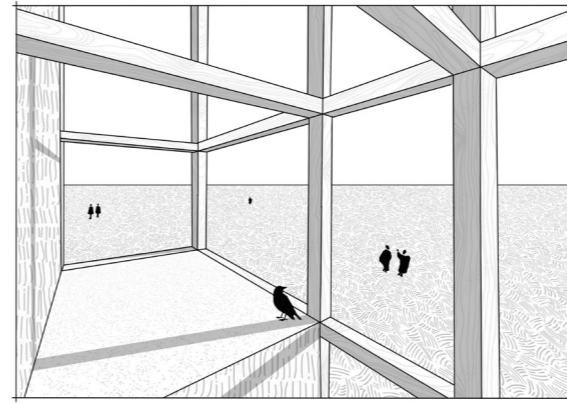
ARRIVE



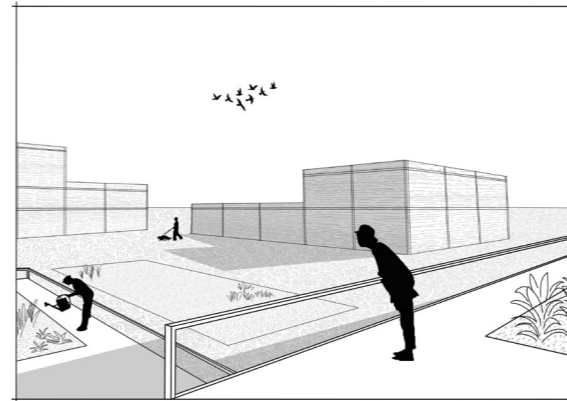
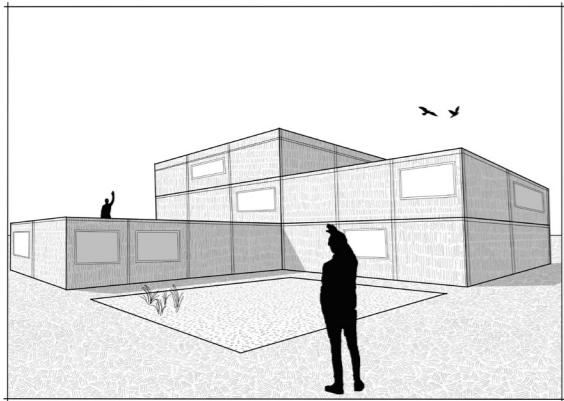
CONSUME



OBSERVE











DECOMPRESS







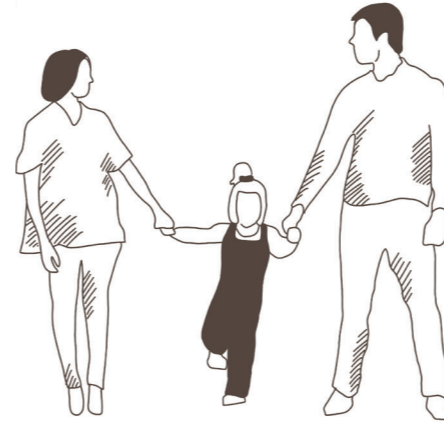


-  Nest box for birds (north & east)
-  Nest spots for bats (throughout)
-  Bee hotel
-  Insect spots (throughout)
-  Resting spots
-  Layered vegetation
-  Gardening spots (Advised: flower)
-  Intensive green roof



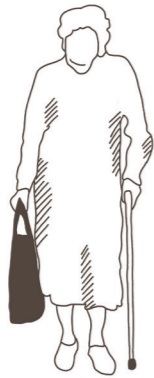
Olev

Olev is a gardening enthusiast who, having recently retired, is eager to spend his days outdoors. While Tallinn has transformed into a skyline of bright, towering buildings since the 90s, Olev has found his spot in this human-scale alternative. It offers him a peaceful place to rest.



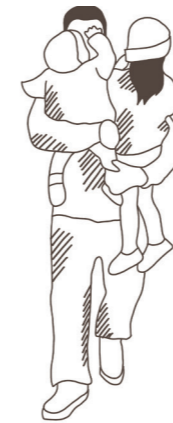
Laura, Artur & Eeva

Navigating urban life with a family can be a challenge, especially when searching for affordable housing in Tallinn. For Artur, Laura, and Eeva, this spot is ideal. It balances a calm, green environment with the joys of communal living, allowing Eeva to grow up alongside their best friends.



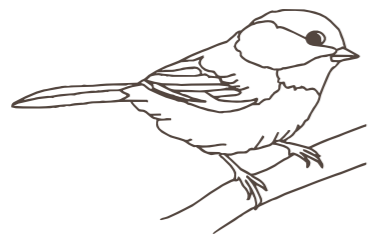
Milvi

After years of living alone, Milvi has found a new lease on life within the community. She thrives on the daily interactions with her "house-sharers," who provide both wonderful company and a helping hand with daily tasks. But perhaps her favorite role of all? Keeping a watchful eye on the neighborhood children and being the community's 'bonus' grandmother.



Aron, Hugo & Nora

Raising two young children on your own is not always easy, but by living in this community it becomes much more manageable for Aron. His neighbors feel like family and support is always just a door away. The location is also great, specially because his kids can walk safely to the kindergarten just across the street.



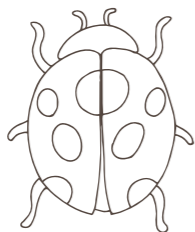
House Sparrow

The House Sparrow used to live in Tuvi Park, but she finds this spot much better. There is a cozy nest box sheltered from the wind, and food is always easy to find.



Northern bat

The greenery and water were the main attractions for the Northern Bat. Water is scarce in Tallinn, but here it provides a vital food source. With a cavity wall surrounding the full building, he stays comfortable in every season.



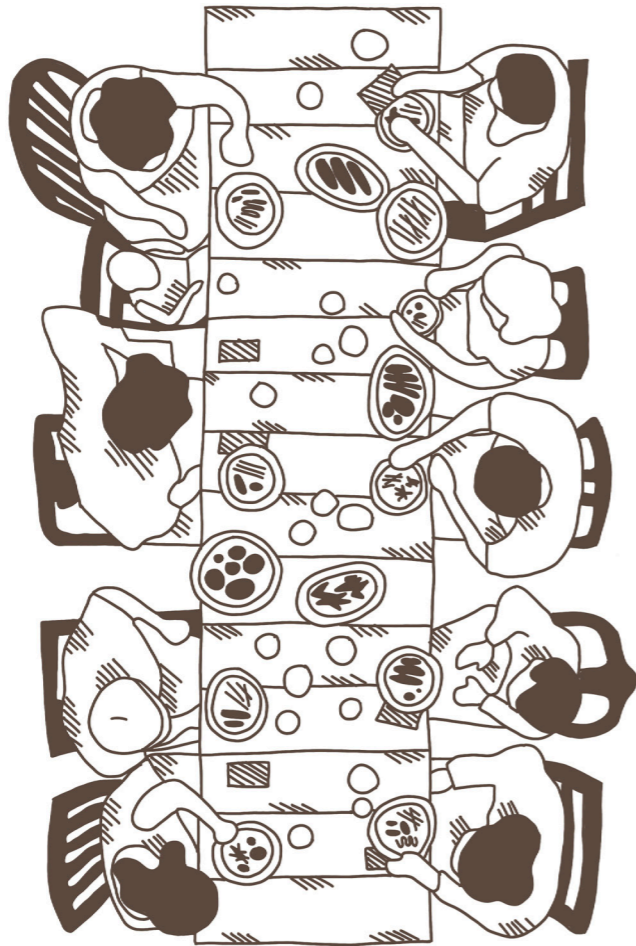
Ladybird

Ladybird enjoys a very sunny stay on the community's facades. The soft bed of loam on the wall makes it comfortable to shelter in. She is very pleased with her peaceful, sun-drenched spot.



Bee

Because he loves the sun more than anyone, the bee lives happily on top of the building. Here, he is surrounded by a wonderful variety of flowers, which are seen in every season.



It is a daily practice set in three
The moment of having a meal.
Besides need for nutrients, it is also the scene
To meet, to chat, to laugh, to whine, to discuss
To connect, like family together
Endlessly linger at the table
Waiting to get to eat.

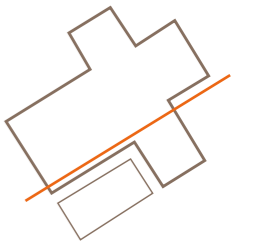
And here it comes!
The much-longed-for plates

Fresh cabbage and carrots and onions and swedes
Made into a little art piece!
It looks so good and it smells... too good
Stomachs start rumbling
And mouths start drooling
Restively waiting for the sign
Can we start, please?

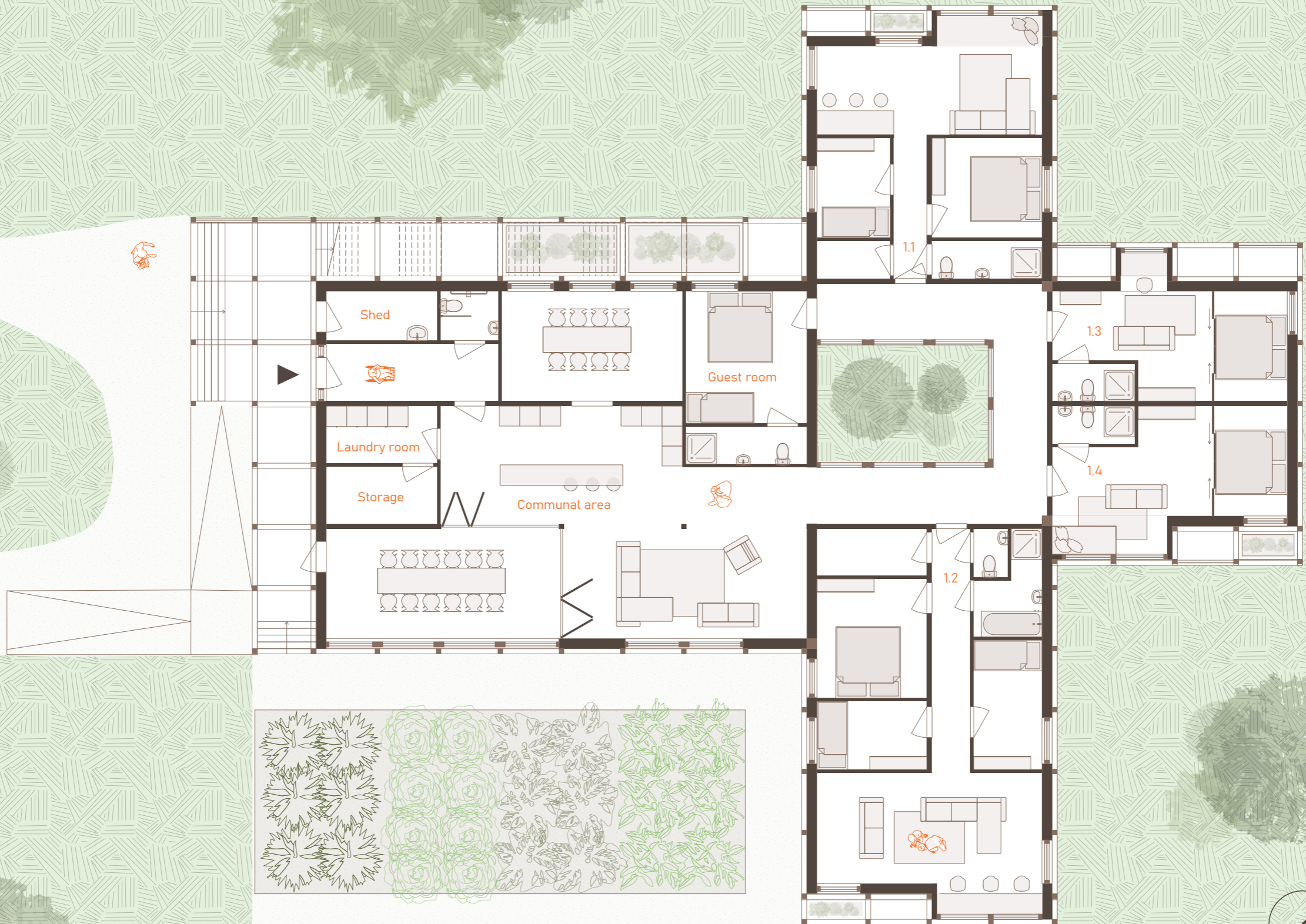
...head isu!
Finally. Time to feed.

Movements are strong
Mouths and jaws work so fast
Eating like a pack of wolves
Temporarily forgetting manners
But, it does not matter
Enjoyment defeats all else
Eating until bellies ache grander

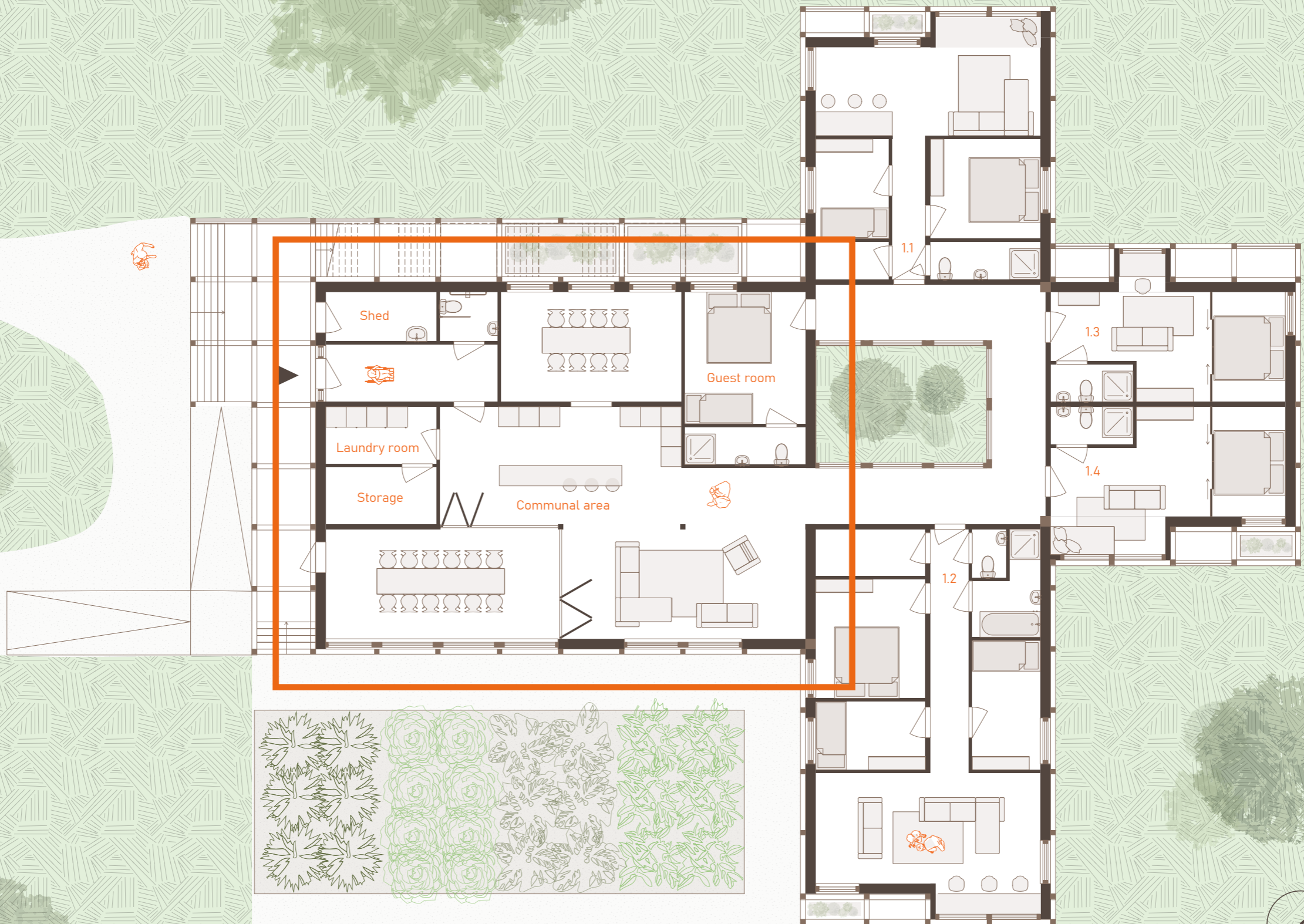
Feasting like beasts.



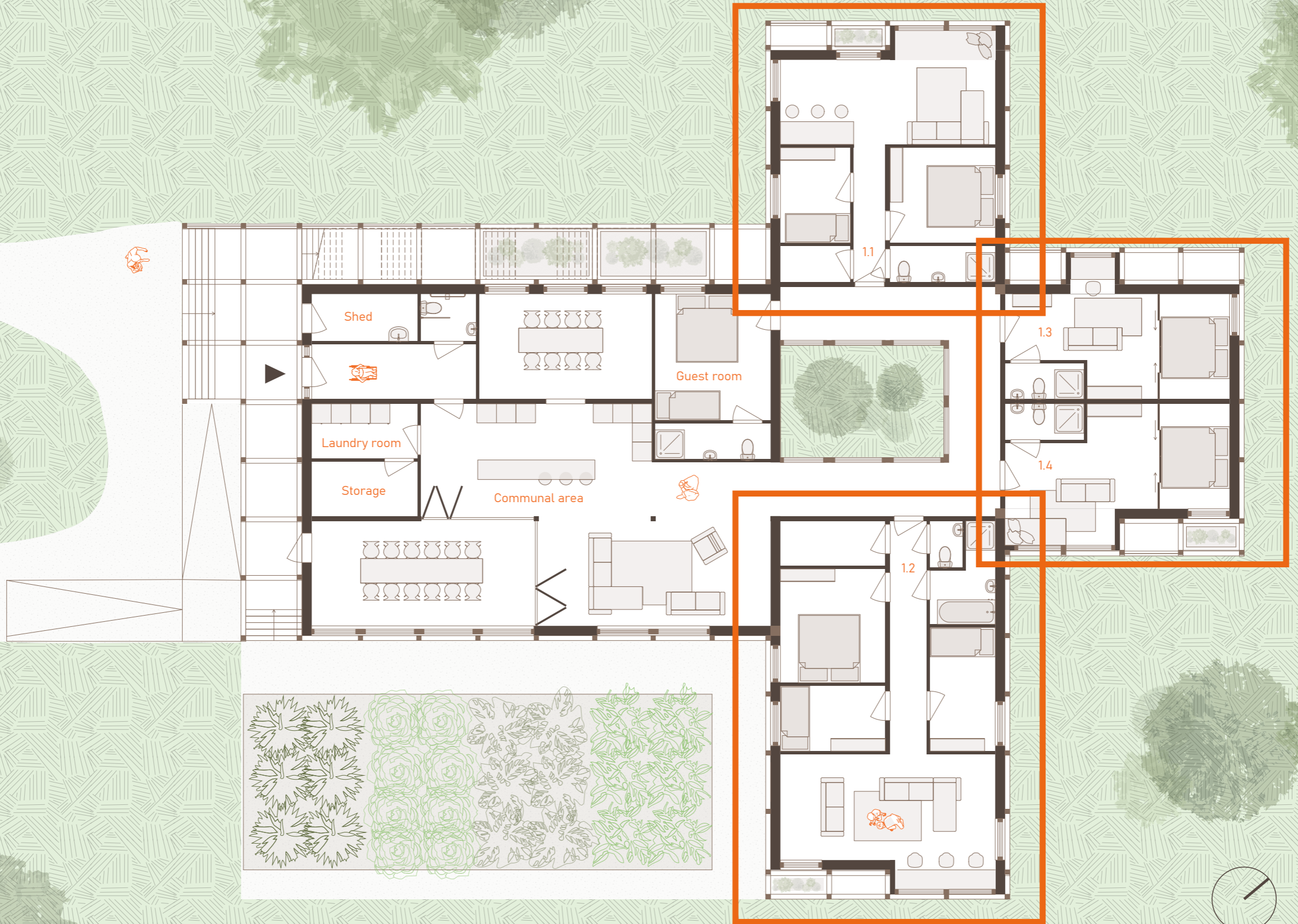
Ground floor 1:100

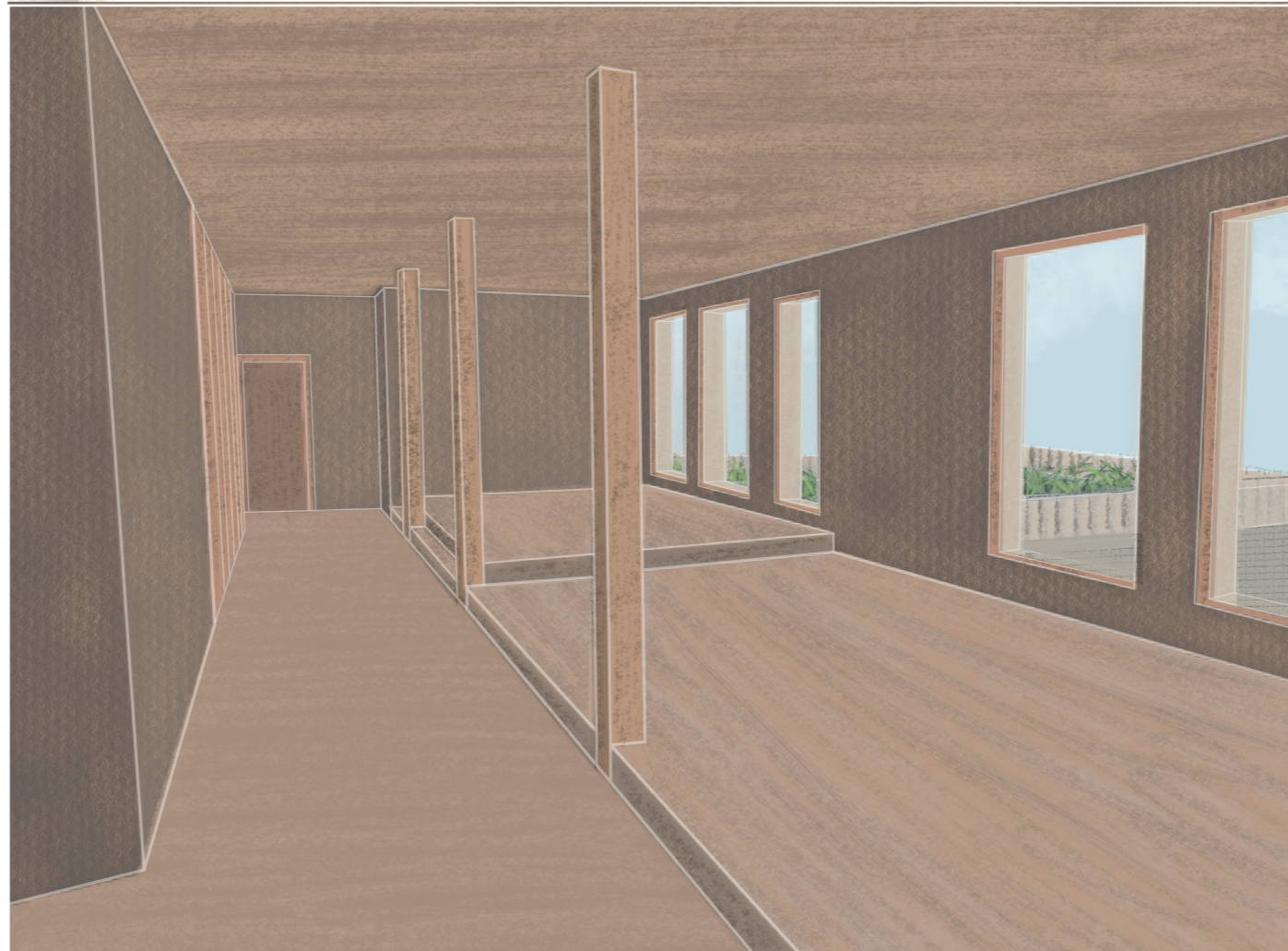


Ground floor 1:100

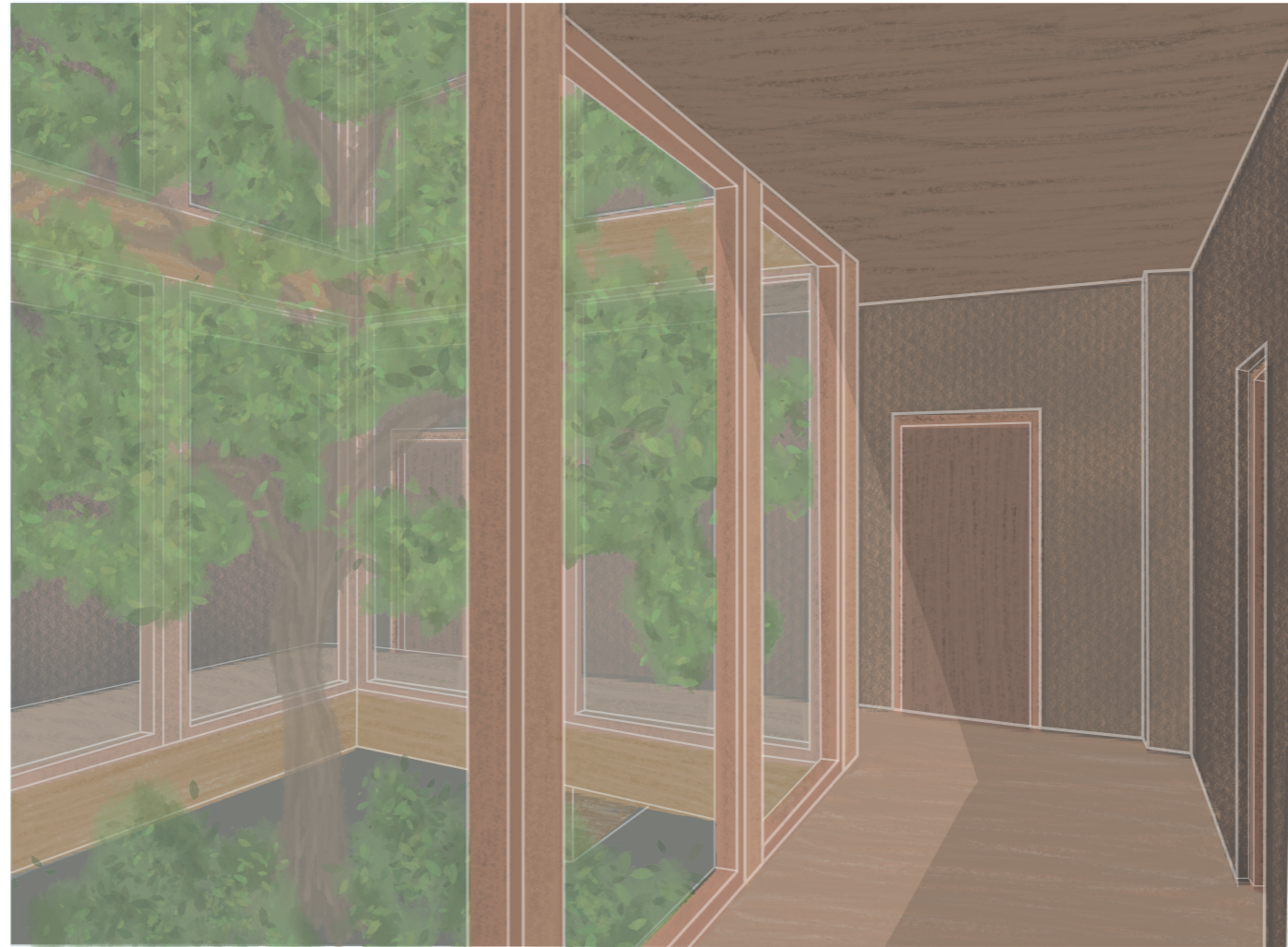


Ground floor 1:100

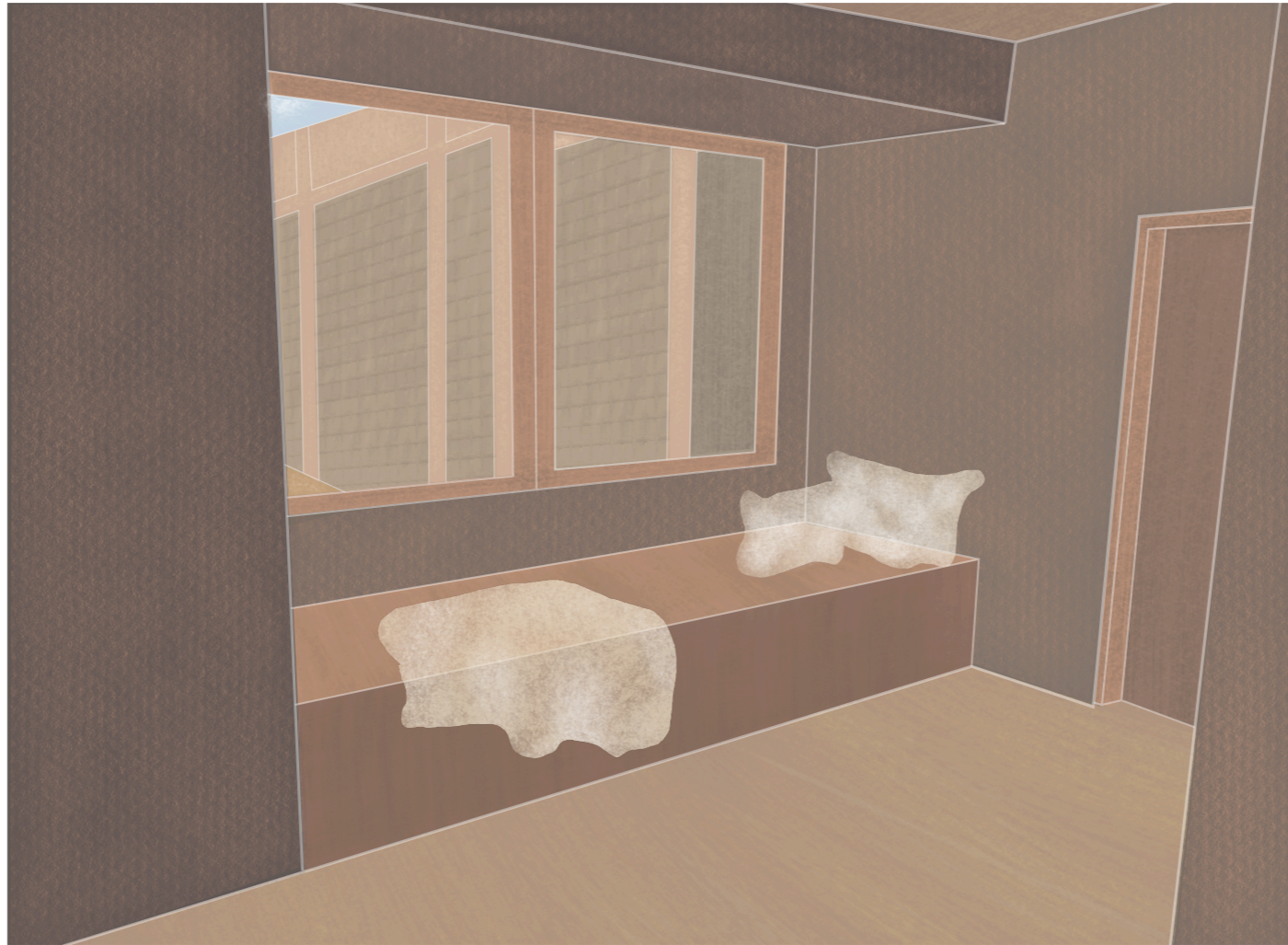




Perspective drawing communal space (first floor)

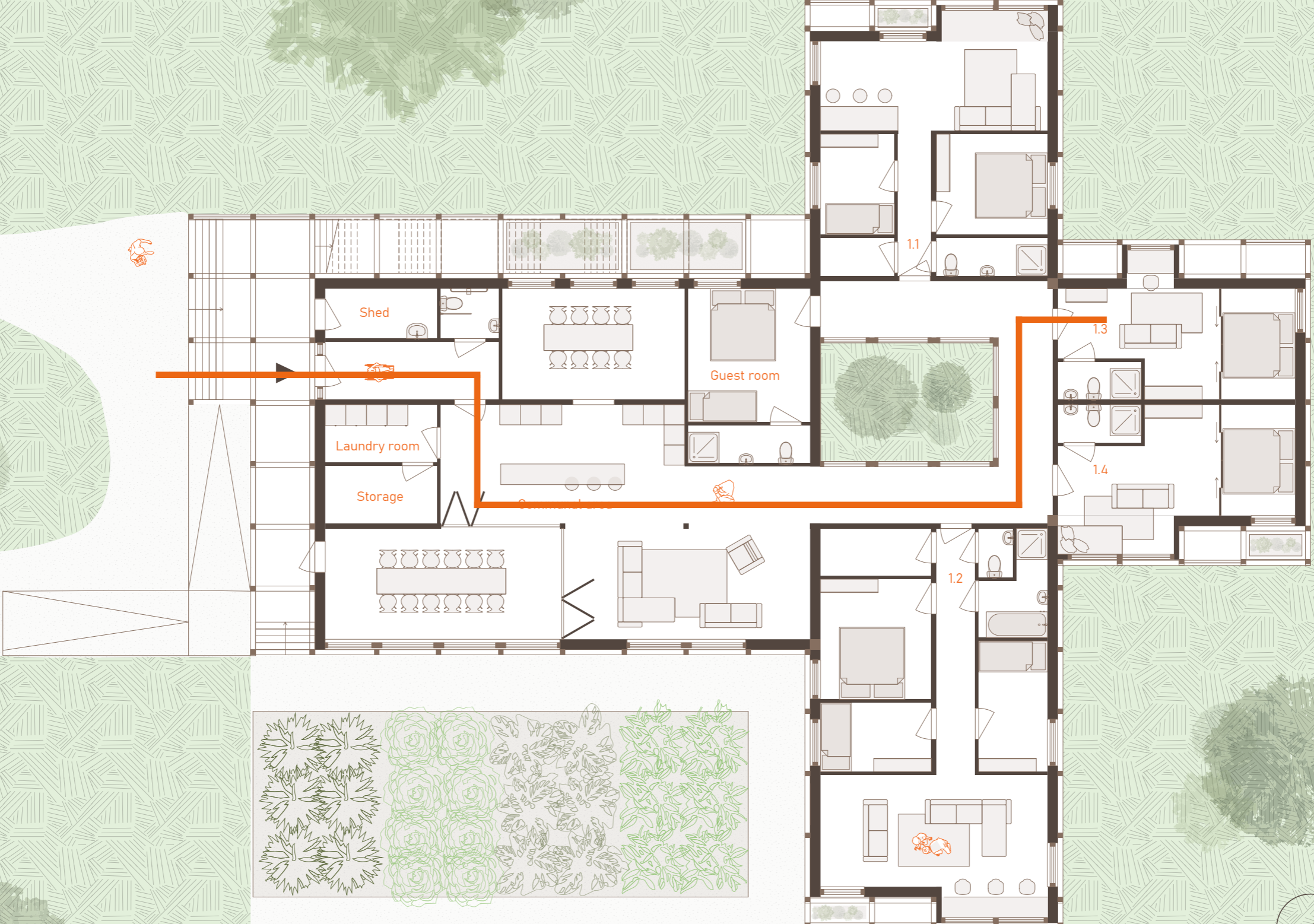


Perspective drawing atrium

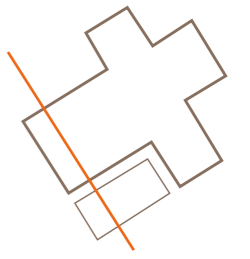


Perspective drawing bay window

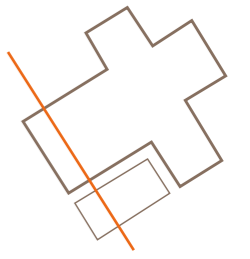
Ground floor 1:100

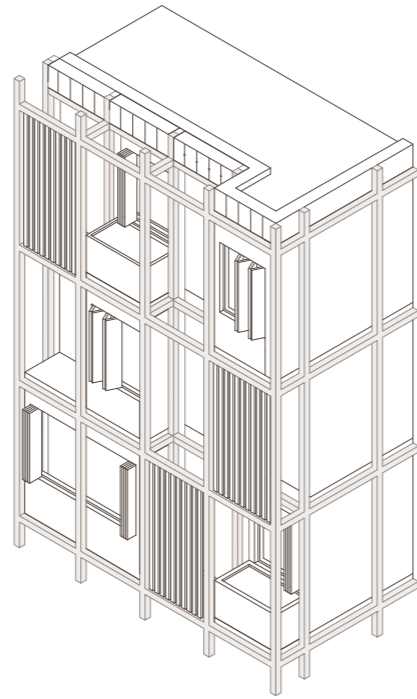


Section 1:50

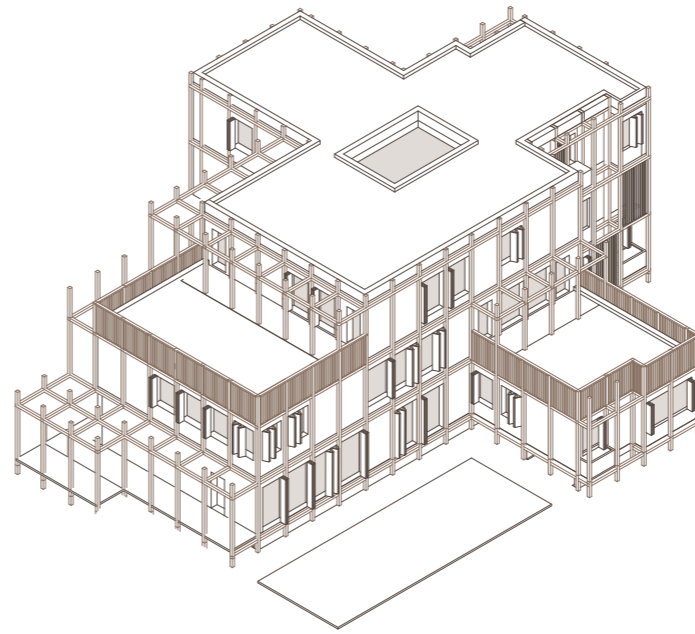


Section 1:50





Roost



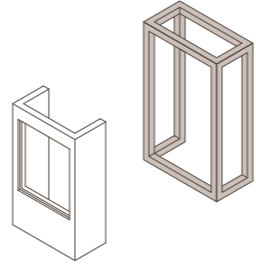
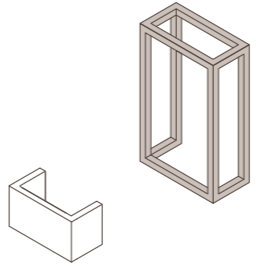
House

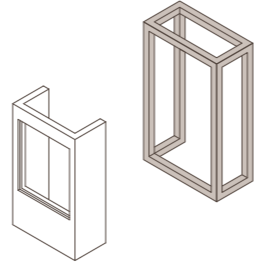
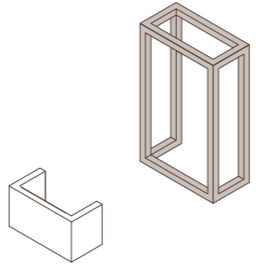


Urban context???

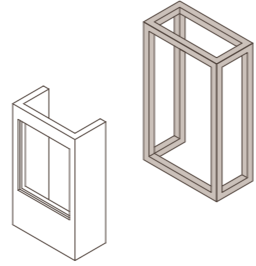
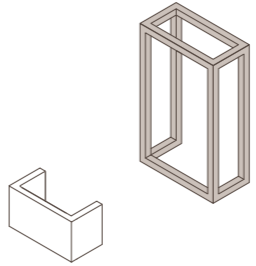


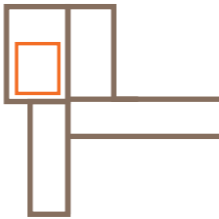

Tallinn

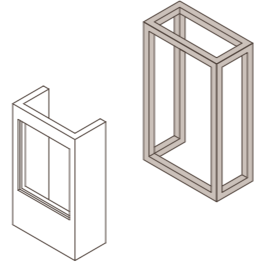
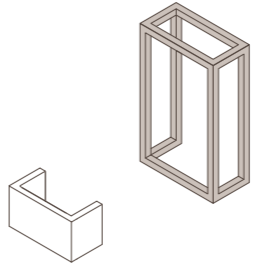


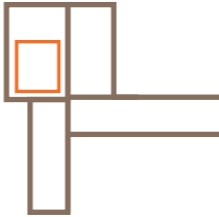

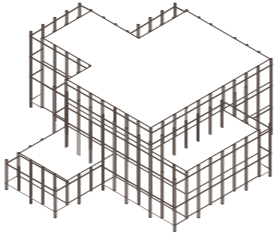
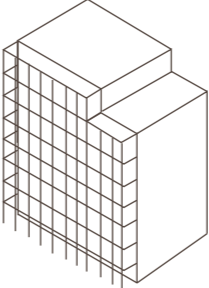
Lyon

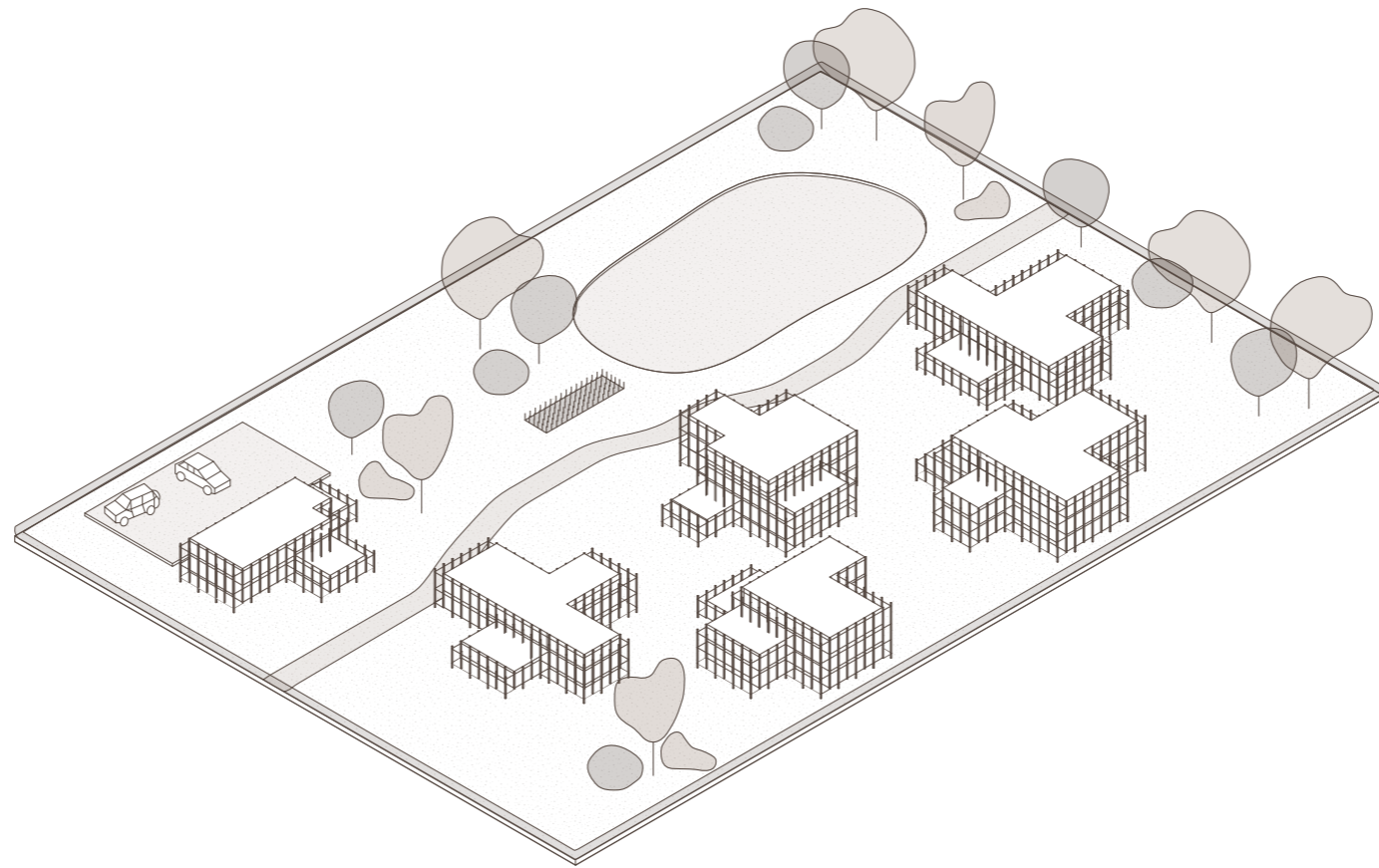
	Tallinn	Lyon

	Tallinn	Lyon
In-between Space	 <p>Bay windows</p>	 <p>Balconies</p>

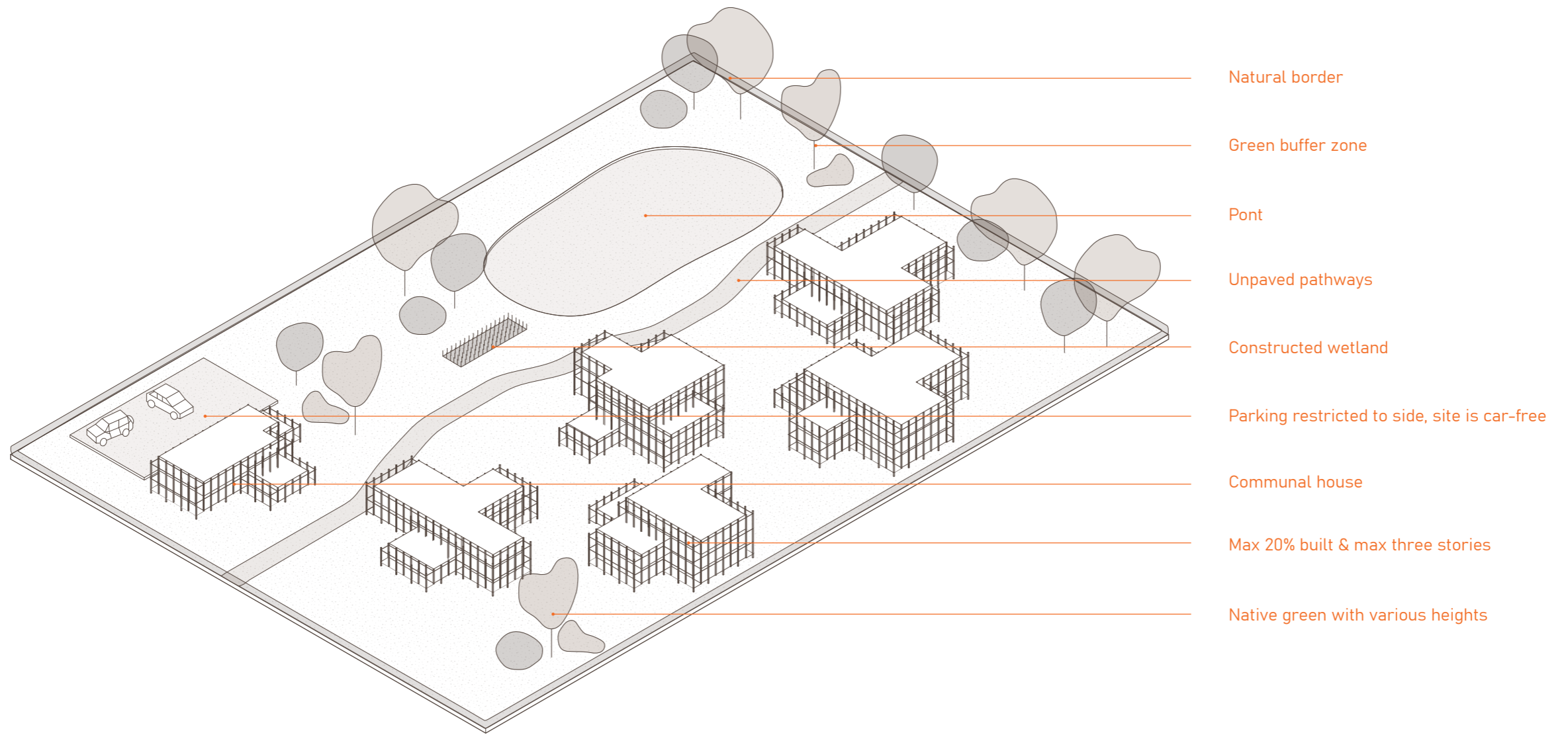
	Tallinn	Lyon
In-between Space	 <p>Bay windows</p>	 <p>Balconies</p>
Materials	 <p>Wood</p>	 <p>Thatch</p>

	Tallinn	Lyon
In-between Space	 <p>Bay windows</p>	 <p>Balconies</p>
Materials	 <p>Wood</p>	 <p>Thatch</p>
Roof edge	 <p>Integrated nest box</p>	 <p>Overhang (sun & swallow)</p>

	Tallinn	Lyon
In-between Space	 <p>Bay windows</p>	 <p>Balconies</p>
Materials	 <p>Wood</p>	 <p>Thatch</p>
Roof edge	 <p>Integrated nest box</p>	 <p>Overhang (sun & swallow)</p>
Form	 <p>low urban villa's</p>	 <p>mid-rise</p>

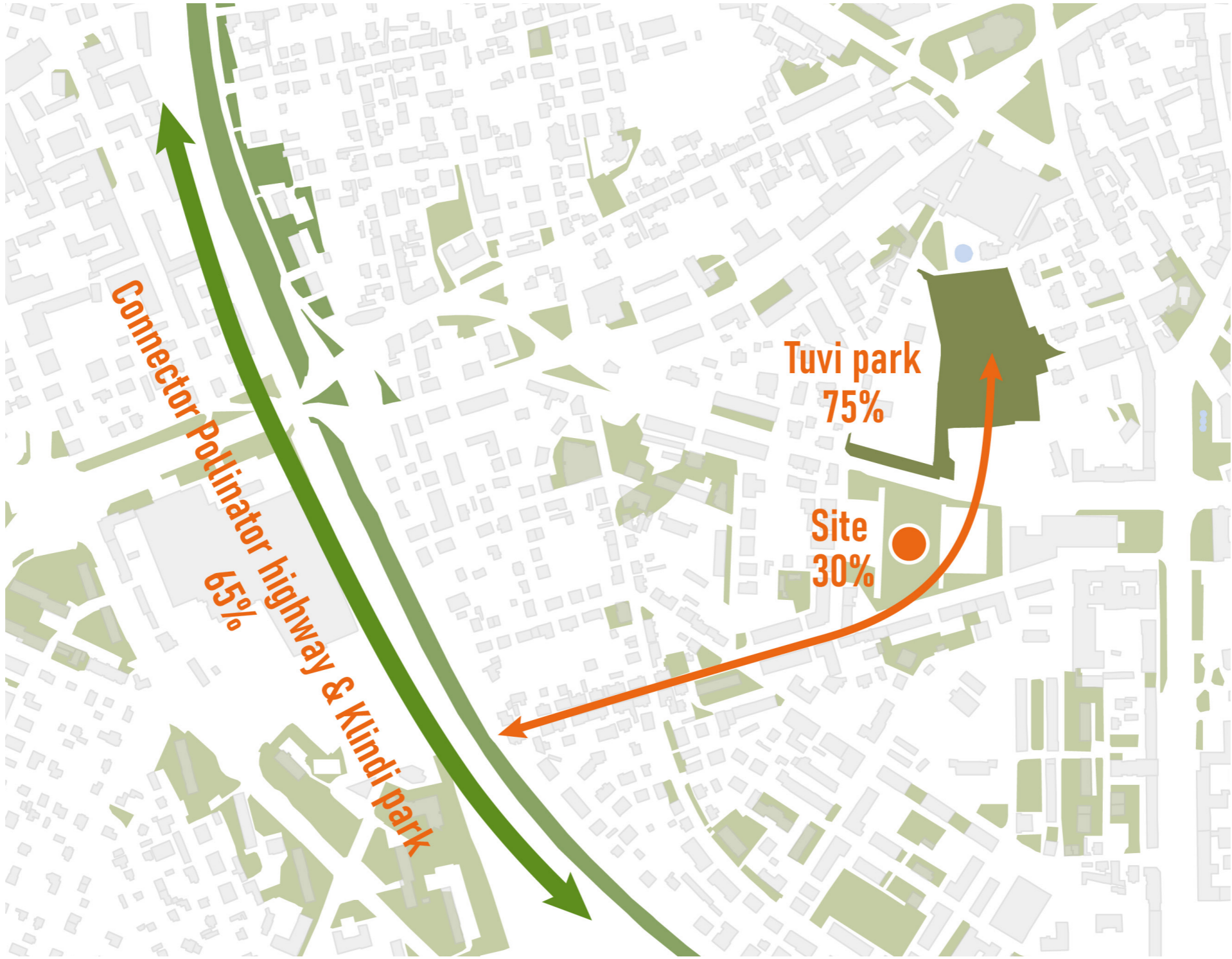


Neighbourhood



Green connection masterplan

(biodiversity in %)



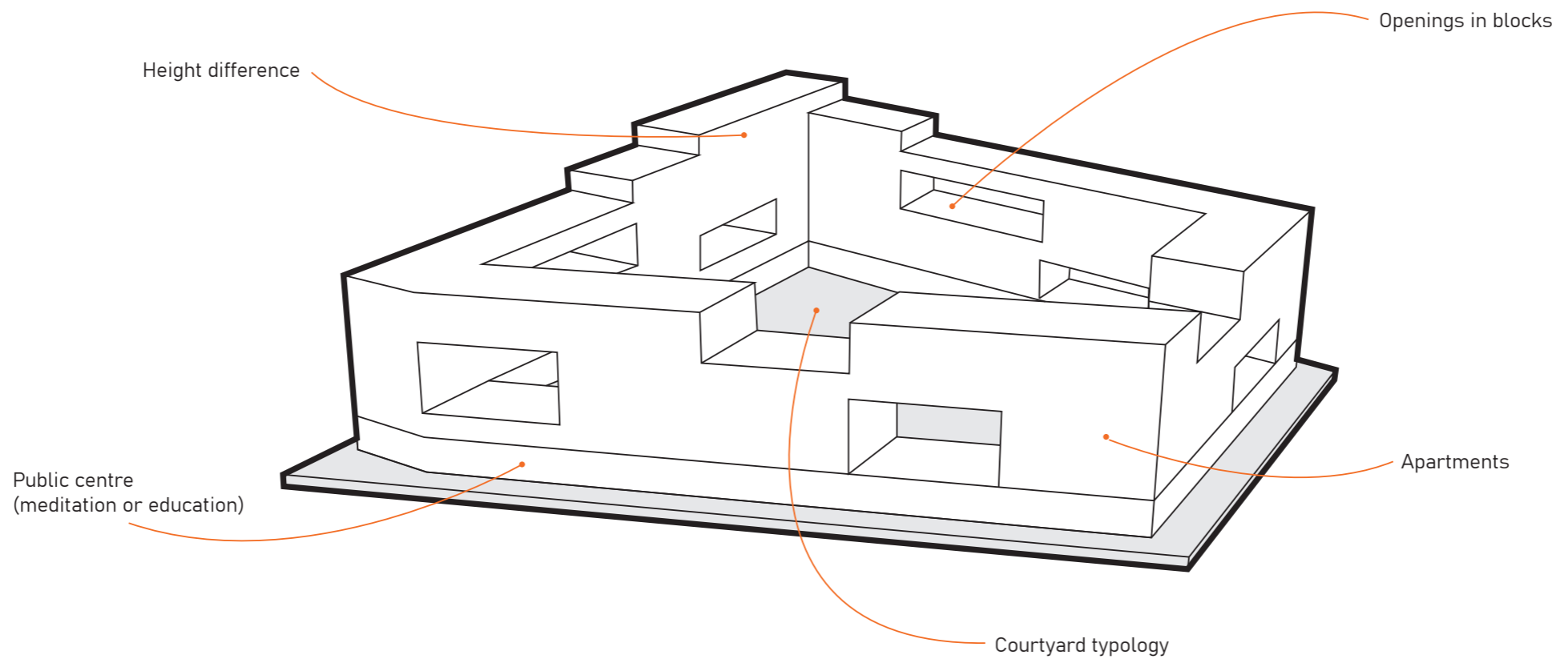
Site 1:500

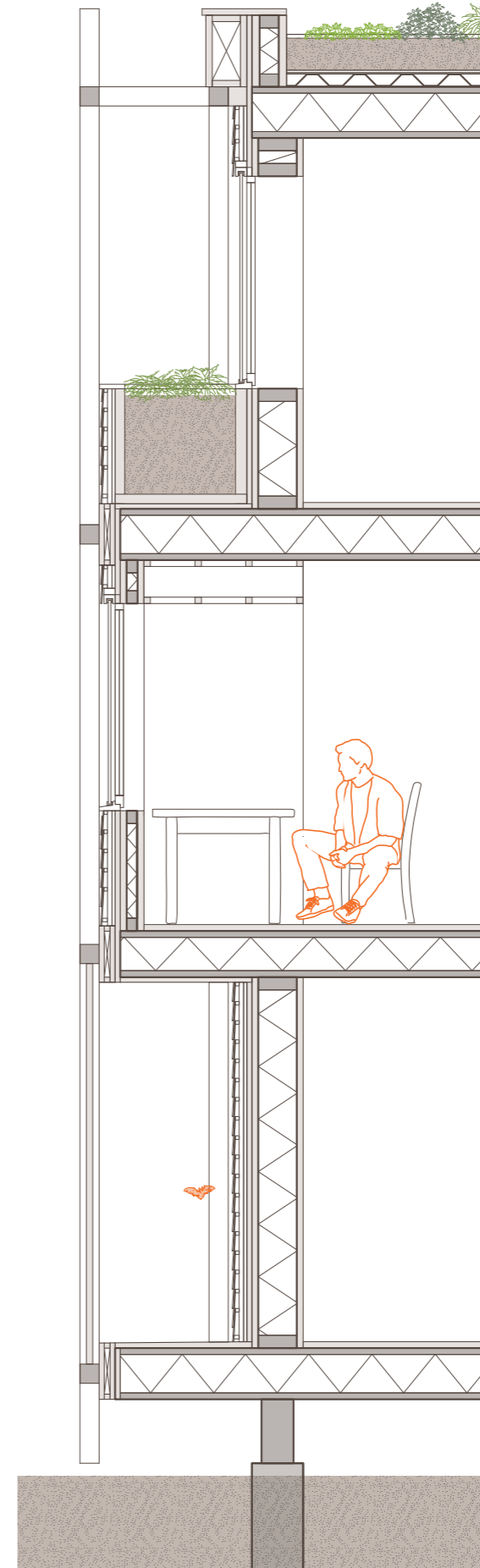
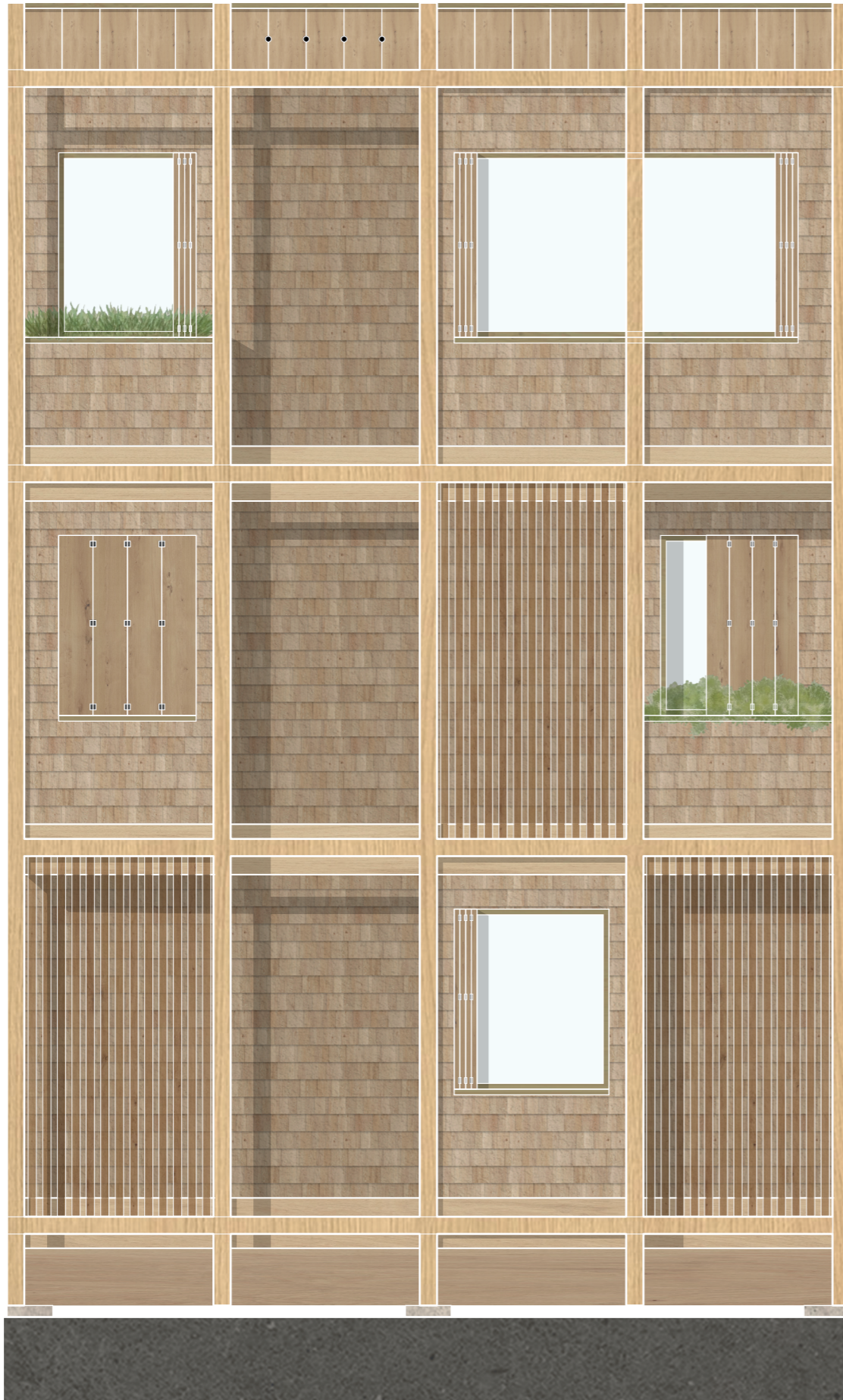




Perspective drawing exterior

Porosity









CO-HABITAT

Nature-inclusive communal dwelling

