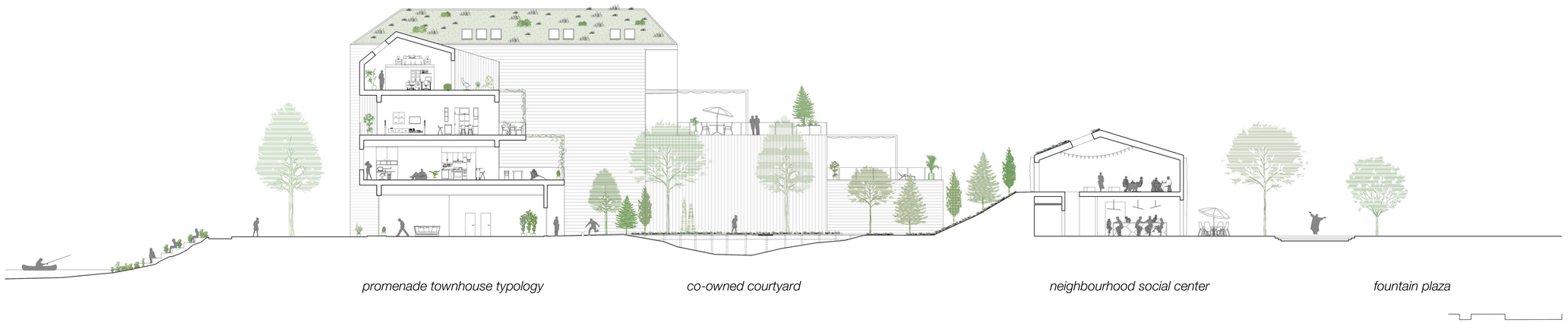
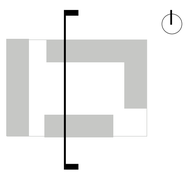
New Sugar Factory District Masterplan scale 1:600


Hoendiep canal
main urban square
canalside promenade
semi-private zone
semi-private zone
semi-private zone
semi-private zone
water pond
co-owned zone
water mirror
post-industrial chimney
local community center
community center square
playground
fountain square

Longitudinal section 1:200





Cross-cut section 1:200

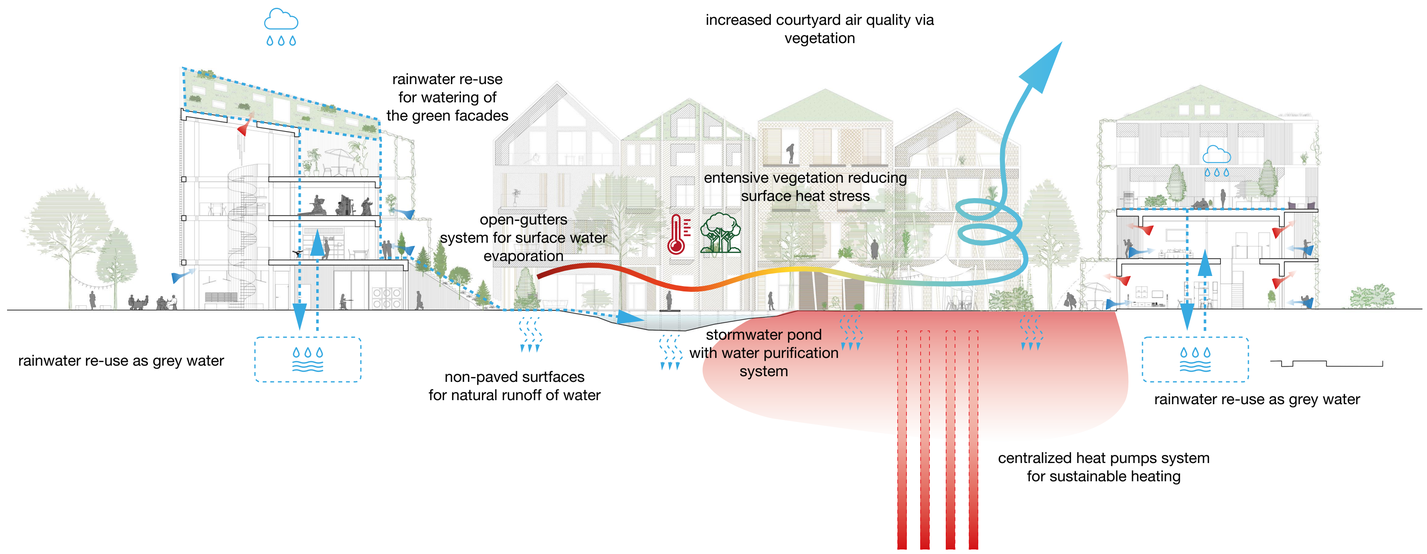
Bioswale strategy

Project approach has brought certain requirements for relation between architecture of the living environment and the natural ladscape design. The most appropriate design strategies has been analyzed and bioswale method had been chosen.

Bioswale is a strategy to decentralize the water retention system, instead of overloading sewage system water is led to naturally vaporate through open gutters and ditches. When this logic is combined with extensive green infrastructure it helps to improve biodiversity levels and quality of living. This system must be connected to the surface waters, and Hoendiep canal situated aprox. 40m from the courtyard would fulfill this requirement.

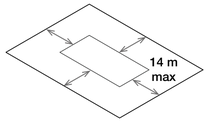
Climate design

Extensive bioswale to purify stormwater, control climate, reduce heat stress. Applied strategies to re-use rainwater as grey water and evaporate the surface rainwater loads in natural manner with use of open gutter systems, majority of surfaces predicted to be non-paved, porous. Decentralized, locally generated heat system providing sustainably generated heat via use of ground heat pumps system with central unit located within centrally-located community building.

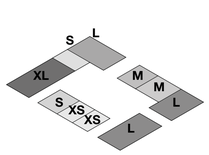


Bioswale strategy

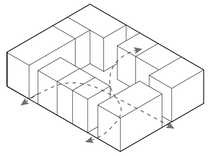
Climate design



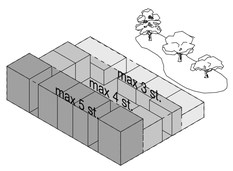
Footprint



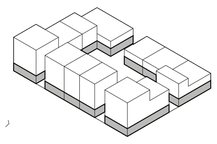
Plot sizes



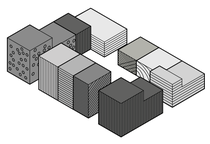
Connectivity



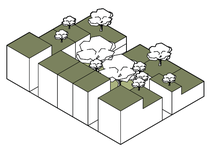
Scale



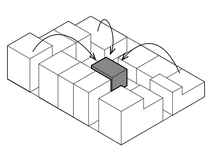
Active plynths



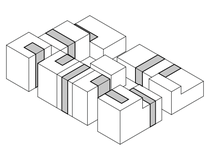
Identity stimulation



Nature inclusive



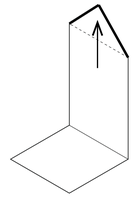
Community buildings



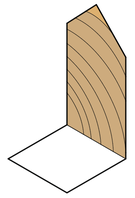
Shared building cores.

Block rules

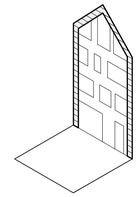
Establishment of rules-based system for each of the blocks



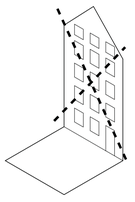
Context related massing.



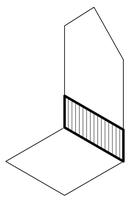
Nature materials exposed.



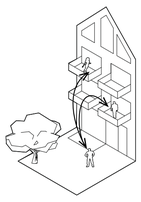
Organised composition.



Non-repetitive rythms.



Emphasized plynths.

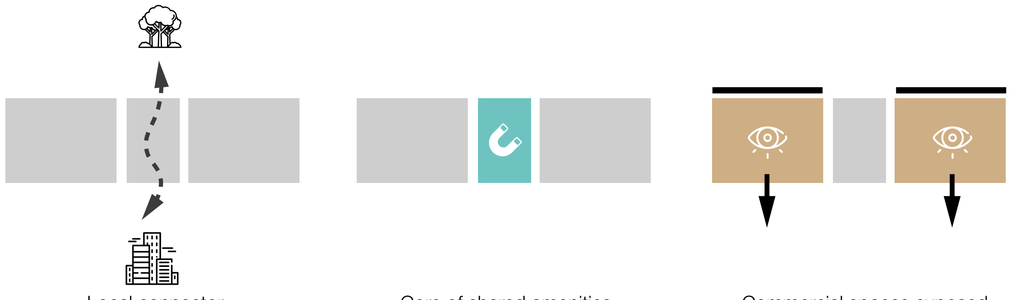


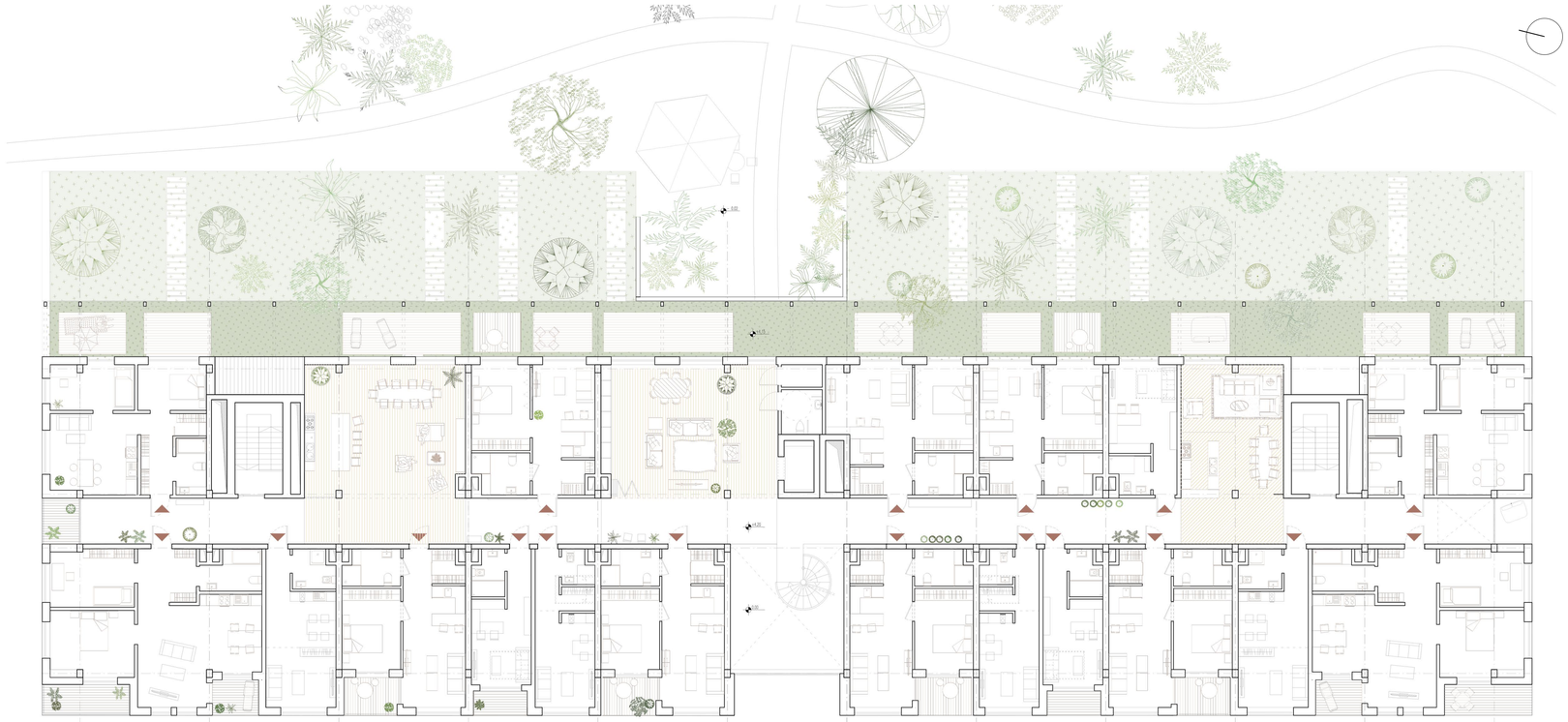
Facades porosity.

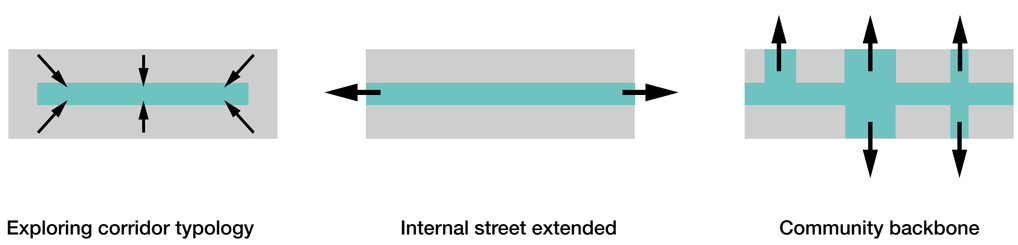
Materialisation rules

Rules organising methods of expressing the blend of architecture and nature

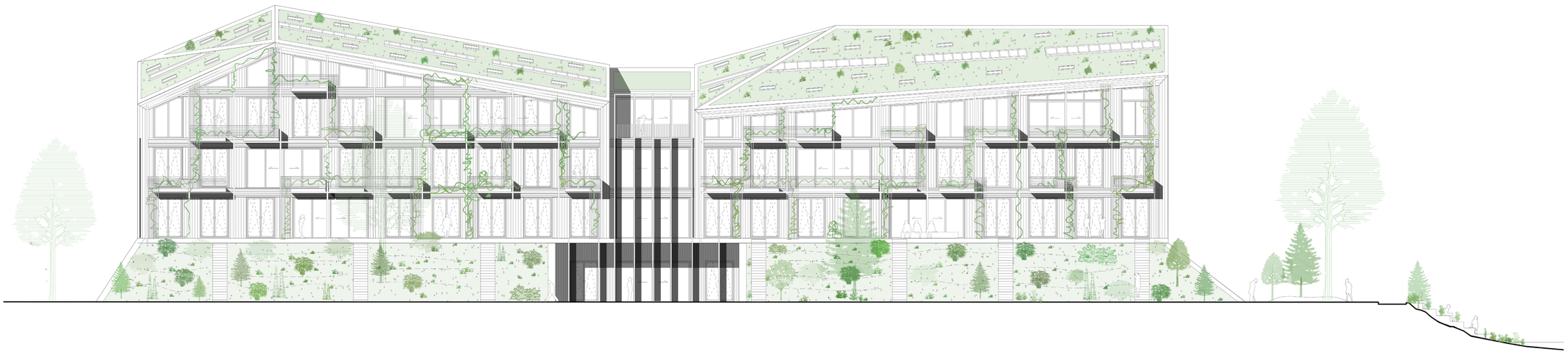

laundry
workshop
conference rooms
co-woking back-off-house
gastronomy back-off-house
gastronomy
storage
event space
cantine space
common entrance
cafe part
main circulation
individual working areas sitting / standing
entrance reception space
outdoor terrace


Local connector
Core of shared amenities
Commercial spaces exposed



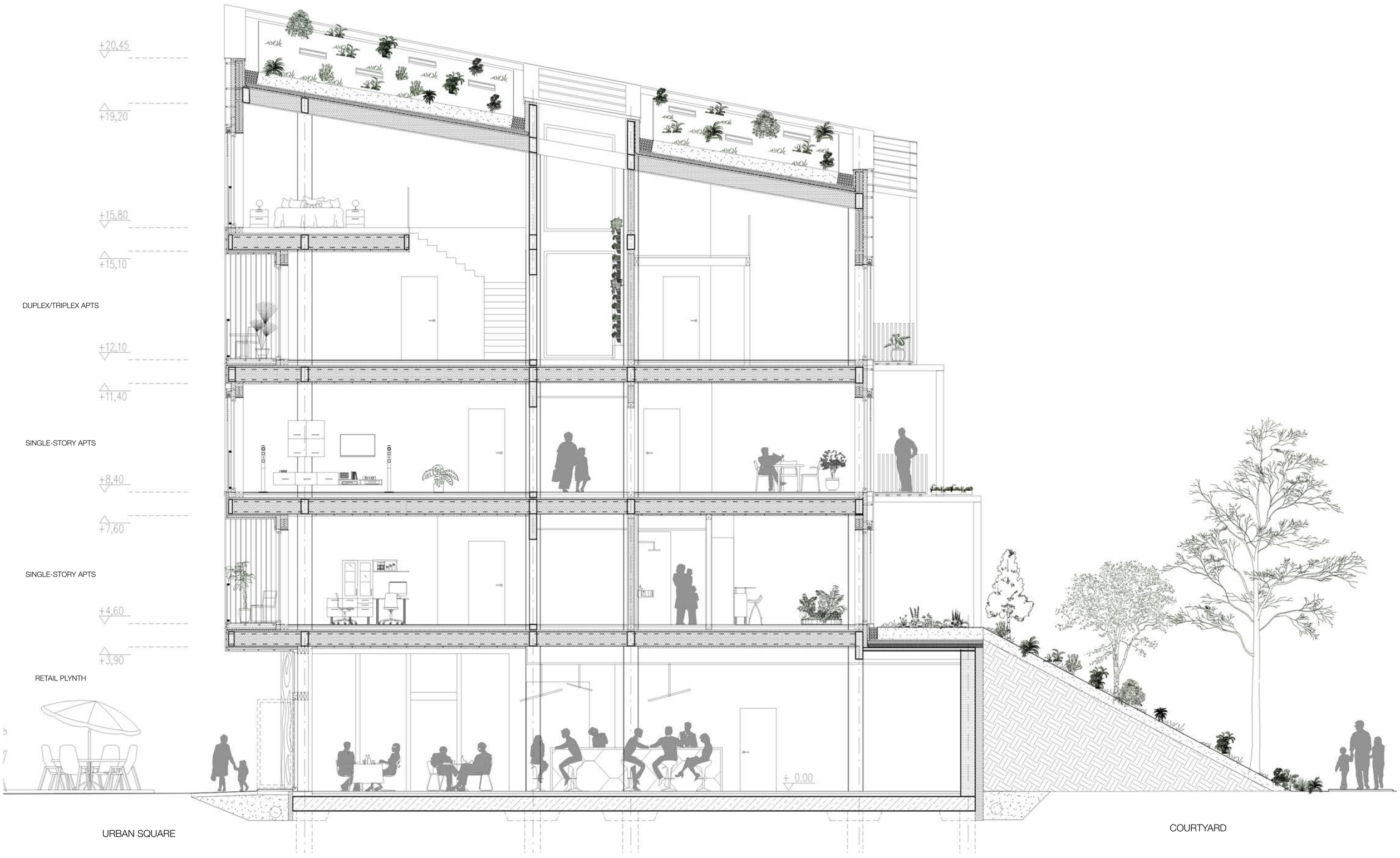

Exploring corridor typology
Internal street extended
Community backbone

Western facade.



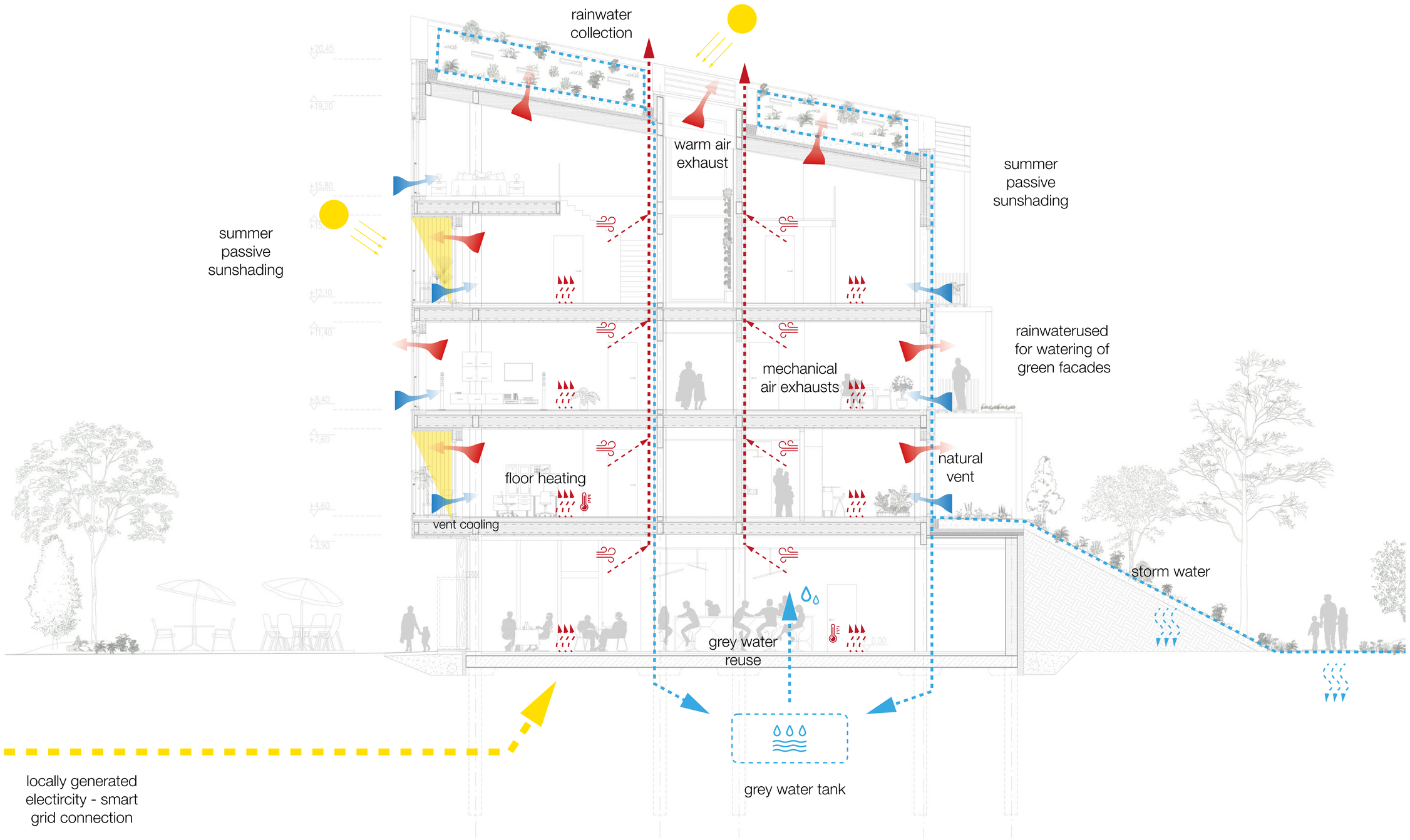
Eastern facade.

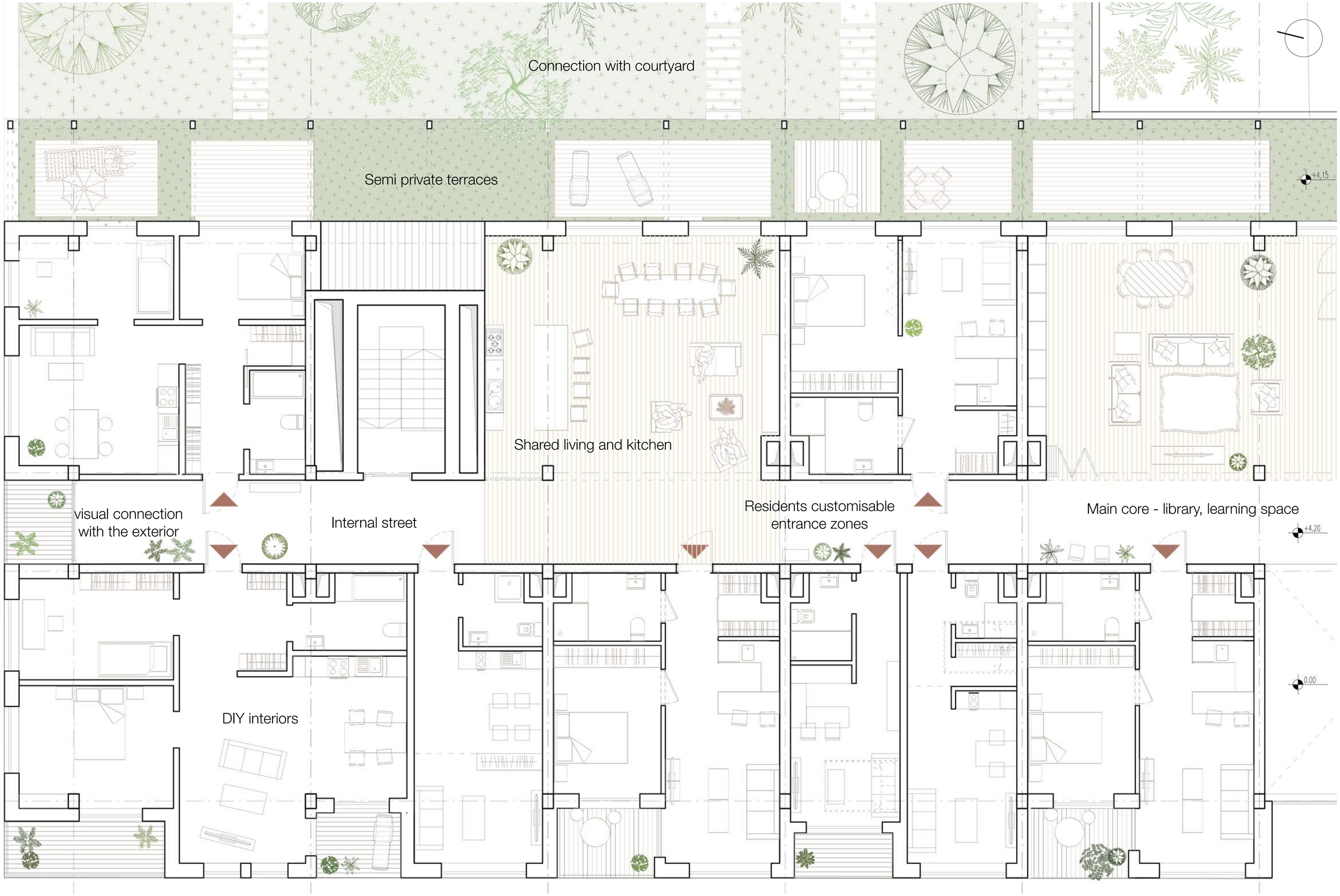
Nothern facade.



Typical section

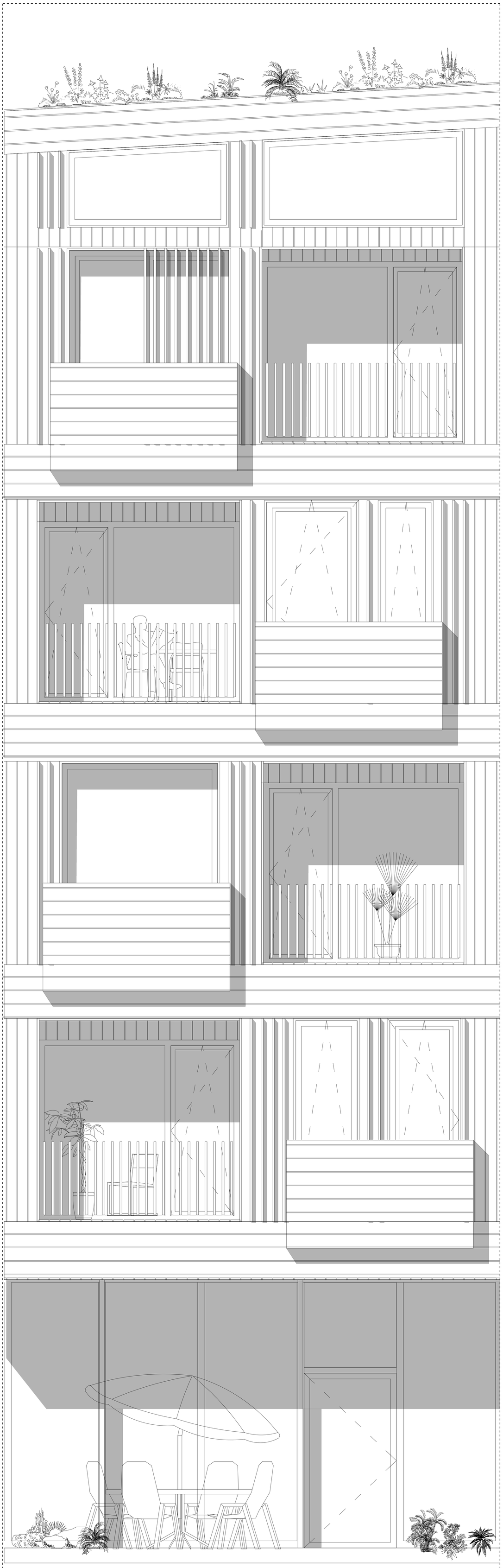
Floor heights relates to the programme, elevated ground floor with retail, followed by residential levels opened towards courtyard


rainwater
collection
warm air
exhaust
summer
passive
sunshading
summer
passive
sunshading
rainwaterused
for watering of
green facades
mechanical
air exhausts
natural
vent
floor heating
vent cooling
storm water
grey water
reuse
grey water tank
locally generated
electircity - smart
grid connection

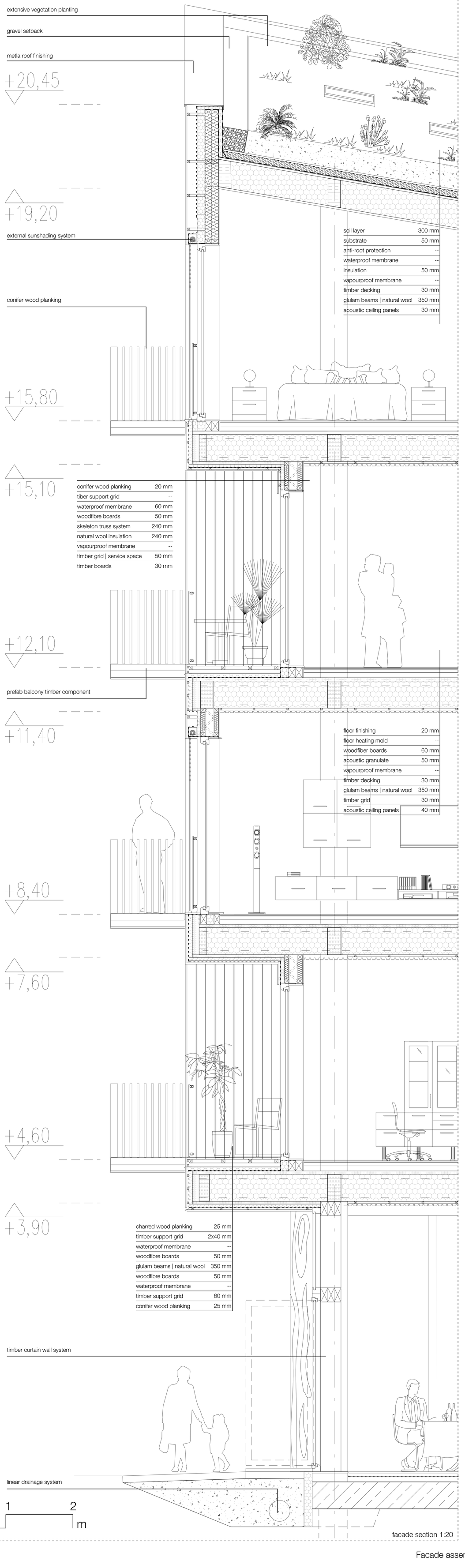


Common room

Organized between individual apartments, open spaces supported by funtional „service” spaces.



facade view 1:20



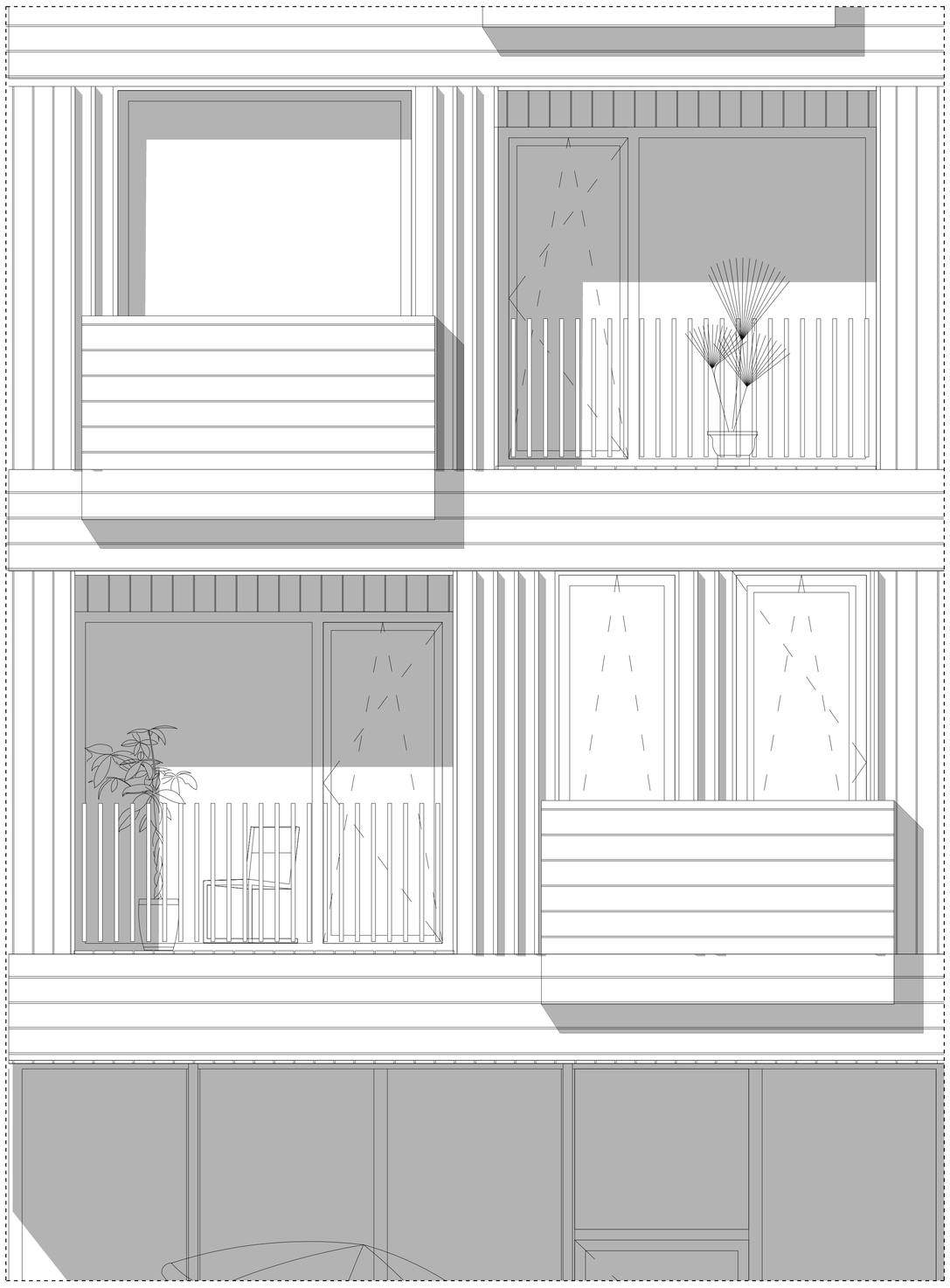
soil layer	300 mm
substrate	50 mm
anti-root protection	--
waterproof membrane	--
insulation	50 mm
vapourproof membrane	--
timber decking	30 mm
glulam beams | natural wool	350 mm
acoustic ceiling panels	30 mm

conifer wood planking	20 mm
tiber support grid	--
waterproof membrane	60 mm
woodfibre boards	50 mm
skeleton truss system	240 mm
natural wool insulation	240 mm
vapourproof membrane	--
timber grid | service space	50 mm
timber boards	30 mm

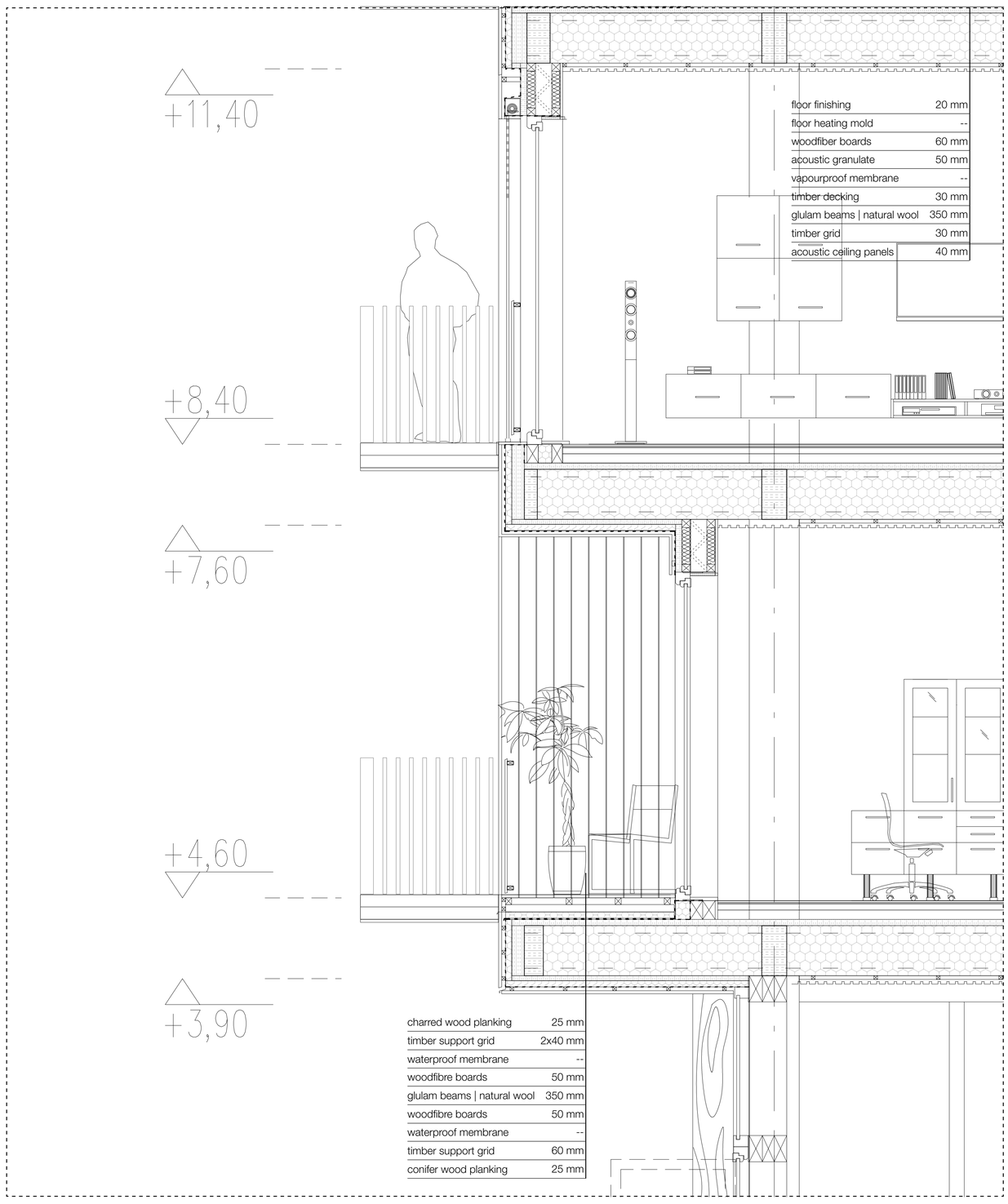
floor finishing	20 mm
floor heating mold	--
woodfiber boards	60 mm
acoustic granulate	50 mm
vapourproof membrane	--
timber decking	30 mm
glulam beams | natural wool	350 mm
timber grid	30 mm
acoustic ceiling panels	40 mm

charred wood planking	25 mm
timber support grid	2x40 mm
waterproof membrane	--
woodfibre boards	50 mm
glulam beams | natural wool	350 mm
woodfibre boards	50 mm
waterproof membrane	--
timber support grid	60 mm
conifer wood planking	25 mm

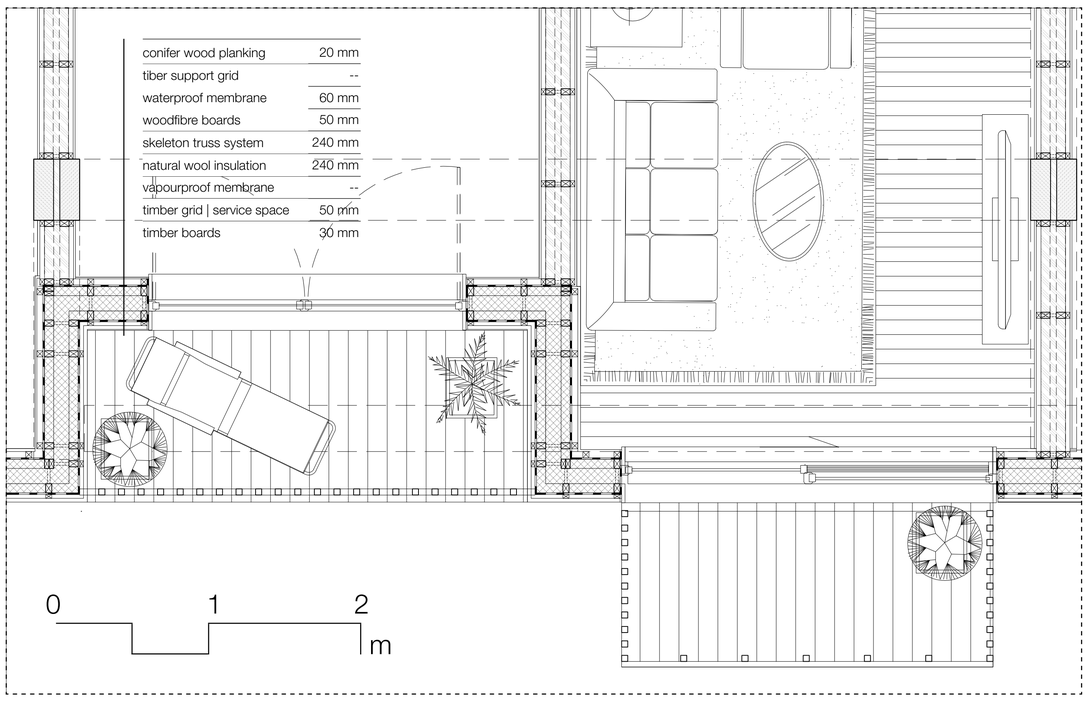
facade section 1:20



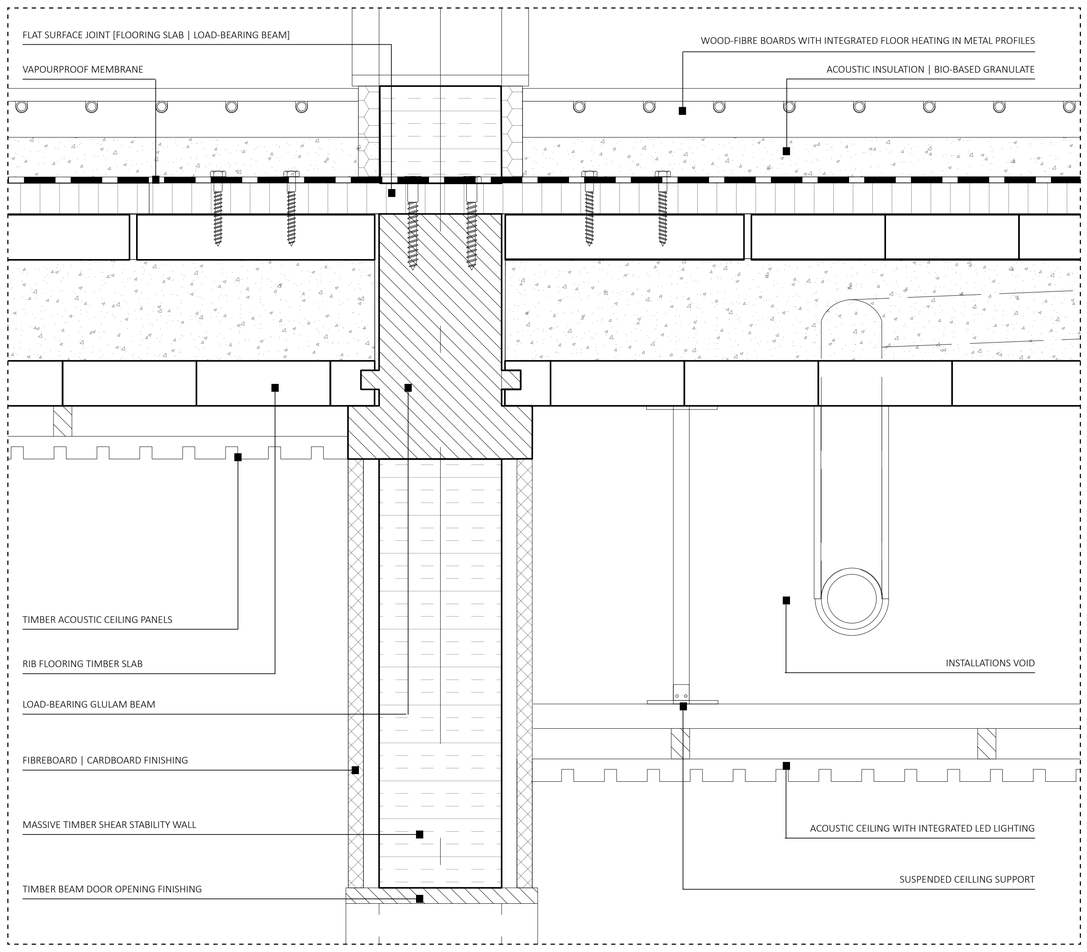
facade view 1:20



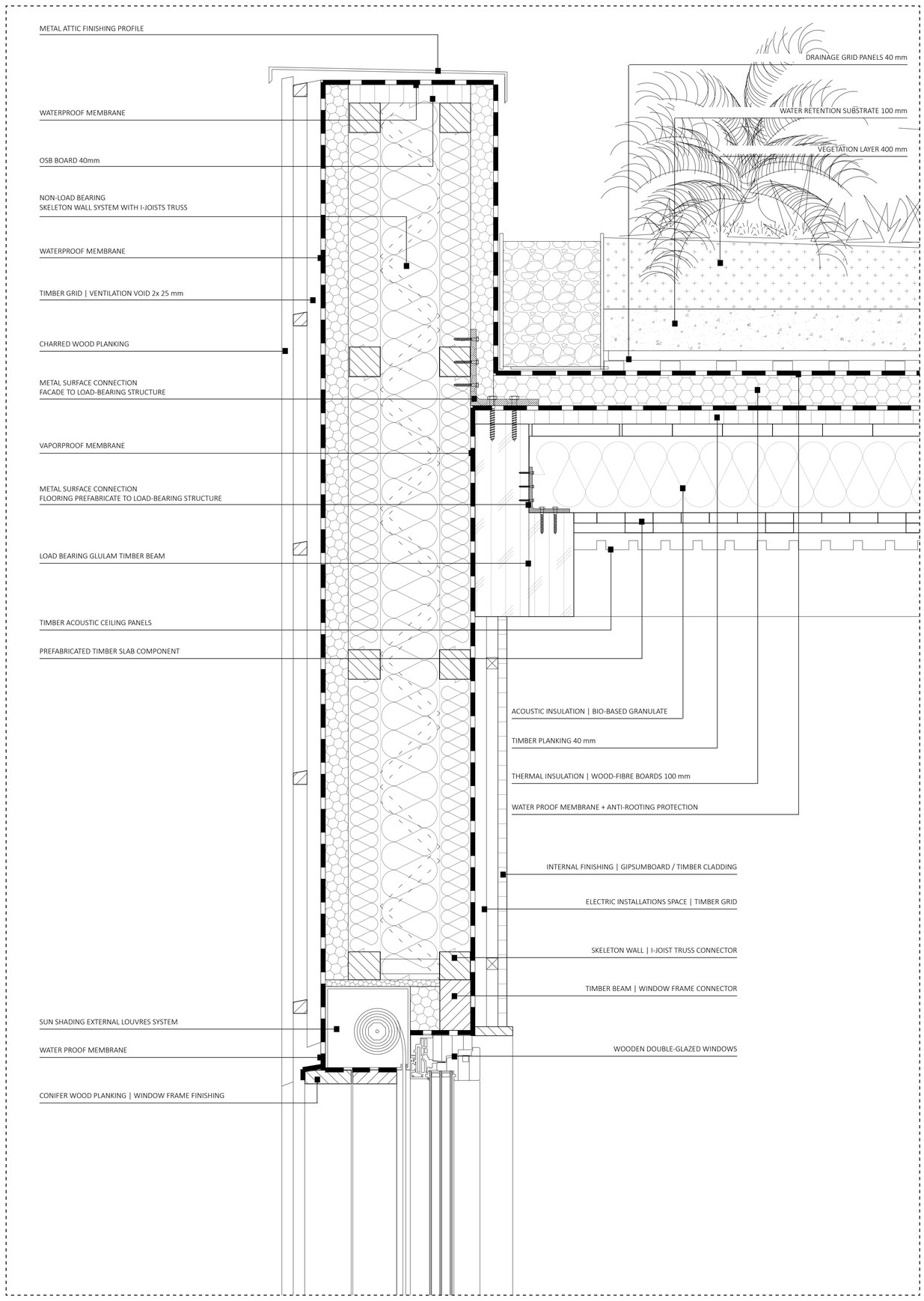
facade section 1:20



floor plan 1:20



detail flooring system to structure joint 1:5



facade detail D2 1:5