Student Haven

Phenomenology as a tool for students' mental well-being


Inital Problem
Worsened By
Relevant Within Target Group
Relevant Within Netherlands
Relevant Within Rotterdam

The pandemic lead to an increase in depressive and anxiety disorders

→

WHO predicted in 2018 that 2030, depression will become the leading cause of disease burden worldwide,

→

Students experience higher rates of depression compared to the general population

(Santomauro et al., 2021)

(World Health Organization,2018)

Ibrahim et al. (2013)

in the Netherlands, 2023
44% of university students showed symptoms of anxiety or depression

(Trimbos Institute & RIVM, 2023)

→

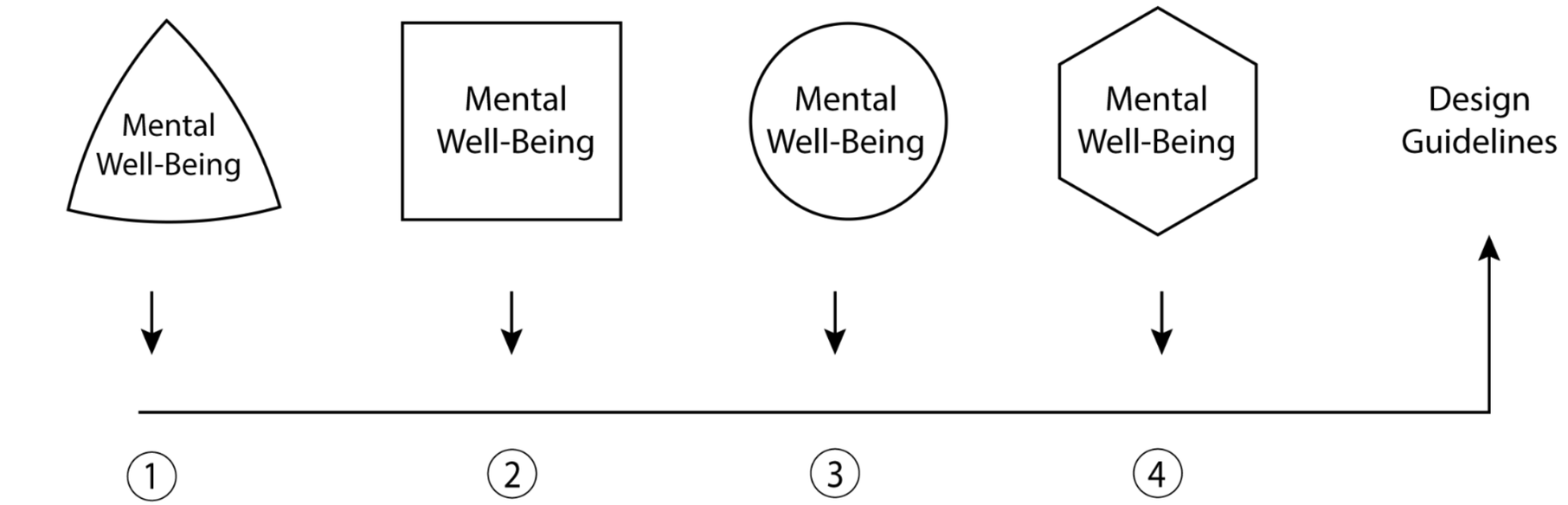
Shortage of student accommodations, Rotterdam facing particularly high demand. forces students into suboptimal accommodations, smaller lack essential privacy and amenities

(Landelijke Monitor Studentenhuisvesting 2023)

→

In Tarwewijk 9% of the residents are students, higher than the citywide average of 7%

(Gemeente Rotterdam, n.d.)


Mental
Well-Being
Mental
Well-Being
Mental
Well-Being
Mental
Well-Being
Design
Guidelines
1
2
3
4
Phenomenological
Literature
Empirical Studies
Case Studies
Interviews

What is phenomenology?

A philosophical approach focused on how we experience the world

In architecture, it examines how spaces are perceived, felt, and lived in

Can percieved experience dictate what is most valuable for mental well-being?

"Phenomenology as a tool for students' mental well-being"

How can the design of residential living environments, viewed through the prism of phenomenological theory, support and enhance the mental well-being of students? A Tarwewijk case study.

good architecture offers shapes and surfaces moulded for the pleasurable touch of the eye (Pallasmaa p48)

perhaps rounded spaces, shapes that feel organic, that feel pleasant to touch,

the current industrial mass production of visual imagery tends to alienate vision from emotional involvement and identification, and turn imagery into a mesmerising flow without focus or participation. (Pallasmaa p25)

Even if architecture is not specifically mentioned it is still relevant emotional implication in architecture? what does it mean?

the concealed spread of superficial architectural imagery today, devoid of tectonic logic and a sense of materiality and empathy, is clearly part of this process. (Pallasmaa p51)

Architectural materials should together with its textures create a sense of empathy? what is empathy in its architectural use?

Perhaps refers to Hertzbergers mentions of appropriatable space? A space that can be seized, A space that has a "containing capacity" [Hertzberger interview 2024] can instigate a sense of "focus and participation", a sense of "empathy" Like nooks corners and edges which can hold items? [dolls montessori]

1.

In heightened emotional states and deep thought, vision is usually repressed (Pallasmaa p30)

Is this a good thing? Should vision be repressed? Should architecture allow heightened emotional states or is this bad for well-being. Should vision perhaps be enlisted to repress heightened emotional states instead?

~~In heightened~~ natural materials - stone, brick and wood - allow our vision to penetrate their surfaces and entrole us to become of the veracity of matter (Pallasmaa p36.)

Vernacular architecture seems to adhere to these values, what I understand is that older, traditional theory for example leads to a veracity of matter, its truthfulness. Tactile materials exhibit truthfulness.

Natural materials express their age, as well as the story of their origins and their histories of human use. (Pallasmaa p36) Materials should show its use by humans? A door handle of copper with its colour changed due to usage?

the retinal images of contemporary architecture certainly appear sterile and lifeless when compared with the emotional and associative power of the poet's olfactory imagery. the poet releases the scent and taste concealed in words, through his words a great writer is capable of constantly an entire city with all the colours of life. (Pallasmaa p50)

Take ... the use of enormous plate windows ... they deprive our buildings of intimacy, the effect of shadow and atmosphere. Architects all over the world have been mistaken in the proportions which they have assigned to large plate windows or spaces opening to the outside ... we have lost our sense of intimate life, and have become forced to live public lives, essentially away from home. (quot from Barragán, Pallasmaa 51)

[Barragán] claims smaller windows = more intimate spaces, more private, (large windows = public lives which is mentioned in [on dutch windows, Herman Hertz] Relates to Building with small windows is therefore also better for well-being -> as it provides privacy?

the use of public space by residents as it were 'private' strengthens the user's claim to that area in the eyes of others (Hertzberger p17) Hertzberger talks about spaces that offer this possibility, "public space" that offers the possibility to be used as private, so renters & dwellers with space for private? where each person can place their own pot? or railings that can be used for drying clothes as should always need? appropriatable public space.

the influence of users can be stimulated, at least if this is done in the right places, ie. where sufficient involvement may be expected.... (Hertzberger 258)

such as nooks and corners or plot surfaces where focus and participation can become a thing [montessori school dolls] and [Hertzberger interview 2024]

even a minor adjustment by the way of spatial articulation of the entrance can be enough to encourage expansion of the personal sphere of influence, and thus the quality of public space will be considerably increased in the common interest (Hertzberger 59)

He is mentioning the "in between spaces", mostly around entrances which he mentions, increases quality of public space, so some sort of decorateable or editable space around the entrance might increase well-being? improved public space -> improved life quality -> improved?

A street area with which the inhabitants themselves are involved and where individual wishes are put down for themselves and for each other is appropriated jointly, and is thus turned into a communal space. (Hertzberger p43). He states this idea of a street as ideal which improves the quality of the traditional "corridor" or street

where the involvement of residents, their implication is crucial for improvement of space. Appropriation of space = empathy in its architectural sense?

the point is to give public spaces form in such a way that the local community will feel personally responsible for them, so that each member of the community will contribute in his or her own way to an environment that he or she can relate to and can identify with.

to further probe my point EMPATHY + RESPONSIBILITY + PARTICIPATION = good architectural spaces -> good for well-being

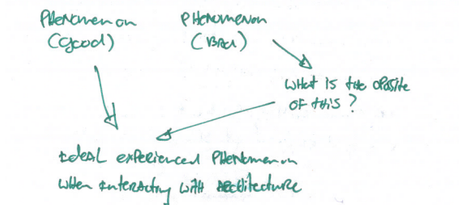
things start to go wrong when the scale becomes too big, when the upkeep and management of a communal area can no longer be left to those directly involved (Hertzberger p58)

Hertzberger mentions small scale = good in this case the mention of proportions as there

the world that is controlled and managed by everyone as well as for everyone will have to be built up of small-scale, workable entities, no larger than what one person can cope with and look after on his own terms. (Hertzberger p47)

Once again mention of scale/proportions, but I like the fact that he states it has capable and easy able to look after

All of the mentioned books approach the topic of architecture and the phenomena of experiencing architecture, through a personal lens, but they all have a simple categorisation, either the described phenomenon is what architects should strive for, or it is something they should avoid.

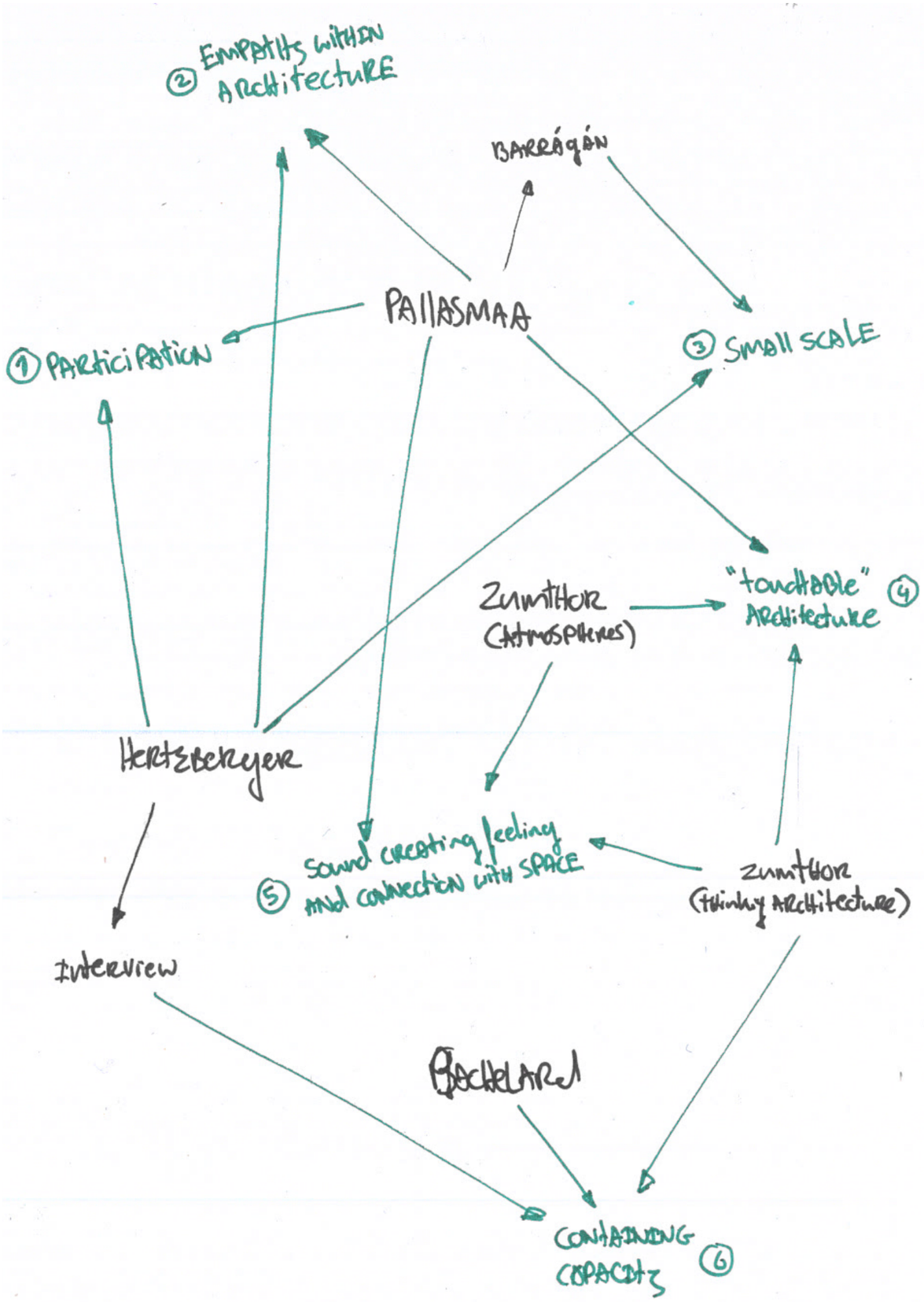


It is this ideal phenomenon that is what I am to extract from these books, whereby it should be noted that there, this space, is a major assumption. Namely that ideal phenomenon = good for mental well-being, another assumption is that this ideal phenomenon is universally considered as ideal, it transcends cultures and preconceptions.

these are my assumptions as of now from what I myself understand

ideal phenomenon -> good for mental well-being
ideal phenomenon -> universally considered ideal

I think they both should be carefully deconstructed prior to the initiation of the research, if possible, these ideal phenomena should evoke a general sense of good or correctness.


② EMPATHS WITHIN ARCHITECTURE
BARRÁGÁN
PALLASMAA
① PARTICIPATION
③ SMALL SCALE
ZUMTHOR (Atmospheres)
"touchable" ARchitecture ④
Hertzberger
⑤ sound creating feeling and connection with SPACE
zumthor (thinking ARchitecture)
Interview
BACHELARD
CONTAINING CAPACITY ⑥



ARCHITECTURE AS A BODY



ARCHITECTURE AS A SPACE OF REFUGE



SOUNDS CREATING AFFILIATION



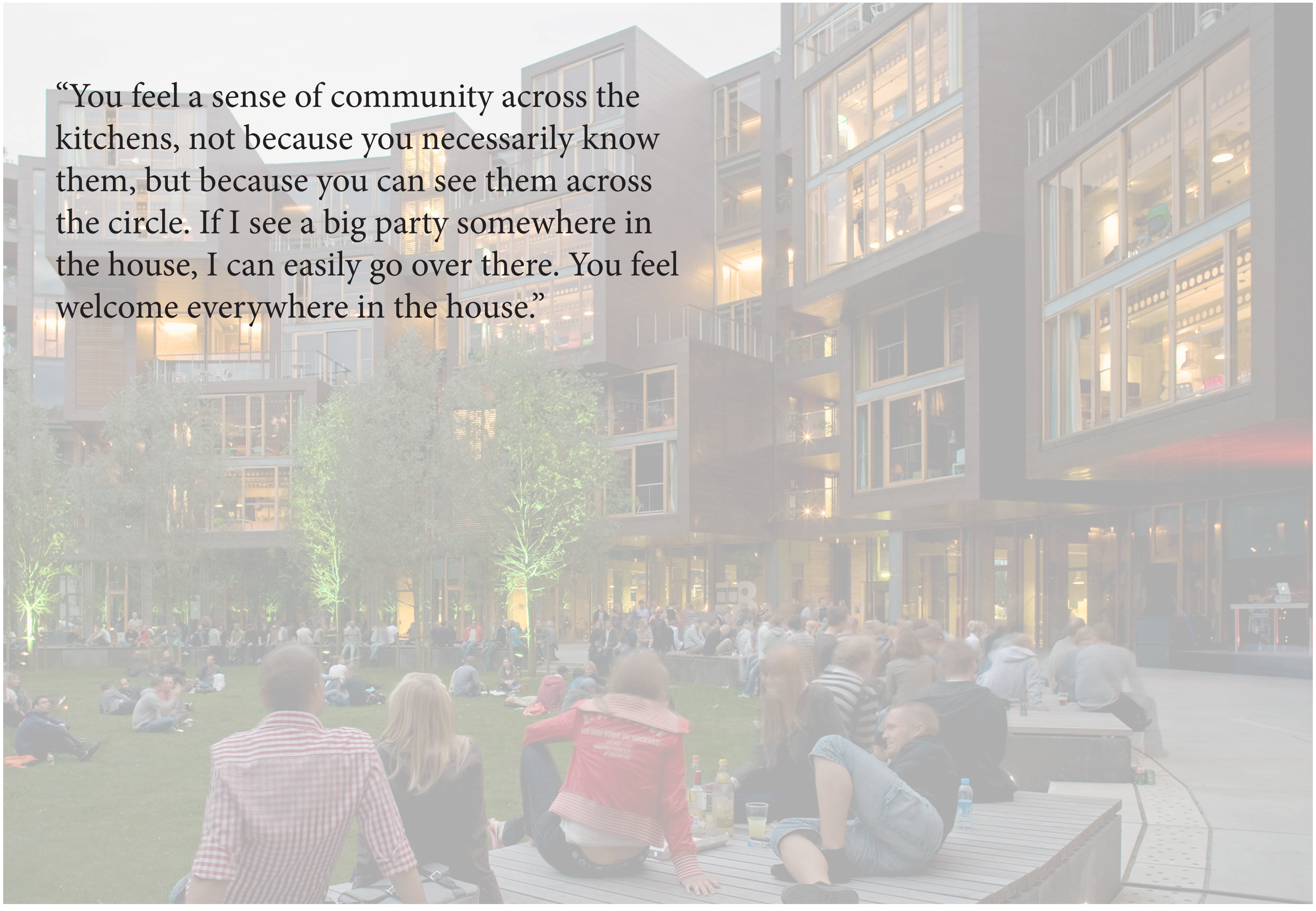
STIMULI-CONTROLLED ARCHITECTURE

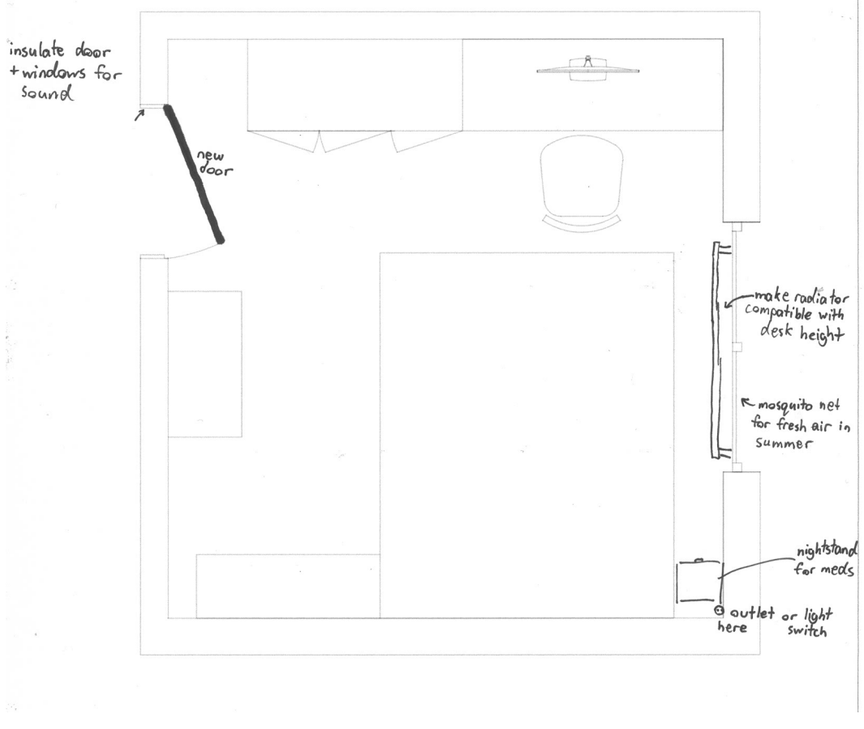


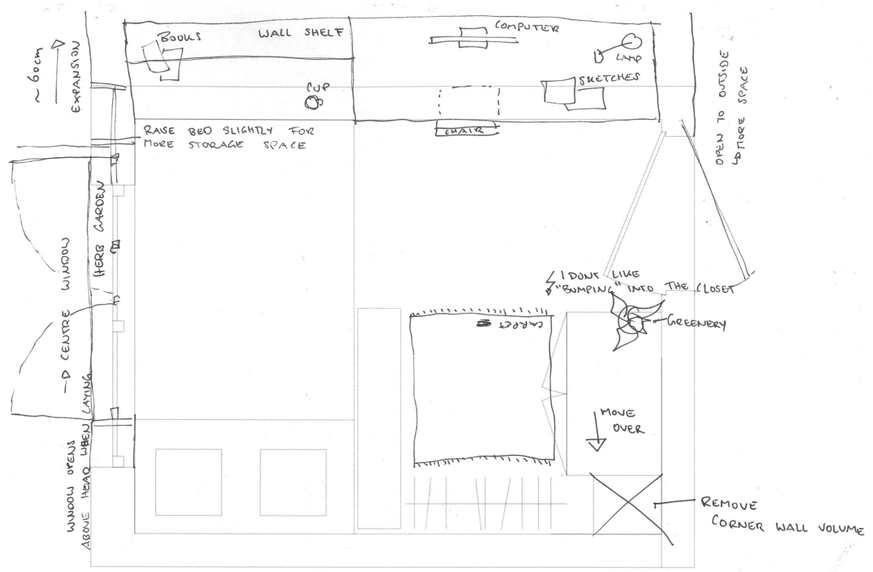
OBJECTS WITHIN ARCHITECTURE

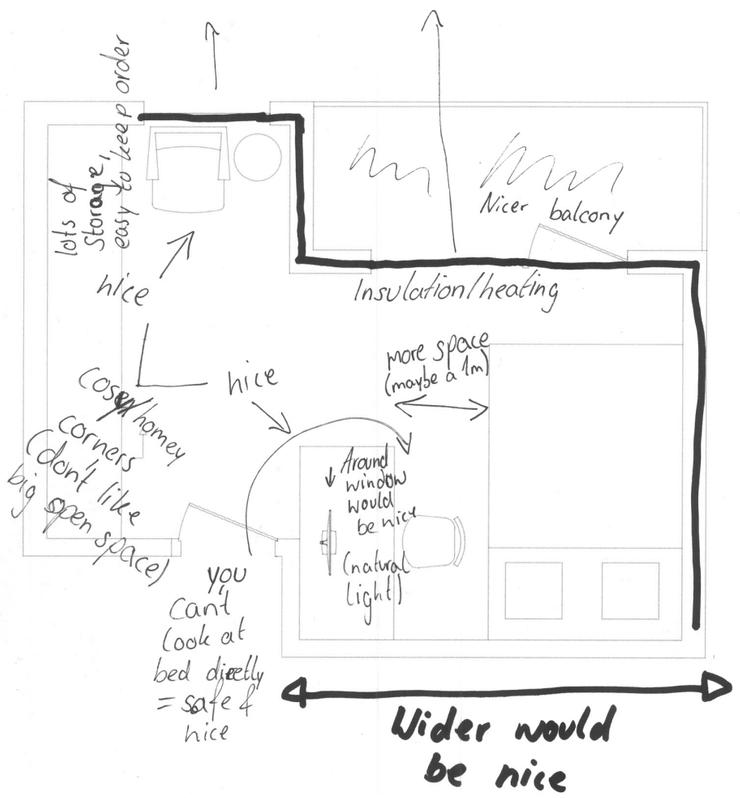
In line with the notion of Pallasmaa's moulded surfaces and Zumthor's understanding of architecture as a bodily mass, a recent study conducted by psychologists Strachan-Regan & Baumann (2024) studied the impact of room shapes.

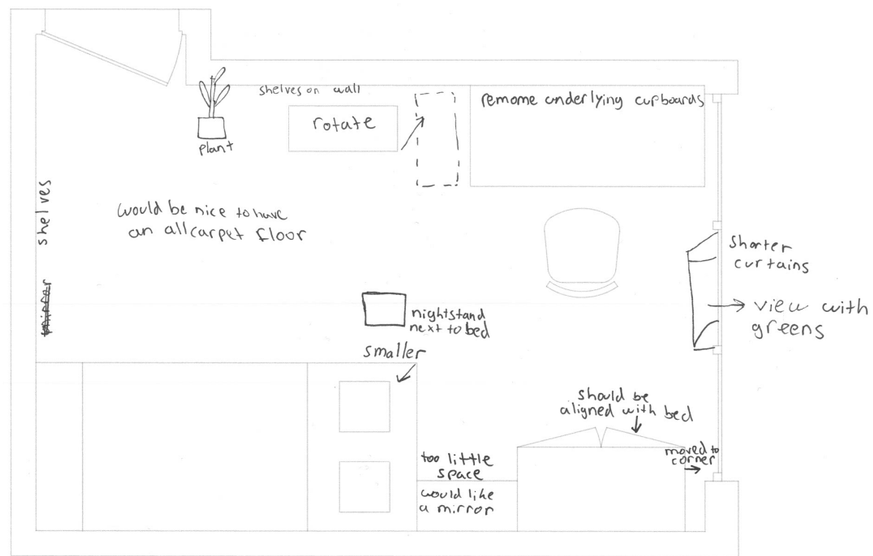
35 participants were placed in a virtual environment where they were exposed to two distinct rooms, a curved room and a rectangular room. The results showed a positive affect for the participants within the curved room, furthermore the curved room showed lower heart rate and, on average, the participants had a higher creative output (Strachan-Regan & Baumann, 2024).


“You feel a sense of community across the kitchens, not because you necessarily know them, but because you can see them across the circle. If I see a big party somewhere in the house, I can easily go over there. You feel welcome everywhere in the house.”


insulate door + windows for sound
new door
make radiator compatible with desk height
mosquito net for fresh air in summer
nightstand for meds
outlet or light switch here


~ 6cm EXPANSION
BOOKS
WALL SHELF
COMPUTER
LAMP
SKETCHES
CUP
CHAIR
RAISE BED SLIGHTLY FOR MORE STORAGE SPACE
OPEN TO OUTSIDE FOR MORE SPACE
WINDOW
HERB GARDEN
I DON'T LIKE "BUMPING" INTO THE CLOSET
CARPET
GREENERY
CENTRE
CANVAS
MOVE OVER
WINDOW OPENS ABOVE HEAD LINE
REMOVE CORNER WALL VOLUME


lots of Storage, easy to keep order
nice
Nicer balcony
Insulation/heating
nice
more space (maybe a 1m)
cosy/homey corners (don't like big open space)
Around window would be nice
(natural light)
you can't look at bed directly = safe & nice
Wider would be nice


shelves on wall
rotate
remome underlying curboards
plant
would be nice to have an allcarpet floor
shelves
nightstand next to bed
smaller
shorter curtains
view with greens
should be aligned with bed
moved to corner
too little space
would like a mirror



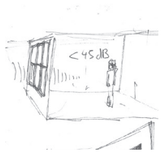
ACCESSIBLE GREENERY (4.30)



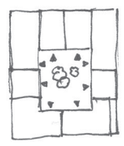
GREEN VIEW WINDOWS (4.20)



LARGE WINDOWS LIVING ROOM (4.15)



QUIET SIDE (4.05)



PRESENCE OF COURTYARD (3.85)



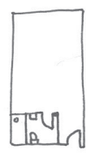
COMMUNAL ROOMS (3.85)



INDOOR PLANTS (3.80)



FURNITURE FOR OBJECTS (3.80)



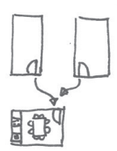
FLEXIBLE INTERIOR SPACES (3.65)



BIRD FRIENDLY TREES (3.65)



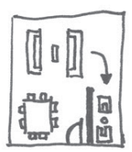
COMMUNITY GARDEN (3.40)



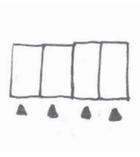
30 M2 COMMUNAL SPACE (3.30)



ACCESS FROM COURTYARD (3.30)



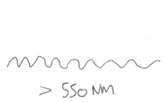
WITHDRAWAL POSSIBILITY COMMUNAL SPACES (3.15)



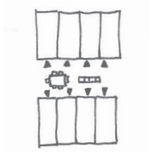
DWELLING GROUPING OF 4 (2.95)



INDOOR SMOOTH WALLS (2.70)



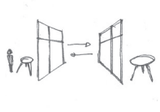
COOL INDOOR COLOURS (2.70)



GROUPING STUDENT DWELLINGS (2.60)



EQUAL DISTANCES TO COMMUNAL SPACES (2.45)

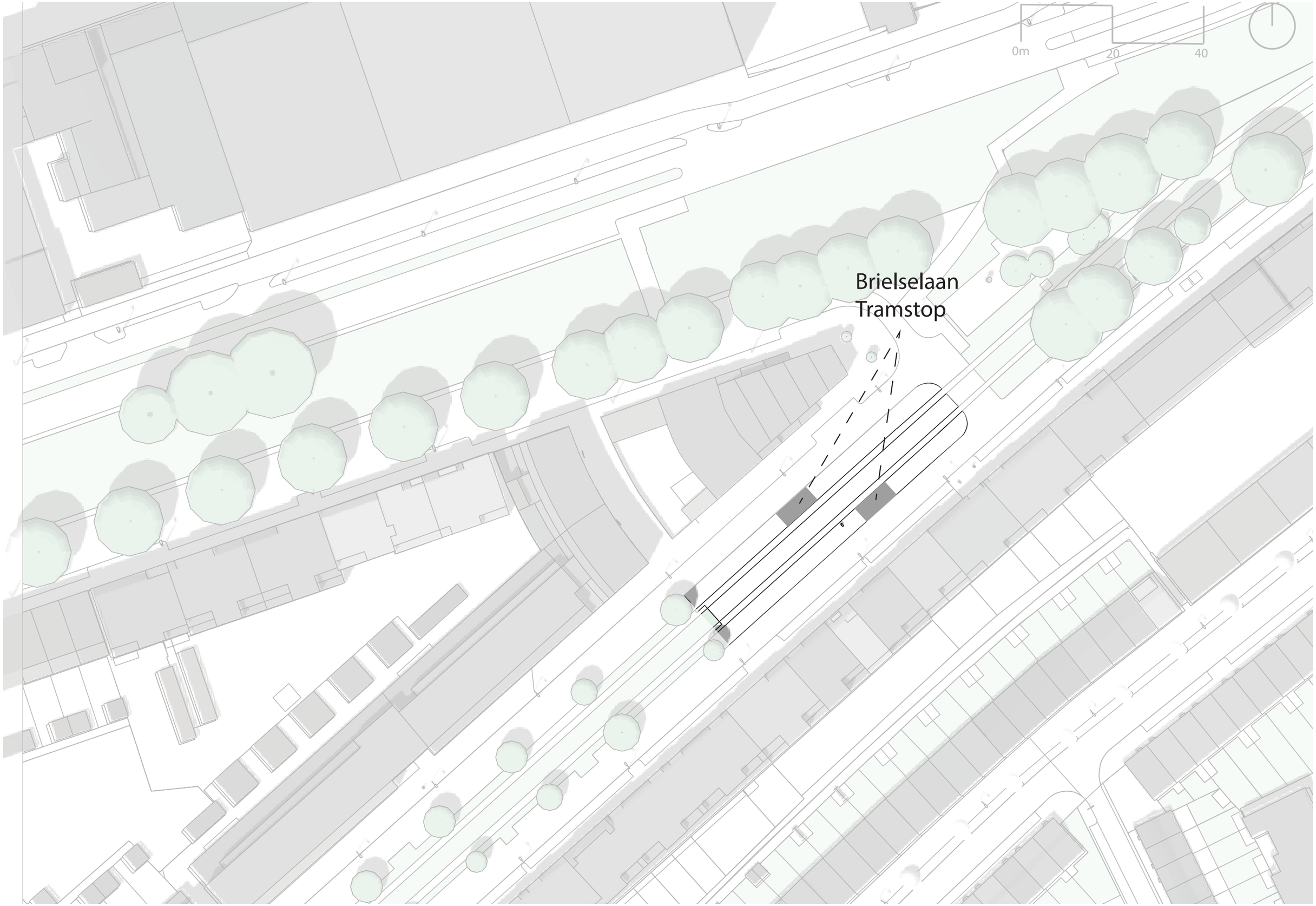


VISUAL CONNECTION BETWEEN COM. SPACES (2.35)



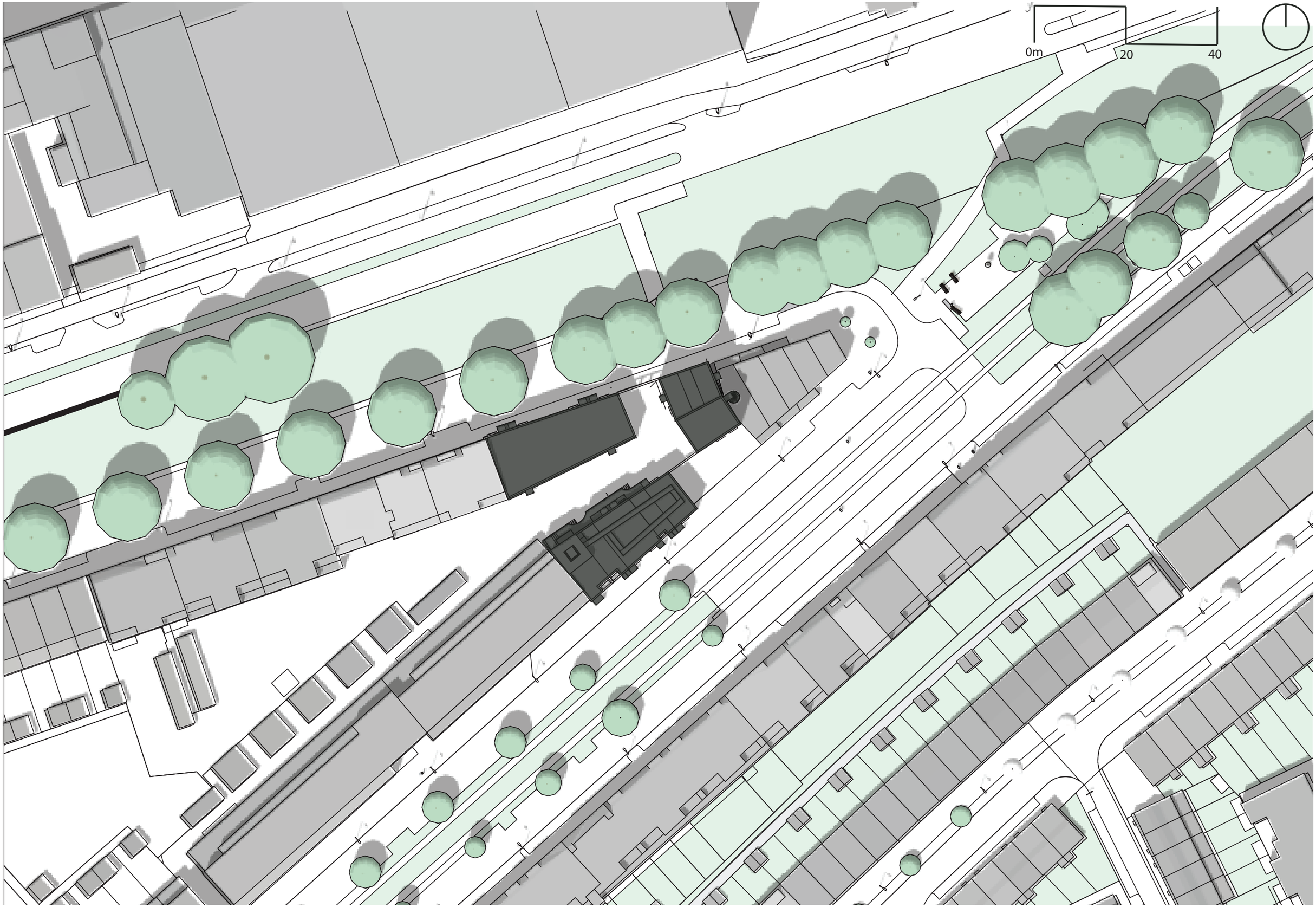
CURVED INTERIOR WALLS (1.95)


0m
100
200


0m
20
40
Brielselaan
Tramstop

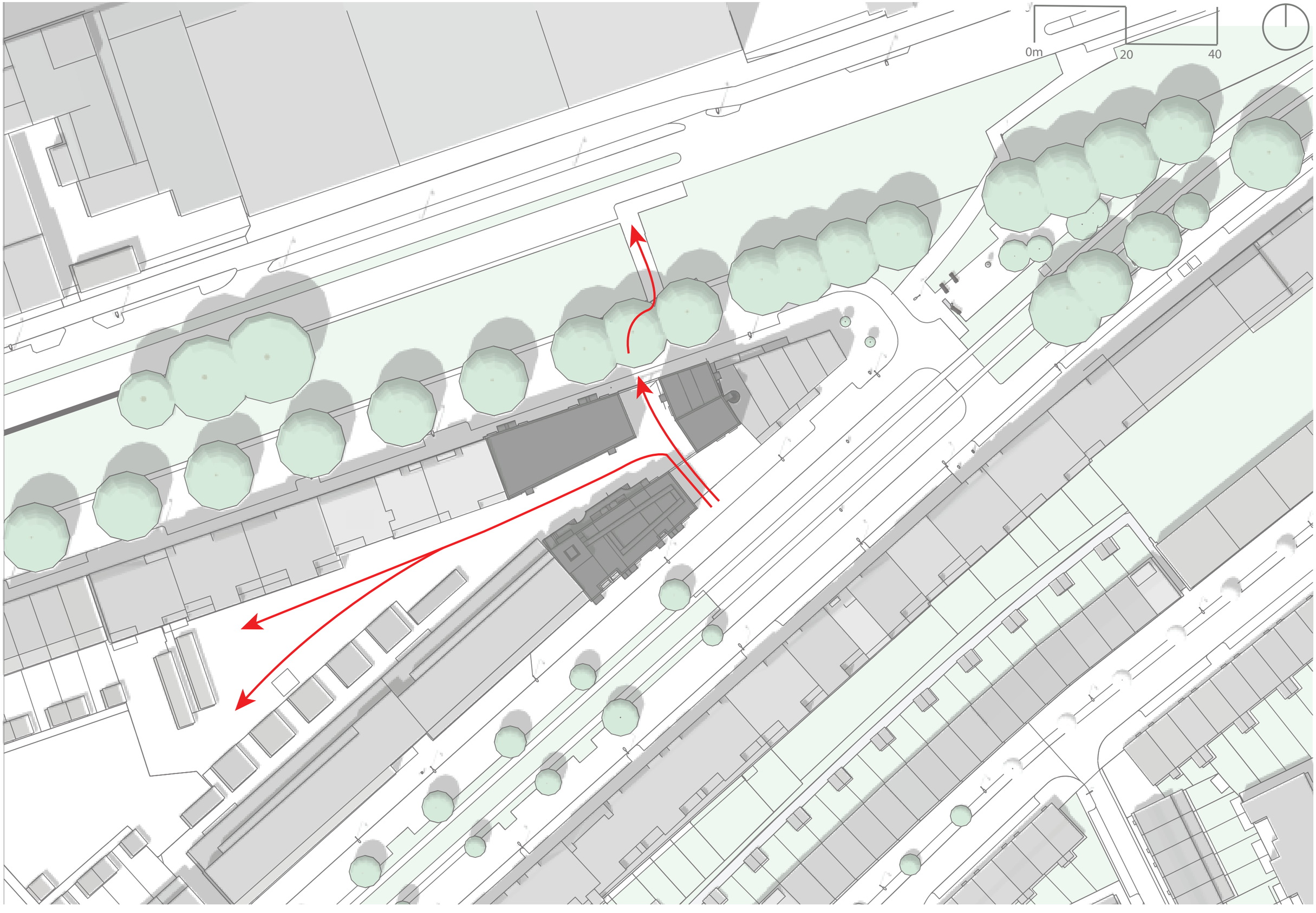
ure 7: Design site




0m
20
40



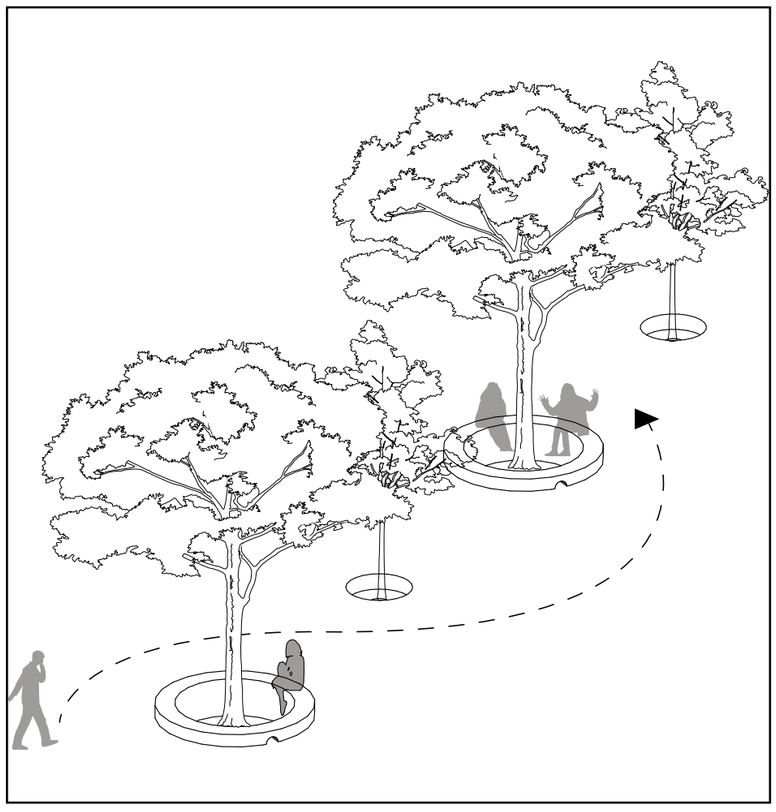

0m
20
40

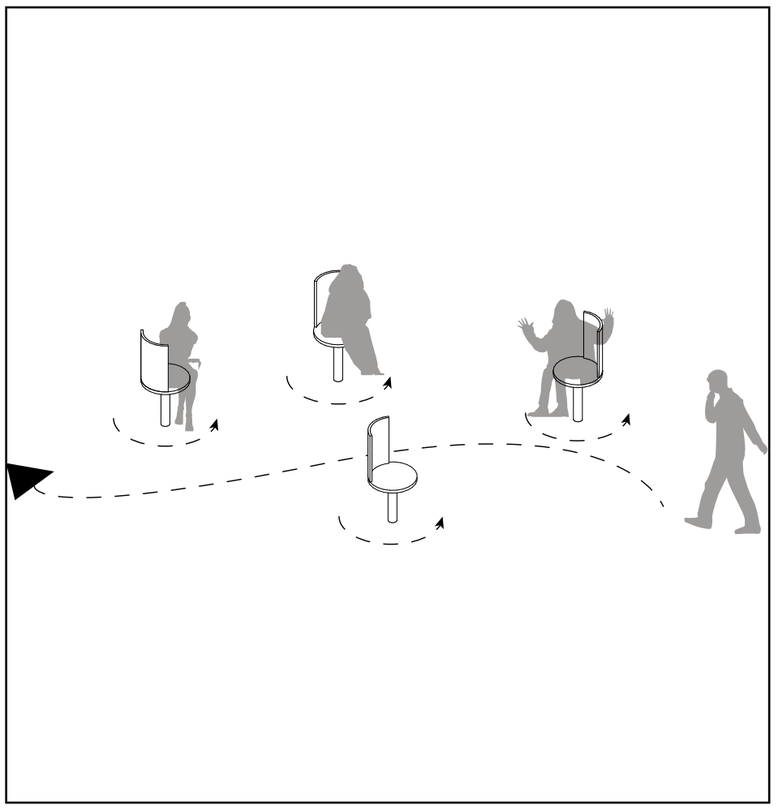

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40

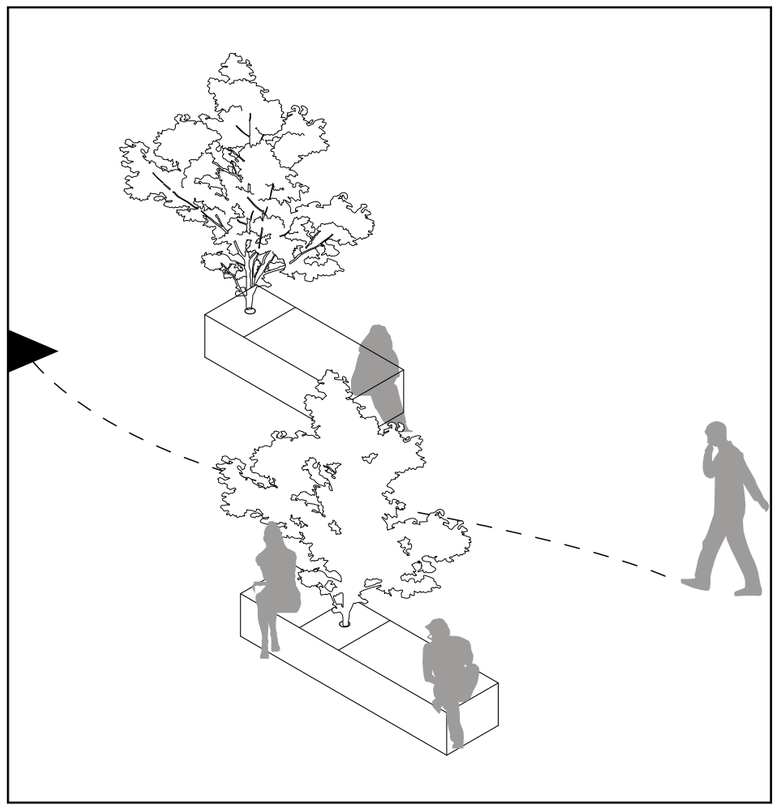


Ground Floor


0m
5
10
TR.
TR.
TR.

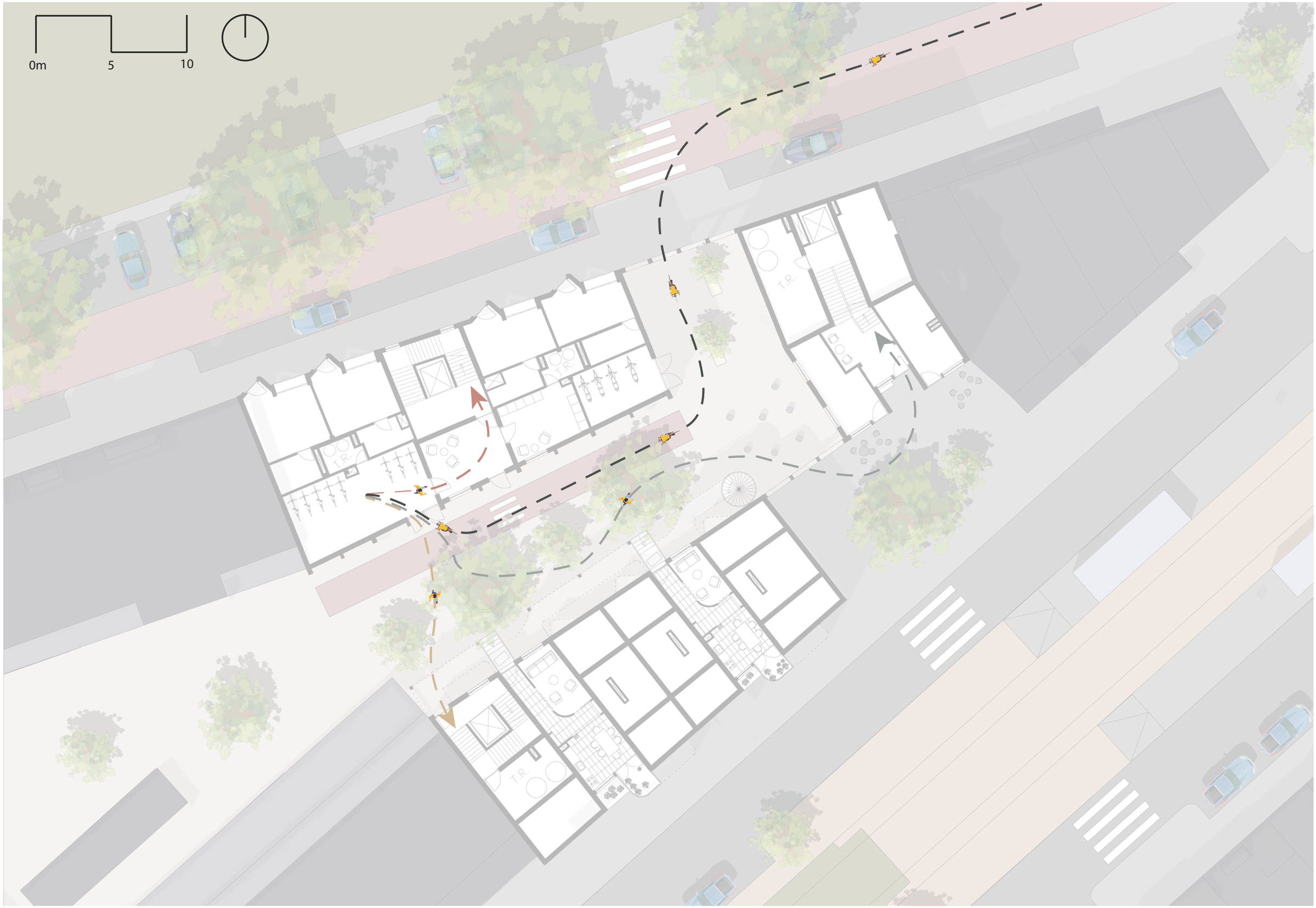


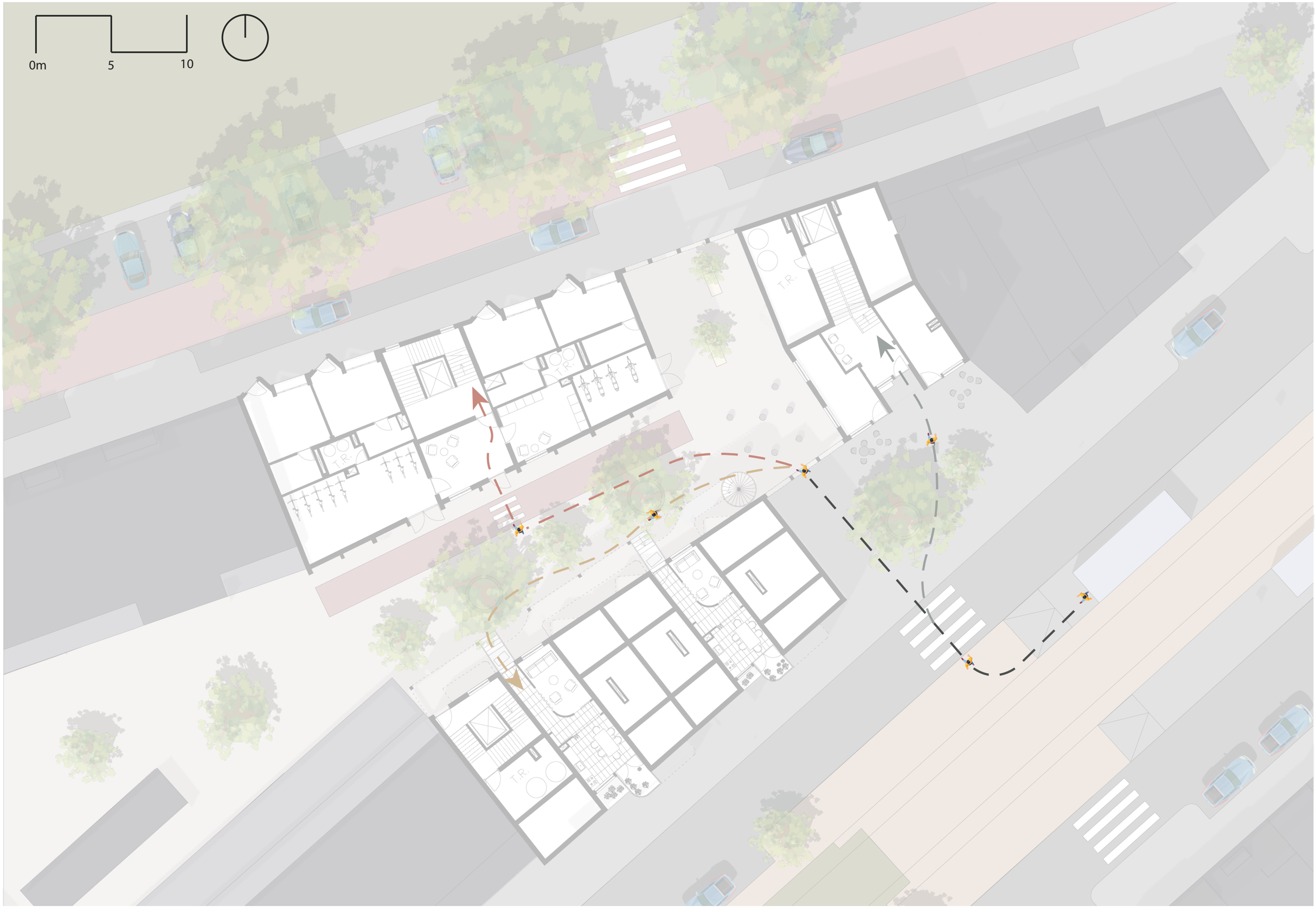




Design features that facilitate coincidental encounters among students can foster stronger interpersonal bonds and enhance psychological well-being (Easterbrook & Vignoles, 2015).

Nature exposure from home and accessibility to nearby nature have been shown to significantly improve general well-being and reduce symptoms of depression and anxiety (Repke et al., 2018).

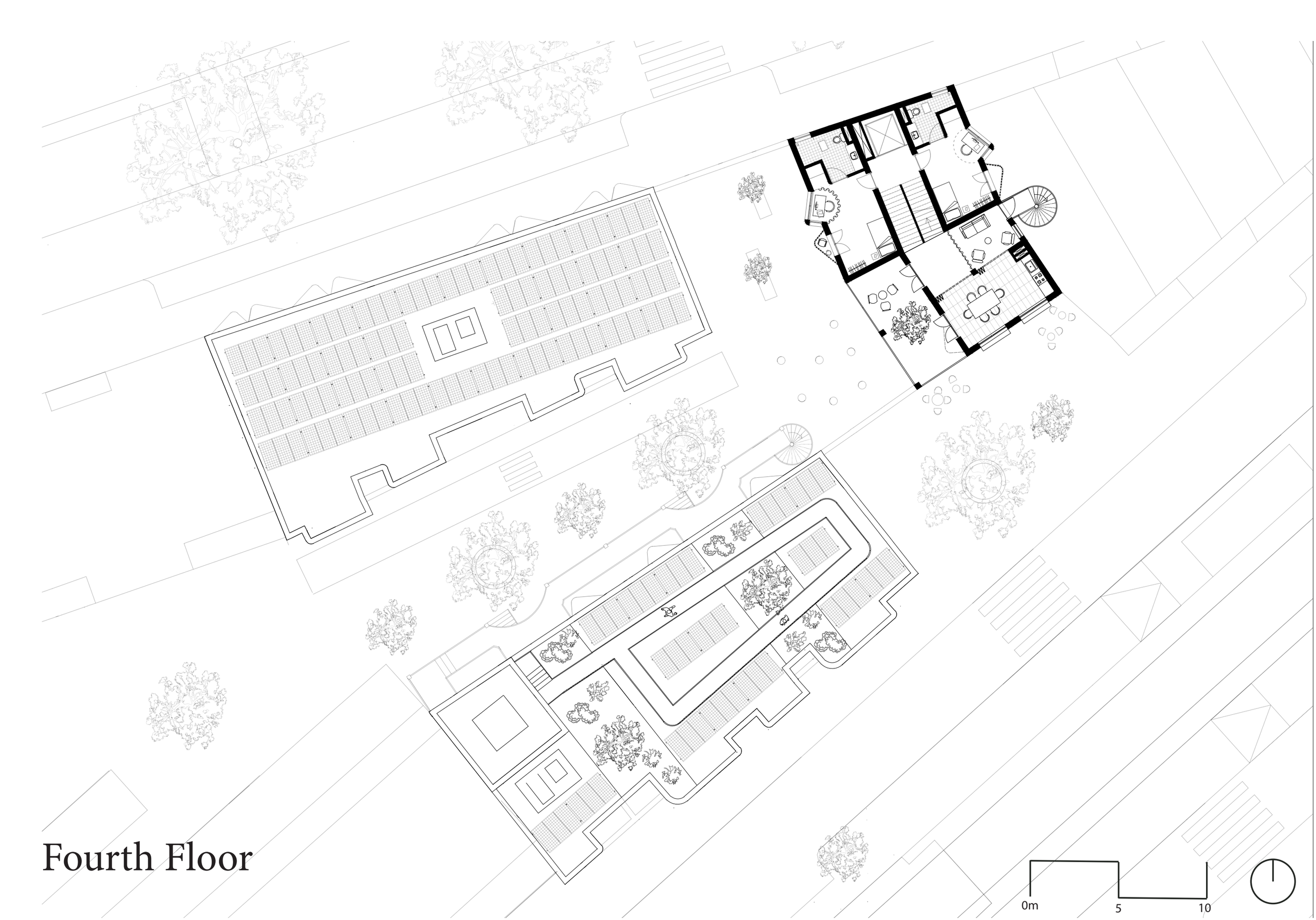

0m
5
10
TR
TR
TR


0m
5
10
T.R.
T.R.
T.R.

First Floor



Fourth Floor




22m2
23m2
25m2
21m2
22m2
23m2
24m2
22m2
25m2
20m2
20m2
20m2
20m2
21m2
21m2
0m
5
10

First Floor

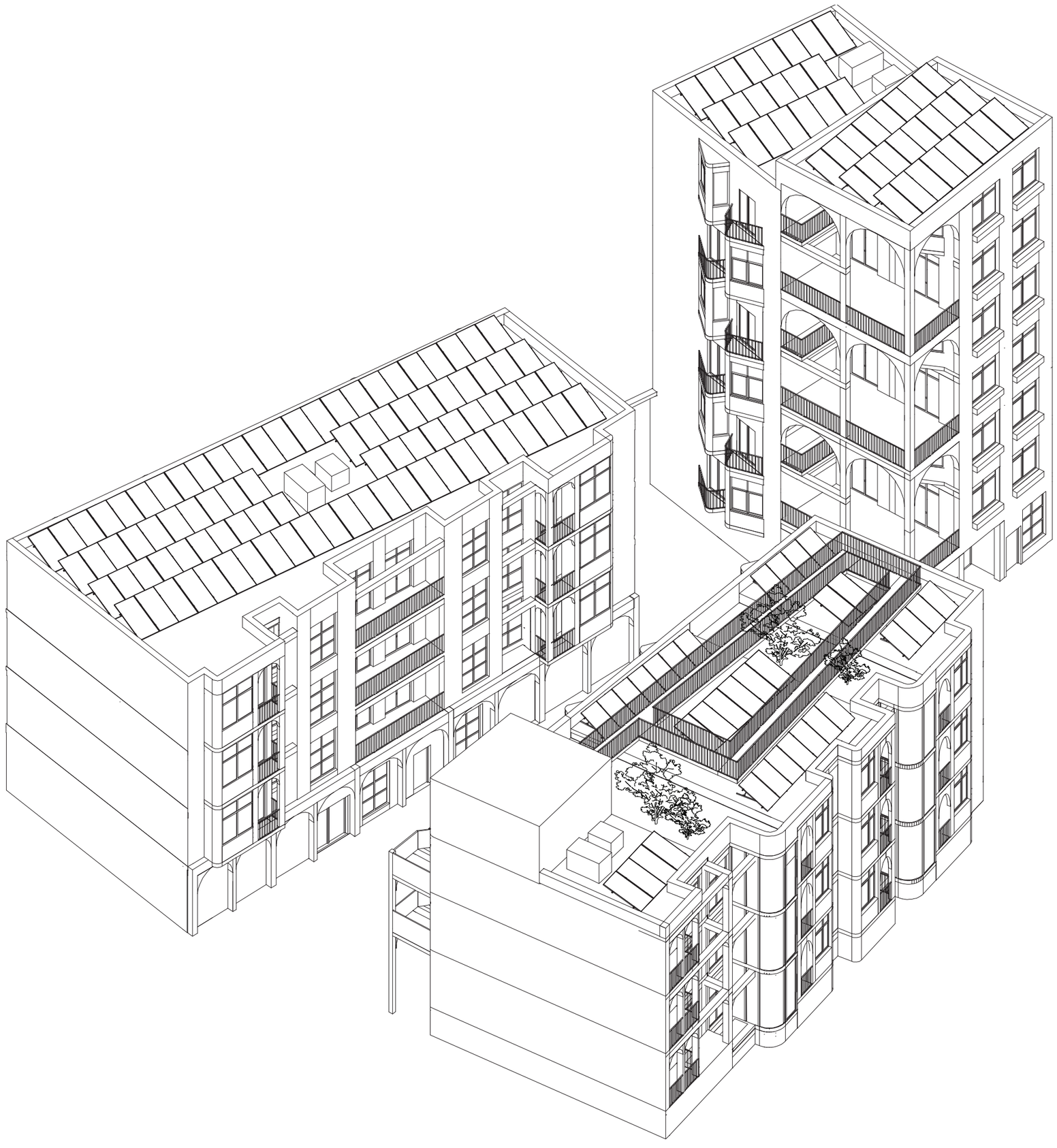
Students indicated on average that a bedroom size of 20–25 m^2 is ideal. (Presura, 2025, n=20)

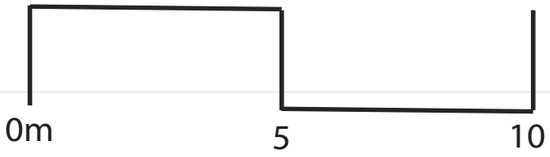


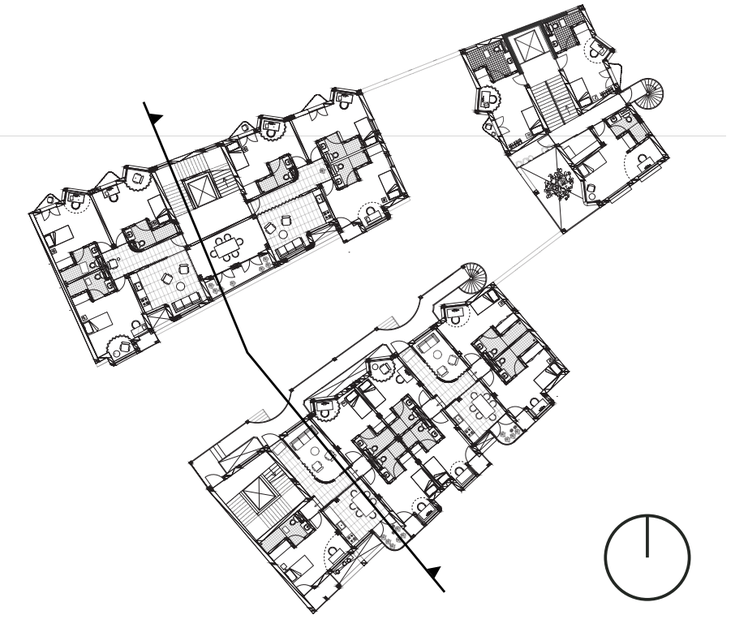
First Floor

Students living in dormitories with shared spaces tend to experience more frequent peer interaction, and improved academic outcomes (Brown, Volk, & Spratto, 2019).

Students indicated on average that sharing a common space with 3–4 peers is ideal. (Presura, 2025, n = 20)




0m
5
10



According to resident Nicolas, opposing communal rooms with visual access across the building create a sense of community by allowing residents to see social activity and feel welcome to join, even without knowing the others personally. (Tietgenkollegiet, n.d.)

Building A

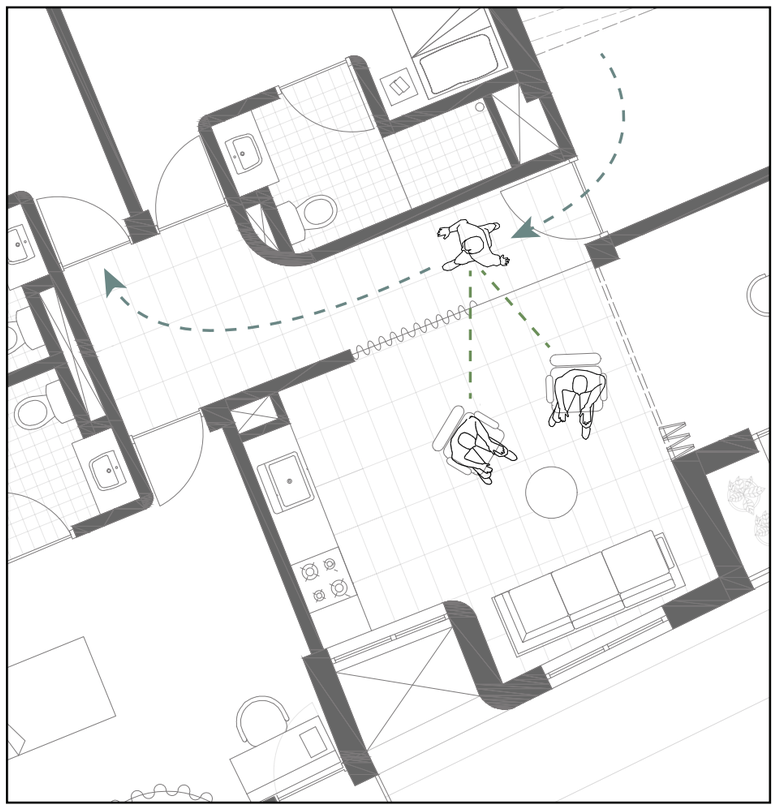
Building B

Building C

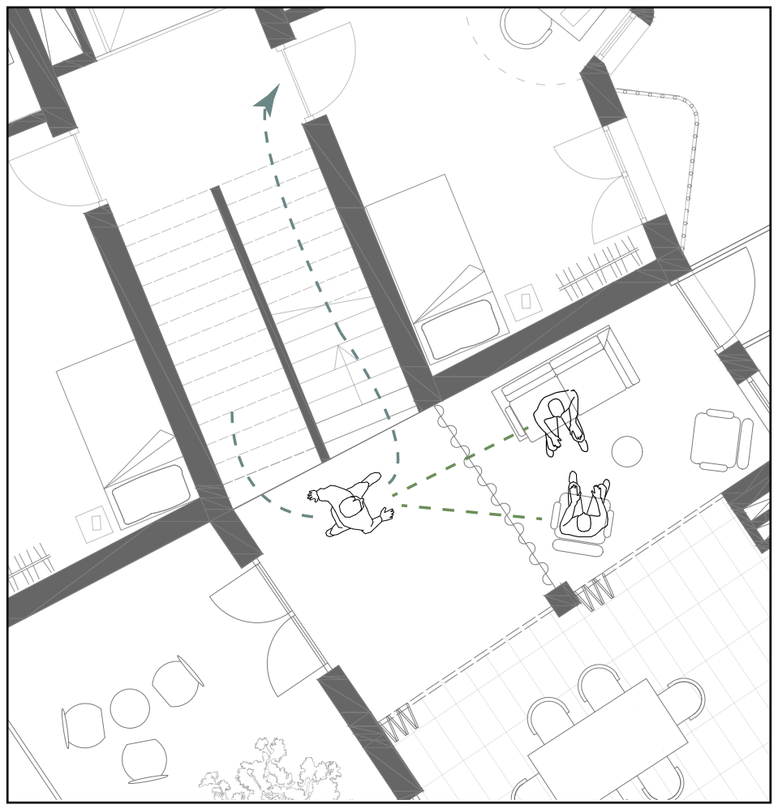
0m 5 10



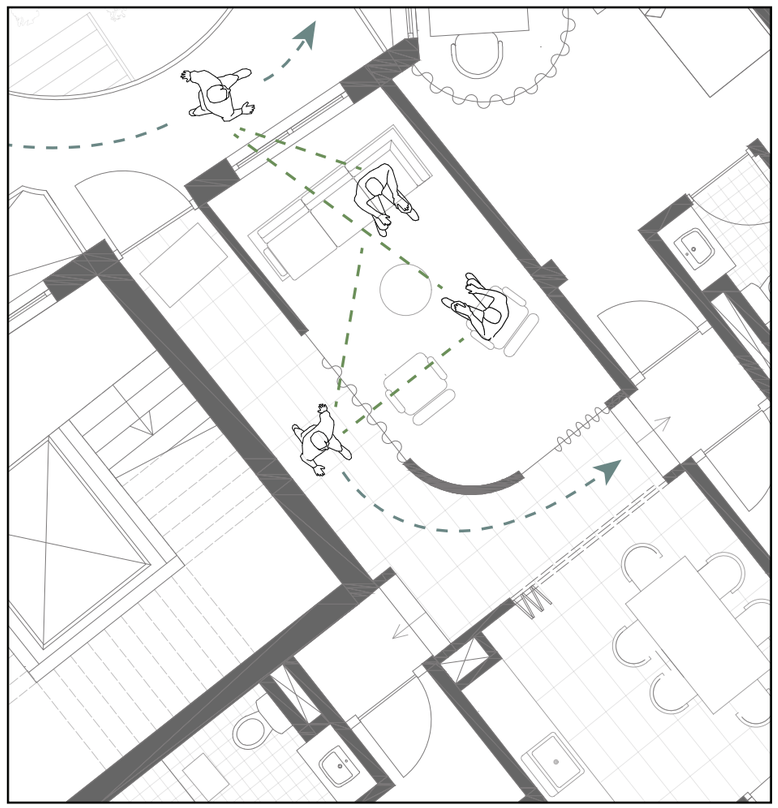
Communal Spaces



Building A



Building B



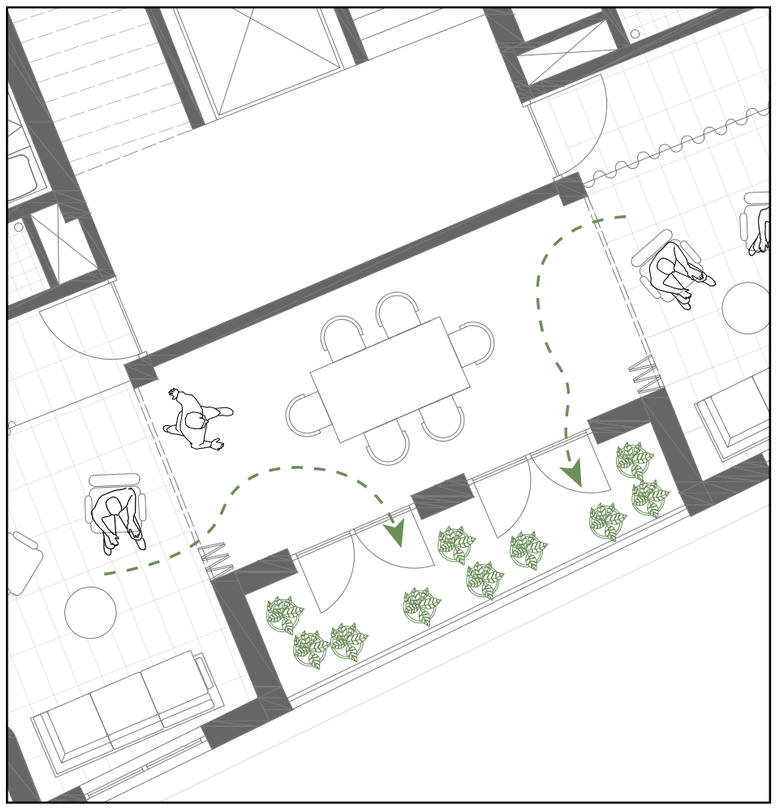
Building C

Design features that facilitate coincidental encounters among students can foster stronger interpersonal bonds and enhance psychological well-being (Easterbrook & Vignoles, 2015).

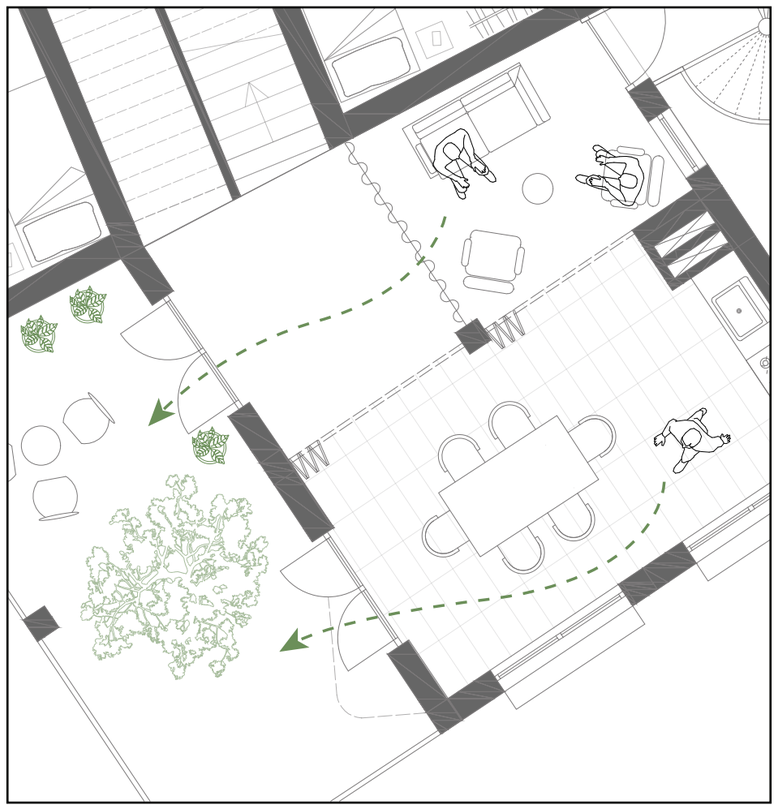
For students, a lack of control over unwanted social interaction can lead to feelings of helplessness, while environments that allow withdrawal promote psychological safety (Baum & Valins, 1977).



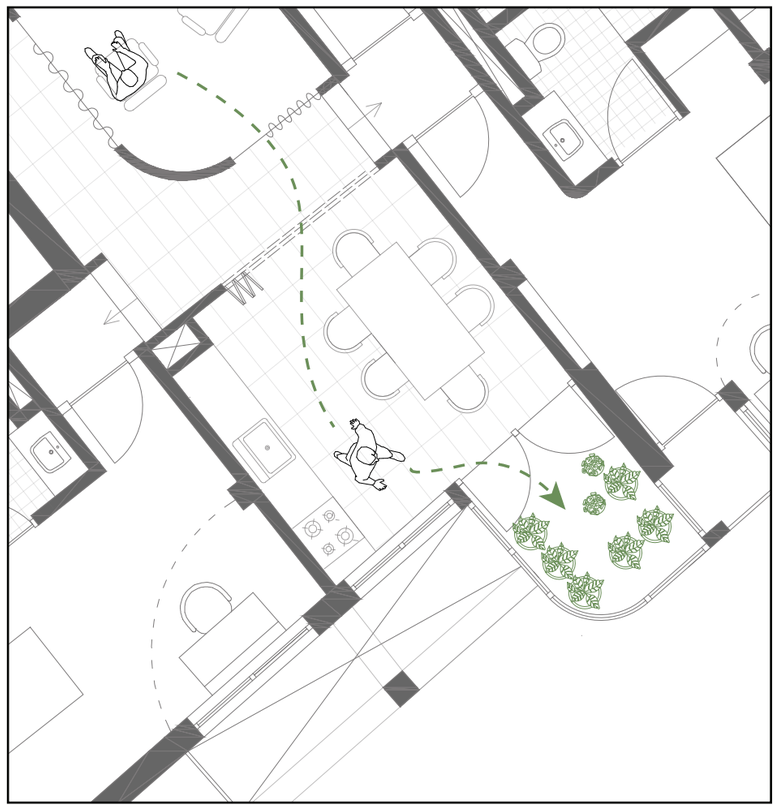
Communal Spaces



Building A



Building B



Building C

Nature exposure from home and accessibility to nearby nature have been shown to significantly improve general well-being and reduce symptoms of depression and anxiety (Repke et al., 2018).

Indoor plants have been found to significantly reduce diastolic blood pressure, improve academic achievement, and positively influence students' perceived mental well-being. (Han, Ruan, & Liao, 2022)

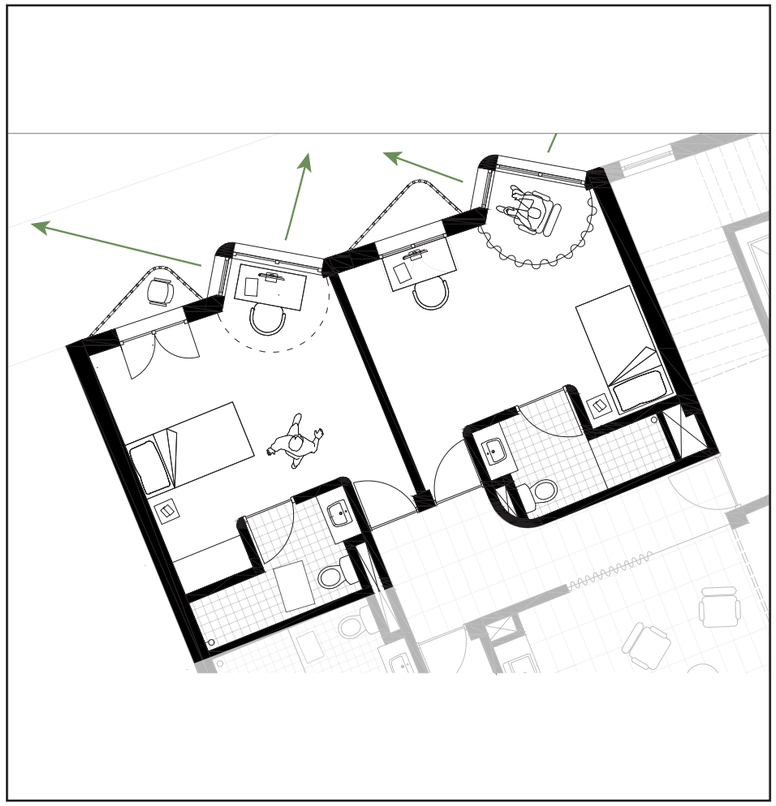
"The sounds when I was a boy, the noises my mother made in the kitchen made me feel happy… There are buildings that have wonderful sounds, telling me I can feel at home, I'm not alone."
(Zumthor, 2006, p. 29, p. 33)

"Hearing creates a sense of connection and solidarity; our look wanders lonesomely in the dark depths of a cathedral, but the sound of the organ makes us immediately experience our affinity with the space."
(Pallasmaa 1996, p. 54)

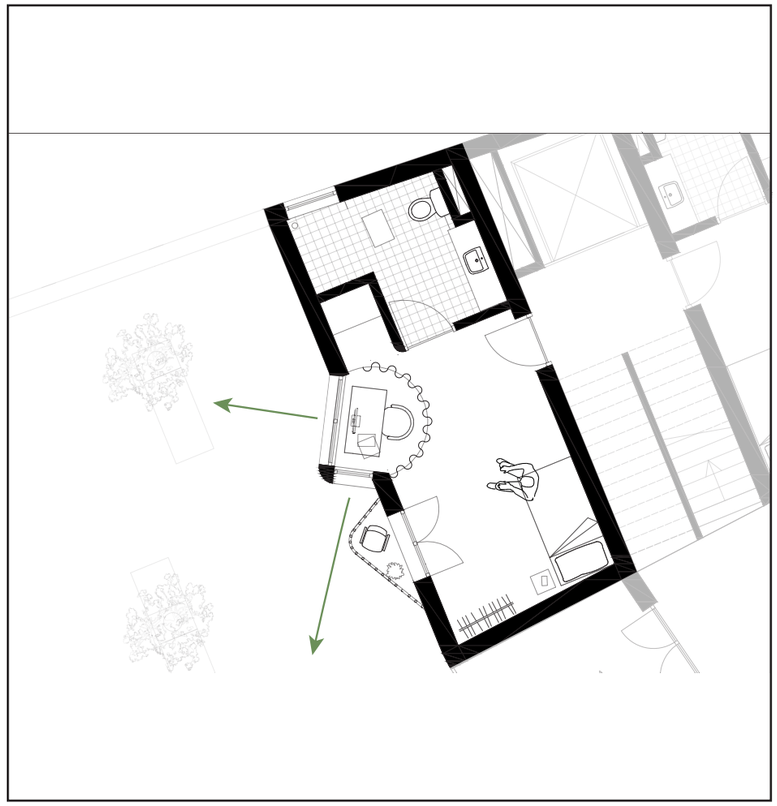




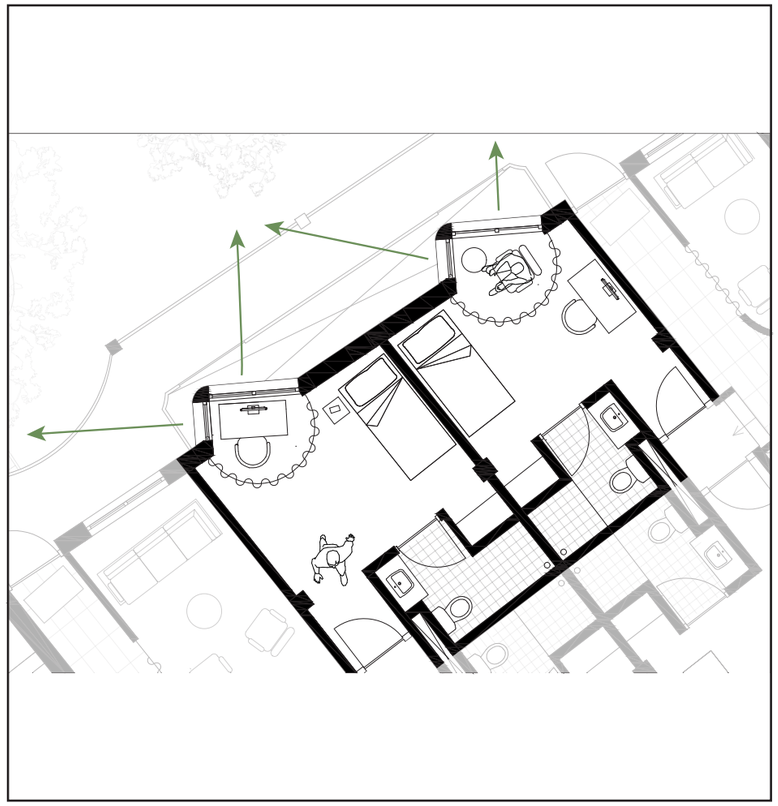
Bedrooms



Building A



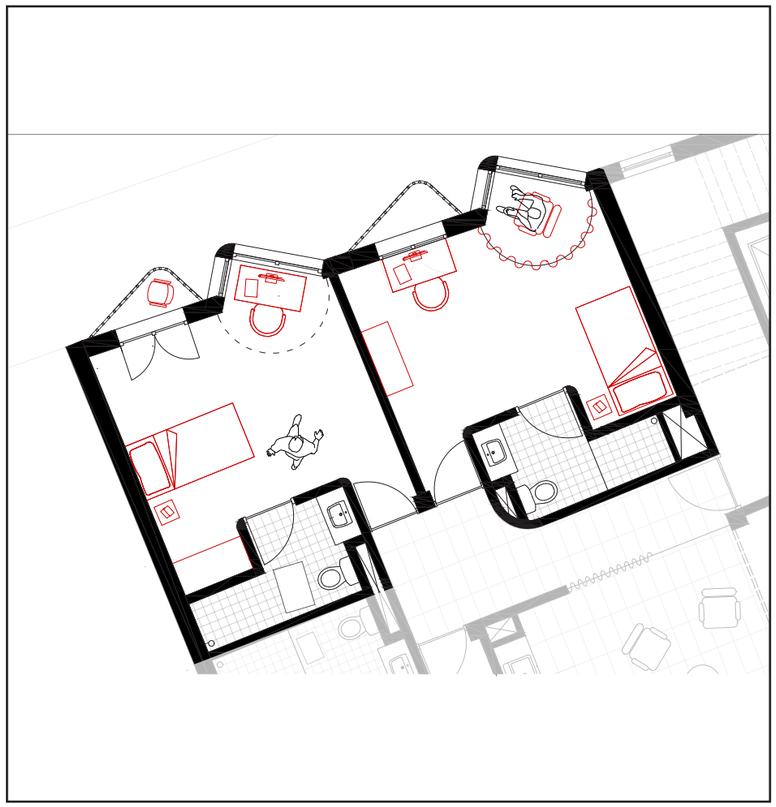
Building B



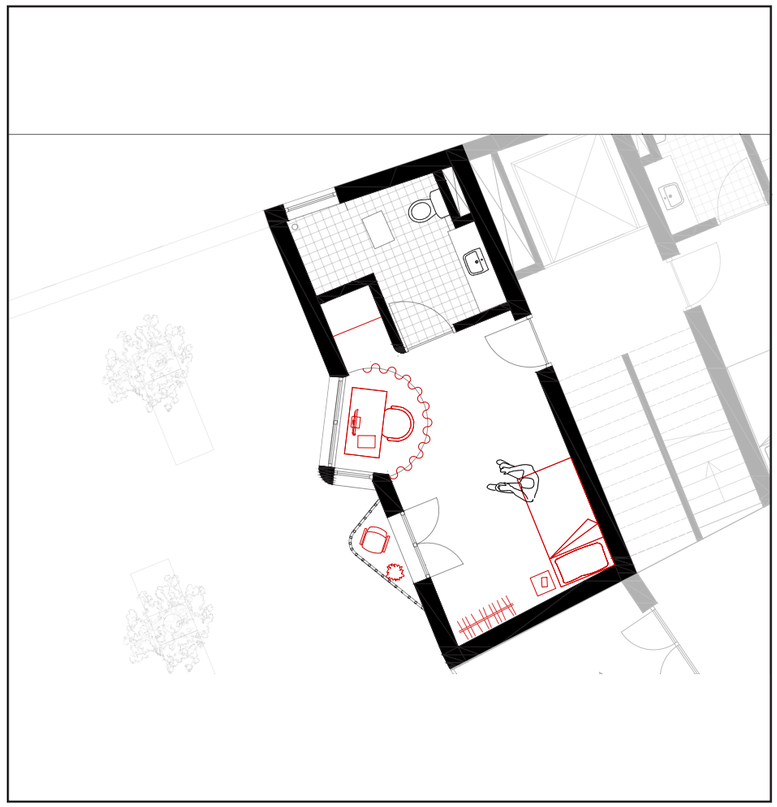
Building C



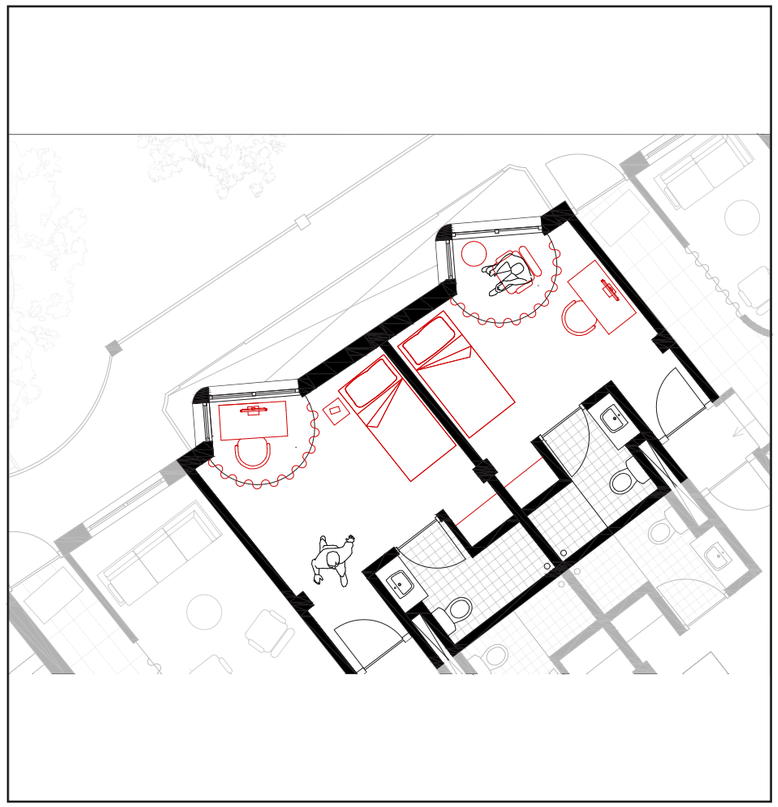
Bedrooms



Building A



Building B

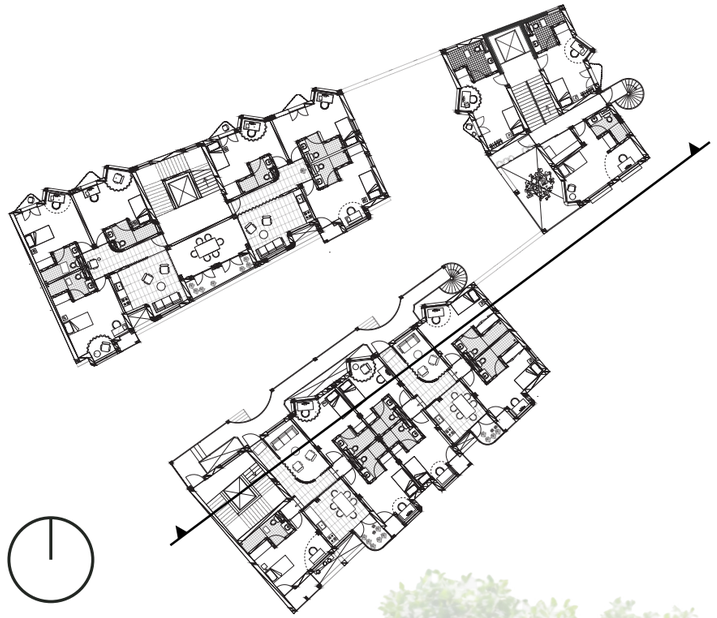


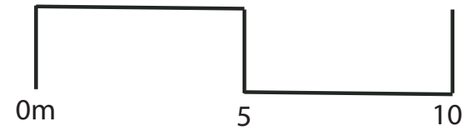
Building C

In drawing-based interviews (n = 4), all students expressed a desire for bedrooms that allow furniture to be repositioned according to personal preference (Presura, 2025)

Creating a spatial division between work and rest areas in student rooms helps prevent blurred boundaries that can make it harder to start studying or maintain focus.
(Presura, 2025, interview with student psychologist)

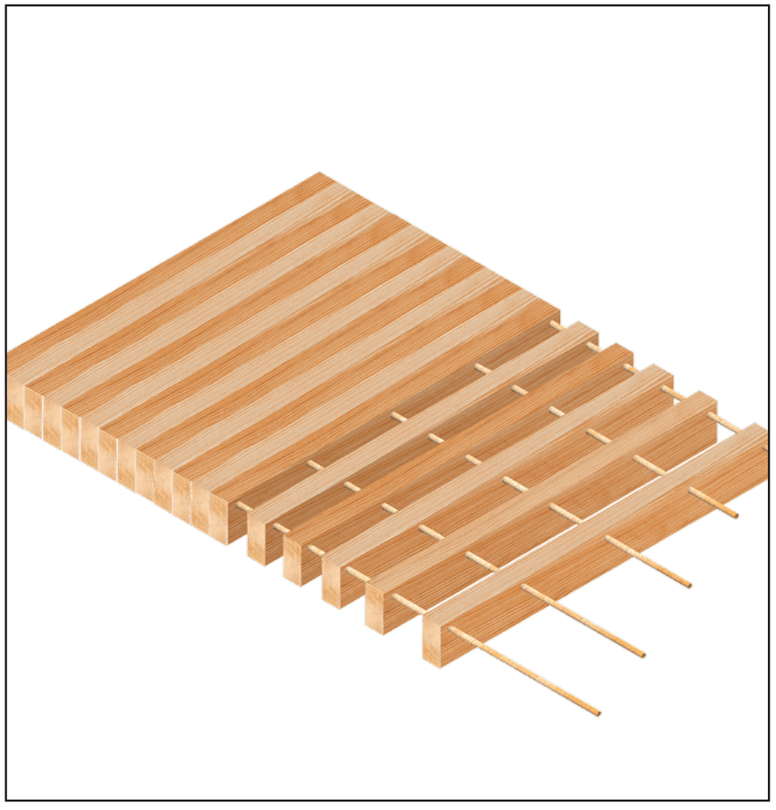
In drawing-based interviews (n = 4), two students indicated that orienting their desk toward a window would positively influence their mental well-being.
(Presura, 2025)




0m
5
10



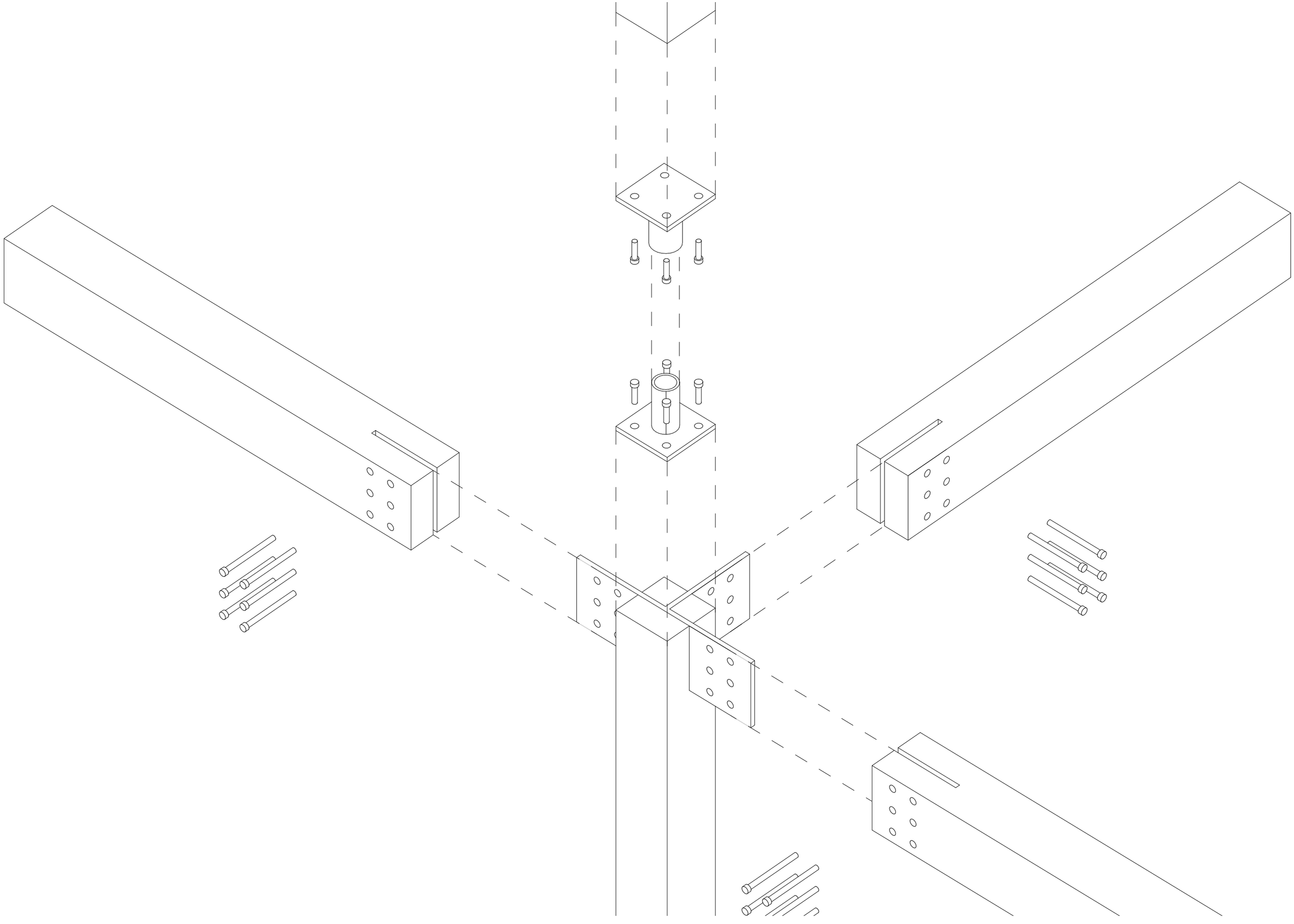
Structure
Materials

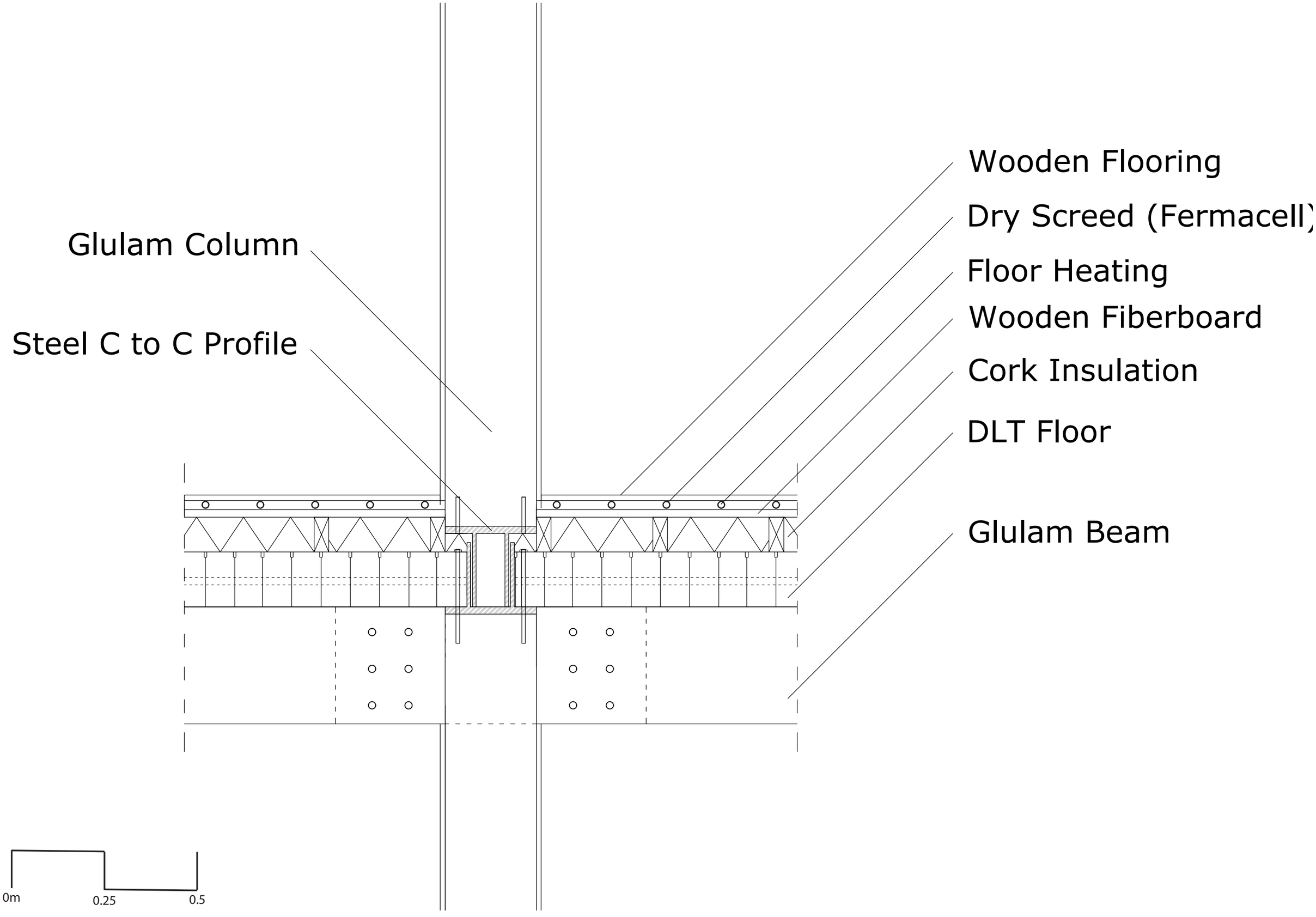


Dowel Laminated
Timber

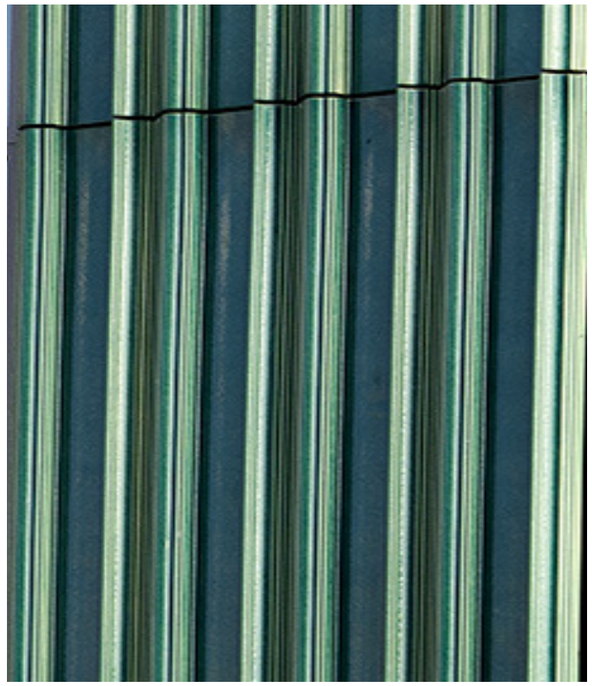


Glulam

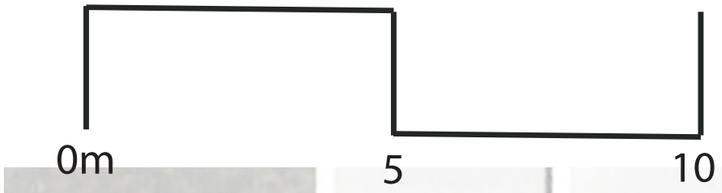


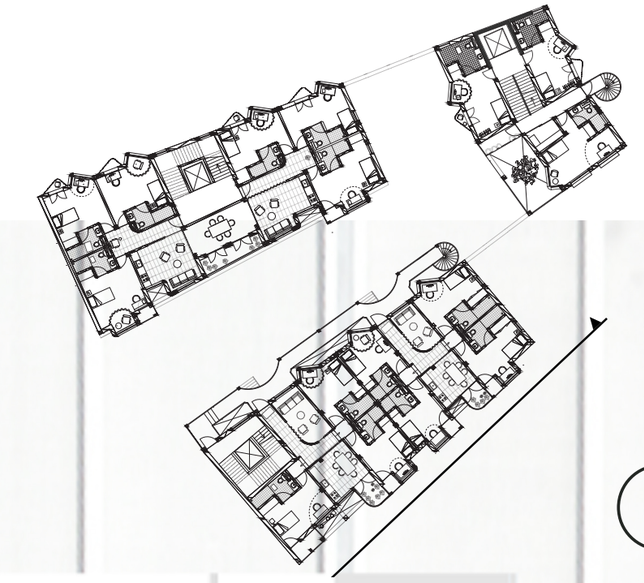

Glulam Column
Steel C to C Profile
Wooden Flooring
Dry Screed (Fermacell)
Floor Heating
Wooden Fiberboard
Cork Insulation
DLT Floor
Glulam Beam
0m
0.25
0.5

“Good architecture offers shapes and surfaces moulded for the pleasurable touch of the eye” (Pallasmaa, 1996, p. 48)






0m
5
10



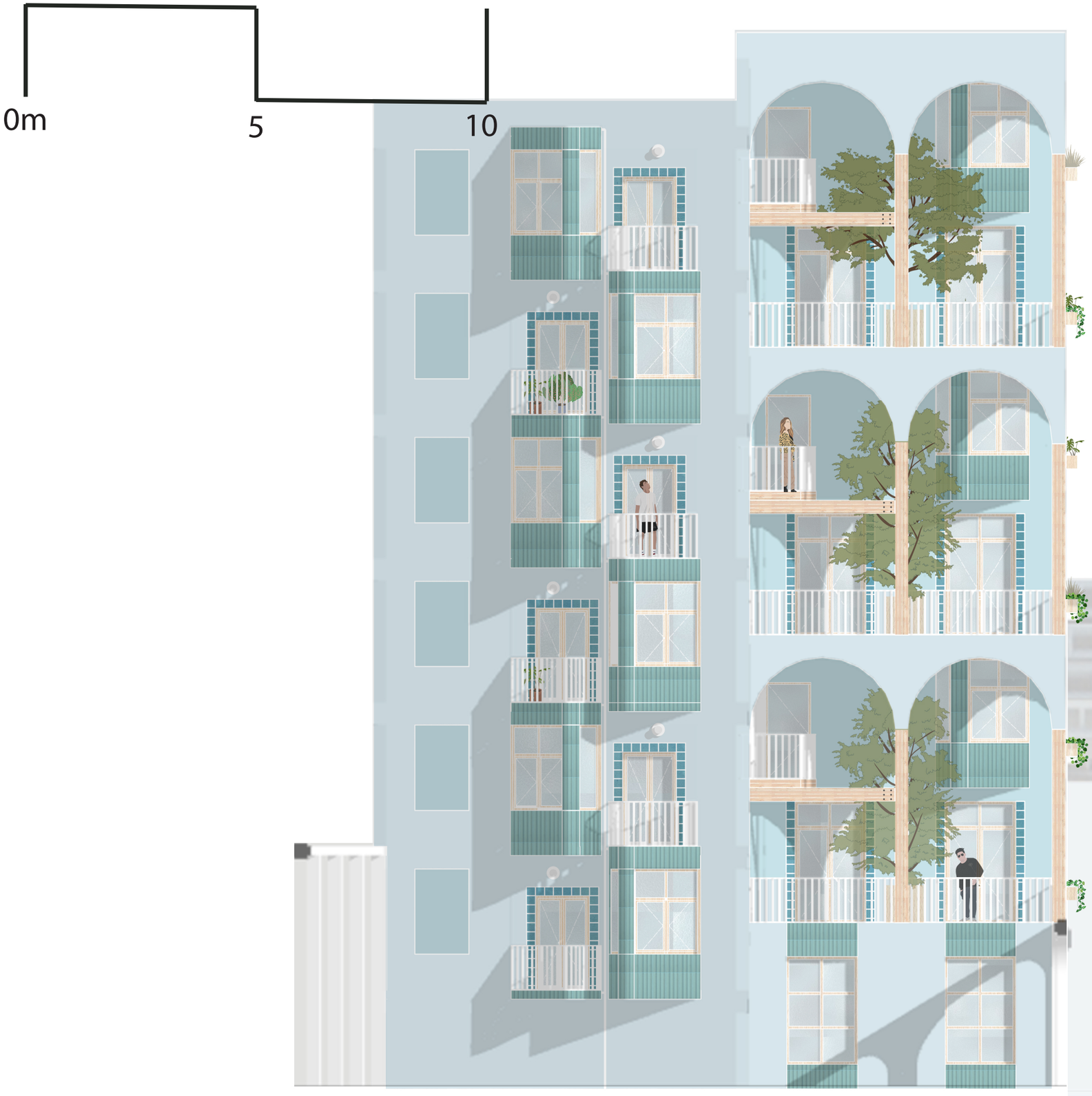
Curved interior geometry has been shown to reduce physiological arousal and enhance creative output, indicating potential cognitive and emotional benefits in interior design (Strachan-Regan & Baumann, 2024).

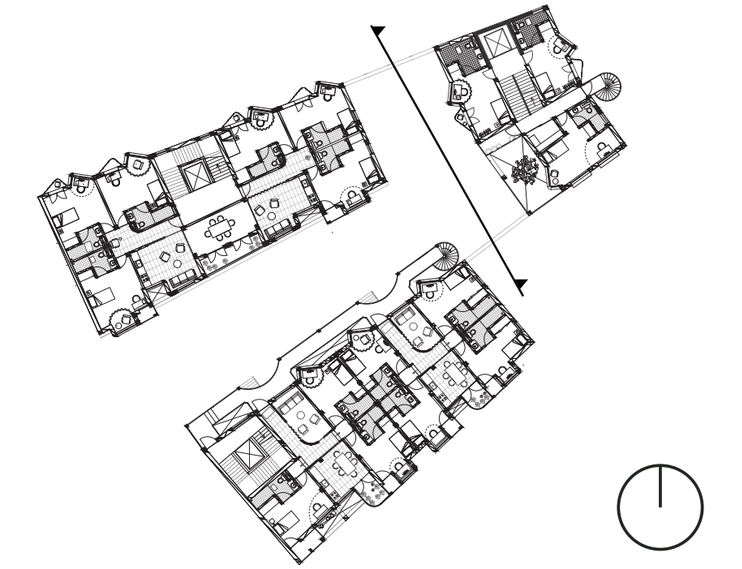
Cool interior colors such as blue, green, and purple are associated with perceptions of calmness, spaciousness, and restfulness among students (Yildirim, Hidayetoglu, & Capanoglu, 2011).

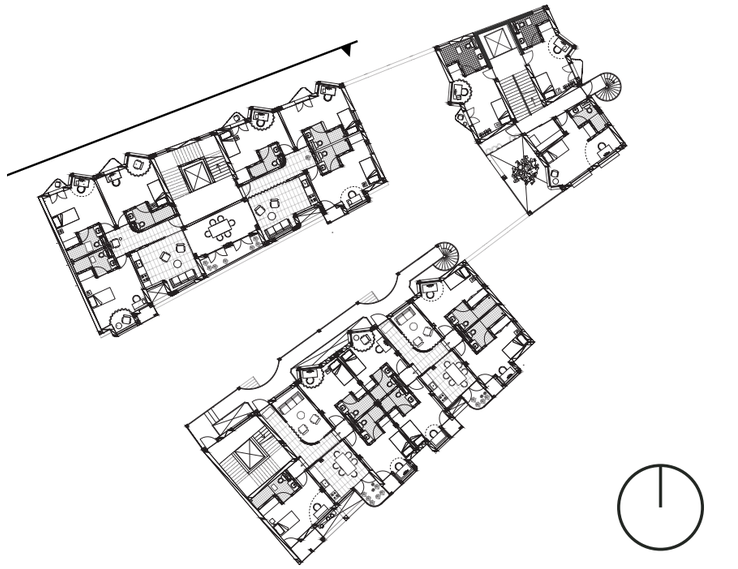


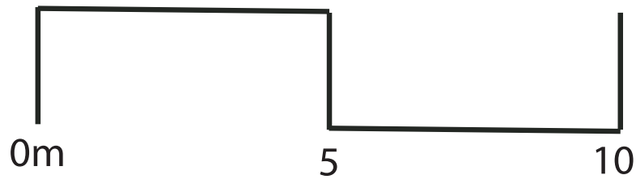
“Good architecture should receive the human visitor, should enable him to experience it,and live in it, but it should not constantly talk at him” (Zumthor, 1998, p. 33).

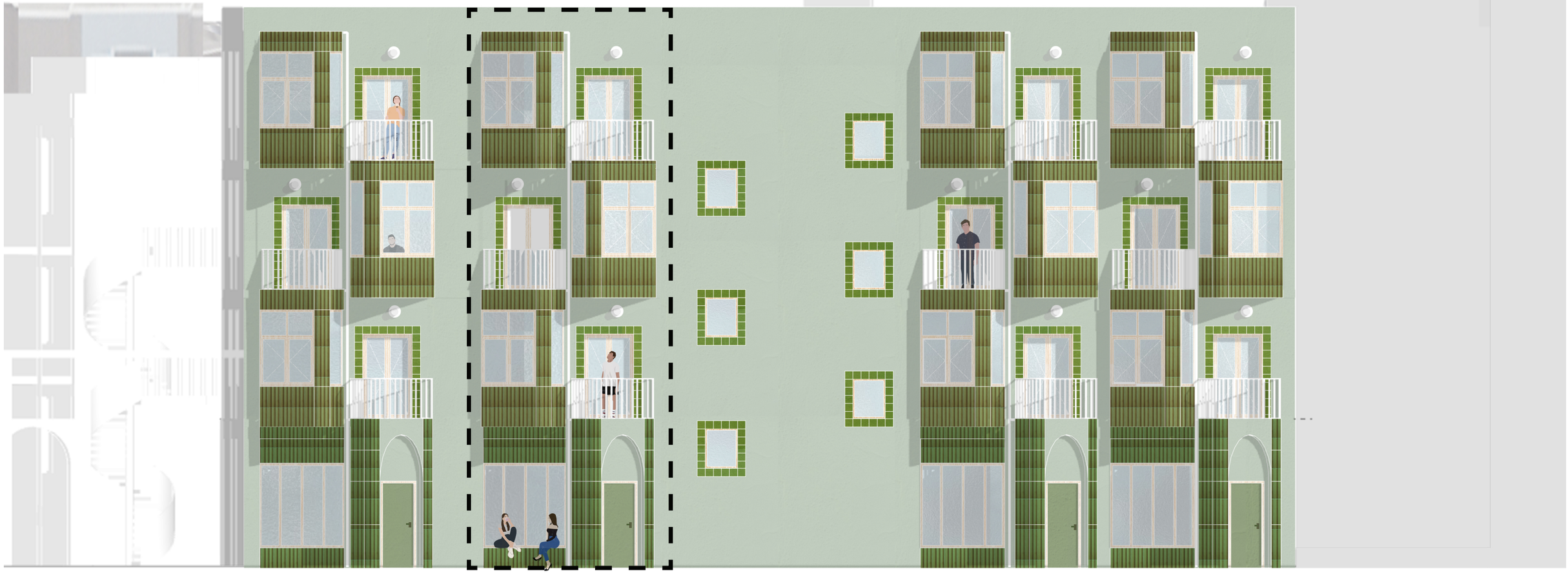



0m
5
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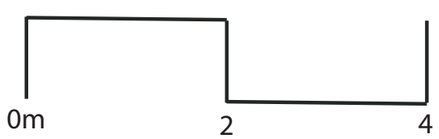


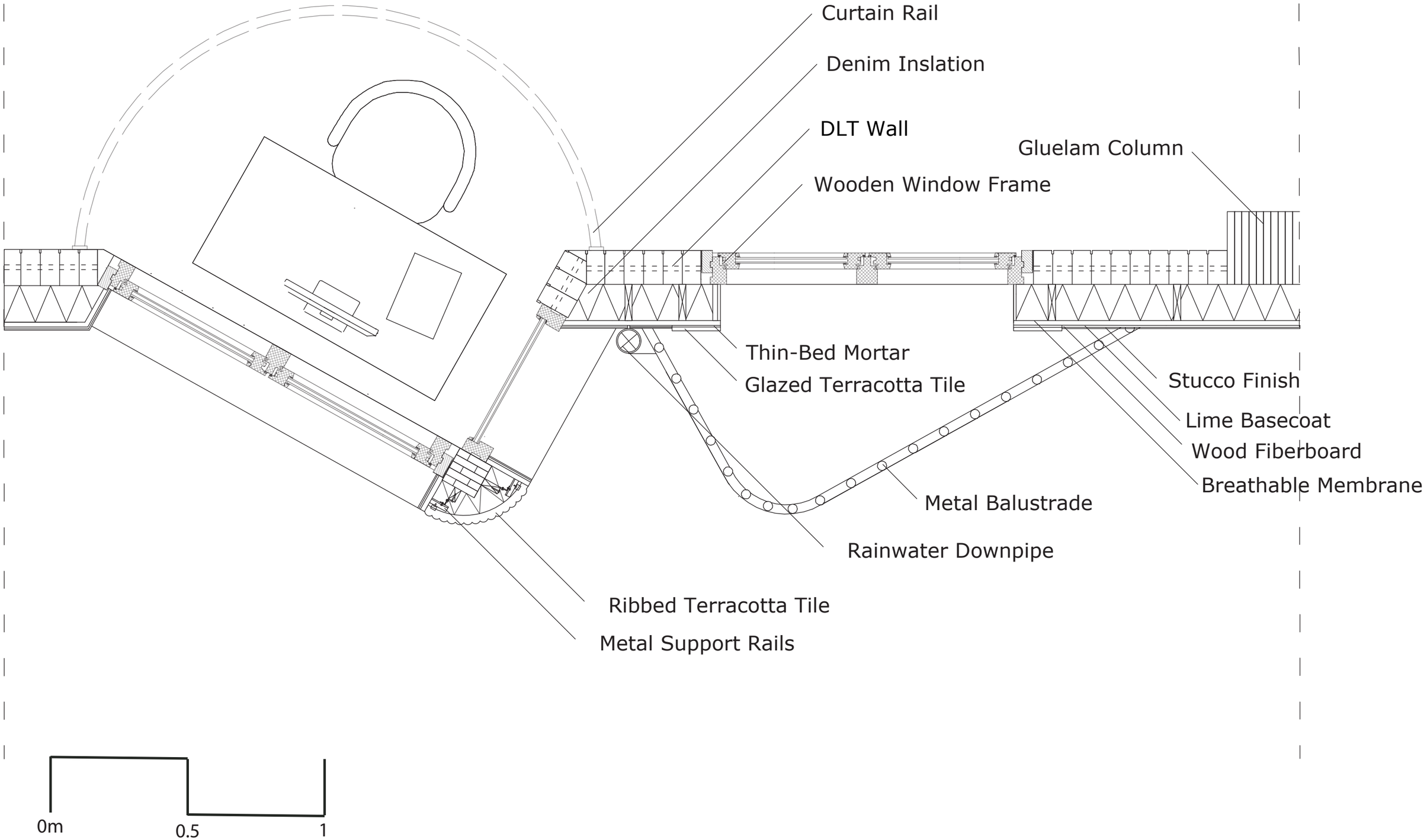



0m
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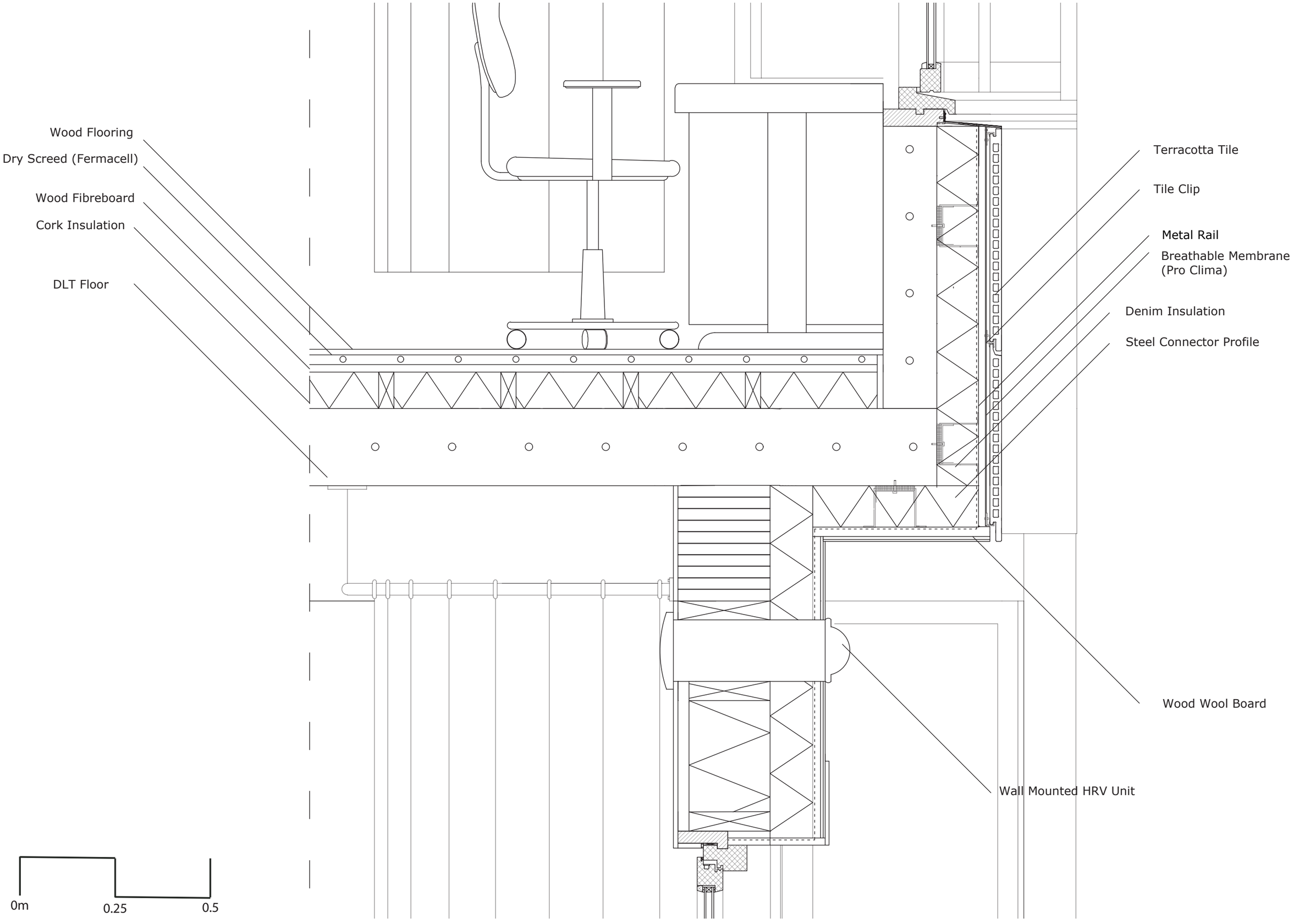



0m
2
4


Curtain Rail
Denim Inslation
DLT Wall
Gluelam Column
Wooden Window Frame
Thin-Bed Mortar
Glazed Terracotta Tile
Stucco Finish
Lime Basecoat
Wood Fiberboard
Breathable Membrane
Metal Balustrade
Rainwater Downpipe
Ribbed Terracotta Tile
Metal Support Rails
0m
0.5
1

“The house shelters daydreaming, the house protects the dreamer, the house allows one to dream in peace”
(Bachelard, 1958, p. 28)




Wood Flooring
Dry Screed (Fermacell)
Wood Fibreboard
Cork Insulation
DLT Floor
Terracotta Tile
Tile Clip
Metal Rail
Breathable Membrane
(Pro Clima)
Denim Insulation
Steel Connector Profile
Wood Wool Board
Wall Mounted HRV Unit
0m
0.25
0.5

How can the design of residential living environments, viewed through the prism of phenomenological theory, support and enhance the mental well-being of students? A Tarwewijk case study.

Through the use of

Bodily

Auditory

Interactional

Retreatable

Architecture

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