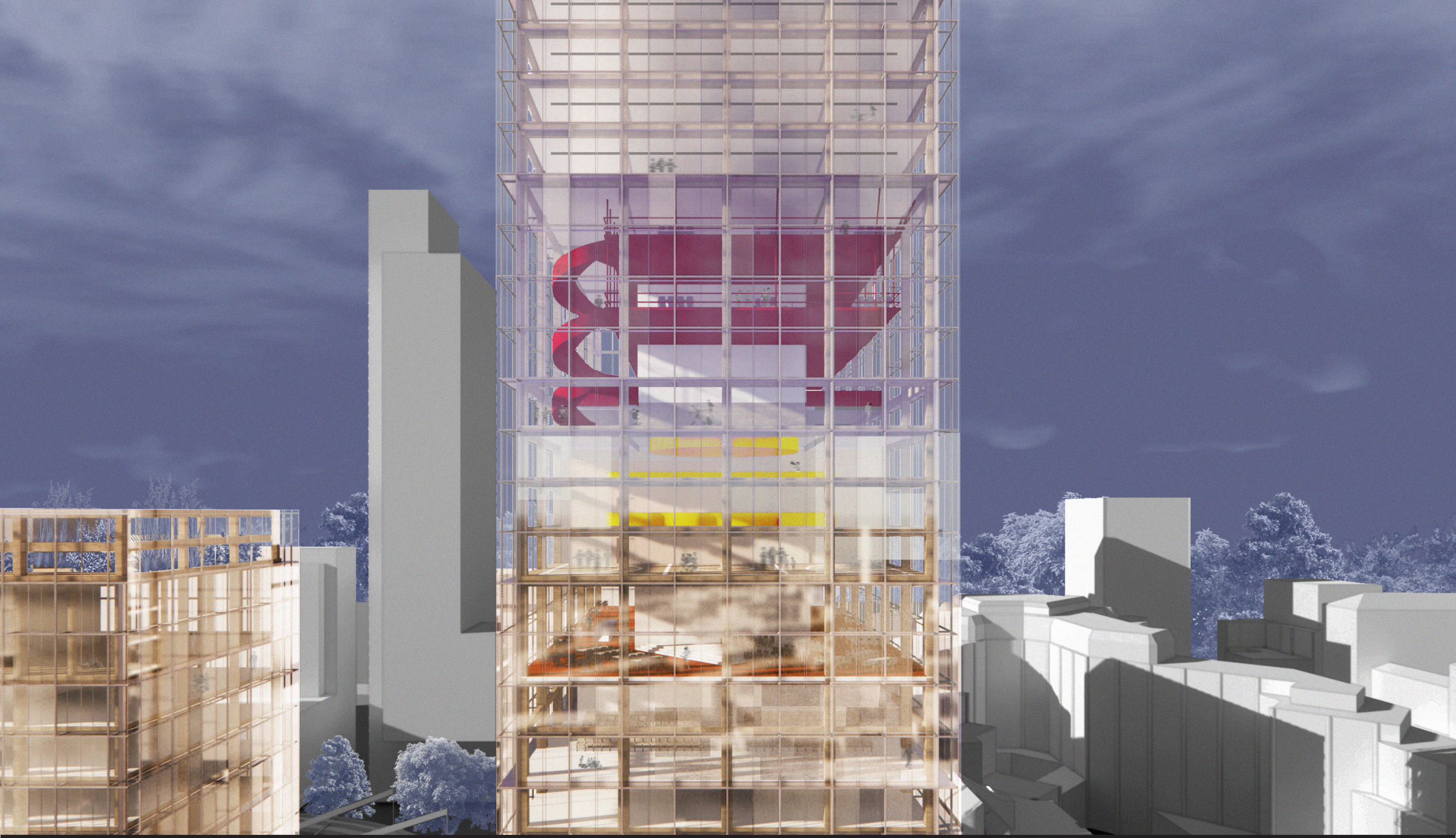


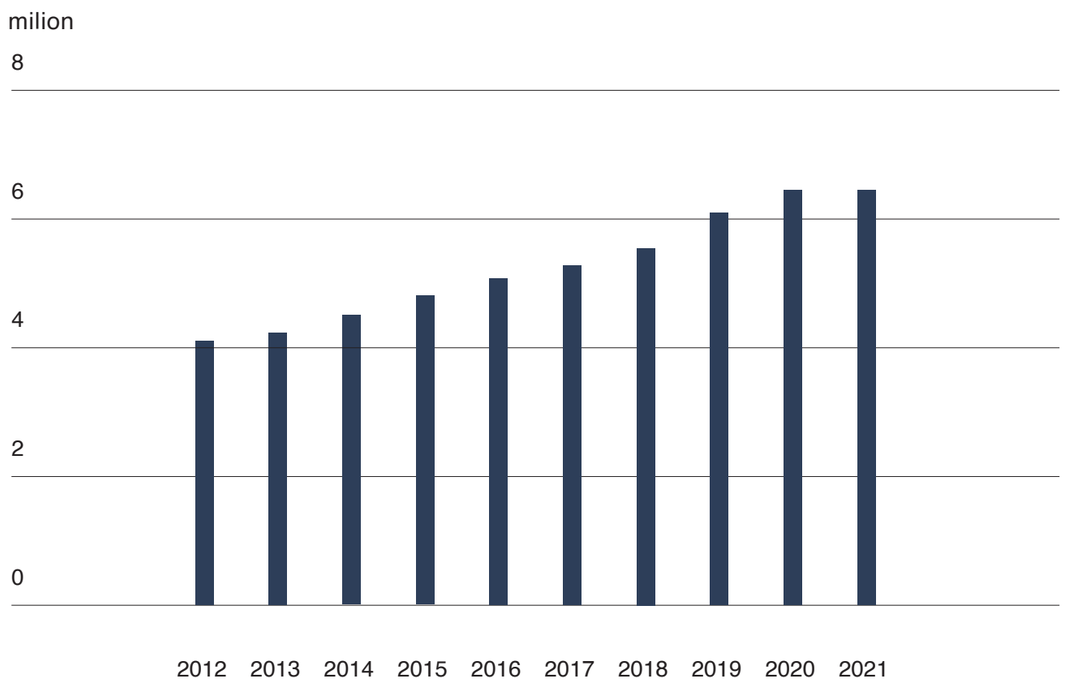
Unified Diversification

P5 Presentation
Public Building Studio
5585481 Oskar Lubera

1 problem statement

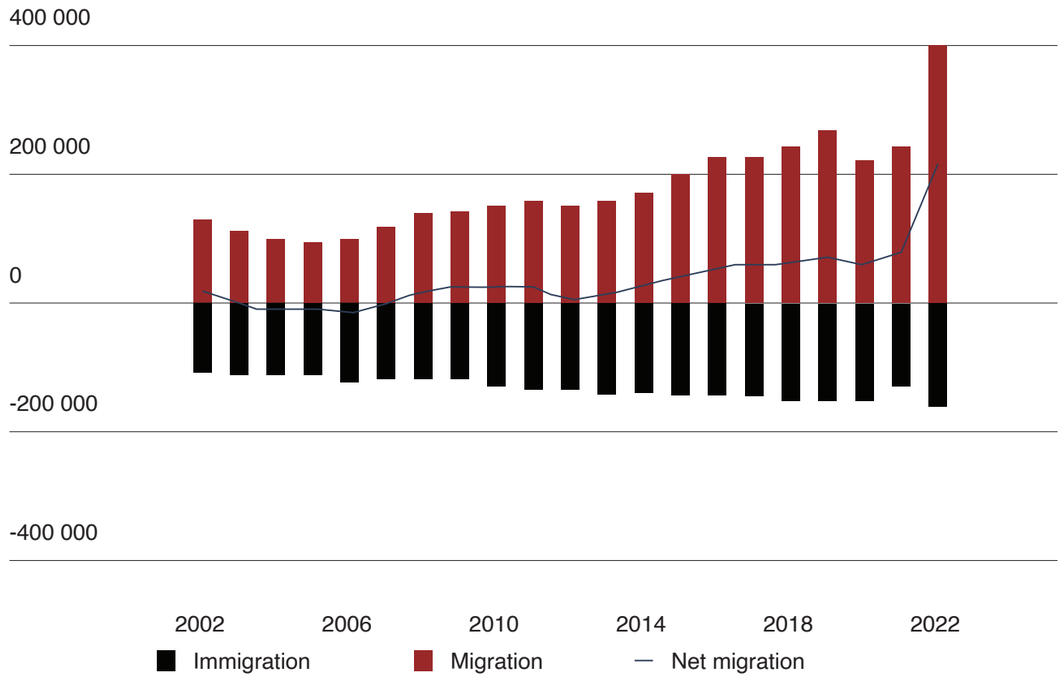
university diversity

international students globally

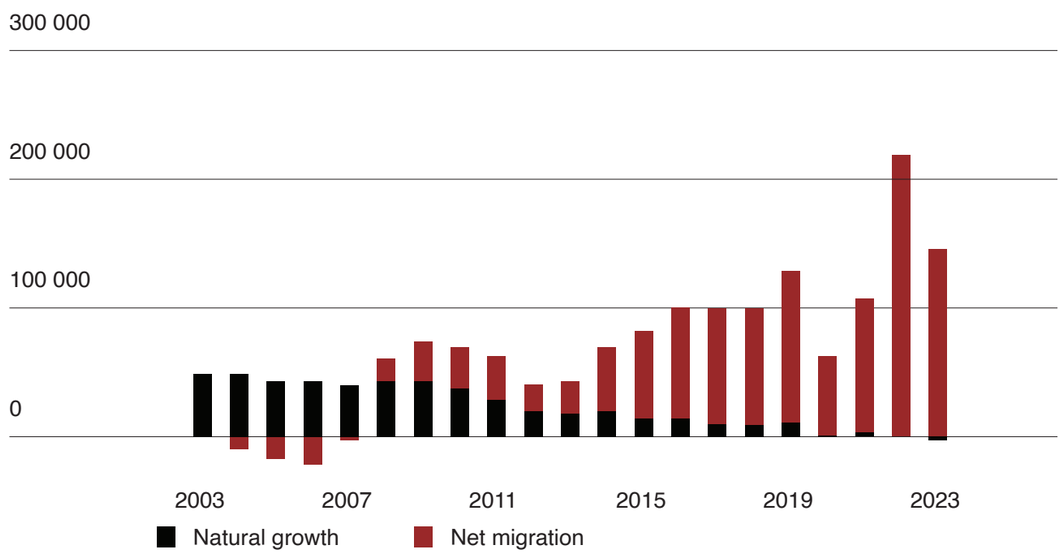


UNESCO Institute of Statistics (UIS), “Internationally Mobile Students Globally” (2023)

immigration vs migration in the Netherlands



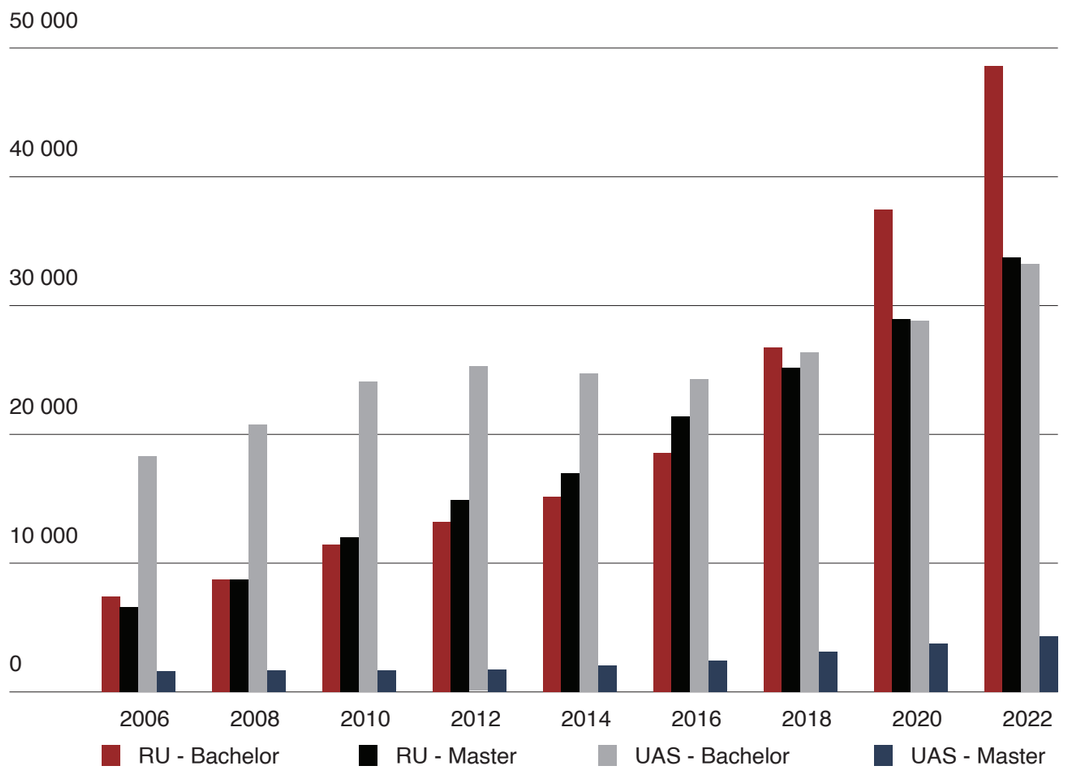
Statistics Netherlands (CBS), “Migration” (2023)



Statistics Netherlands (CBS), “Population Dynamics” (2023)

natural growth vs net migration in the Netherlands

number of international students in the Netherlands



Nuffic, “Incoming degree mobility in Dutch higher education 2022-23” (2023)

Classroom1, Photograph. Iharare. February, 2019. https://iharare.com/dont-even-set-foot-at-schools/.

typical classrooms

122 287 internationals in total (2023), accounting for 15% of all degree students enrolled in Dutch higher education

50 876 new international students enrolled in year 2022/2023

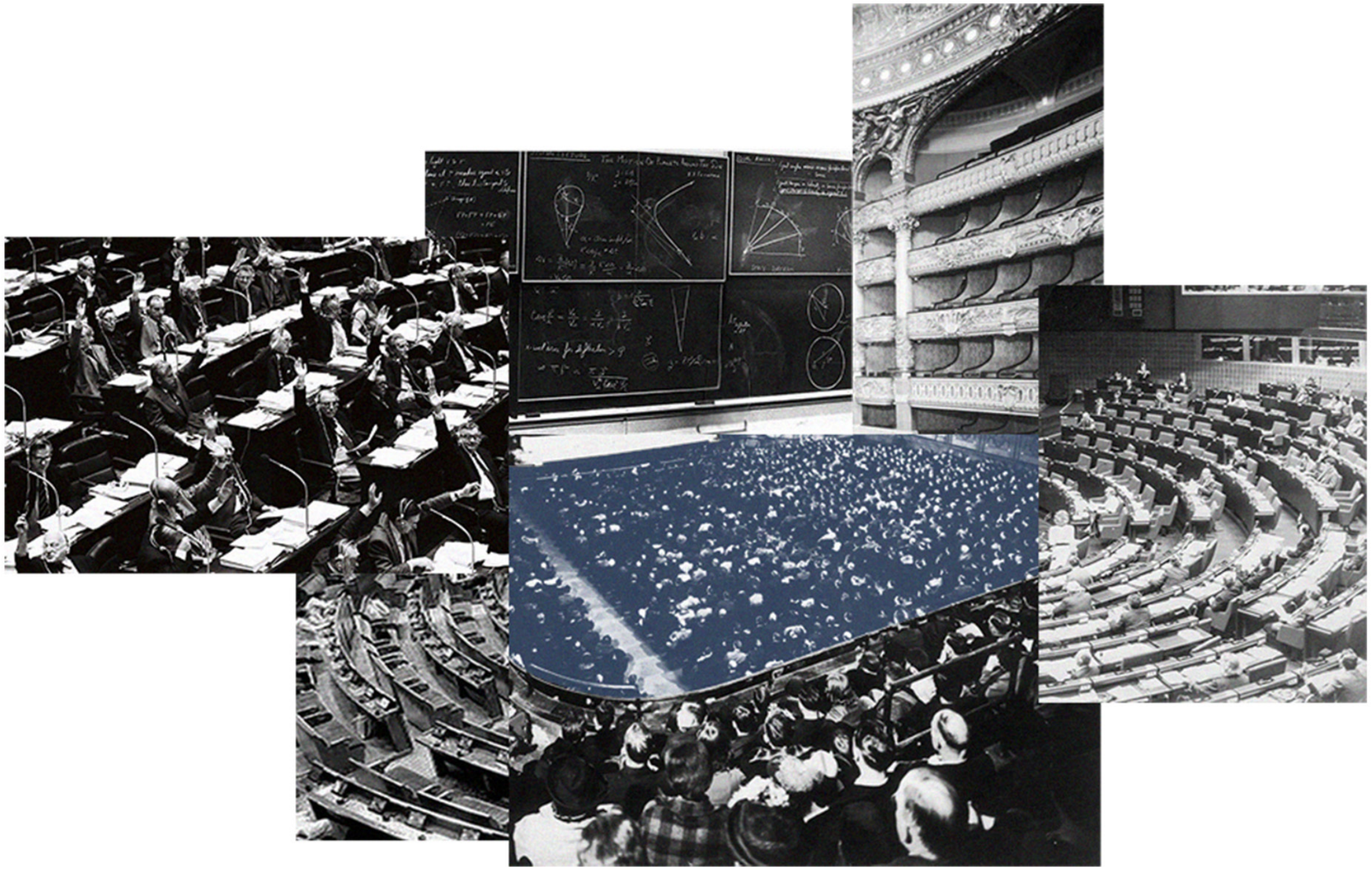
159 countries

Nuffic, “Incoming degree mobility in Dutch higher education 2022-23” (2023)

2 approach

.

new meaning



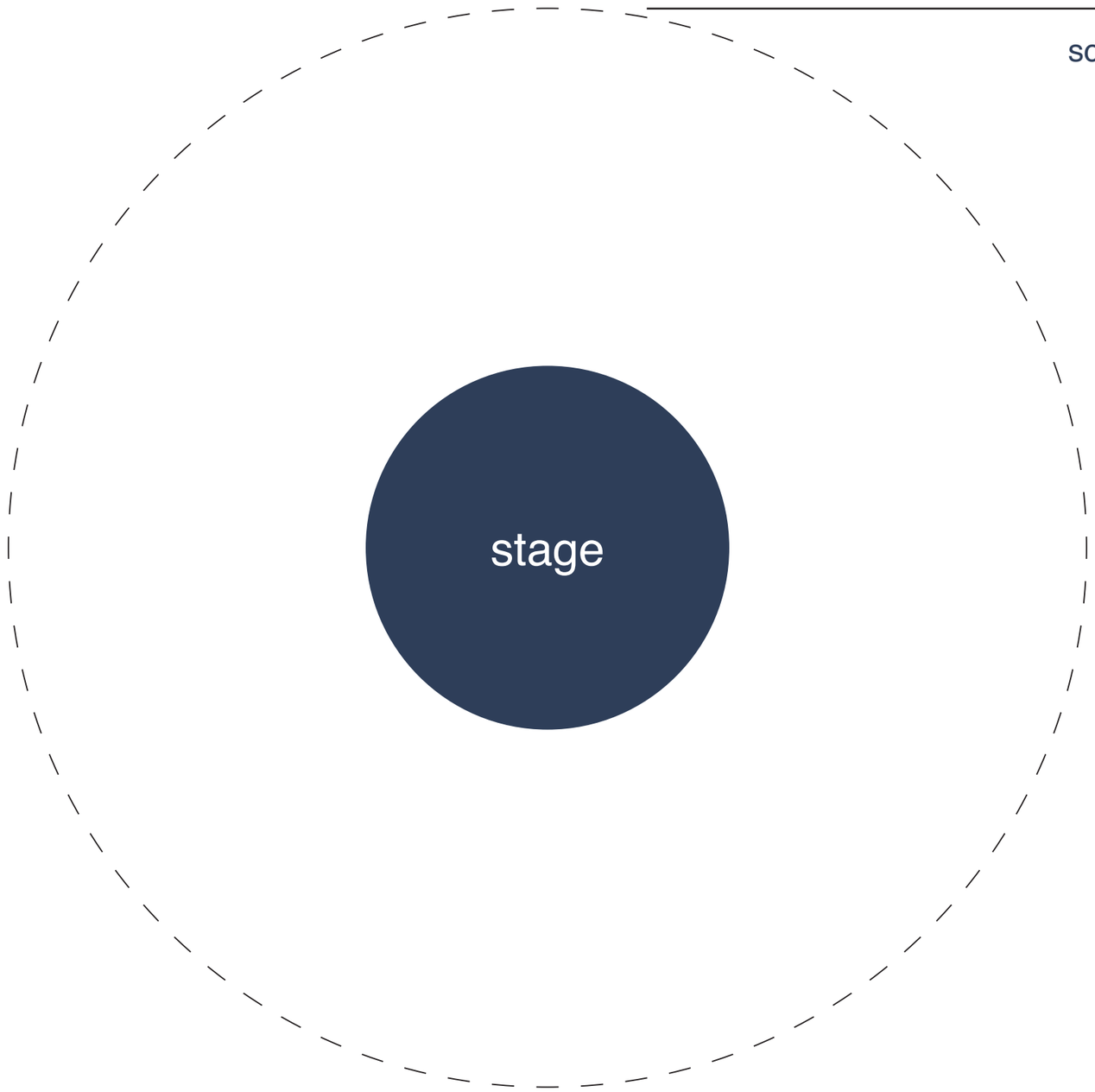
university as a stage

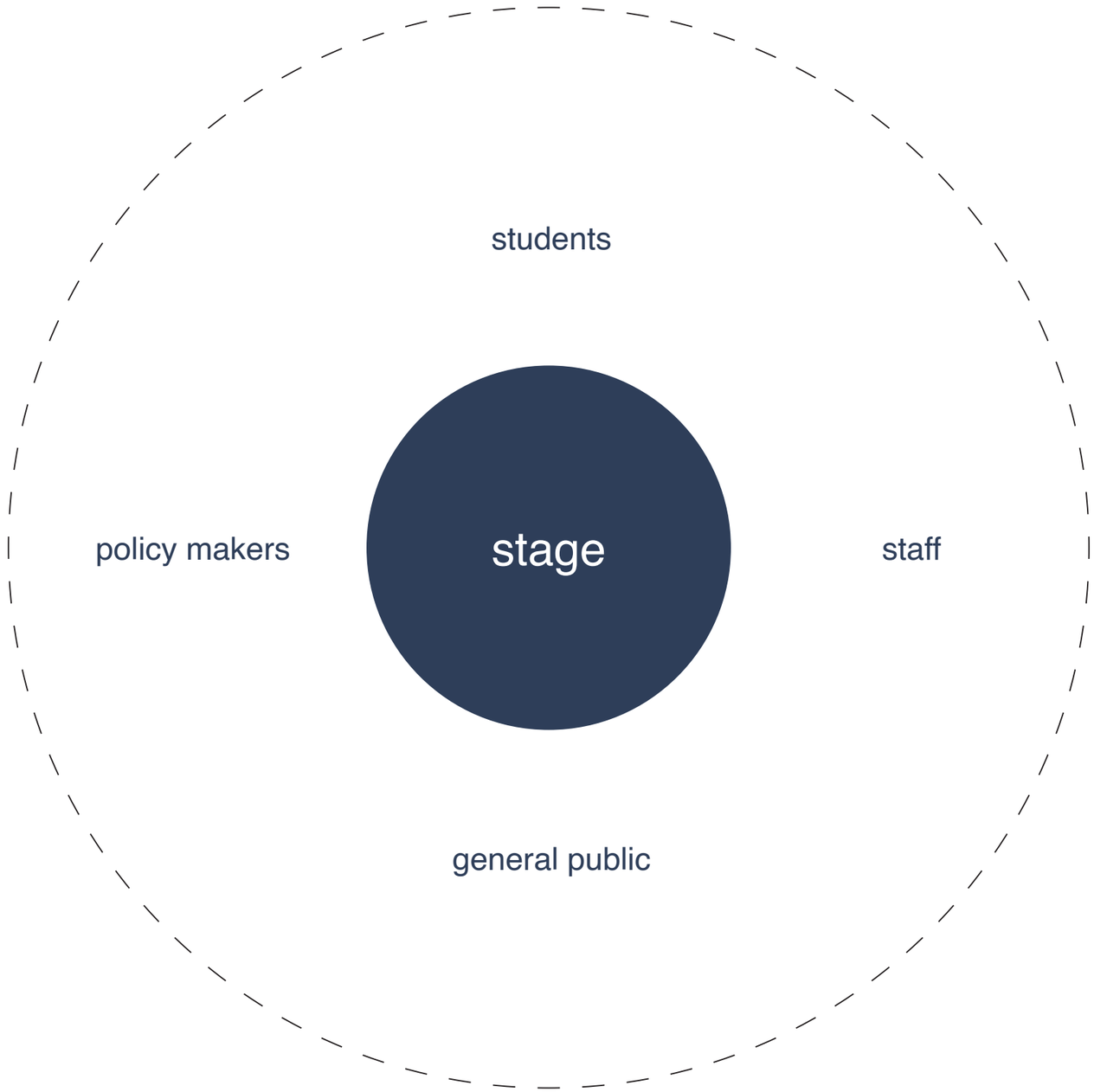
stage as a marker, indicator for

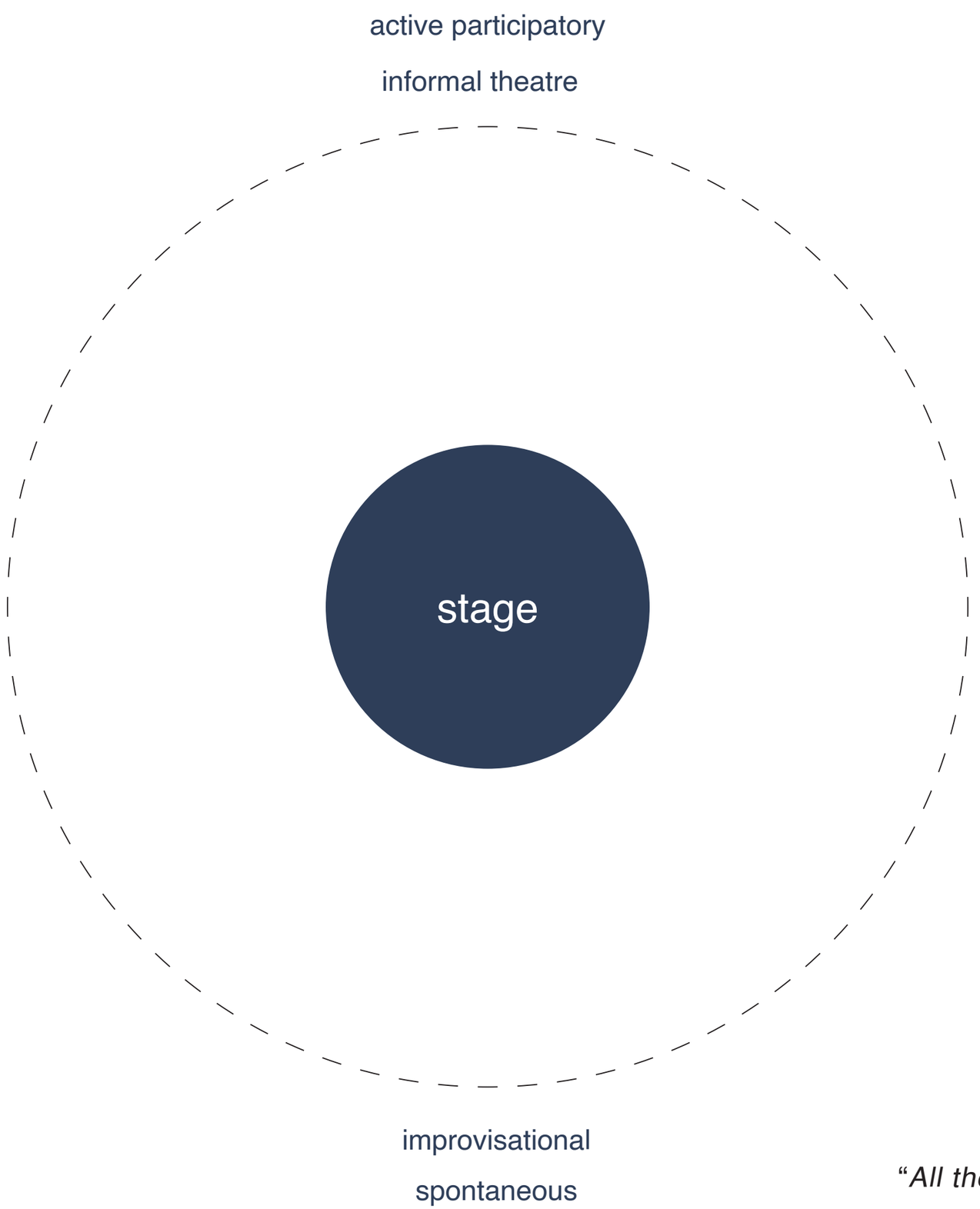
scientific and cultural exchange

public gatherings

voice for minorities




students
policy makers
stage
staff
general public



"*All the world's stage.*"

William Shakespeare, "As You Like It", Act II, Scene VII (1623)

creativity

innovation

problemsolving

civic engagement

policy making

appropriation

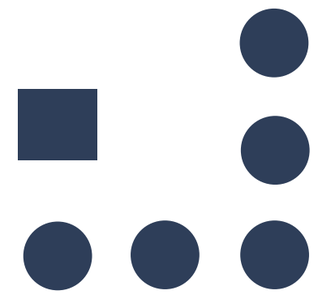
intergroup engagement

“A vast and growing body of research provides evidence that a diverse student body, faculty, and staff benefits our joint missions of teaching and research by increasing creativity, innovation, and problemsolving.”

Eve Fine and Jo Handelsman, “Benefits and Challenges of Diversity in Academic Settings” 2nd ed. (2010)

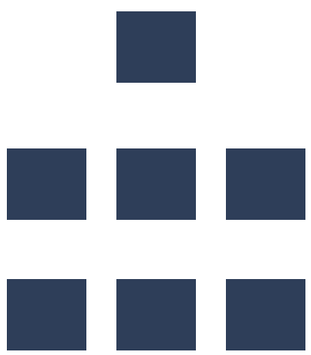
Teacher to Student
Word to Word

10th Century



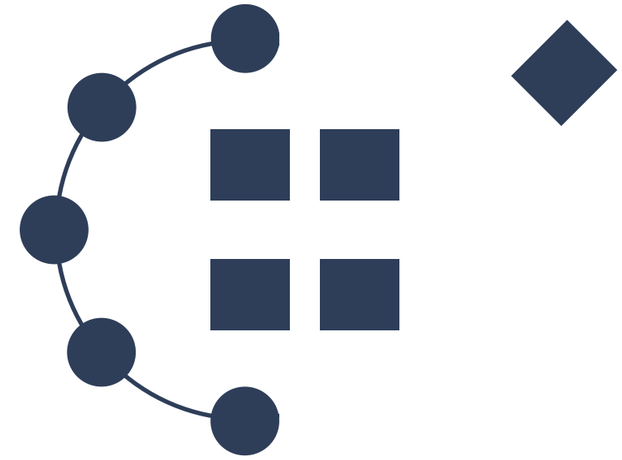
Laboratories
Practice and Research

19th Century



Mass Teaching
Invention of Printing

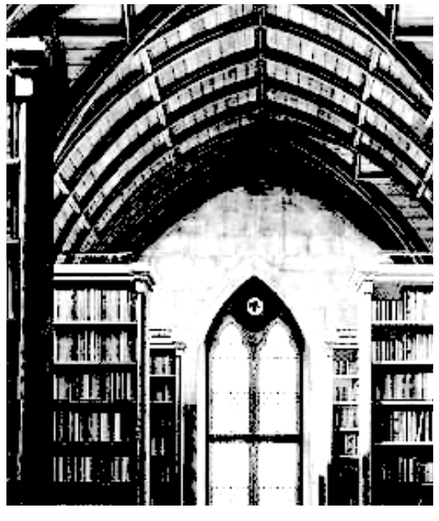
15th Century

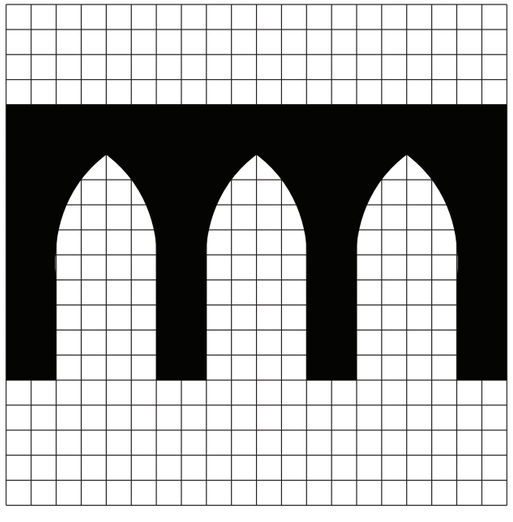


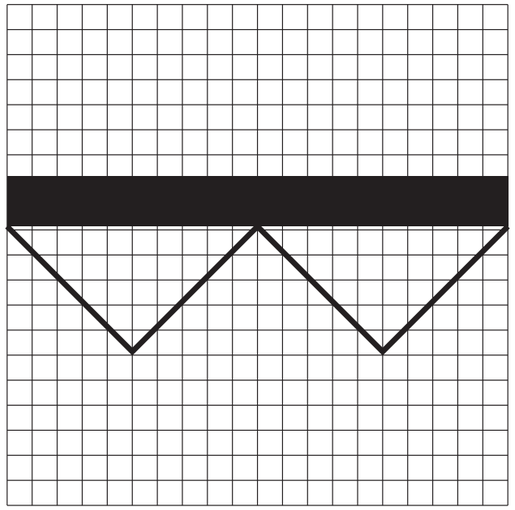
Diversity in Teaching
Flexibility

21st Century

tradition

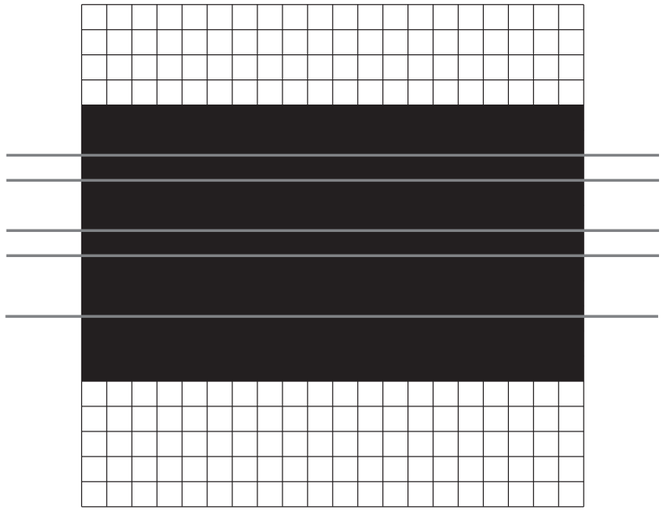


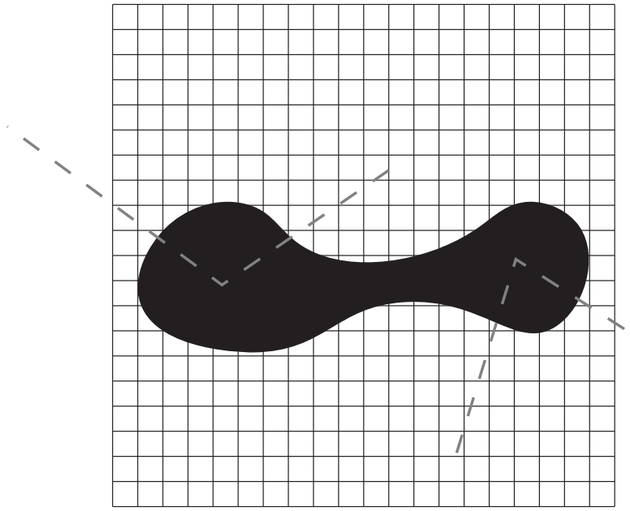




innovation

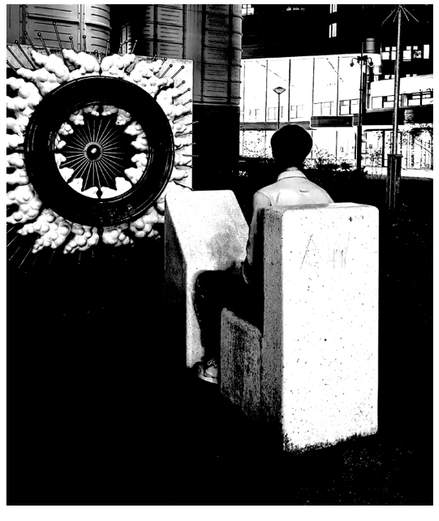
static

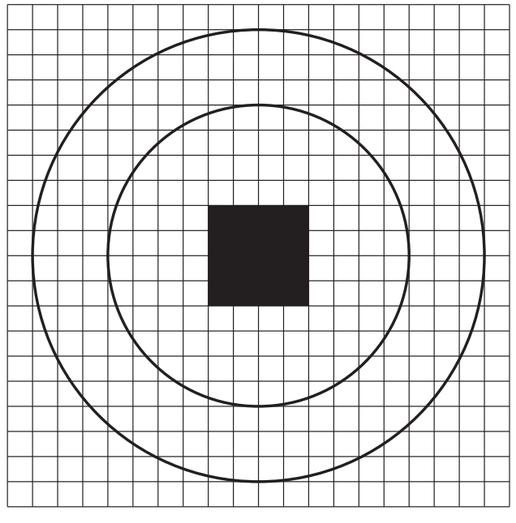


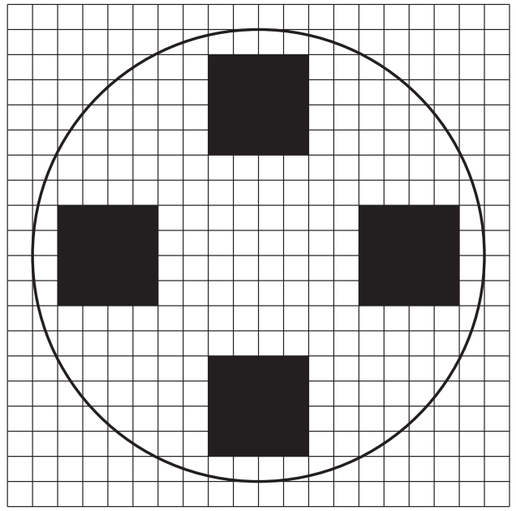


dynamic

isolation



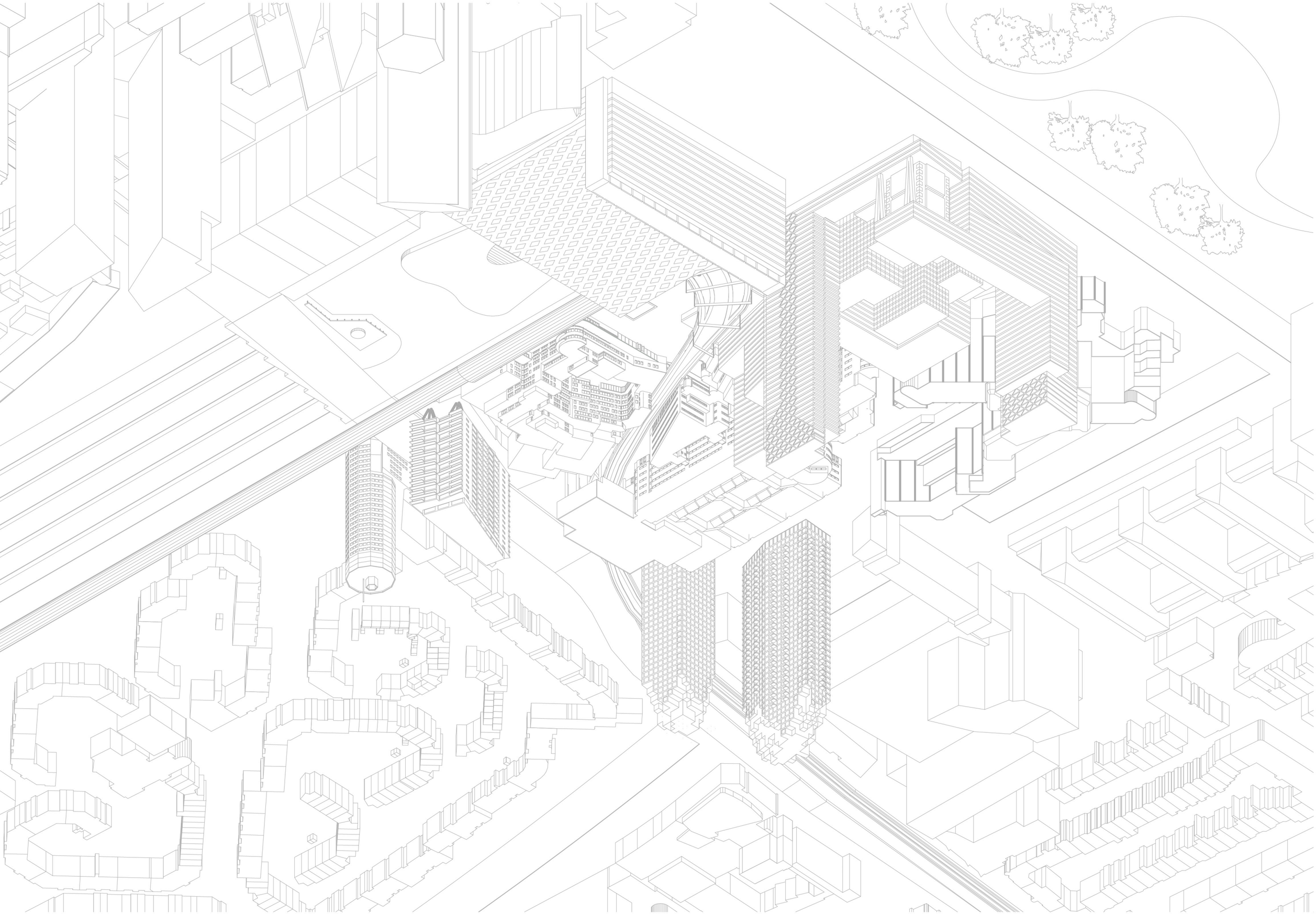


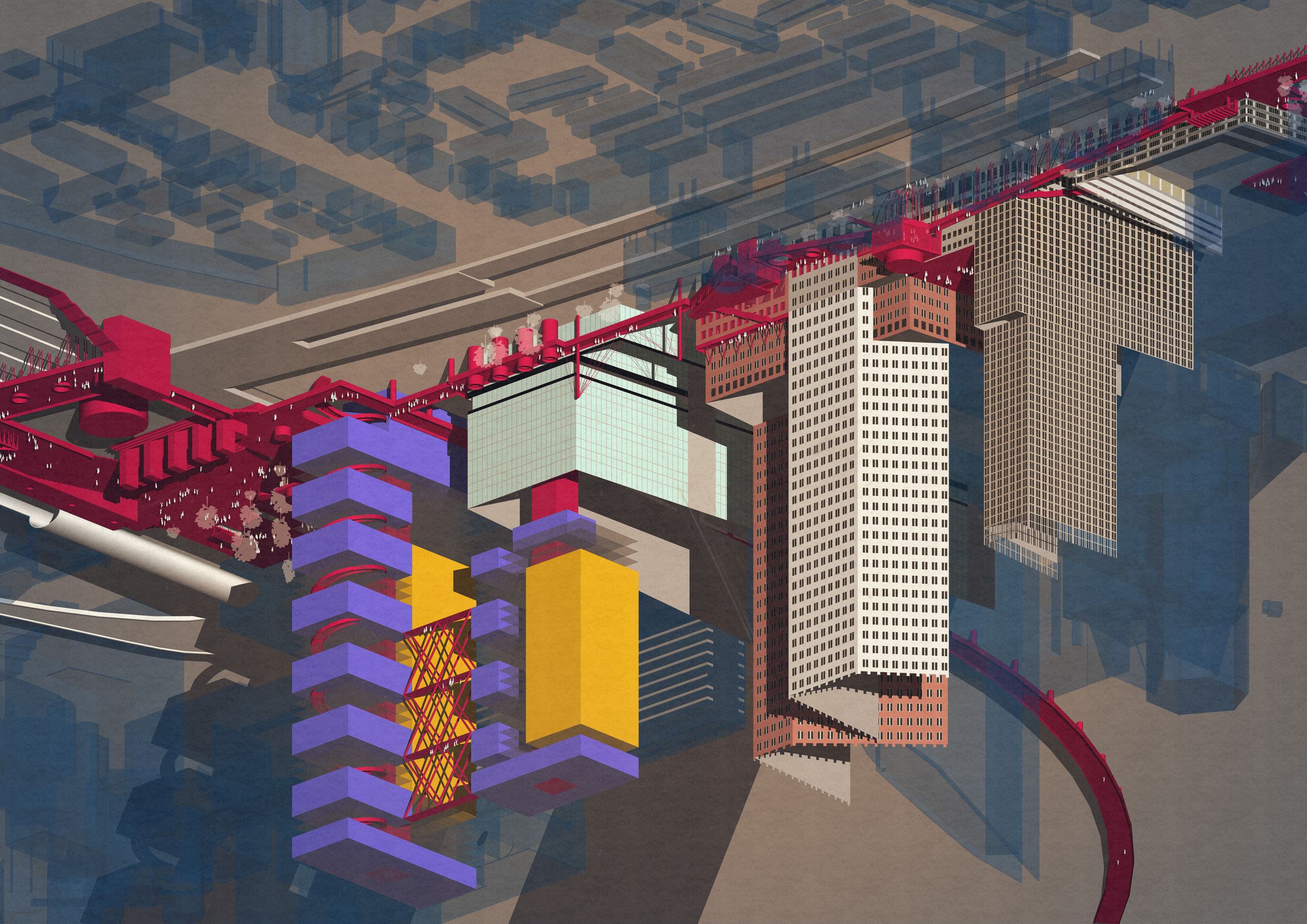


engagement

3.1 relation

impact on the city





1:2000 urban zones

park

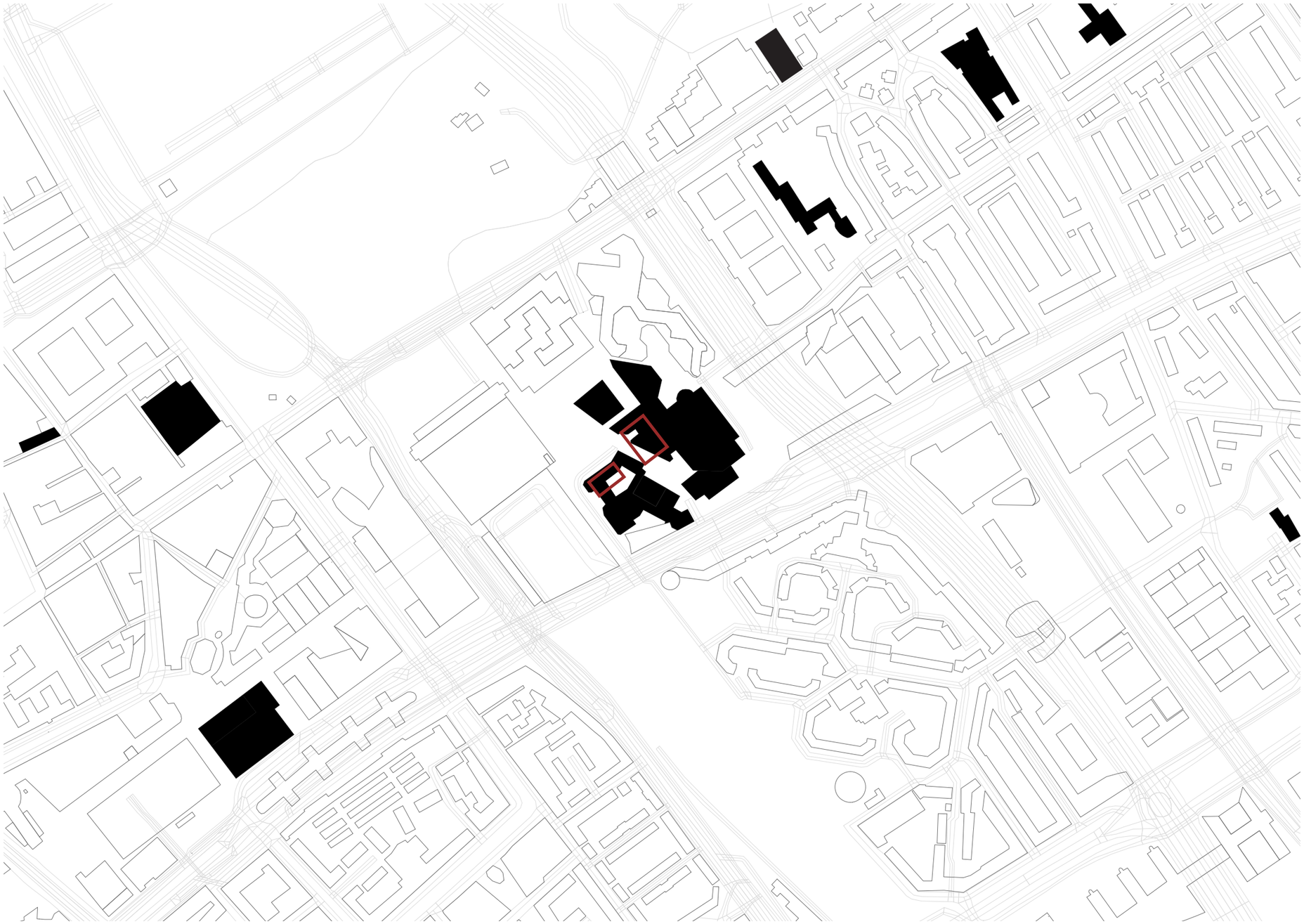
fortresses area

historic city centre

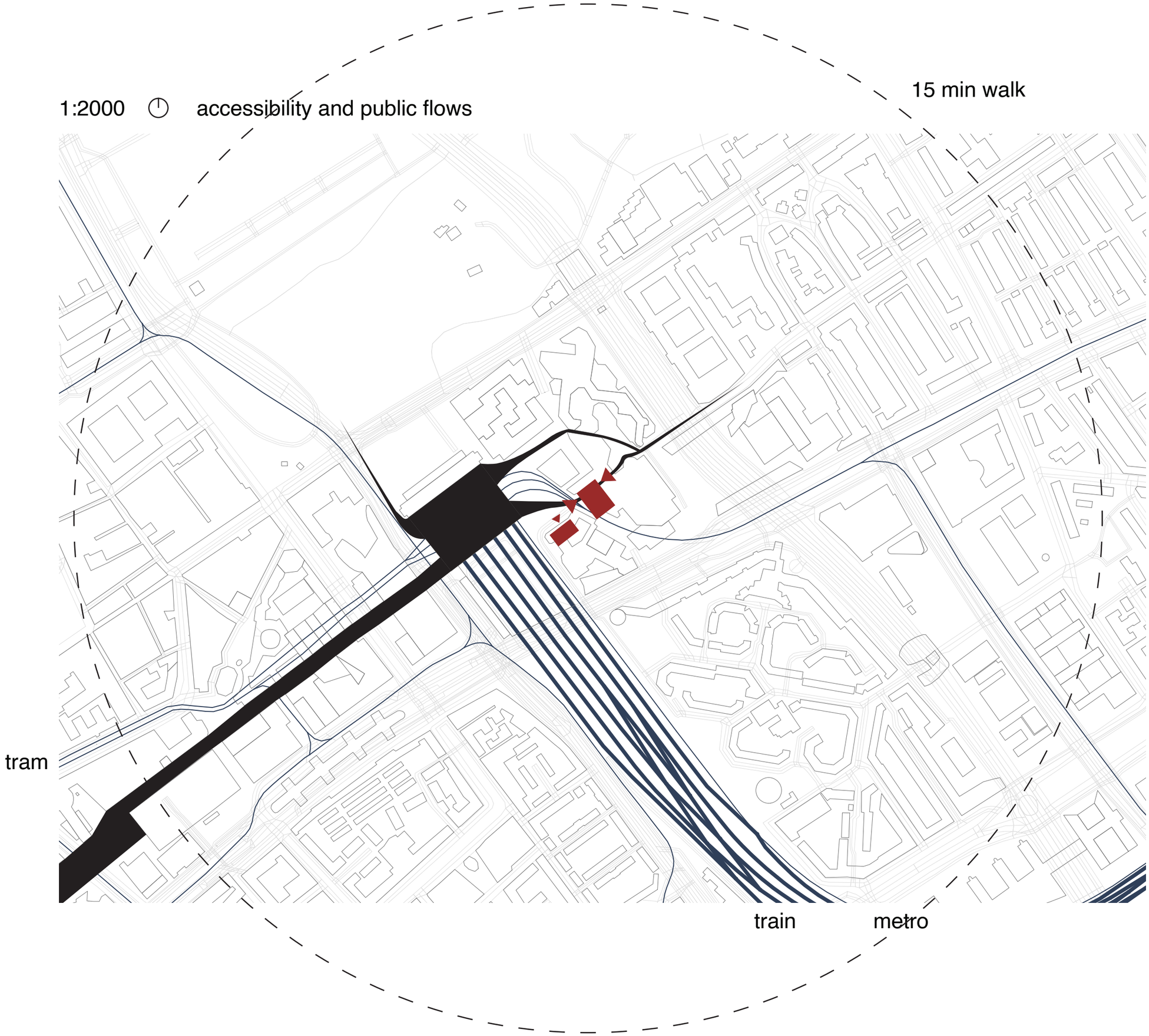
residential

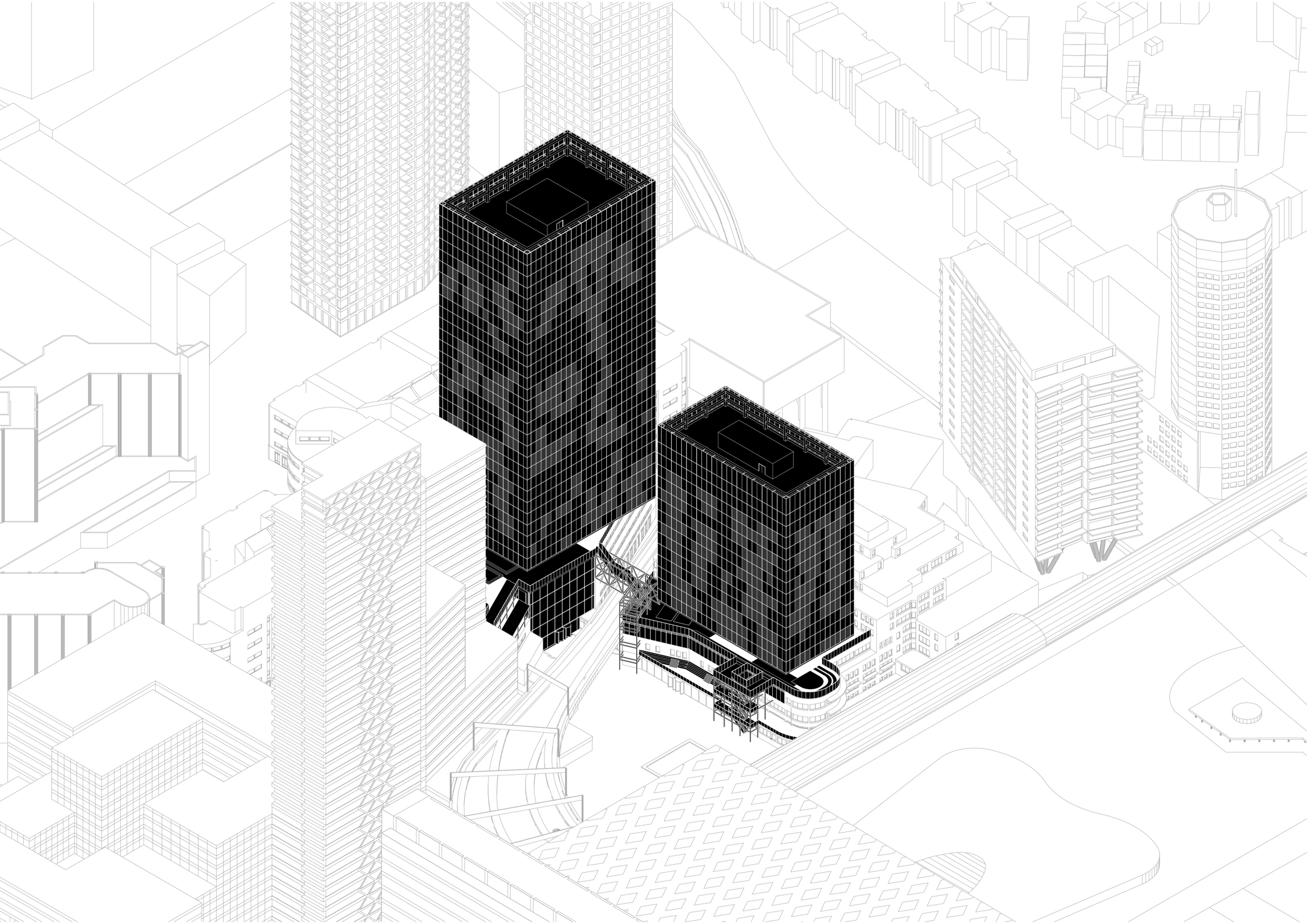
dense city centre

1:2000 educational buildings



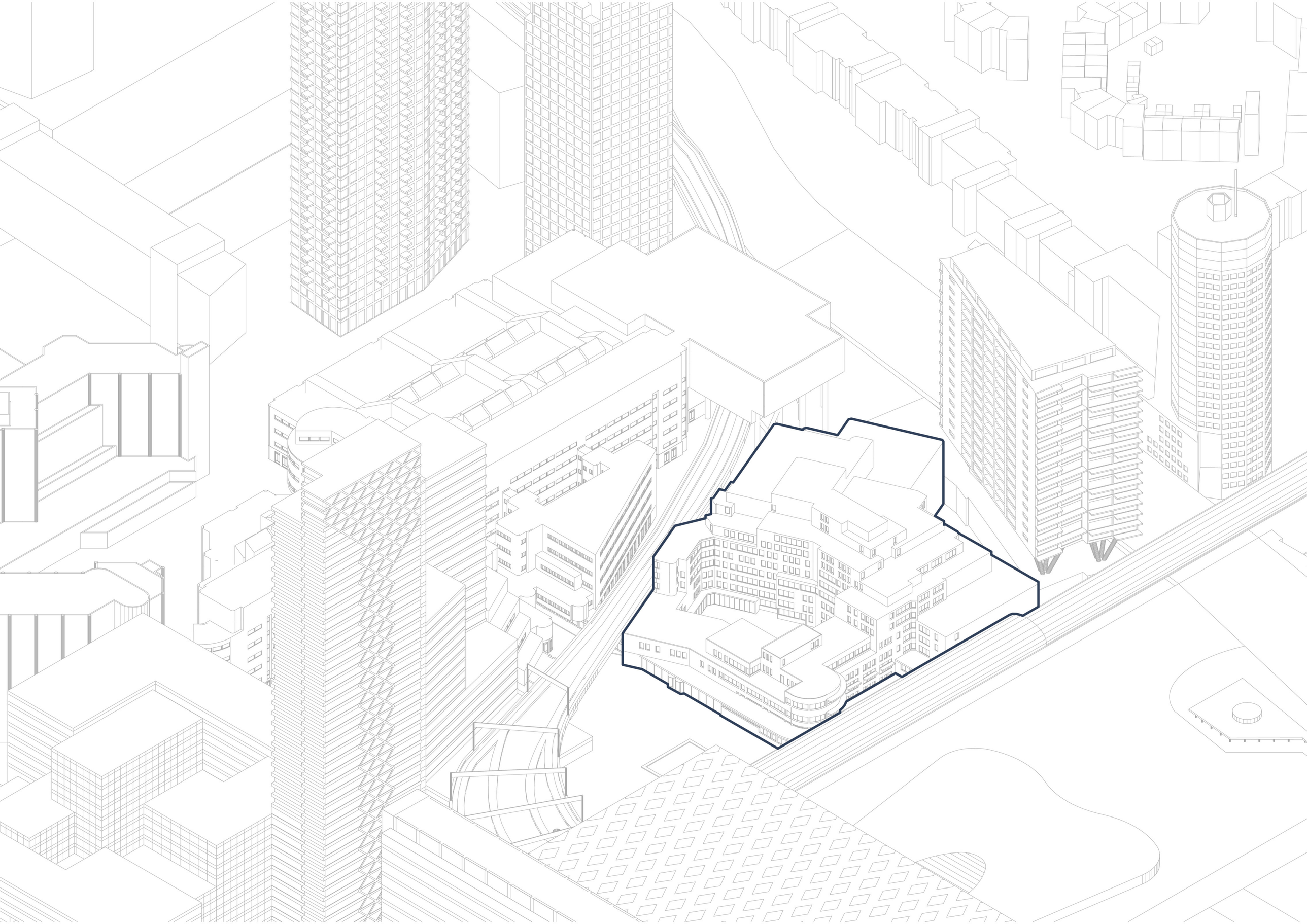
1:2000 accessibility and public flows





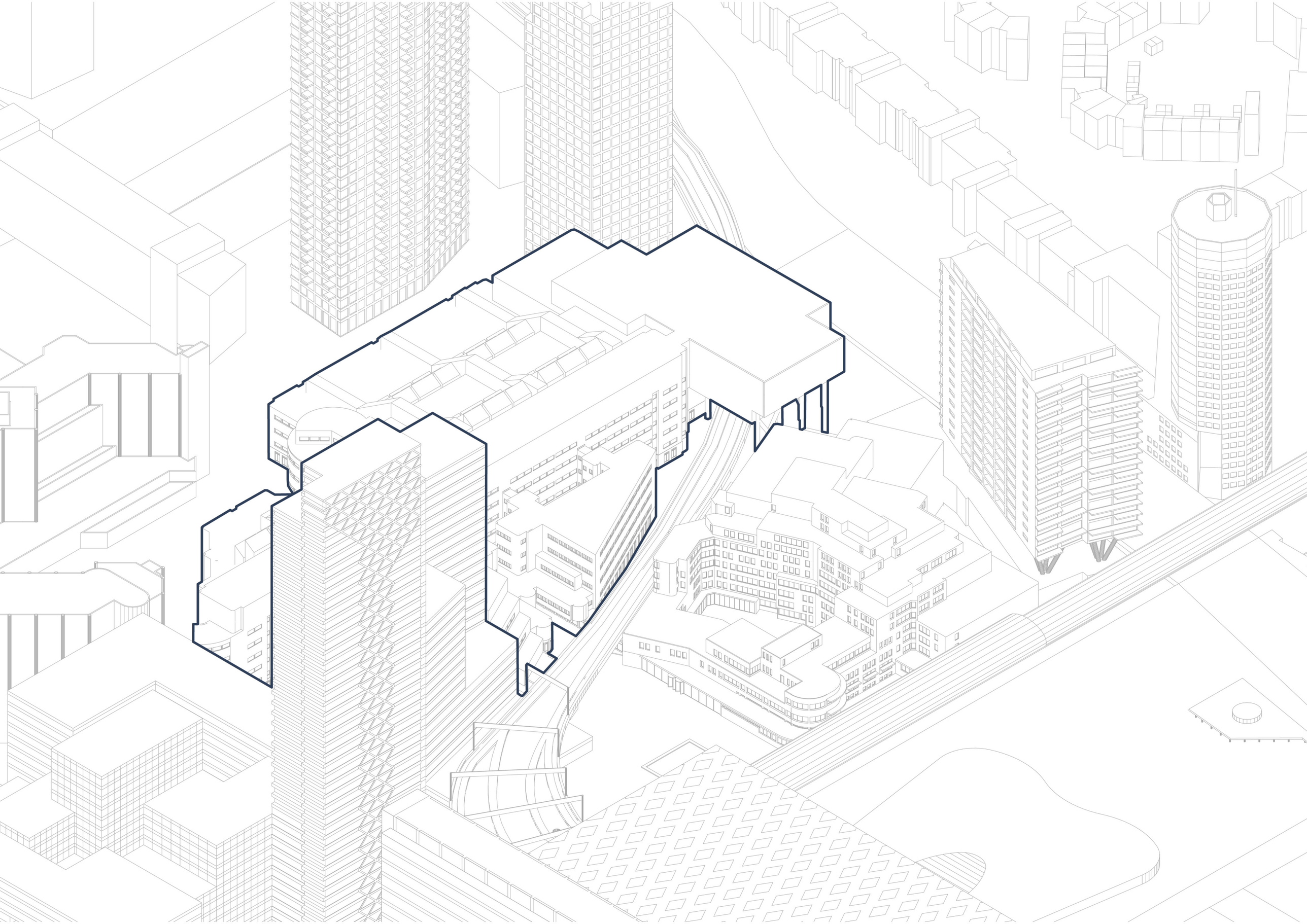
3.2 relation

existing vs new



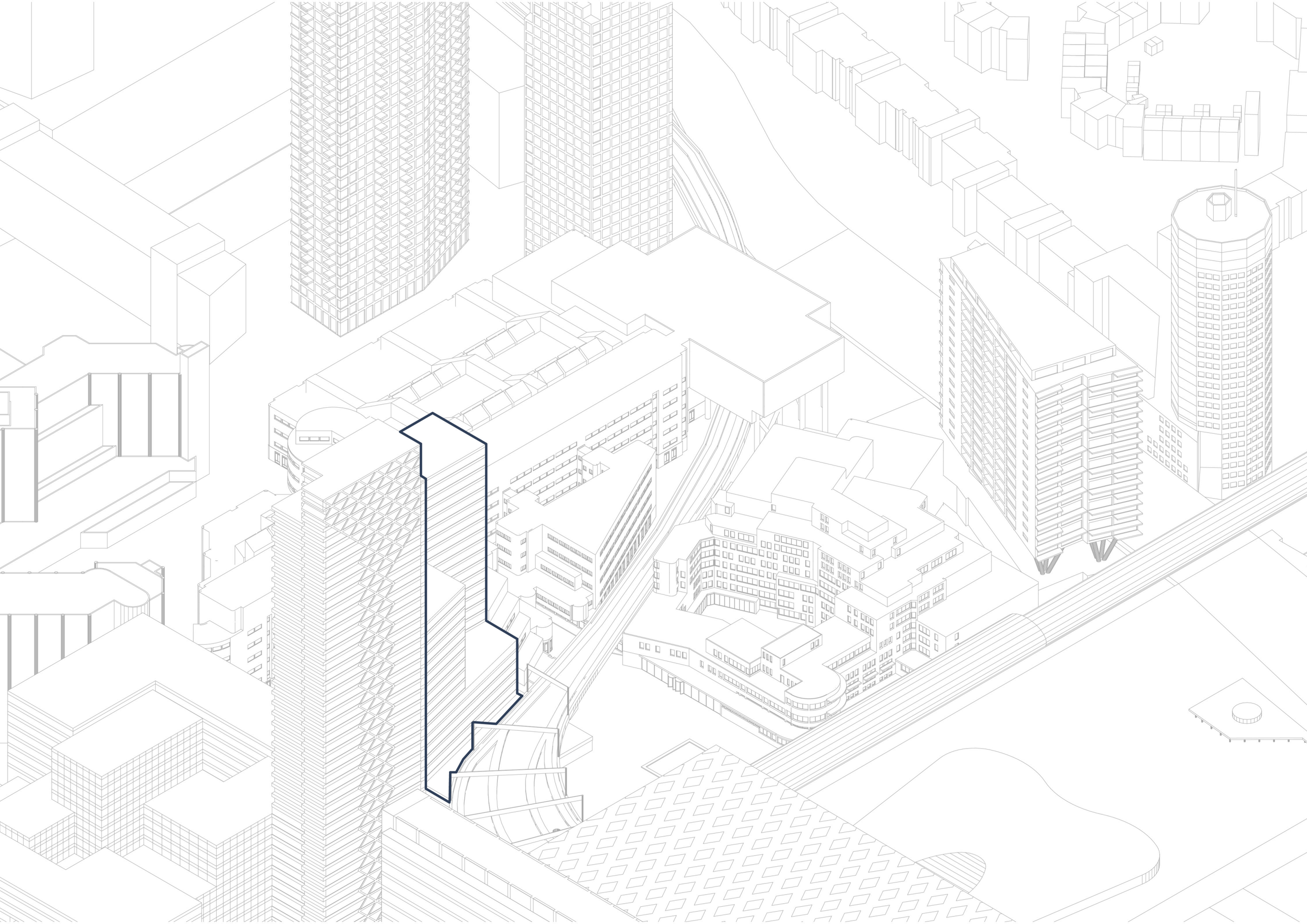
Nationaal Archief

architect:	Sjoerd Schamhart
year built:	1972 - 1979
materials:	concrete, masonary
client:	Rijksgebouwendienst
gross area:	35 000 m²
renovation:	2008 - 2016
architect:	diederendirrix



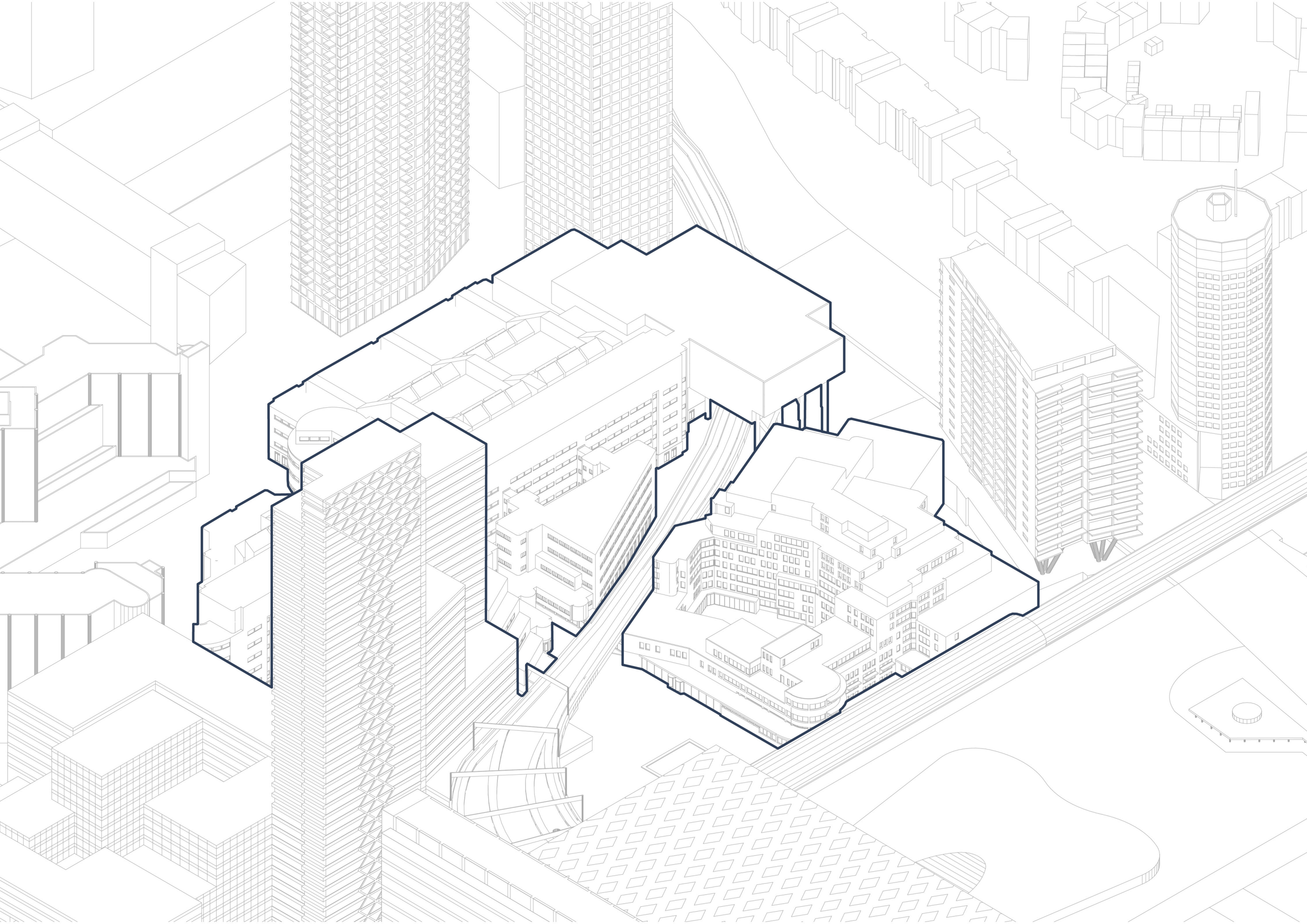
Koninklijke Bibliotheek

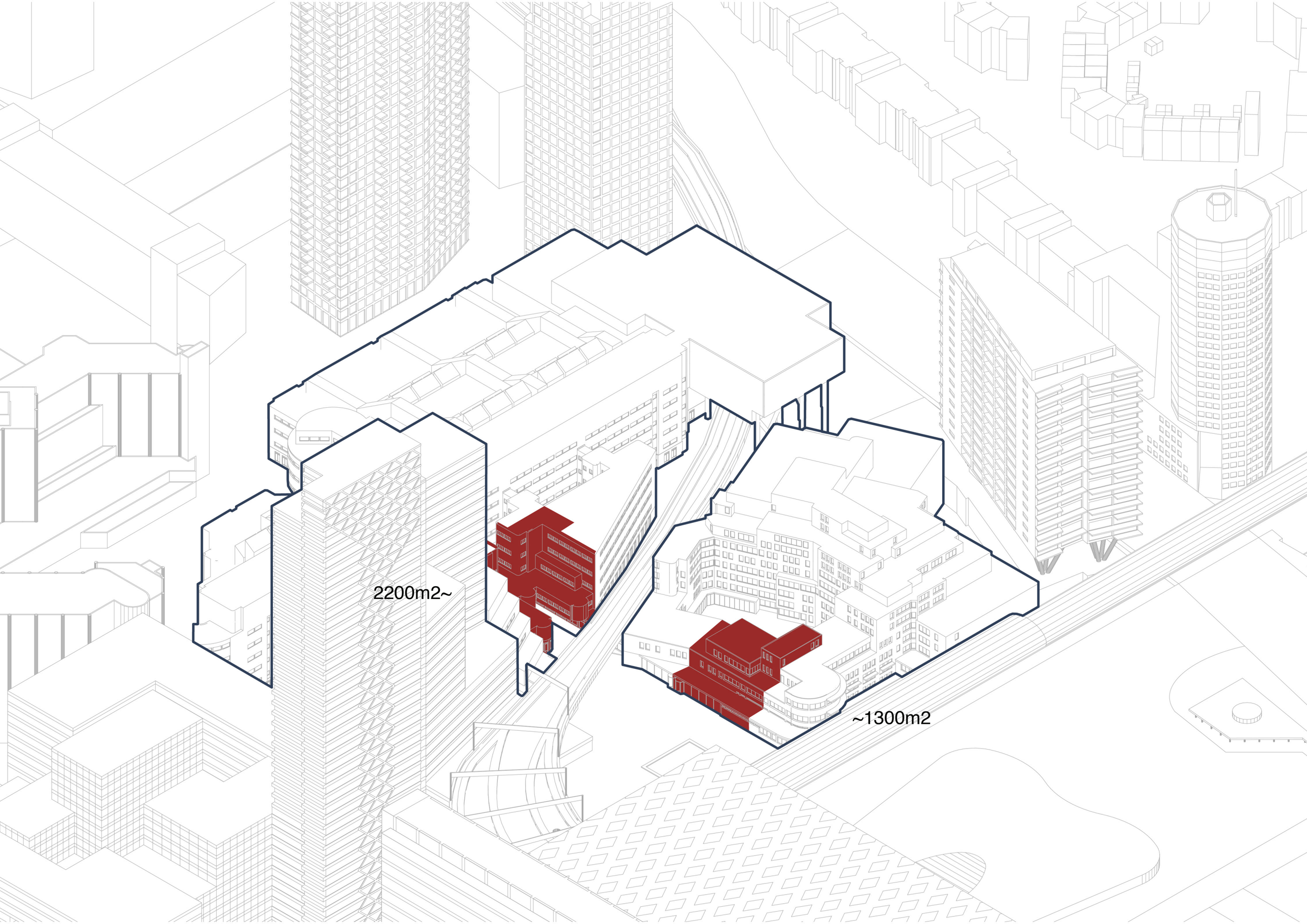
architect:	Arie Hagoort, B.M. van der Meer, A.J. Trotz
year built:	1973 - 1982
materials:	concrete, masonary
client:	Rijksgebouwendienst
gross area:	74 462 m²
extention:	2003 - 2006
architect:	OD 205

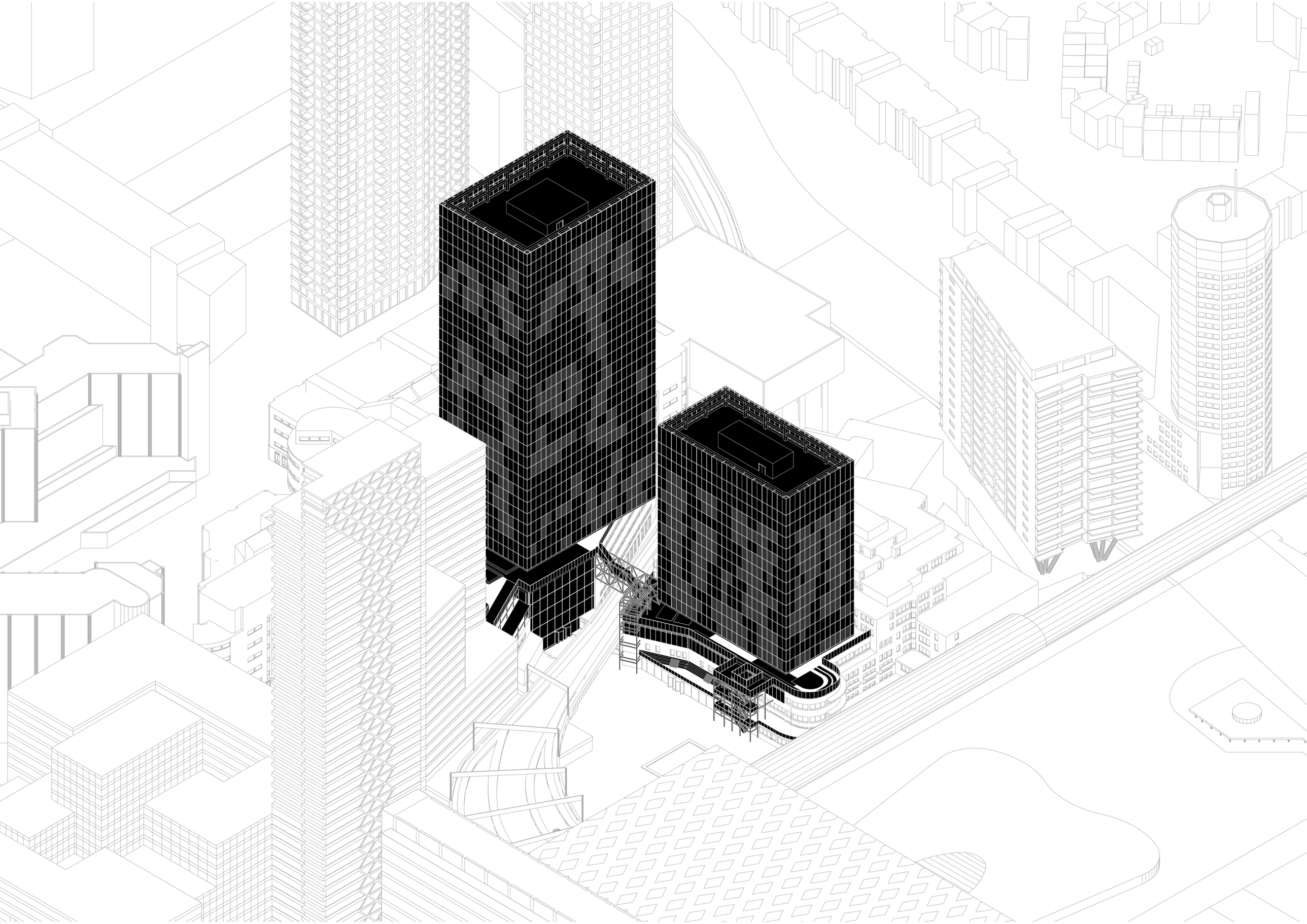


Anna van Buerentoren

architect:	Wiel Arets
year built:	2010 - 2013
materials:	steel
client:	Bouwbedrijf Wessels Zeist
gross area:	24 500 m²

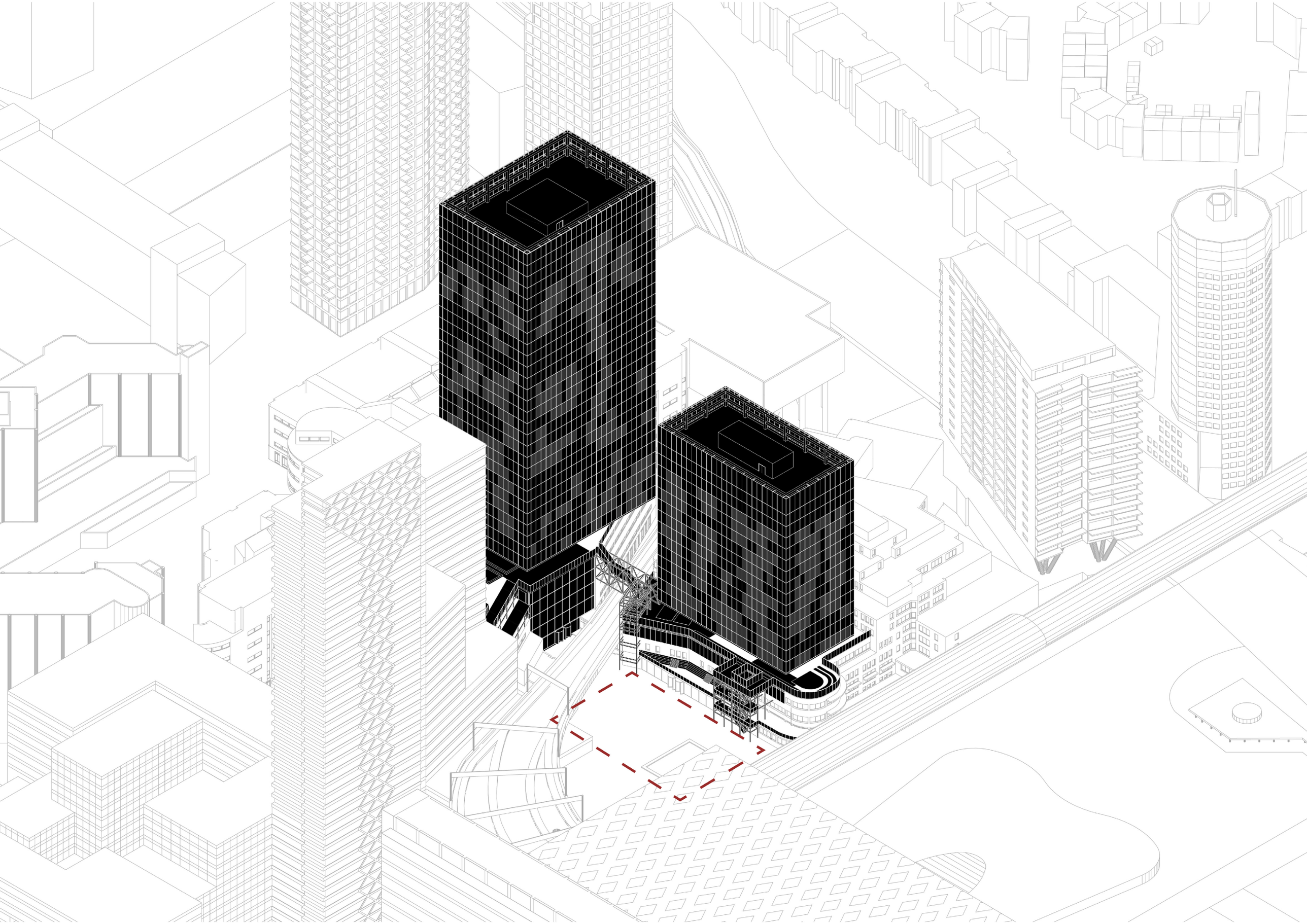


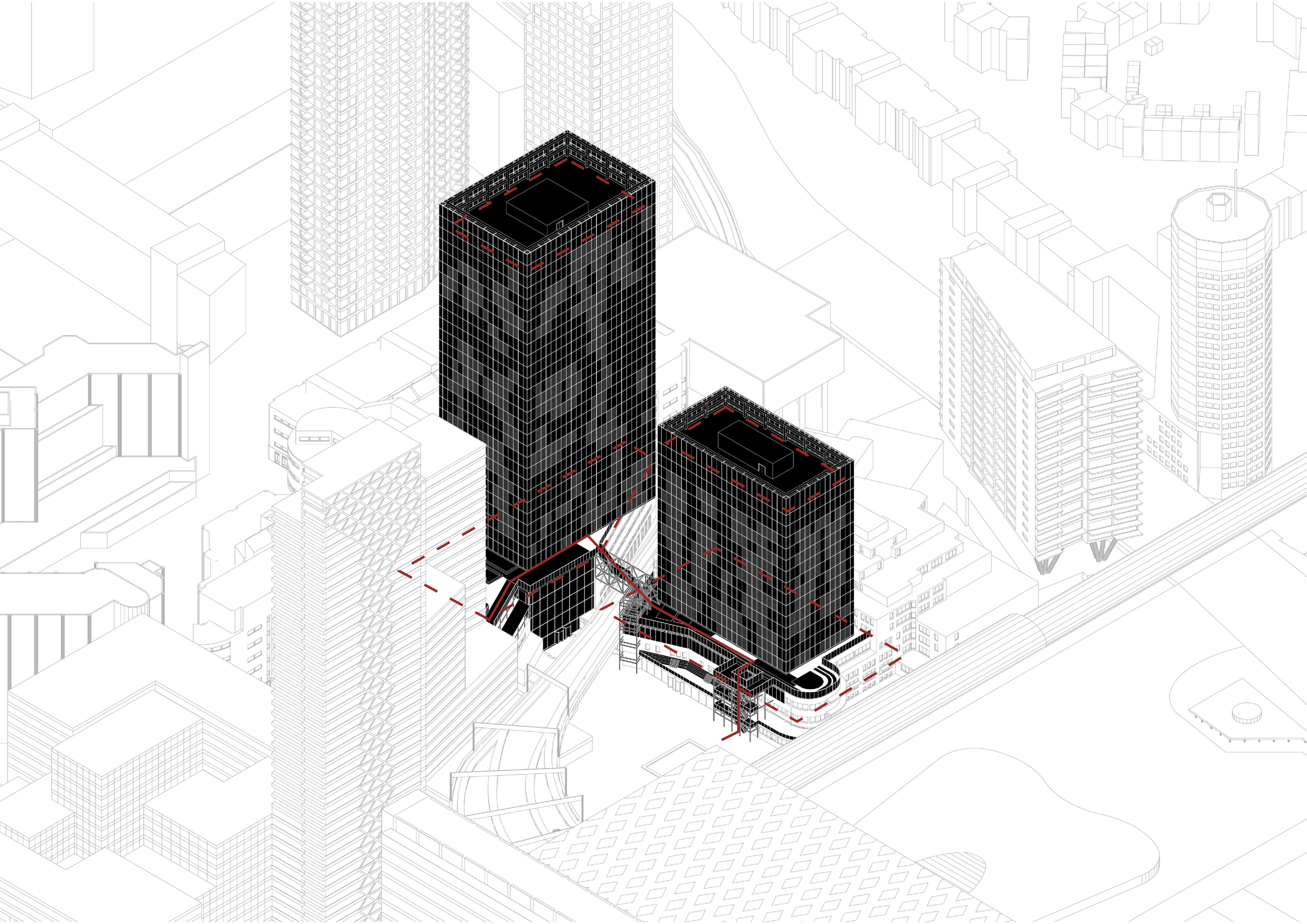

2200m2~
~1300m2

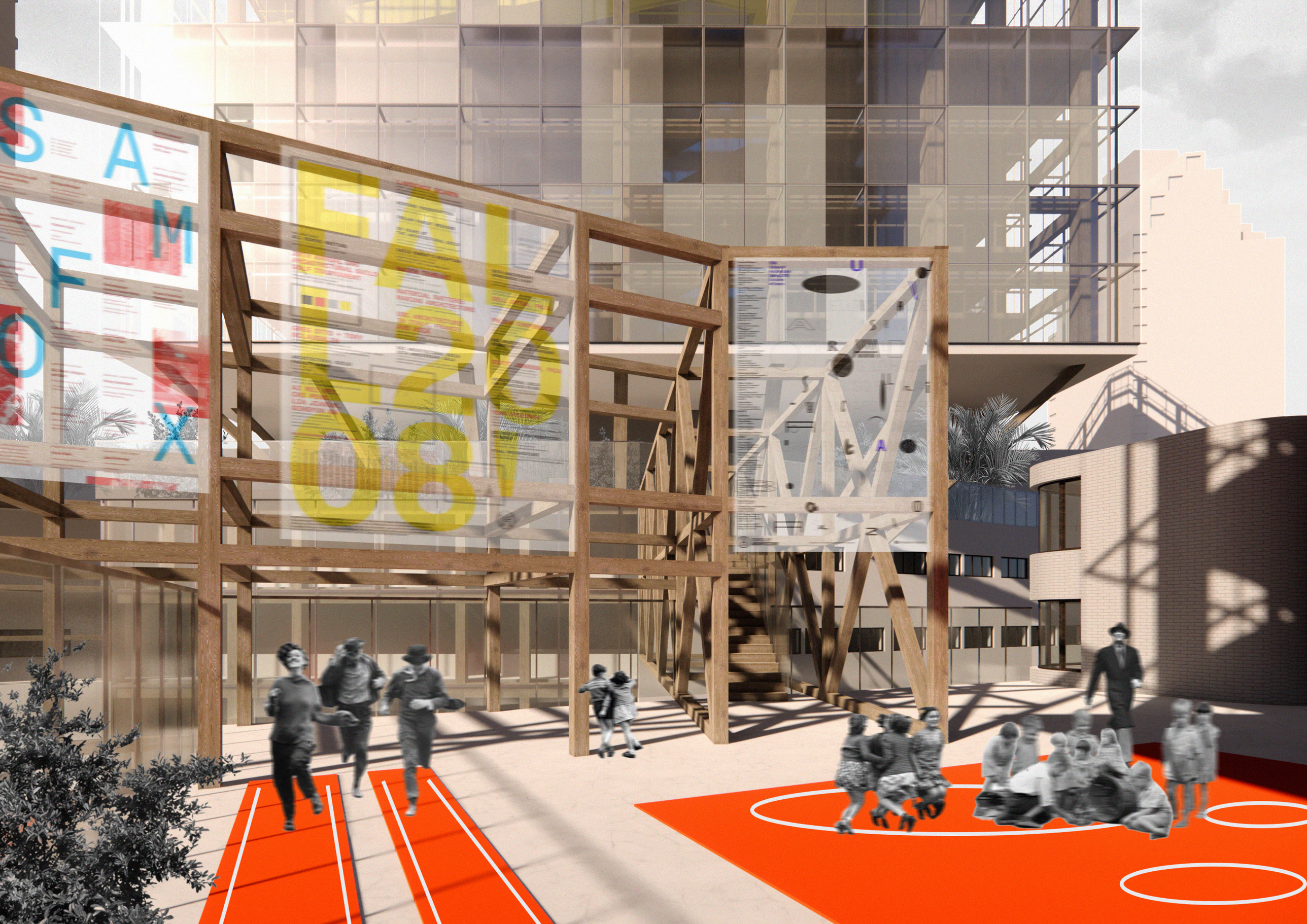


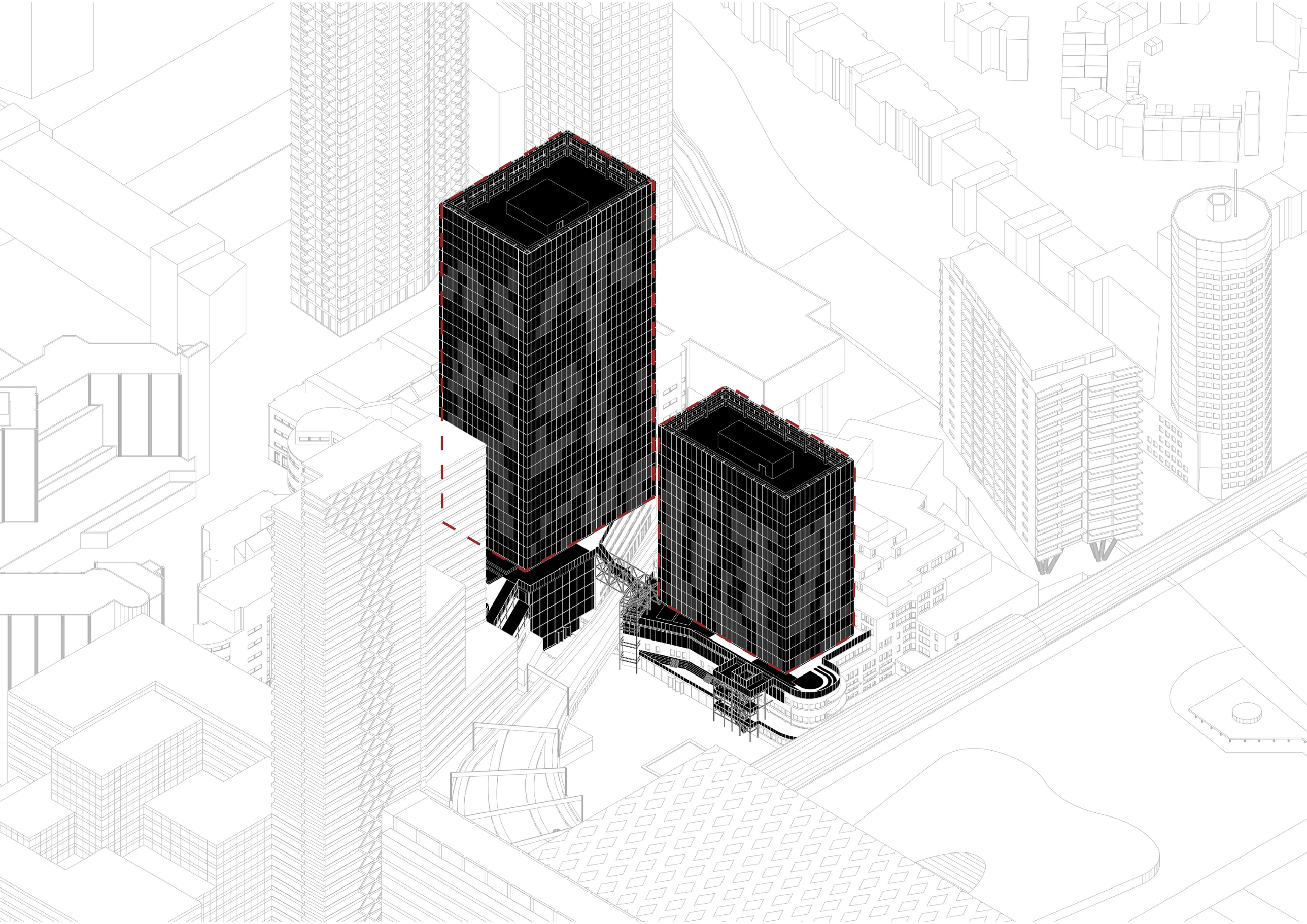
3.3 relation

urban engagement






SAMFOX
FAL
1880



1:500 ground floor new existing

Studio Syllabus Design Brief

1. Entrance	(400 m2)
2. Commercial Spaces	(600 m2)
3. Café and Lounge	(500 m2)
4. Play and Learn	(2.000 m2)
5. Learn and Discover; Studio Spaces	(1.000 m2)
6. Library and Media Center	(400 m2)
7. Workshops	(400 m2)
8. Centre for Advanced Virtuality	(500 m2)
9. Learn and Develop; Research Spaces	(2.000 m2)
10. Teaching, Learning & Development Spaces	(1.000 m2)
11. (Lecture) Theatres	(1.000 m2)
12. Exhibition Space	(500 m2)
13. Sports	(500 m2)
14. Office Spaces	(10.000 m2)
15. Outdoor grounds	
16. Storage, Mechanical Utilities and Circulation Space	(25-30% of total gross floor area)
17. Bicycle Parking	(1.500 sqm)
18. Delivery of Goods	

Added Program

1. Cafeteria	(200 m2)
2. Senior Centre	(370 m2)
3. Student Association Spaces	(400 m2)
4. Debate Centre	(300 m2)
5. Dean and Staff	(400 m2)
6. Communal/ Flexible Study	
7. Rooftop Restaurants	(1600 m2)

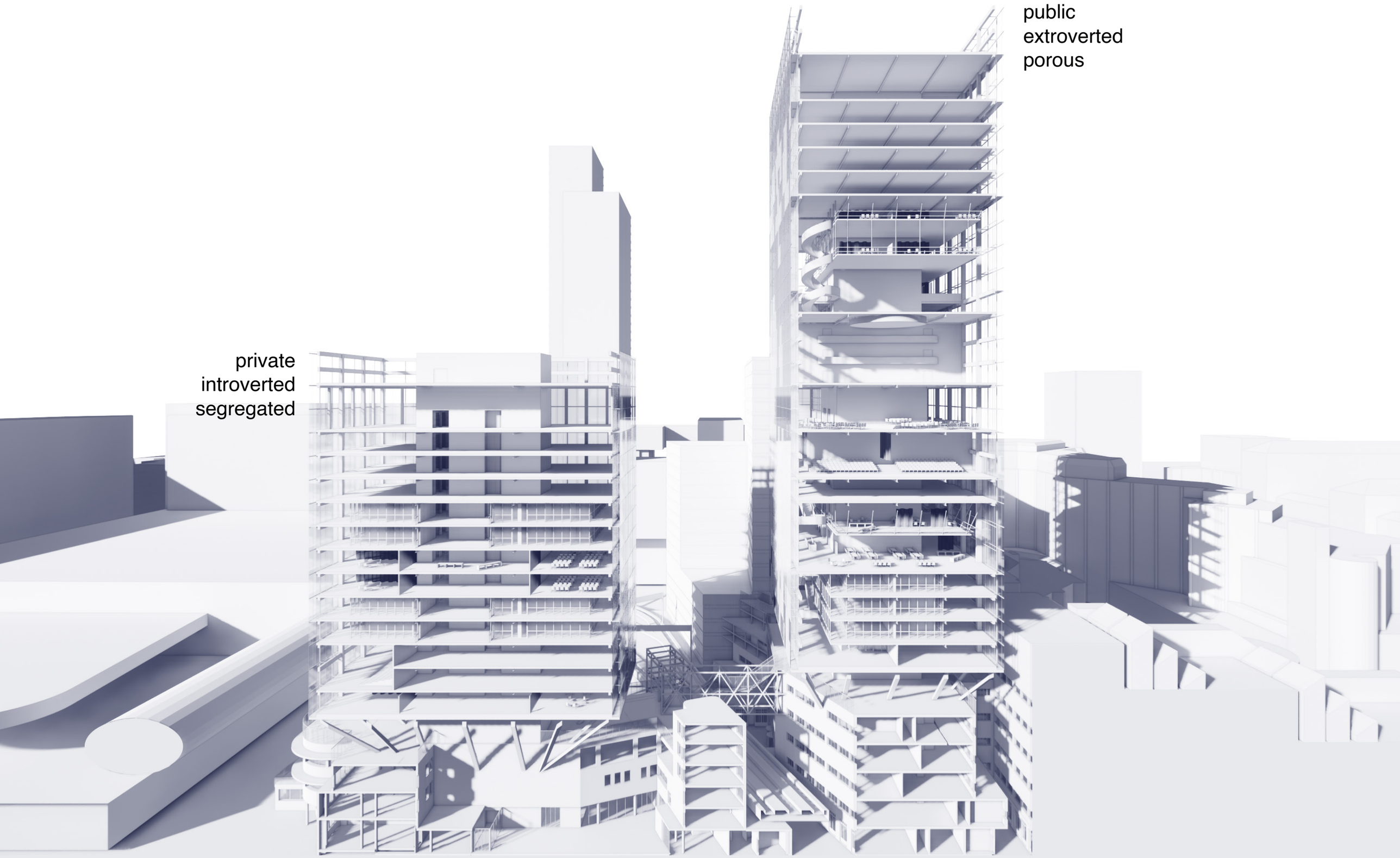
Removed Program

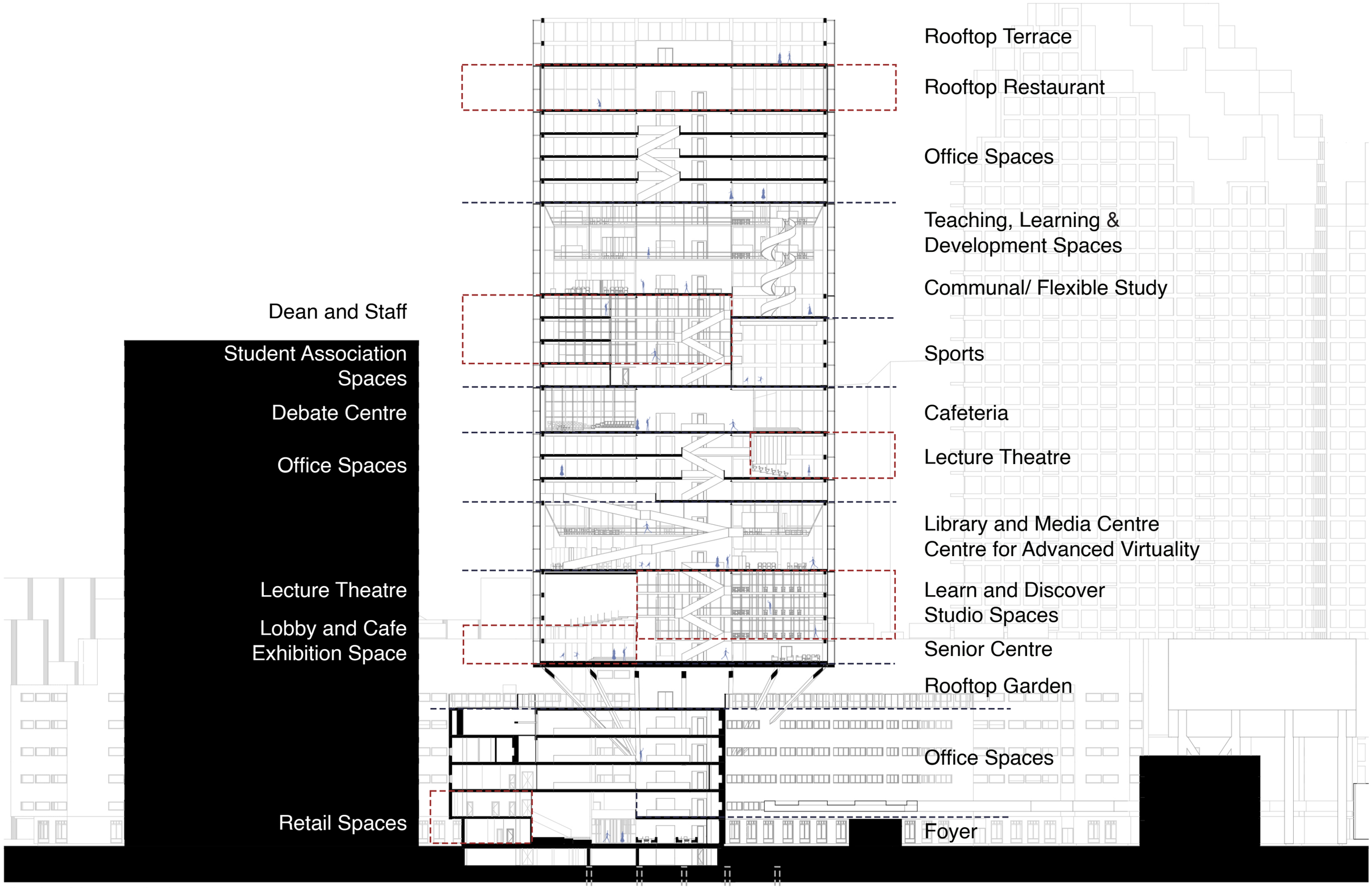
1. Car Parking	
2. Commercial Spaces	(400 m2)
3. Library and Media Center	(1.600 m2)

Total Area of the Buildings: 32 300 sqm

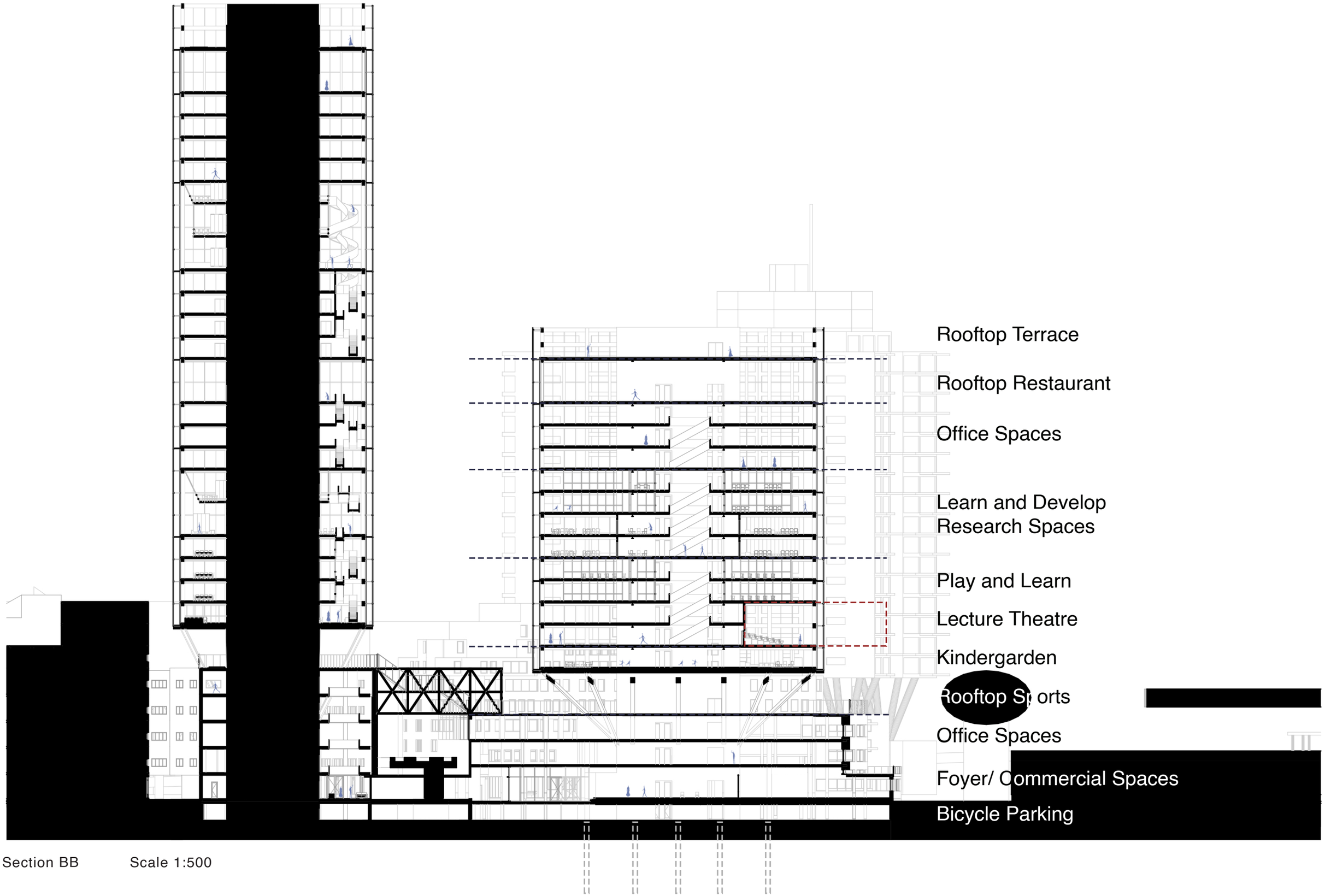
3.4 relation

two towers

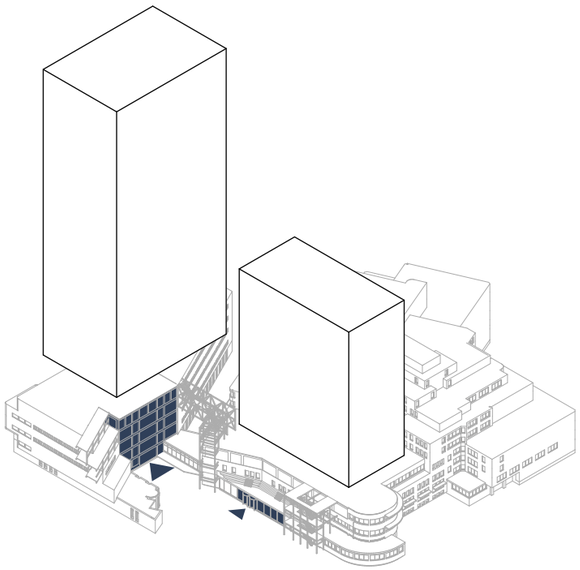

public
extroverted
porous
private
introverted
segregated



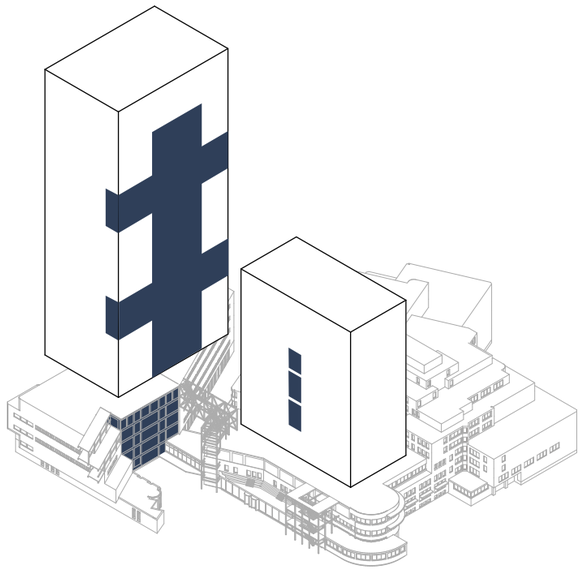
Section AA Scale 1:500



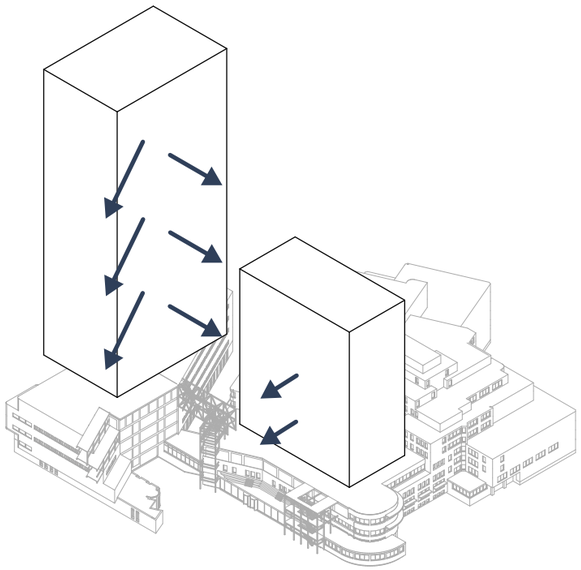
Section BB Scale 1:500



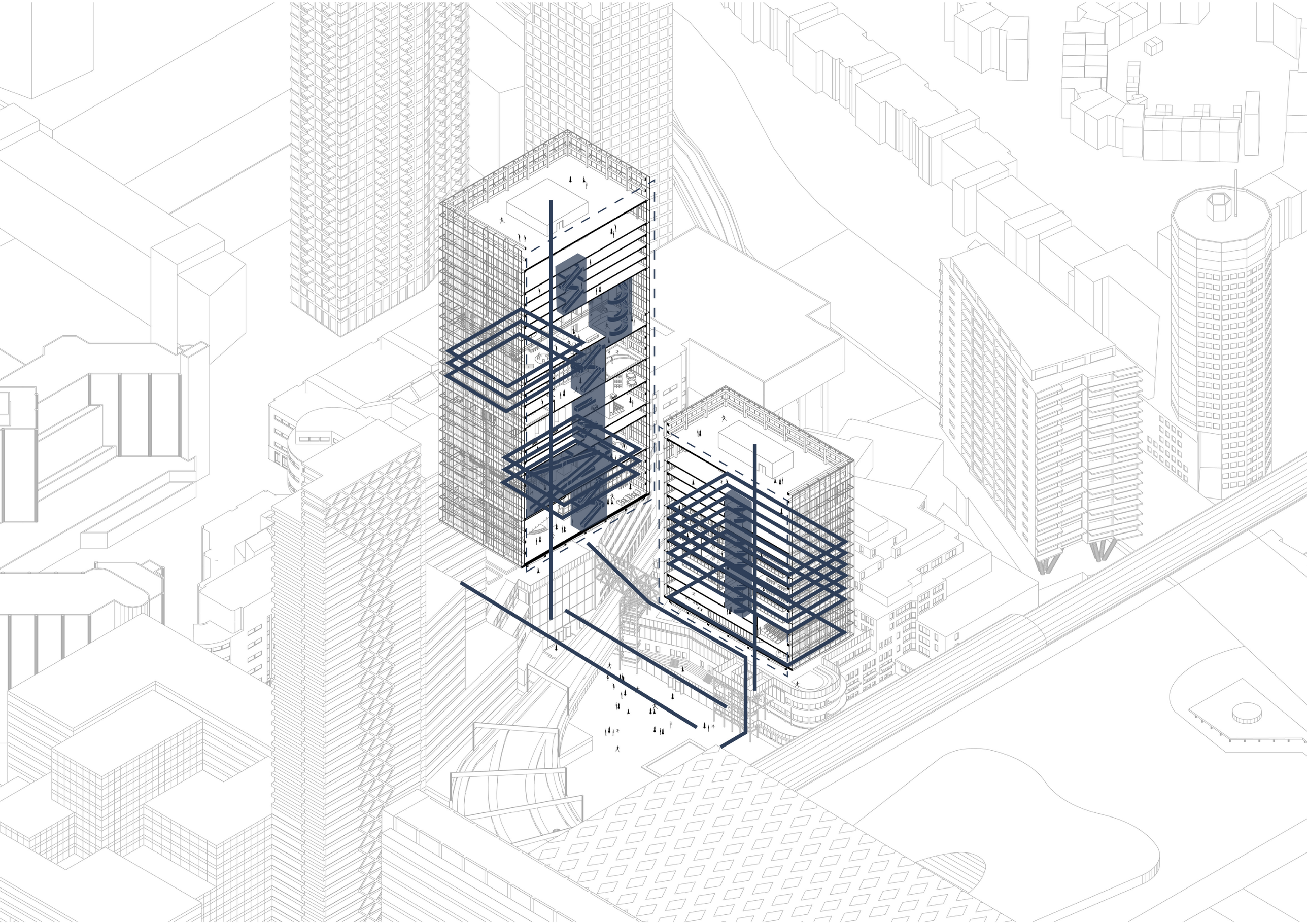
entrances

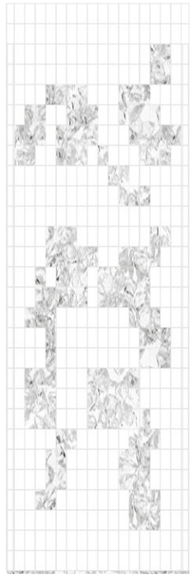


vertical voids

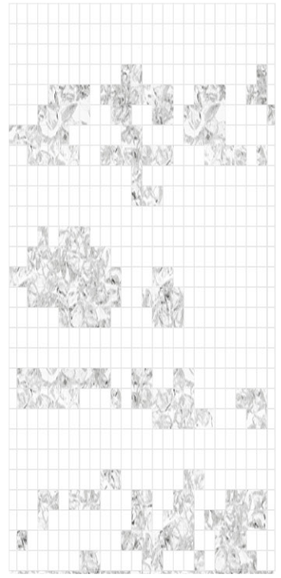


views from communal areas



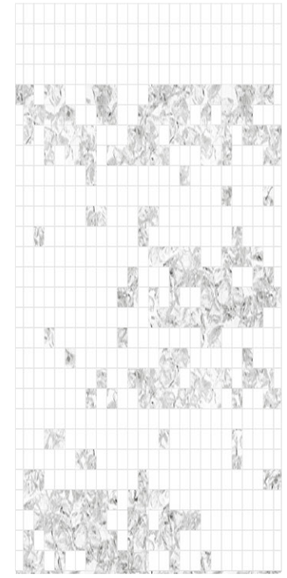


North



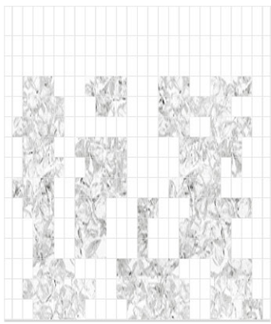
West

South



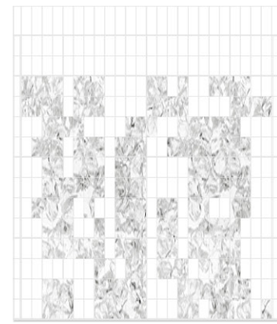
East

Tower 1



North

West



South

East

Tower 2

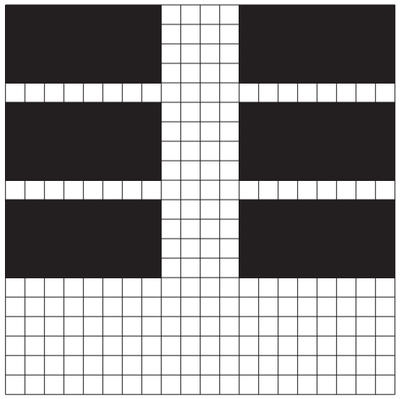
Facade Rhythms Scale 1:1000

3.5 relation

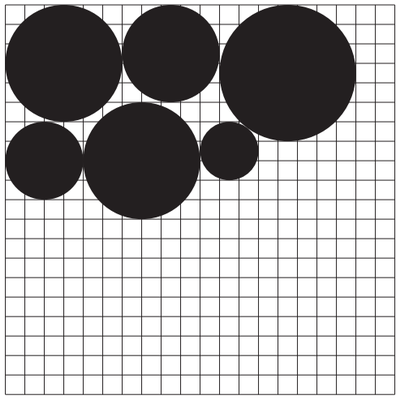
program

space catalogue
pockets of floors

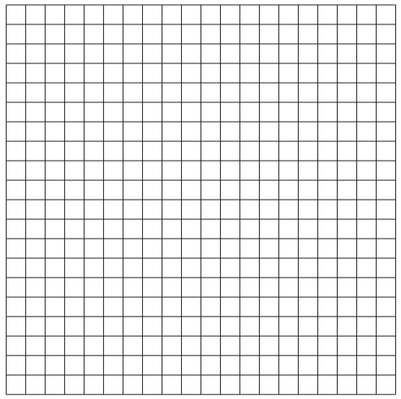
traditional classrooms



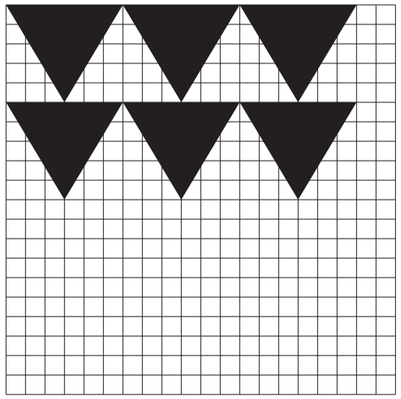
temporal learning



open canvas

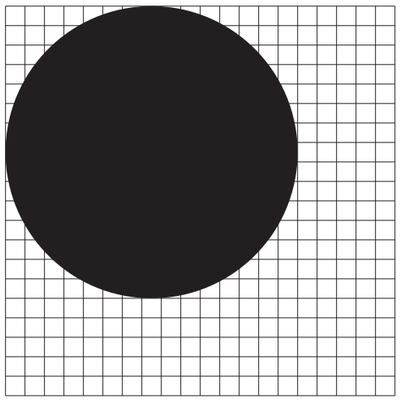


gathering

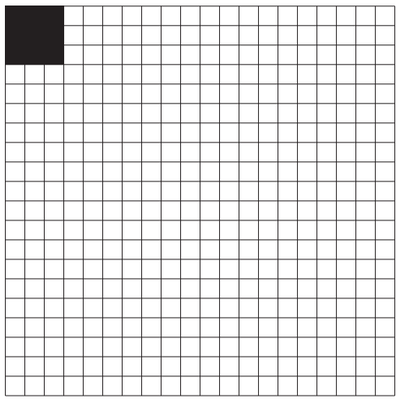


space catalogue
moments

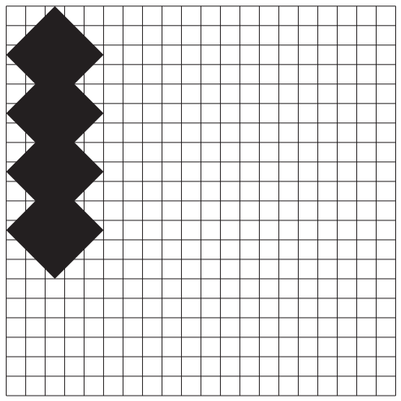
theatrical experience



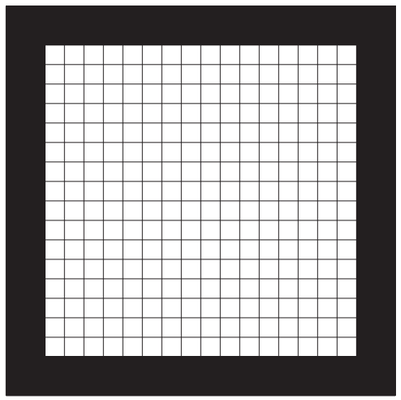
theatre for one

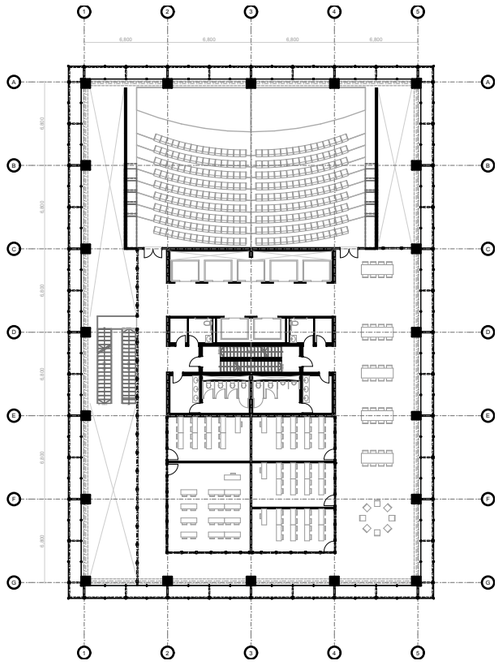


vertical void

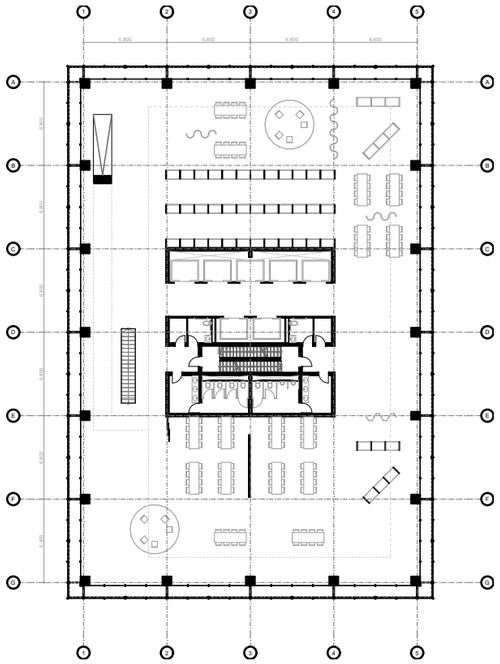


peripherial promenade

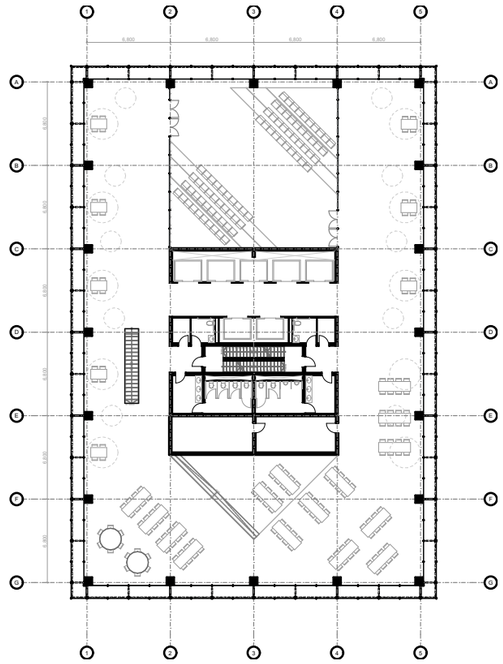




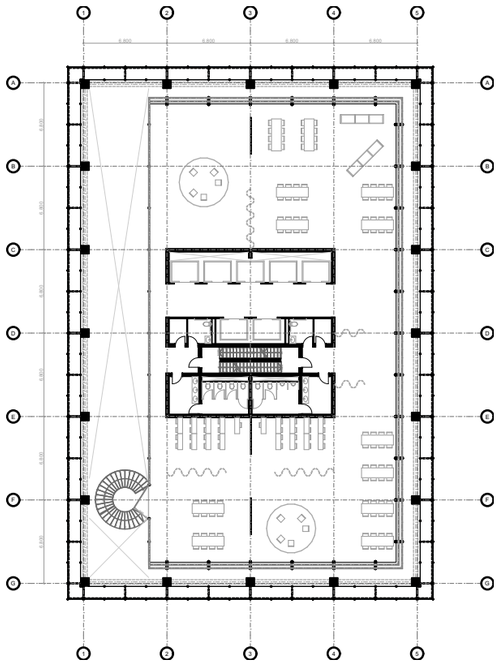
Floor 9



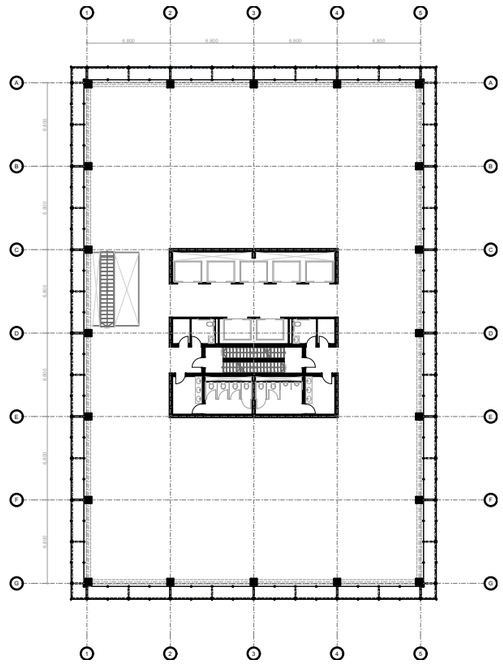
Floor 11



Floor 17



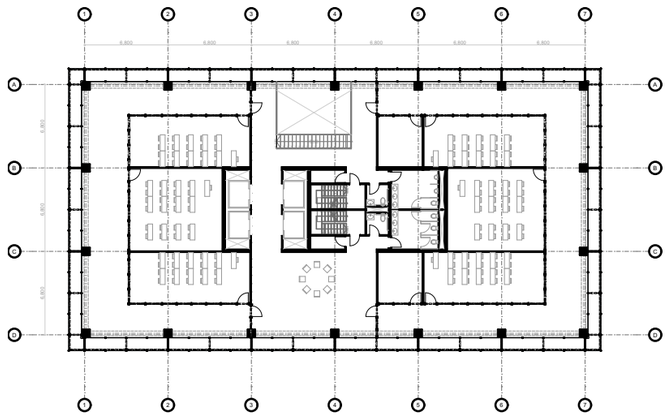
Floor 26



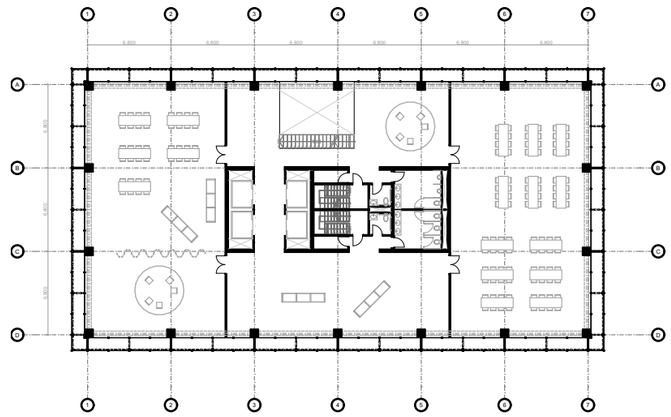
Floor 30

Scale 1:500

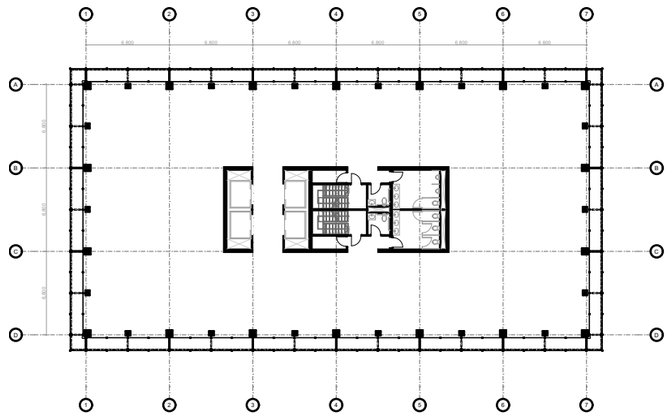
N



Floor 9



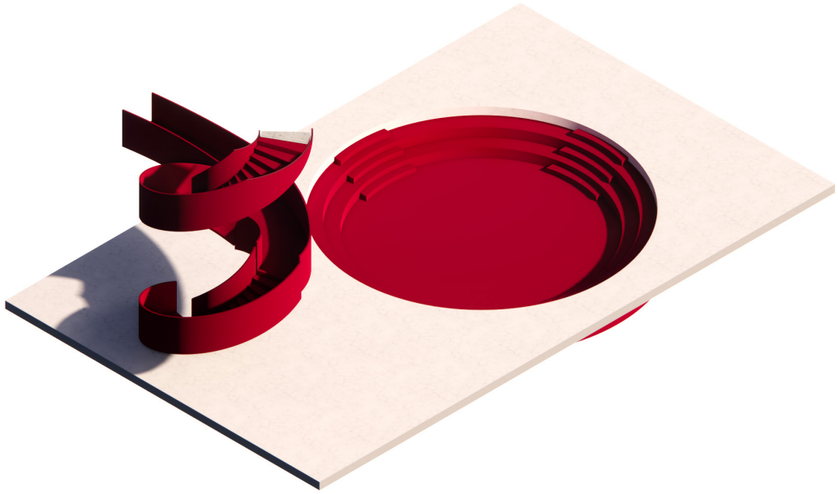
Floor 11

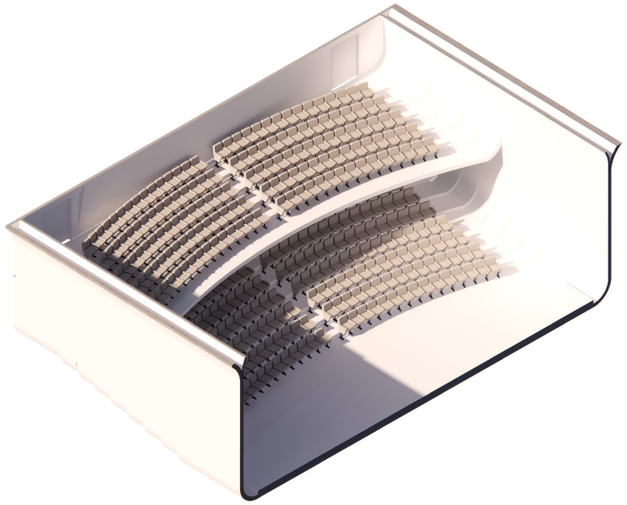


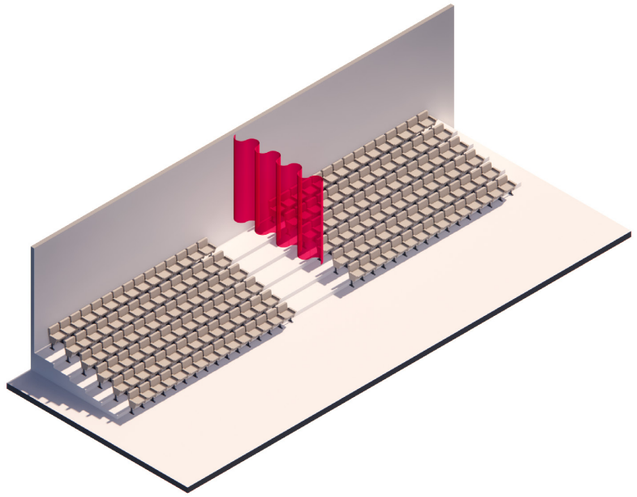
Floor 17

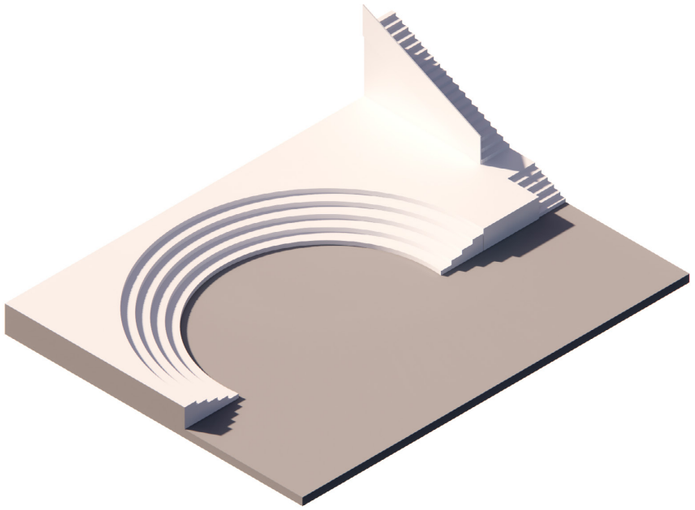
Scale 1:500

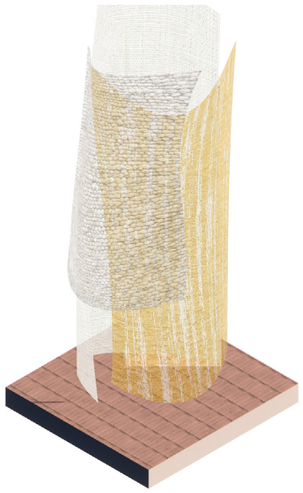
N

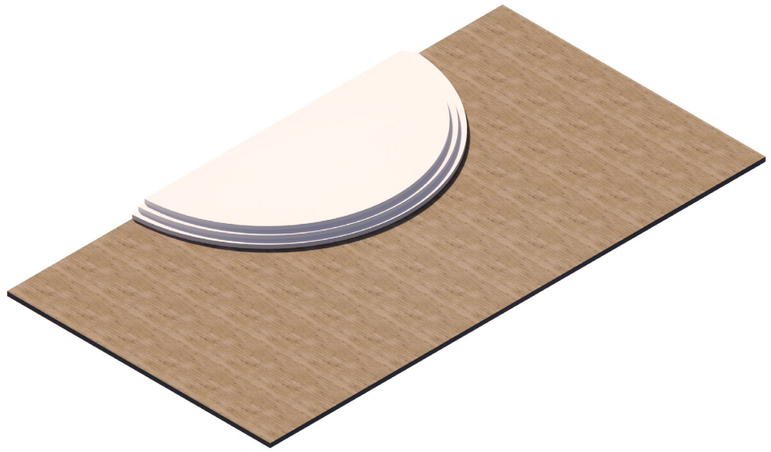




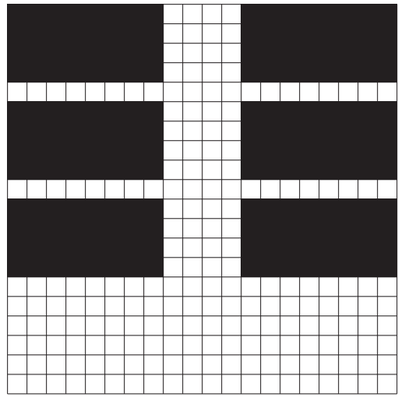


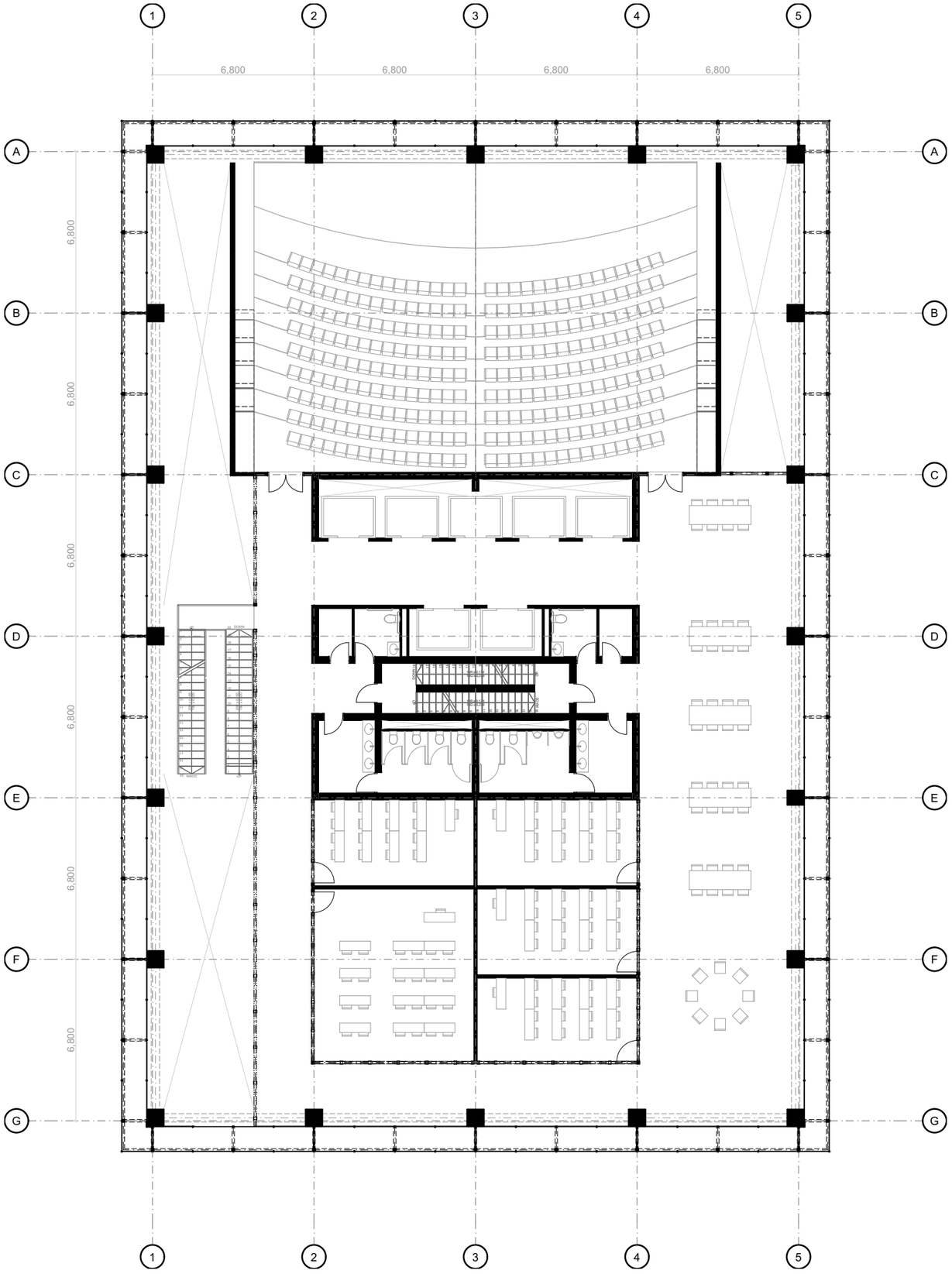






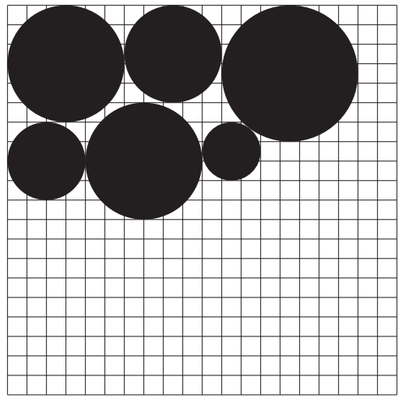
traditional classrooms

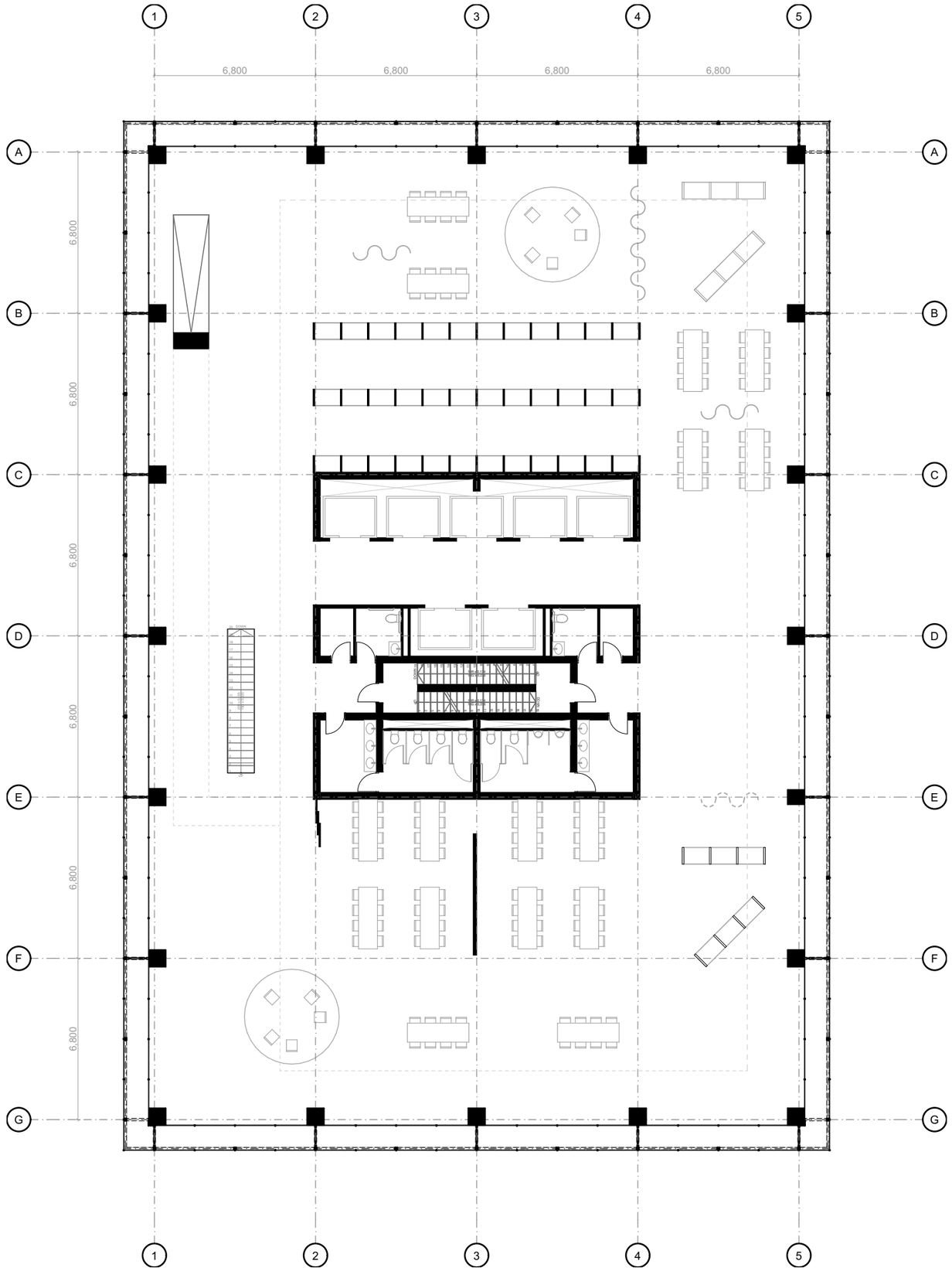




Floor 9 Scale 1:200 N

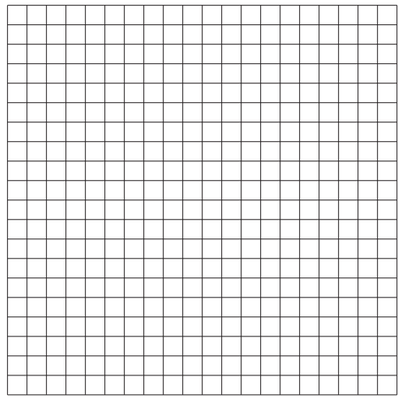
temporal learning

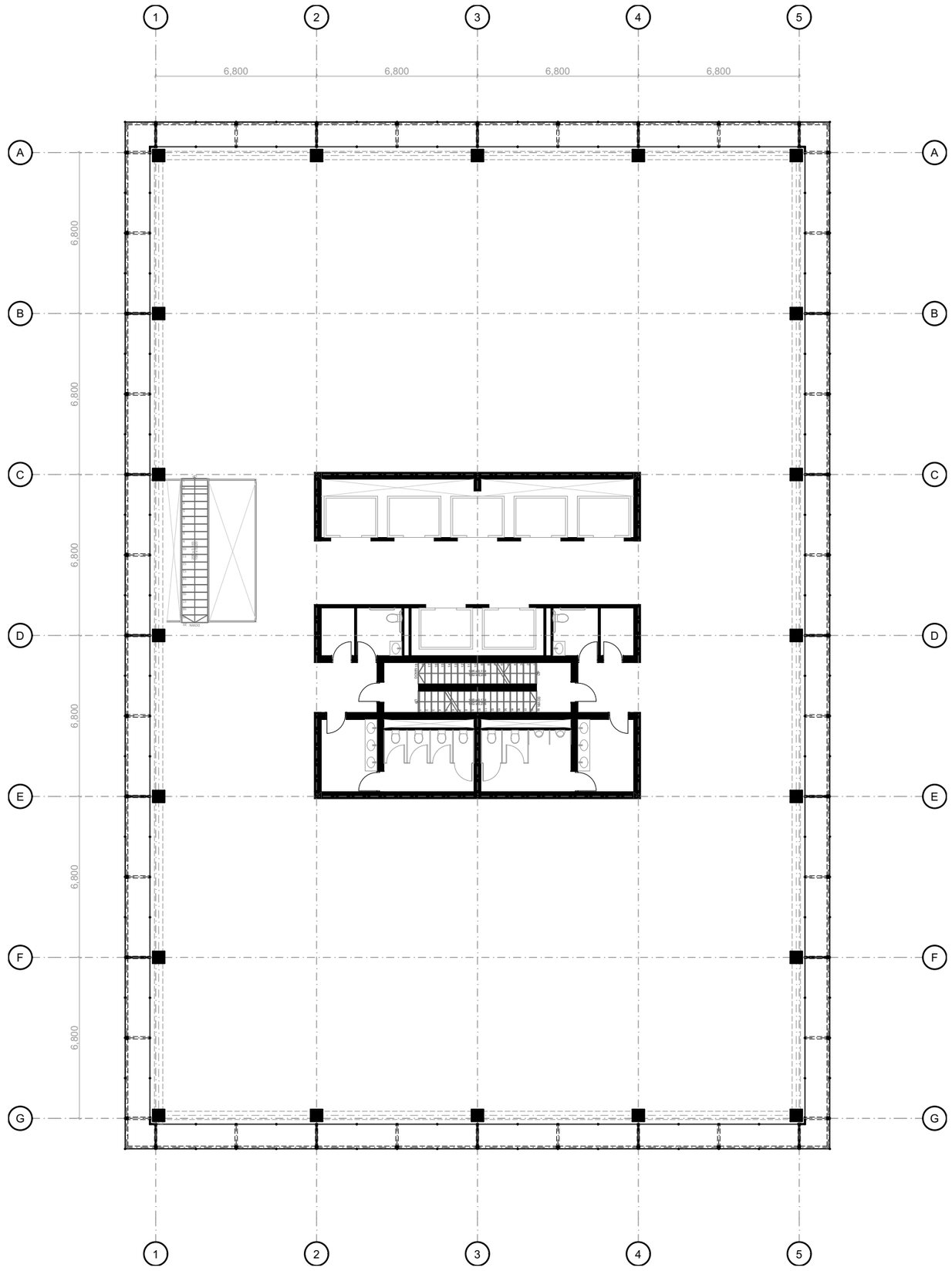




Floor 11 Scale 1:200 N

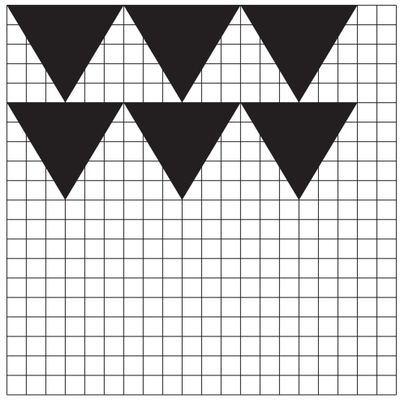
open canvas

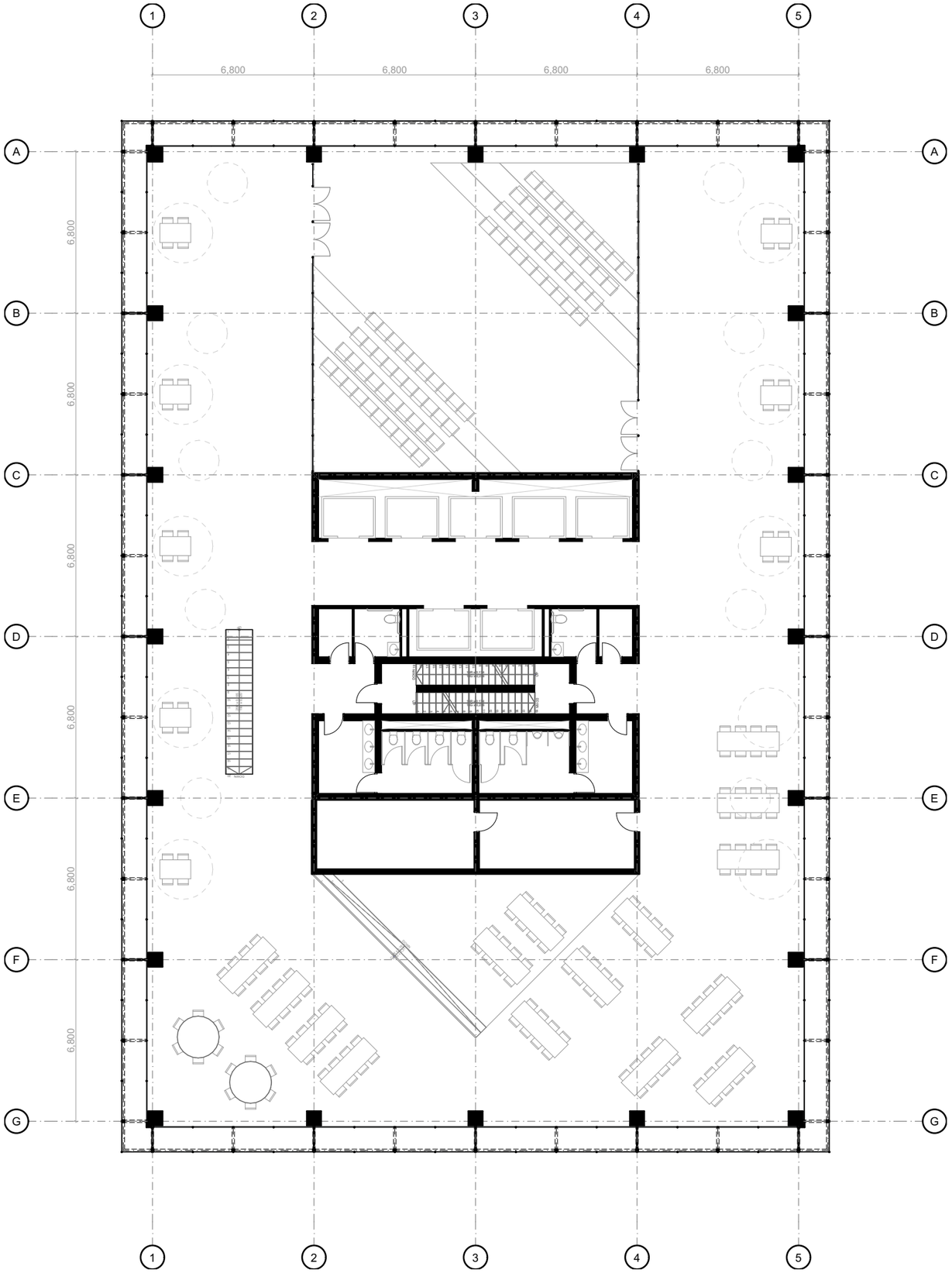




Floor 30 Scale 1:200 N

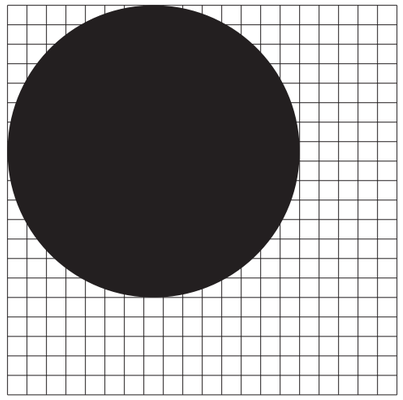
gathering

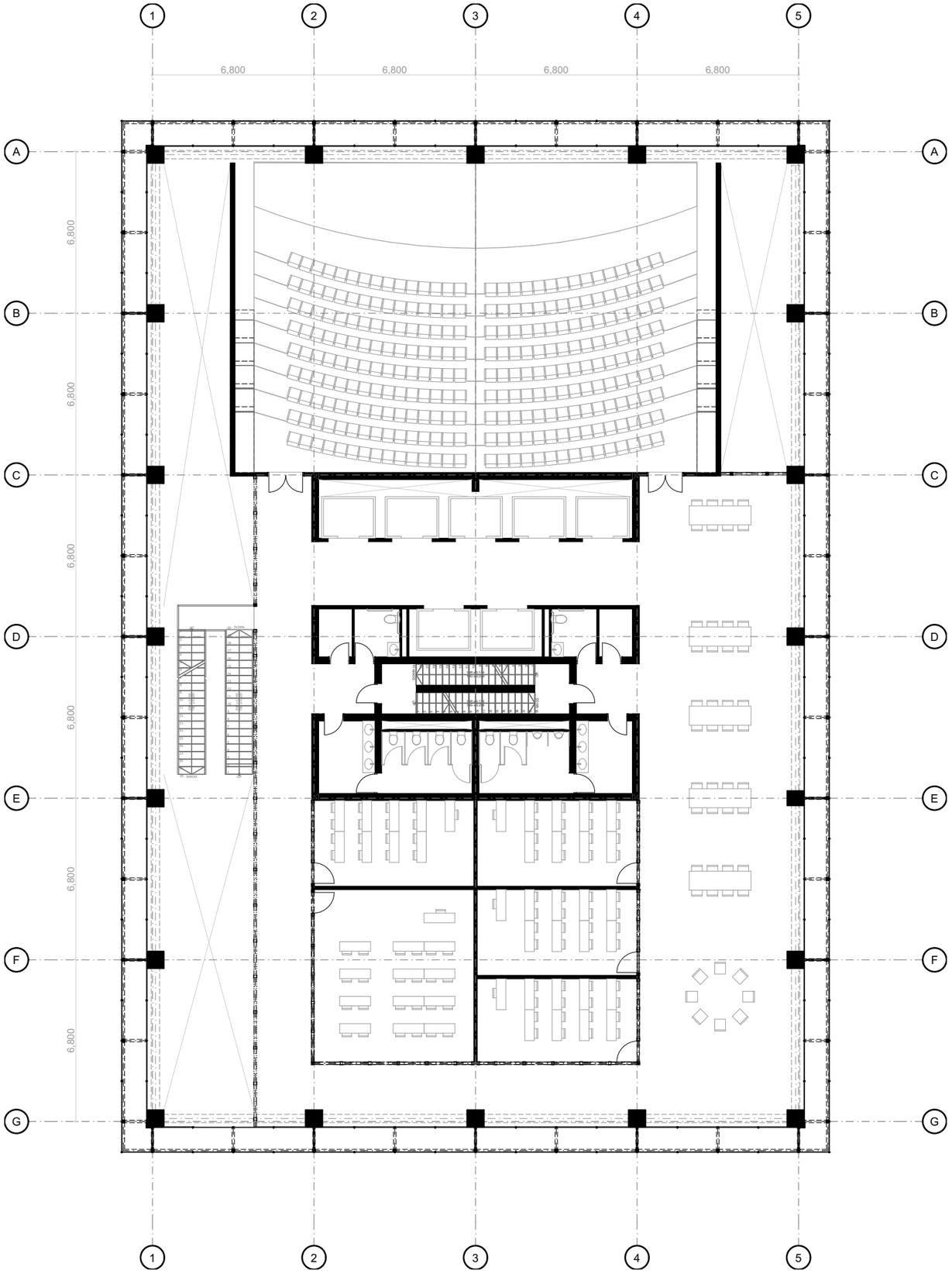




Floor 17 Scale 1:200 N

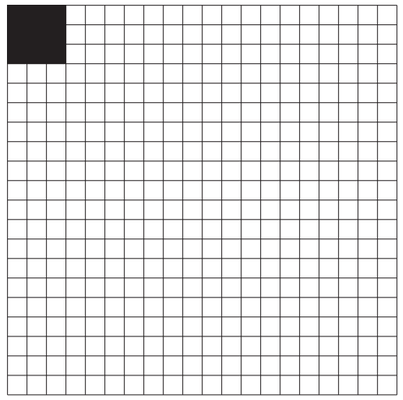
theatrical experience

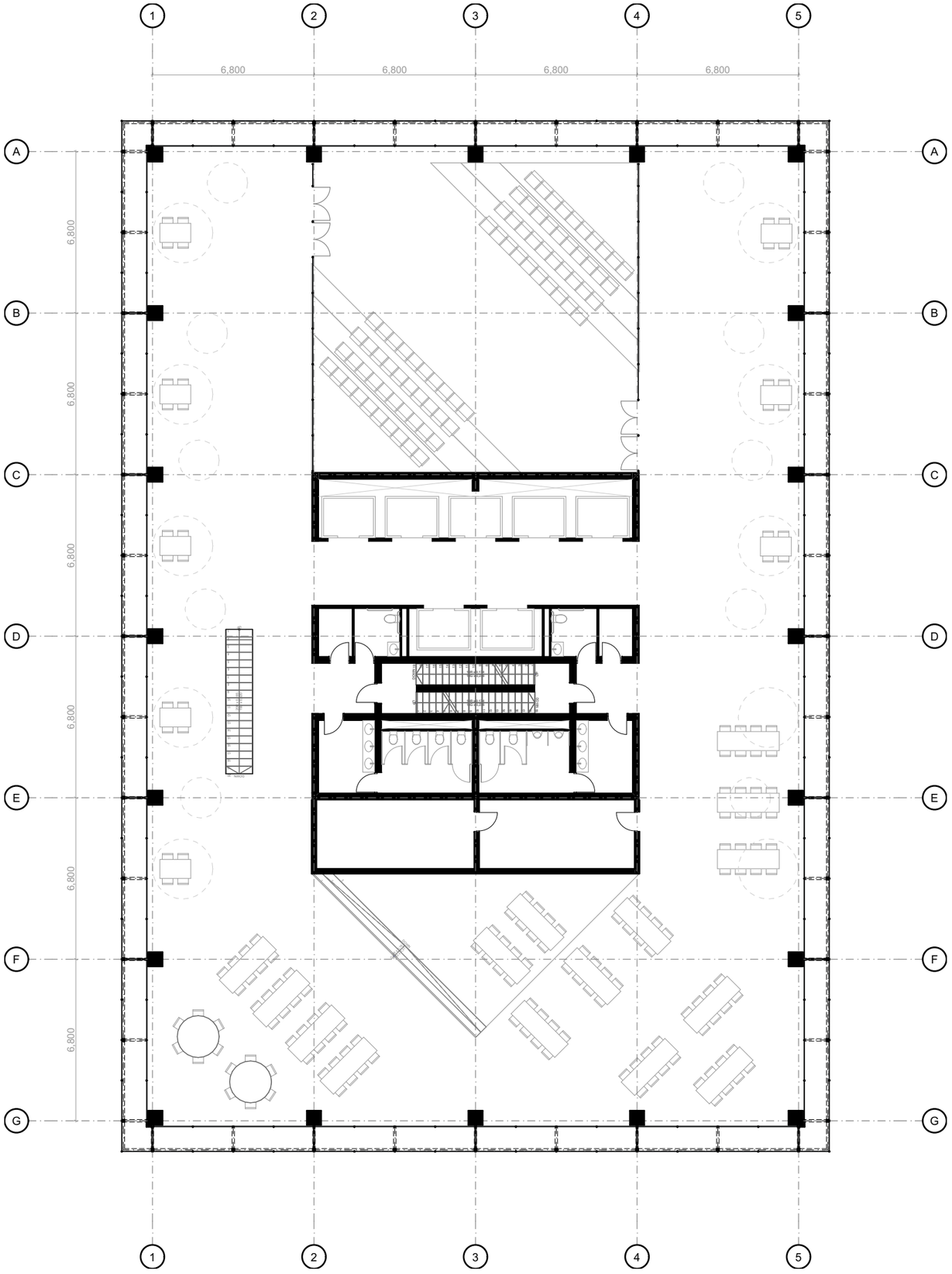




Floor 9 Scale 1:200 N

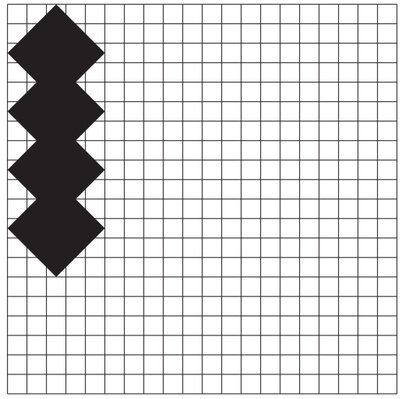
theatre for one

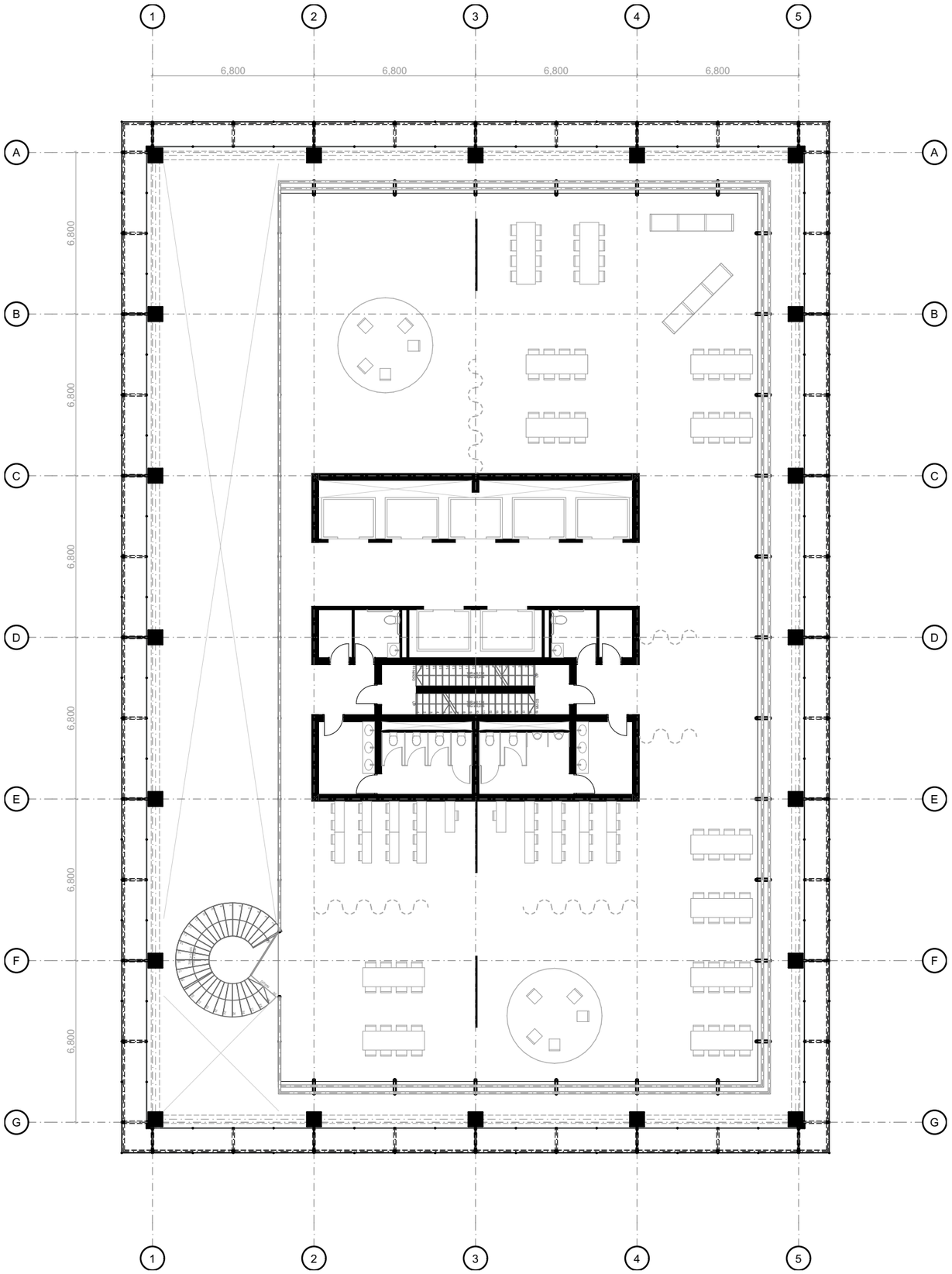




Floor 17 Scale 1:200 N

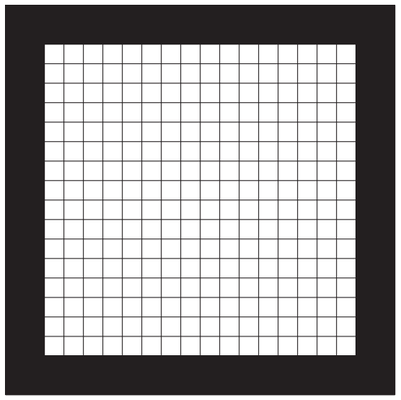
vertical void

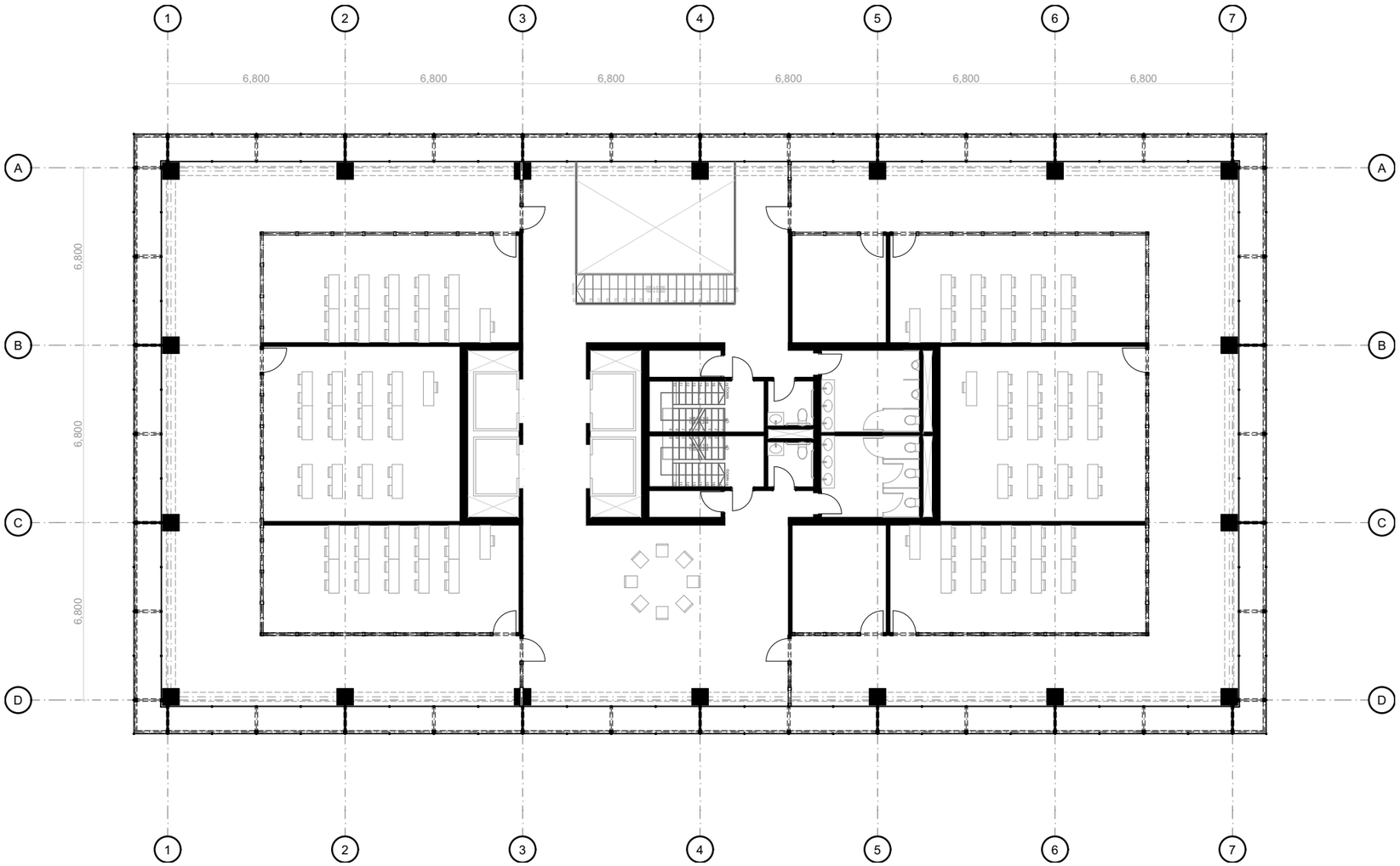




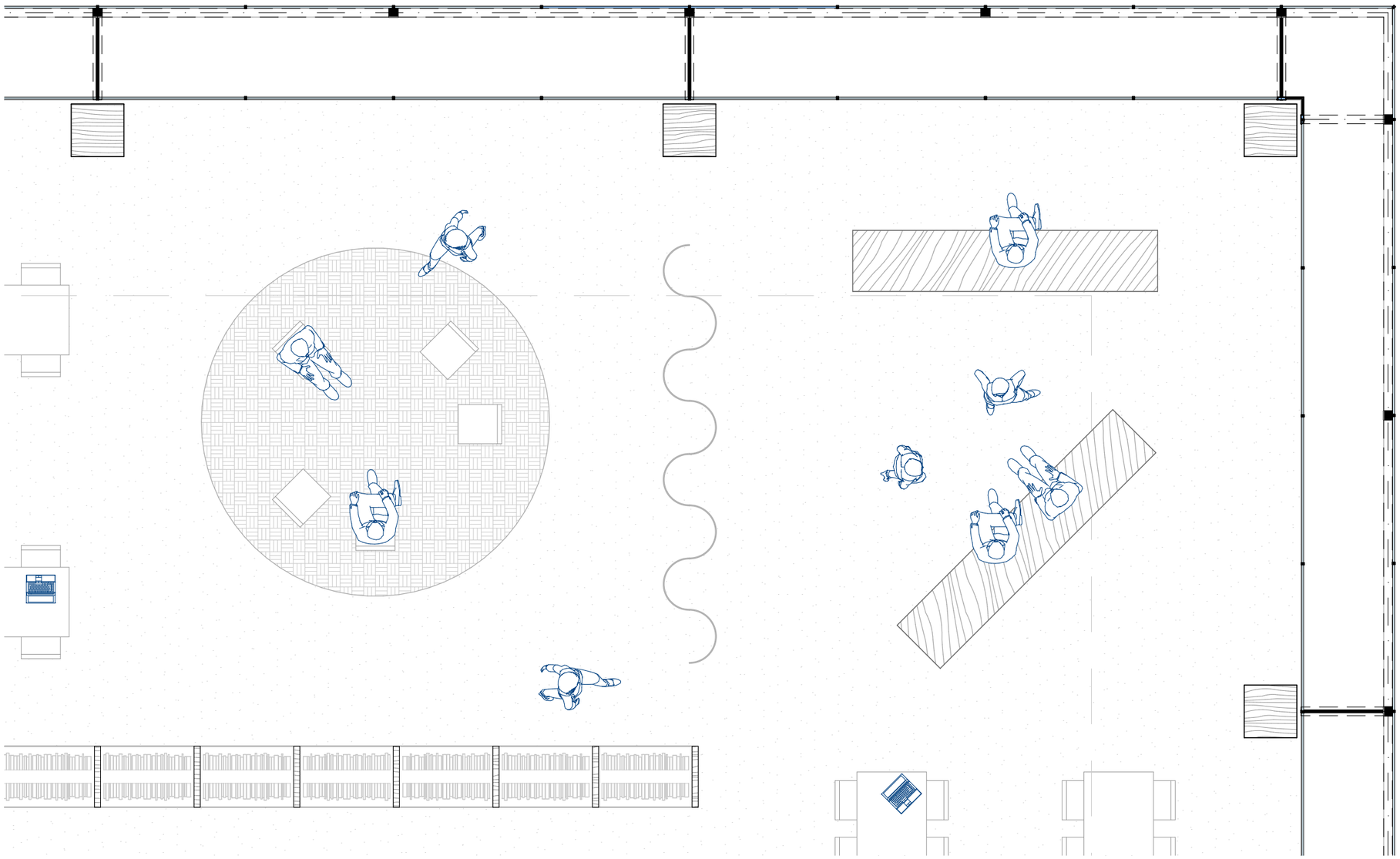
Floor 26 Scale 1:200 N

peripherial promenade

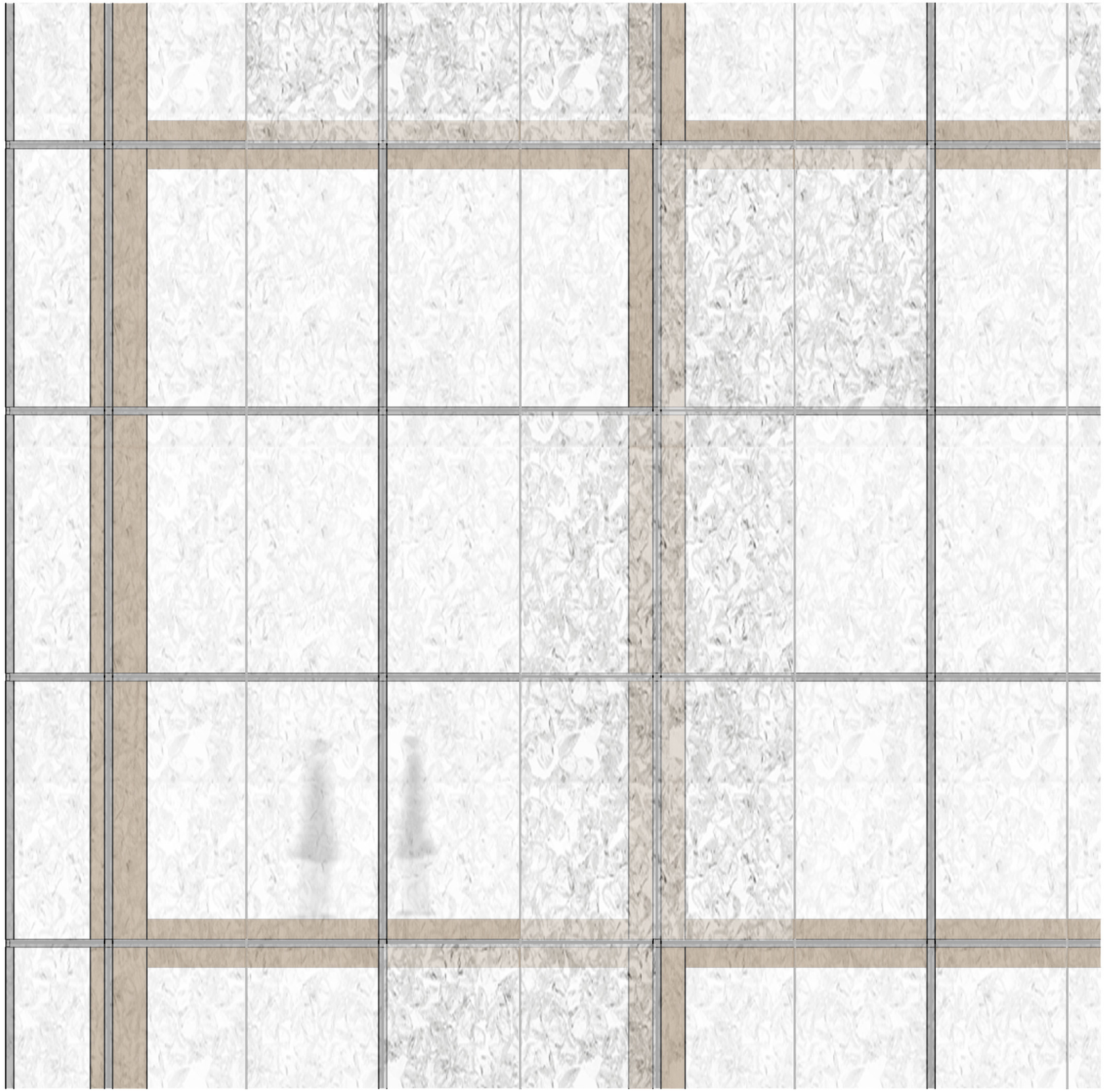




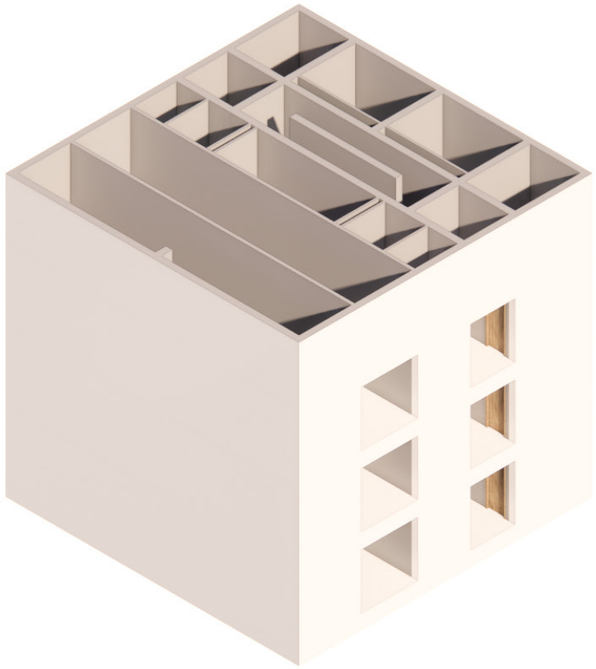
Floor 9 Scale 1:200 N



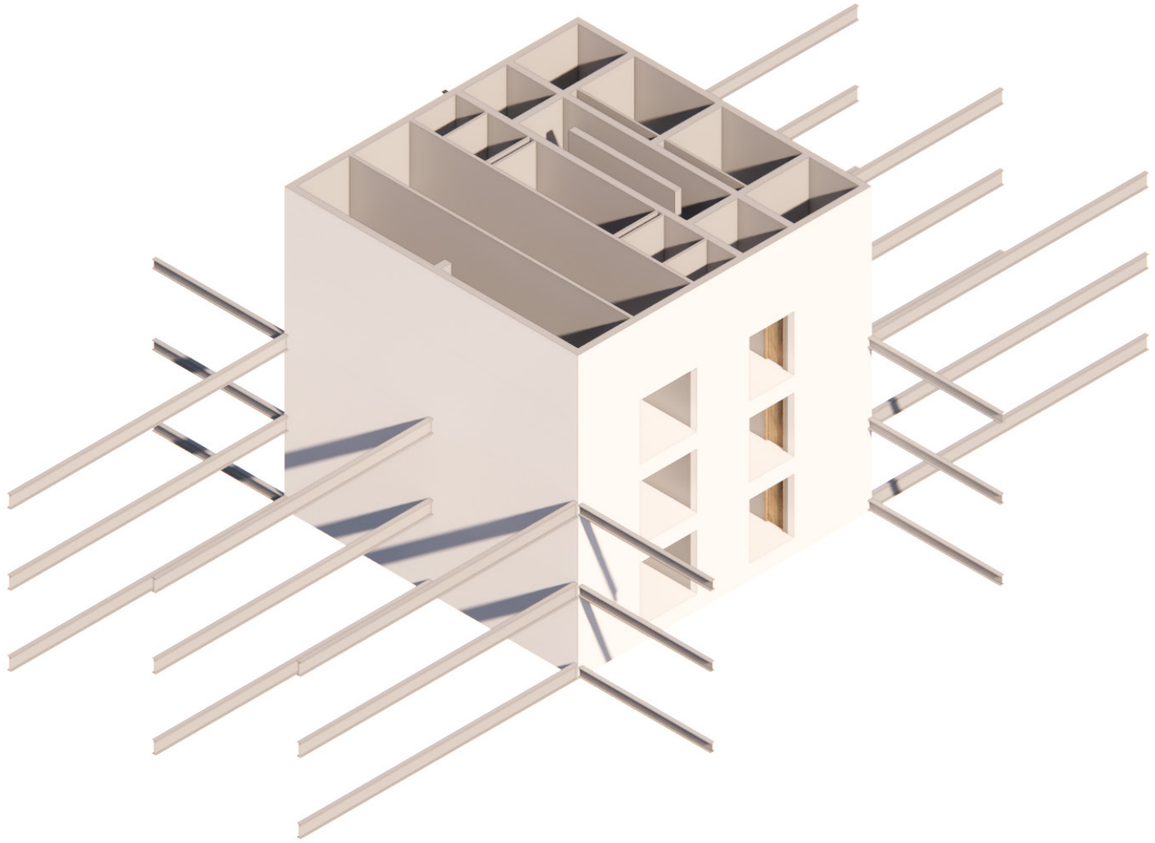
Floor 11 Scale 1:50 N



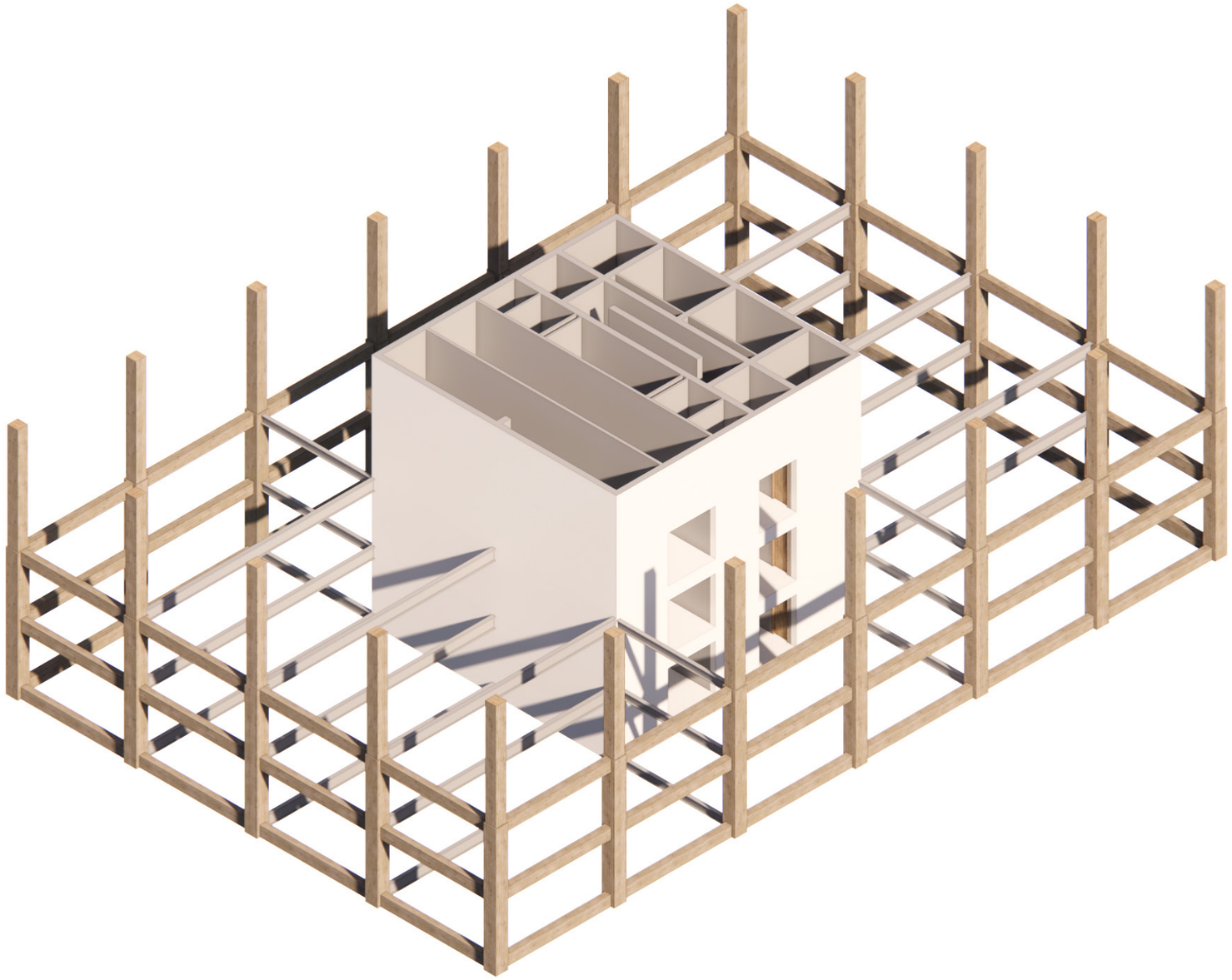
Elevation North Scale 1:50



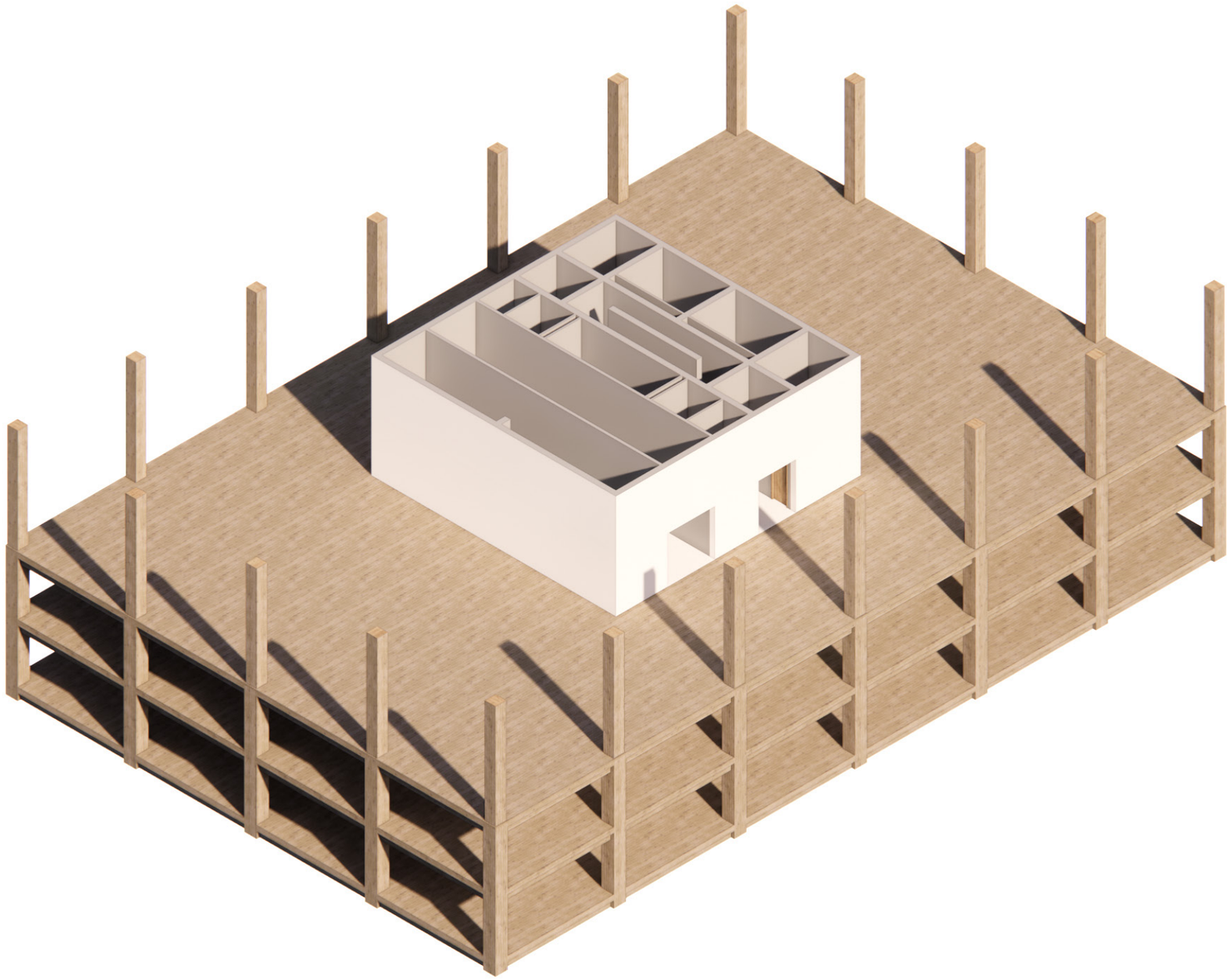
concrete core



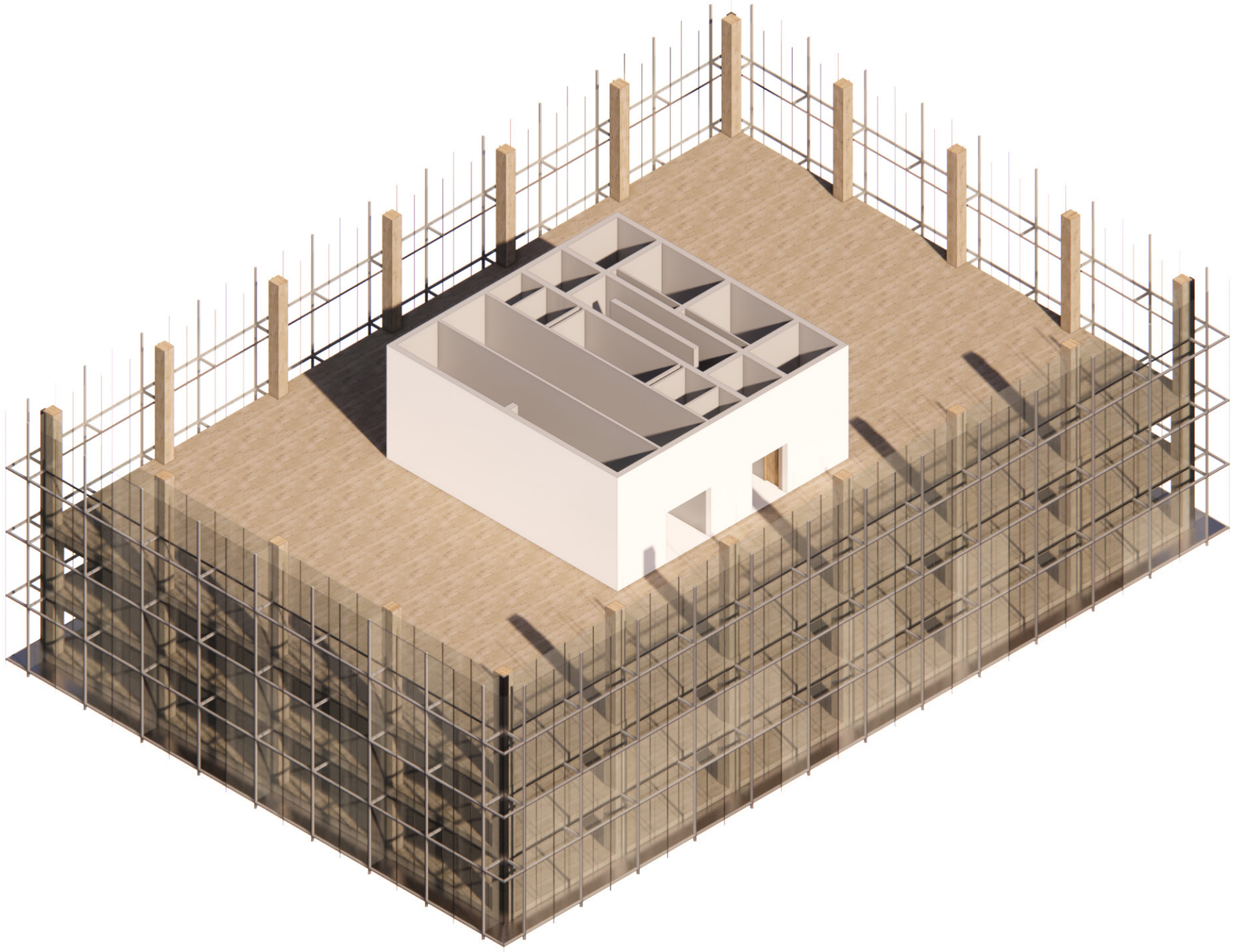
steel beams



timber structure

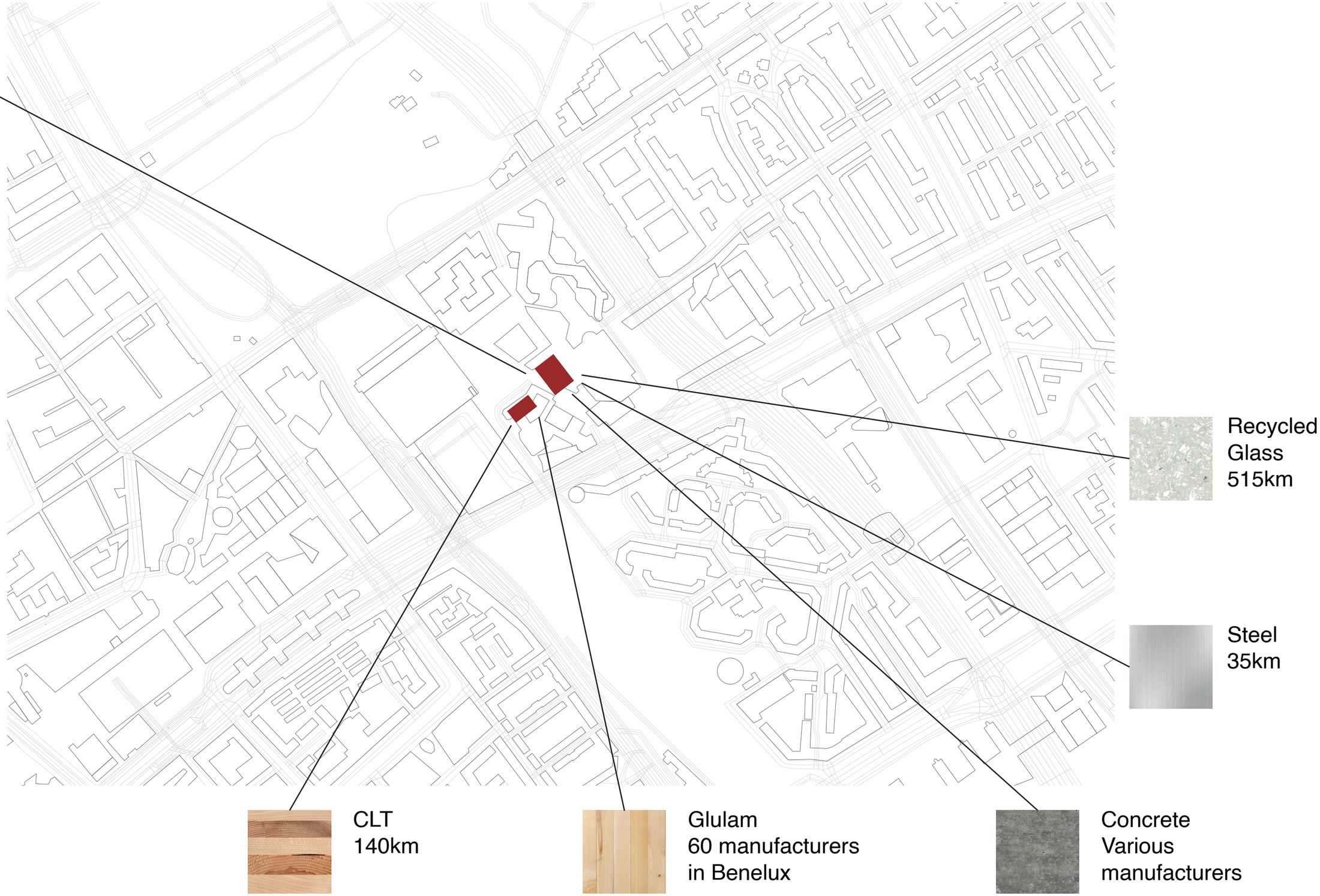


timber floor slab



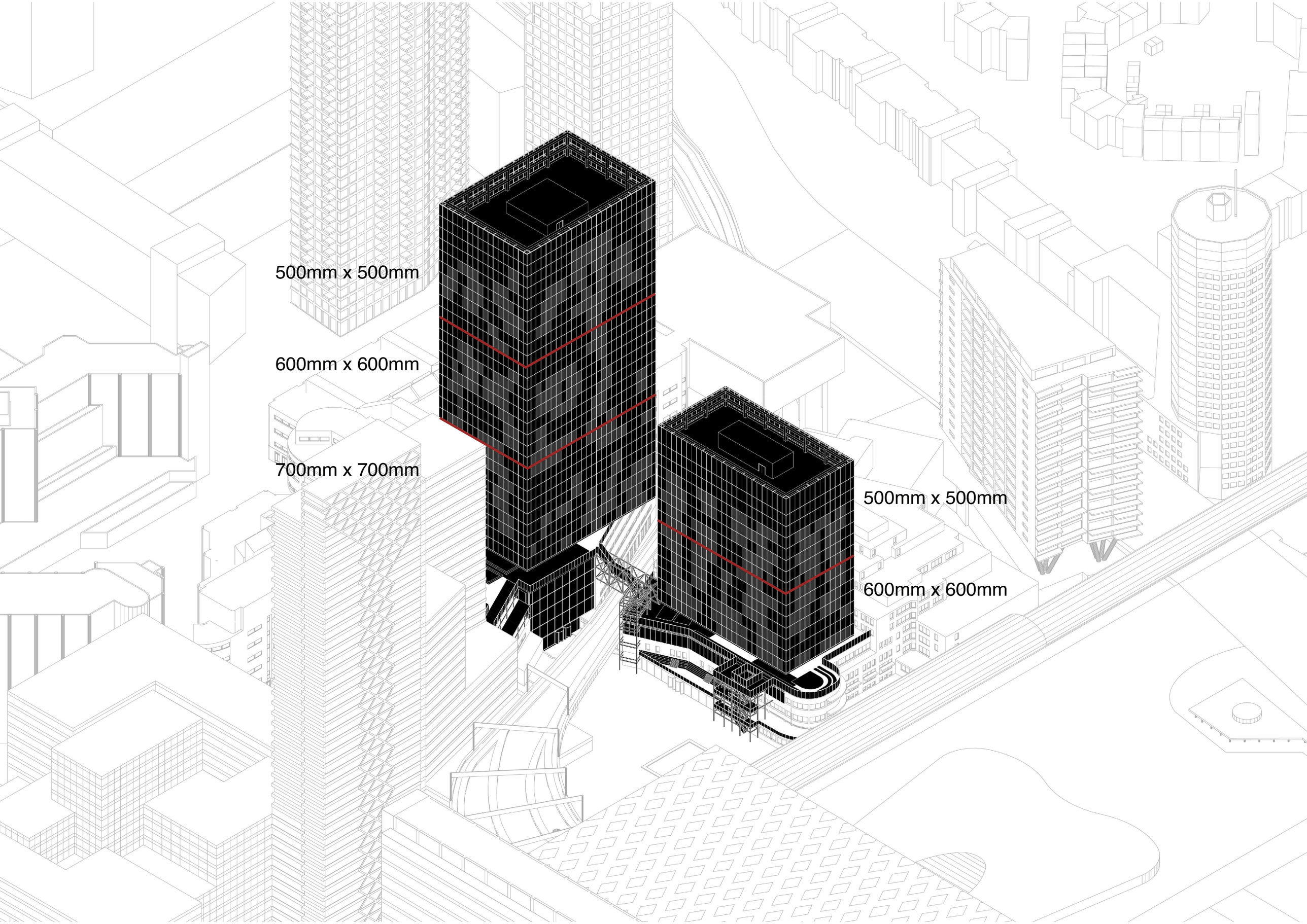
glass facade

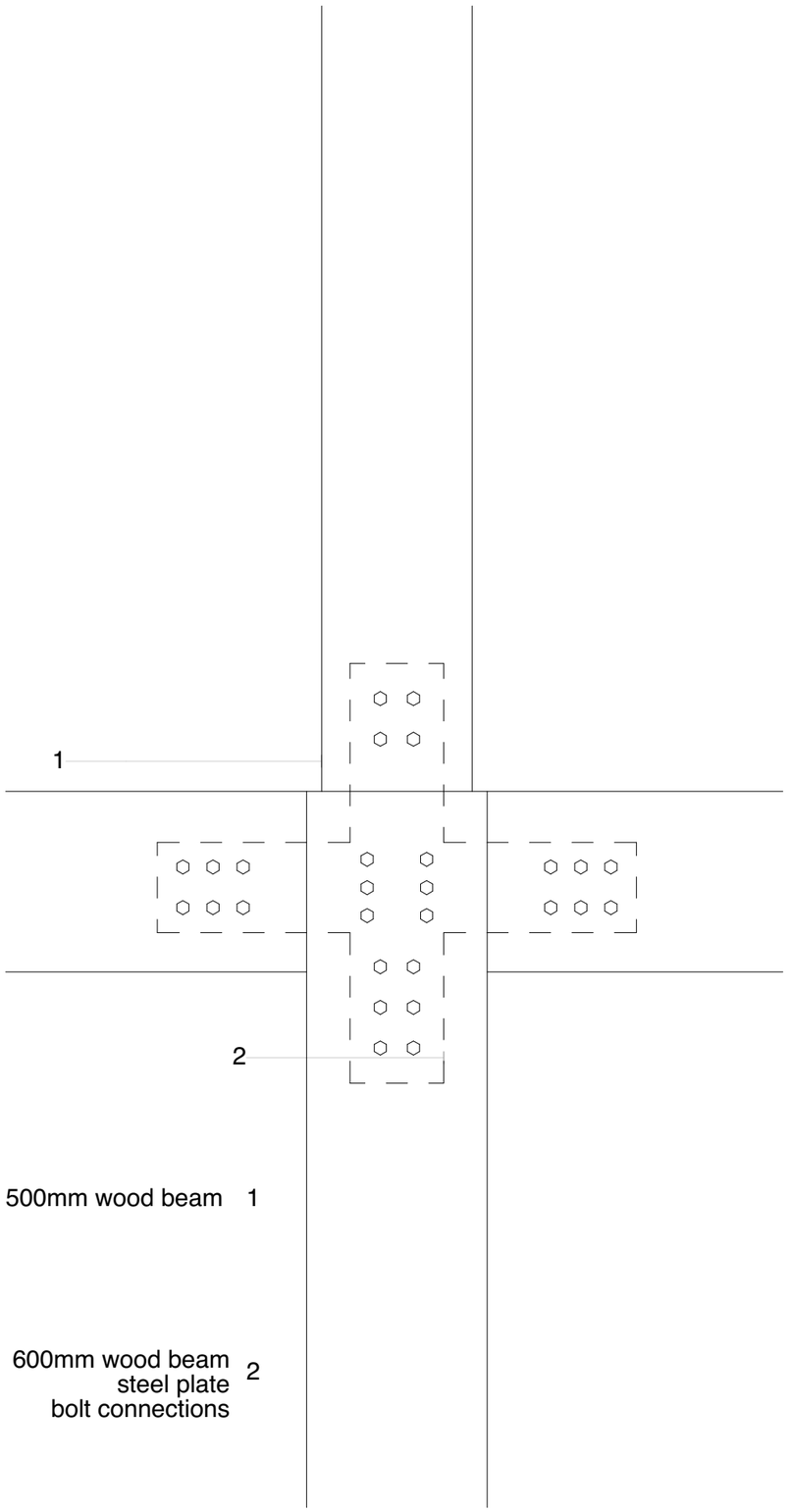
1:2000 materials map

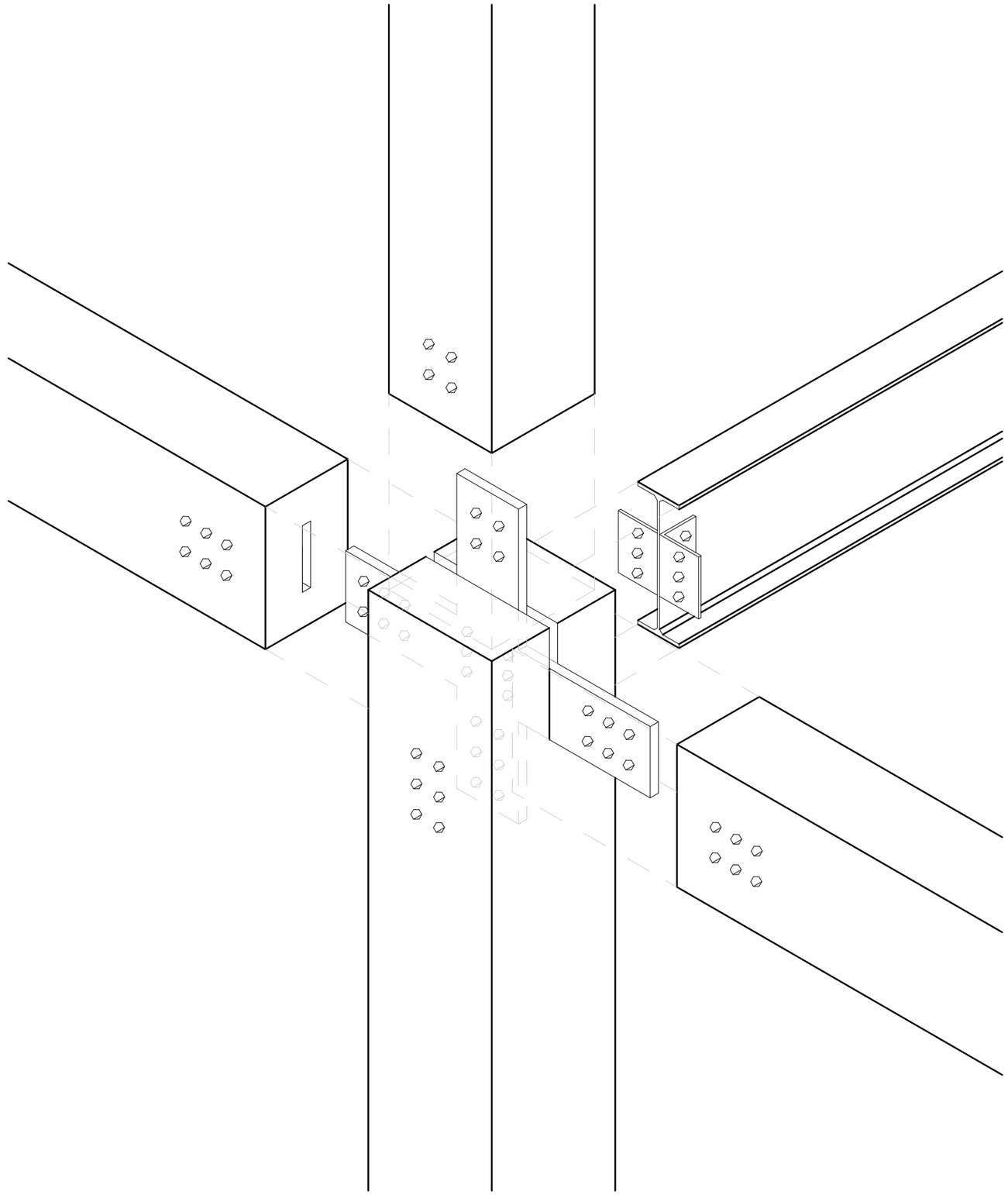


	Tower 1	Tower 2
Concrete	1 321 605 kg CO2	557 925 kg CO2
Steel	14 178 kg CO2	9 412.4 kg CO2
CLT/ Glulam	-2 948 890.4 kg CO2	-1 829 120.8 kg CO2
	-1 613 107.4 kg CO2	-1 261 783.4 kg CO2
	-2 874 890.8 kg CO2	

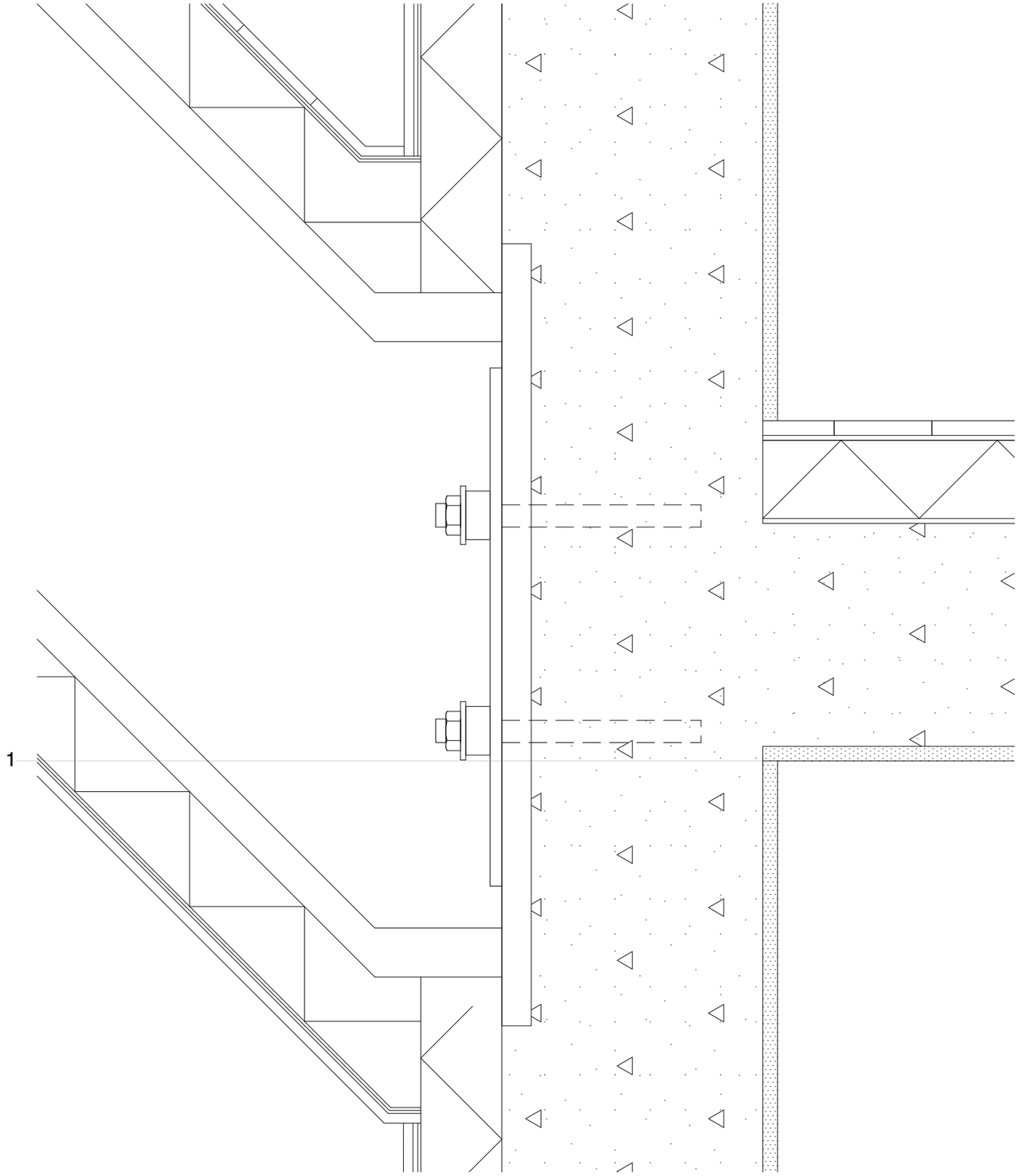
https://www.materialepyramiden.dk/


500mm x 500mm
600mm x 600mm
700mm x 700mm
500mm x 500mm
600mm x 600mm





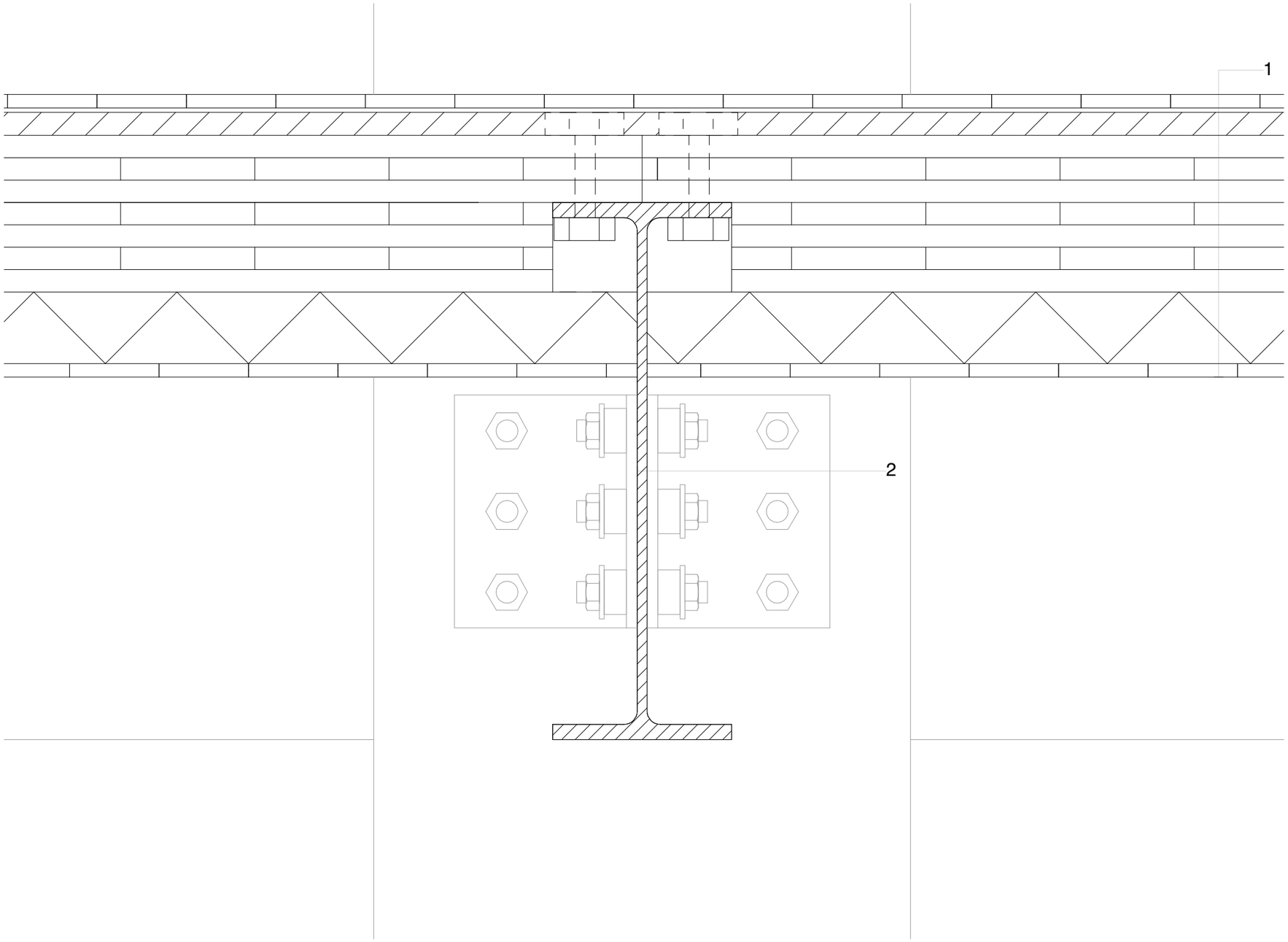
Structure Detail Scale 1:20



1

10mm tiles
mortar
waterproof membrane
83mm mineral wool insulation
700mm steel beam
24mm bolt connections
welded steel plate
267mm concrete

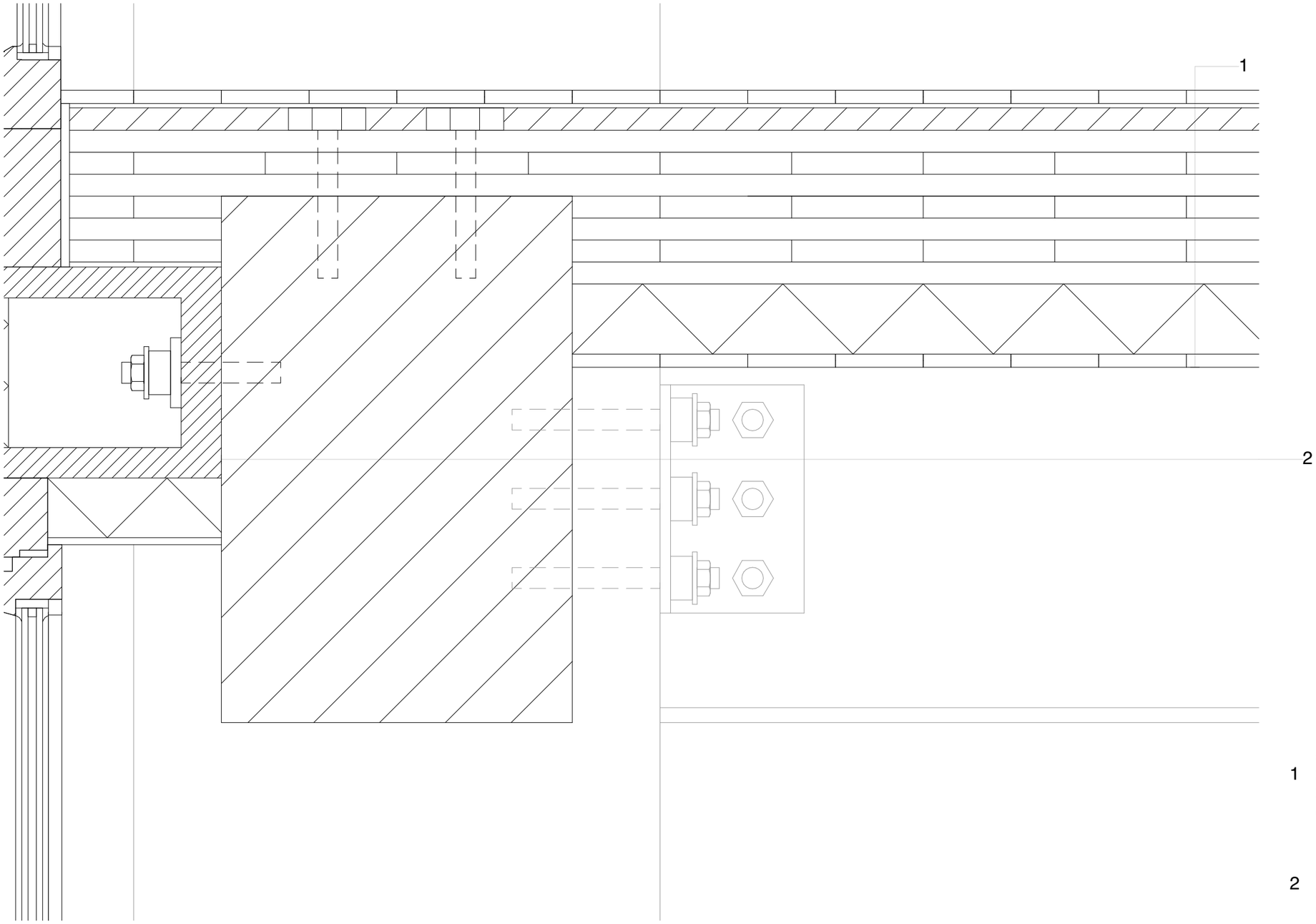
Structure Detail Scale 1:5



1
15mm wood floor
5mm polyester fiber mat
25mm gypsum fiberboard
225mm CLT panel 7 layers
80mm mineral wool insulation
15mm suspended wood panels

2
600mm steel beam
24mm bolt connections

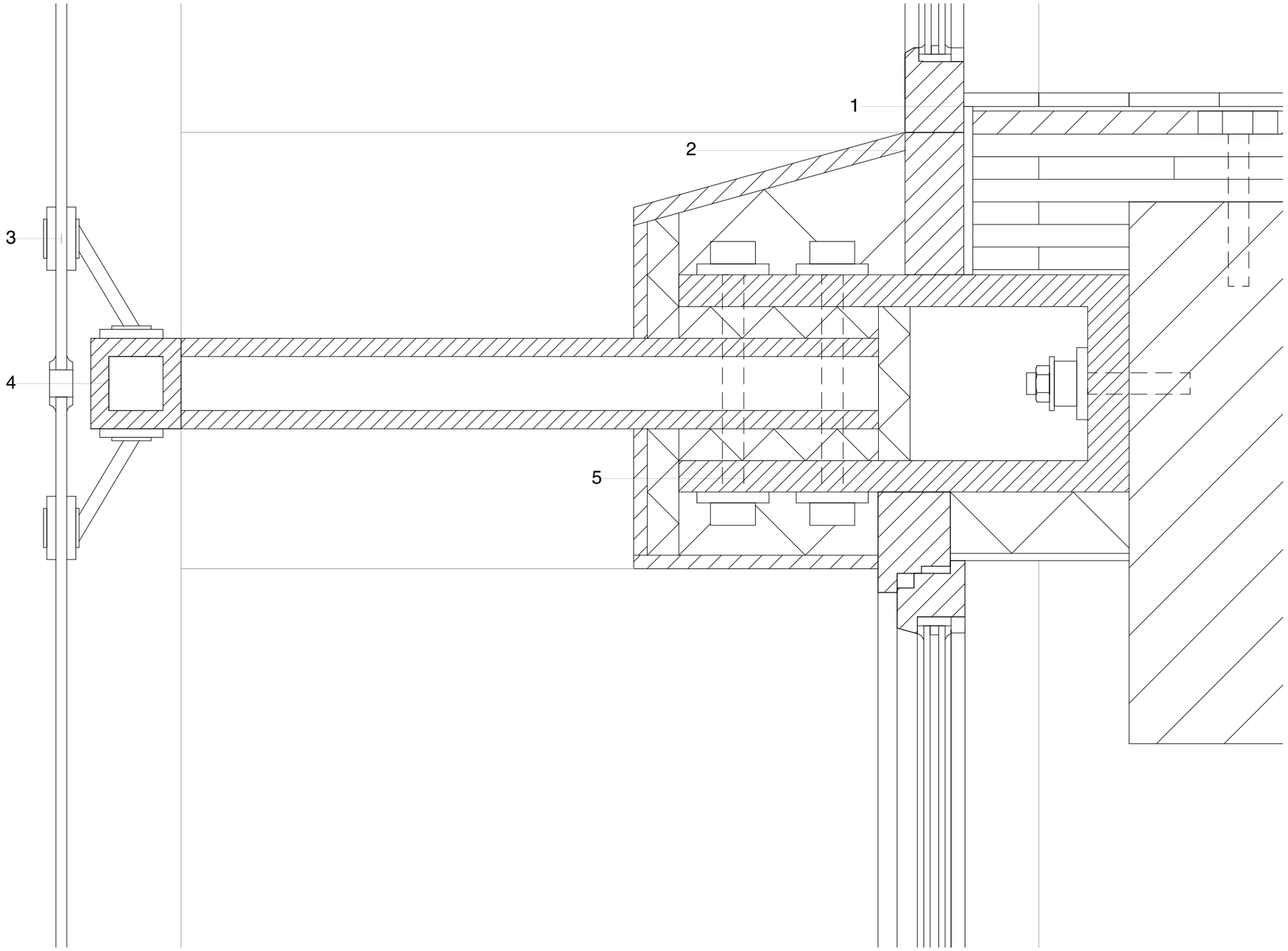
Floor Detail Scale 1:5



1
15mm wood floor
5mm polyester fiber mat
25mm gypsum fiberboard
225mm CLT panel 7 layers
80mm mineral wool insulation
15mm suspended wood panels

2
600mm steel beam
24mm bolt connections
600mm x 400mm wood beam

Floor Detail Scale 1:5



glass double glazing
7mm glass 1
8mm cavity
65mm wood frame

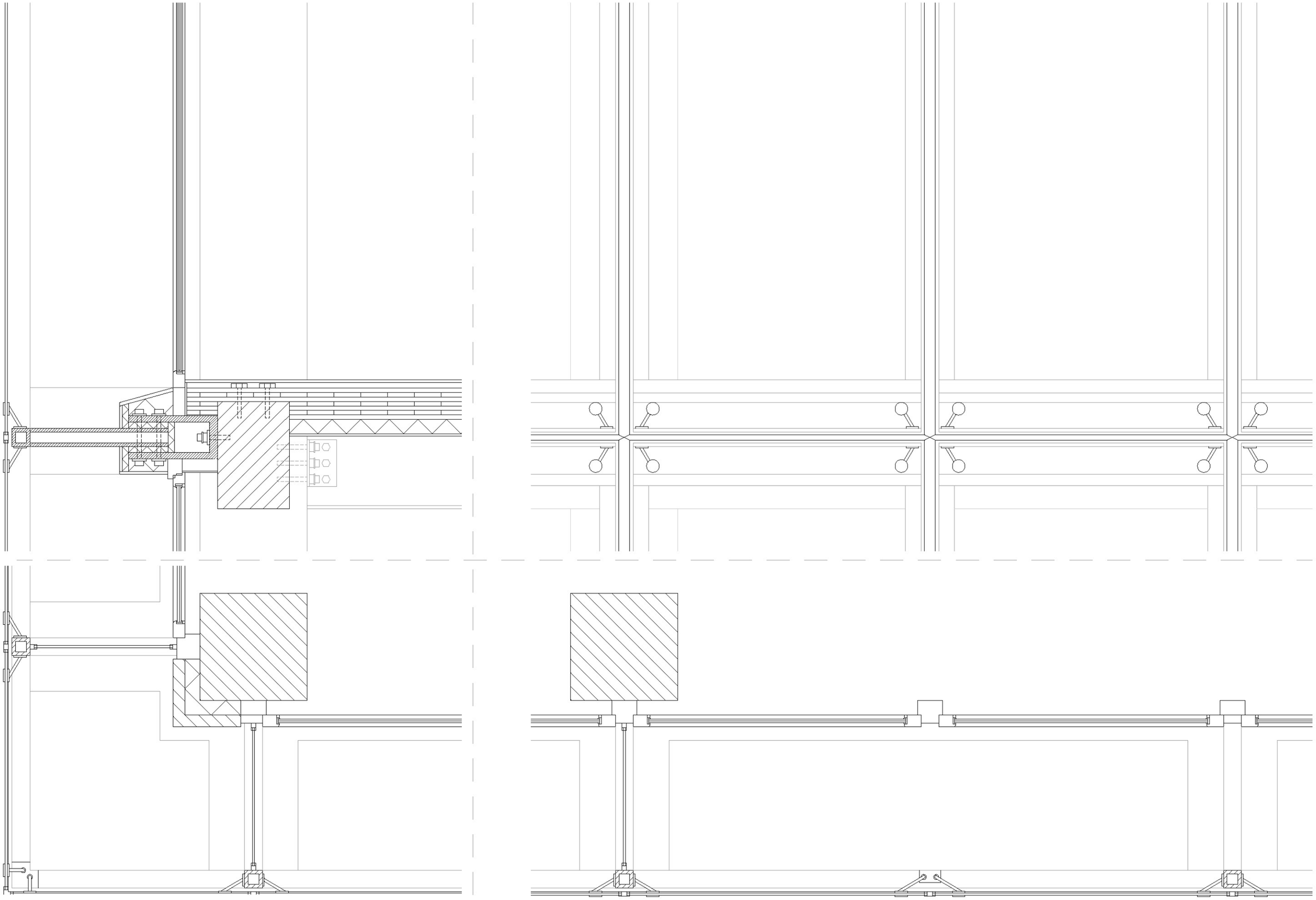
15mm coated
wood sill 2
waterproof membrane

bolt fixings 3

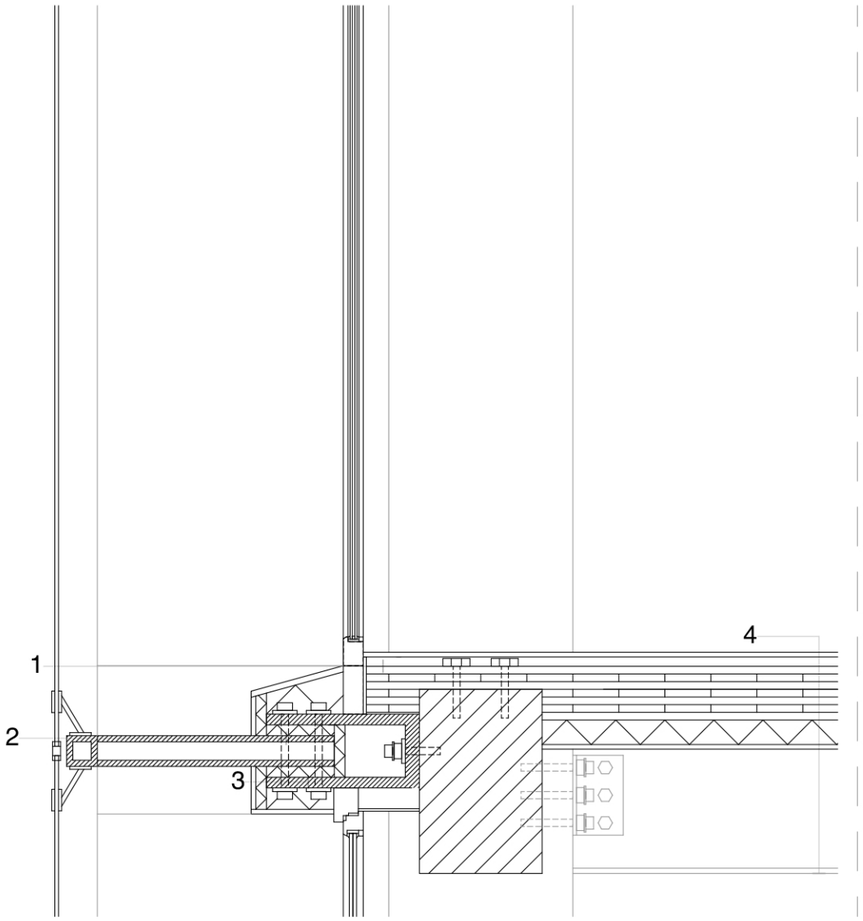
12mm recycled glass in
aluminium frame 4
100mm hollow
steel beam

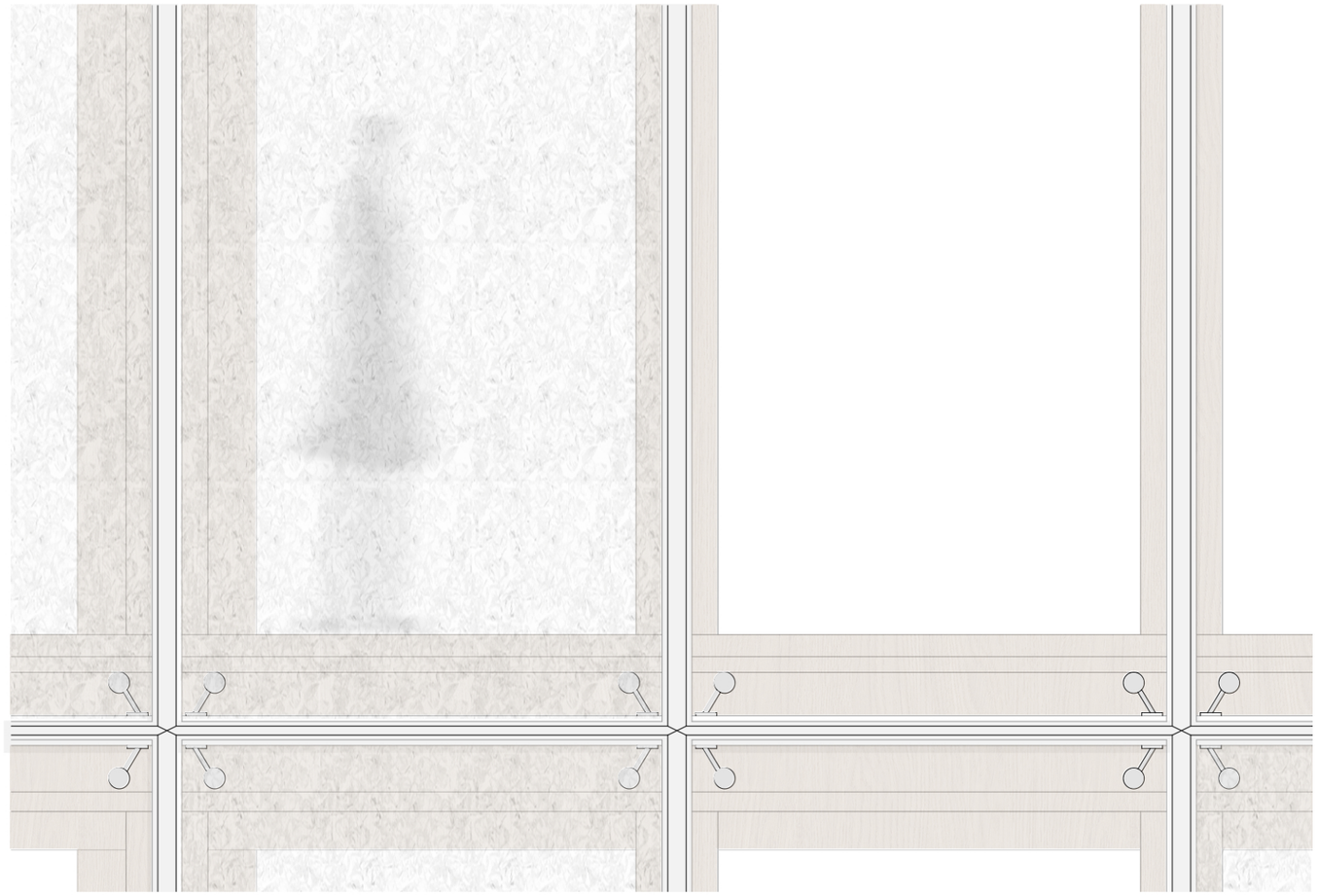
15mm coated wood
waterproof membrane
35mm mineral 5
wool insulation
35mm steel hinge
24mm bolts

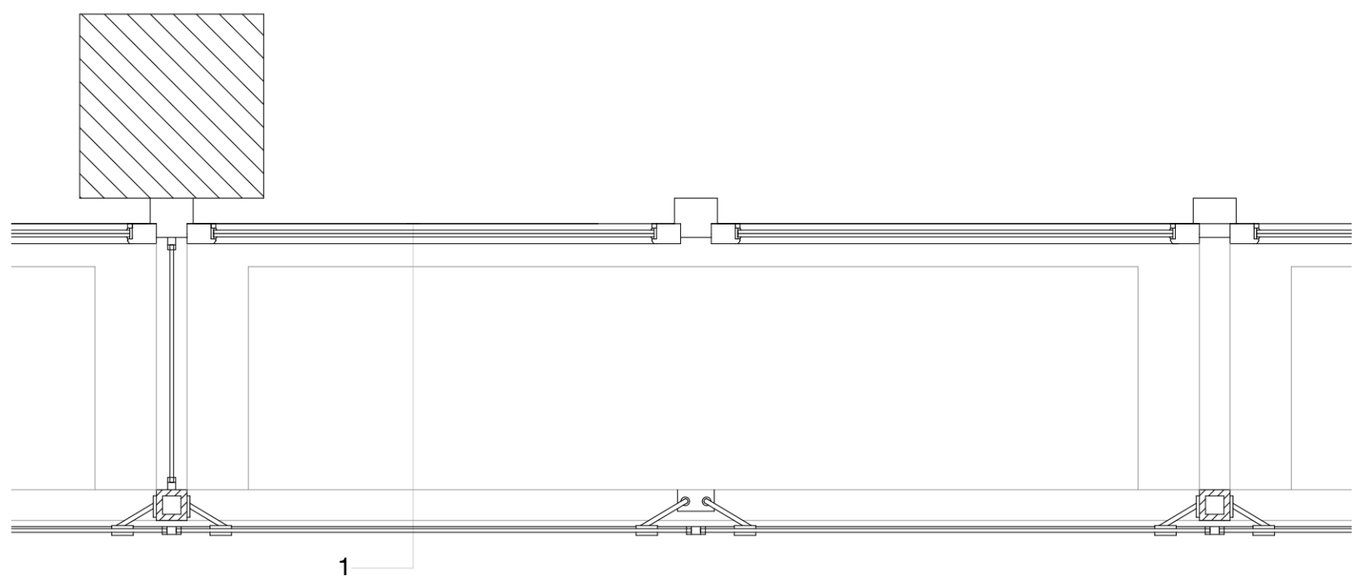
Facade Detail Scale 1:5



Facade Details Scale 1:20







1

12mm recycled glass in
aluminium frame
glass double glazing
7mm glass
8mm cavity
65mm wood frame

2

bolt fixings
100mm hollow steel beam
15mm coated
wood sill
waterproof membrane

3

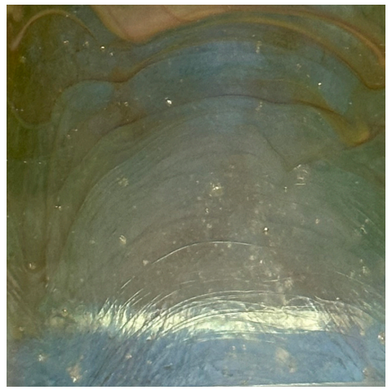
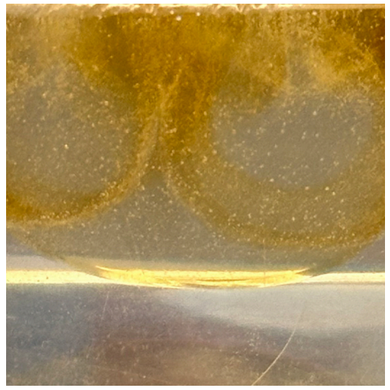
15mm coated wood
waterproof membrane
35mm mineral
wool insulation
35mm steel hinge
24mm bolts

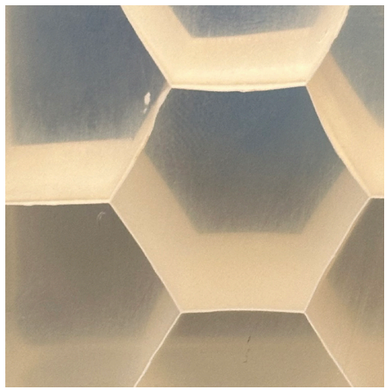
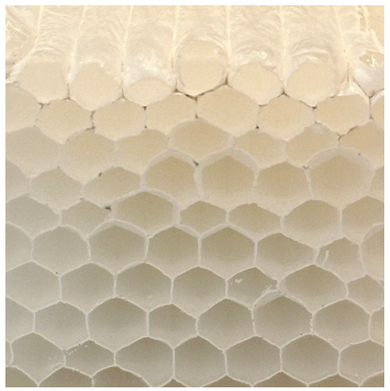
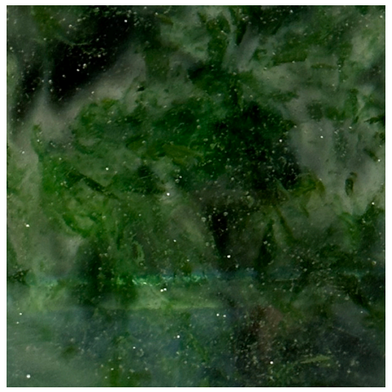
4

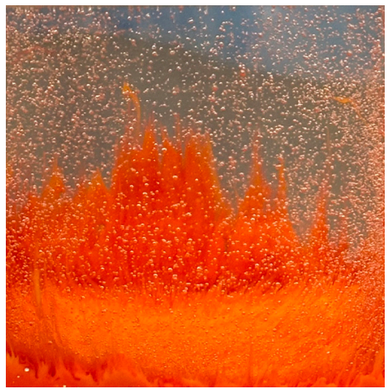
15mm wood floor
5mm polyester fiber mat
25mm gypsum fiberboard
225mm CLT panel 7 layers
80mm mineral wool insulation
15mm suspended wood panels
600mm steel beam

Facade Details Scale 1:20

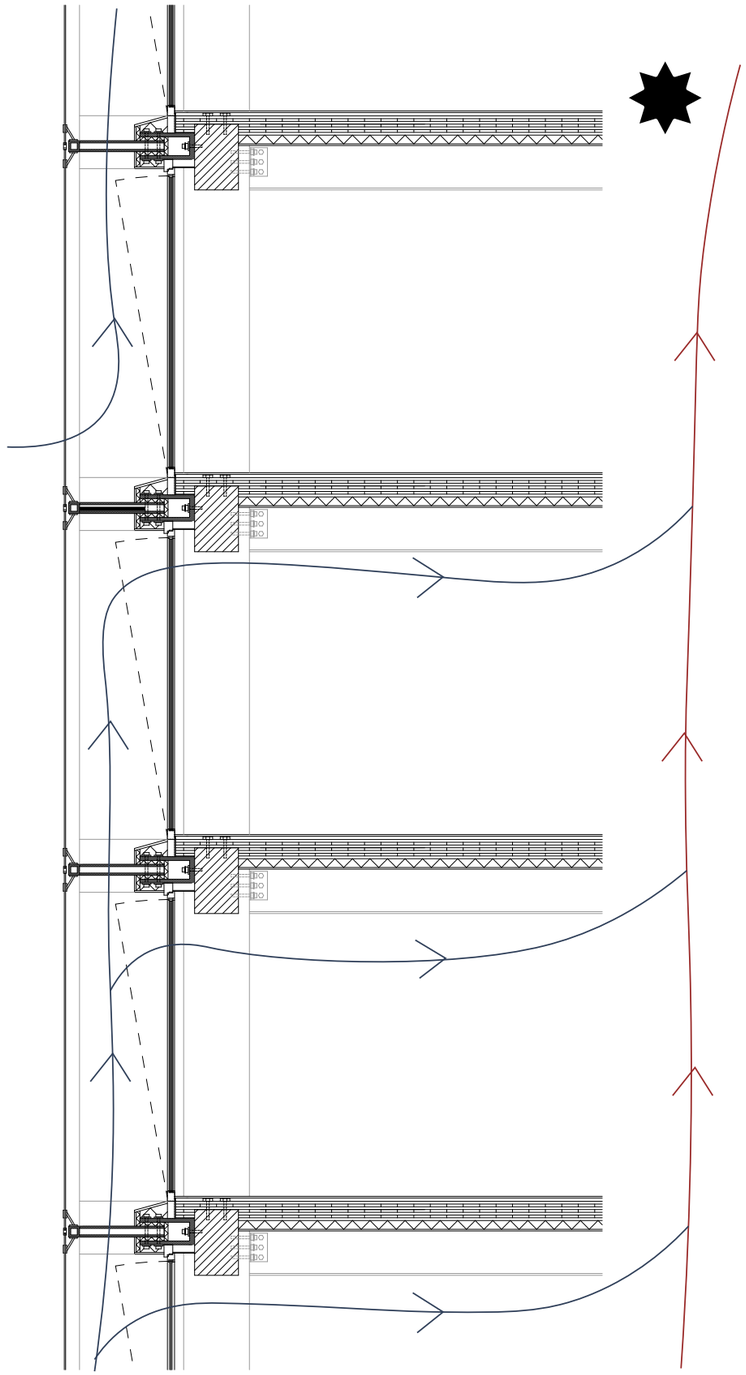


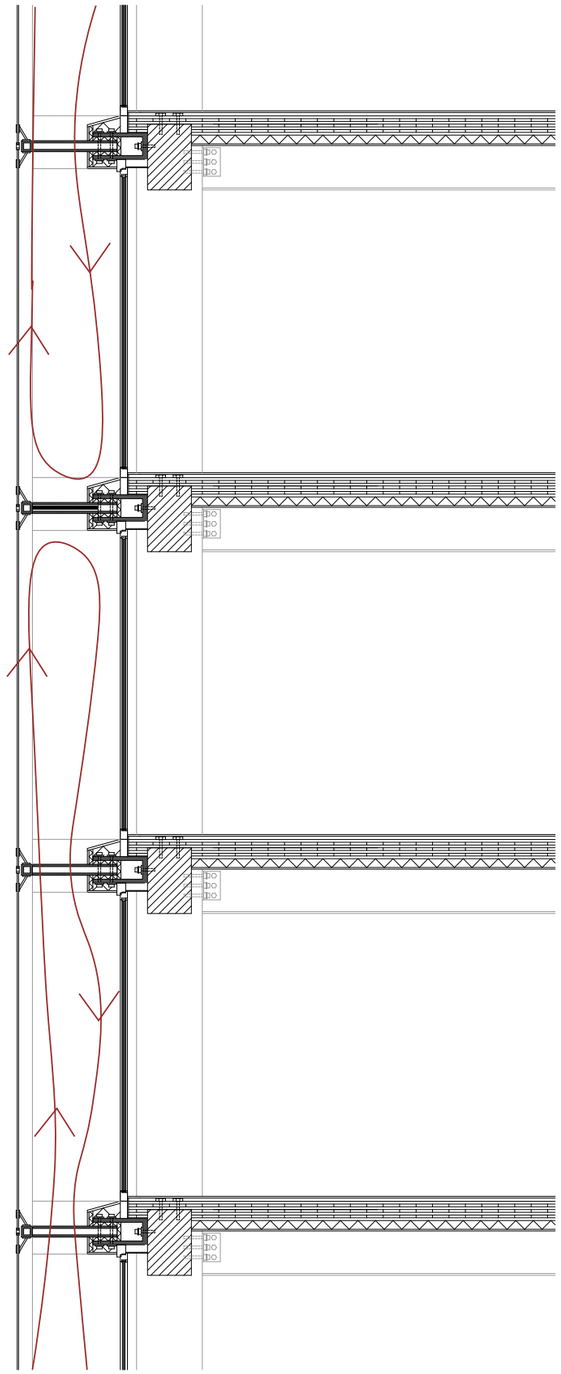



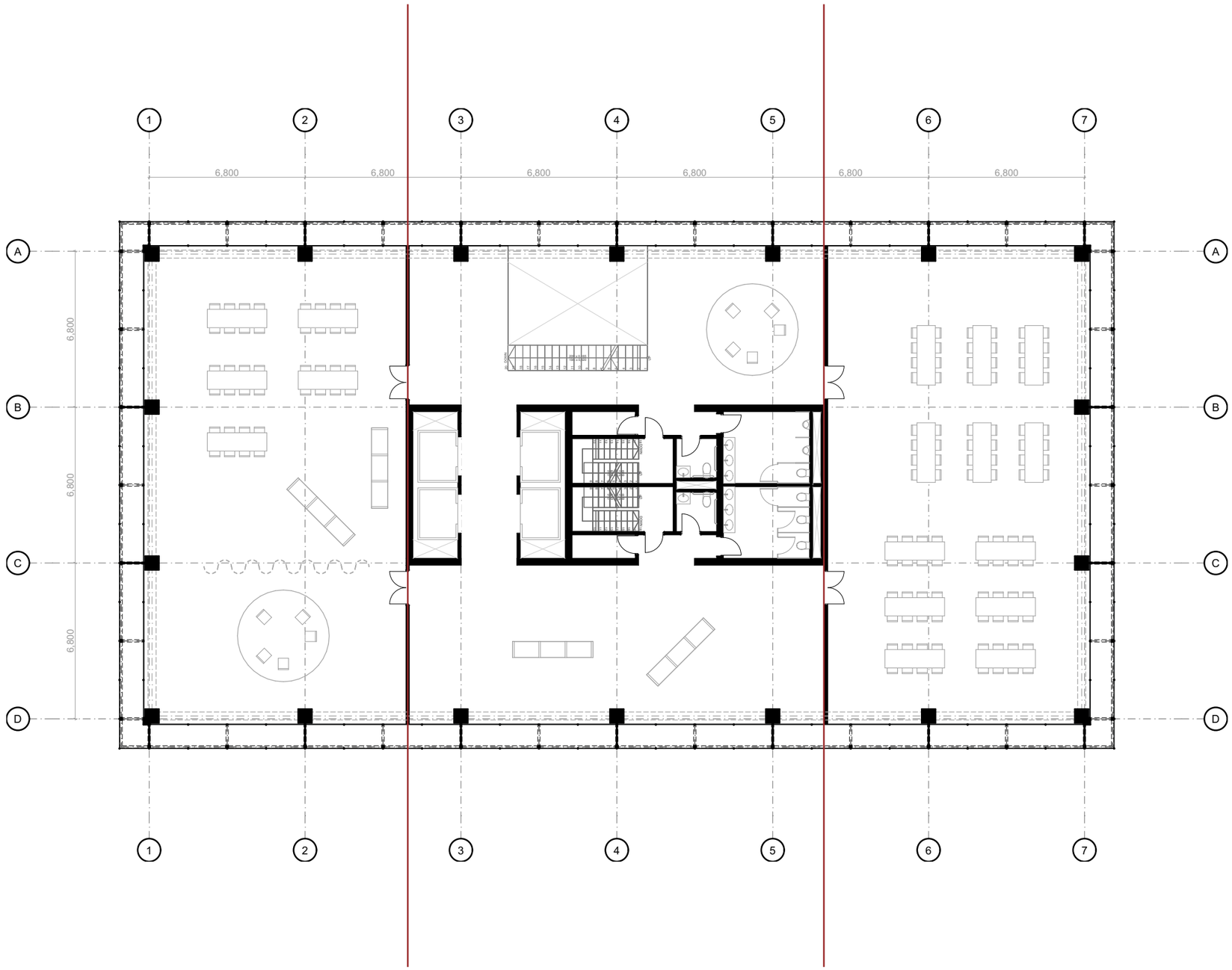


Research: Ir. Telesilla Bristogianni, Dr. ir. Faidra Oikonomopoulou, ReStruct Group

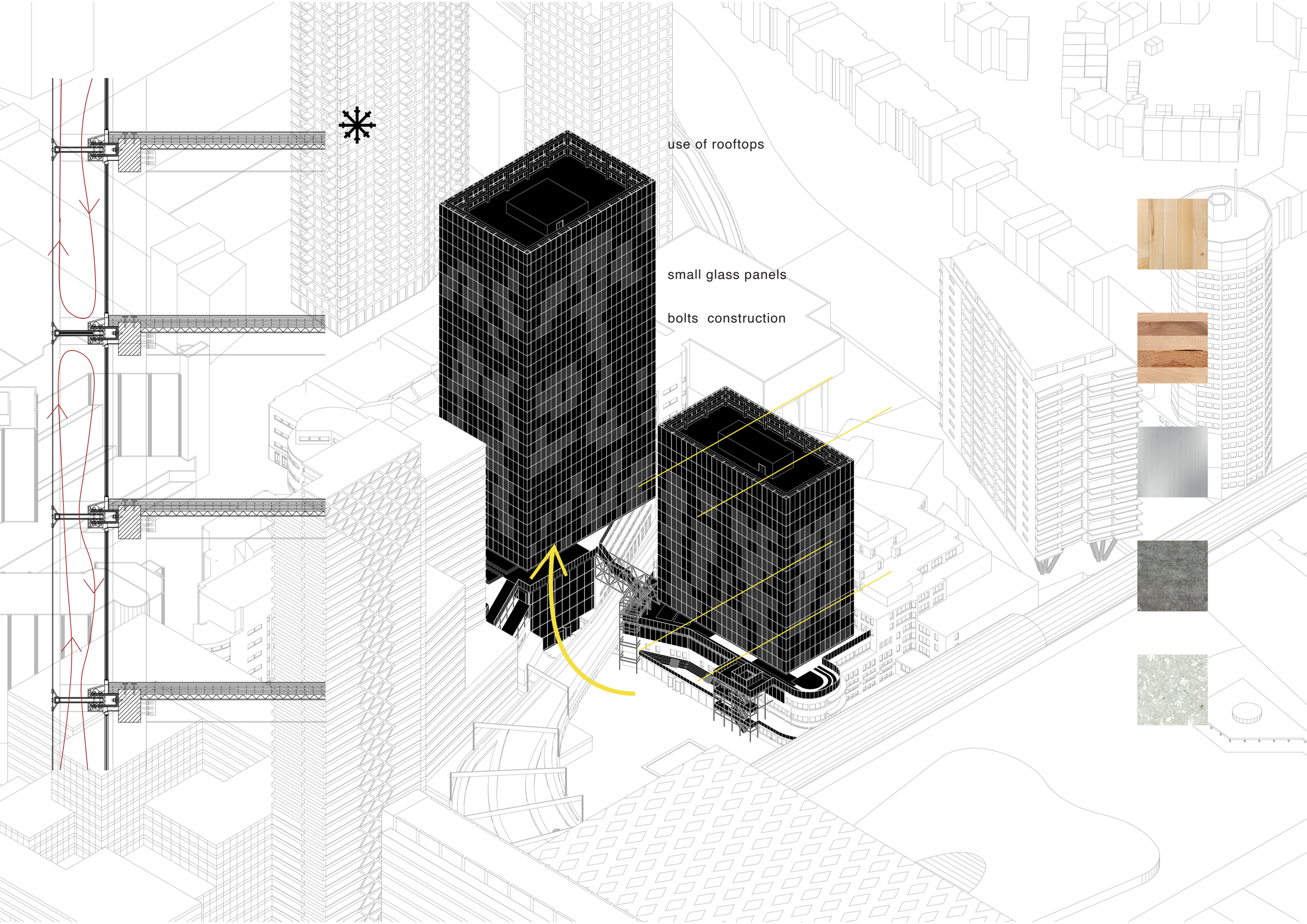


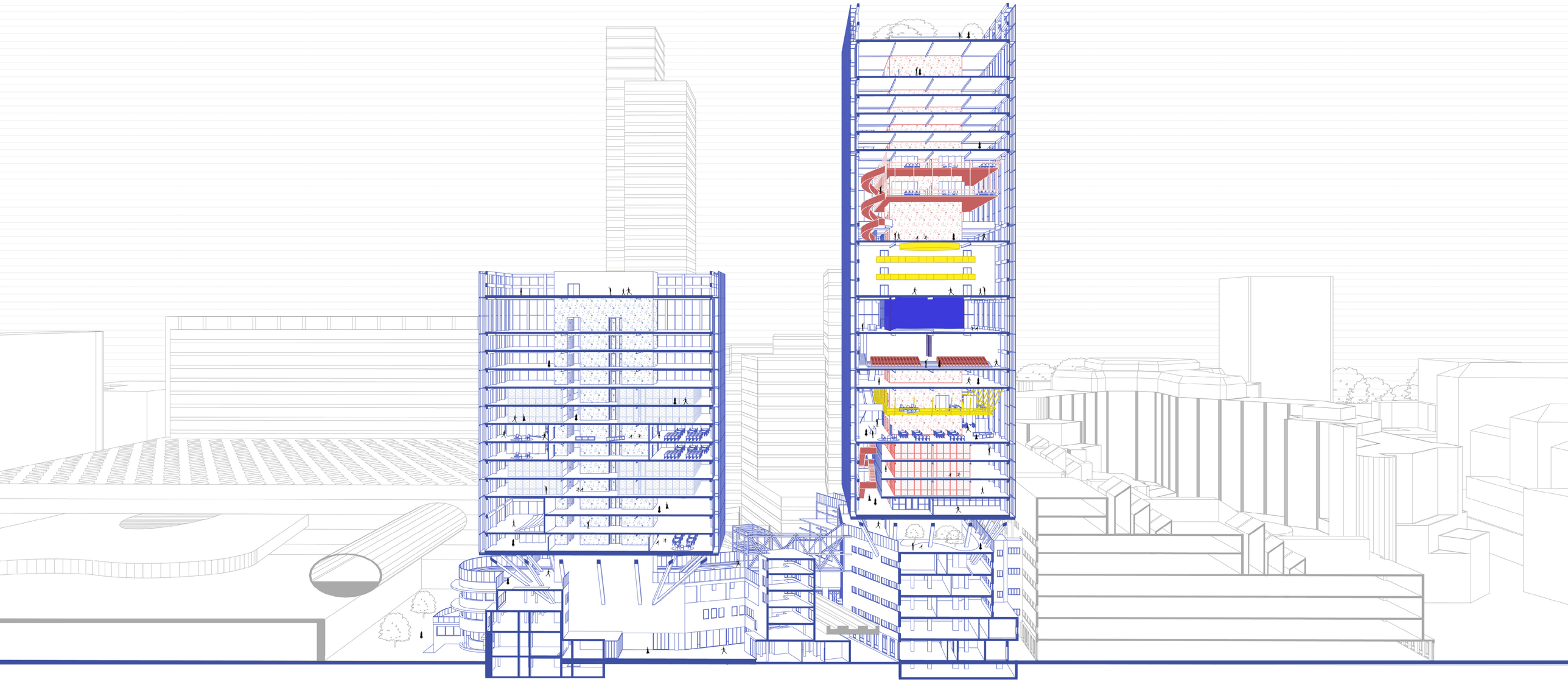


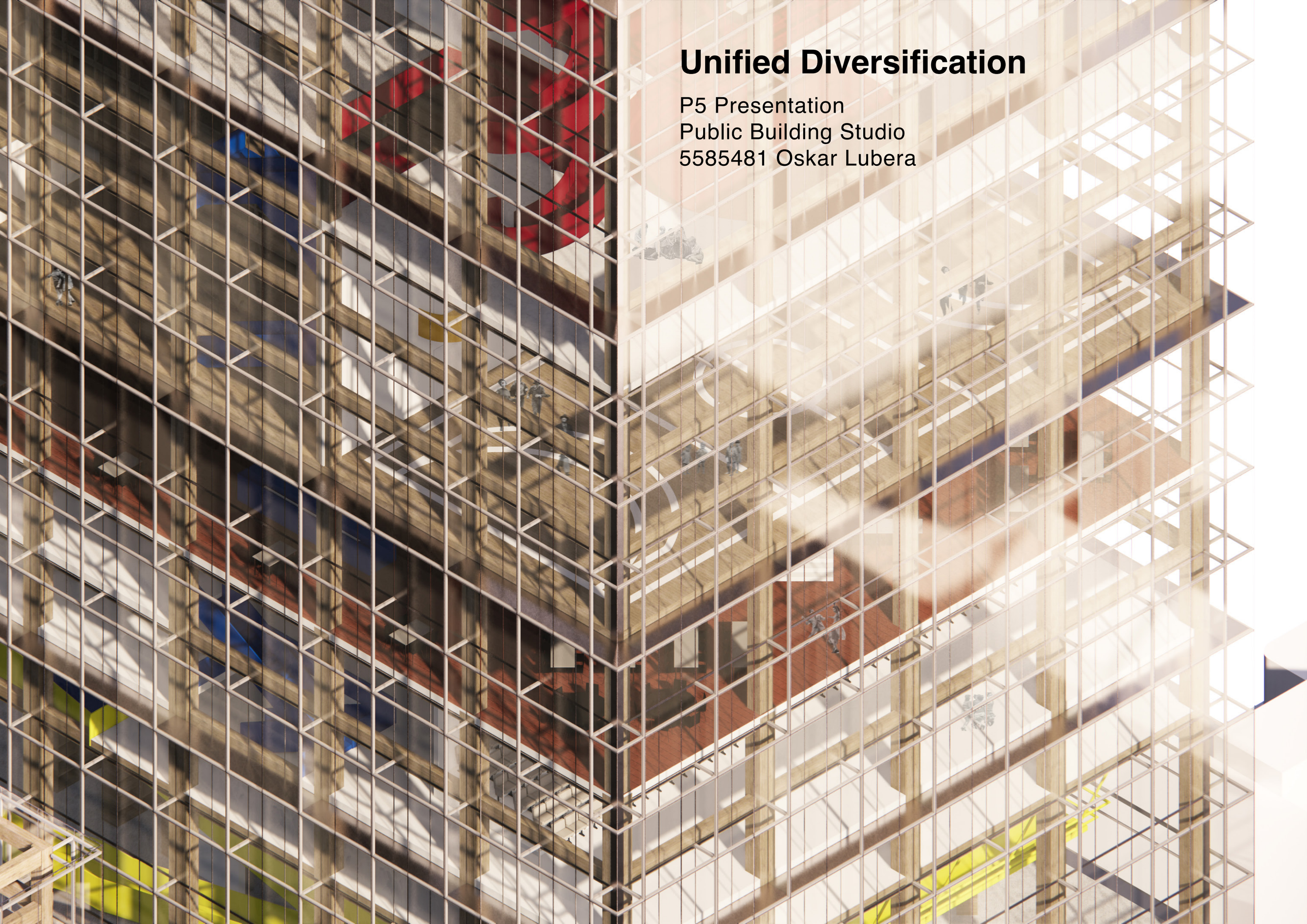
Facade Principals Scale 1:50 cold air warm air



Floor 11 Scale 1:200 N


use of rooftops
small glass panels
bolts construction





Unified Diversification

P5 Presentation
Public Building Studio
5585481 Oskar Lubera