Home of the Innocent

Delft University of Technology
MSc Architecture

This is my project called Home of the Innocent, my answer to the graduation studio of Interiors, Buildings and Cities that addresses the question what the future prospects of the City Hotel in Amsterdam could be in a society that cares for its citizens whilst working towards a healthier planet. The question set out throughout the graduation seeks to answer how notions of hospitality, care and kindness can be translated to a new architectural model that profits the public.

Owen
Elverding

One of the first architectural models that explores the notion of hospitality and care is the Caravanserai, an inwards oriented inn that emerged from the 10th century along the Silk Road, providing overnight shelter for caravanners on their travels. Besides its primary function of accomodating and safeguarding the salesmen from the hostile desert, the enclosed courtyard and its niches in the building envelope provided moments of connection, a possibility to share laughs and stories after a long and often lonely days' travel.

In Amsterdam enclave-like structures emerged in the name of Hofjes, an assembly of a number of small scaled residencies woven into the urban fabric, oriented along a central courtyard and often accessed via a single port. This typology attentively addressed the notion of care and kindness, as the charitable and most often religious accommodation offered a safe environment to widowed women to share and live among others within the busy city.

During Holland's Golden Ages the Amsterdam economy was booming. The unethical and illicit practices overseas enabled the city and its richer citizens to invest largely in the welfare of Amsterdam and its people. Over the 16th and 17th century charitable institutions like hospices and orphanages started to present themselves in the city more and more. The Burgerweeshuis, comparable to the morphology of the Caravanserai and Hofjes with a central courtyard, offered shelter to a hundred orphaned boys and girls and was funded by the municipality. Located in the heart of the centre, its face tucked into the city block discreetly, while its many functions opened up to the enclosed courtyard. This private exterior aided a paradoxical idea: it created a just space for the children to play, protecting them from city life, but it also kept them from running

CARAVANSERAI NEAR ALEPPO, SYRIA

CLAESZ CLAESZ HOFJE, AMSTERDAM

BURGERWEESHUIS, AMSTERDAM


DRAAIORGEL
'1 KOLKJE
MONTELBAANSTOREN
KONINGSPLEIN
WATERLOOPLEIN
GROETEN UIT
AMSTERDAM
ROKIN
KONINKLIJK PALEIS
MAGERE BRUG


Amsterdam — Rembrandtplein
RESTAURANT
TROTSCHE


amste
am
rd
JAAR
OORLOG

Over the years Amsterdam kept expanding its borders. The empty voids that the charitable institutions left in the urban fabric were slowly occupied by hotels, cafes and tourist attractions, densifying the city centre and shifting the notion of hospitality towards out of towners. Towards the end of the 20th century Amsterdam became internationally popular as a city trip destination, romanticised for its beautiful architecture and idyllic canals but infamously known as city of drugs and sex workers.

The mass-tourism worked well as a financial model, enabling the city to expand its borders and invest largely in culture, leisure and entertainment. However complaints of the city's permanent citizens started to rise, claiming that the city became unlivable by the invasion of tourists. The many cultures and lifestyles co-existing came to an unbearable imbalance with many places and initiatives for visitors, but little for locals.
With the people of Amsterdam saying enough is enough, the city adapted the model of the Doughnut Economy as a new outline for its policy making in 2019, claiming it will refocus its attention towards attending the needs of permanent residents in a socially, ecologically and economically sustainable manner.

The City Forest is a romantic response to the potential of a city built for its people, rather than its financial model. Attaining to reclaim the plots currently used for city centre gas stations, the forest gives back pieces of city to nature and reintroduces the urban void.The Forest is initially man made, constructed along the principles of the Miyawaki tiny forest method, using indedigenous species to grow a densely populated forest of 2 meters height within 2 years. To safeguard it within these first 2 fragile years, the plot is walled in with reclaimed bricks from the site. Under the canopy a public interior arises that enables citizens to watch flora and fauna flourish as a symbol of nature's resilience, if only we let it be.

The project investigates what the architectural model could be like that offers shelter to parentless refugee children that now live in refugee camps around Europe without access to water, food nor hygeniecs.. A place that is welcoming, that feels like a home, a place where one can interact or withdraw, that cares and nurtures, that protects and stimulates, a place that provides hope to children that are without any.

To offer the children the prospect of a brighter future, the building sets out to create a safe and protective environment, one that allows them to withdraw and cope with trauma, but also presents means to build new relationships and interaction with the child's new setting.


tappery
18
Health
Check
Center
A.v. WEES
anno 1883
Henri Matve
KLARENA

1 : 100

1 : 200


UP
UP
UP
AHU
EWH
EWH
office for adoption
entrance private
after school care
entrance public
nursery
entrance apartment

Contrary to the typologies of the Caravanserai, het Hofje and the studied orphanages, the building proudly has a face in the street, creating an identity that indicates its function rather than to hide behind an anonymous facade. The ground floor materialises in timber with large openings, creating a transparent image, while the red Viroc cladding of the private upper floors and windows of differing sizes indicates a more intimate use while fitting into the colour palette of the neighbouring buildings.

The verticality detailed in the timber and Viroc cladding together with the repetition of gables and roof surfaces creates the illusion of a series of smaller buildings, fitting into the fabric of narrow buildings in the street.

The nursery sits on the Southern part of the building, with an enclosed courtyard where the infants can safely play outside and a adjacent a long space for playing and eating, with an adjoined bedroom for lunchtime naps. The after school care takes a larger footprint and accommodates a cafe and an interior playground, which opens up to the larger enclosed courtyard at the center of the block. At the northern perimeter the office for adoption is located, secluded from the more public functions.

The building is constructed with a timber frame, which has a strong presence in the interiors signifying the points of entry from the other spaces along the facade with its visible beams spanning in the other direction. The interior playgrounds of the nursery and after school care are constructed with KertoRipa sandwich panels, allowing them to span 10 meters and creating a large open space.

The timber frame is wrapped in hempcrete, which acts both as thermal insulation as well as an interior finish. On the exterior the hempcrete is cladded with Viroc, a wood fiber cement material that has a pale red colour matching the palette of the bricks in the street.

Hempcrete is an innovative building material composed of the trunk of the Hennep plant and lime. As a material it has great thermal and acoustic properties, it is known to be self regulating a building's humidity and is naturally fire resistant. The common weed grows rapidly in circumstances anywhere around the globe without much need of water or nutrition and it stores CO2.


1 : 200

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Eternit solar roof slates
~ 100 m² South = 15.000 kWh/year
~ 140 m² East-West = 12.500 kWh/year

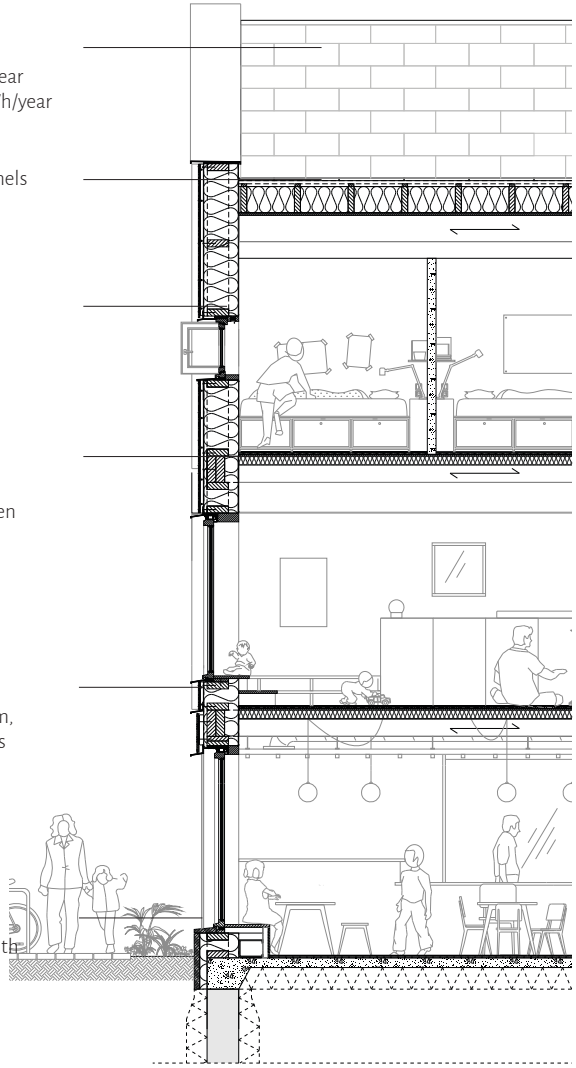
Roof insulated with hennep panels
300 mm, Rc 7,5 m²K/W

Accoya stained windowframes,
lifespan ~ 50 years.

Linoleum flooring
Dry floor heating system
Acoustic wood panels in between
floor beams

Viroc woodfiber cladding 16 mm,
mounted on aluminium profiles

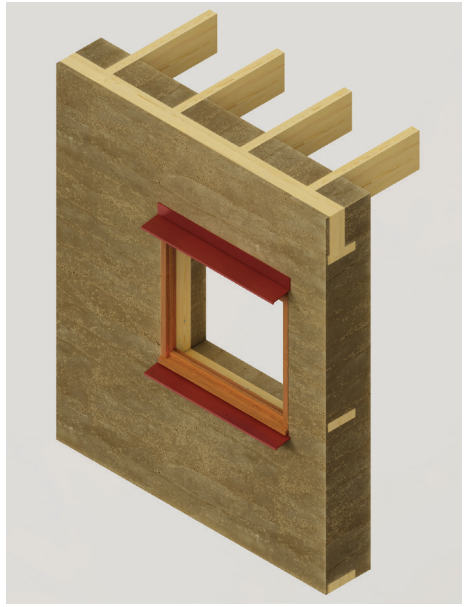
Hempcrete cast-in-site exterior
walls 400 mm, Rc 7,2 m²K/W with
constructive timber frame

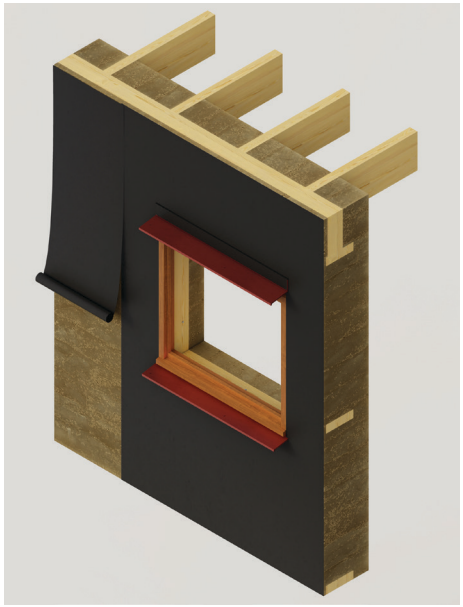
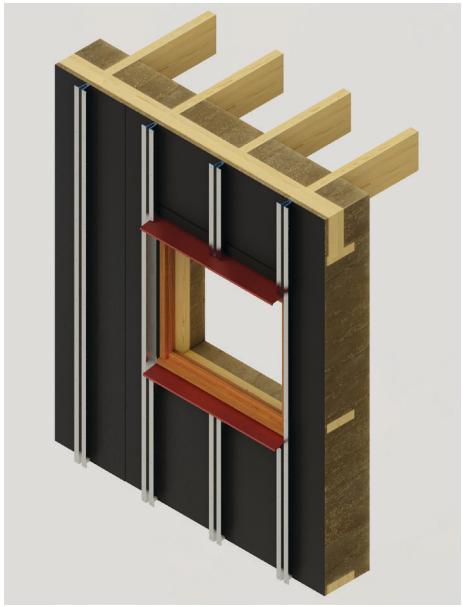


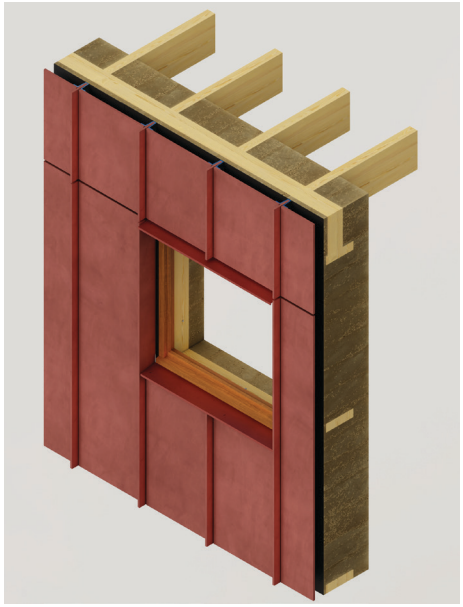
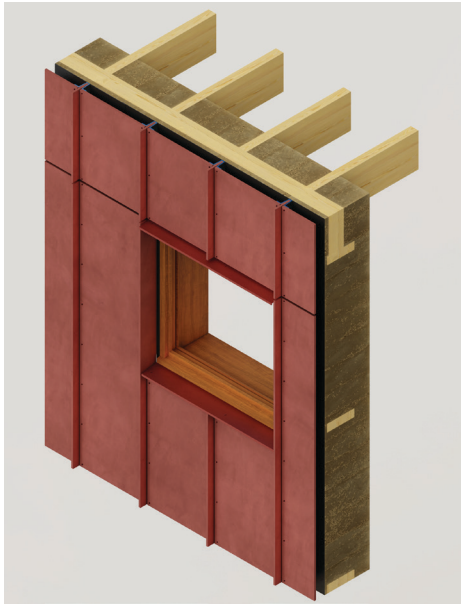
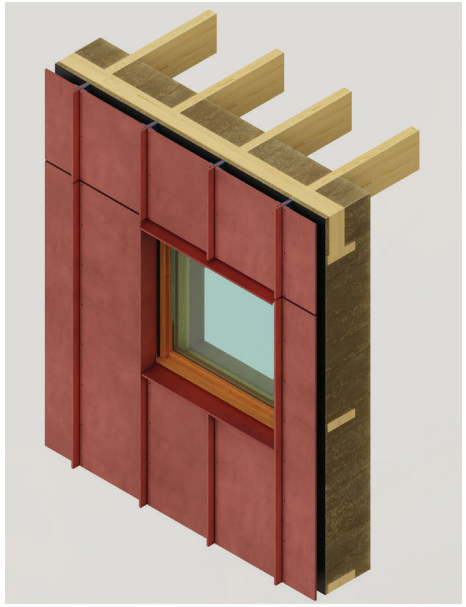







Timber frame 80 x 244 with casted-in-site hempcrete 400 mm, Rc = 7,2 m²K/W

Water barrier

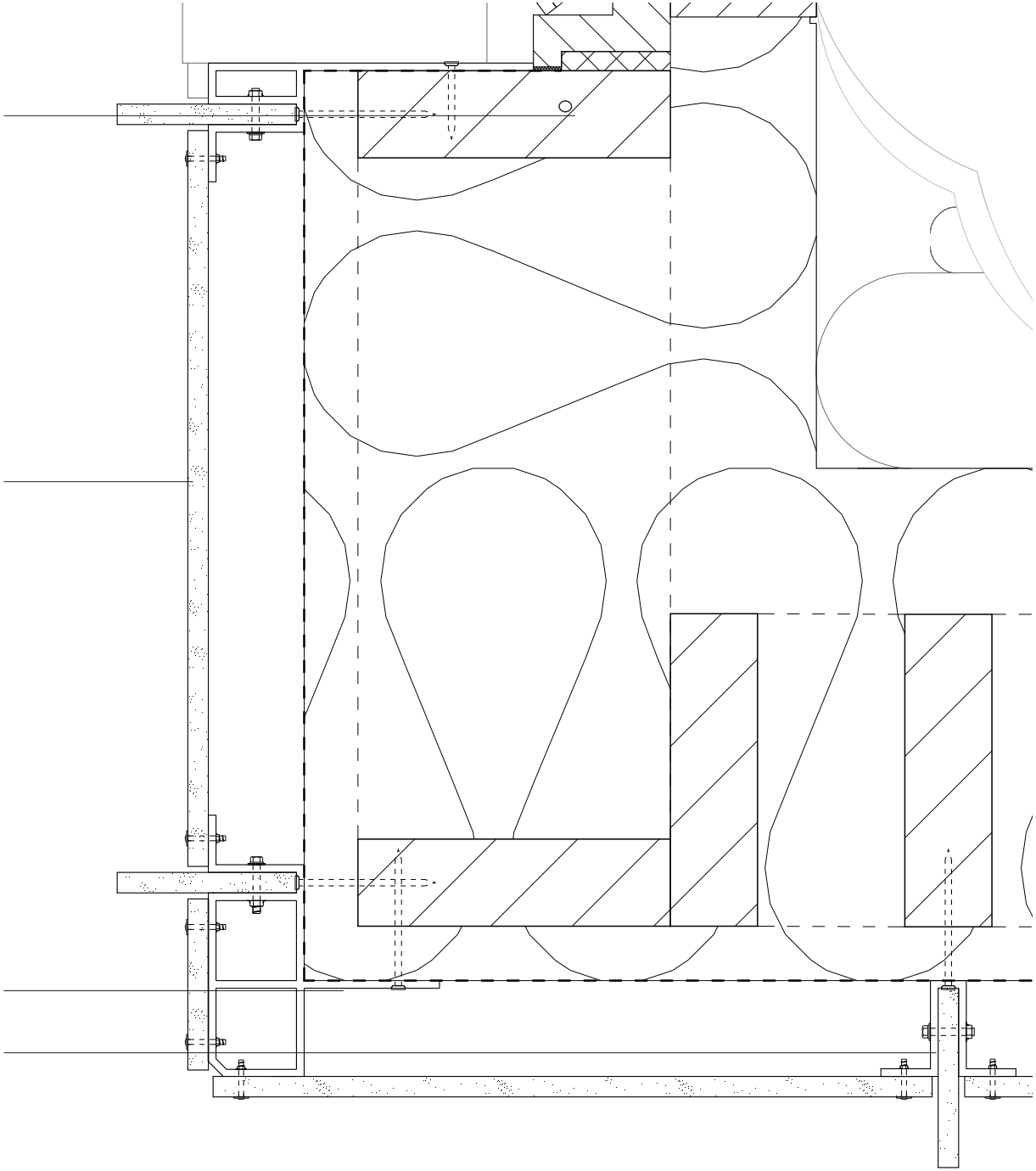
Aluminium profile screwed to timber frame, specific for openable windows

Viroc rib 16 x 140 mm, fit into aluminium U-profile and tightened with bolt and nut

Viroc panel 16 x 575 mm (max)

Corner aluminium profile

Typical aluminium profile



The detailing of the facade demands specially designed aluminium mounting profiles, on which the Viroc ribs and panels can be attached. Three different profiles are needed; the window profile, the corner profile and the typical U-profile. Whereas the vertical seam between the 575 mm wide panel is enhanced with the ribs, the horizontal and corner joints are detailed with

Vertical timber cladding

Stained accoya window frame

A+++ triple glazing

Stained accoya inner finish frame

Precast concrete plinth

Water barrier

Timber frame 80 x 244 with casted-in-site hempcrete 400 mm, Rc = 7,2 m²K/W

Fresh air supply shaft

Timber box support for sill bench

Vertical slats covering ventilation shaft

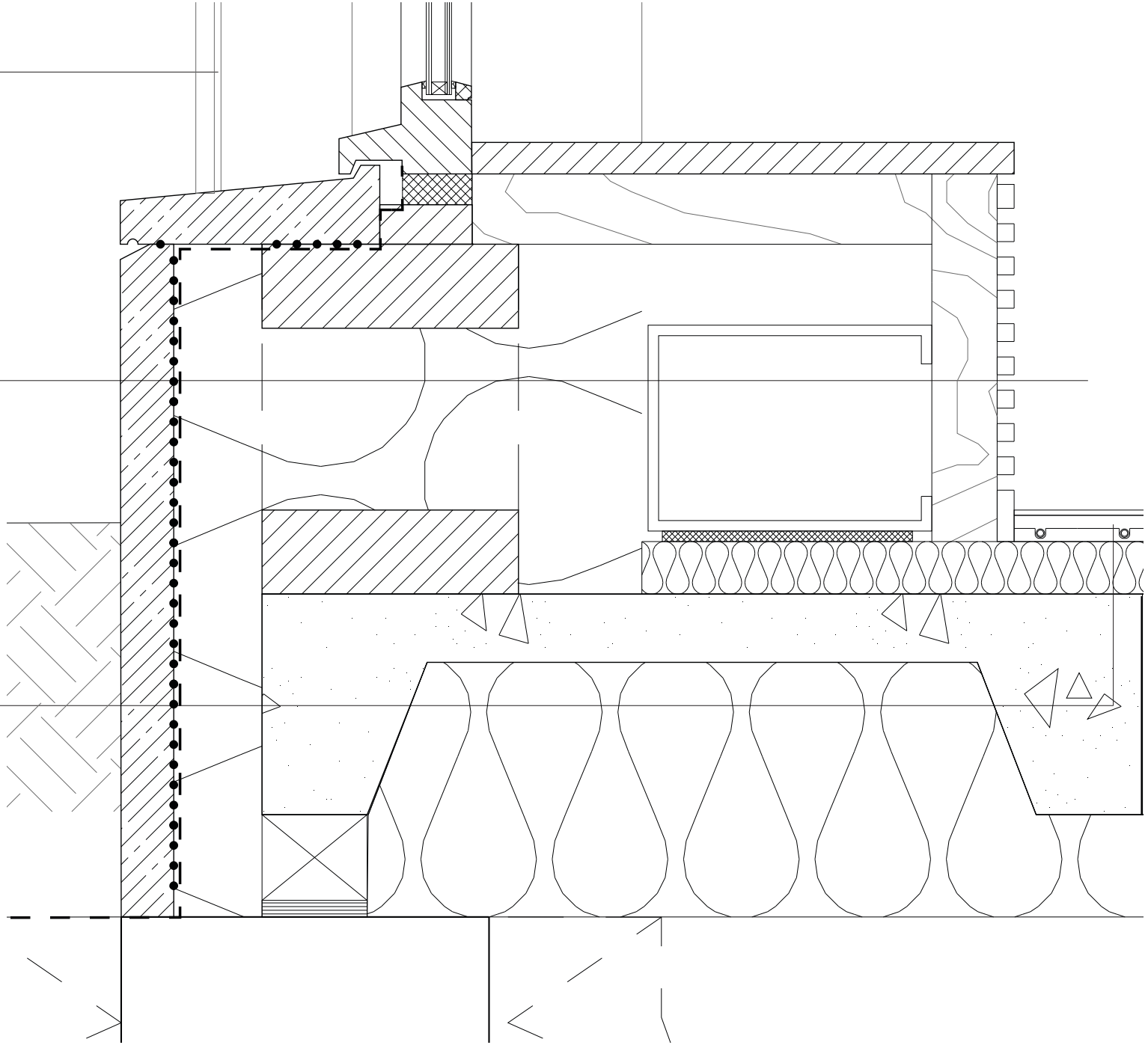
Linoleum flooring

Dry floorheating system 25 mm

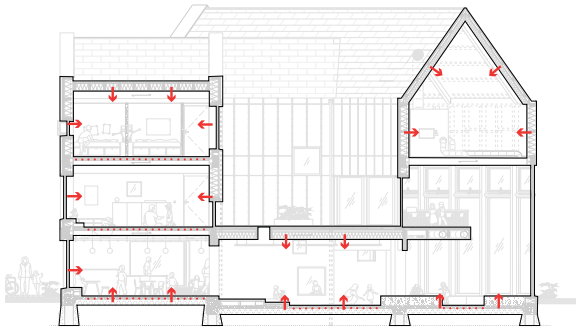
100 mm Hemp insulation Rc = 2,5 m²K/W

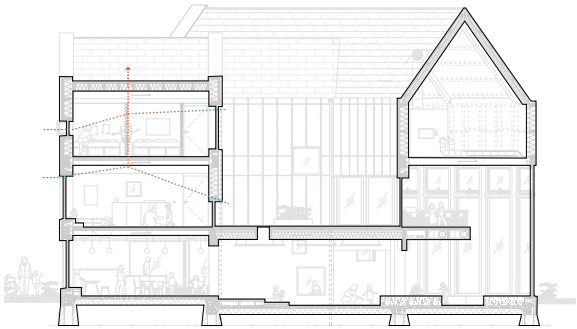
Concrete foundation slab 100 mm

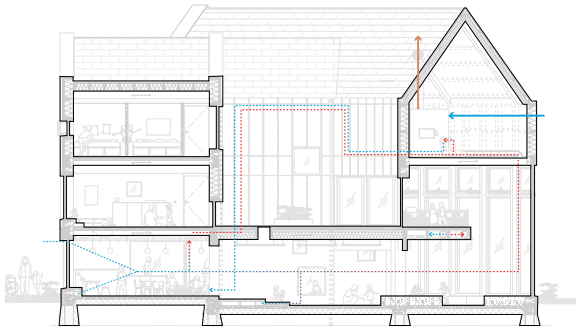
300 mm XPS insulation Rc = 8,5 m²K/W

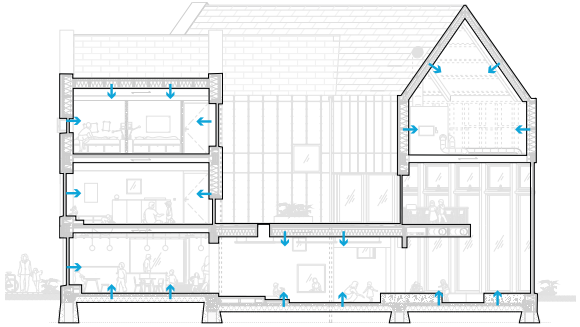


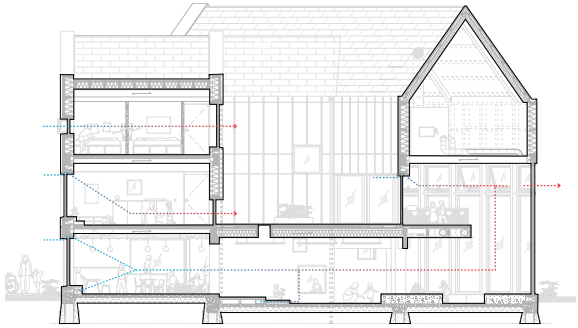
winter





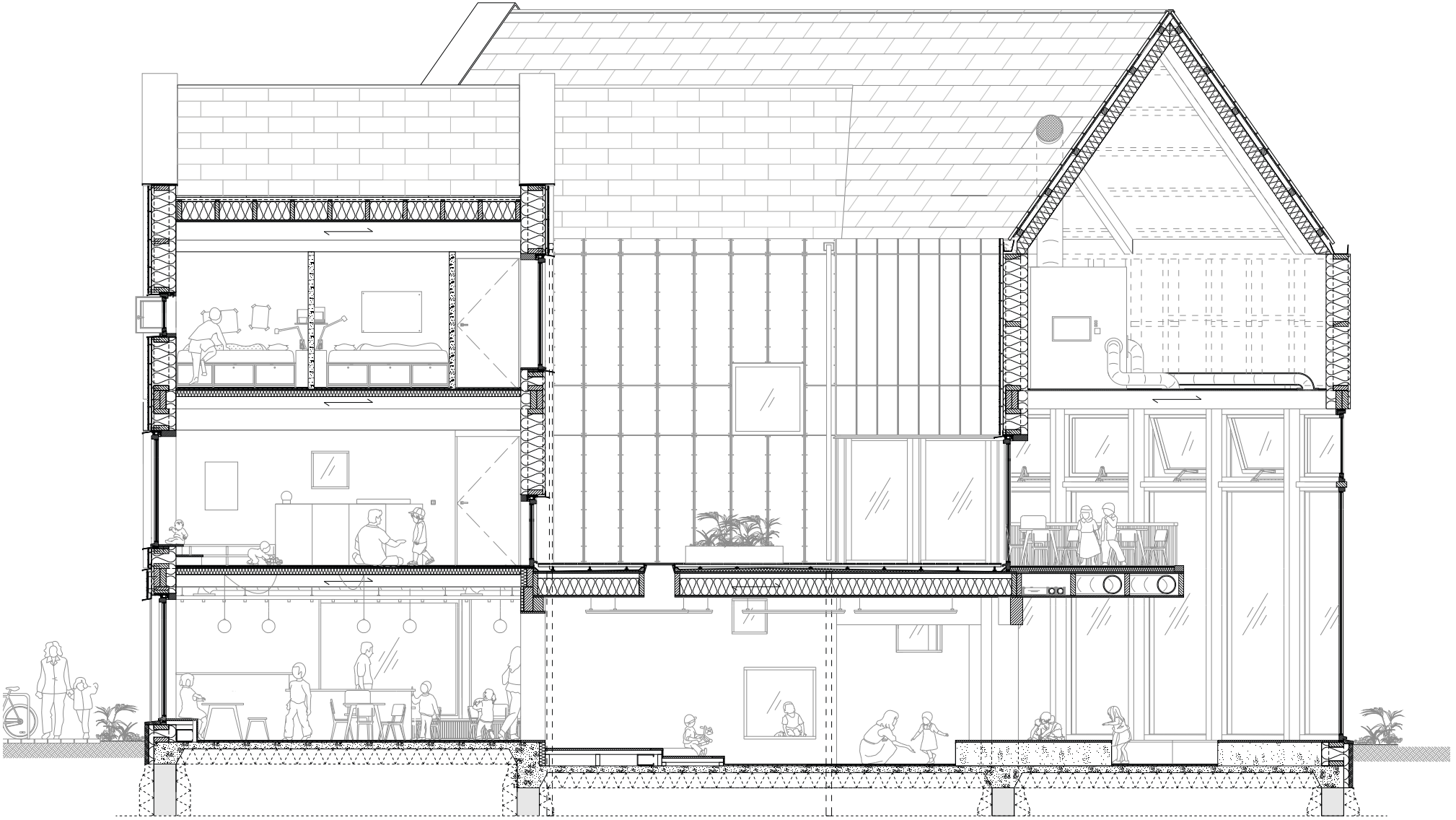


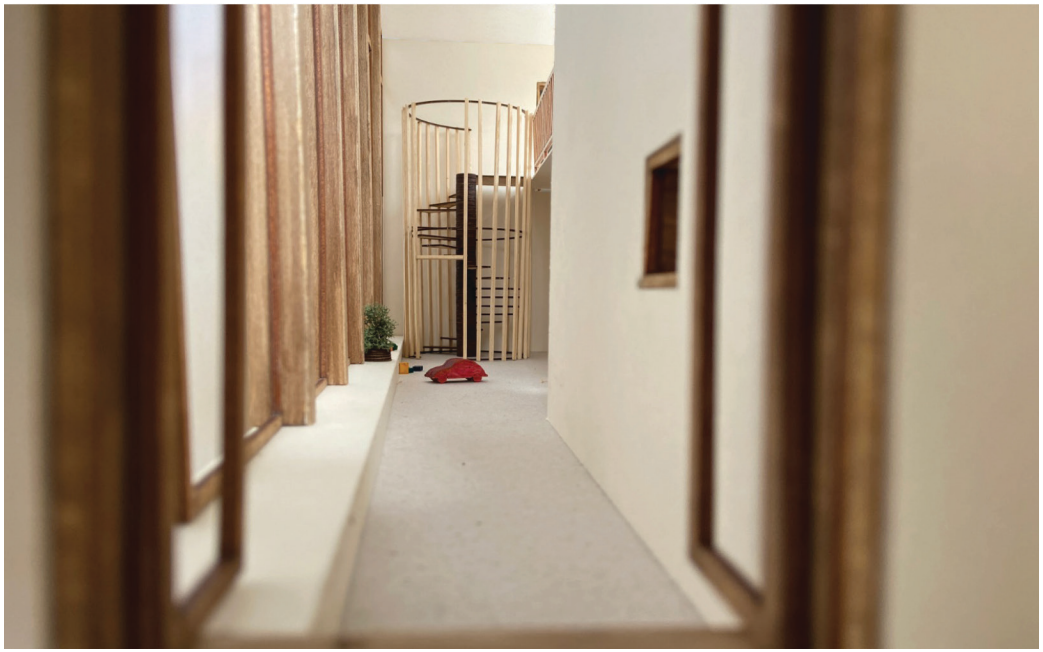


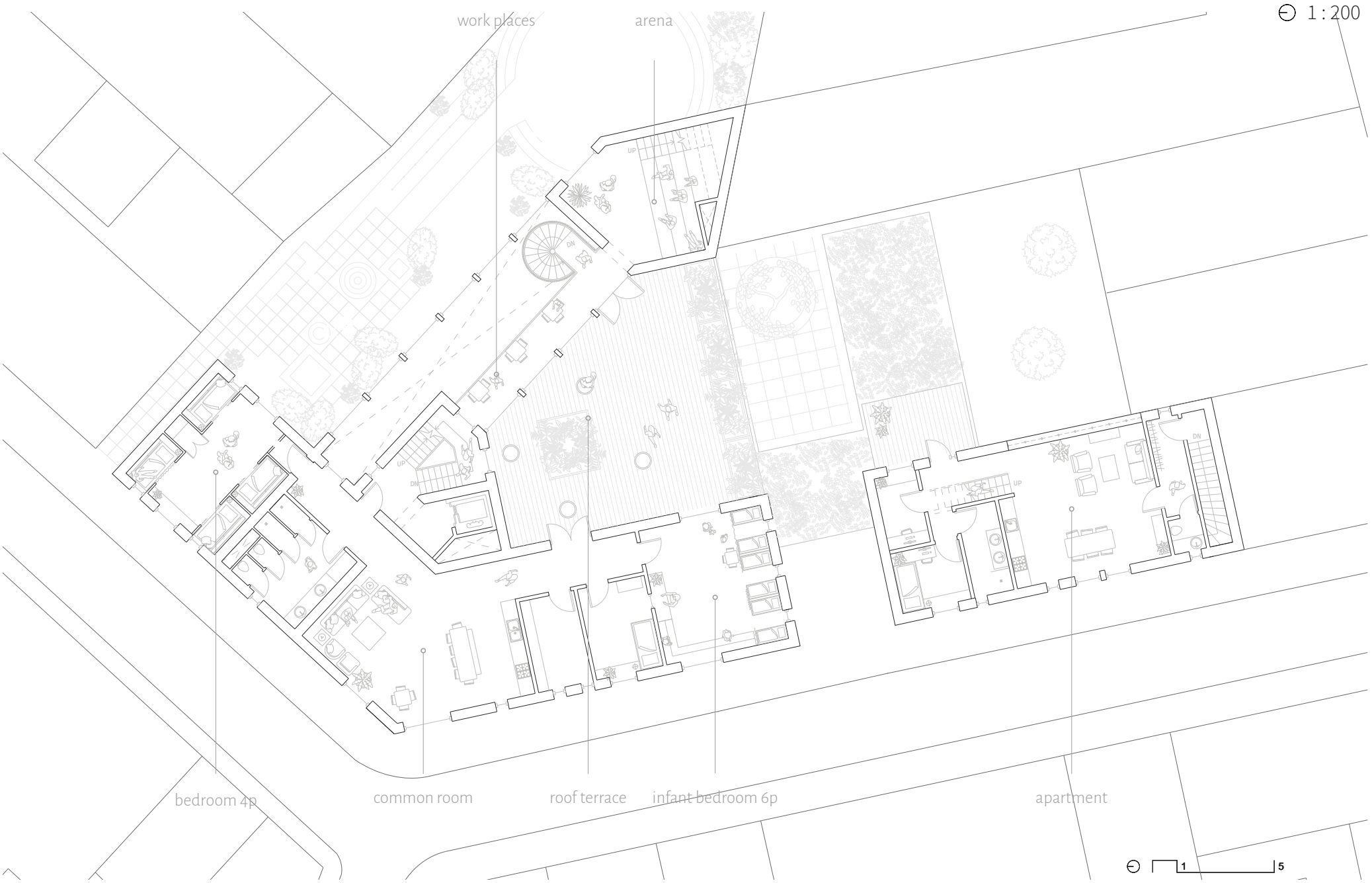


summer

1 : 100



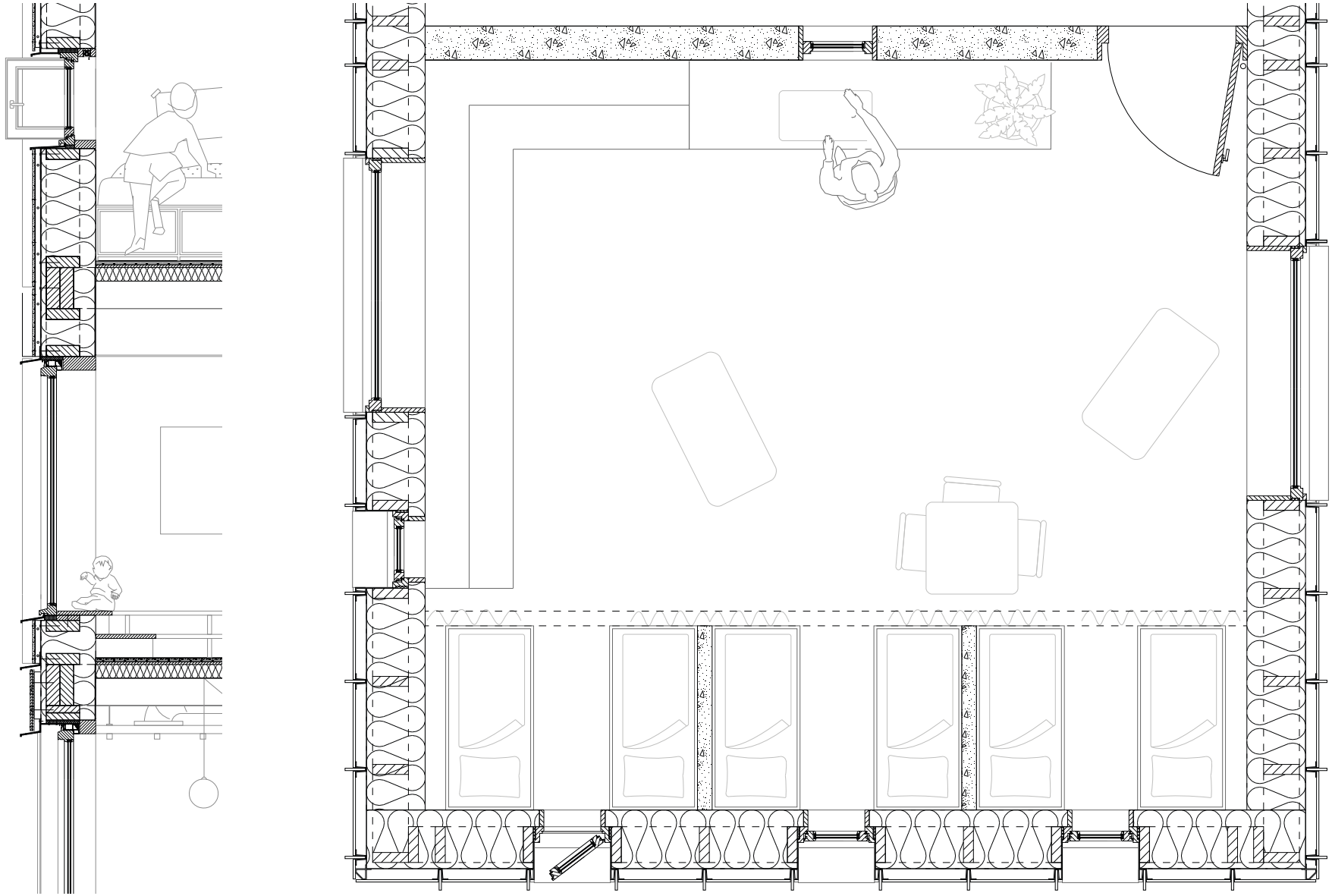



work places
arena
1 : 200
bedroom 4p
common room
roof terrace
infant bedroom 6p
apartment
1
5


1 : 200
1
5

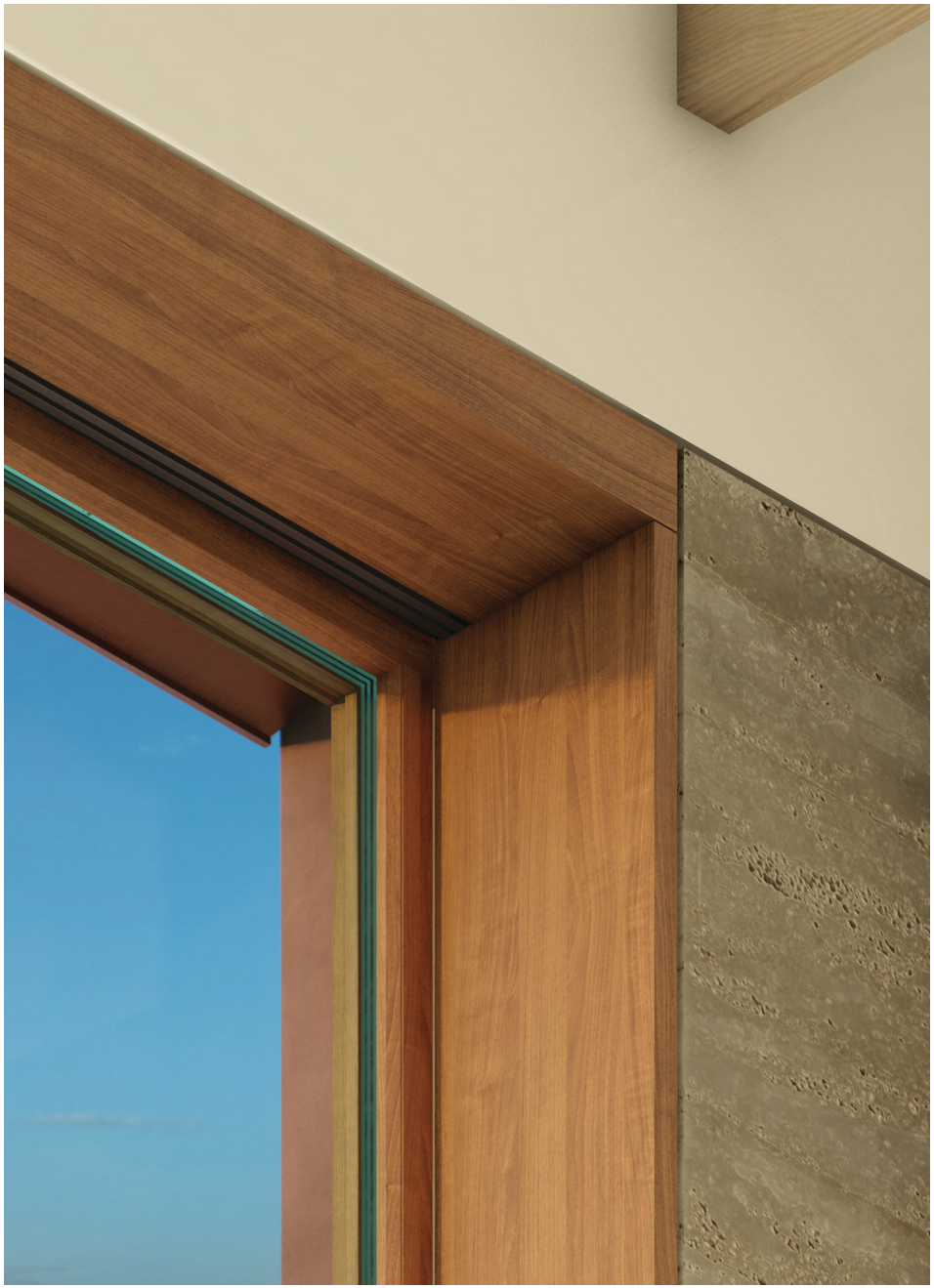
The first floor houses two bedrooms, one shared by 6 infants and the other by 4 children aged 4 up, a collective bathroom, communal space with a small kitchen, a laundry room and a bedroom for a caregiver for the overnight watch. Also it hosts the arena of the after school care, where musical and theatrical therapy can be conducted or stories be read, study places and the roof terrace where children can engage with the nurturing of plants and crops. Finally the Southern part of the plan is reserved as an apartment for the principal of the facility, who could potentially be a former refugee also.

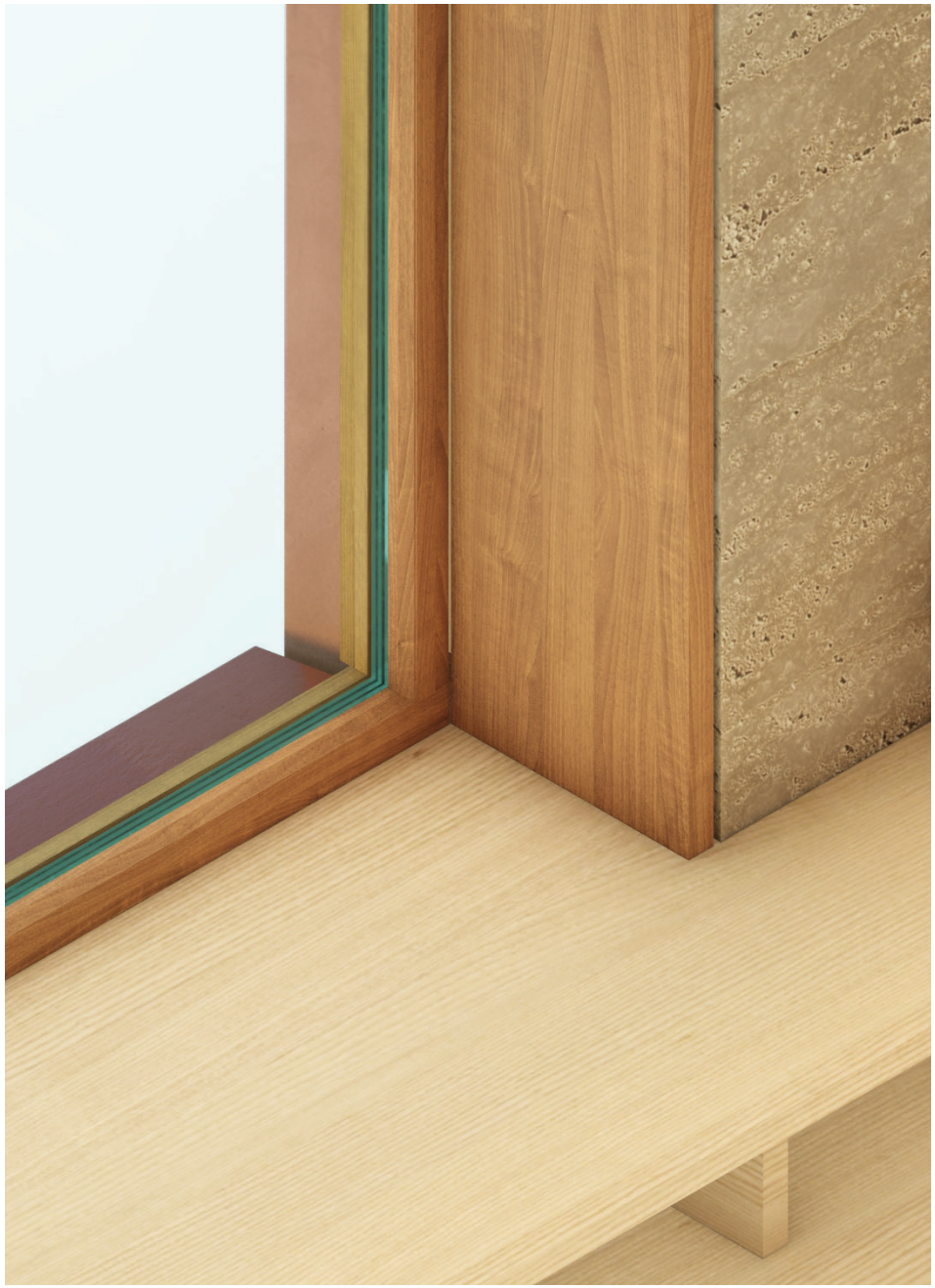
The span of the floors allow all the partition walls to be non-bearing, making it possible to easily alternate the floor plan in any future remodelling or repurposing of the building.



The infant room has three alcoves, that each host 2 beds and share a little window and light to be operated by the caregiver. The alcoves can be closed from the shared space of the bedroom with a set of curtains when in need of intimate nurturing of the child, or opened up when the child feels spirited and wants to engage with others. The space within the alcoves is to be appropriated with drawings and pictures, whereas the shared space is naturally materialised with hempcrete, loam and accoya timber, resulting in a calm pallet that allows bright colours in toys not to be disruptive.

A tiny window between the infant's bedroom and the caregivers overnight space allows caregivers to keep watch during the night, and determine whether he or she needs to enter the room when a child is crying.





Linoleum flooring

Dry floorheating system 25 mm

Acoustic insulation 80 mm

Timber floor beams c.t.c 600 mm

Viroc vertical rib 16 x 140 mm fitted into U-profile and tightened with bolts and nuts

Viroc panel 16 x 575 mm (max) screwed to U-profile

Aluminium mounting U-profile screwed into timber frame

Water barrier

Timber frame 80 x 244 with casted-in-site hempcrete 400 mm,
Rc = 7,2 m^2K/W

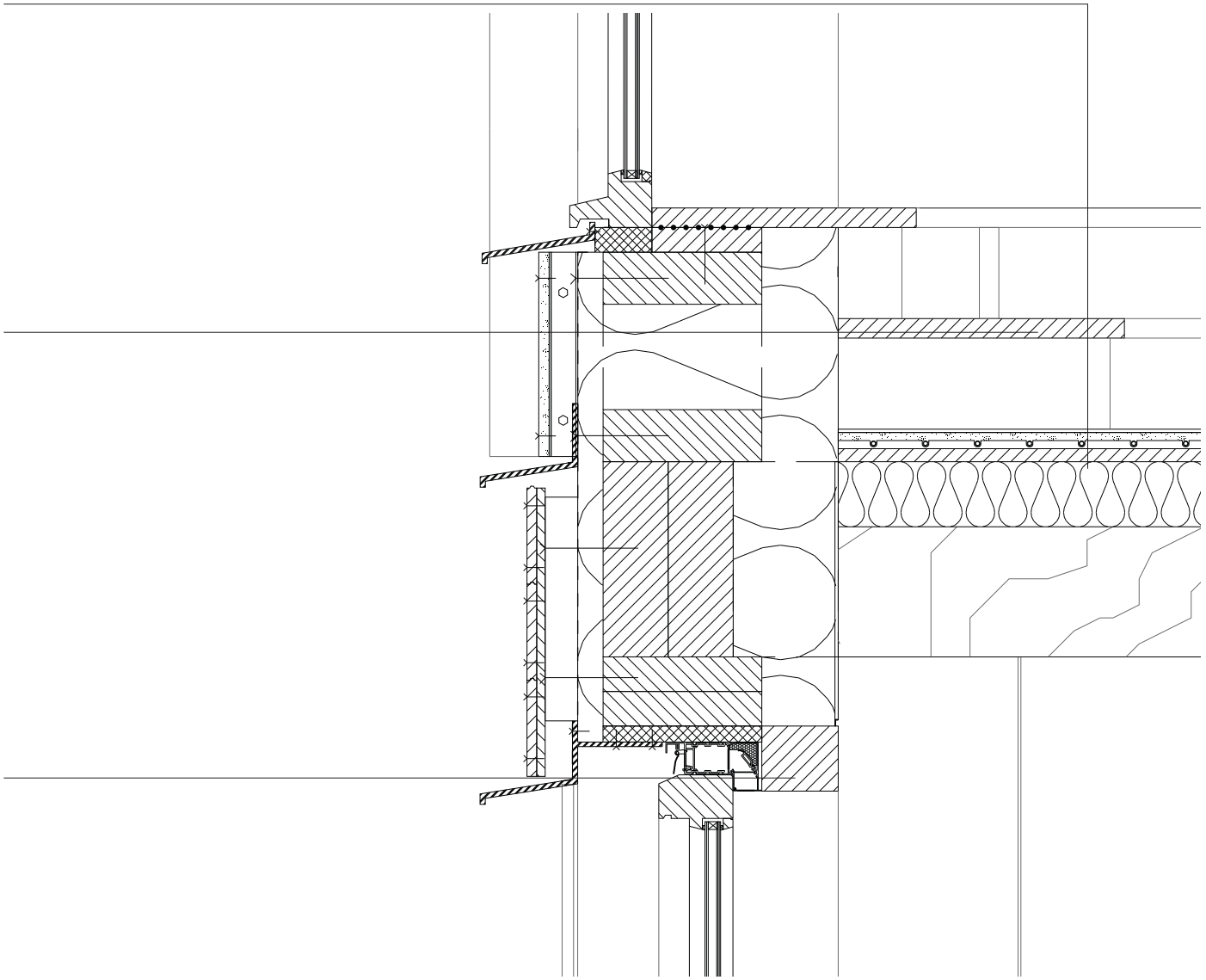
Window sill bench

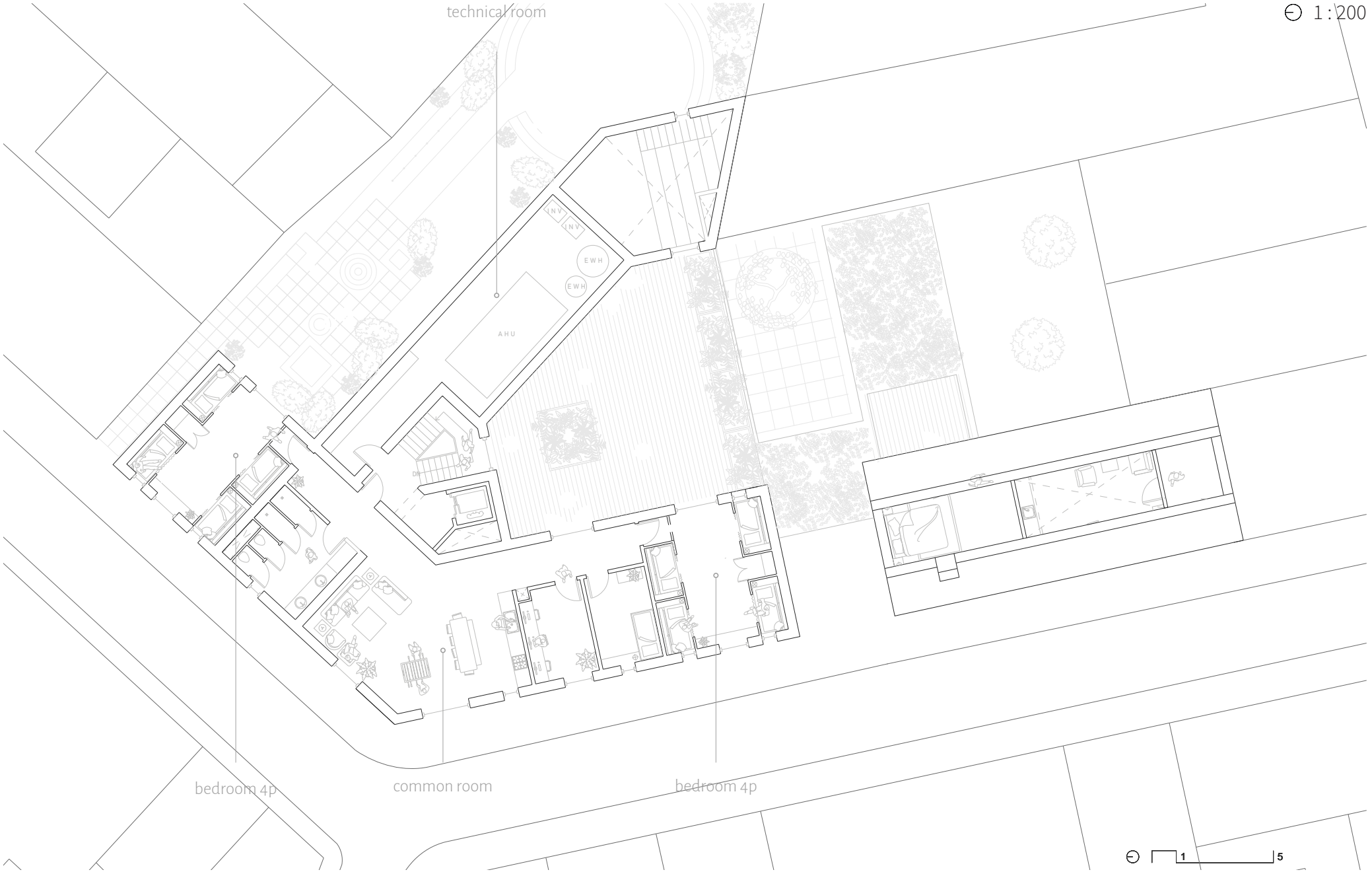
Aluminium sill

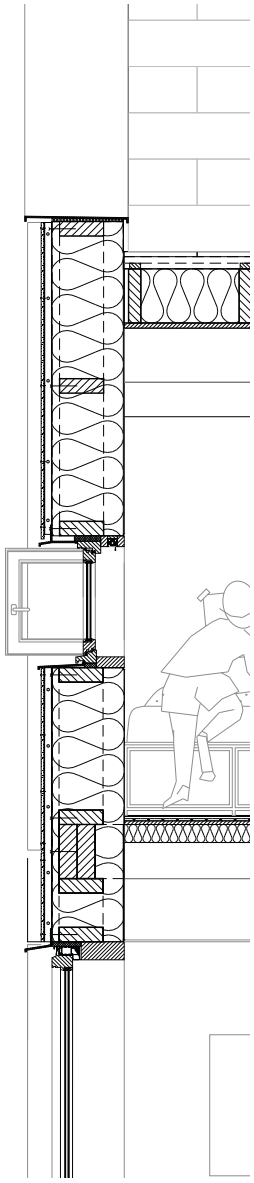
Stained accoya window frame with passive ventilation grate

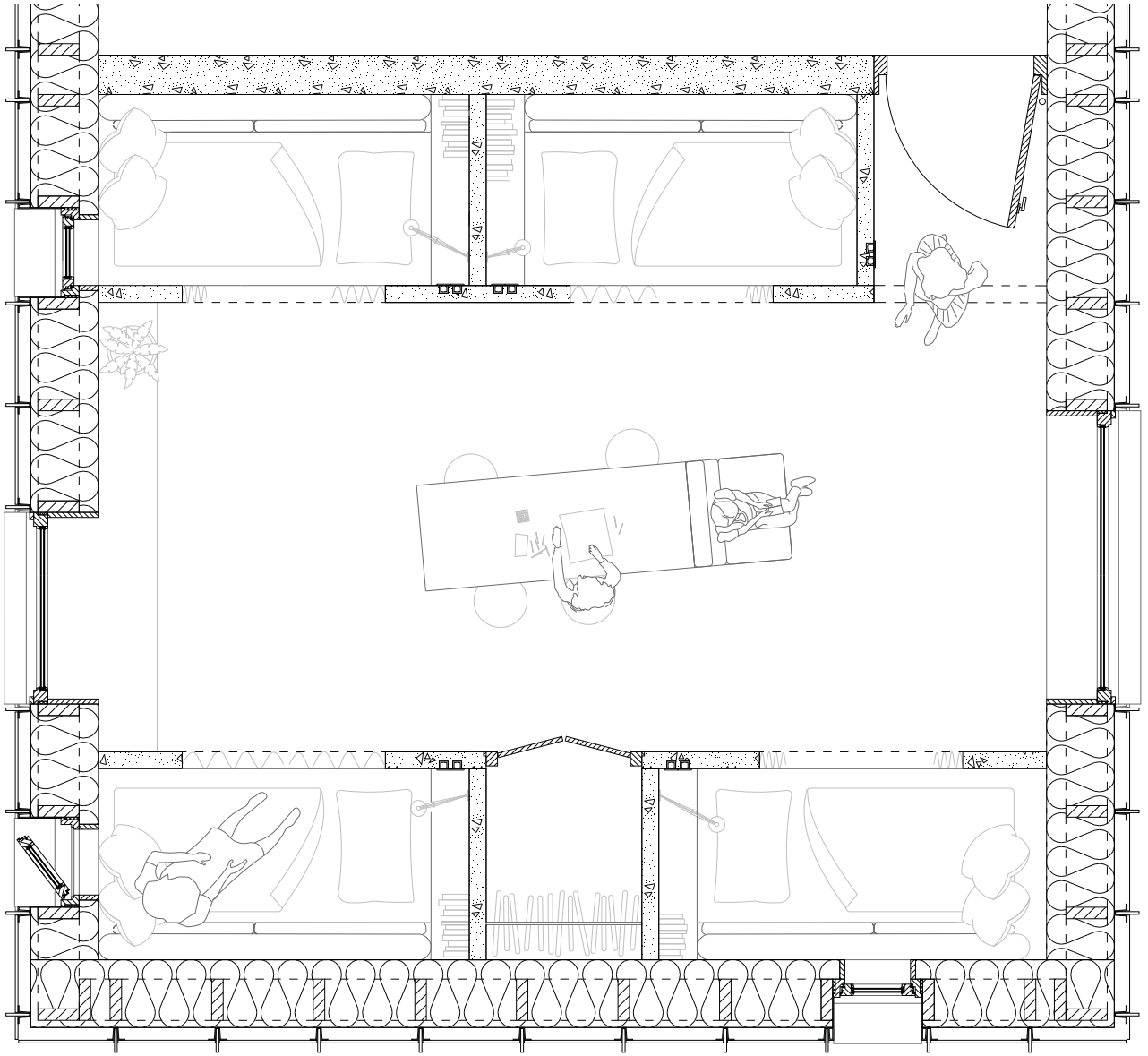
Stained accoya inner finish frame

A+++ triple glazing




technical room
1 : 200
INV
INV
EWH
EWH
AHU
bedroom 4p
common room
bedroom 4p
1
5






THE WORLD

Viroc vertical rib 16 x 140 mm fitted into U-profile and tightened with bolts and nuts

Viroc panel 16 x 575 mm (max) screwed to U-profile

Aluminium mounting U-profile screwed into timber frame

Water barrier

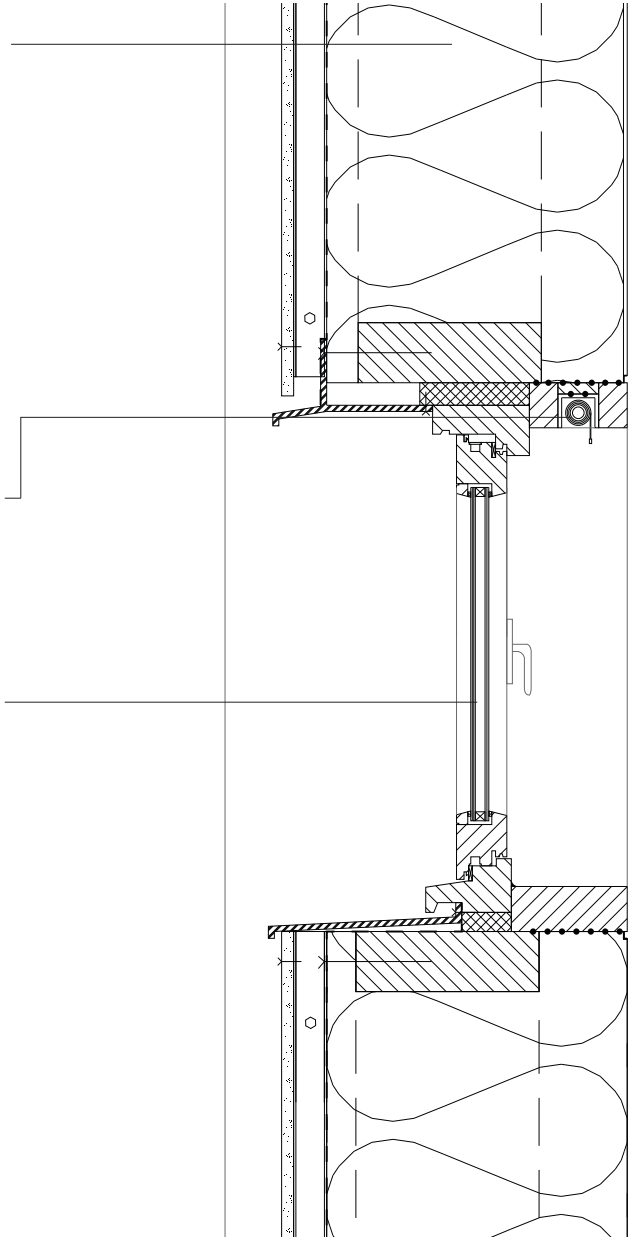
Timber frame 80 x 244 with casted-in-site hempcrete 400 mm,
Rc = 7,2 m²K/W

Aluminium sill

Stained accoya window frame

Stained accoya inner finish frame with integrated roller blinds

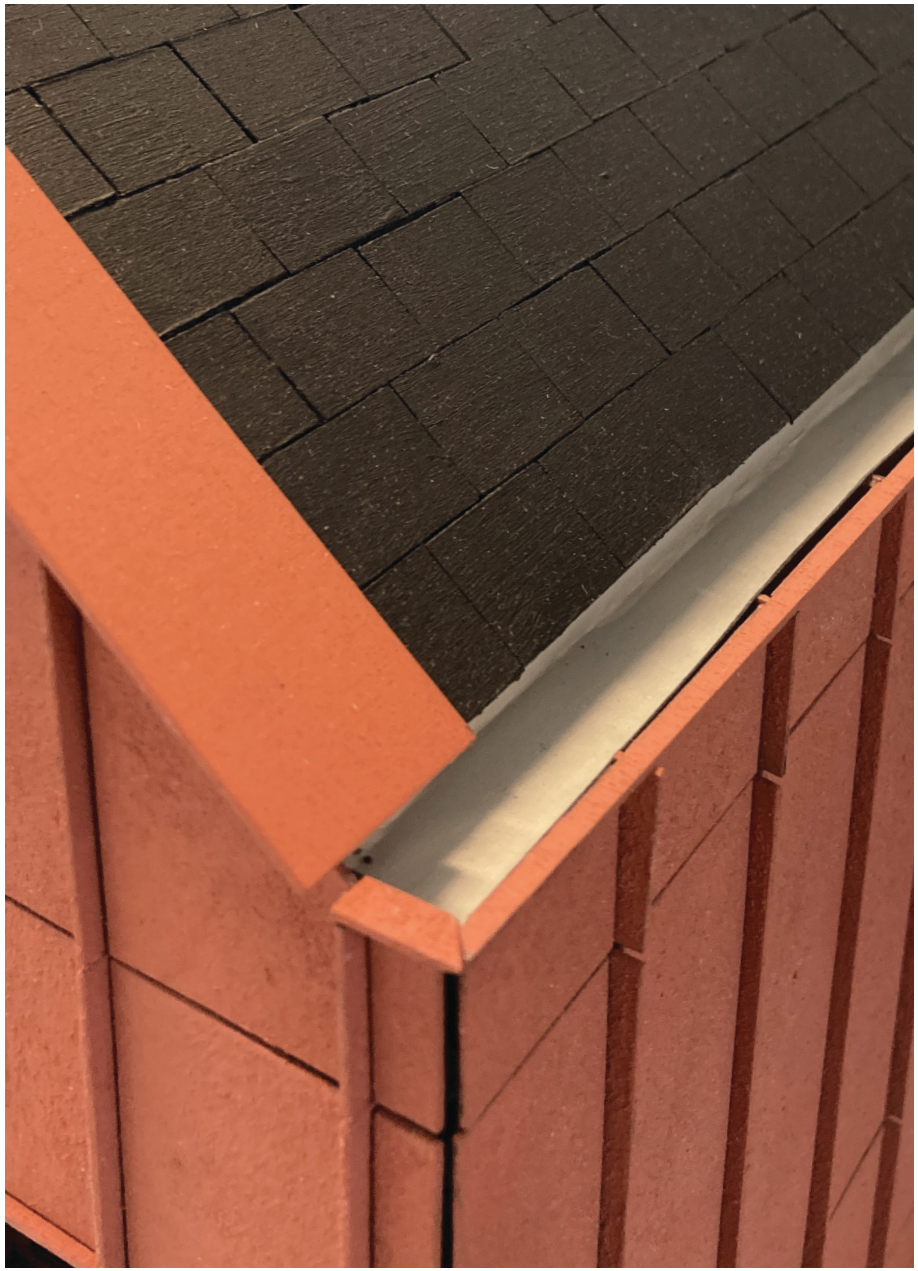
A+++ triple glazing

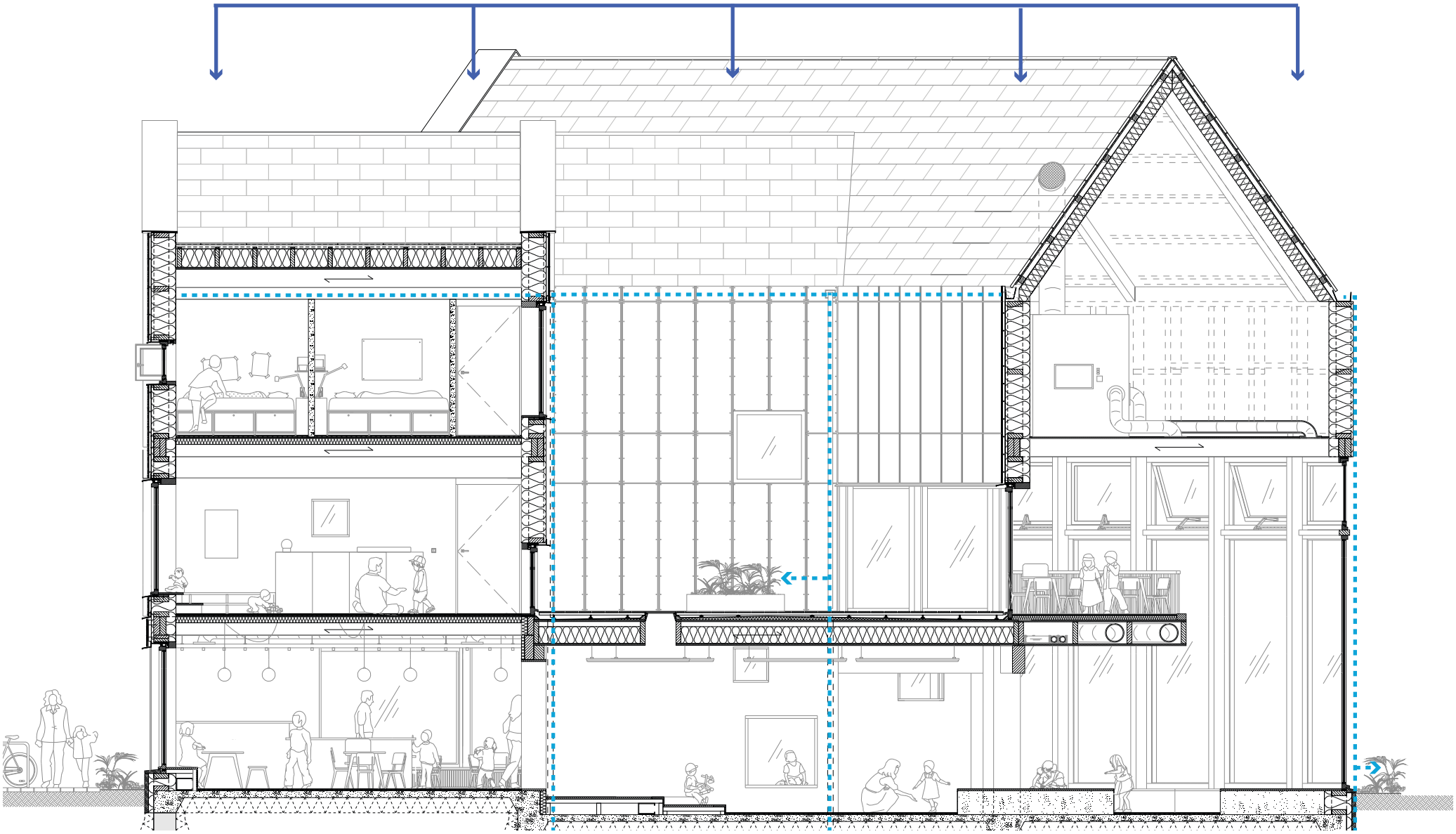


These bedrooms are inspired more heartily by the traditional alcove beds, which were very common in the workers houses in De Jordaan in earlier times, creating a small but private space within a larger and often shared room.

The alcoves are pushed towards the two outer walls, creating a common space in between that is lighted by large windows in the remaining two walls that have a direct relation with the street and the courtyard. A higher window sill, relatable to the height of these older children again signifies the relation between the exterior and interior.

The alcoves are fitted with curtains to regulate the sense of desired privacy, a small openable window so that the child can control the temperature with integrated blackout curtains and shelves for personal belongings. The interior of the alcove is entirely to be appropriated by the child, the kid being in control of the set of sheets, wall decoration and his or her own lamp.





Thanks for your guidance, knowledge, humour and good spirits Sam, Matthijs, Daniel & Mark. It was a fruitful and learnful year, despite all the circumstances. I am happy and proud that under your teaching the project has developed as it has and I as an architect have developed my architectural thinking and positioning.

Be well,
Owen