The City Cultural Hub

A Campus for the Future



AR3AP100 Public Building Graduation Studio
The Vertical Campus - ‘a public hub of the future in the hague’

P4 Graduation Report | 27/05/2024
By Tijn Jansen | 4713702

PD - Dr. Ir. S. Corbo | TBD - Ir. F. Eckardt | TD - Ir. S. Lee | BE Dr. M. Dabrowski

Information from Author

This report contains my graduation project within the graduation studio of Public Building; The Vertical Campus - ‘a public hub of the future in the hague’. It documents the research context, the design process of the City Cultural Hub and showcases the final design as submission for P4.

- Tijn Jansen, 4713702

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A. Graduation Plan and Project Abstract

Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	Tijn Jansen
Student number	4713702

Studio		
Name / Theme	Public Building Graduation Studio – Vertical Campus	
Main mentor	Dr. Ir. S. Corbo	Public Building
Second mentor	Ir. H.F. Eckart	Building Technology
Third mentor	Ir. S. Lee	Theory and Delineation
Argumentation of choice of the studio	The reason for choosing the studio public building on the first hand is the theme that they presented; vertical campus. The subject of educational buildings is one of my interests, with also writing my history thesis about the topic. On the other hand, being able to design a public building well requires a diverse set of skills and an understanding of people, spaces and buildings. They are making me an overall well-rounded designer in the process.	

Graduation project	
Title of the graduation project	**Cultural City Hub - Reconnecting the social and the technical**
Goal	
Location:	The Hague Central Station District
The posed problem,	*The public environment within the Hague Central Station district has been neglected throughout the years, creating a separation between the social and technical environments within the district. This separation results in poor quality of public space, and bad accessibility through the area. As a result, over the last decennia, the buildings have created a network of dark, narrow and socially unsafe spaces.*
research questions and	**Main research question:** '*How can the implementation of culture and education contribute to the reconnecting of the social environment with the technical environment within the Hague Central Station district?*

	Sub questions: *What does culture contribute to the social environment?* *What does education contribute to the technical environment?* *What is the rhythm that happens on a day-to-day basis in the Hague Central Station district?* *What is the current social interaction with the buildings in question?*
design assignment in which these result.	The main objective of the project can be divided into an urban component and a building component. The urban component stems from the posed problem of poor quality of public space and bad accessibility and serves as the foundation for the building component. To design a new vertical campus where education and cultures come together, the urban and social context in which this will be placed has to function properly. Redeveloping the existing urban fabric into a high-quality, safe environment will be mandatory to create a vibrant new public hub, the City Cultural Hub. The building component will be the focal point of the project. The vertical campus will be a place where cultures and higher education merge with one another, creating a new interactive learning environment. The building will contain hybrid work- and study spaces, a diverse program for cultural-, social- and educational facilities, and high-quality public spaces for the city of the Hague. By doing so, it reconnects the social environment to the technical environment.

Process

Method description

As a point of departure for the research about the Hague Central Station district, a first observation allowed me to experience the area on a first-hand basis. This first impression helped me raise questions about the district and quantify the design problems that could be a starting point for further research.

The next step is to explain the terms *social environment* and *technical environment*, doing so by the implementation of a literature study. When I talk about the social environment, I talk about the setting of how people live and interact with one another. The technical environment resonates with the physical objects and the urban systems that allow the social environment to exist. With the understanding of these terms, further observation is key to analysing the social- and technical surroundings of the district.

Moreover, it will result in an understanding of the social and technical environments within the Hague Central Station district, which will be compared to three case studies that connect the social environment with its technical environment, with its related question; *How can the social and technical environments of the Hague Central Station district be connected?* The case studies are; Campus TU Eindhoven by Samuel van Embden, Cultural Center Eemhuis by Neutelings Riedijk, and the Rotterdam Rooftop Walk by MVRDV. Furthermore, to understand and analyse the case studies, a literature study will be used to dissect the projects.

Literature and general practical references

Books:

Dick Brongers, Den Haag, 1945-1970 : mooie stad achter de duinen (Zwolle : WBOOKS, 2021).

Dick Valentijn, De wederopbouw : Haagse gids voor architectuur en stedenbouw in de periode 1945-1965 (Dienst Stedelijke Ontwikkeling, 2002).

Leo Grebler, Urban renewal in European countries: its emergence and potentials (Philadelphia, University of Pennsylvania Press, 1964), 58-60.

Tim Verlaan and Stefan Couperus, “From the ‘scientised’ to the ‘sociocratic’ city: The politics of knowledge and norm change in post-war urban planning in the Netherlands” in Politics of urban Knowledge, ed. Bert de Munck and Jens Lachmund (New York: Routledge, 2023): 81-108.

Anthony Di Mari and Nora Yoo, Operative Design; A Catalog of Spatial Verbs (Amsterdam, BIS Publishers, 2012).

Francios Blanciak, Sitesless - 1001 Building forms (Massachusetts London: MIT Press, 2008)

Essays:

Richard Sennett, “The Public Realm”, 2008.

Journal Articles:

Florian Langstraat and Rianne van Melik, “Challenging the ‘End of Public Space’: A Comparative Analysis of Publicness in British and Dutch Urban Spaces”, Journal of Urban Design, volume 18, issue 3 (2013).

Claudio de Magalhaes, “Public Space and the Contracting-out of Publicness: A Framework for Analysis”, Journal of Urban Spaces, volume 15, issue 4 (2010).

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Projecten - Den Haag. “Ontwikkelingen in omgeving Den Haag Centraal - Projecten - Den Haag,” September 12, 2023. (https://projecten.denhaag.nl/gebied/central-innovation-district/ontwikkelingen-in-omgeving-den-haag-centraal/).

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Public Building graduation studio. “The Vertical Campus: A Public Hub of the Future in the Hague,” September 2023.

“Structuurvisie Den Haag 2020 Gemeente Den Haag,” June 26, 2005. (https://denhaag.raadsinformatie.nl/modules/13/Overige%20bestuurlijke%20stukken/61331).

Buildings:

D.C. Apon, ‘Monkey Rock’, 1985, the Hague, the Netherlands.

S. van Embden, Eindhoven University of Technology Campus, 1956, Eindhoven, the Netherlands.

A.J. Hagoort, P.B.M. van der Meer en A.J. Trot, Royal Library, 1982, the Hague, the Netherlands.

MVRDV, Rotterdam Rooftop Walk, 2022, Rotterdam, the Netherlands.Sjoerd Schamhart, National Archive, 1979, the Hague, the Netherlands.

MVSA, New Babylon, 2003, the Hague, the Netherlands.

Neutelings Riedijk, Cultural Center Eemhuis, 2014, Amersfoort, the Netherlands.

WAA. AvB tower, 2013, the Hague, the Netherlands.

Cultural City Hub - Reconnecting the social environment to the technical environment in the Hague Central Station District

Tijn Jansen (4713702)

18 Jan. 2024

This paper contains research and analysis of the current urban fabric, the future development of The Hague Central Station district, as well as an analysis of three case studies related to the topic of integrating social environments with technical building environments. It will contribute to the design of a new public hub for the city of the Hague, where education and culture lay the foundation for reconnecting the social environment with the technical environment within the district.

During my observations of The Hague Central Station district, two issues came to my attention. In the next two paragraphs, each problem will be explained to substantiate the design problem; *the public environment within the Hague Central Station district has been neglected throughout the years, creating a separation between the social environment and the technical environment within the district.*

Isolated architectural objects

The first problem is that the district has an inventory of buildings that are predominantly built as isolated, stand-alone architectural objects. These projects do not contribute to the urban dynamics of the city, resulting in a separation within the city fabric between the human and the building.

The first example is Bezuidenhoutseweg 67, better known as *'the monkey rock building'* by D.C Apon. A brutalist building completed in 1985 intended as governmental office space for the Ministry of Foreign Affairs. After the ministry moved out in 2017, the building was renovated to temporarily host the House of Representatives, which in itself is being renovated at the Binnenhof of the Hague. Due to its original design of the constructivist facade and its current political function, the building has little interaction with the outside world.

Another two examples are the Royal Library by A.J. Hagoort, P.B.M. van der Meer en A.J. Trot, and the National Archive by Sjoerd Schamhart. Both have a lot of cultural value on the city scale as on the national scale.

The KB (*'Royal Library'*) is the national library of the Netherlands. It collects everything that appears in and about the Netherlands, from mediaeval literature to contemporary publications. The library was founded in 1798 and received the name Royal Library in 1806 from King Louis Napoleon. The institution has been an independent administrative body since 1993, largely financed by the Ministry of Education, Culture and Science. In 2020, the name was changed to KB, National Library. In 1973, the Government Buildings Agency awarded the contract to the architects A. Hagoort, P.B.M. van der Meer and A.J. Trotz for a new building, which began construction in 1977. Since 1982, the library has been housed in a modern building at the Prins Willem Alexanderhof in The Hague, next to The Hague Central Station. The entire complex covers approximately 55,000 m^2 net and approximately 78,000 m^2 gross surface (gross volume 305,000 m^3). The building, which is characterised by 5,200 white aluminium plates that cover the facades, with rounded corners and recessed facade surfaces, is located next to the National Archives. The building also houses the Literary Museum, the Children's Book Museum, RKD and the offices of Europeana, DEN, LIBER and IFLA.

In 1968, Schamhart designed a building on Laan van Meerdervoort for the General State Archives. This plan did not go through and a new location was chosen between the then-new Hague Central Station, the elevated tram route and the Prins Bernard viaduct. Schamhart designed a building with a sculptural form. The building rises gradually from the public entrance to the 9-storey archive space. The shape of the building is dictated by the location, part of it follows the direction of the tracks of The Hague Central Station, another part of the tram route running at an angle to it. This was not entirely successful, the intention was for the facade of the building to run parallel to the Royal Library located on the other side of the tram track. Due to its functionality, the building has many closed facades, which are covered with masonry. Its design was a collaboration with artist Aat Verhoog.

It is important to understand that these buildings were designed for post-war The Hague, which had a different perspective on urban- and social dynamics of city fabric than the current day. With this changed perspective throughout the decades, the current inventory creates a field of urban nothingness where the buildings are stand-alone architectural objects floating side by side with only its technical environment in mind.

Neglected public domain

The second concern that came to my attention whilst walking through the district, was the lack of quality in the public spaces. This problem is interconnected with the problem of architectural objects, mentioned first in this chapter, and results in the disconnection between the social environment and the technical environment.

In the few public spaces that are scattered around the district, the quality of these spaces is personally experienced as poor. An example of a public space is the Anna van Bueren Square, next to the Central Station. The tram tracks fly over the square, creating a division within the public space. Adjacent to this square are the National Archive, the New Babylon, the Central Station, and the AvB tower. Looking at these buildings, there is little coherence between them with minimal visual porosity on the plinth level, resulting in a harsh separation between the inside world and the outside.

This principle of separation between the inside and outside can be found throughout the district, whilst having opportunities to connect the public domain with the neighbouring green spaces of the Koekamp and the Hague Forest.

If the transition of The Hague Central Station District to a new Dutch Manhattan before 2050 wants to be deemed successful, as mentioned by the municipality of the Hague (*"Plannen*

voor omgeving Den Haag Centraal - Projecten - Den Haag.”), these two issues should be taken into account. This will allow future designs and -plans to transform, connect, and interact better with the public realm and re-establish the connection between the social- and the technical environment that has been lost throughout the years.

Approach and methods

As a point of departure for the research about the Hague Central Station district, a first observation allowed me to experience the area on a first-hand basis. This first impression helped me raise questions about the district and quantify the design problems that could be a starting point for further research. At the start of this paper, two main issues are highlighted and resulted in the main research question; *How can the implementation of culture and education contribute to the reconnecting of the social environment with the technical environment within the Hague Central Station district?*

To understand these issues more comprehensively and answer the research question, first, the terms *social environment* and *technical environment* will be explained, followed by their relationship with culture and education. With the understanding of these terms, further observation is key to analysing the social- and technical surroundings of the district. This is done with the subquestions; *What is the rhythm that happens on a day-to-day basis in the Hague Central Station district? What is the current social interaction with the buildings in question?*

Moreover, it will result in an understanding of the social and technical environments within the Hague Central Station district, which will be compared to three case studies that connect the social environment with its technical environment, with its related question; *How can the social and technical environments of the Hague Central Station district be connected?* The case studies are; Campus TU Eindhoven by Samuel van Embden, Cultural Center Eemhuis by Neutelings Riedijk, and the Rotterdam Rooftop Walk by MVRDV. Furthermore, to understand and analyse the case studies, a literature study will be used to dissect the projects.

Objective and larger discourse

The main objective of the project is to design a new vertical public hub where education and culture come together, as described in the syllabus of the graduation studio Public Building (*Public Building graduation studio, “The Vertical Campus: A Public Hub of the Future in the Hague.”*). It will contain hybrid work- and study spaces, a diverse program for educational facilities, and reconnect the current cultural program that is located within the district, creating a place for every path of life for the city of the Hague. By doing so, it reconnects the social environment to the technical environment.

As elaborated earlier, the connection between the social and the technical in the Hague Central Station District has been dissolved over the years, resulting in a field of urban nothingness where the buildings are isolated architectural objects floating side-by-side, with humans merely as guests. By re-establishing this connection through culture and education, the district and the city of the Hague will become more lively and resilient, resulting in a better functional and livable city.

List of References

Books:

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Dick Valentijn, De wederopbouw : Haagse gids voor architectuur en stedenbouw in de periode 1945-1965 (Dienst Stedelijke Ontwikkeling, 2002).

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(https://www.archined.nl/2012/04/de-lange-weg-van-bezuidenhout-c-naar-nieuw-centraal/; accessed on 4 Nov. 2023).

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A.J. Hagoort, P.B.M. van der Meer en A.J. Trot, Royal Library, 1982, the Hague, the Netherlands.

MVRDV, Rotterdam Rooftop Walk, 2022, Rotterdam, the Netherlands.Sjoerd Schamhart, National Archive, 1979, the Hague, the Netherlands.

MVSA, New Babylon, 2003, the Hague, the Netherlands.

Neutelings Riedijk, Cultural Center Eemhuis, 2014, Amersfoort, the Netherlands.

WAA. AvB tower, 2013, the Hague, the Netherlands.

Time planning towards P5

Tijn Jansen

4713702

Public Building Design: The Vertical Campus

18/01/2024

| | | |

B. Design Brief

Current Cultural Program

National Archive (25.000 m^2)

Royal Library (25.000 m^2)
- Museum of Literature / Children's books
- DEN acadamy
- RKD, institute for Art History

Added Cultural Program

Entrances + Lounges (250 m^2)
Cafes (500 m^2)
International Culture Exchange (1000 m^2)
Exhibition Space (500 m^2)
Event Spaces (1000 m^2)
Meeting Rooms (500 m^2)
Storage, Mechanical, Circulation space (25-30% of total sqm)
Delivery of goods / logistics (250 m^2)

Total Cultural Program (55.000 m^2)

Current Educational Program

AvB Tower, Leiden University (24.500 m^2)
- Lecture Hall
- Study Spaces
- Social Space
- Student Housing

TU Delft facilities within the Hague within New Babylon (290 m^2)

Library facilities within the Royal Library (5000 m^2)

Added Educational Program

Entrances + Lounges + Cafes (750 m^2)
Play and Learn (2500 m^2)
Outdoor Playground (200 m^2)
Social Hub (500 m^2)
Learn and Discover (1500 m^2)
Learn and Develop (2500 m^2)
- Integrated Innovation Center

Lecture Halls (1000 m^2)
Life Long Learning Spaces (3000 m^2)
Teaching, Learning and Development (1000 m^2)
Media Center (1500 m^2)
Center of Advanced Virtuality (500 m^2)
Storage, Mechanical, Circulation space (25-30% of total sqm)
Delivery of goods / logistics (250 m^2)

Total Educational Program (50.000 m^2)

Current Hybrid Program

Parking Garage New Babylon (20.000 m^2)
1267 Parking Spaces

Koningin Julianasquare bike storage (10.000 m^2)
8000 Bike Spaces
700 Public Transport bikes

Added Hybrid Program

Entrance + Lounges (500 m^2)
Flexible Work and Study Spaces (10.000 m^2)
Quite Work and Study Spaces (1000 m^2)
Storage, Mechanical, Circulation space (25-30% of total sqm)
Delivery of goods / logistics (250 m^2)

Total Hybrid Program (45.000 m^2)

Total Program: Current Program (110.000 m^2) + Added Program (43.500 m^2) = 153.500 m^2

Added Commercial Program

Cafes (300 m^2)
Art Gallery (500 m^2)
Book Shop (250 m^2)
Local Shops (500 m^2)
Workshop Spaces (1000 m^2)
Dance Studio (400 m^2)
Music Classrooms (400 m^2)
Storage, Mechanical, Circulation space (25-30% of total sqm)
Delivery of goods / logistics (250 m^2)

Total Commercial Program (3500 m^2)

C. Process Documentation until P2


WELCOME












Fitzhugh Auditorium
Dalaita Café
Teaching Rooms
Lifts to all rooms
Ashdown Room
XETER
OLLEGE
XFORD
ohen
uadrangle








National Theatre
National Theatre
National Theatre
BEER & LIQUOR


Wolfson Gallery
↑ Olivier Theatre
← Dorfman Theatre
coffee cups


ZONE


Prins Willem III (1650-1702) en zijn tante
Maria, prinses van Oranje (1642 - 1688)
Anna van Buren


BABYLON


New Babylon


nationale bibliotheek
KINDER BOEKEN MUSEUM
Universiteit Leiden
College The Hague
KB nationale bibliotheek
KINDER BOEKEN MUSEUM


Tickets






KB nationale bibliotheek
RKD NEDERLANDS INSTITUUT VOOR KUNSTGESCHIEDENIS

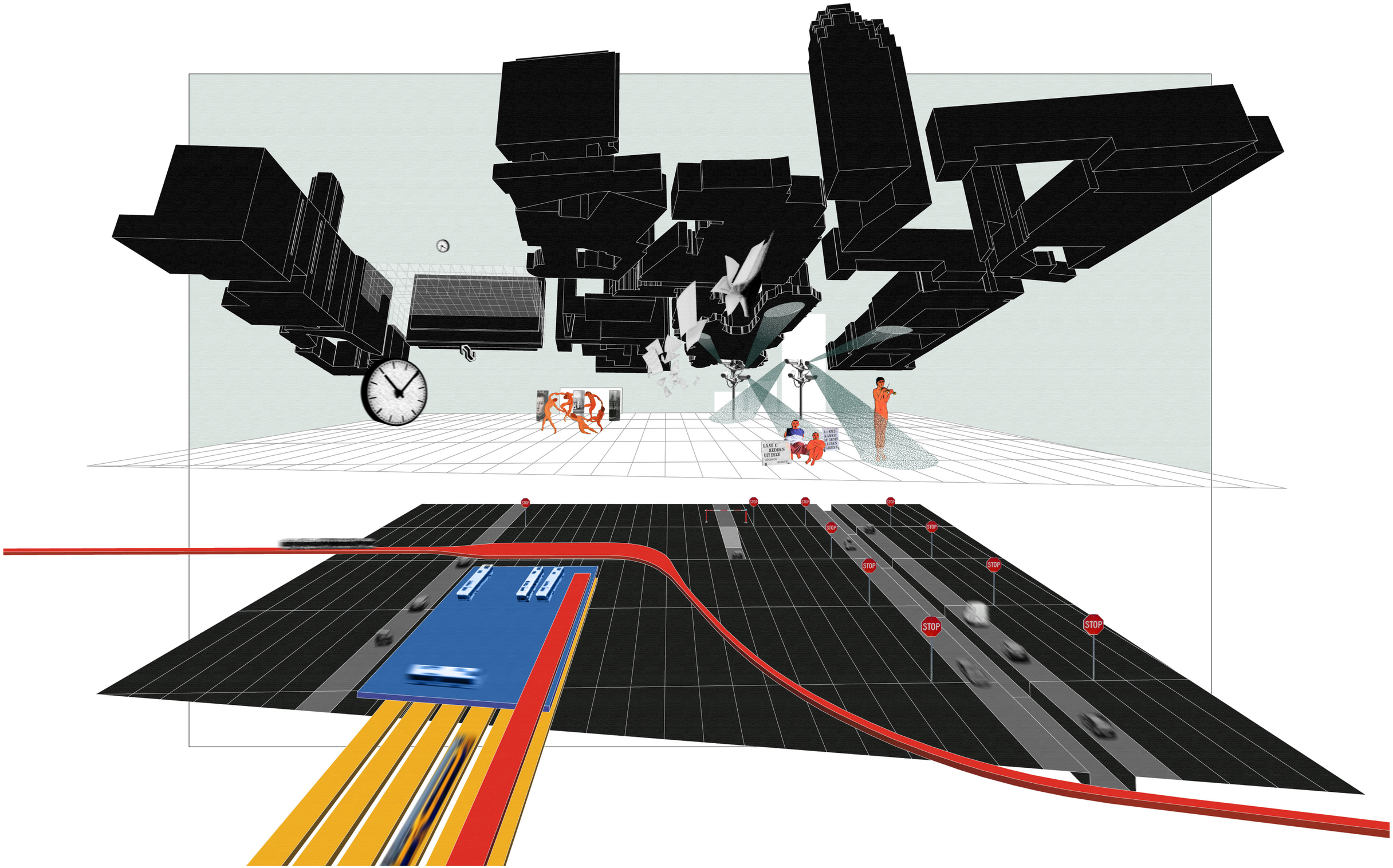

KB nationale bibliotheek
LITERATUUR MUSEUM
KINDER BOEKEN MUSEUM
RKD NEDERLANDS INSTITUUT VOOR KUNSTGESCHIEDENIS
225 jaar
KB nationale bibliotheek


PERONI
OPEN
Foodhall






Tweede Kamer der Staten-Generaal


LAAT U
REDDEN
UIT DEZE
STOP

‘ The problem of the Central Station District is the **lack of connectivity and accessibility** within the site due to **closed-off, fragmented spaces** and a clear **separation between buildings**, hindering effective communication and use of the area.

Persona 1

Name: Harris
Age: 55

Occupation: Shopkeeper
Location: Den Haag
Education: Hogeschool

Biography

Harris, a dedicated shopkeeper from the city of Den Haag, has spent years creating a warm and welcoming atmosphere in his store. His passion for creating unique and high-quality products has made him a beloved figure in the local community. With a knack for customer service and an eye for craftsmanship, Harris continues to be the go-to destination for those seeking lovely pastries in Den Haag.

Statement

Harris's life statement is to enrich the lives of those around him by providing quality products and service through his shop. He is committed to creating a sense of community and satisfaction among his customers.

Quote

"The only true wisdom is in knowing you know nothing."

Behaviour

Harris puts significant emphasis on his health. He is very talkative and approachable and loves to interact with others.

Personality traits

Wisdom / Detail-Oriented / Community-Minded / Responsible

Motivations

Harrison's motivation to be on our project site is commuting. He is using public transport to go to his doctor for a check up.

Problems and challenges

Harris seems very concerned about the lack of places for children to play. When asked what he thinks the project site misses his answer was places for children to be free. He emphasis how it is very important for children to feel not only safe but free to run and play.

PAIN POINTS

Lack of space for children to play.
Safety of the site referring to traffic.

GAIN POINTS

Harris emphasizes how the goal of our design should be human-centered, public space for all, that is also easily accessible and safe.

Persona 2

Name: Pierre
Age: 16

Occupation: High school
Location: Den Haag
Education: High school (unfinished)

Biography

Pierre, 16-year-old, is a high school student whose life revolves around school, friendship, and adventure. Born with an deep curiosity, Pierre has always embraced every opportunity to explore and grow. He aspires to pursue a career in the field of technology. His dedication to his studies has earned him the admiration of both teachers and peers, making him a role model within his school community. But life isn't all about books and academics he recognizes the importance of balance and enjoys spending quality time with his friends.

Statement

"Embrace learning, cherish friendships, and capture life's beauty through my lens, one adventure at a time."

Quote

"Imagination is more important than knowledge. For knowledge is limited, whereas imagination embraces the entire world, stimulating progress, giving birth to evolution."

Behaviour

He is very talkative and fun person to be around.

Personality traits

Curious / Diligent / Sociable / Ambitious

Motivations

Pierre´s motivation to be on the project site is socializing with friends. he is using a diverse range of amenities such as bars and restaurants.

Problems and challenges

Pierre's biggest problem regarding the site is the fact that there should be a store open 24/7. Also, he emphasizes the importance of food on campuses and how it should be easily accessible for all students.

PAIN POINTS

Lack of student restaurants.

GAIN POINTS

Pierre emphasizes how the goal of our design for a vertical campus should be student-oriented, and how students need to have all the amenities in the close vicinity.

Persona 3

Name: Abdul
Age: 70

Occupation: Retired
Location: Den Haag
Education: Master of accountancy

Biography

Abdul, at the age of 70, stands as a distinguished figure with a Master's degree in Accountancy, a testament to his lifelong dedication to financial expertise. Throughout his career, he has held key positions in the corporate world. Outside the world of numbers and ledgers, Abdul finds solace in the simple pleasures, often taking long walks to appreciate the beauty of the countryside. His love for diversity extends beyond just numbers; he cherishes the rich tapestry of cultures and perspectives that make our world so vibrant.

Statement

Abdul's life is a testament to the power of wisdom, experience, and an unwavering commitment to learning. His journey has been one of achievement, reflection, and a deep appreciation for the diverse of human existence.

Quote

"In diversity, there is beauty and strength."

Behaviour

He is very kind and wise man.

Personality traits

Wise / Committed / Reflective / Humble

Motivations

Abdul´s motivation to be on the project site walking and having coffe in one the coffee places.

Problems and challenges

He believes that we should diversify and integrate our society. He states that we have become more separated by politics and religion and that we should see ourselves as part of one bigger whole.

PAIN POINTS

Lack of diversity.

GAIN POINTS

Abdul emphasizes how the goal of our design for a vertical campus should be more inclusive. A place to mix other cultures and to learn from each other.

Persona 4

Name: Gregor
Age: 23

Occupation: Student
Location: Den Haag
Education: Bachelor of Arts

Biography

Gregor, a 23-year-old student hailing from the picturesque nation of Estonia, is a young man with a passion for education and exploration. Armed with a Bachelor of Arts degree, he set his sights on broadening his horizons and decided to pursue his Master's degree in The Netherlands more specifically University in Leiden. Beyond the classroom, Gregor's life is colored by his thirst for exploration. He enjoys discovering the hidden places of his new surroundings, be it cycling along canals or trying Dutch cuisine with newfound friends.

Statement

Abdul's life is a testament to the power of wisdom, experience, and an unwavering commitment to learning. His journey has been one of achievement, reflection, and a deep appreciation for the diverse of human existence.

Quote

"Adventure is worthwhile in itself."

Behaviour

He is talkative, adventurous and approachable person.

Personality traits

Diligent / Committed / Humble / Detail-Oriented

Motivations

Gregor is on the project site because he is a Student of the University of Leiden. He uses the building currently occupied By UL for learning, socializing, and working on group assignments.

Problems and challenges

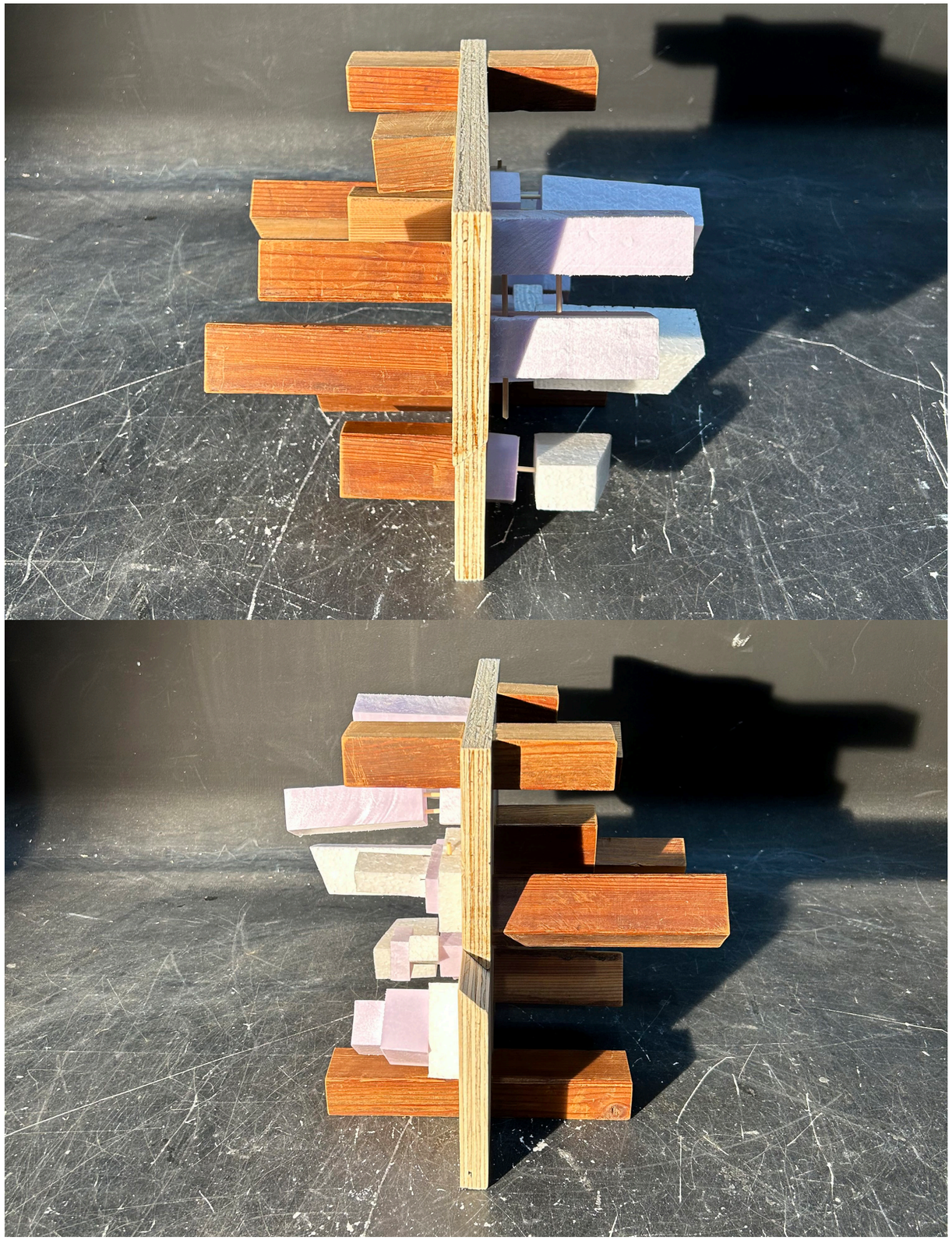
Gregor believes that students have to be able to live, learn, and eat on campus. He says that in order to focus 100 percent on one's studies universities should incorporate housing with educational buildings as well as other amenities. Everything should be on campus but also he says that it should be open to the public not just the students.

PAIN POINTS

Lack of silent spaces.

GAIN POINTS

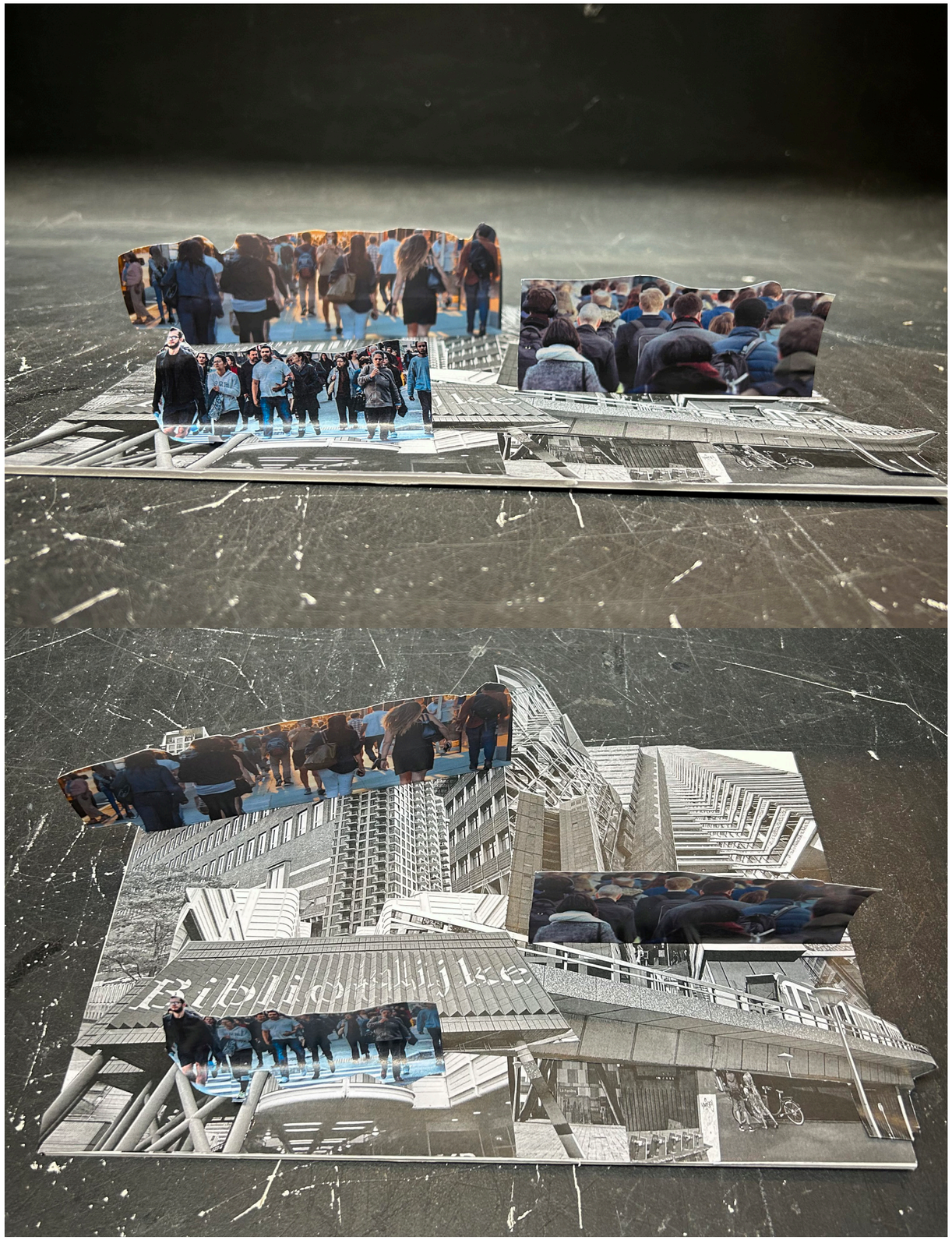
Gregor emphasizes how the goal of our design for a vertical campus should be more integrated with housing as well as other amenities such as green spaces and spaces for recreation. He also thinks campuses should be more public.



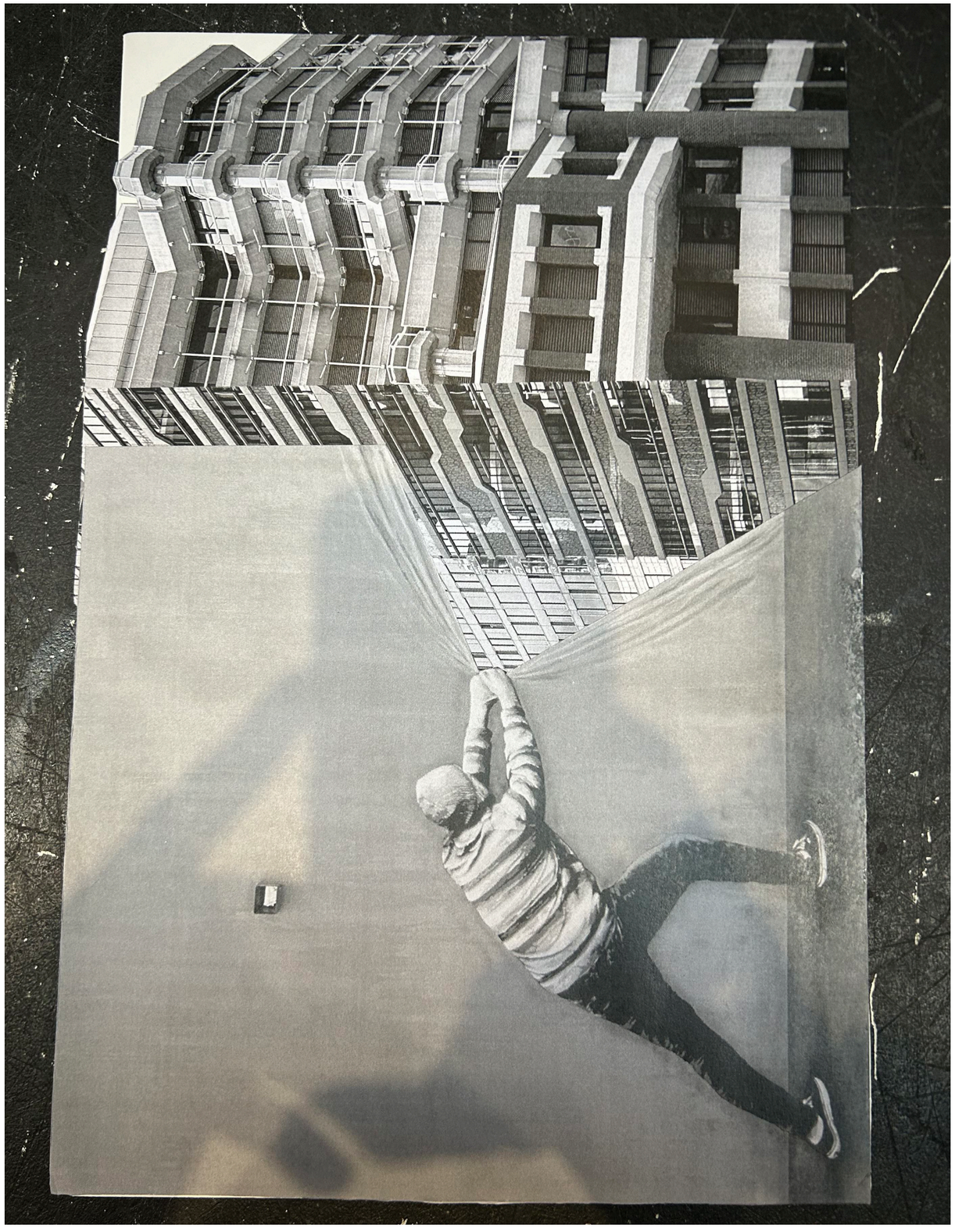
The performative conceptual model is about the **duality of the urban fabric** of the Central Station District in the Hague.

On the one hand its about the current situation, where **every building is an isolated architectural object**, with little to none porosity within the facade, resulting in a empty separated urban fabric.

On the other hand its about **what could it become?** How does the district perform if the buildings interact with each other? Or what would happen if more transparency and porosity was implemented within the building volumes? Questions that could help me within the design phase of the vertical campus.



The currrent inventory of buildings are designed with only their own interest at heart, becoming a collection of individual architectural objects that blend together, forming **the floorplan of the district**. The **people do not interact or react with the built environment** anymore, resulting in the people just walking by.



The different facades of the built environment are characterized by **repetition and anonymity**, resulting in a representation of a '**wall of nothingness**'. Even if we try to break this down, the people still do not know what is behind it, due to the lack of accessibility and transparency.



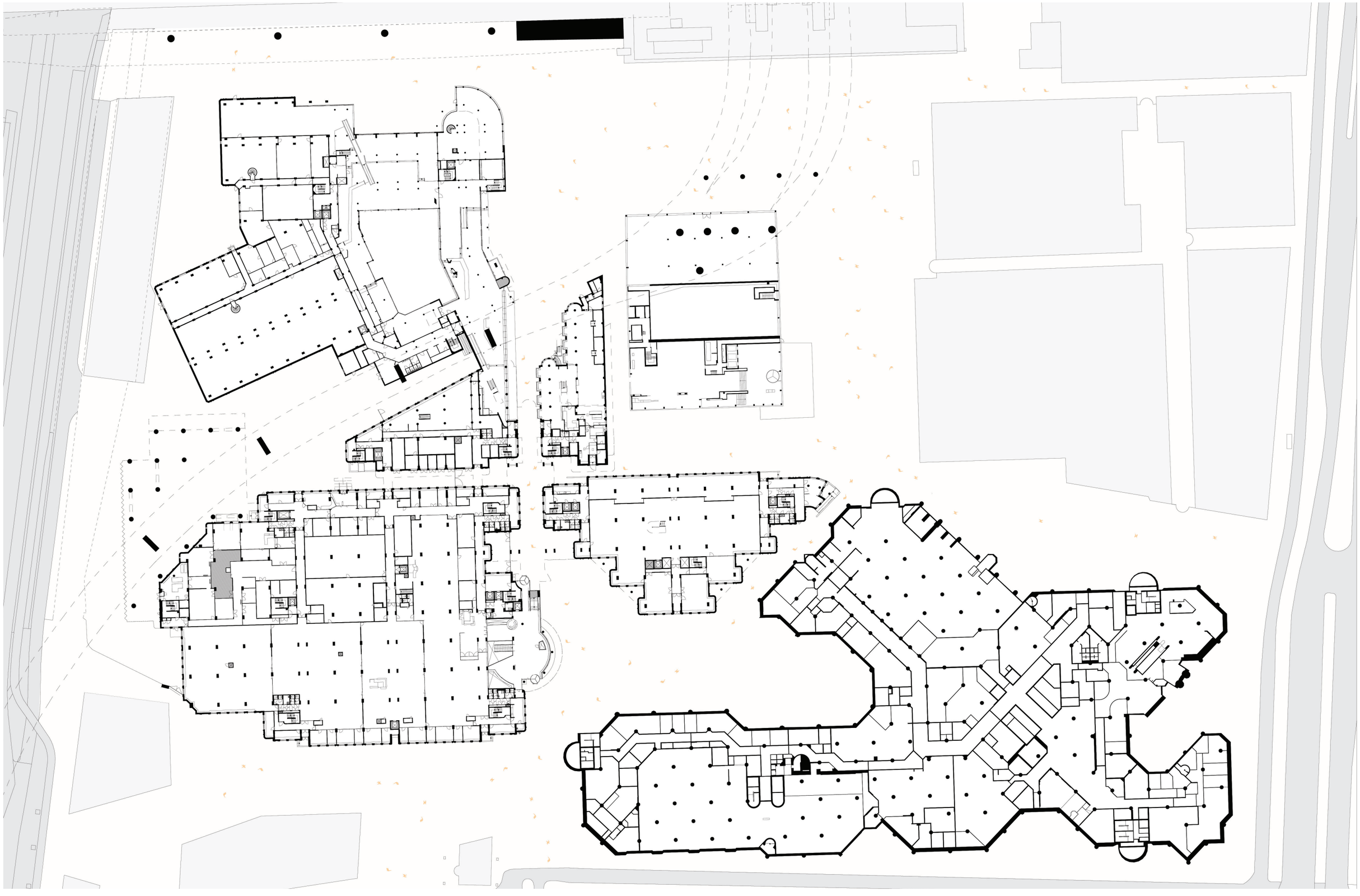
Inspired by a famous artwork, the next collage represents the issue of **disconnection between the human and the built environment.** Where the buildings literally and figuratively tower above the people, the connection between them has been dissolved over the years.



The next collage is made by the **AI-tool Dall-E**, to experiment with how it could make a digital photomontage of a **doomsenario of the future**. The sentenced used for the image is; 'Digital photomontage, where people are the size of buildings and buildings are the size of people. Make it as realistic as possible.'


Sustainability
Use at least 50% of renewable building materials
Implement flexible spaces to prolong the life-span of the buildings
More than 75% of energy consumption has to be from renewable sources
Implementation of pre-fabricated elements to reduce building phase
Reuse of excisting building structures as much as possible
Durability
Optimisation
60% of facade materials have to be from recyclable sources
Standardise structural building concept for quicker (de)assembly
Demolish only when there is no better option
Conservation

D. Integrated Design Proposal until P2









The location of my project is carefully selected due to its **fundamental principal of connecting education with culture.** Three buildings within site area two, the 'high-density' district, are directly connected with the concept of the 'Cultural City Hub'.

These buildings are;
- The AvB Tower, currently occupied by Leiden University,

- The National Archive, the archive of the Netherlands,

- The Royal Library, the library of the Netherlands.

Each building currently undervalued or isolated, but having tremendous **cultural or educational value for the city.**



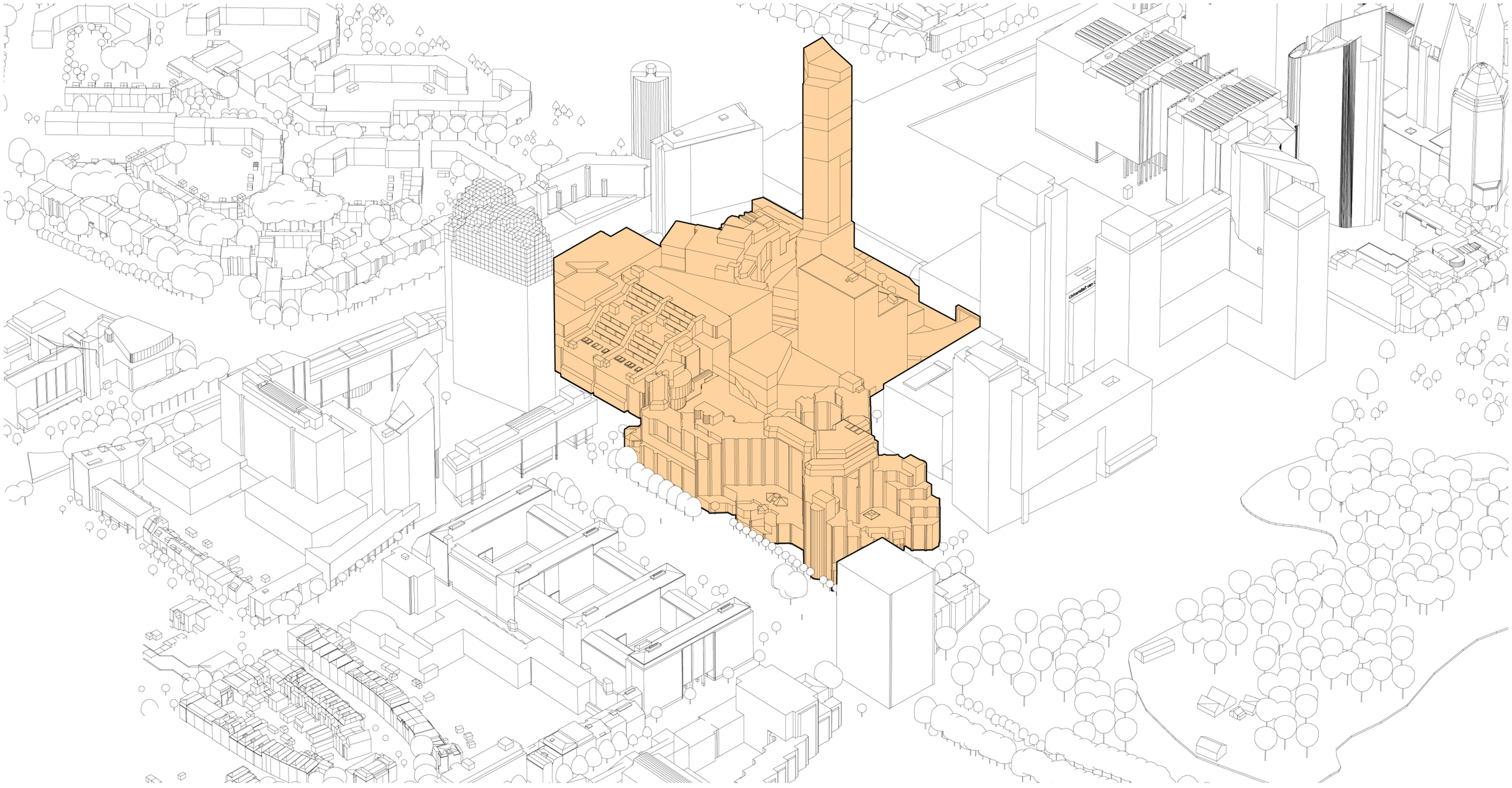
Bezuidenhoutseweg 67



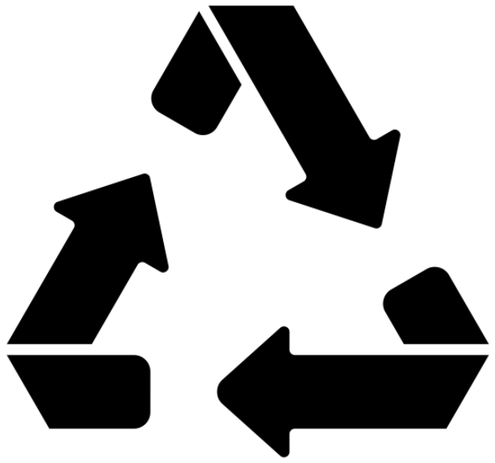
Central Station

A fourth building within this district **radiates potential for further development**, the Bezuidenhoutseweg 67 building. It is temporarily occupied by the 'House of Representitives' of the Dutch government. and **will become vacant** in 2028, leaving it open for (partly) redevelopment.

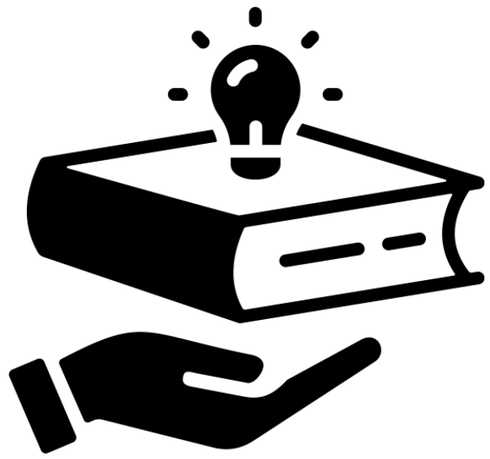
The final reason for the location of the Cultural City Hub is its **proximity to the transportation hub** of the city, the Central Station. With several bus-, tram-, metro- and train platforms the Cultural City Hub is **easily accessible form throughout the city and far beyond**.



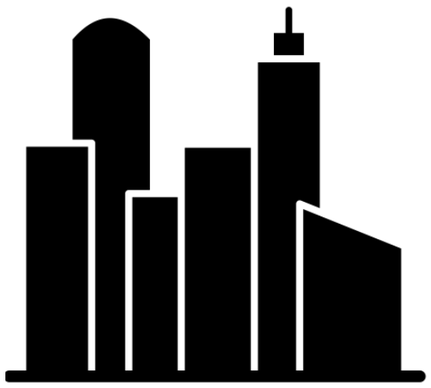
‘City Cultural Hub – a **social condenser** of different **cultural and educational activities** that combine multiple levels of education, but also **multiple paths of life**.’



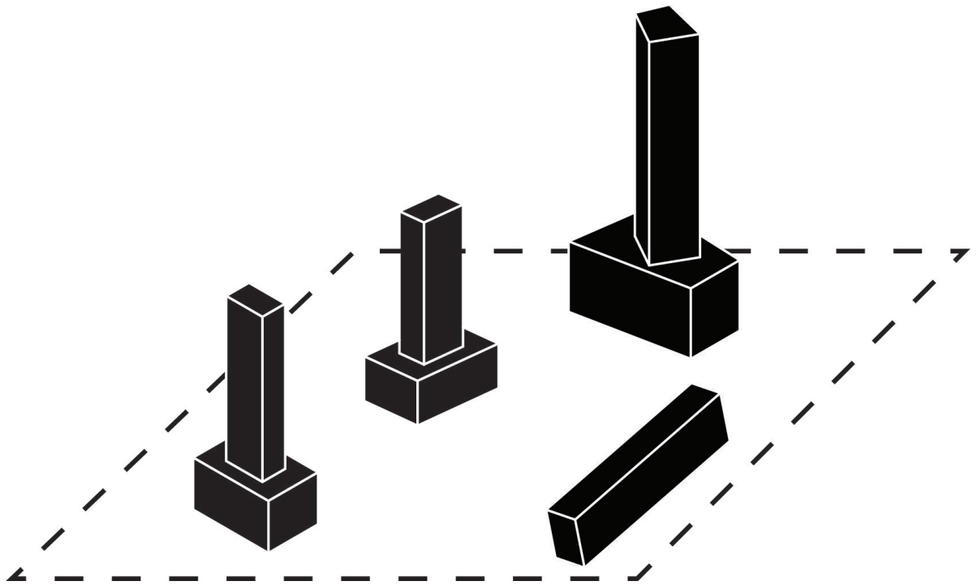
Redeveloping current inventory



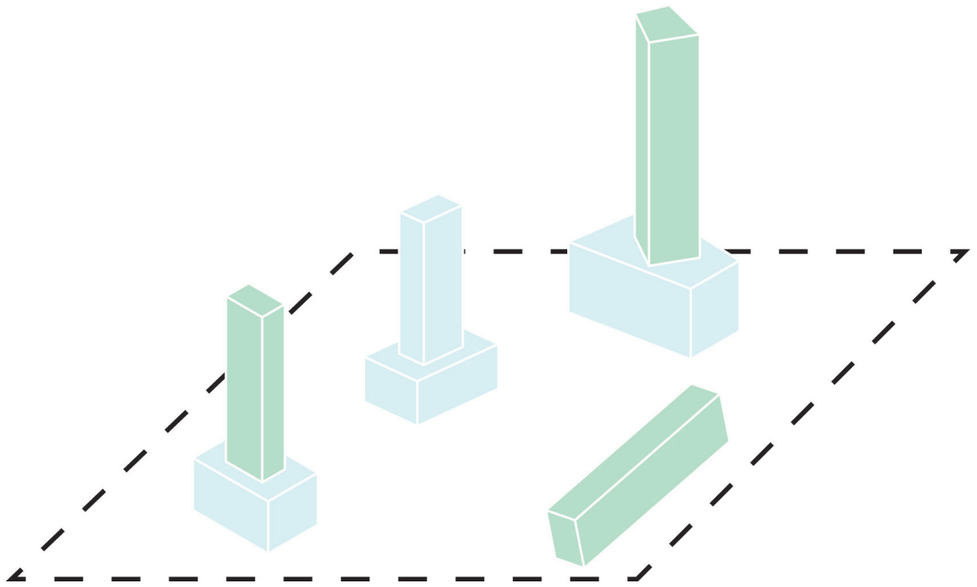
Cultural integration in education



For the city, by the city



Campus



Campus of the Future

Education

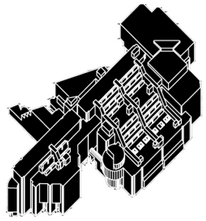
Culture

My position on the current Campus perspective is that **a campus is more than just a building**. It is a field of several buildings creating an ensemble of education and knowledge.

The Campus of the Future should develop the current perspective into something **more resilient and adaptive**. By implementing **culture within the boundaries of education**, a more thorough reflection of the current society will allow future generations to **understand and value different perspectives and ideologies**.

Moreover, **hybrid facilities** should be **key** to allow future perspectives to be implemented more freely.

Royal Library



Library Facilities (40.000 m2)

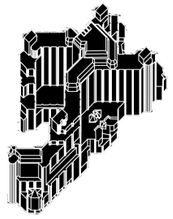
Museum of Literature and Children's books

DEN acadamy

RKD, Institute for Art History

Storage, Mechanical, Circulation spaces

B67 - Primary Education



Entrances

Play and Learn

Outdoor Spaces

Storage, Mechanical, Circulation spaces

AvB Tower



Lecture Hall

Study Spaces

Student Apartments + Amenities

Social Space

Storage, Mechanical, Circulation spaces

National Archive



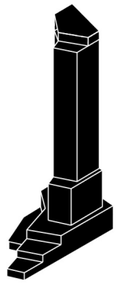
Archive Space (22.000 m2)

Meeting Rooms

Office Spaces

Storage, Mechanical, Circulation spaces

Hybrid Tower



Entrance Lounge + Cafe

Media Center + Center of Advanced Virtuality

Hybrid Work and Study Space

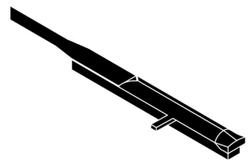
Lecture Halls

Social Sky Lounges

Life Long Learning Spaces

Storage, Mechanical, Circulation spaces

Cultural Commercial



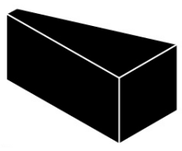
Art Gallery

Book Shop

Cafes

Local Shops

Cultural Exchange Hub



Lounge + Cafe

Exhibition Space

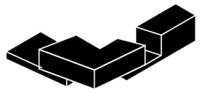
Event Spaces

Meeting Rooms

Office Spaces

Storage, Mechanical, Circulation spaces

Makers District



Lounge + Cafe

Workshop Spaces

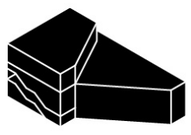
Dance Studio

Music Classrooms

Local Shops

Storage, Mechanical, Circulation spaces

Open University



Social Hub

Learn and Discover

Learn and Develop + Innovation Center

Teaching, Learning and Development

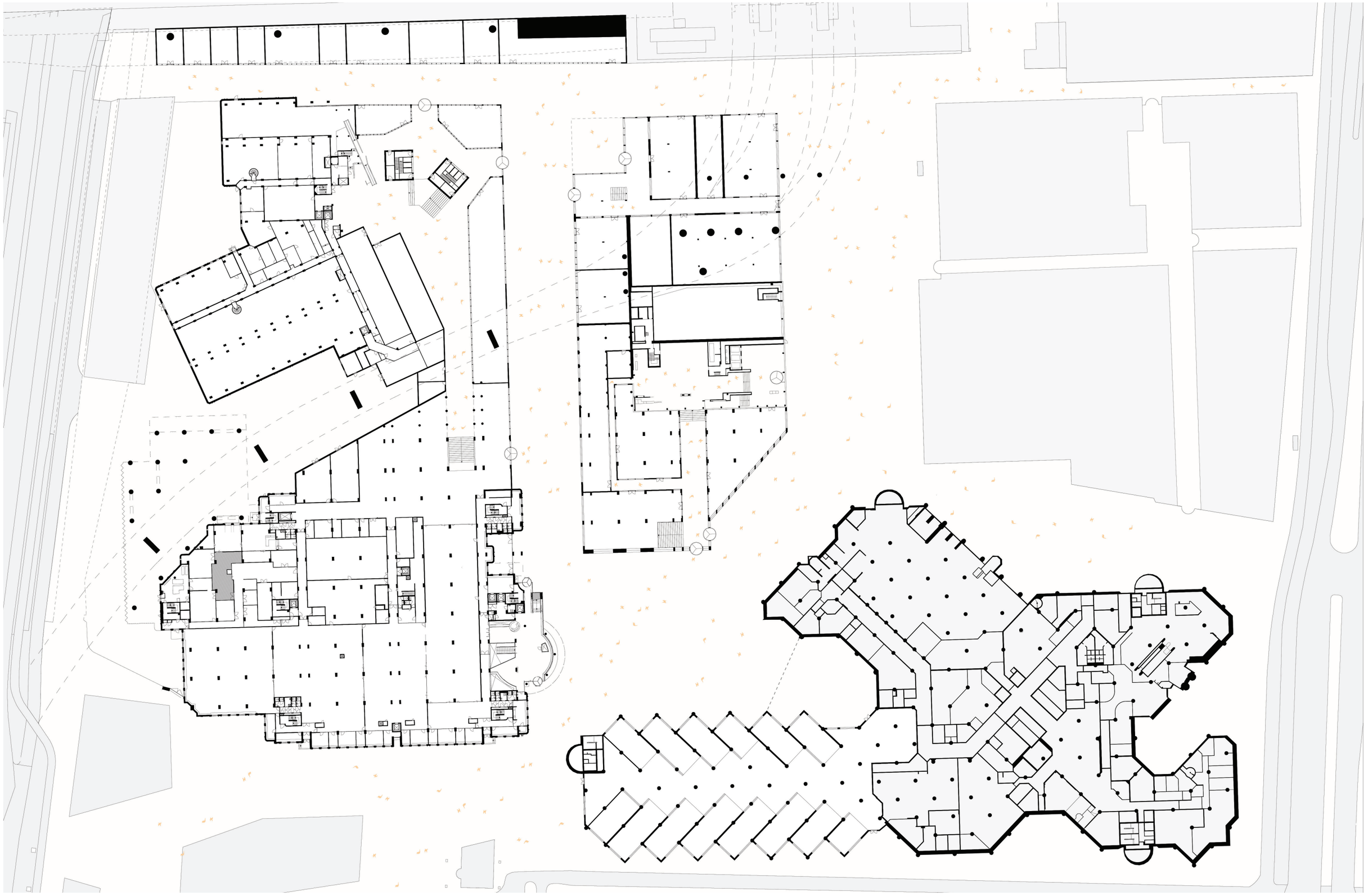
Storage, Mechanical, Circulation spaces

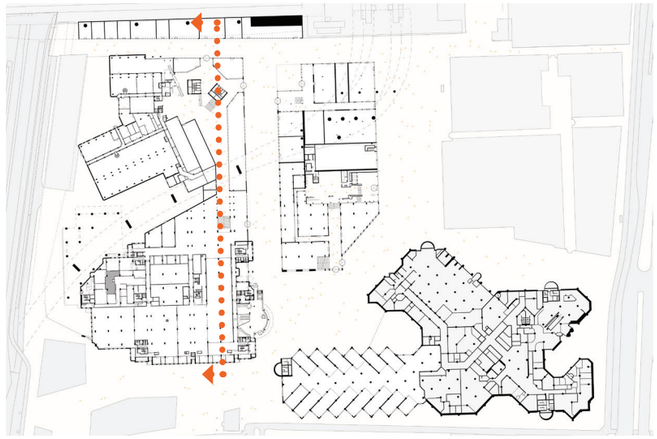
The Cultural City Hub's first pillar is **redeveloping the current inventory.** Located near the transportation hub of the city and within walking distance of its major green zone, the area has a high potential to connect to the current city fabric. Several **cultural facilities** located within the Hague Central Station District, such as the **National Archive and the Royal Library,** are currently **undervalued** and losing their connection with the social environment. By redeveloping these buildings, together with adding new cultural- and educational programs, the Hague Central Station District will transform into a new public hub characterised by culture and education.

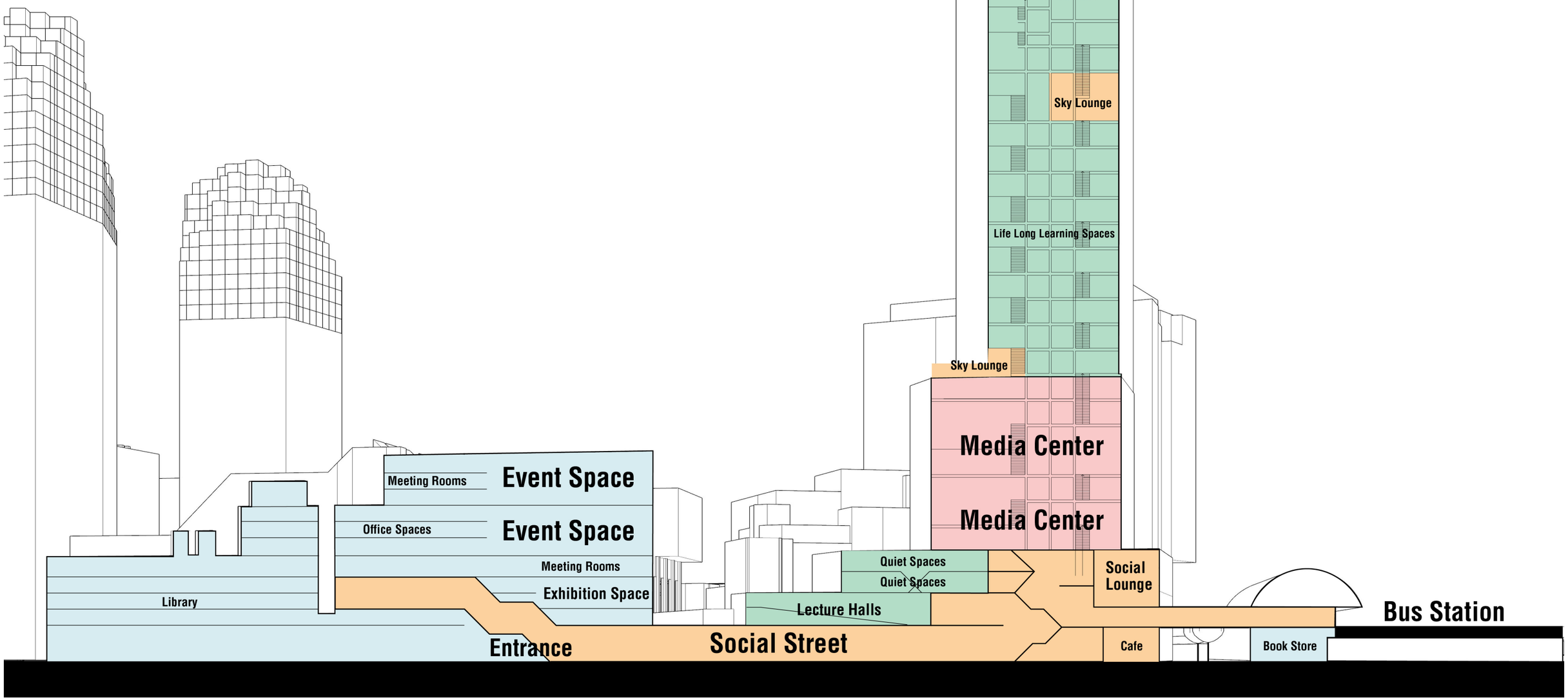
The Cultural City Hub's second pillar is **cultural integration in education.** The Netherlands is a **multicultural society** with 26.2% of its inhabitants having a migration background, meaning that they were not born in the Netherlands or have at least one parent who migrated here. Between the ages of 0-25, this percentage is even higher, at 29%. **Culture entails people's values, perspectives, and ideologies**, and thereby **affects** how children and students **behaviour, communication, and interaction with the world.** Connecting culture with education allows them to learn about the differences between them and the values they bring to the multicultural society that they live in, giving them a better understanding of the world.

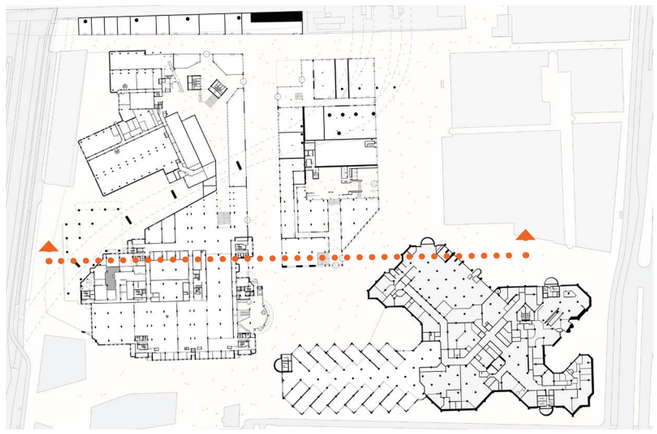
The Cultural City Hub's third pillar is **'for the city, by the city.'** The new public hub will become a **key area for the city of the Hague**, where everyone can benefit from the new cultural, educational, and hybrid facilities. This strategy of expansion is **characterised by** the theme of **lifelong learning**, resulting in the Open University of the Netherlands assisted by all the universities throughout the Netherlands, **and culture**, explained in the second pillar.

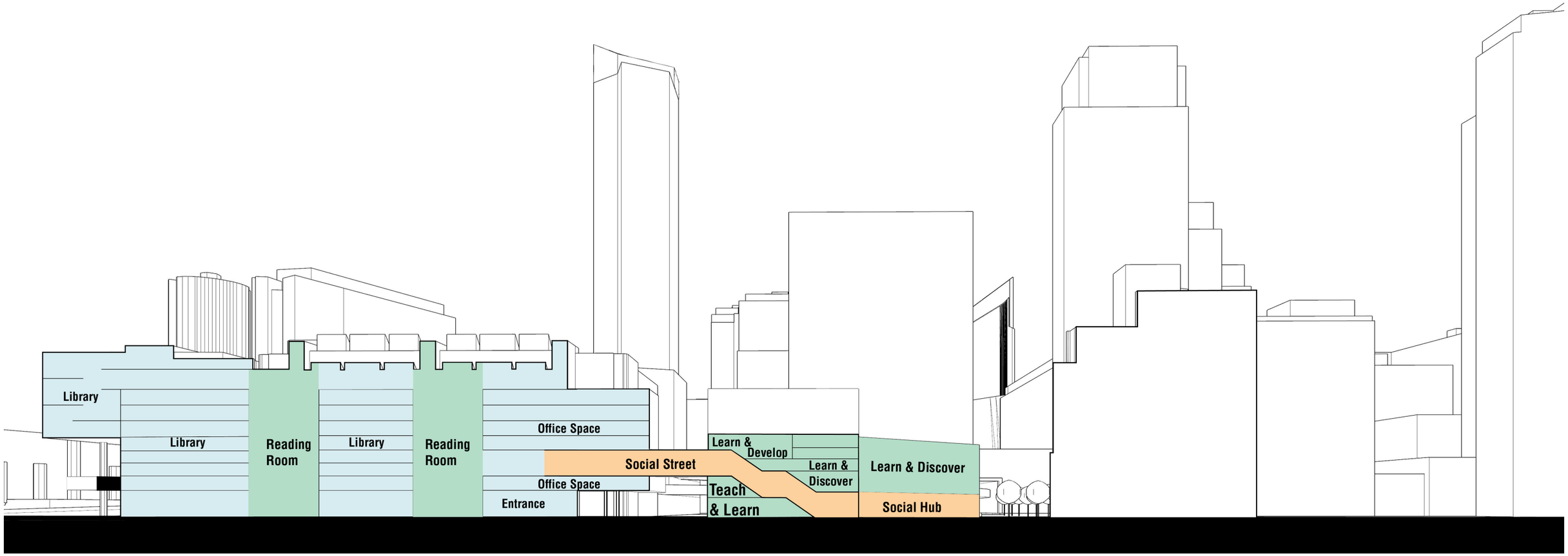
Together with the 'making district' where local artists, musicians, cafes, and start-ups can express their experiences to the public.






Sky Lounge
Hybrid Facilities
Sky Lounge
Hybrid Facilities
Sky Lounge
Life Long Learning Spaces
Sky Lounge
Media Center
Media Center
Meeting Rooms
Event Space
Office Spaces
Event Space
Meeting Rooms
Exhibition Space
Library
Quiet Spaces
Quiet Spaces
Lecture Halls
Social Lounge
Bus Station
Entrance
Social Street
Cafe
Book Store

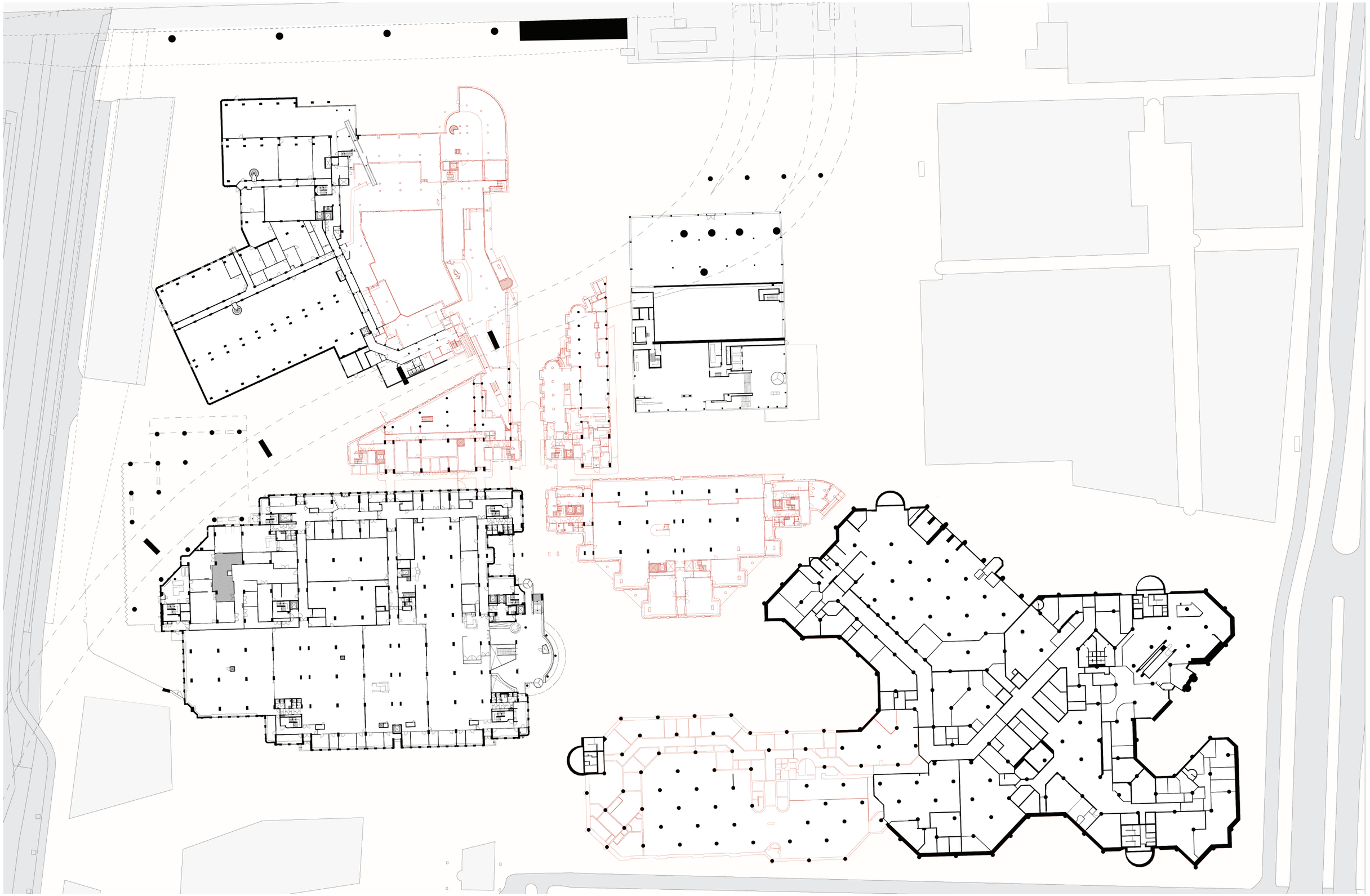


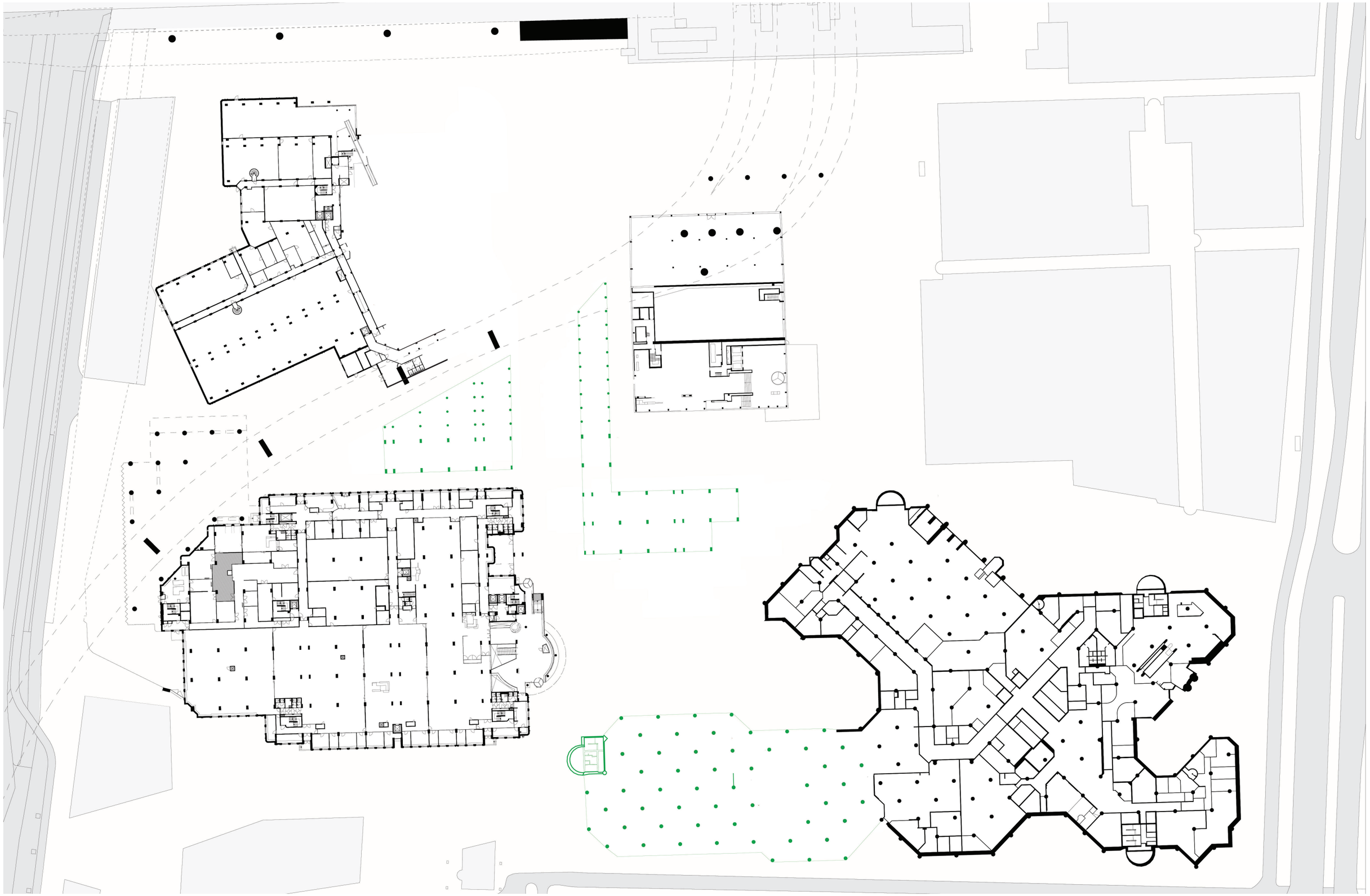

Library
Library
Reading Room
Library
Reading Room
Office Space
Office Space
Entrance
Social Street
Learn & Develop
Learn & Discover
Teach & Learn
Learn & Discover
Social Hub

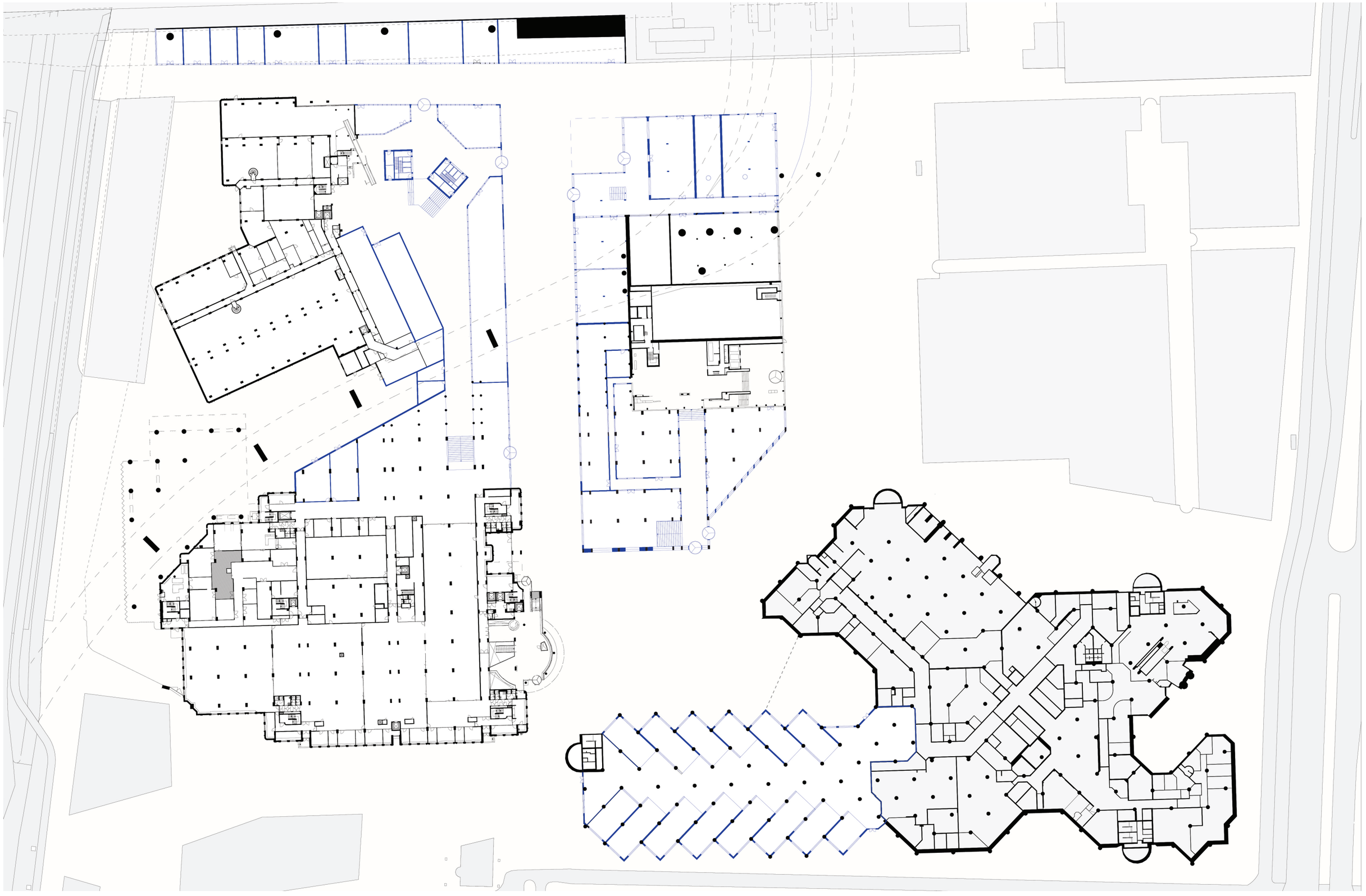
The urban ground floorplan and sections show the **programmatic layout of the Cultural CIty Hub**, highlighting the **hybrid facilities** within the project, located in the tower.

In the next three pages, the **process of redevelopment** between the current situation and the proposed Cultural City Hub is indicated. This process is **fundamentally based on the resillience of concrete constructions** and the **reusability of the material.** By doing so, creating **a new canvas to design** the Cultural City Hub.

The red areas are destined for demolishion, the green areas are reused, and the blue is the additional program the create the Cultural City Hub.







E. Progress Documentation until P3


Nationaal Archief
Raad voor Cultuur
Spaarnestad Photo
AWTI
fo / Tickets
Kantoren
CBG|Centrum voor Familiegeschiedenis
Onderwijsraad
Feithfoyer
Fruinzaal
Mullerzaal
Garderobe 41-260
Toiletten
Studiezaal


Tentoonstelling

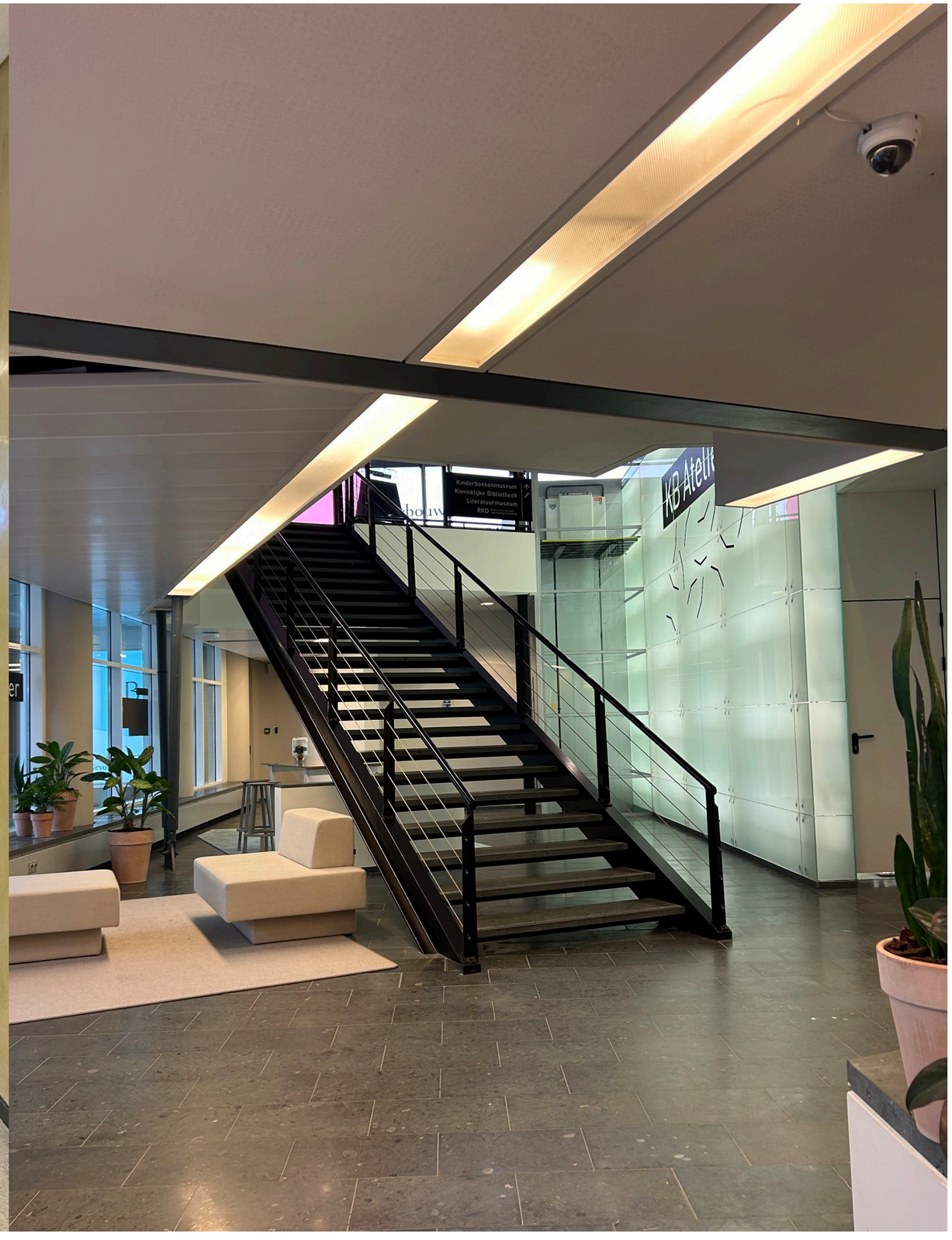




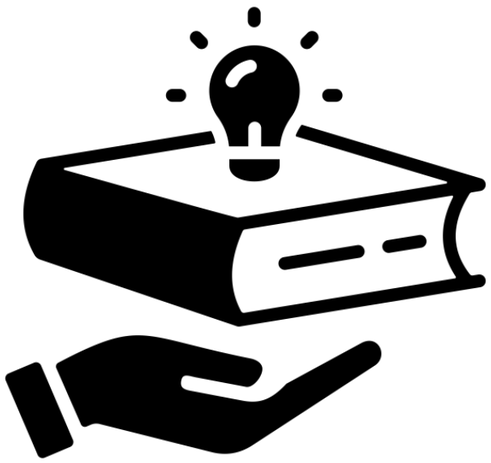




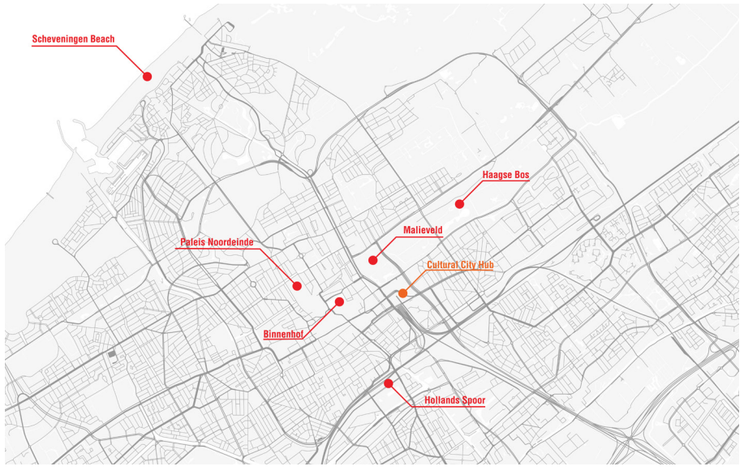



Kinderboekenmuseum
Koninklijke Bibliotheek
Literatuurmuseum
RKD

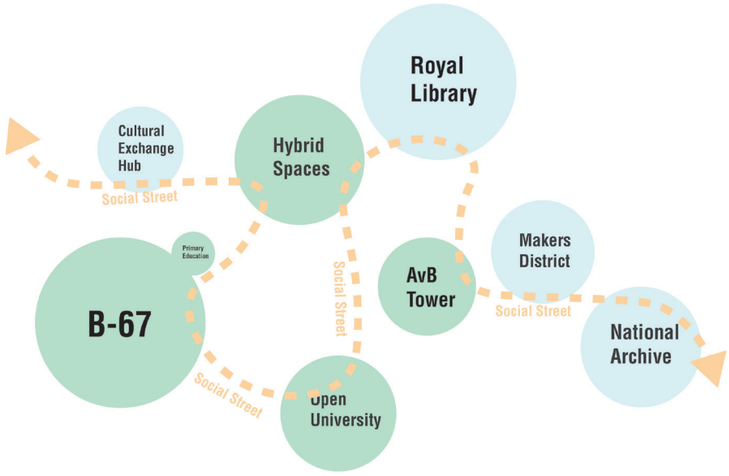
F. Integrated Design Proposal until P3



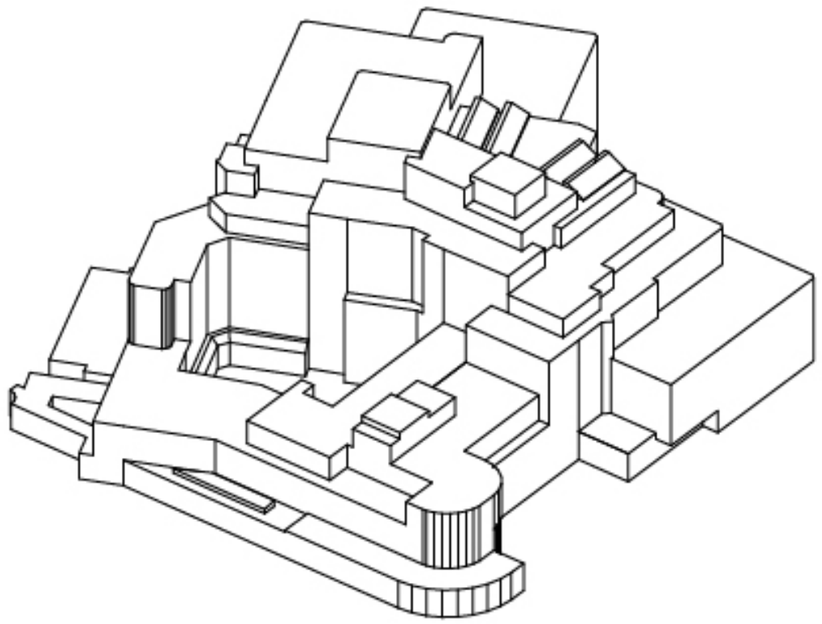
Cultural integration in Education



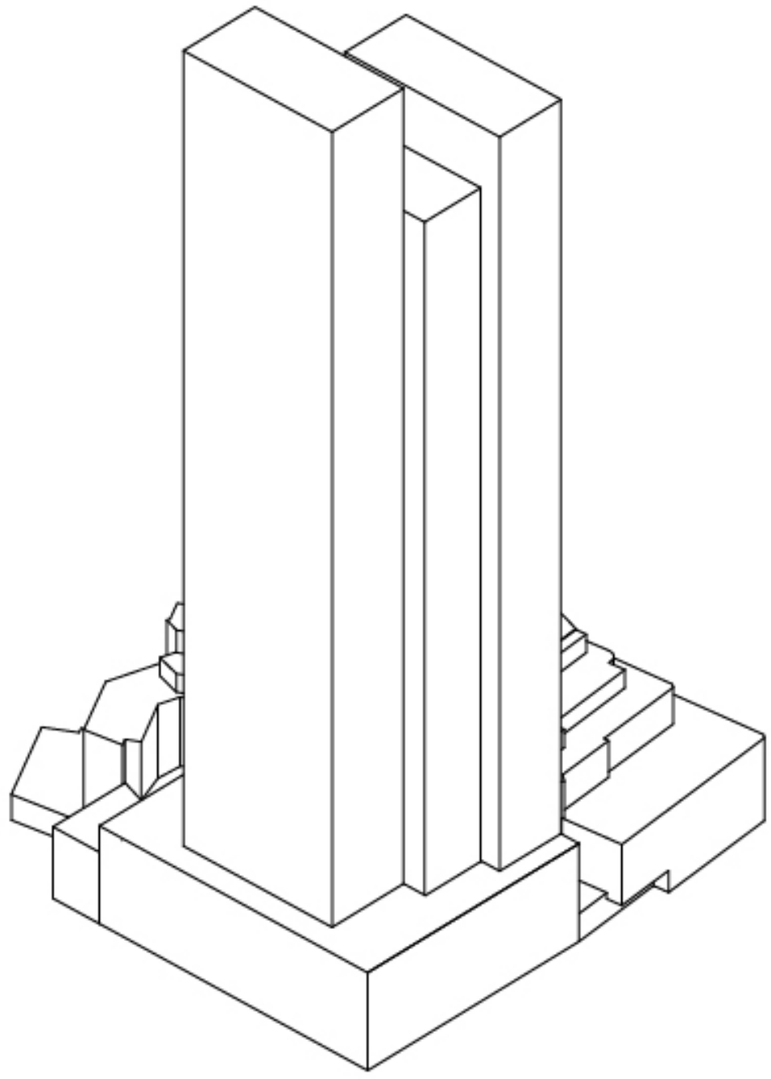
Cultural and Educational expansion in one place



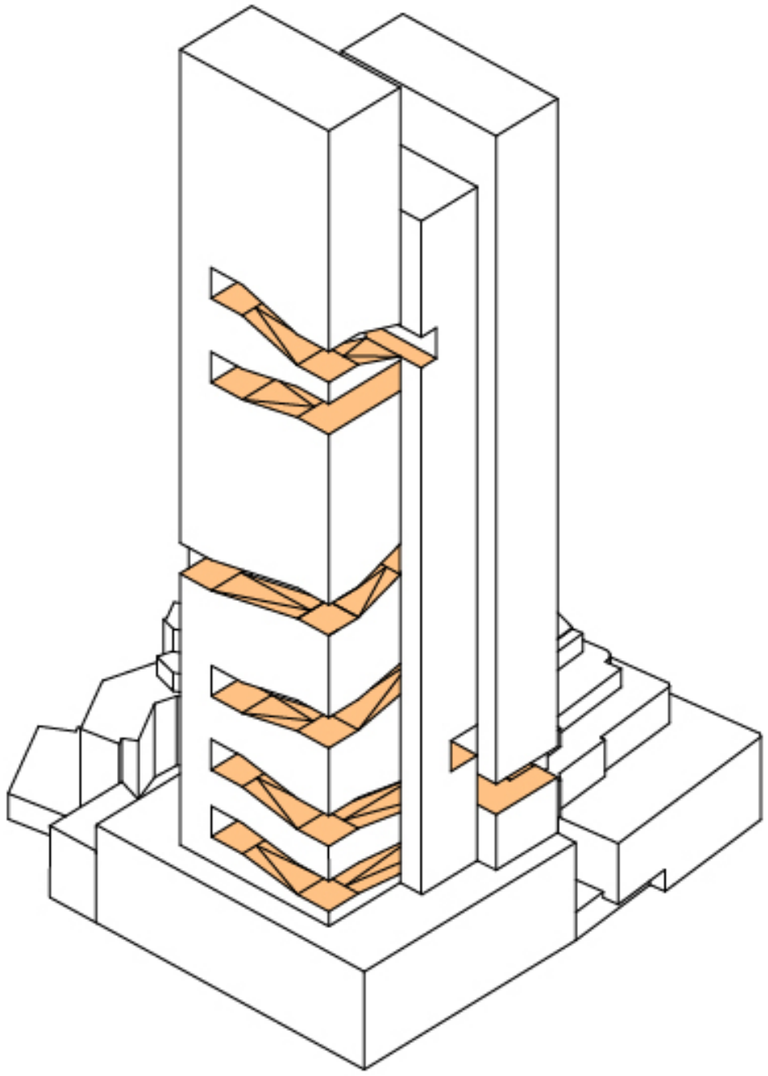
Connection via Social Infrastructure



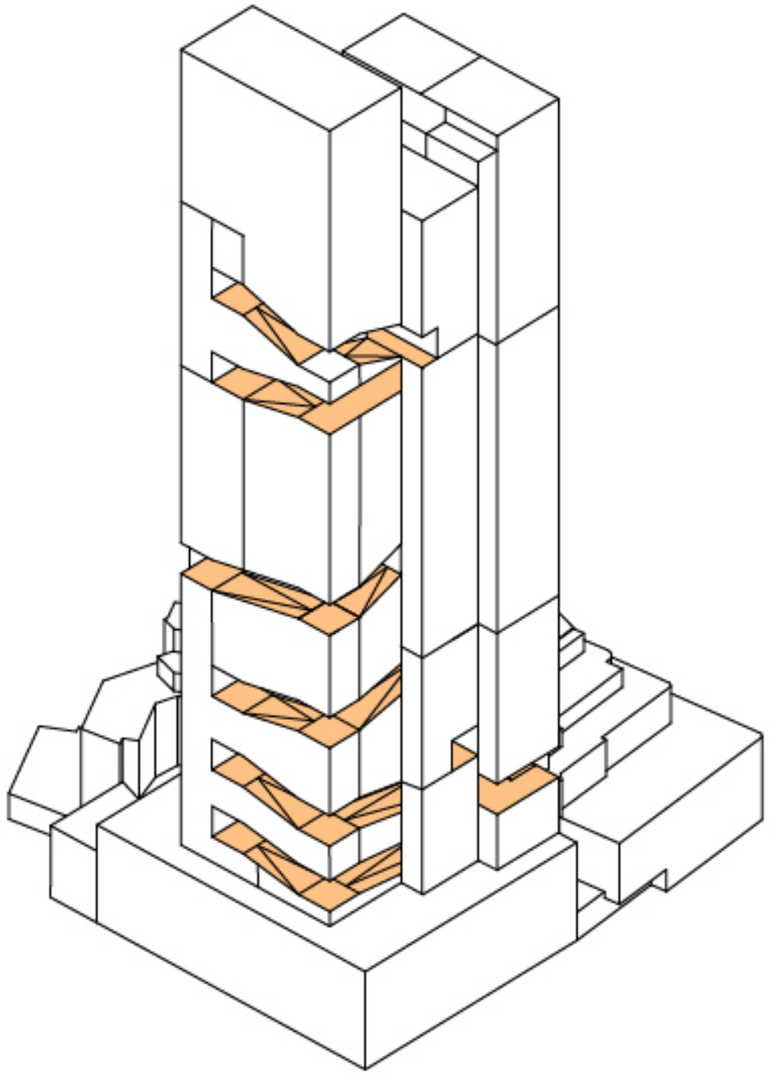
Phase 0:
Current Situation



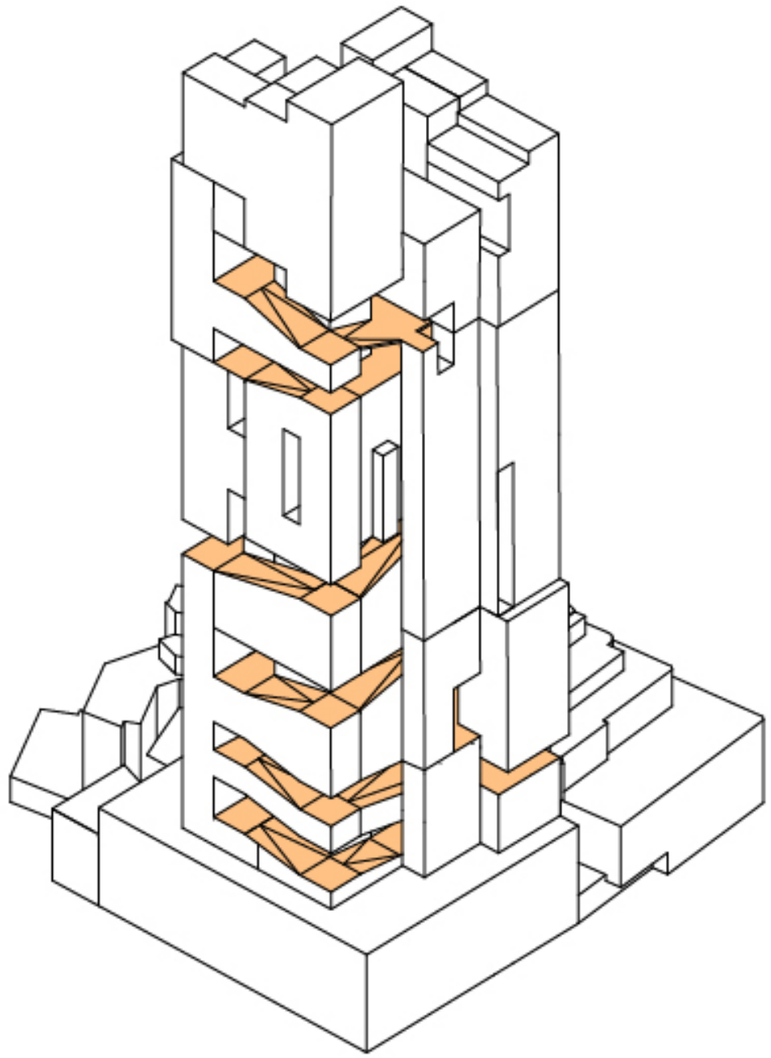
Phase 1:
Densification



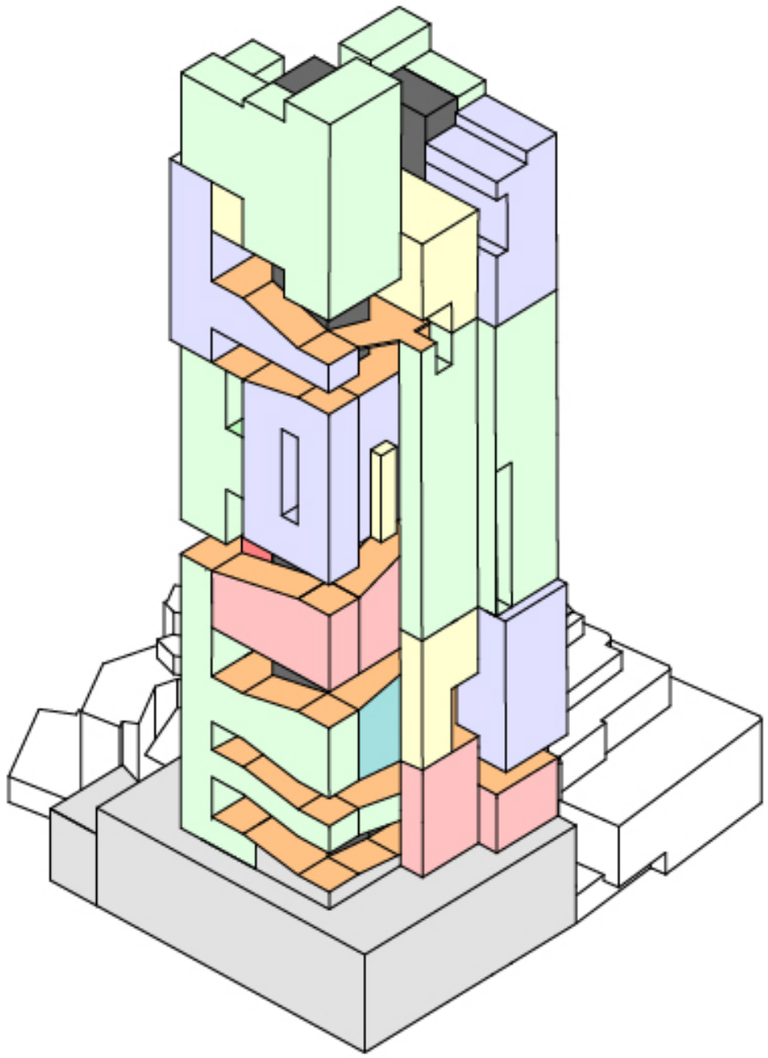
Phase 2:
Circulation



Phase 3:
Clustering



Phase 4:
Transform



Circulation

Media Center

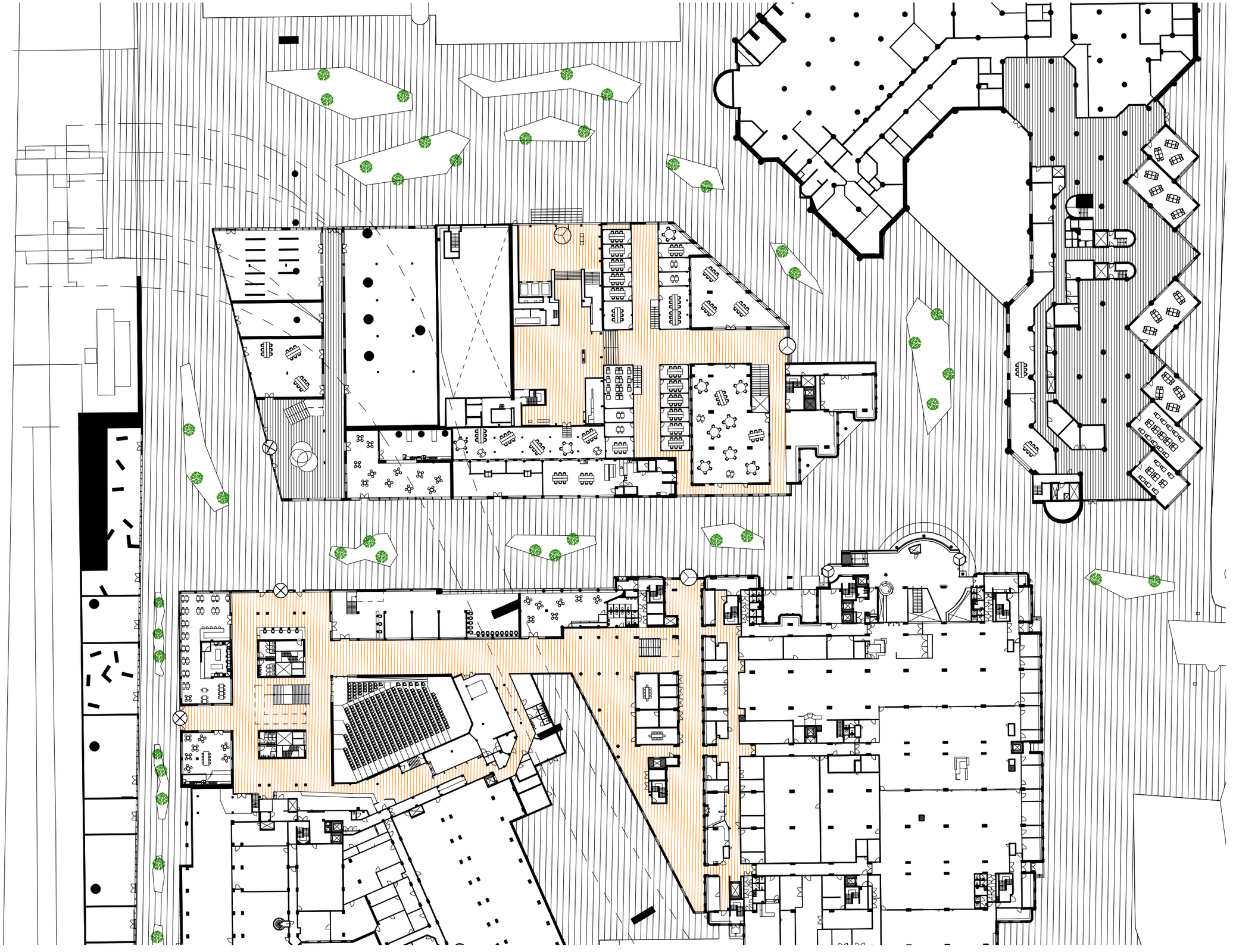
Life Long Learning: Silent

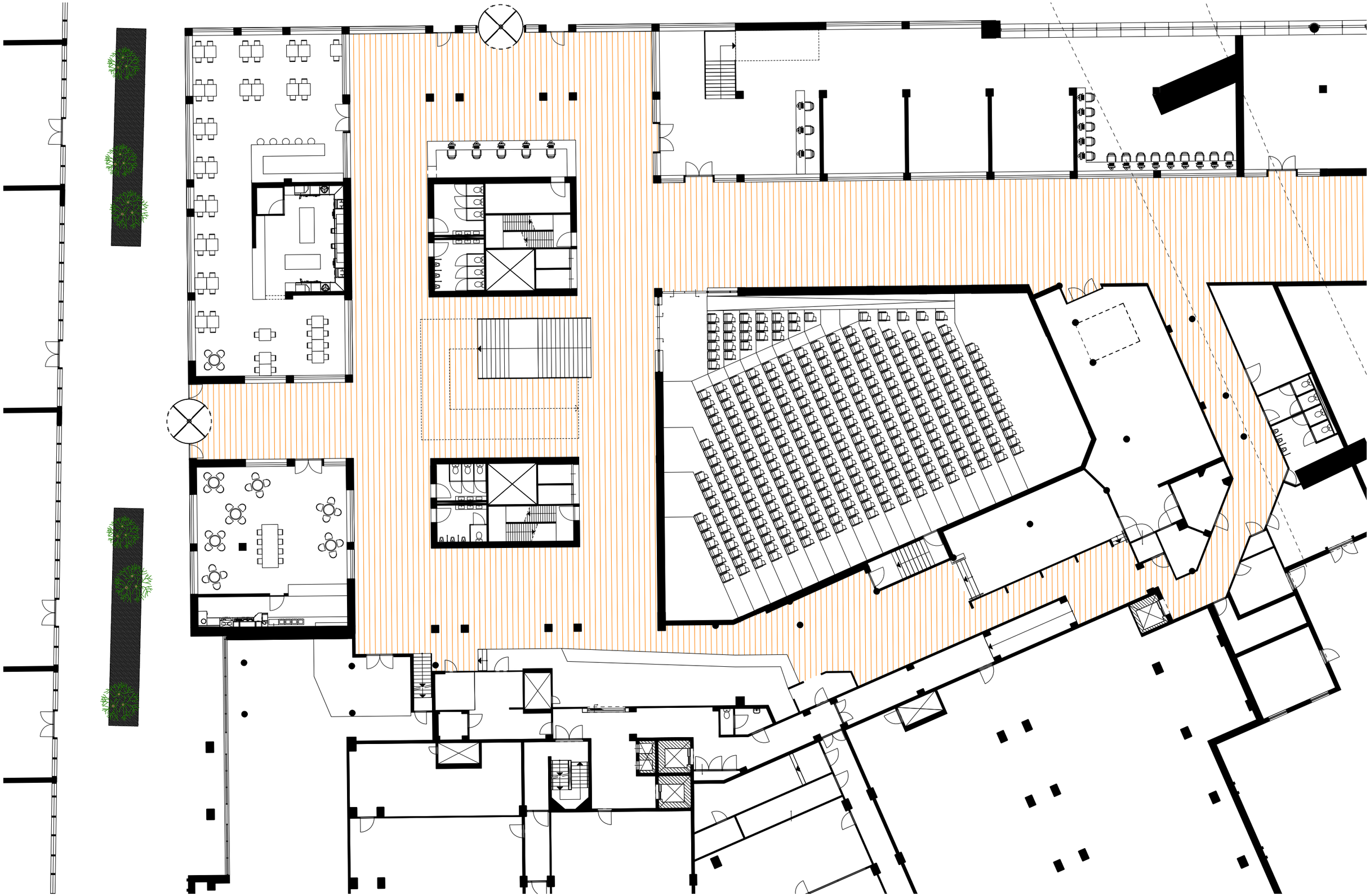
Life Long Learning: Social

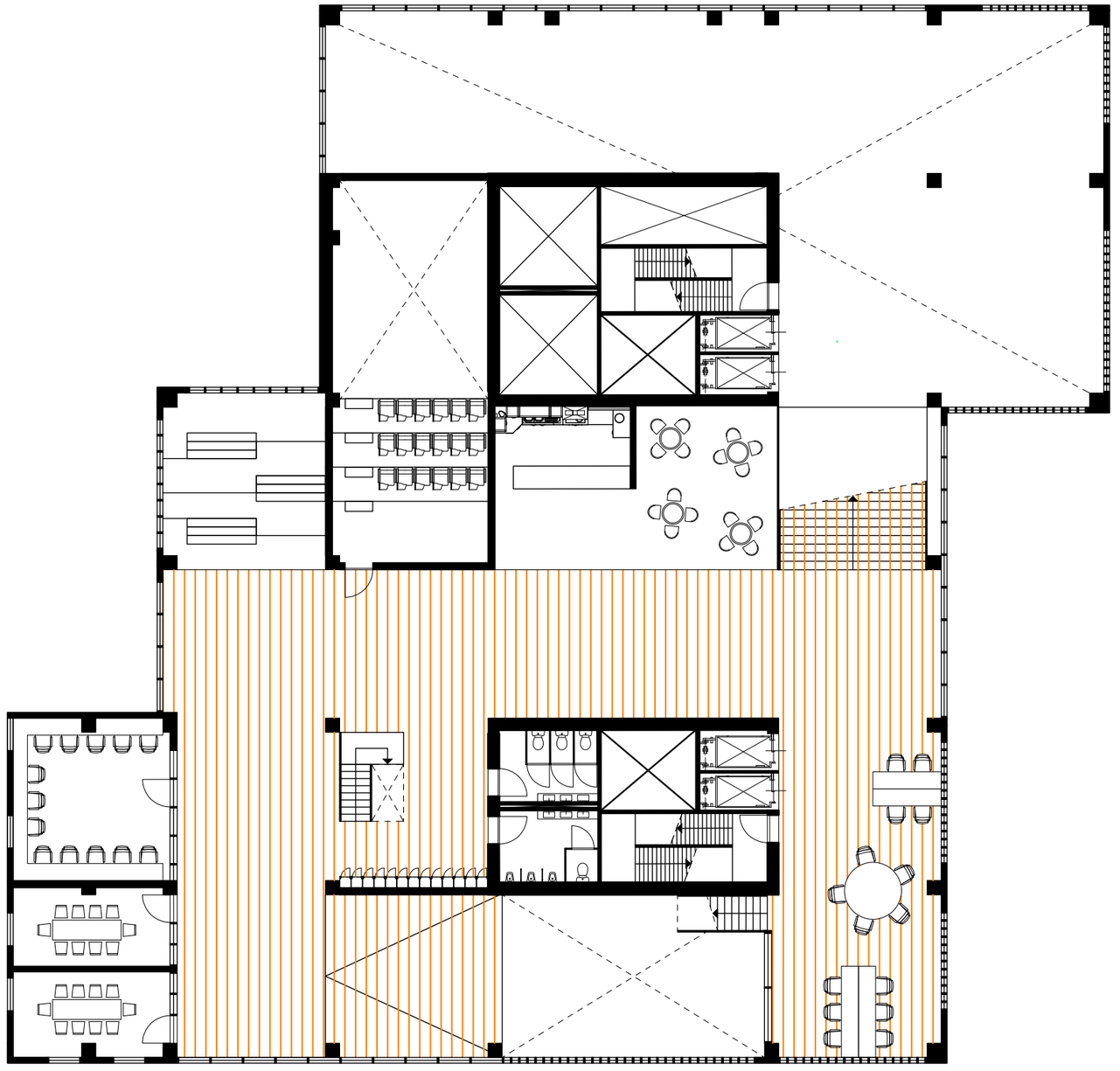
Social Space

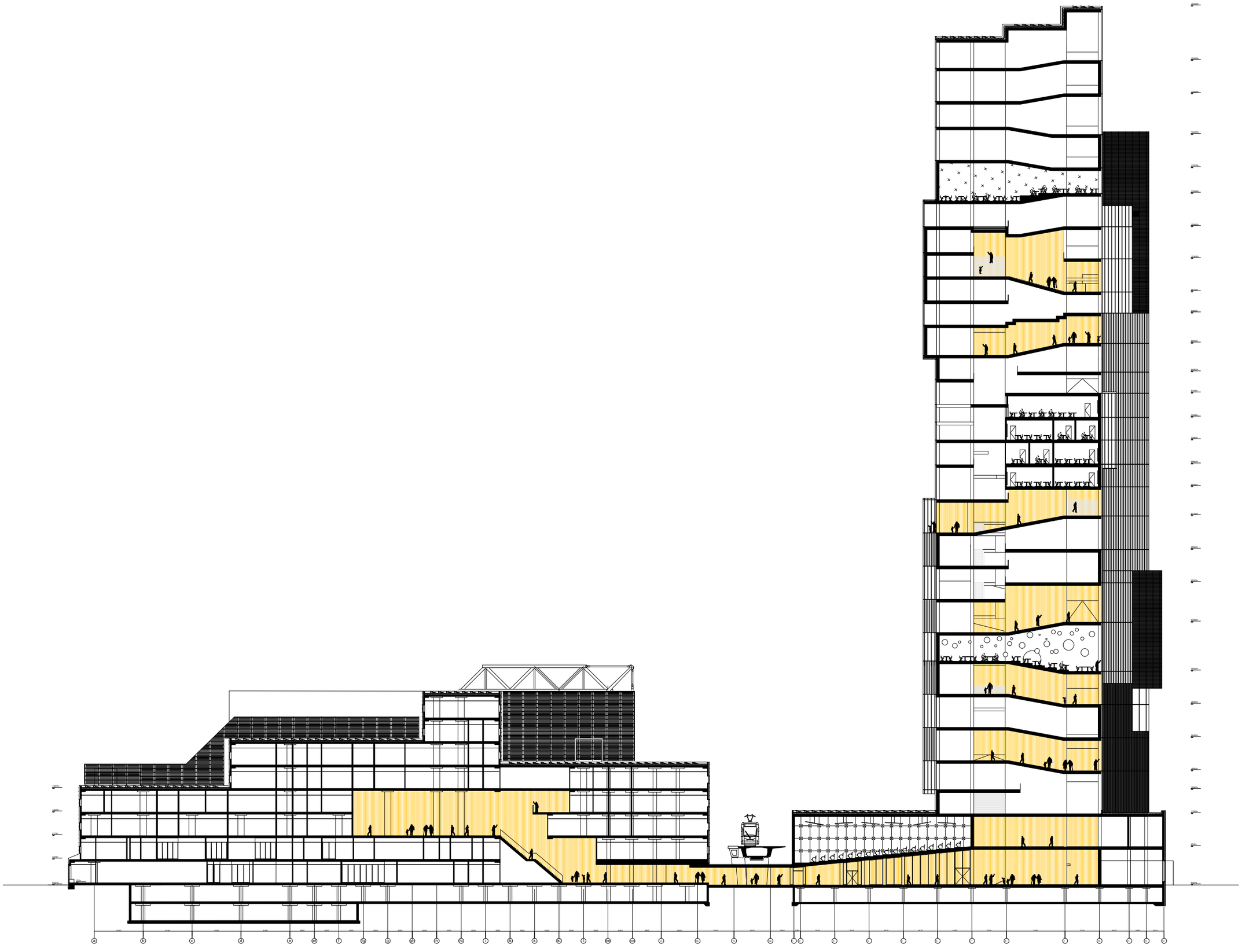
Lecture Hall

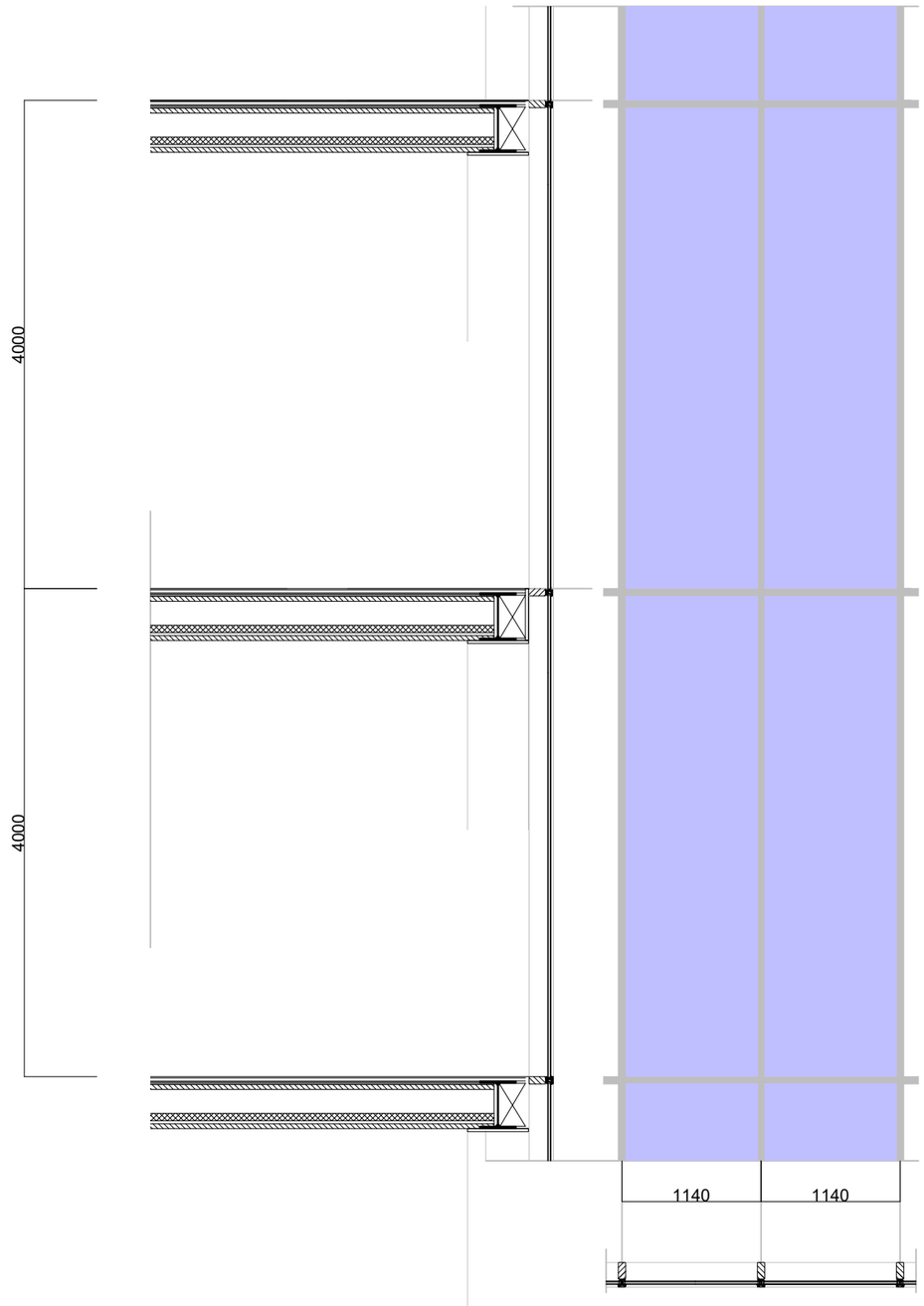
Phase 5: Program







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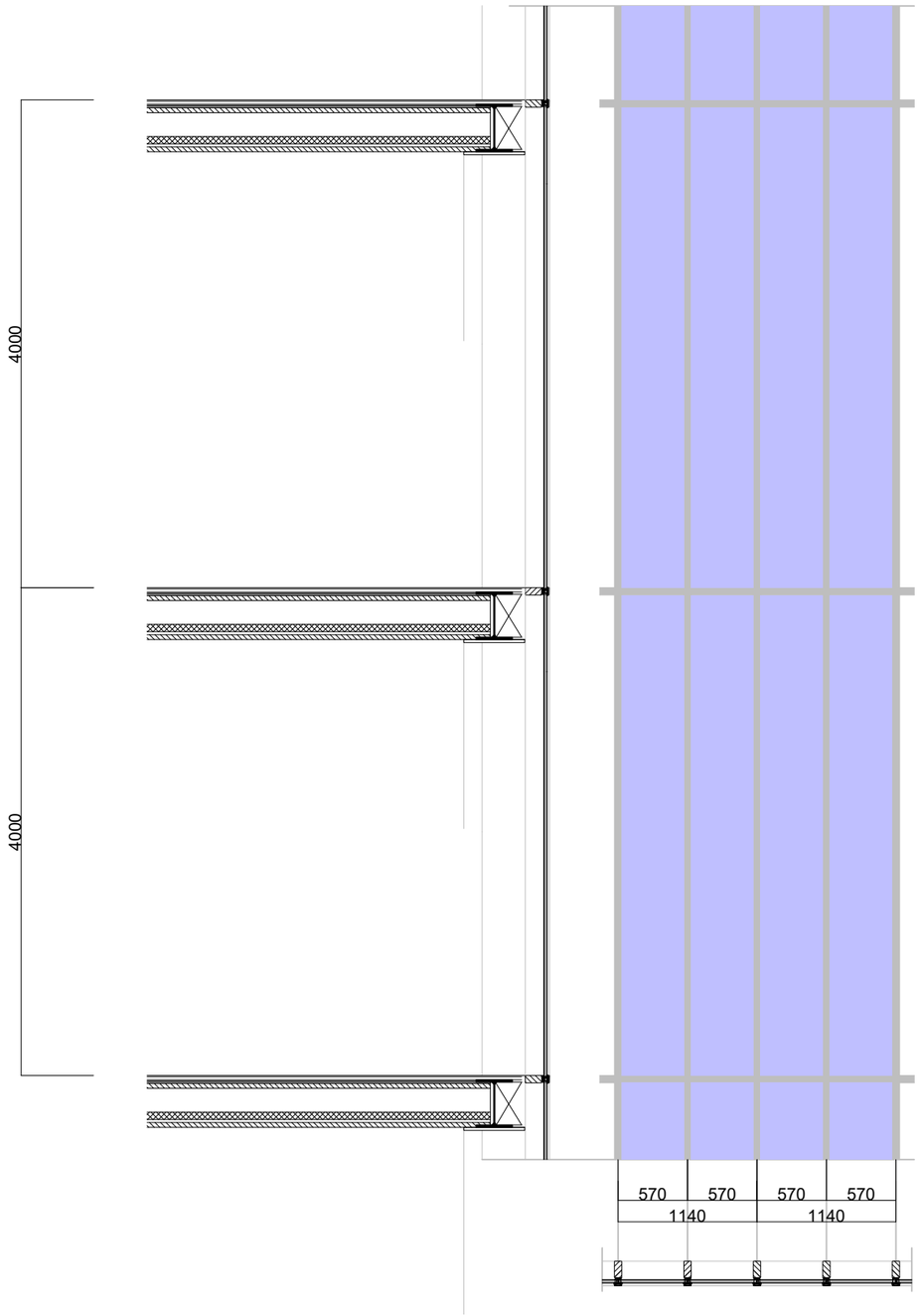
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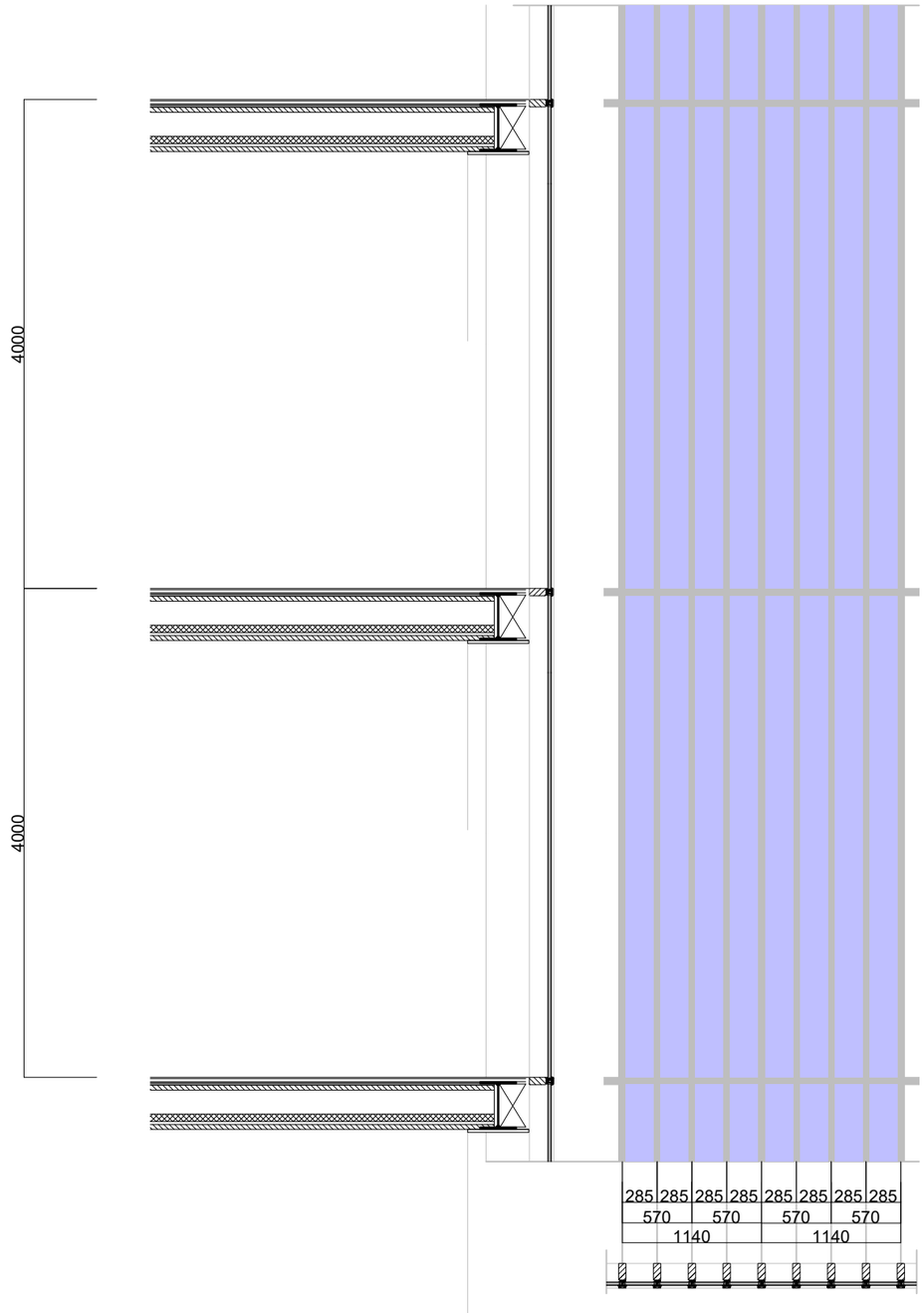
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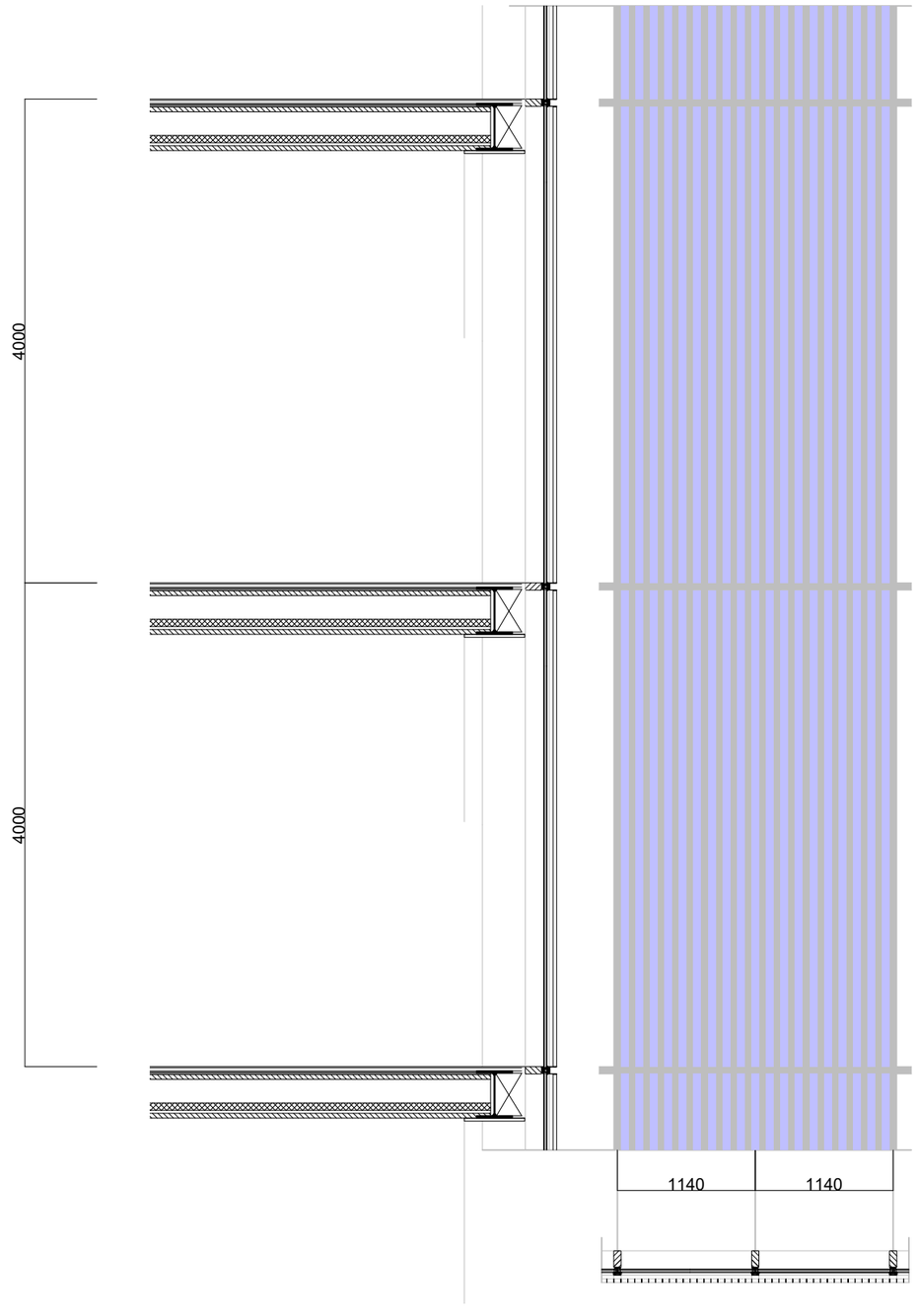
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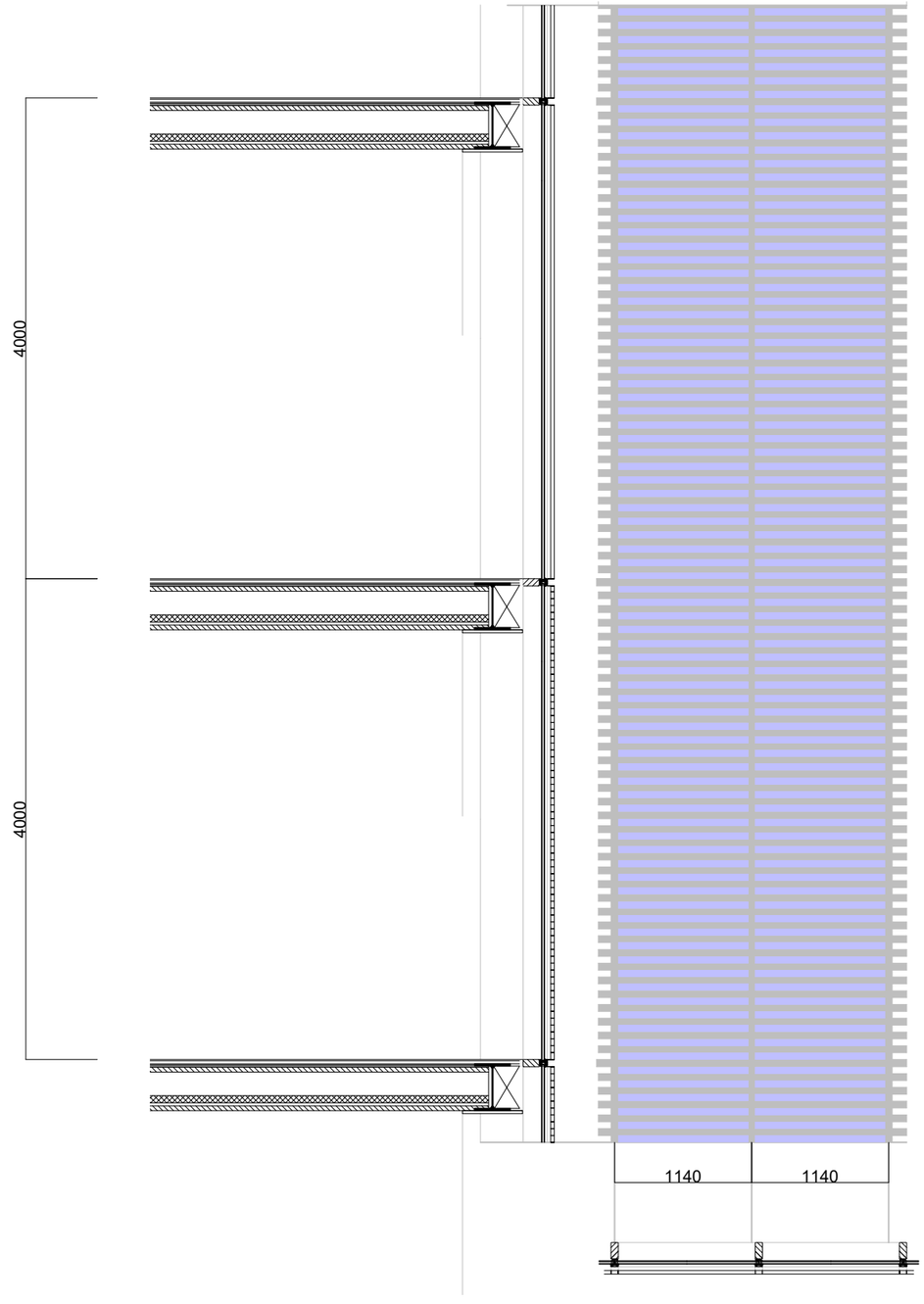
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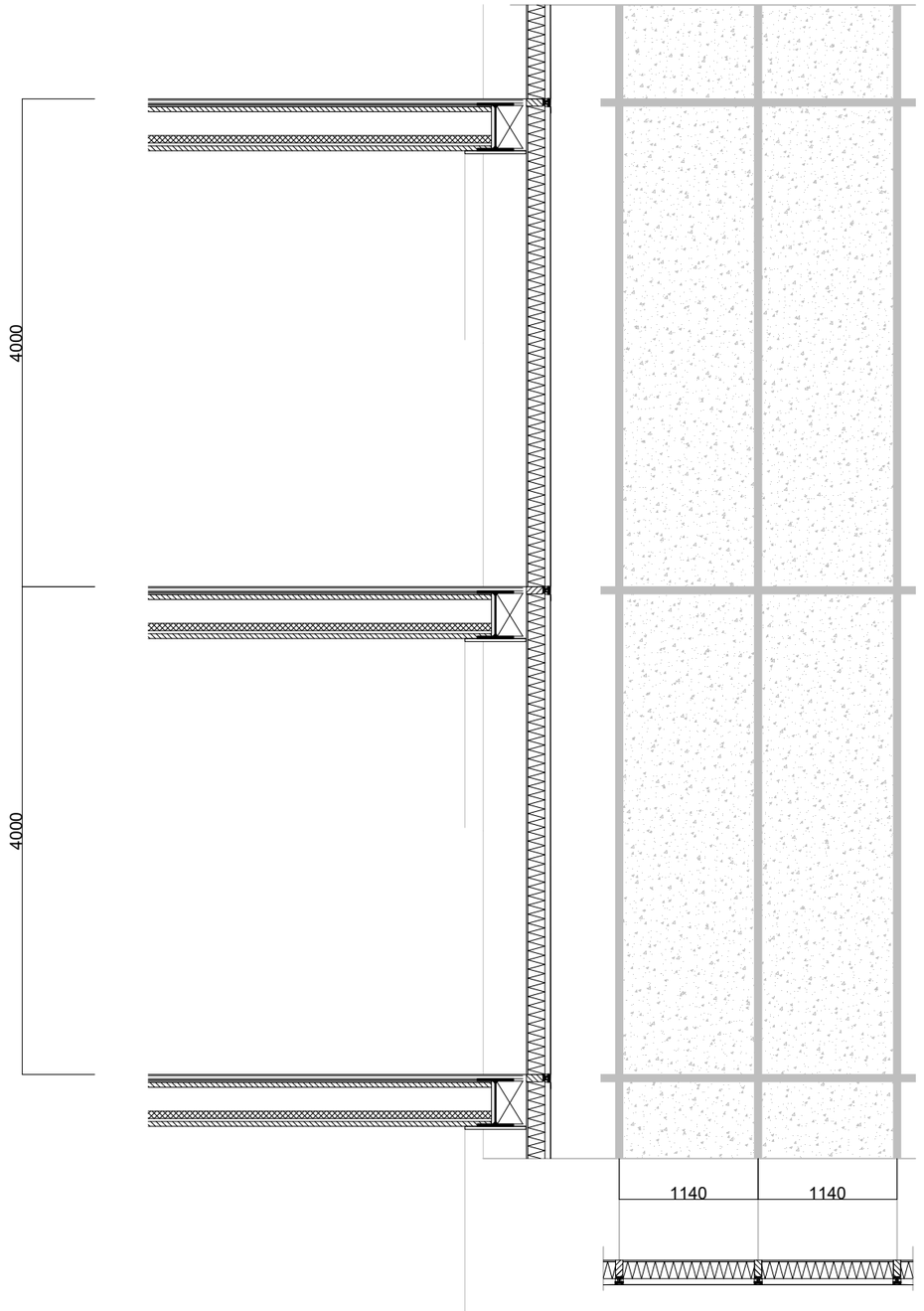
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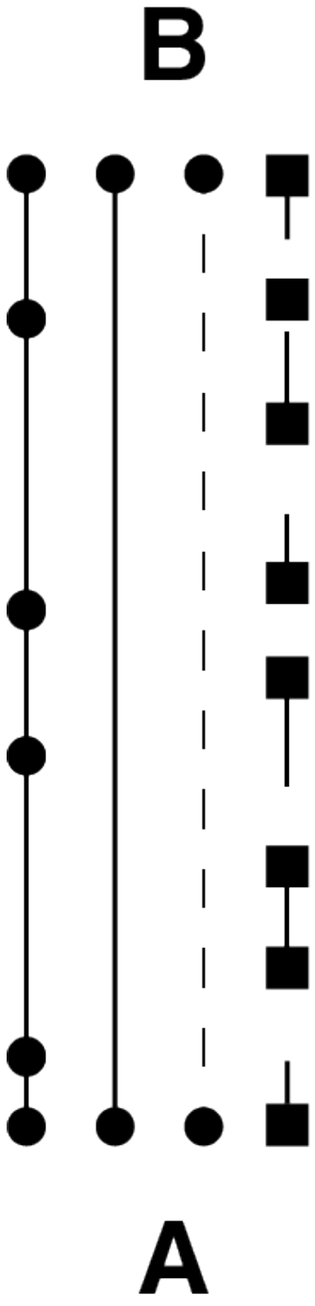
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A






ant & Bar



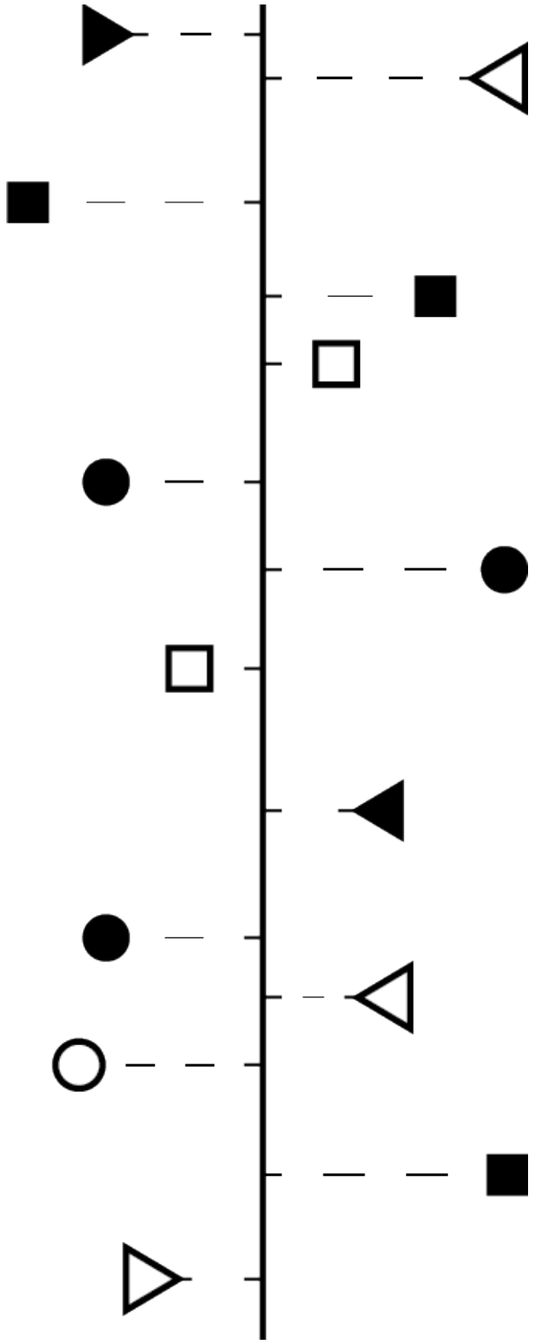



Lezen

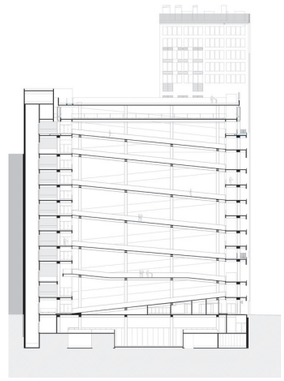


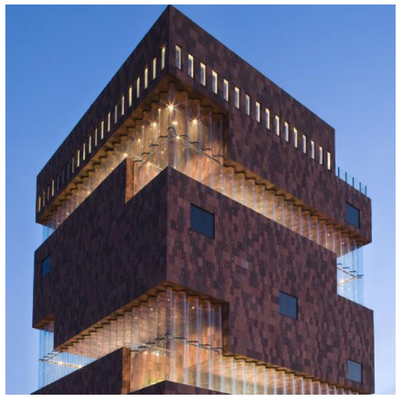


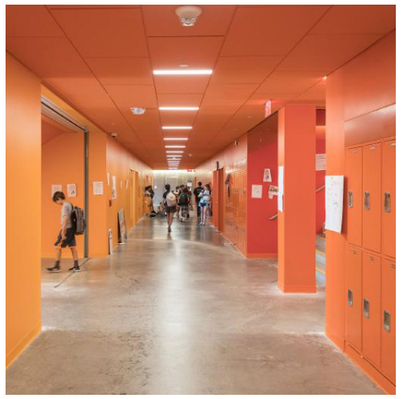

Bibliotheek
Welkom
Fietsenkelder
Restaurant & Bar

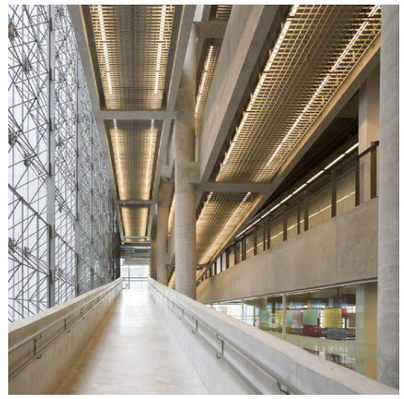


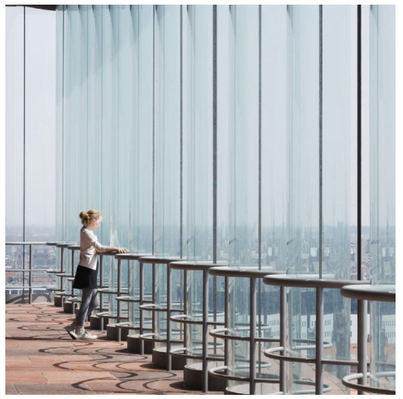




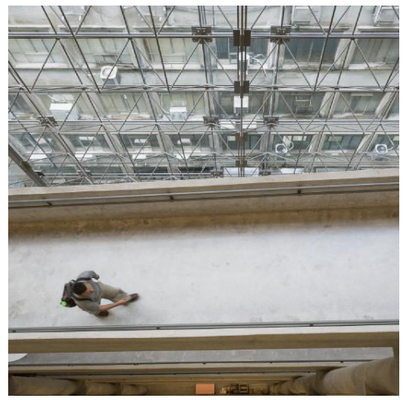


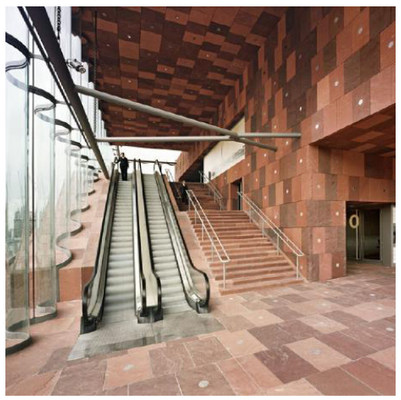


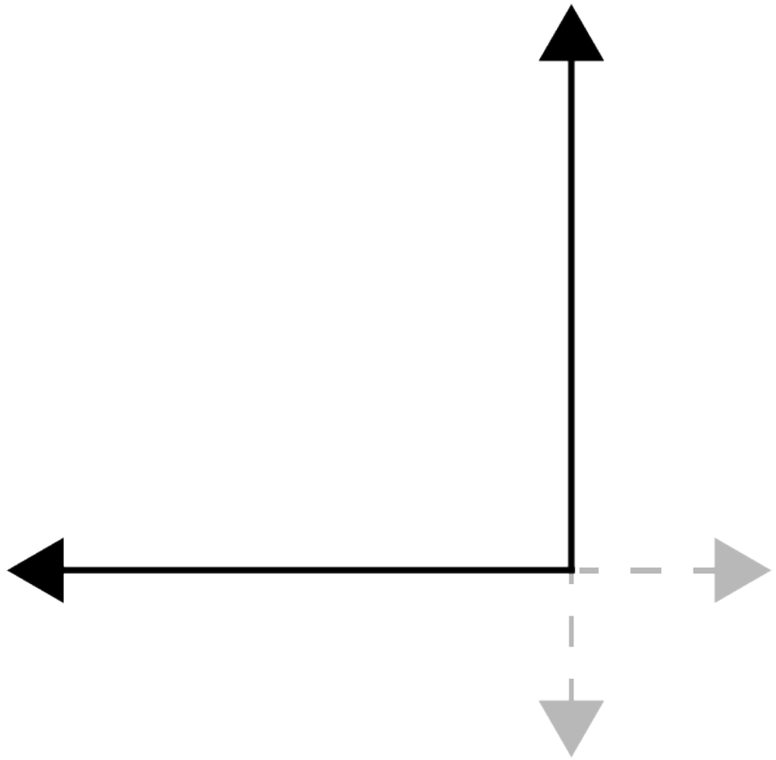


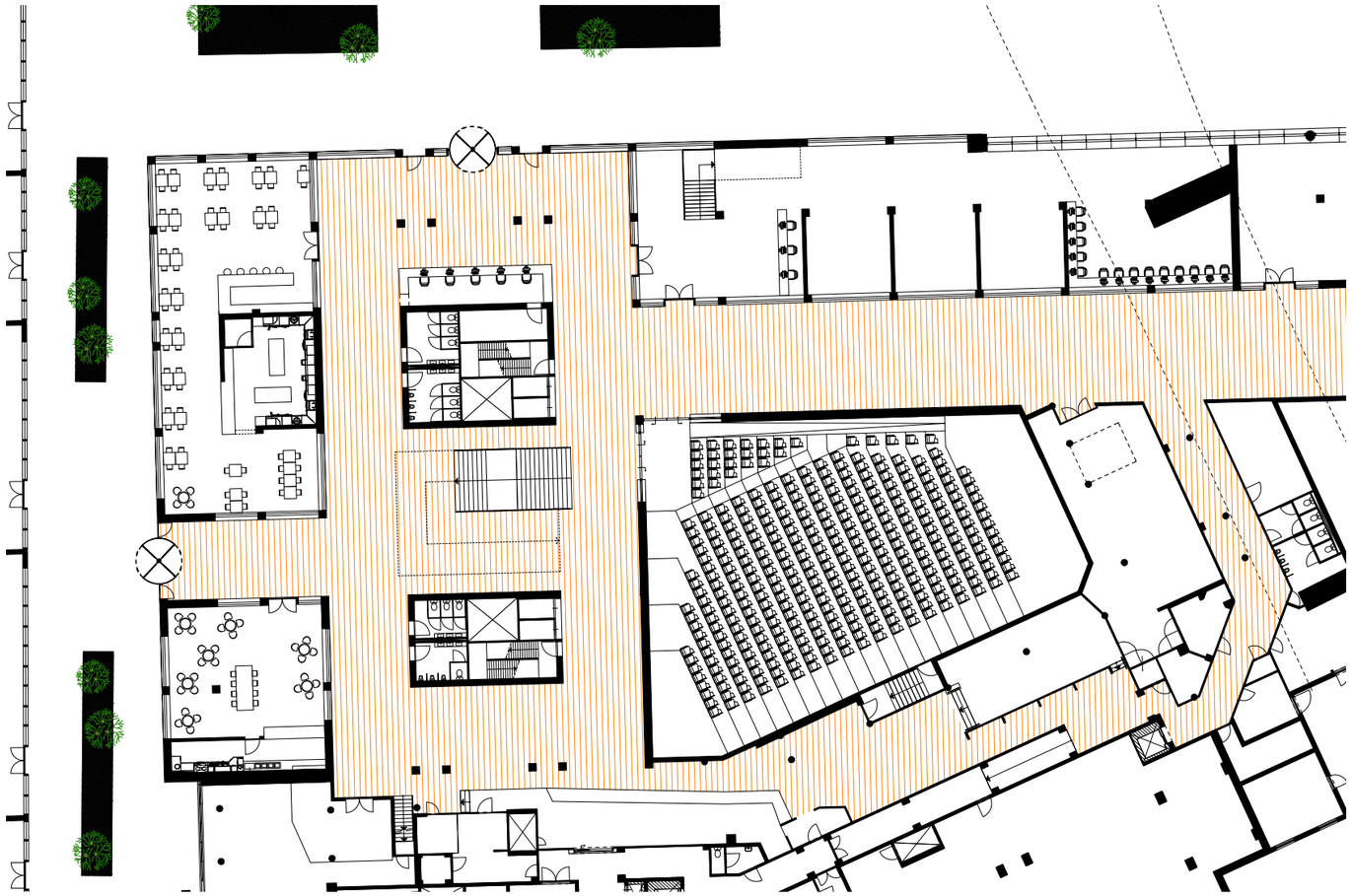


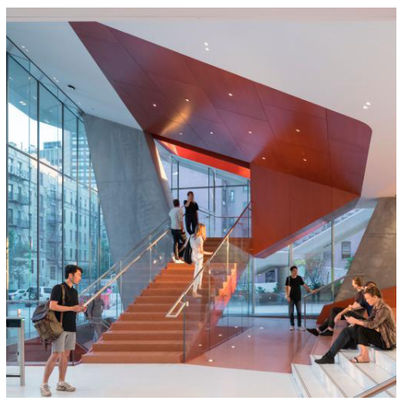


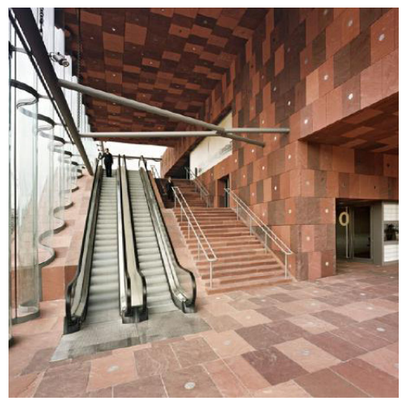


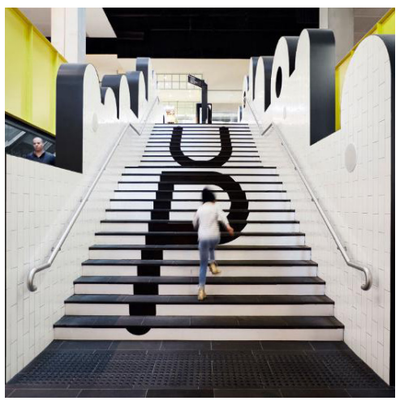


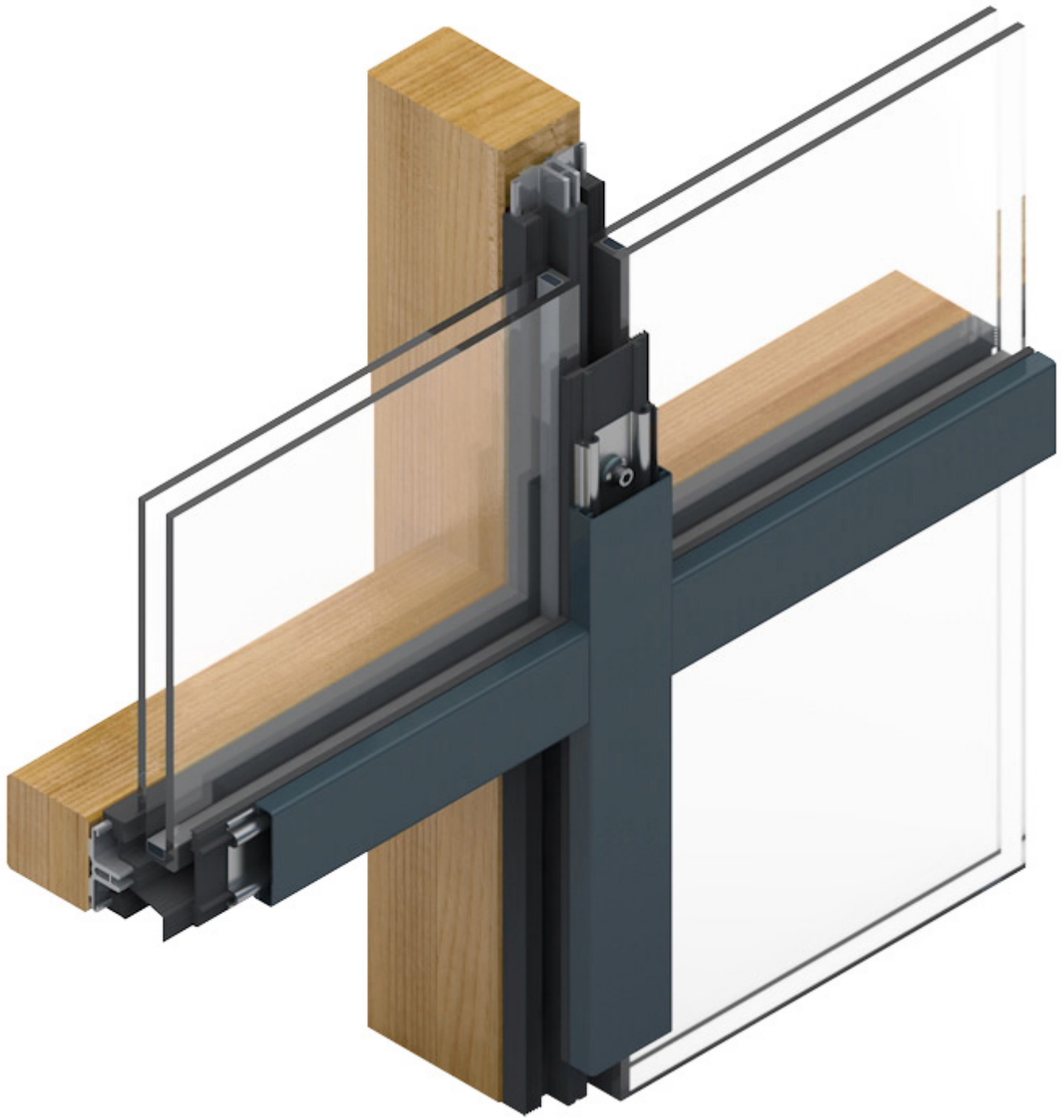


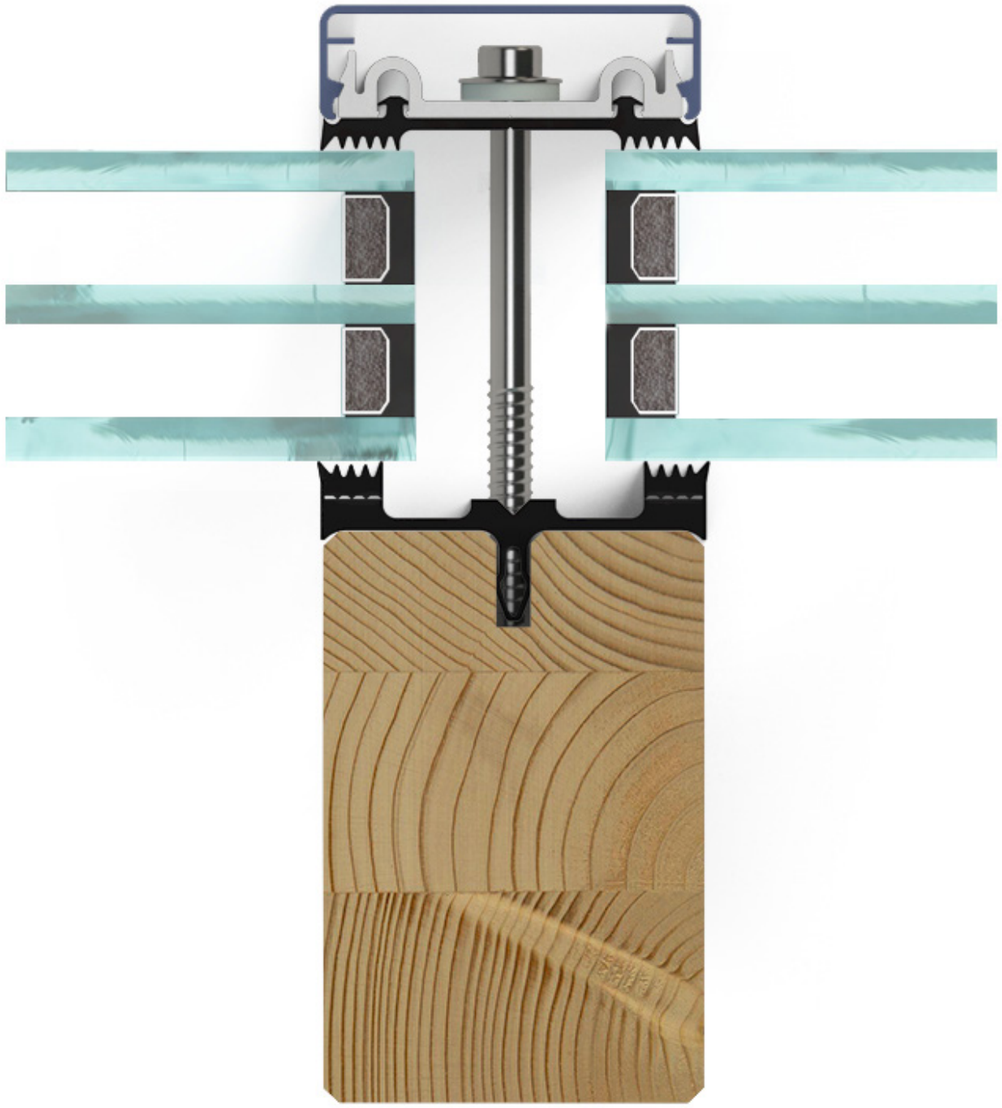


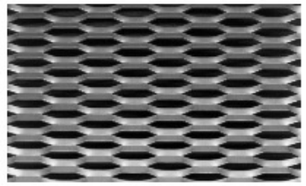








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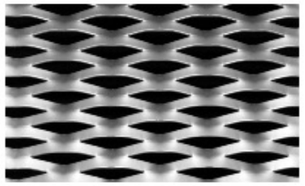
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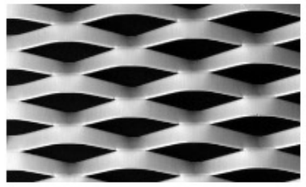
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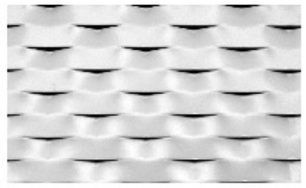
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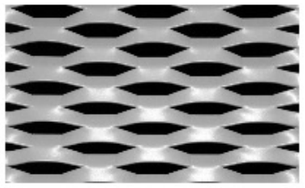
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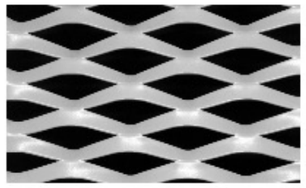
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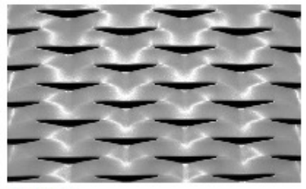
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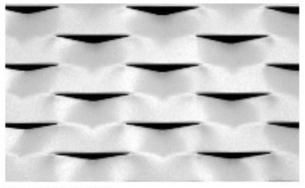
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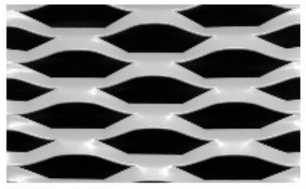
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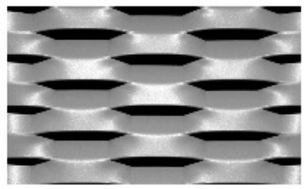
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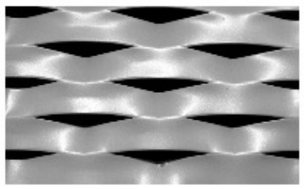
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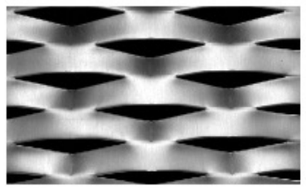
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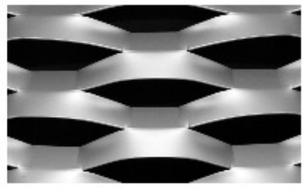
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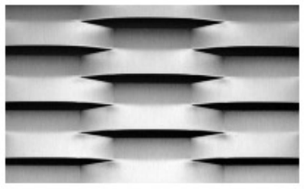
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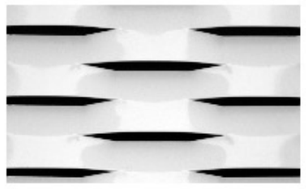
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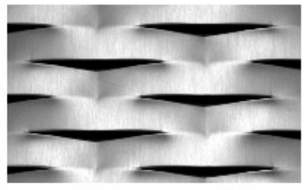
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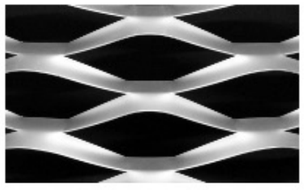
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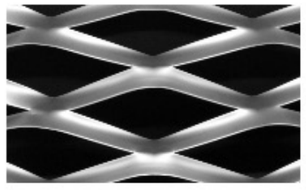
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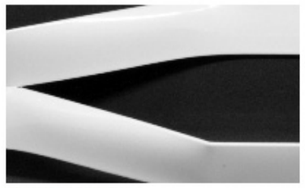
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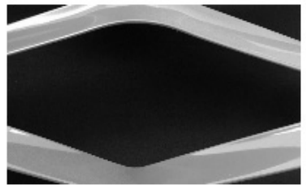
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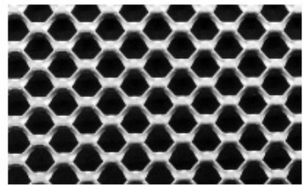
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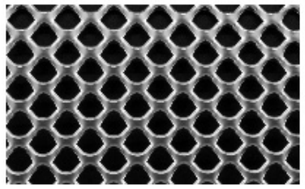
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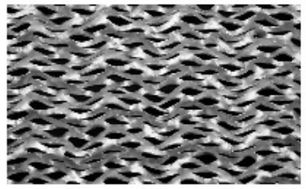
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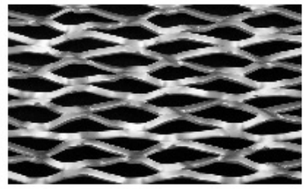
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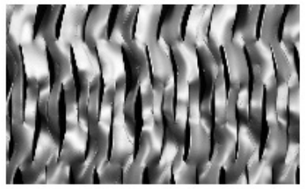
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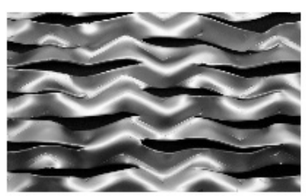
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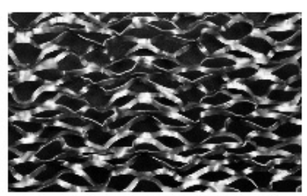
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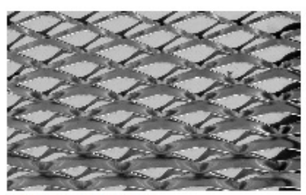
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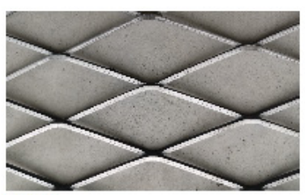
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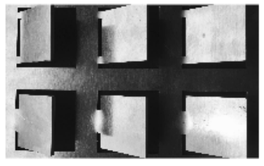
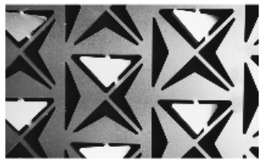
Patroon 1 - Eenvoud
Figuur met gelijke vorm en richting

Type 1 bestaat uit panelen die zijn gestanst met één type figuur. De stans kan in elke willekeurige vorm worden uitgevoerd. De vormen die door het stansen ontstaan, worden in een vaste zettingshoek omgezet.


MD FO110

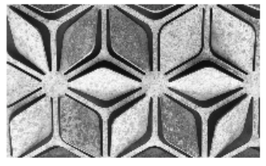

MD FO111

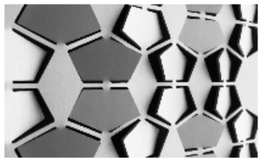

MD FO112


EIGEN ONTWERP

Patroon 2 - Gaaf
Figuur met gelijke vorm en verschillende richtingen

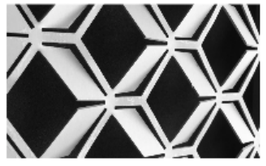
Bij type 2 wordt een enkel figuur gebruikt, die uit te voeren is in elke gewenste vorm. De vormen kunnen in meerdere zettingshoeken worden gebogen. Deze uitvoering voorziet in de mogelijkheid om het binnenklimaat te beheersen door wind af te remmen en de toetreding van zonlicht te beheersen.


MD FO210


MD FO211

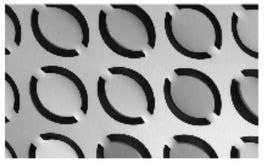

MD FO212

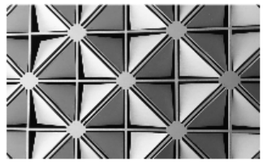

MD FO213

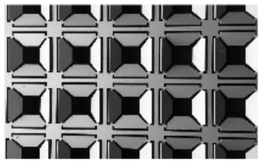

MD FO214

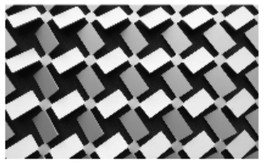

MD FO215


MD FO216


MD FO217

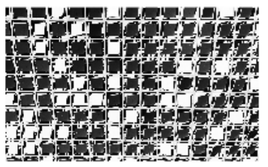

MD FO218

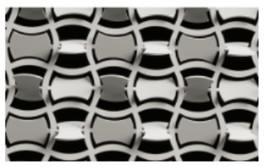

MD FO219


MD FO220


MD FO221


MD FO222

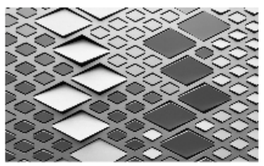

MD FO223

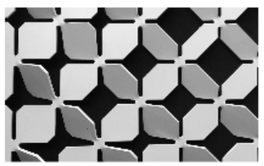

MD FO224

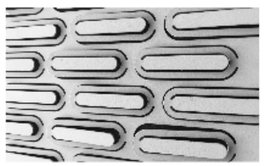

EIGEN ONTWERP

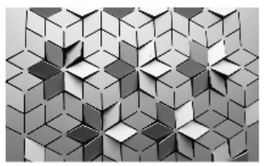
Patroon 3 - Vindingrijk
Figuur met verschillende vormen en richtingen

Bij type 3 wordt met meerdere figuren een verscheidenheid aan vormen in het materiaal gestanst. Door vervolgens met de zettingshoek van de losse delen te spelen, ontstaat een gevel met een uniek karakter. Door in de zettingshoek rekening te houden met de stand van de zon ten opzichte van de gevel, kan deze uitvoering ook fungeren als verticale zonwering. Op de geveldelen waar de windbelasting groot is, kunnen de losse delen worden omgezet om wind af te remmen.

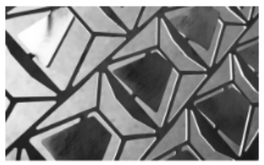

MD FO310


MD FO311


MD FO312

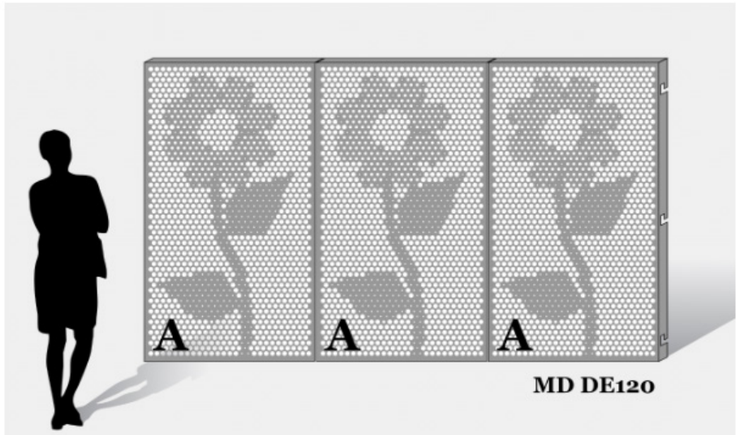

MD FO314


MD FO315

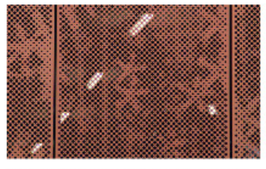

MD FO316


EIGEN ONTWERP

MD DE120 - repeterend motief

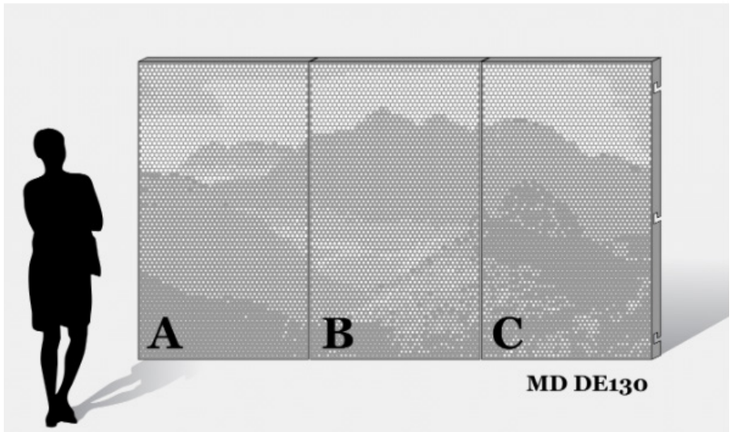


MD DE120 op een gevel geeft met een of meerdere repeterende afbeeldingen een unieke uitstraling. Iedere gewenste afbeelding kan worden omgezet in een perforatiepatroon. Met een figuur, beeldmerk, of een fragment daarvan dat over de gehele gevel wordt herhaald, krijgt het gebouw een unieke identiteit.

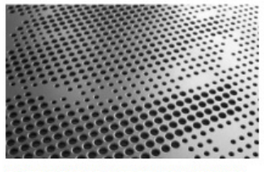

PATROON PROJECT DIAKONES...


PATROON CITY GARDEN AMSE...

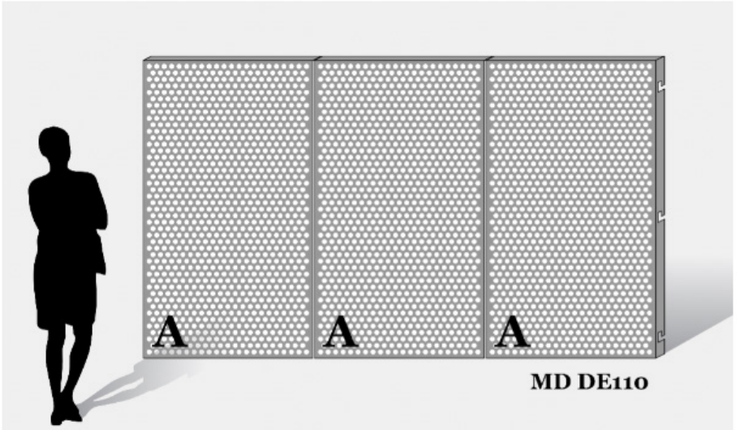
MD DE130 - patroon, foto of figuur over de gehele gevel



Er ontstaat een spannend en uitdagend beeld wanneer een enkele afbeelding met MD DE130 in zijn geheel op het totale beschikbare oppervlakte wordt weergegeven. Met een MD Resto principe worden de panelen, die allemaal uniek zijn, naadloos aan een hulpconstructie bevestigd. Zo maakt jouw gebouw een statement.

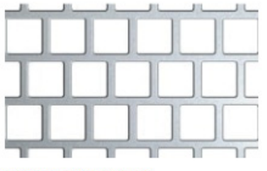

PATROON PROJECT OLD TOWN...

MD DE110 - standaard perforatie patroon



Een aaneenschakeling van dezelfde vormen: dat is MD DE110. Kies je voor rond, vierkant, langwerpig of lijnvormig? De grootte van de perforatie bepaalt daarbij de openheid van de panelen. Welke optie je ook kiest, door de kostenefficiënte productie is MD DE110 een economisch interessante optie. Dit type geperforeerde plaat wordt ook vaak toegepast in de interieurarchitectuur, onder andere voor de afwerking van akoestische panelen.


RONDE GATEN

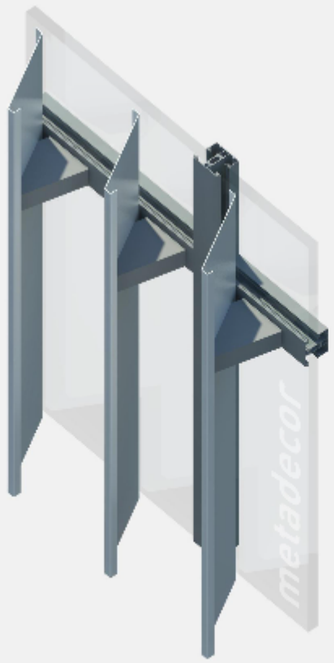

VIERKANTE GATEN


VIERKANTE STEEK

Projecten met MD Lamel

Horizontaal of verticaal? Met die keuzes lijkt MD Lamel een simpel product, maar vergis je niet. Naast de keuze uit verschillende types, biedt de manier van bevestigen ook nog een heel scala aan mogelijkheden. Het resultaat mag er zijn: een gebouw dat er goed uitziet en bovendien ook kan voldoen aan verschillende brandveiligheids- en ventilatievoorschriften.

Bekijk onze projecten

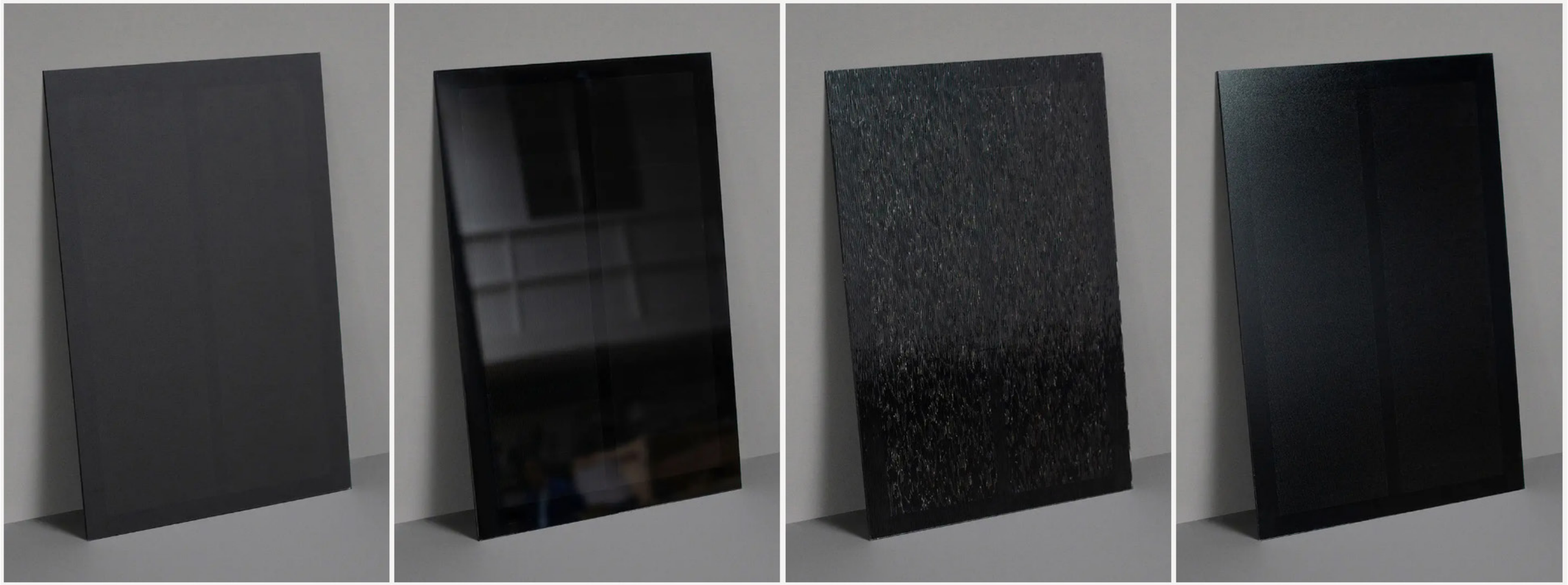


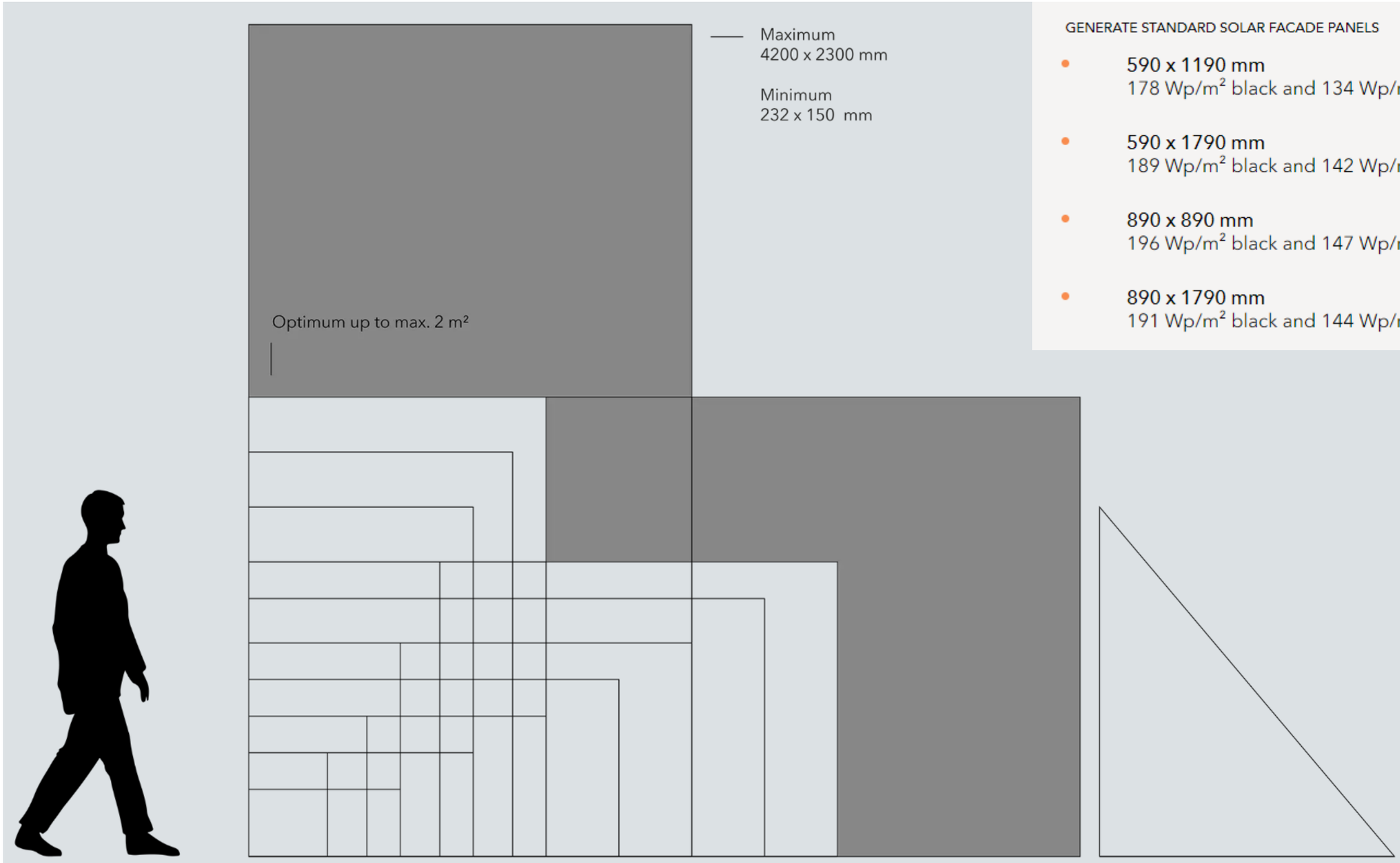
New Item 1

Bevestigings-systemen

Bij de keuze voor een bevestigingssysteem vormen vormgeving, functionaliteit en het beschikbare budget het kader. Onze engineers beschikken over een schat aan ervaring. De bibliotheek van bevestigingssystemen waar we voor de realisatie van projecten uit kunnen putten is daar het resultaat van.

Kies een bevestiging

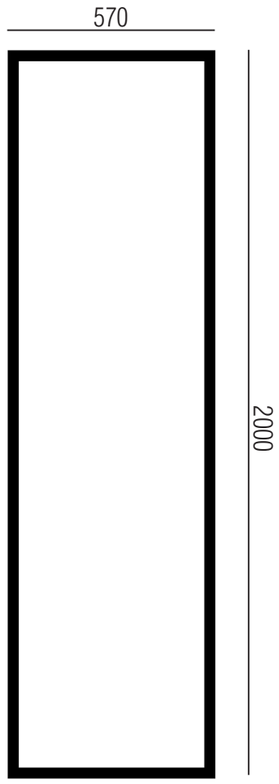




GENERATE STANDARD SOLAR FACADE PANELS

- **590 x 1190 mm**
  178 Wp/m² black and 134 Wp/m² average in colour.
- **590 x 1790 mm**
  189 Wp/m² black and 142 Wp/m² average in colour.
- **890 x 890 mm**
  196 Wp/m² black and 147 Wp/m² average in colour.
- **890 x 1790 mm**
  191 Wp/m² black and 144 Wp/m² average in colour.

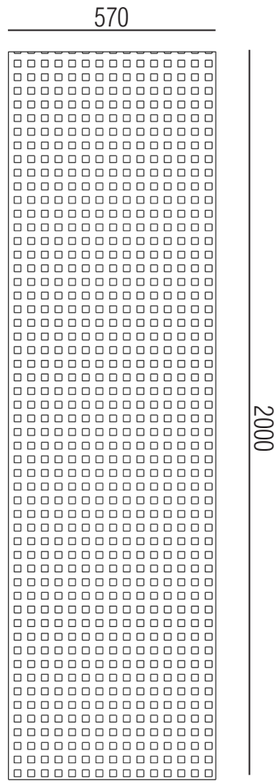
Transparent



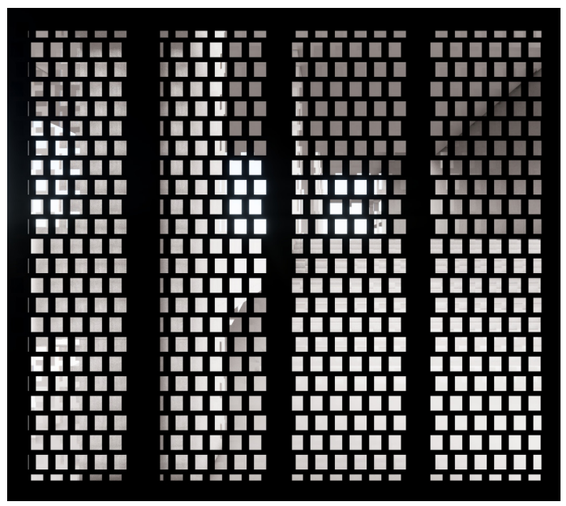
Public | Unique | Eye Catching Moments



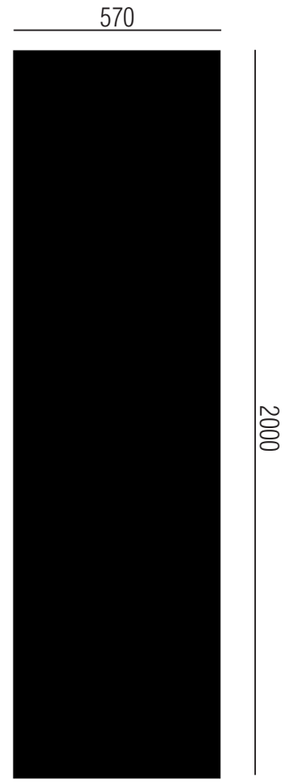
Semi-Transparent



Semi-Public | Educational | Cultural



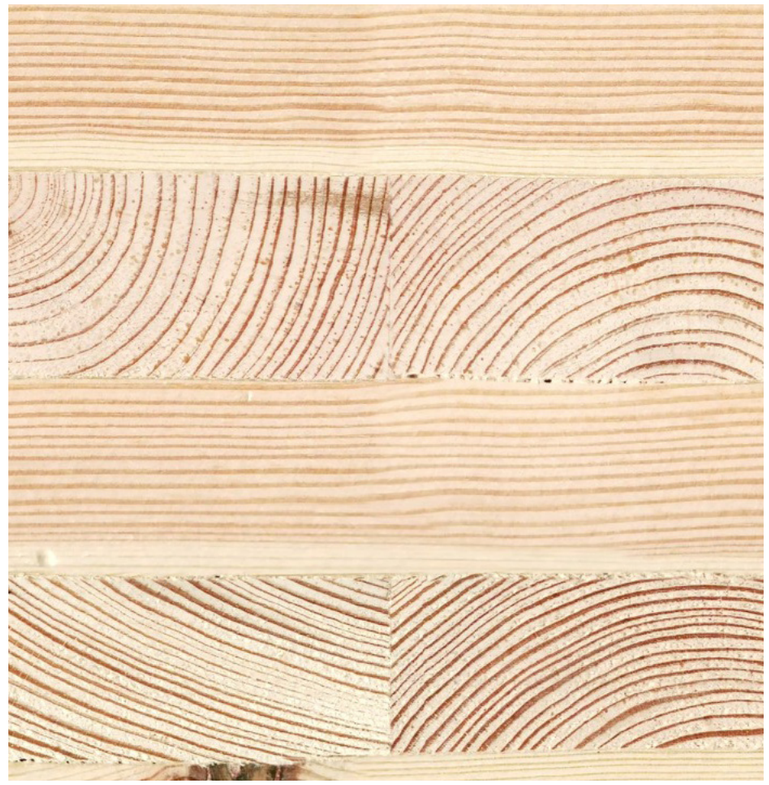
Opaque



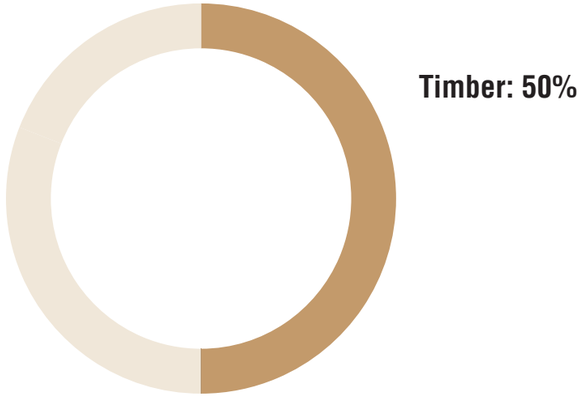
Non-Public | Technical | Event Space | Art Gallery



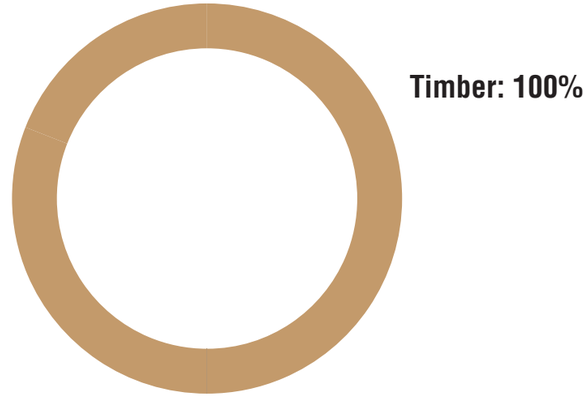




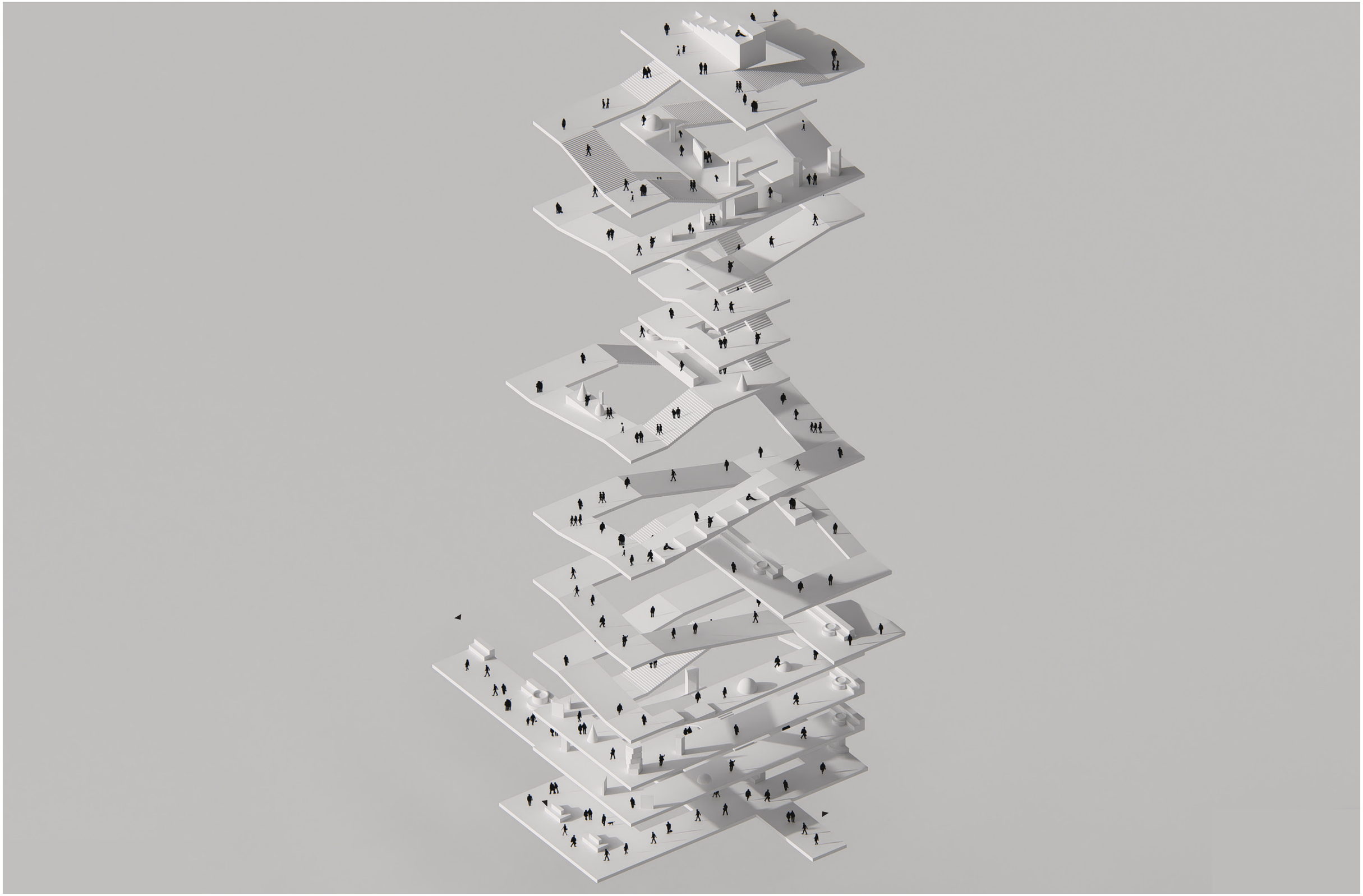
Lignatur Floor

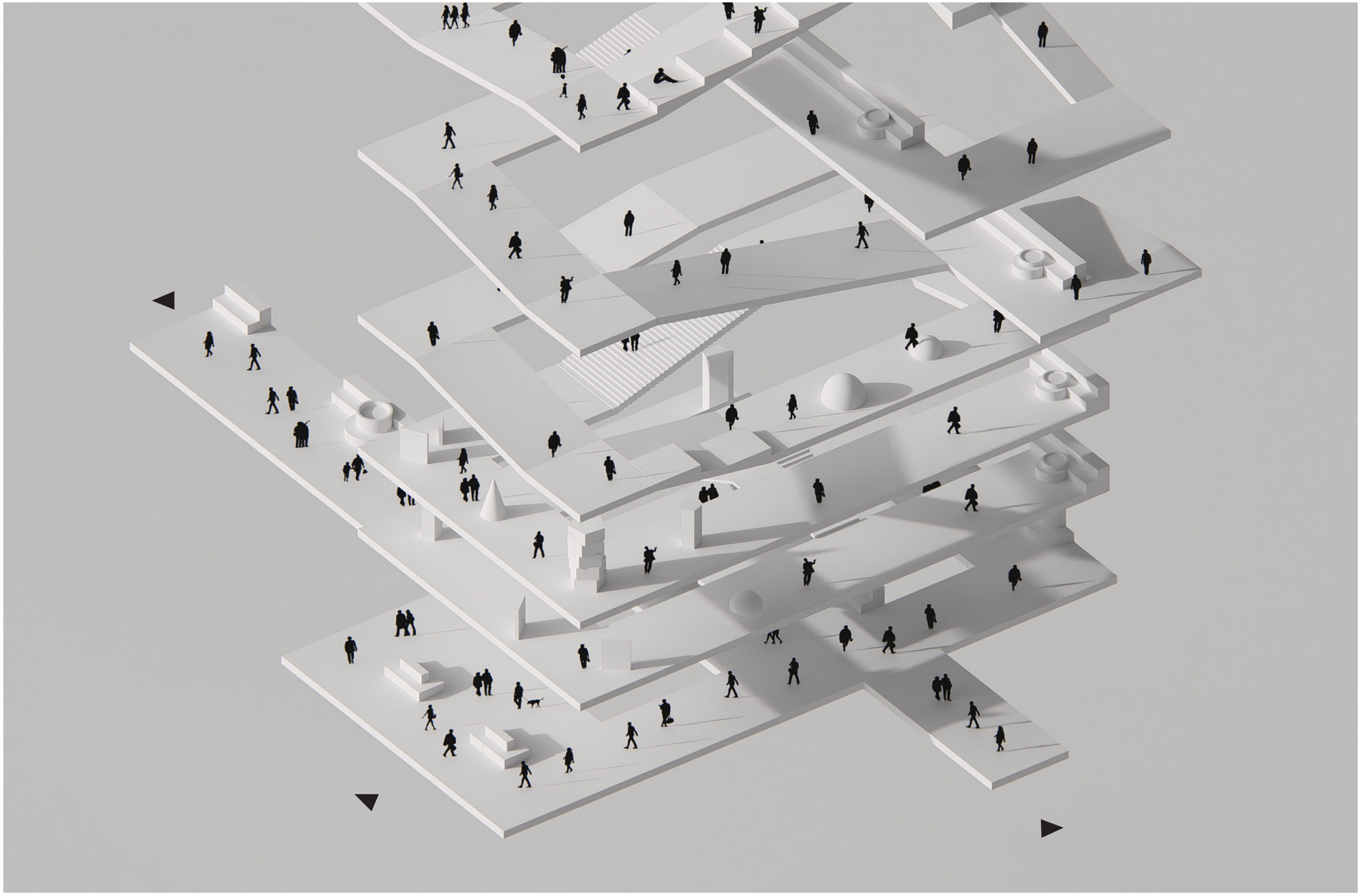


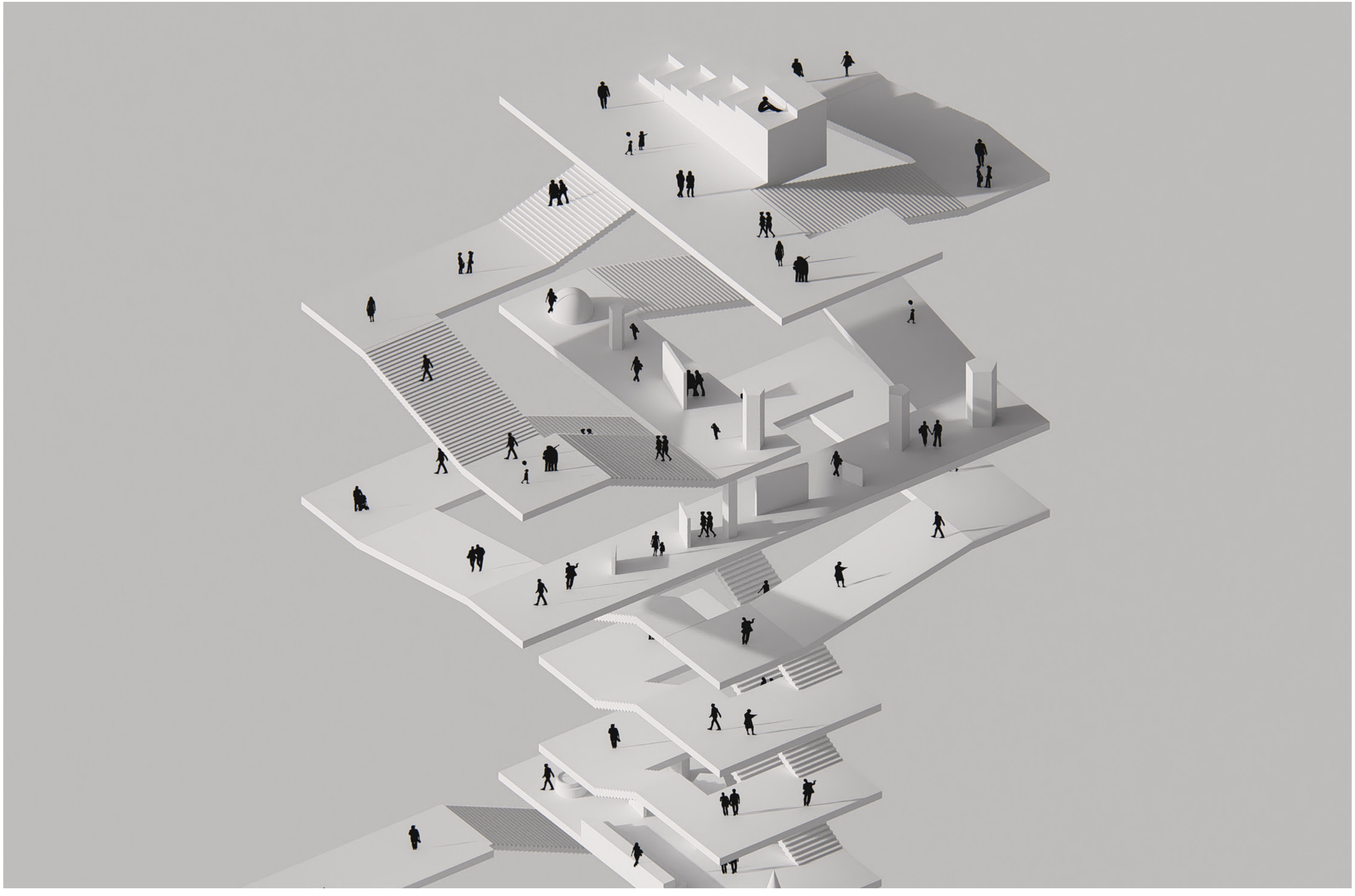
CLT Floor

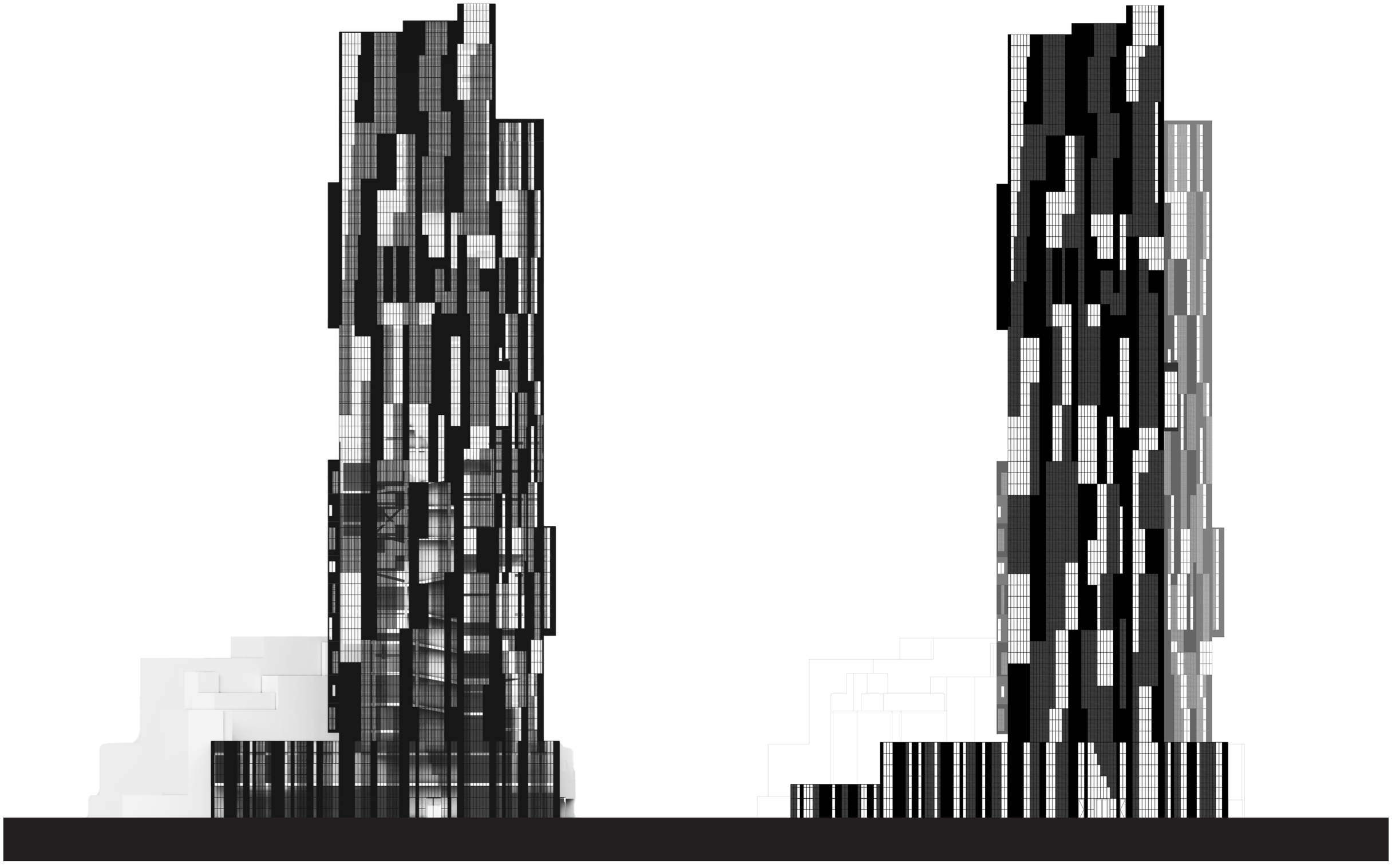


H. Integrated Design Proposal until P4





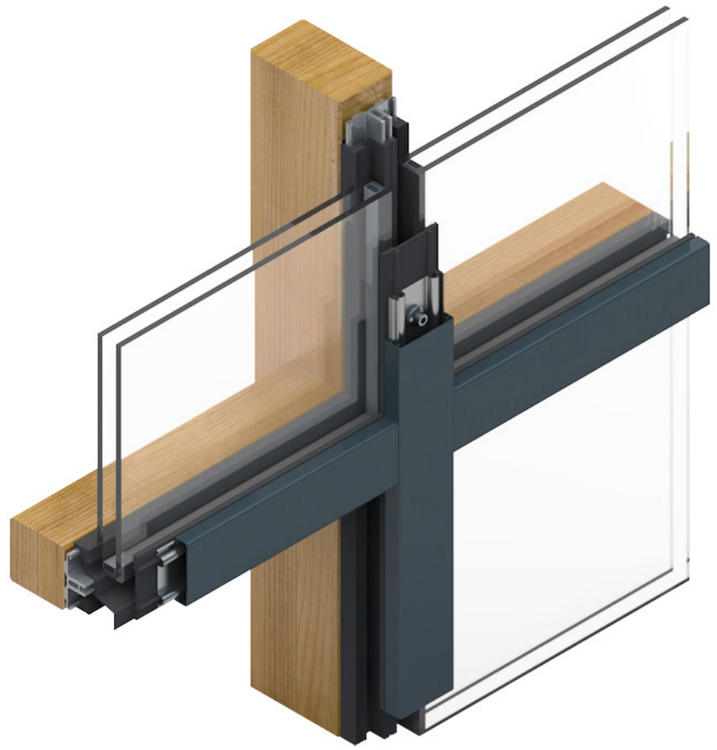






Public | Unique | Eye Catching Moments

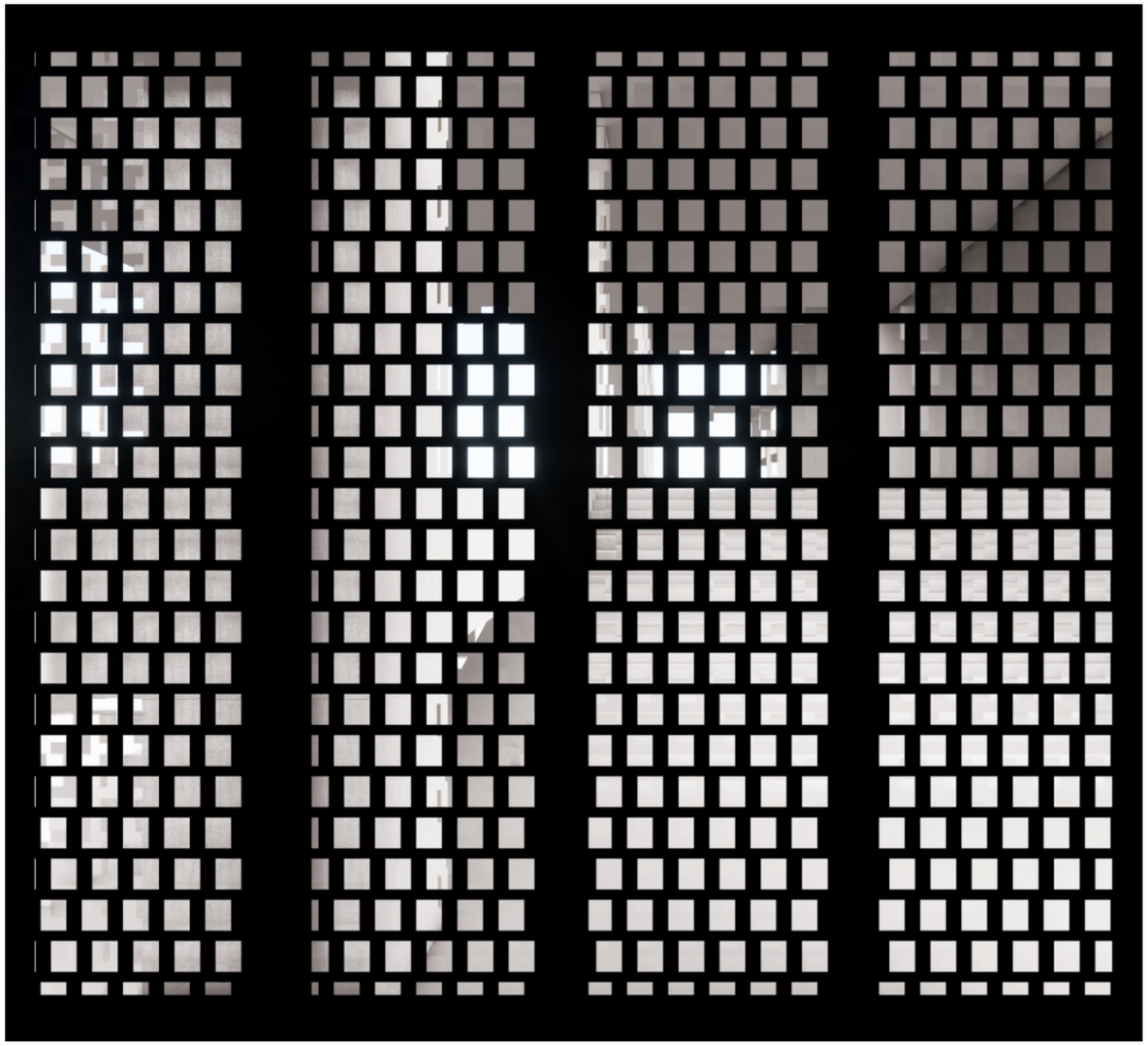
Connection with Urban Context
Quality of Space
Showcase Publicness

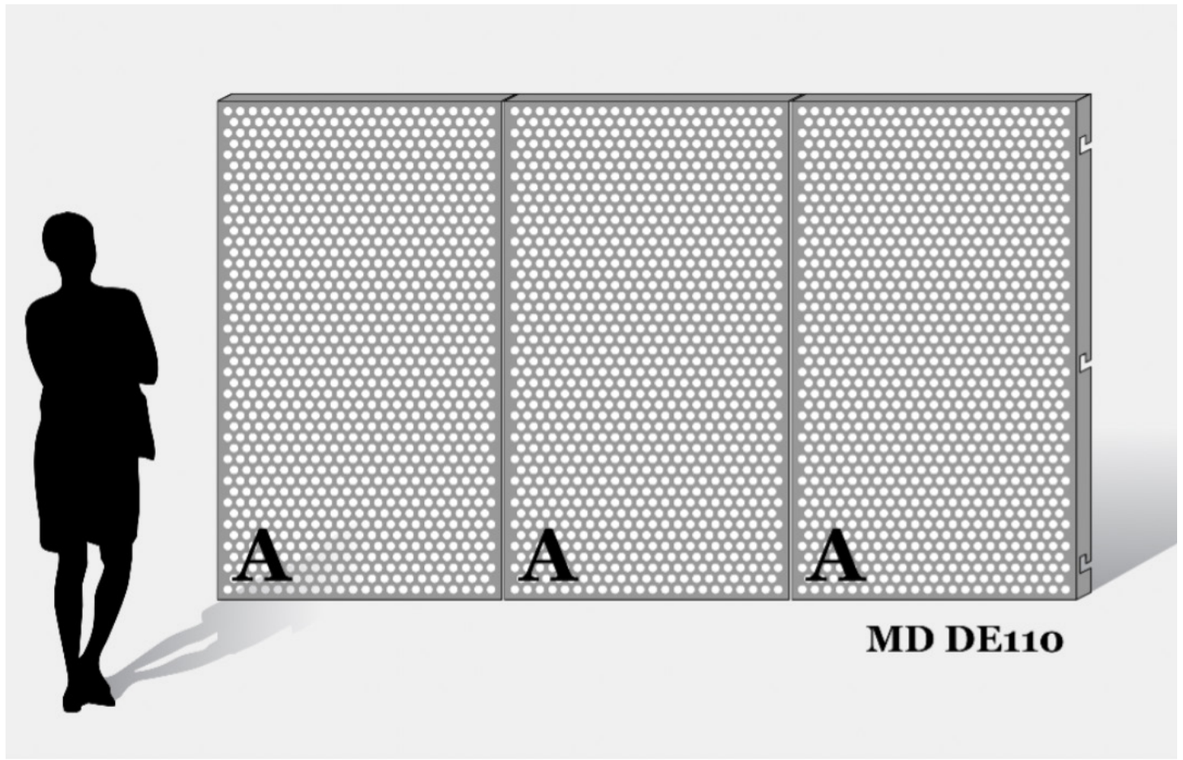


Stabalux AK-H

Timber Construction
Aluminium Exterior
HR Triple Glazing

34.2 % of Facade = 6310 m^2 Transparent Facade





Semi-Public | Educational | Cultural

Spatial Quality through Daylight
Solar Protection

MetaDecor DE110

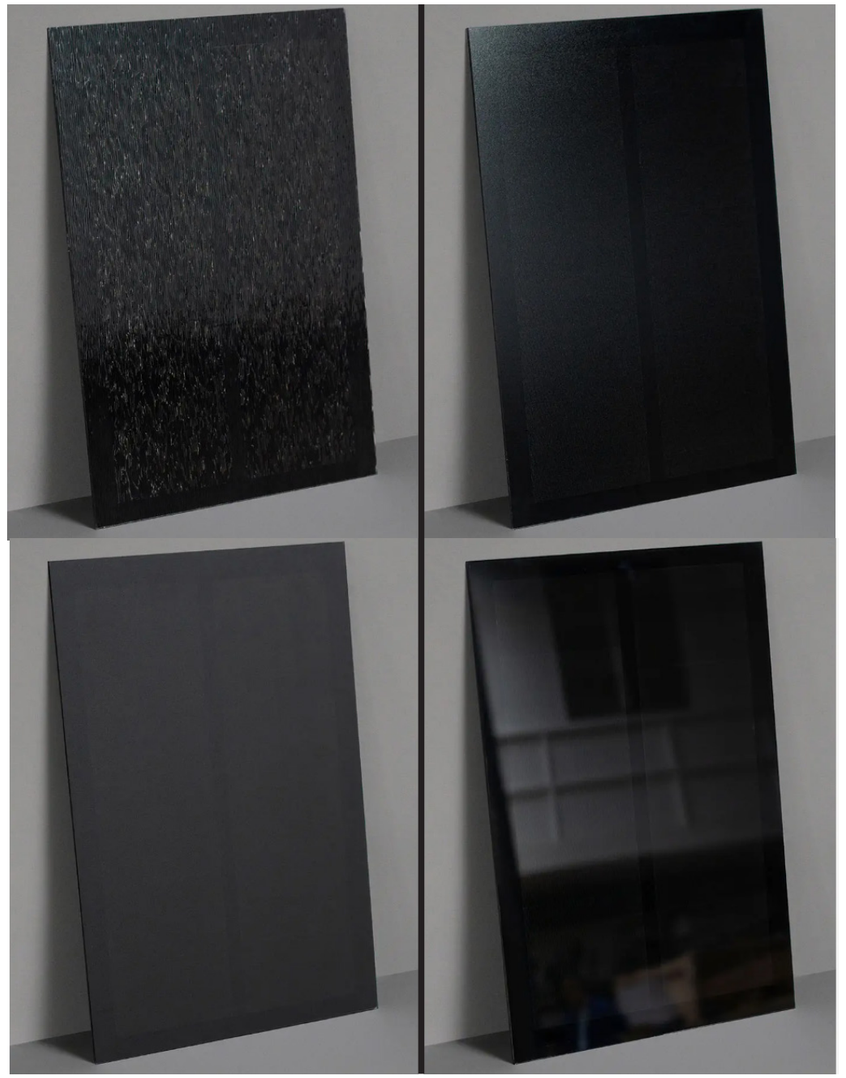
Aluminium Perforated Panels
40% Opaque | 60% Transparent

34.5 % of Facade = 6365 m^2 Semi-Transparent Facade



Non-Public | Technical | Event Space | Art Gallery

Quality of Interior Space through Climatic Design
No '*Full Glazed Spaces*'



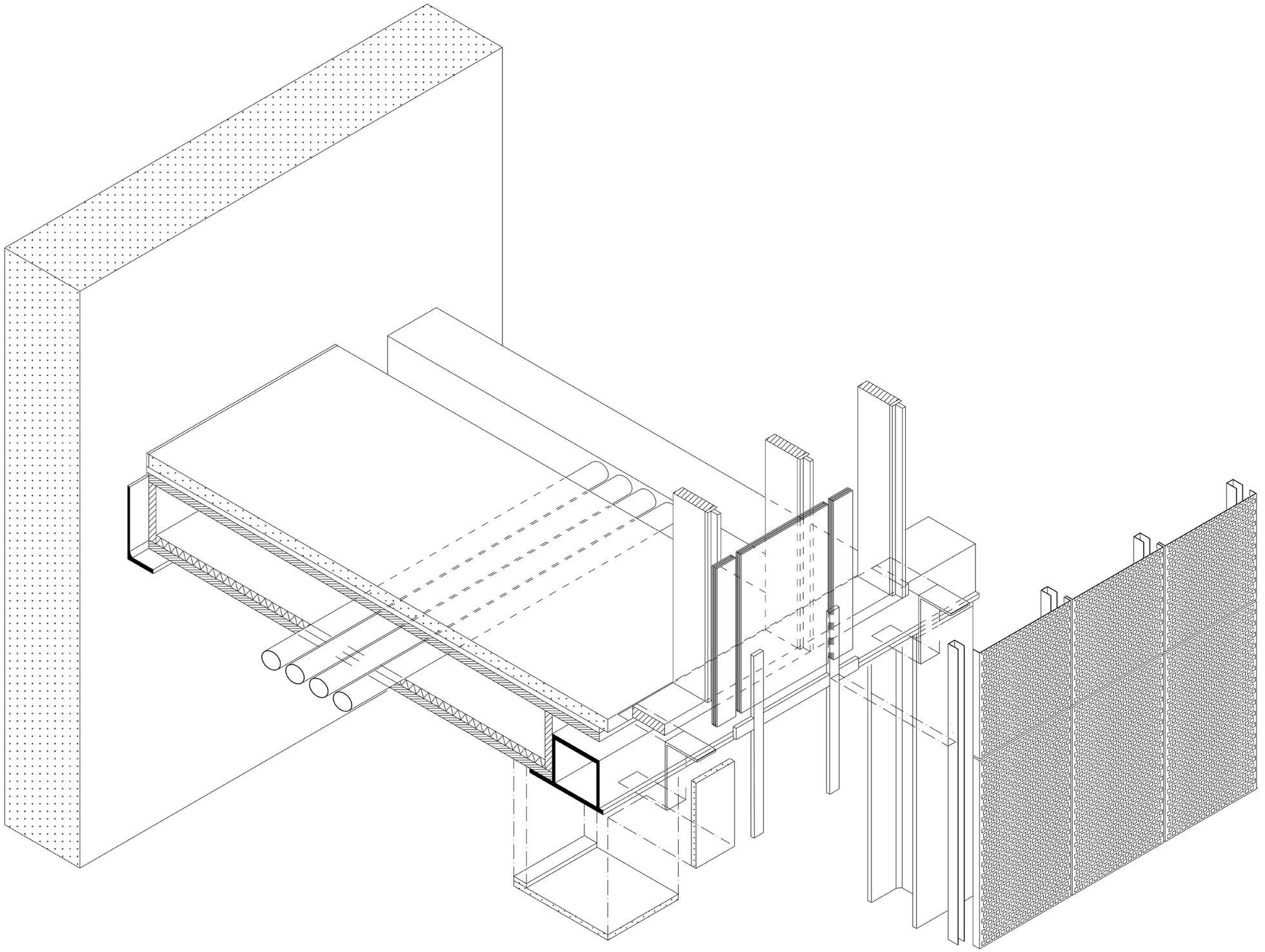
Solarix Black Collection

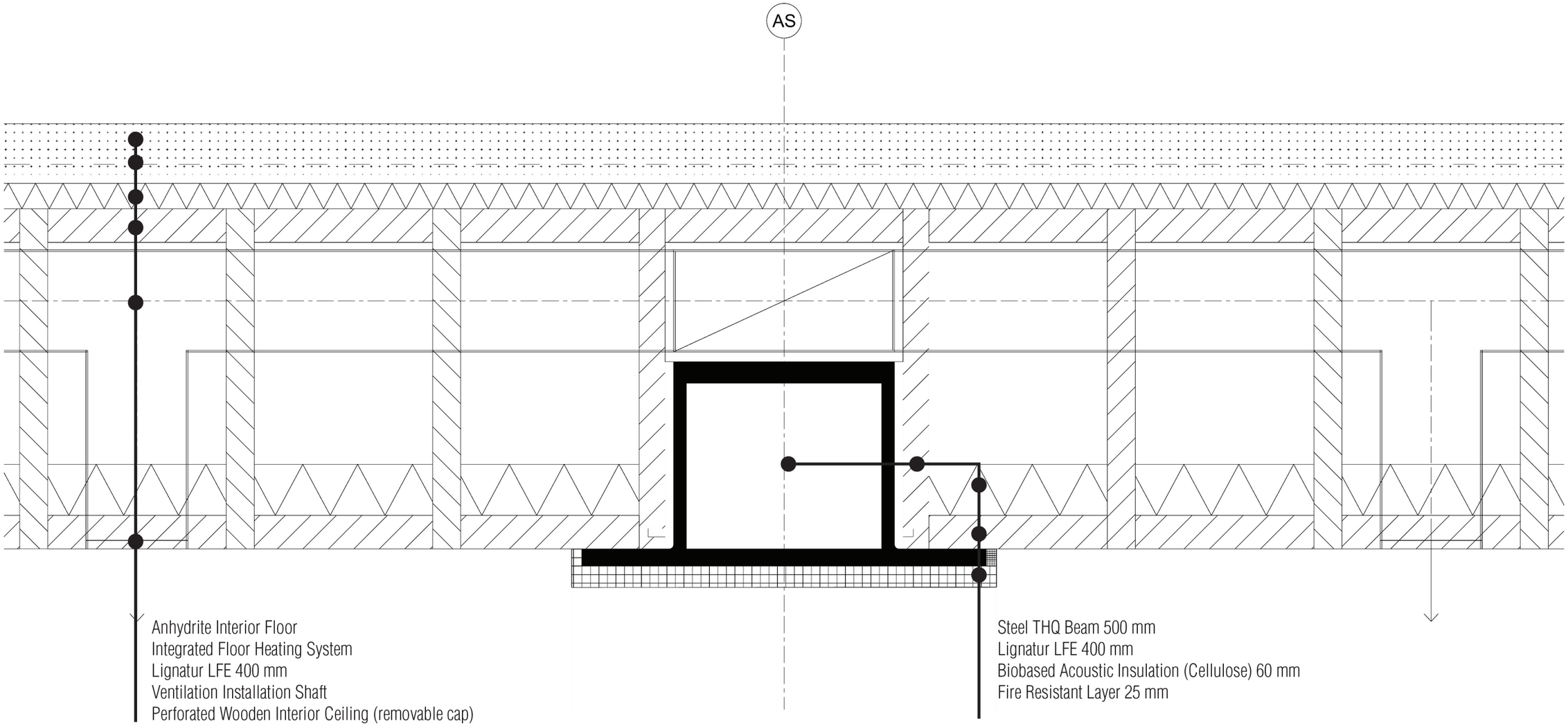
Solar Panels for Renewable Energy
Black for Highest Efficiency

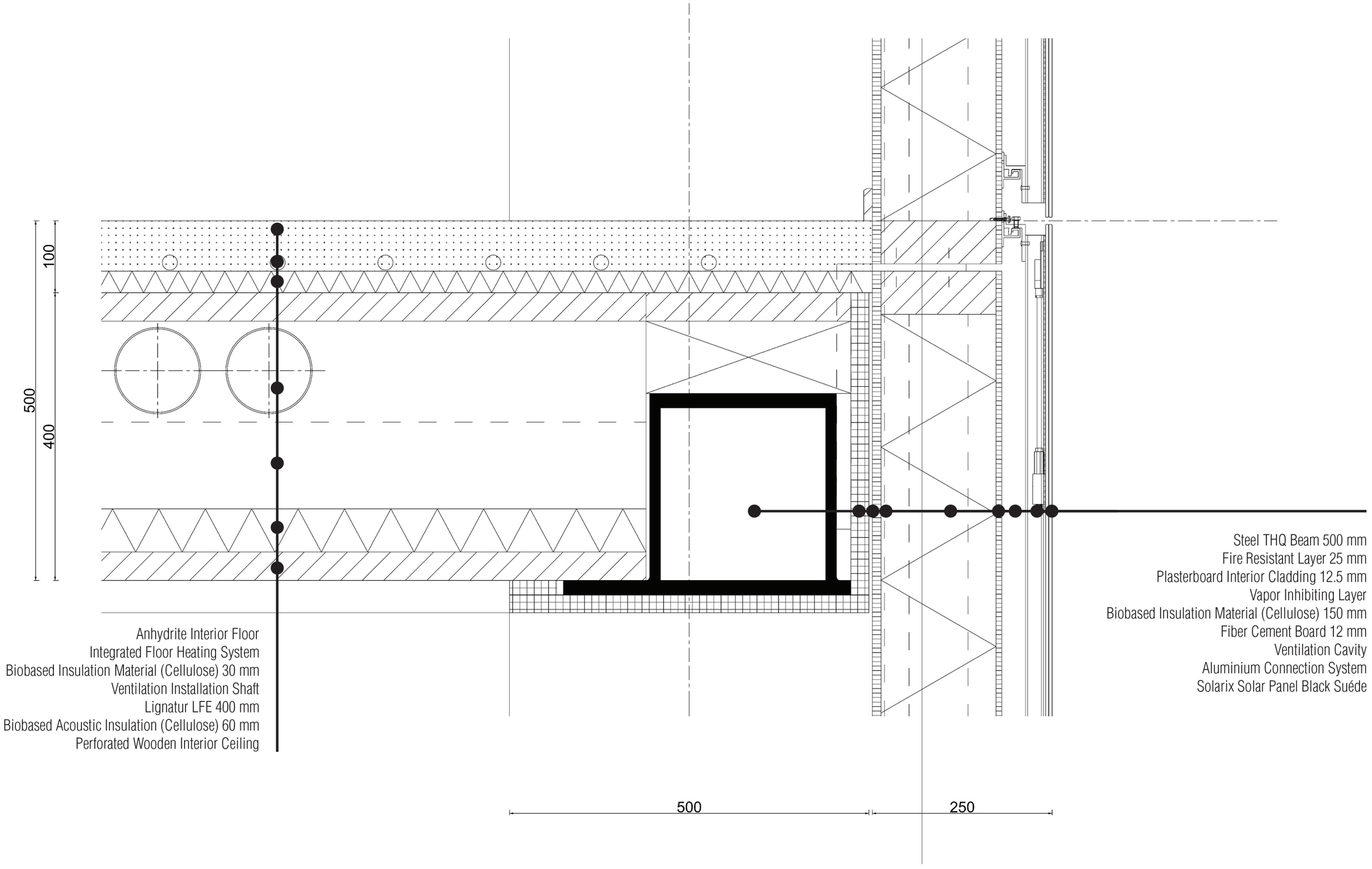
31.3 % of Facade = 5774 m^2 Opaque Facade

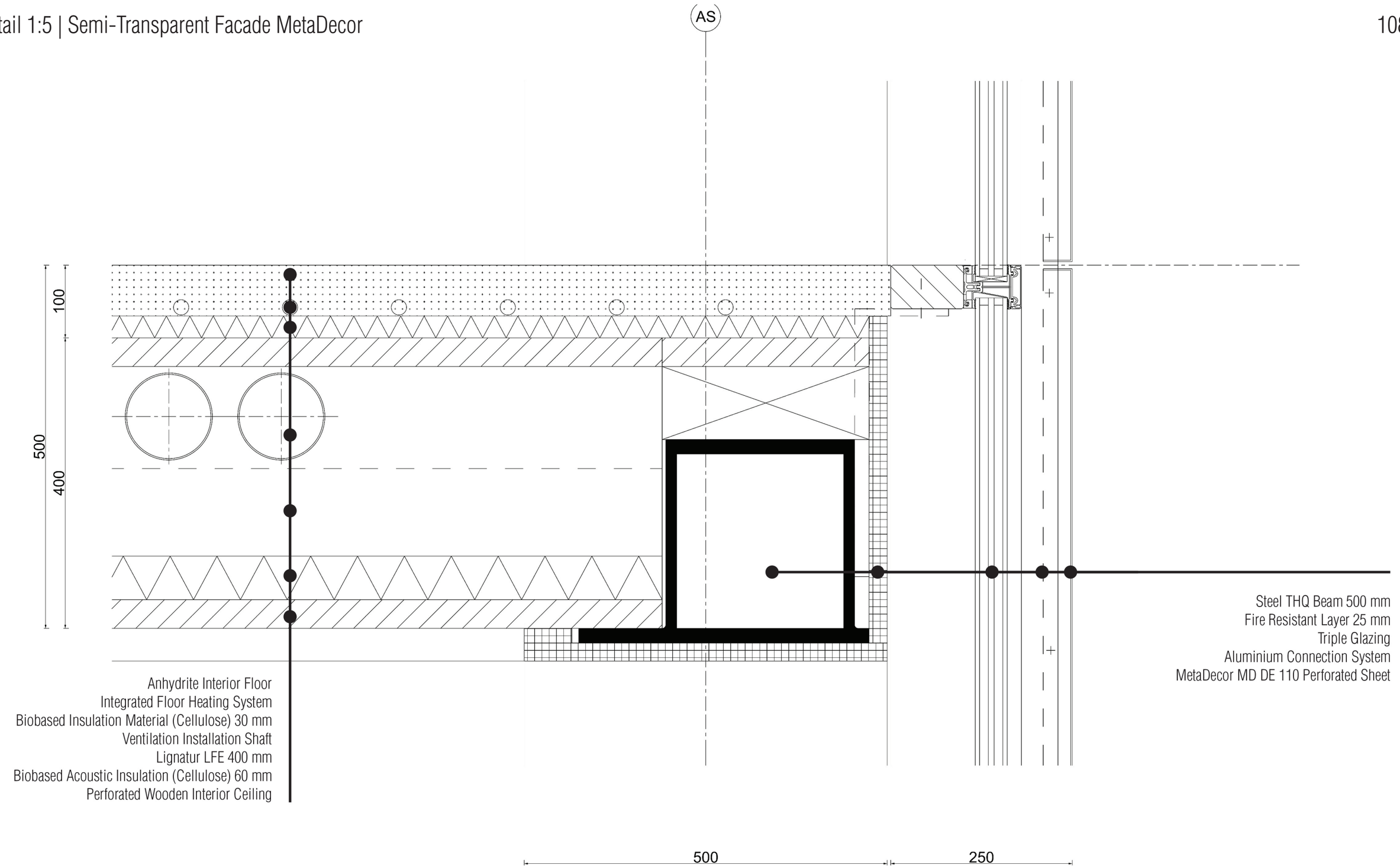
Preventing 4000 kg/m^2 CO_2 over Lifespan = 4 Trees CO_2 Absorbtion

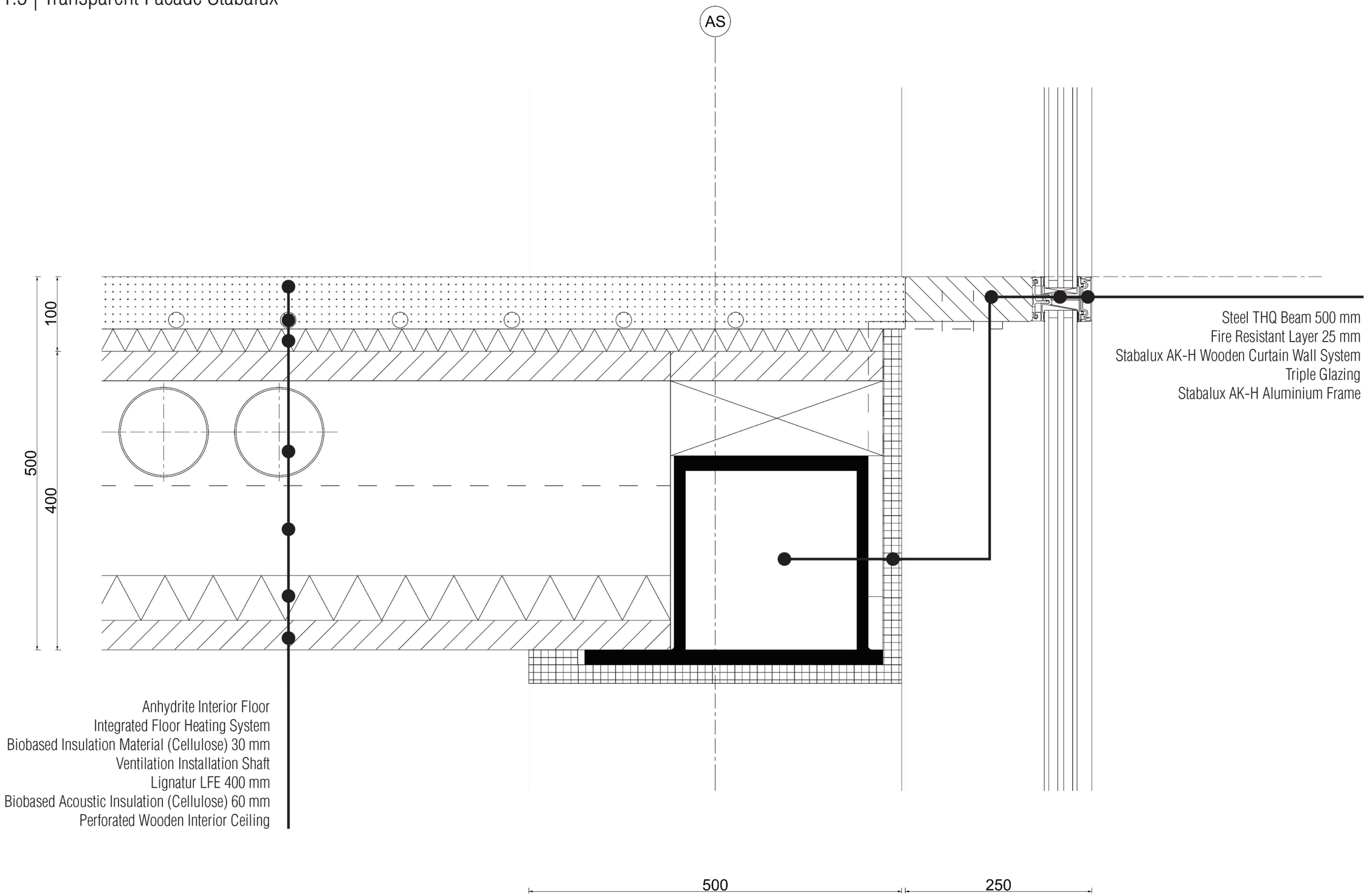
4000 x 5774 = **23099 Trees** CO_2 Absorbtion

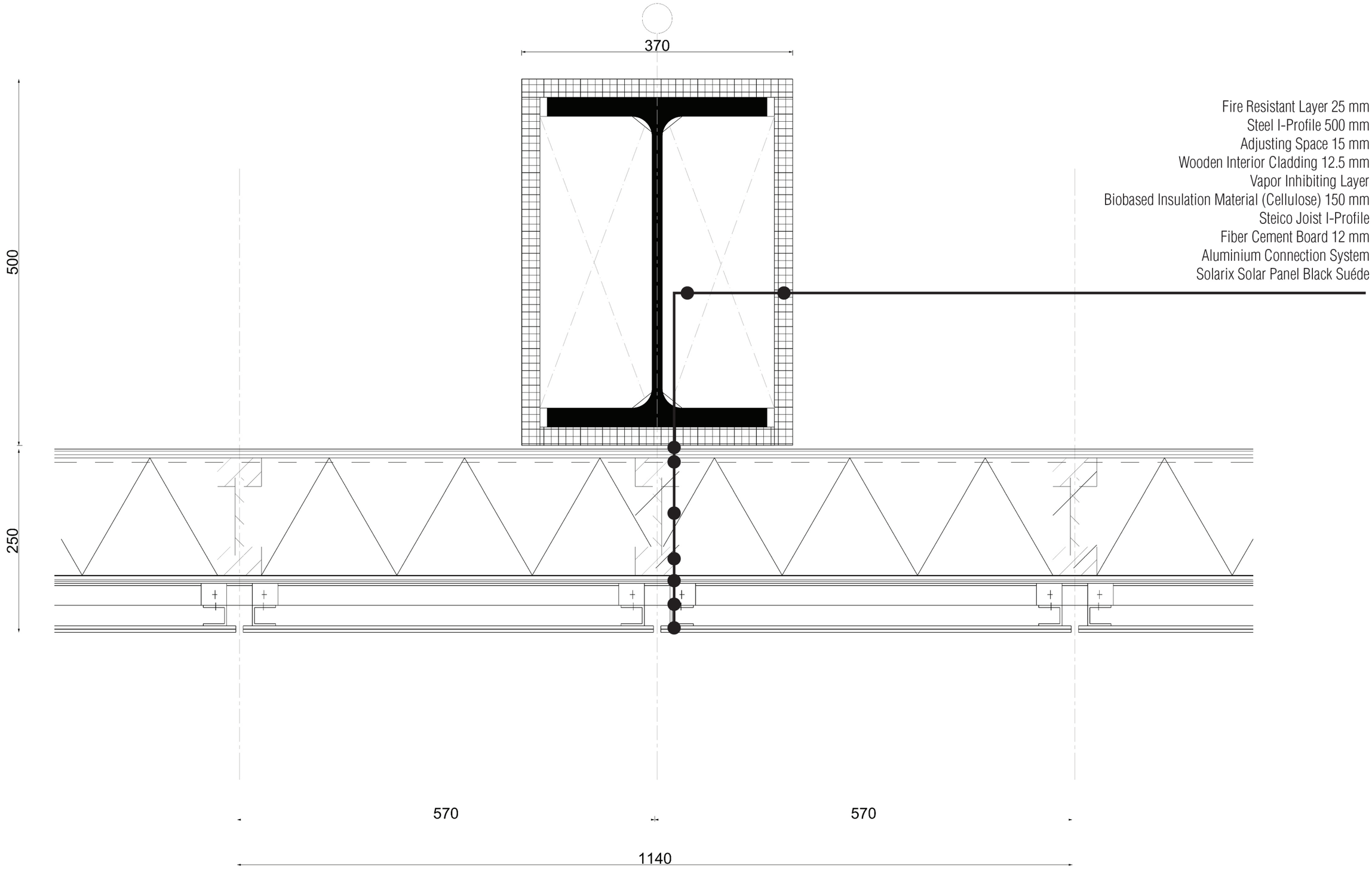


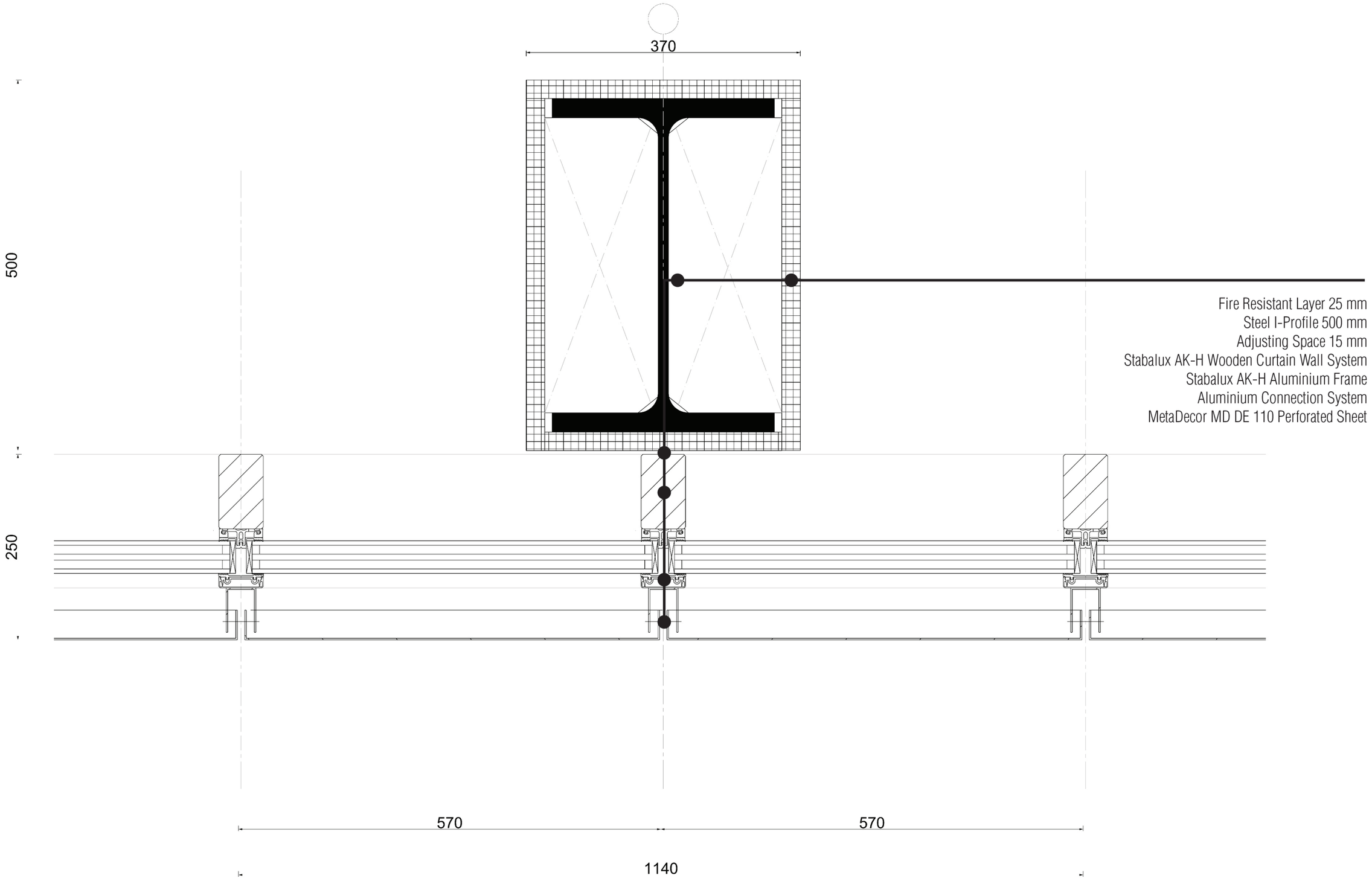

AS
Anhydrite Interior Floor
Integrated Floor Heating System
Lignatur LFE 400 mm
Ventilation Installation Shaft
Perforated Wooden Interior Ceiling (removable cap)
Steel THQ Beam 500 mm
Lignatur LFE 400 mm
Biobased Acoustic Insulation (Cellulose) 60 mm
Fire Resistant Layer 25 mm
500

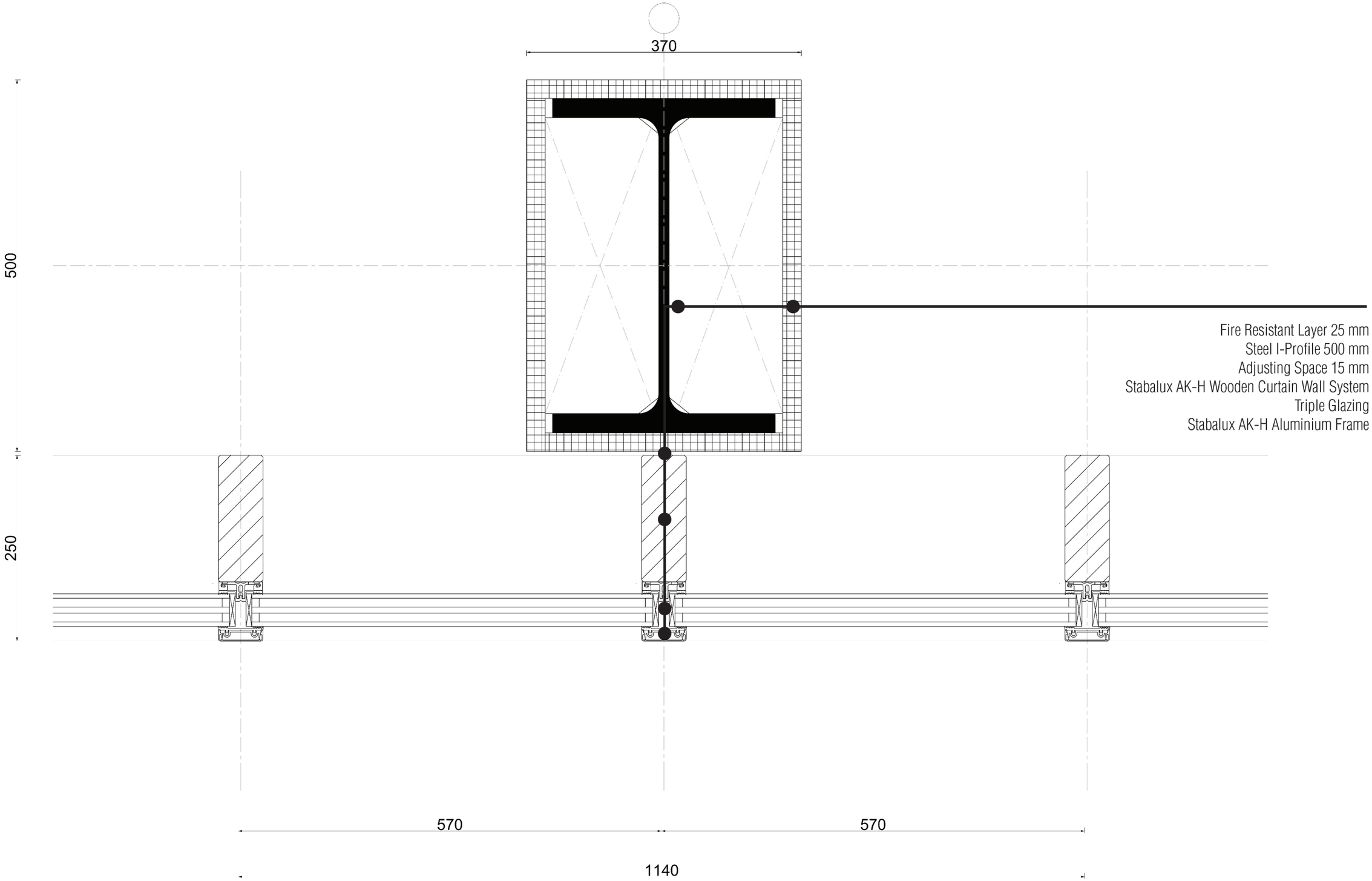

100
500
400
Anhydrite Interior Floor
Integrated Floor Heating System
Biobased Insulation Material (Cellulose) 30 mm
Ventilation Installation Shaft
Lignatur LFE 400 mm
Biobased Acoustic Insulation (Cellulose) 60 mm
Perforated Wooden Interior Ceiling
Steel THQ Beam 500 mm
Fire Resistant Layer 25 mm
Plasterboard Interior Cladding 12.5 mm
Vapor Inhibiting Layer
Biobased Insulation Material (Cellulose) 150 mm
Fiber Cement Board 12 mm
Ventilation Cavity
Aluminium Connection System
Solarix Solar Panel Black Suéde
500
250

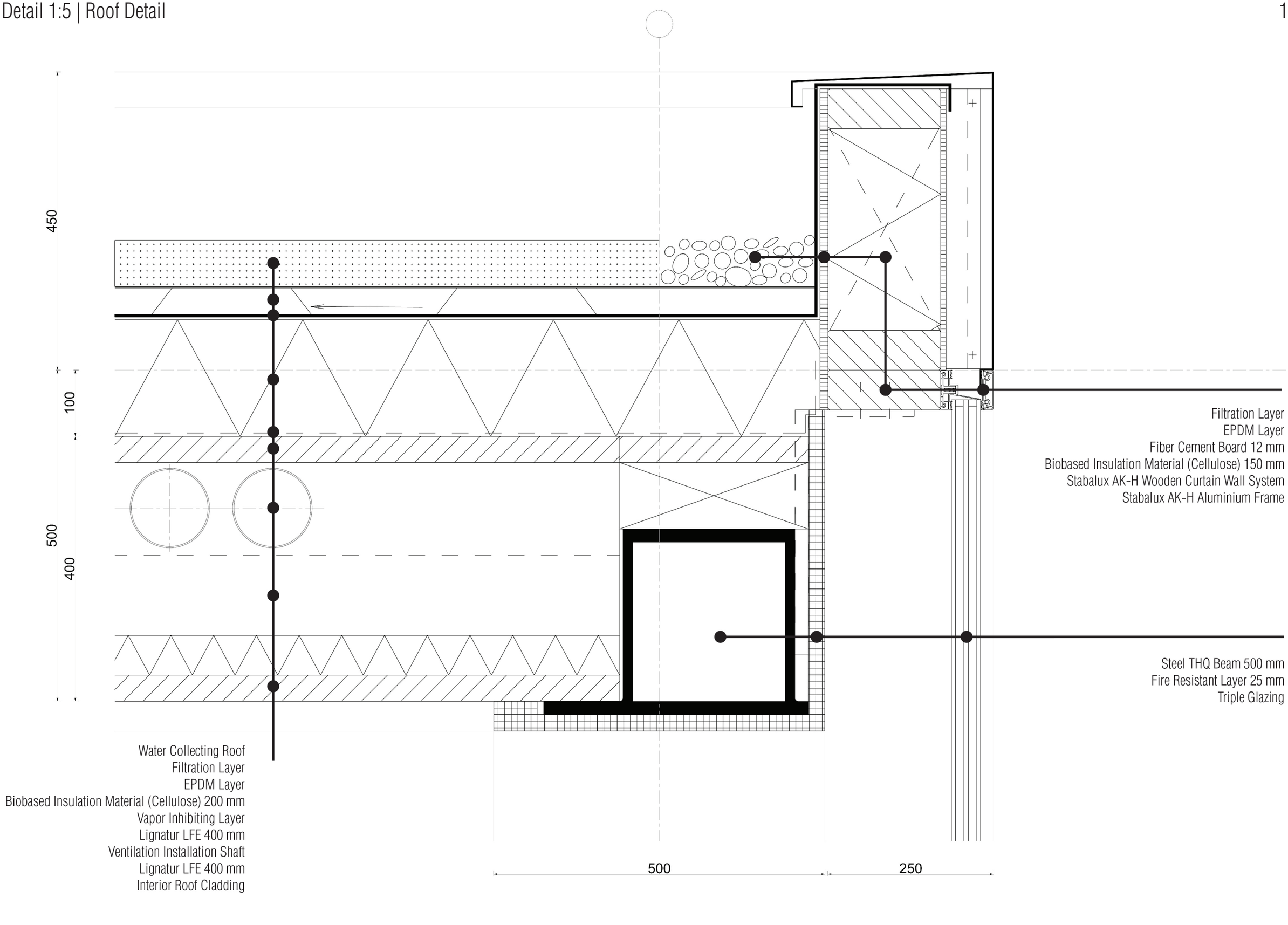

AS
100
500
400
Anhydrite Interior Floor
Integrated Floor Heating System
Biobased Insulation Material (Cellulose) 30 mm
Ventilation Installation Shaft
Lignatur LFE 400 mm
Biobased Acoustic Insulation (Cellulose) 60 mm
Perforated Wooden Interior Ceiling
Steel THQ Beam 500 mm
Fire Resistant Layer 25 mm
Triple Glazing
Aluminium Connection System
MetaDecor MD DE 110 Perforated Sheet
500
250


AS
100
500
400
Steel THQ Beam 500 mm
Fire Resistant Layer 25 mm
Stabalux AK-H Wooden Curtain Wall System
Triple Glazing
Stabalux AK-H Aluminium Frame
Anhydrite Interior Floor
Integrated Floor Heating System
Biobased Insulation Material (Cellulose) 30 mm
Ventilation Installation Shaft
Lignatur LFE 400 mm
Biobased Acoustic Insulation (Cellulose) 60 mm
Perforated Wooden Interior Ceiling
500
250


370
500
250
570
570
1140
Fire Resistant Layer 25 mm
Steel I-Profile 500 mm
Adjusting Space 15 mm
Wooden Interior Cladding 12.5 mm
Vapor Inhibiting Layer
Biobased Insulation Material (Cellulose) 150 mm
Steico Joist I-Profile
Fiber Cement Board 12 mm
Aluminium Connection System
Solarix Solar Panel Black Suéde


370
500
250
570
570
1140
Fire Resistant Layer 25 mm
Steel I-Profile 500 mm
Adjusting Space 15 mm
Stabalux AK-H Wooden Curtain Wall System
Stabalux AK-H Aluminium Frame
Aluminium Connection System
MetaDecor MD DE 110 Perforated Sheet


370
500
250
570
570
1140
Fire Resistant Layer 25 mm
Steel I-Profile 500 mm
Adjusting Space 15 mm
Stabalux AK-H Wooden Curtain Wall System
Triple Glazing
Stabalux AK-H Aluminium Frame


450
100
500
400
Water Collecting Roof
Filtration Layer
EPDM Layer
Biobased Insulation Material (Cellulose) 200 mm
Vapor Inhibiting Layer
Lignatur LFE 400 mm
Ventilation Installation Shaft
Lignatur LFE 400 mm
Interior Roof Cladding
Filtration Layer
EPDM Layer
Fiber Cement Board 12 mm
Biobased Insulation Material (Cellulose) 150 mm
Stabalux AK-H Wooden Curtain Wall System
Stabalux AK-H Aluminium Frame
Steel THQ Beam 500 mm
Fire Resistant Layer 25 mm
Triple Glazing
500
250

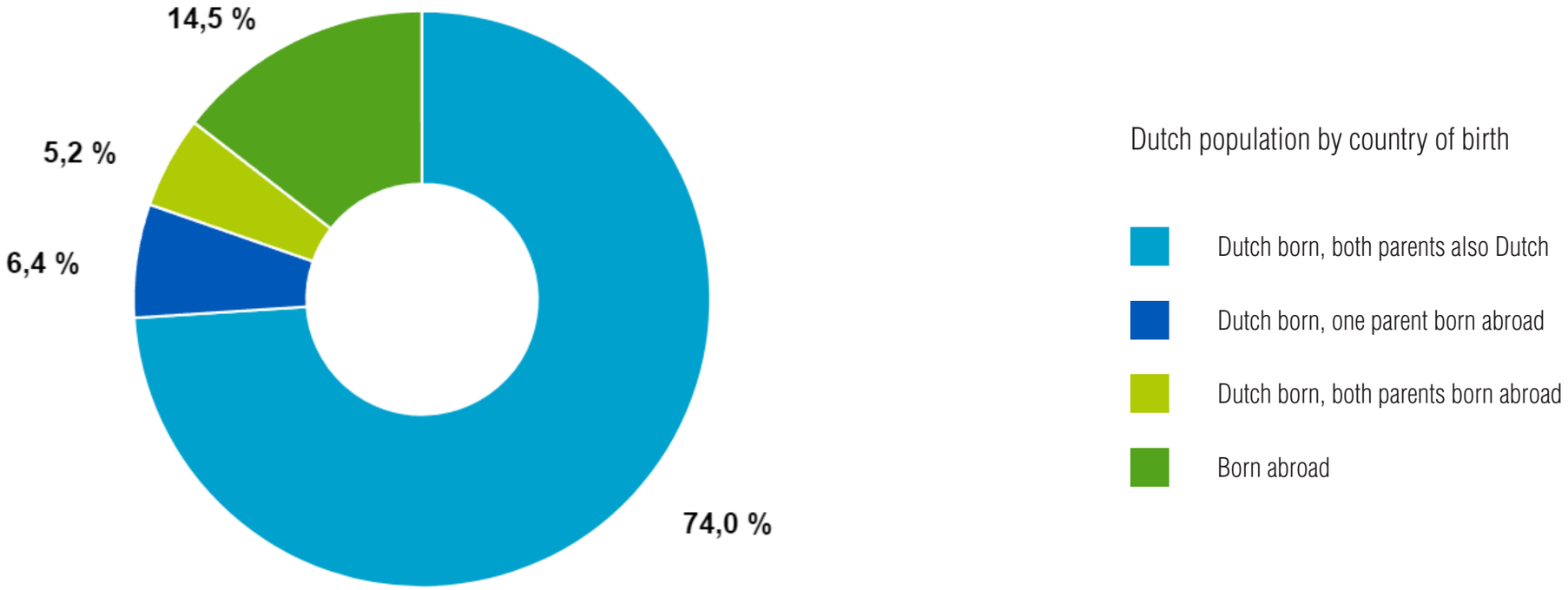
I. Final Design

Part I: Research Context

Part II: The Hague: City Cultural Hub

Part III: The Vertical Campus

Culture – *'the way of life; the **customs**, **beliefs**, **behaviour** and **opinions** of a particular **group of people** within society.'*



by: https://www.cbs.nl/nl-nl/dossier/dossier-asiel-migratie-en-integratie/hoeveel-inwoners-hebben-een-herkomst-buiten-nederland

by: https://dictionary.cambridge.org/dictionary/english/culture

Dutch Society – *'**Culture** means **Cultures**'*



by: https://media.indebuurt.nl/amsterdam/2024/04/30155241/Bootjes-grachten-koningsdag-ANP.jpg



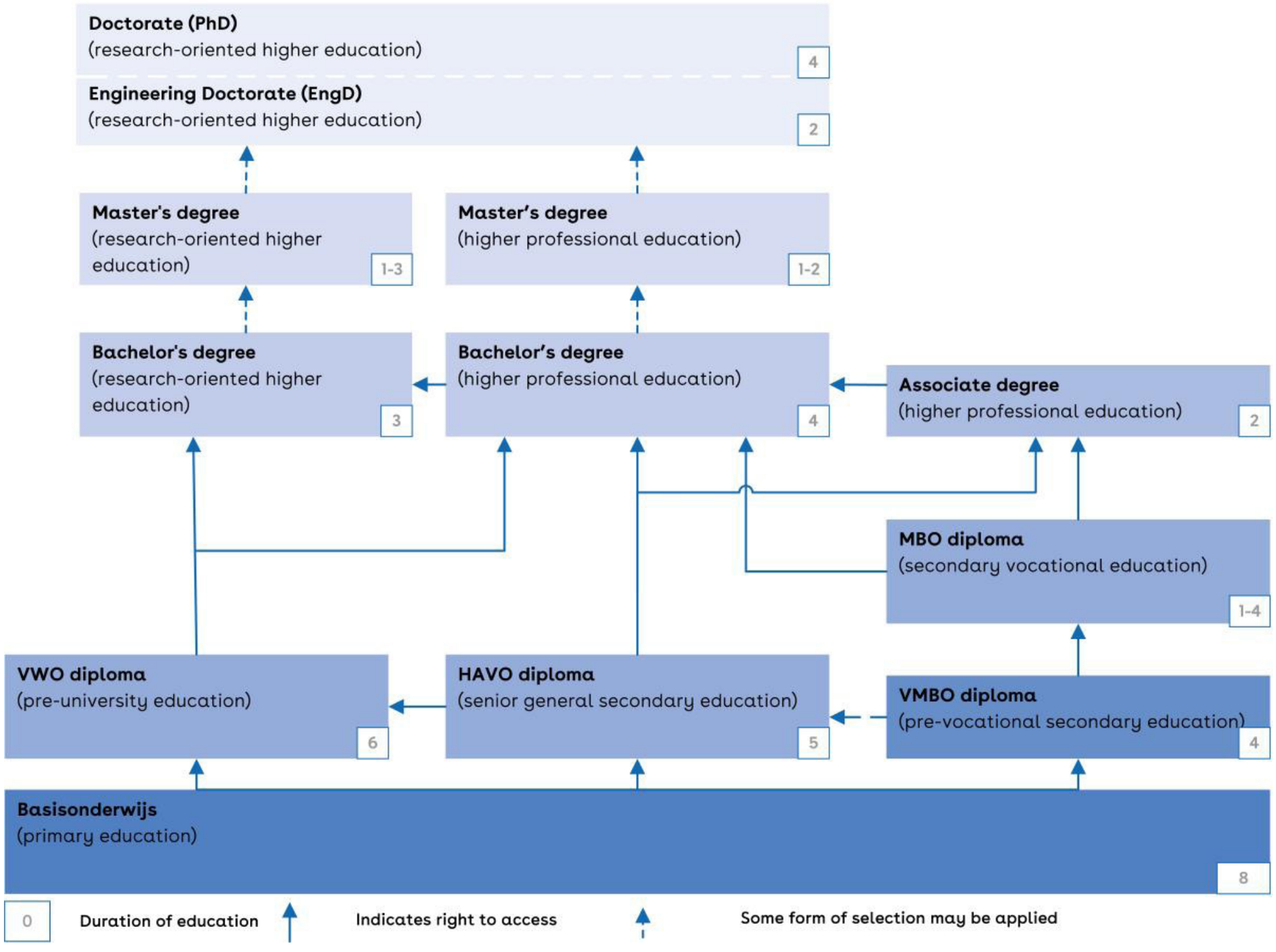
by: https://ticketsuriname.nl/de-surinaamse-cultuur/



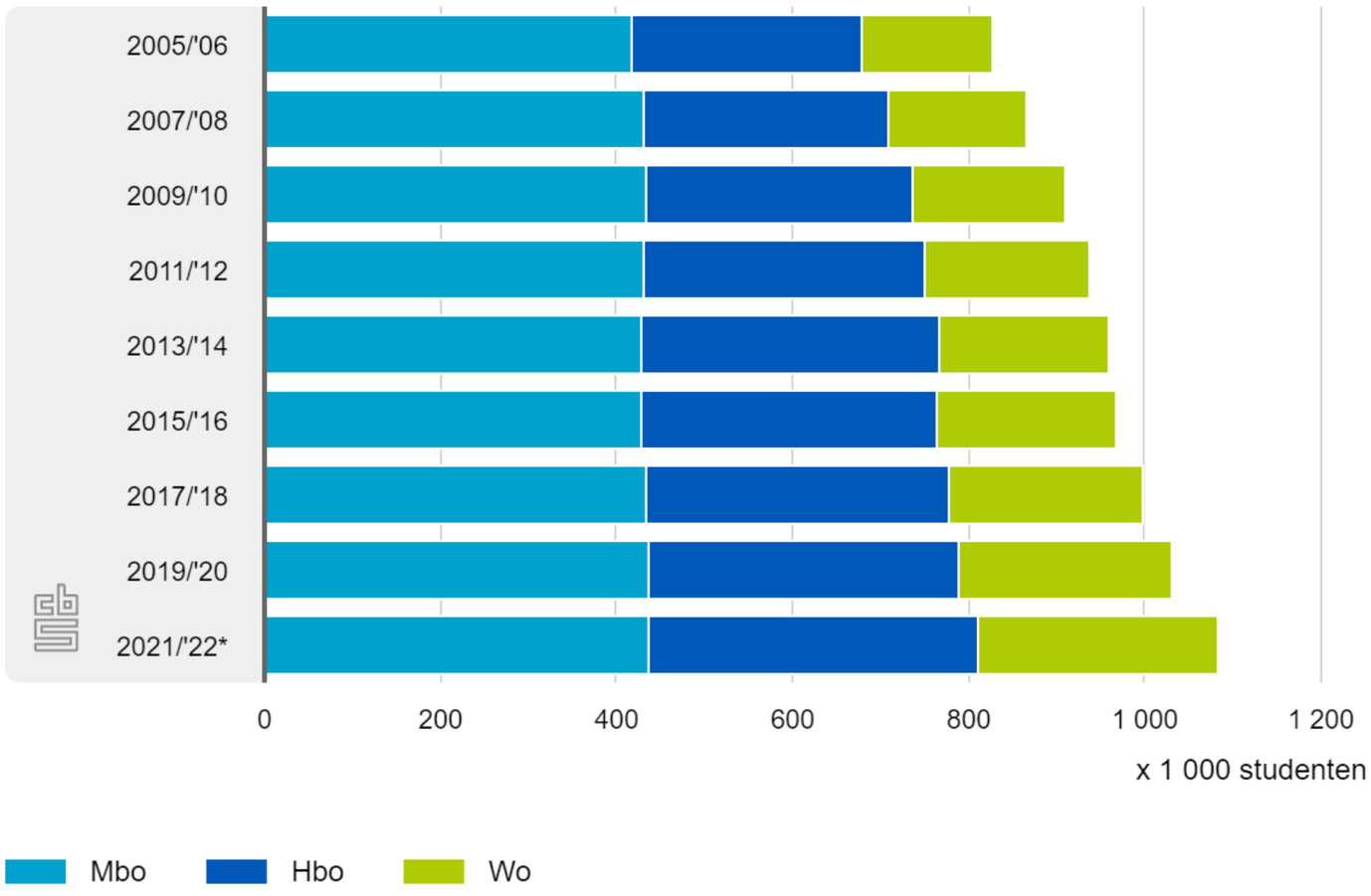
by: https://nos.nl/nieuwsuur/artikel/2118961-voelen-turkse-nederlanders-zich-vooral-turk-of-ook-nederlander

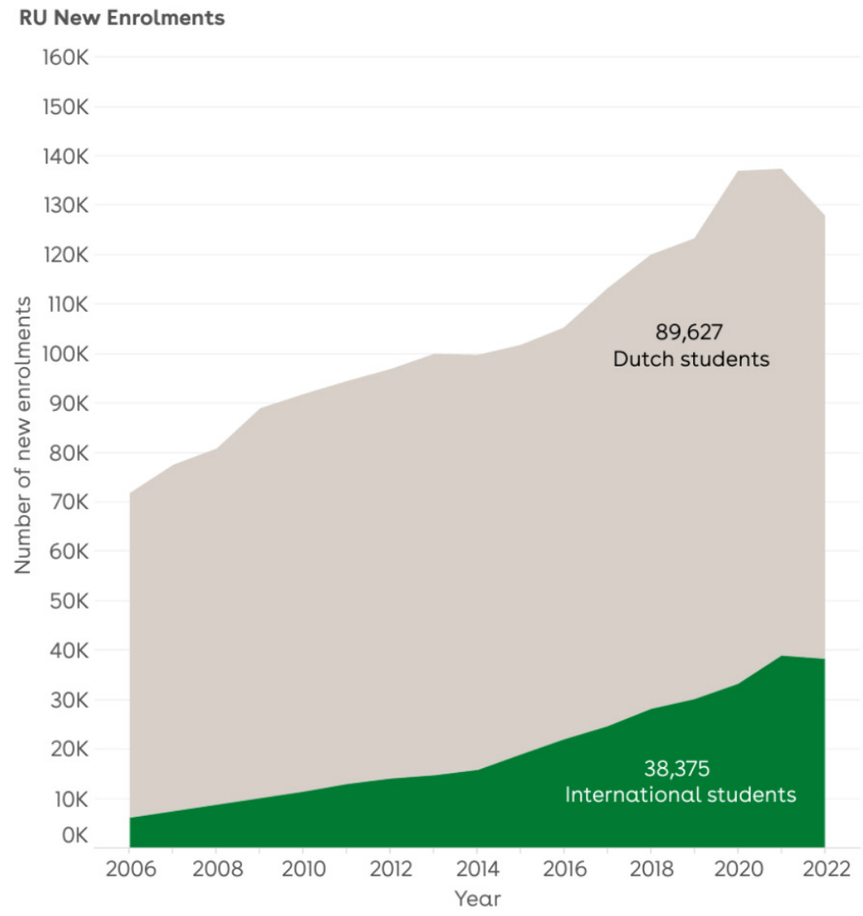
Education – *‘the process of **teaching** and **learning**, or the **knowledge** that you get from this.’*

by: https://dictionary.cambridge.org/nl/woordenboek/engels/education



by: https://www.nuffic.nl/en/education-systems/the-netherlands/chart-education-system-in-the-netherlands





by: https://www.nuffic.nl/sites/default/files/2023-06/incoming-degree-mobility-in-dutch-higher-education-2022-2023.pdf

Cultures in Education – *'The **Multiplicity of Cultures** is **not represented** within **Education**.'*



Cultures + Education = ***City Cultural Hub***



by: https://archello.s3.eu-central-1.amazonaws.com/images/2015/05/19/aerial-view-from-south.1506076611.3585.jpg



by: https://arquitecturaviva.com/works/sesc-24-de-maio-so-paulo-



by: https://arquitecturaviva.com/works/sesc-fabrica-pompeia-9





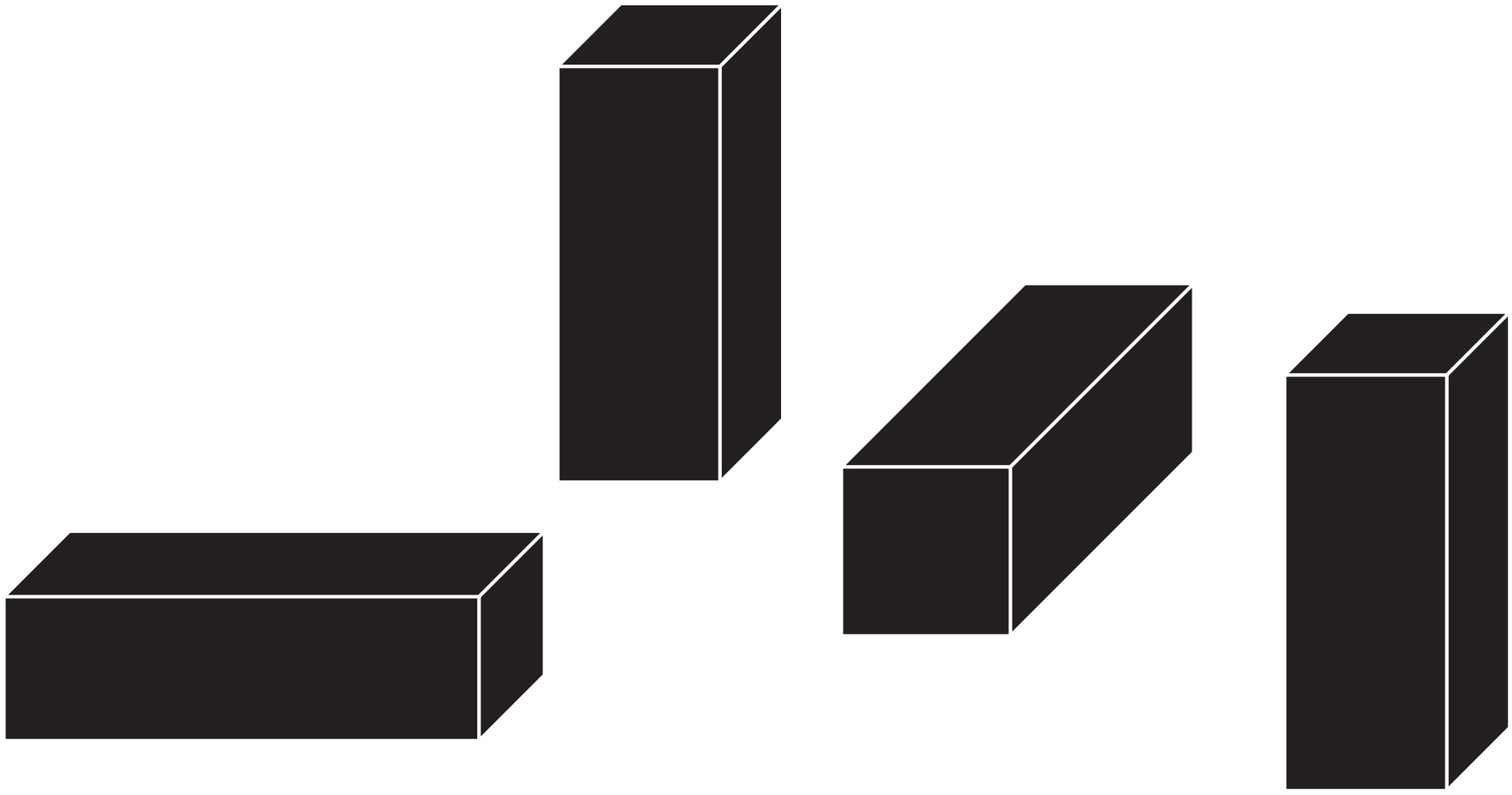


by: https://arquitecturaviva.com/works/biblioteca-nacional-de-francia-2

‘City Cultural Hub – ‘*a **social condenser**, thats blends **cultural and educational program**, but also **multiple paths of life**.’*



City Cultural Hub = ***Campus?***



Campus – *'The campus, by contrast, focuses on the **individual built object**. The campus does not delineate spaces, but instead positions the **objects within** a seemingly **limitless space**'*

by: D. van Gameren, 2014, Dash #10 Housing the Student, *College versus Campus.*



by: https://www.facebook.com/spartans.msu/photos/a.65981593019/10158629915563020/?type=3



by: https://filelist.tudelft.nl/TUDelft/Technology_Transfer/afbeeldingen/TU%20Delft%20Campus.jpg

Campus of the Future – *'The campus of the future is a **multifunctional social condenser**, embedded within the **urban fabric**.'*



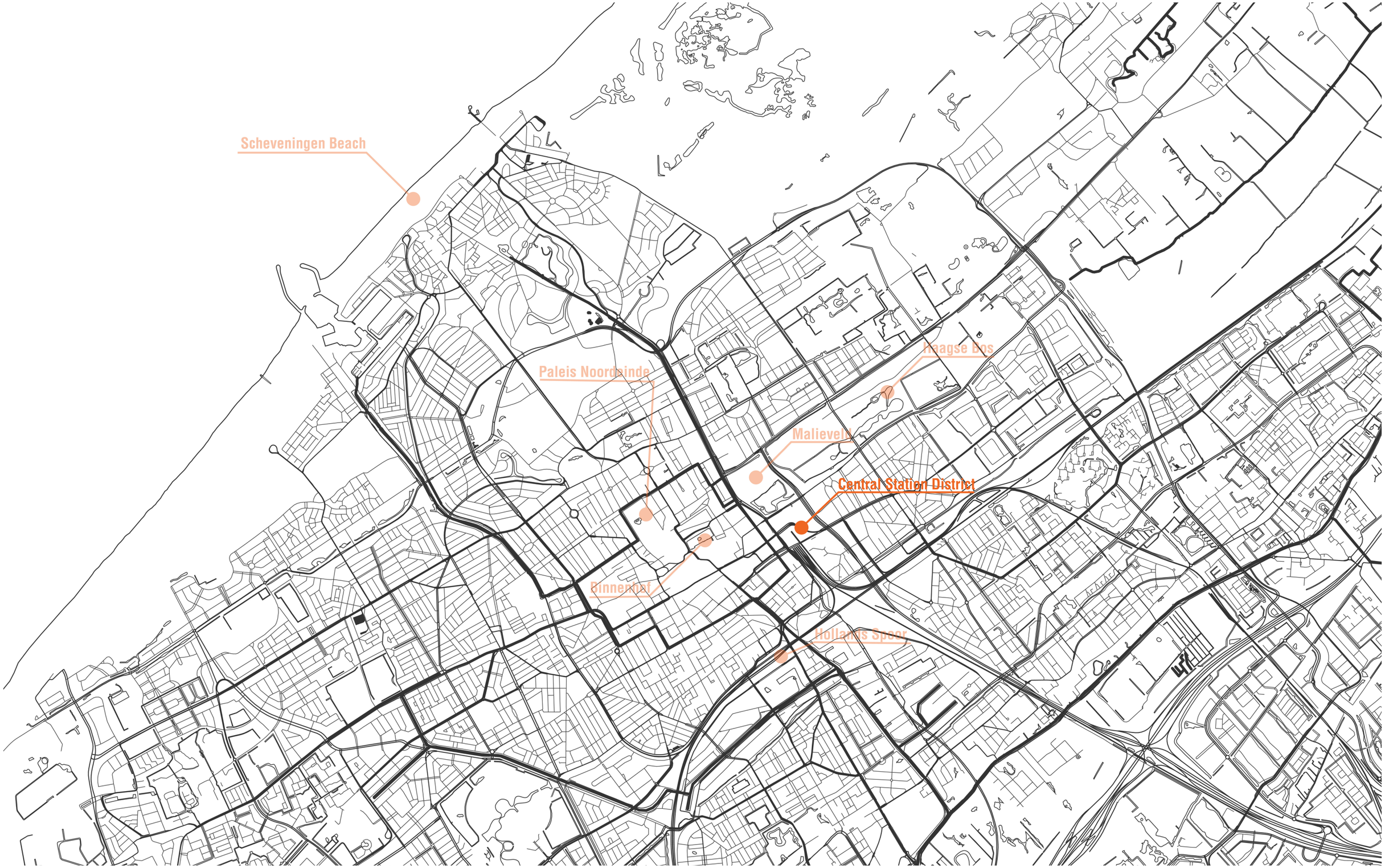
City Cultural Hub = ***Vertical Campus***


Multiplicity
Diversity
Iconic
Vertica
Multifun
Social C
Edu
Old and New
Culture
Connected
Urban Context
Connected

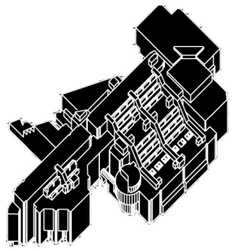
Part I: Research Context

Part II: The Hague: Cultural City Hub

Part III: The Vertical Campus


Scheveningen Beach
Paleis Noordeinde
Haagse Bos
Malieveld
Central Station District
Binnenhof
Hollands Spoor





Royal Library

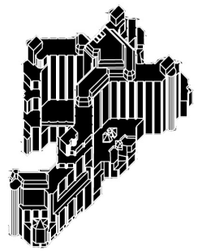
Library Facilities (40.000 m2)

Museum of Literature and Children's books

DEN acadamy

RKD, Institute for Art History

Entrance, Storage, Mechanical, Circulation spaces



B67 (part) - Primary Education

Play and Learn Spaces | Primary Education

Outdoor Playground

Entrance, Storage, Mechanical, Circulation spaces



Leiden University | AvB Tower

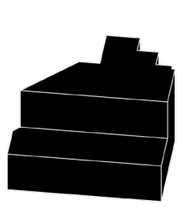
Lecture Hall

(Social) Study Spaces

Student Apartments + Amenities

Social Spaces

Entrance, Storage, Mechanical, Circulation spaces



Open University

Social Hub

Learn and Discover

Learn and Develop + Innovation Center

Teaching, Learning and Development

Entrance, Storage, Mechanical, Circulation spaces



Makers District

Lounge + Cafe

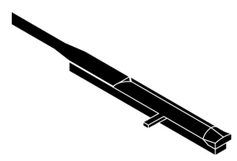
Workshop Spaces

Dance Studio

Music Classrooms

Local Shops

Entrance, Storage, Mechanical, Circulation spaces



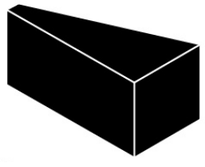
Cultural Commercial

Art Gallery

Book Shop

Cafes

Local Shops



Cultural Exchange Hub

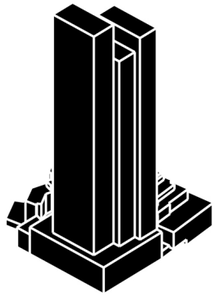
Exhibition Lounge & Cafe

Event Spaces

Meeting Rooms

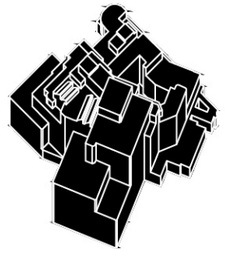
Office Spaces

Entrance, Storage, Mechanical, Circulation spaces



Vertical Campus

?



National Archive

Archive Space (22.000 m2)

Meeting Rooms

Office Spaces

Entrance, Storage, Mechanical, Circulation spaces


4
2
1
3



1



2

by: images by Tijn Jansen

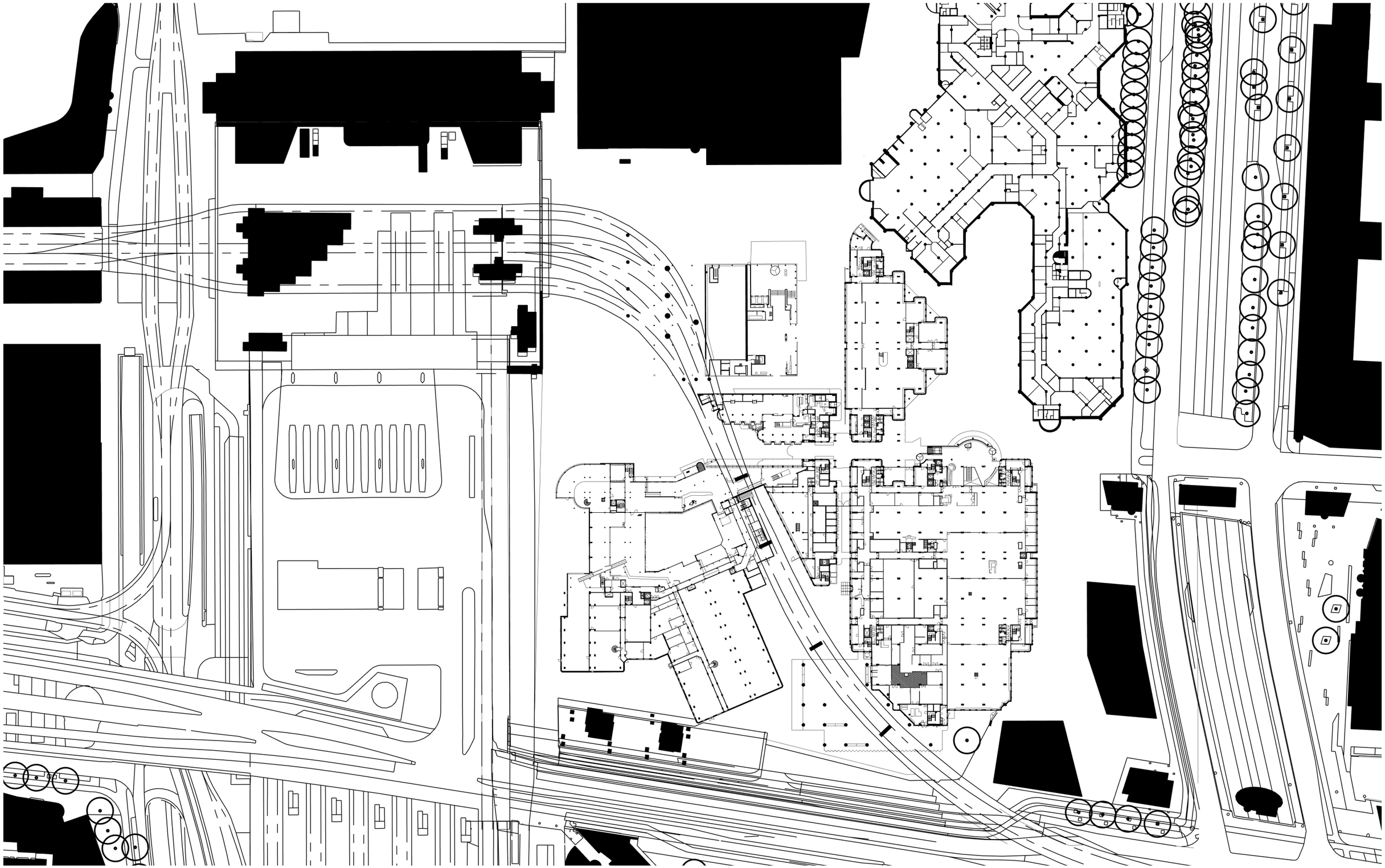


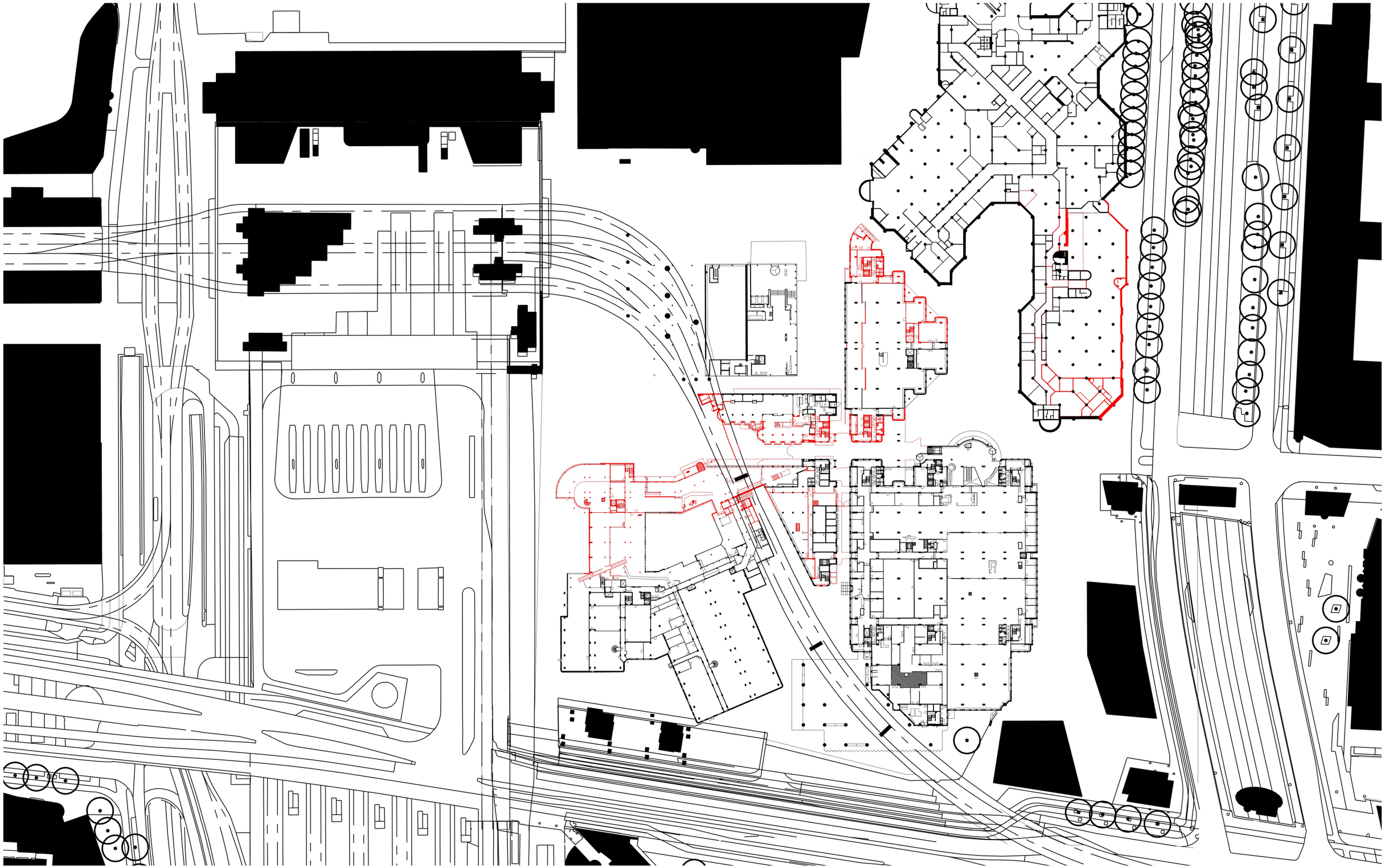
3

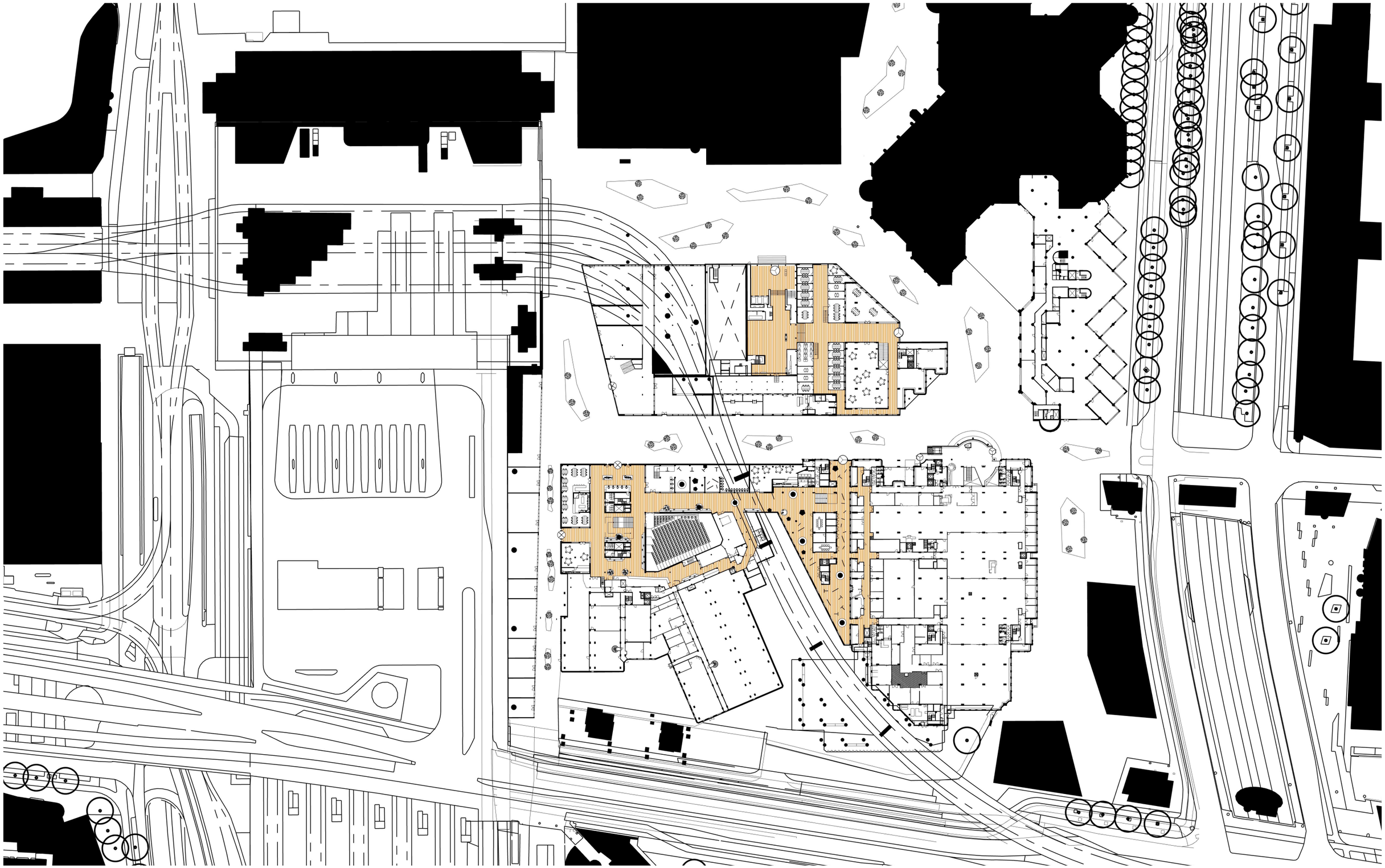


4

by: images by Tijn Jansen









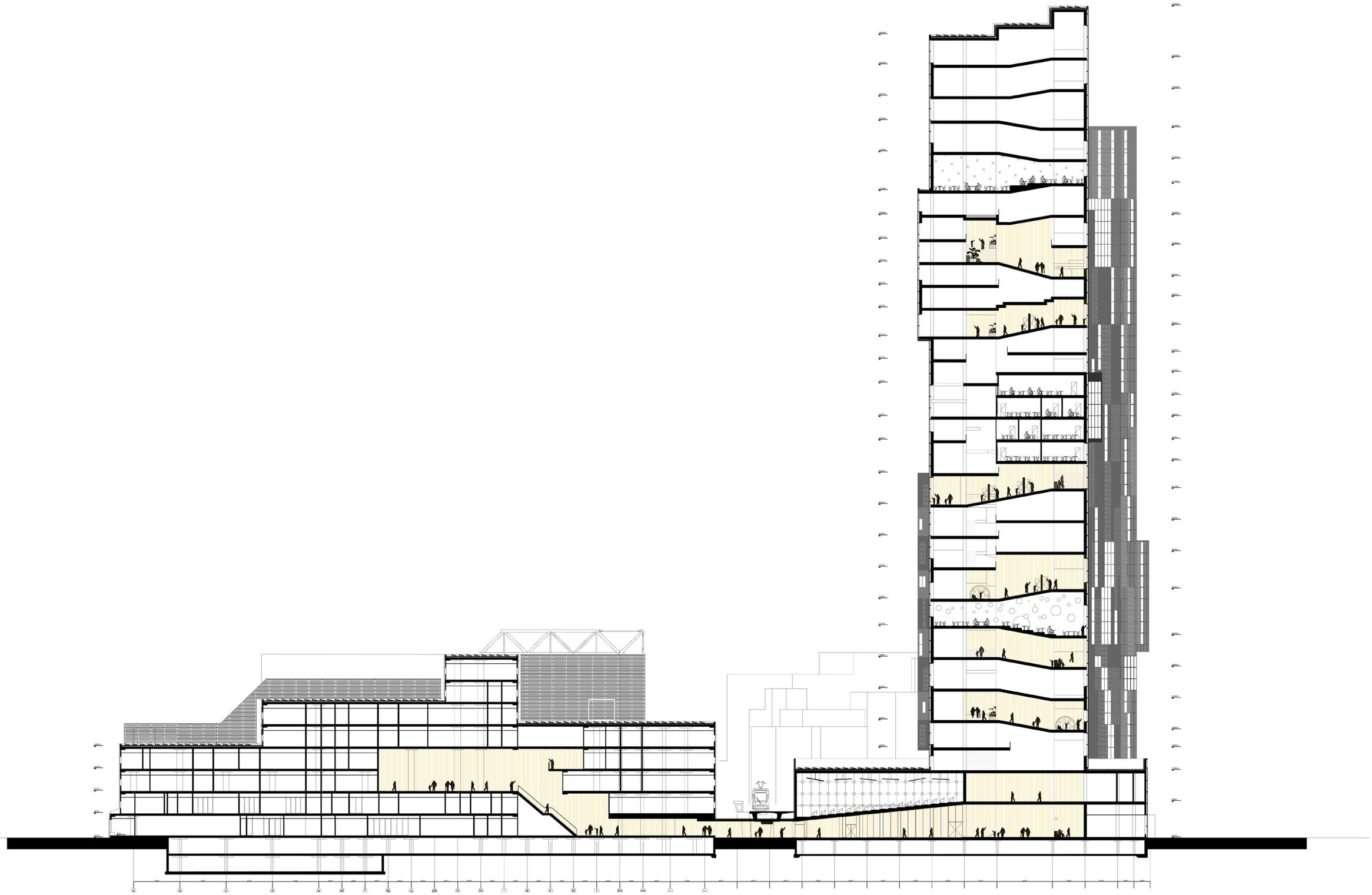
by: image by Tijn Jansen





by: image by Tijn Jansen

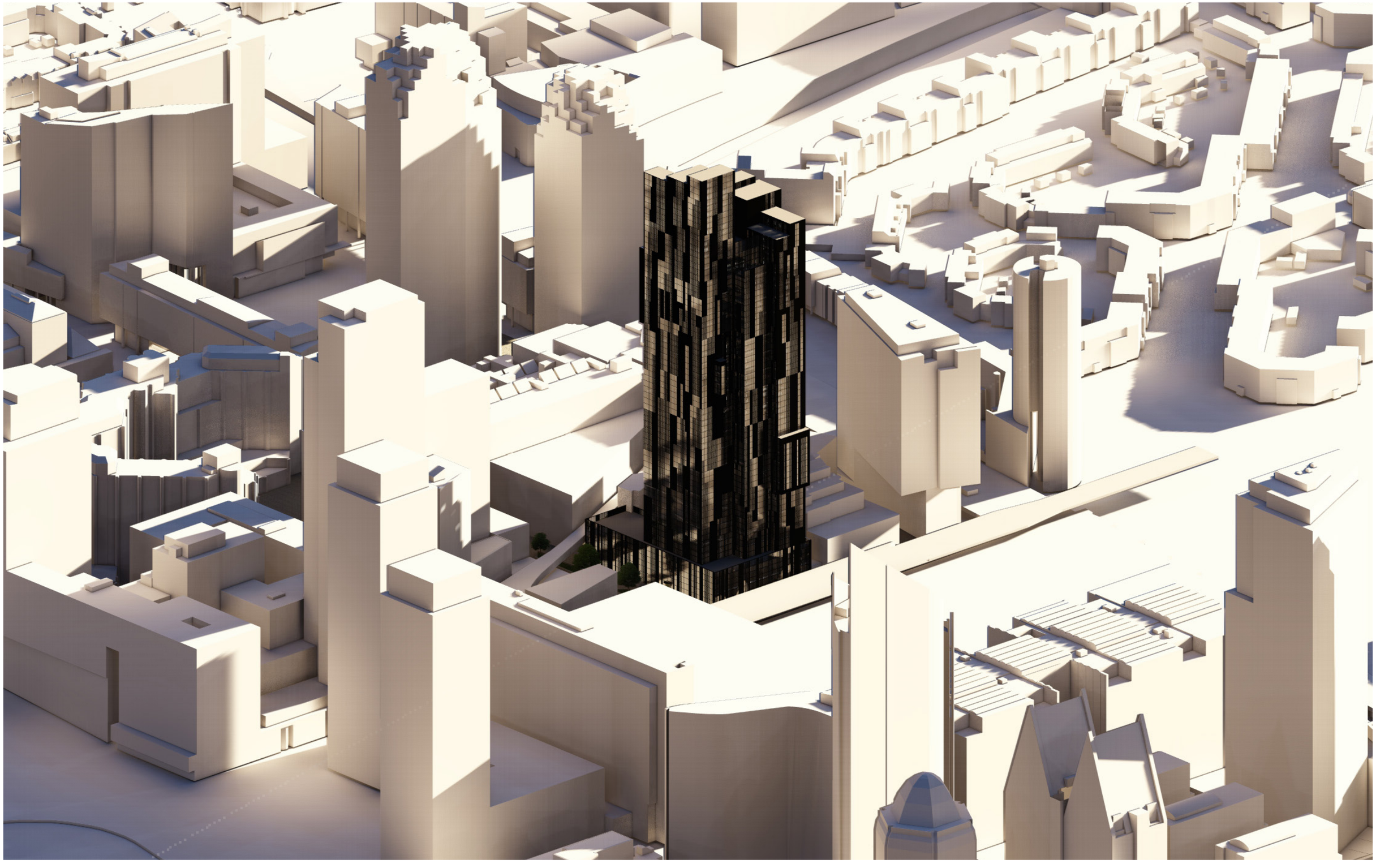


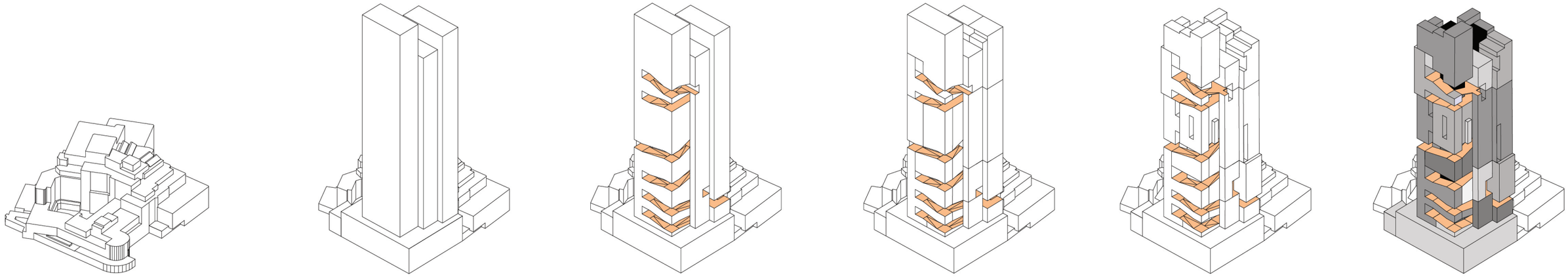


Part I: Research Context

Part II: The Hague: Cultural City Hub

Part III: The Vertical Campus





Phase 0:
Current Situation

Phase 1:
Densification

Phase 2:
Circulation

Phase 3:
Clustering

Phase 4:
Transform

Phase 5:
Program

Life Long Learning: Social

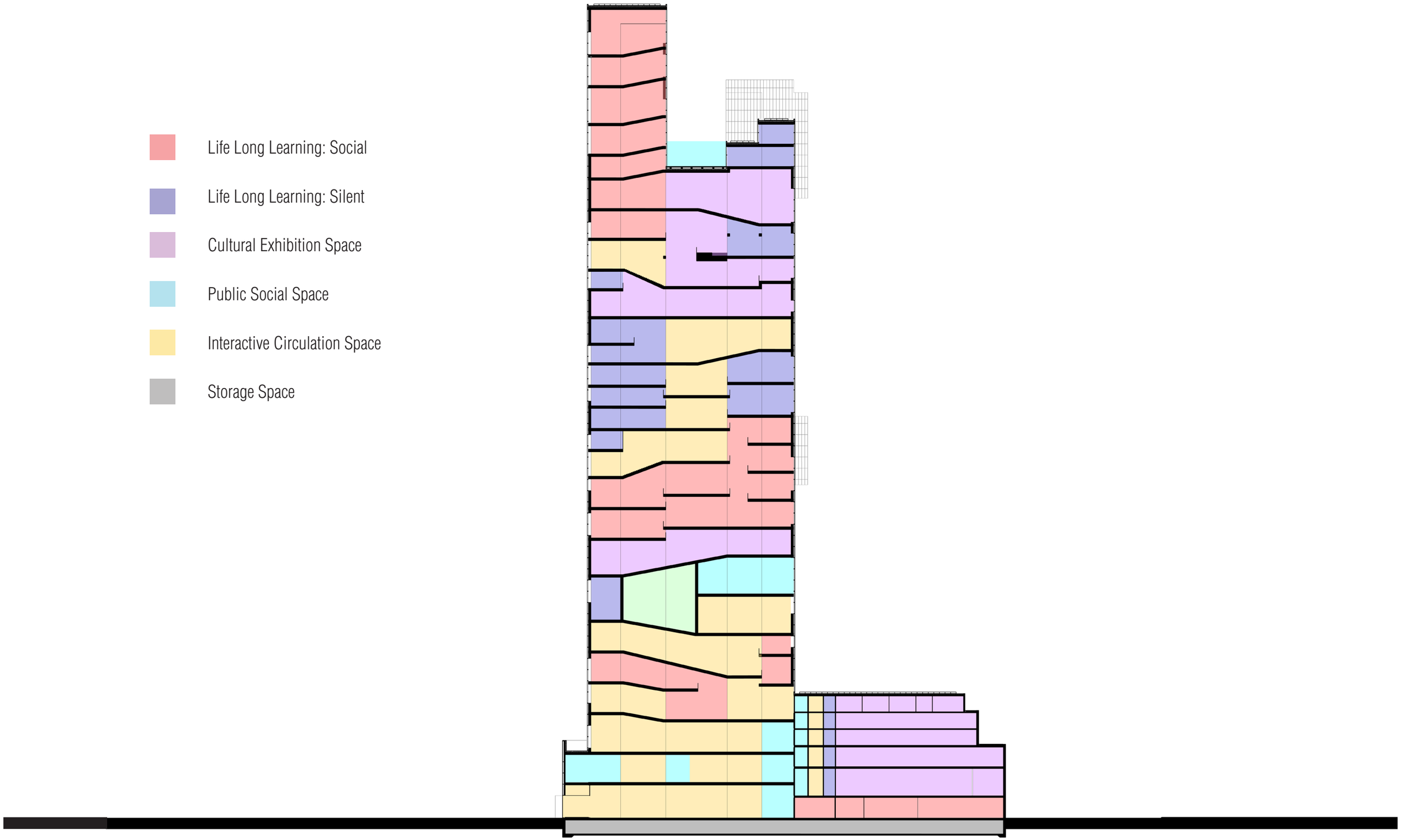
Life Long Learning: Silent

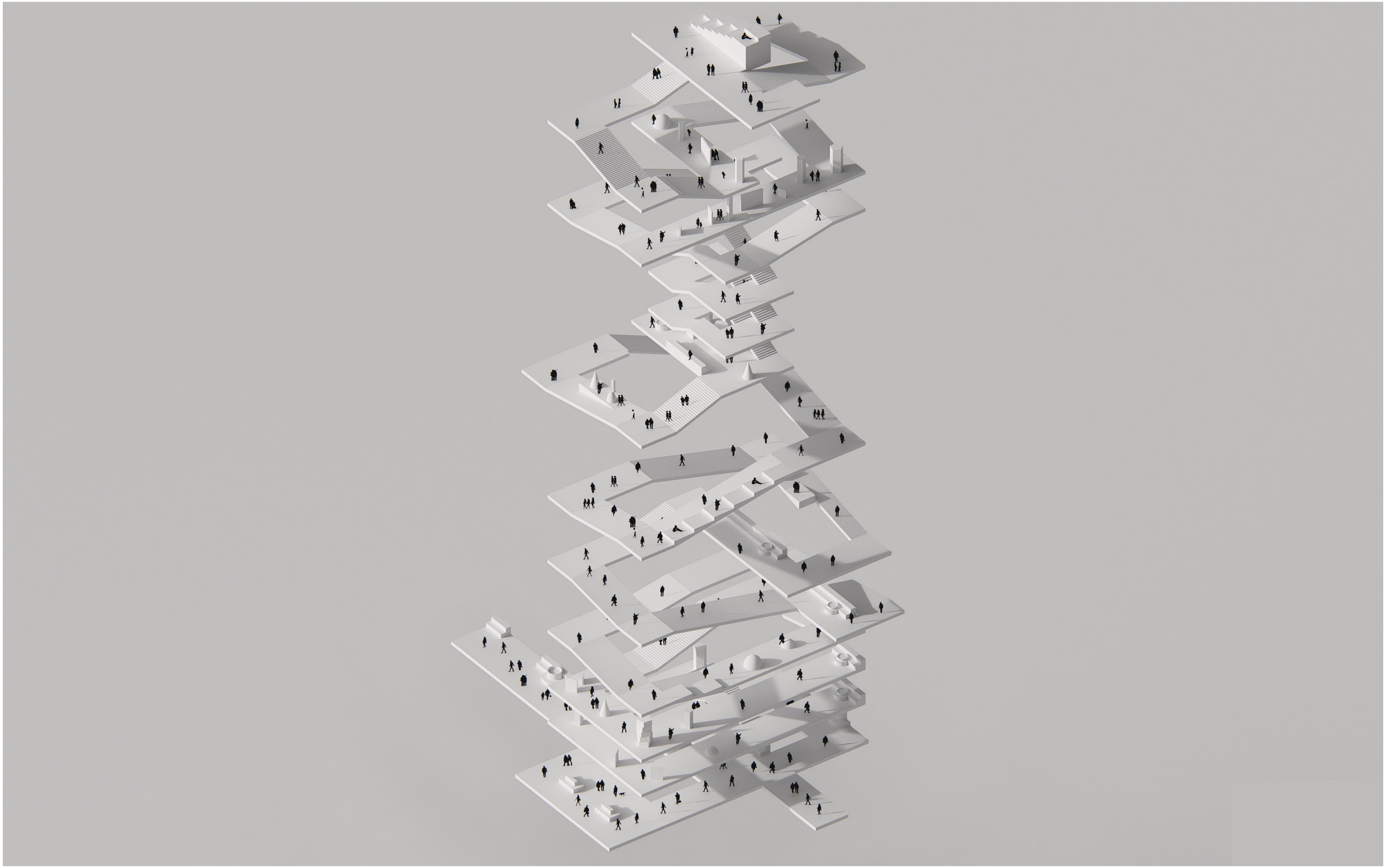
Cultural Exhibition Space

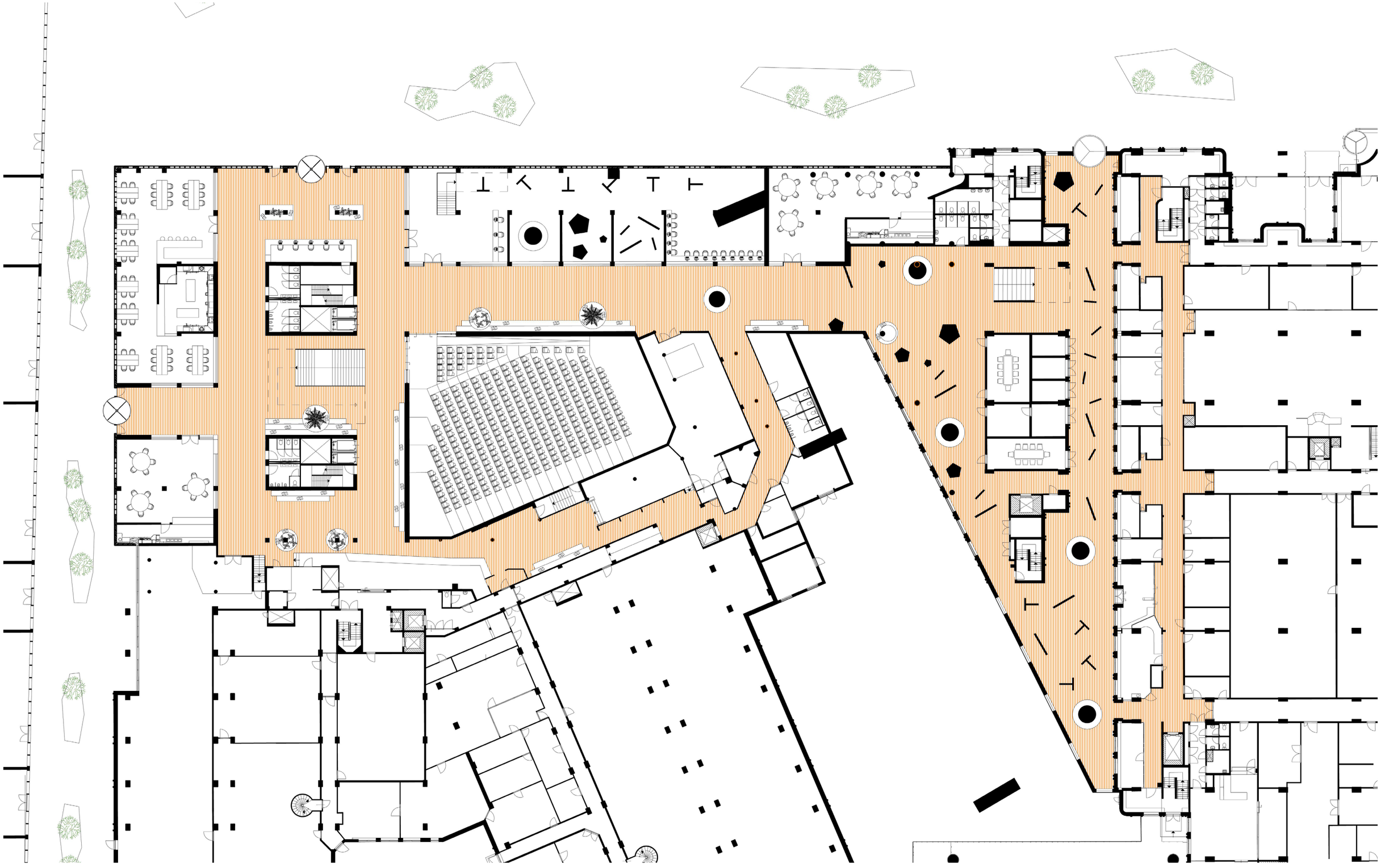
Public Social Space

Interactive Circulation Space

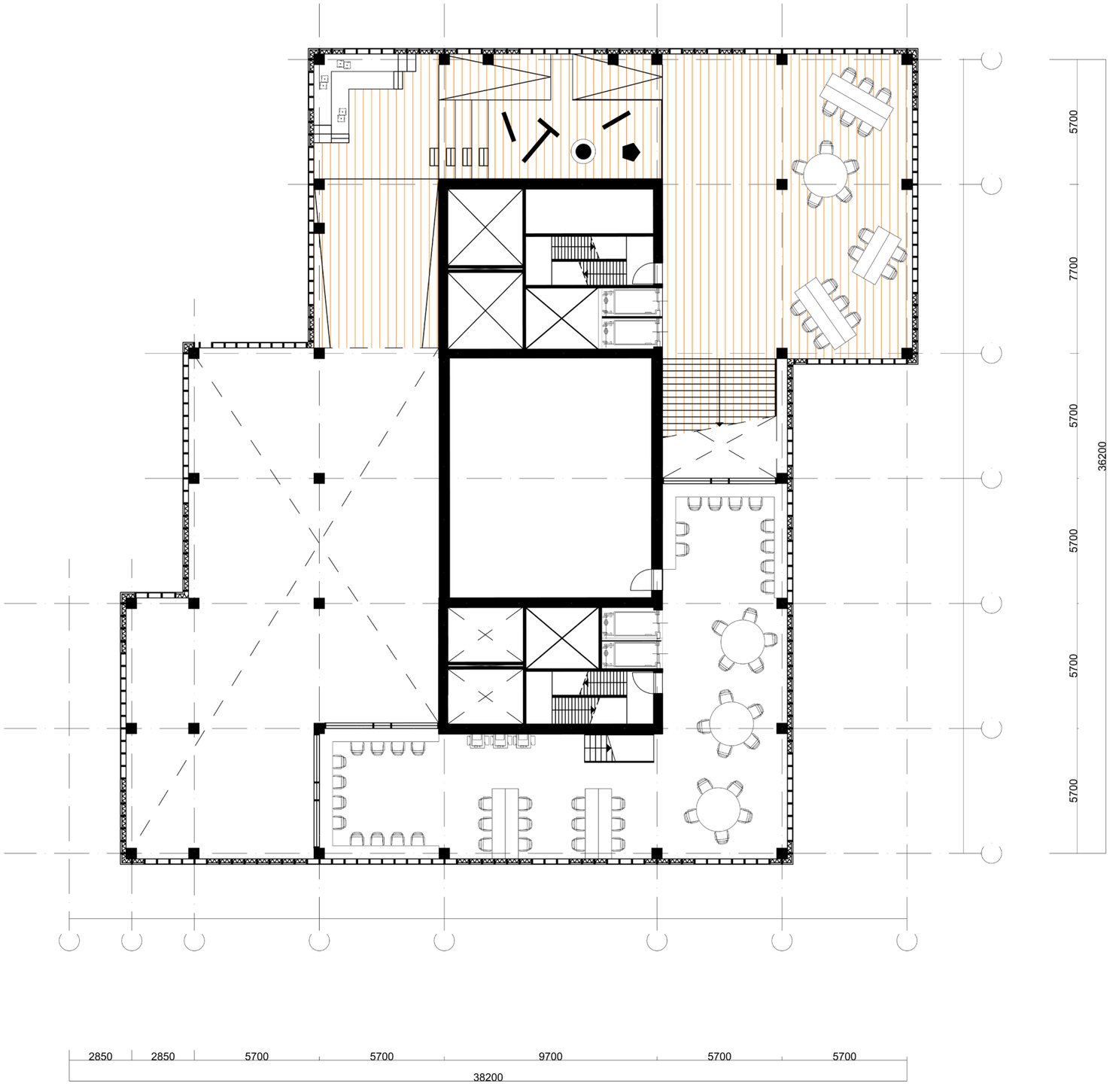
Storage Space







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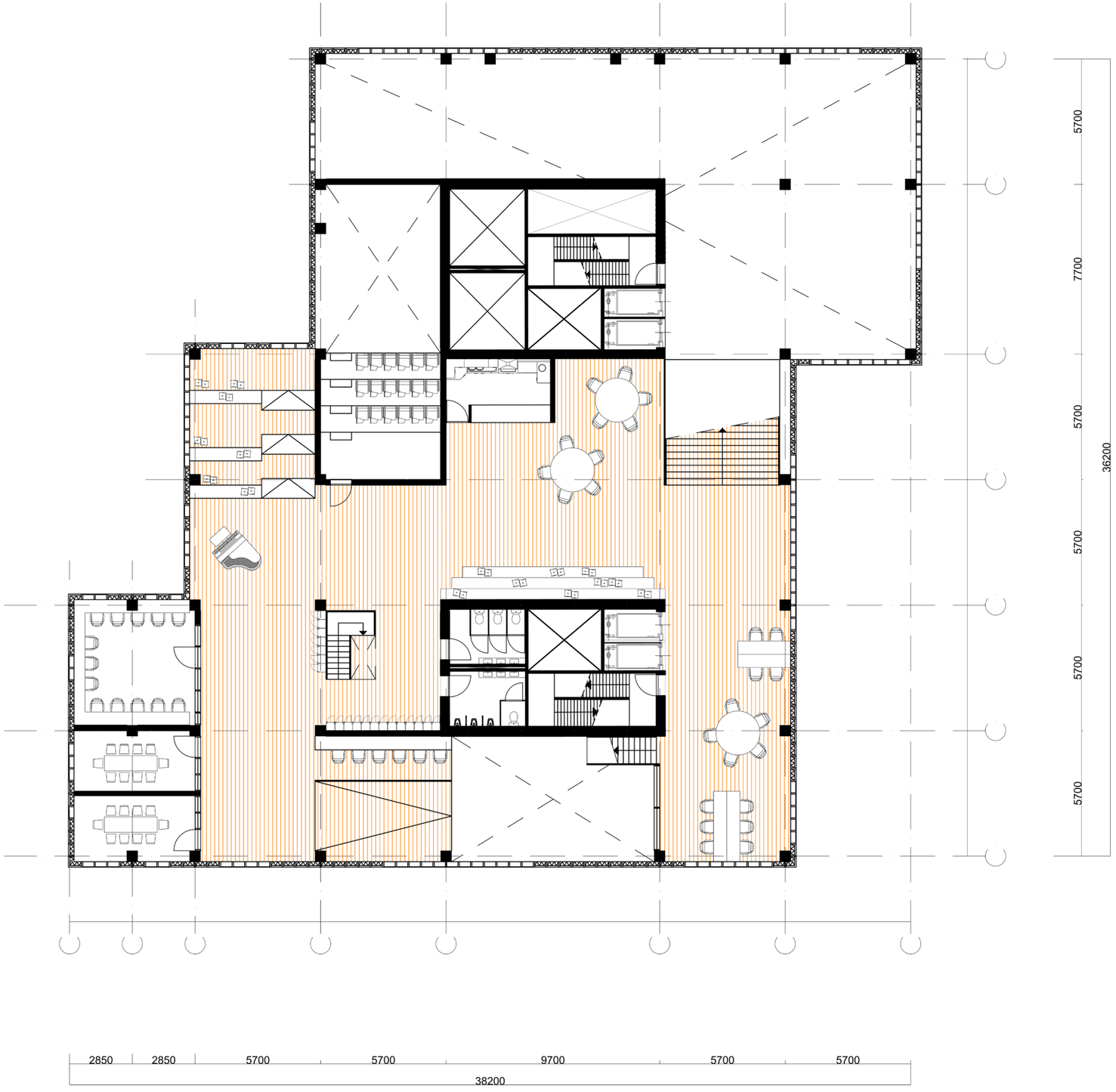
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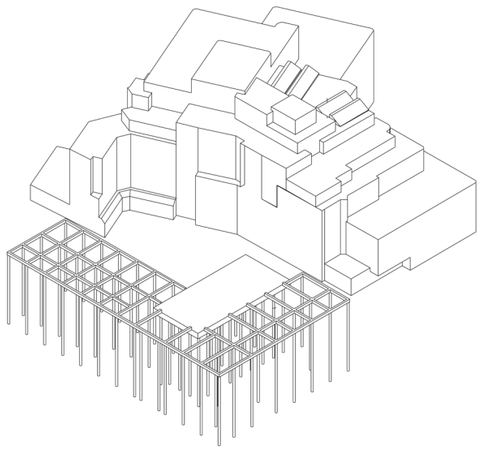
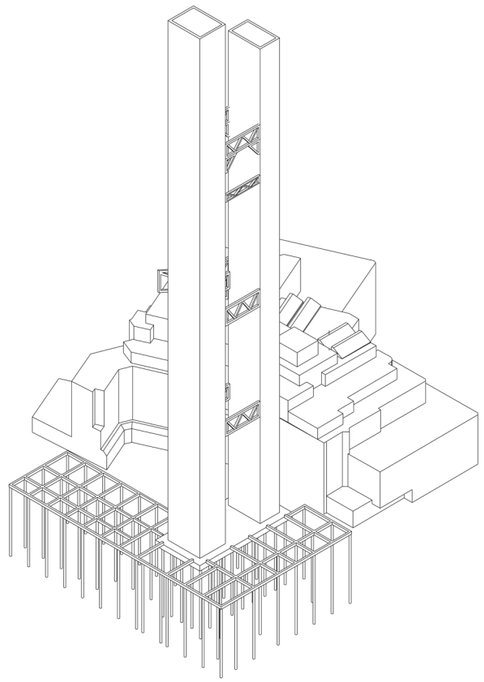
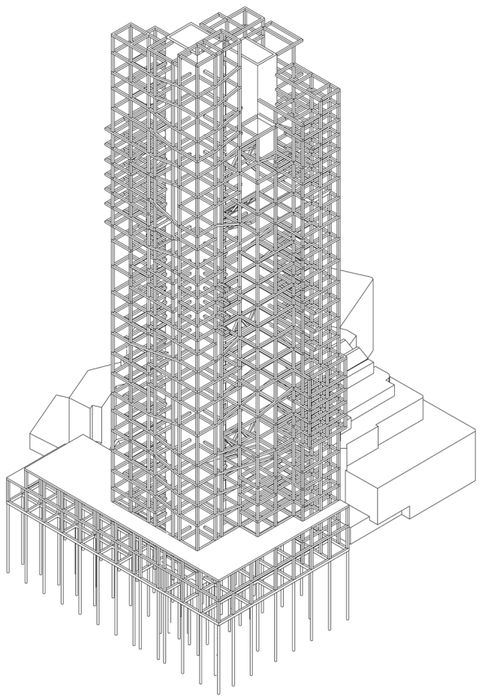


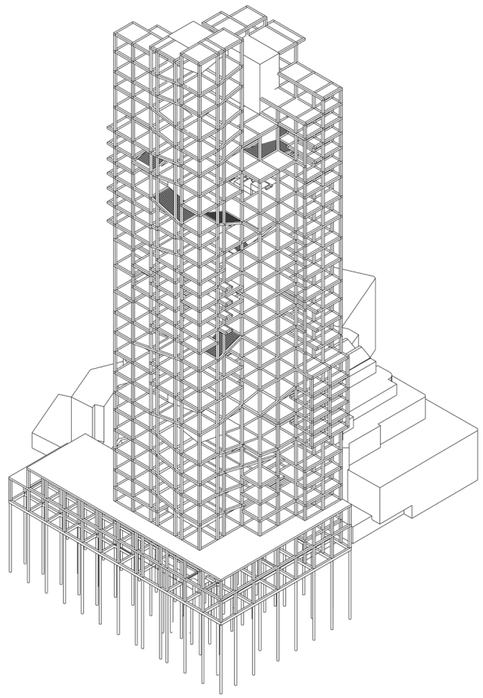
Phase 0:
Foundation



Phase 1:
Core



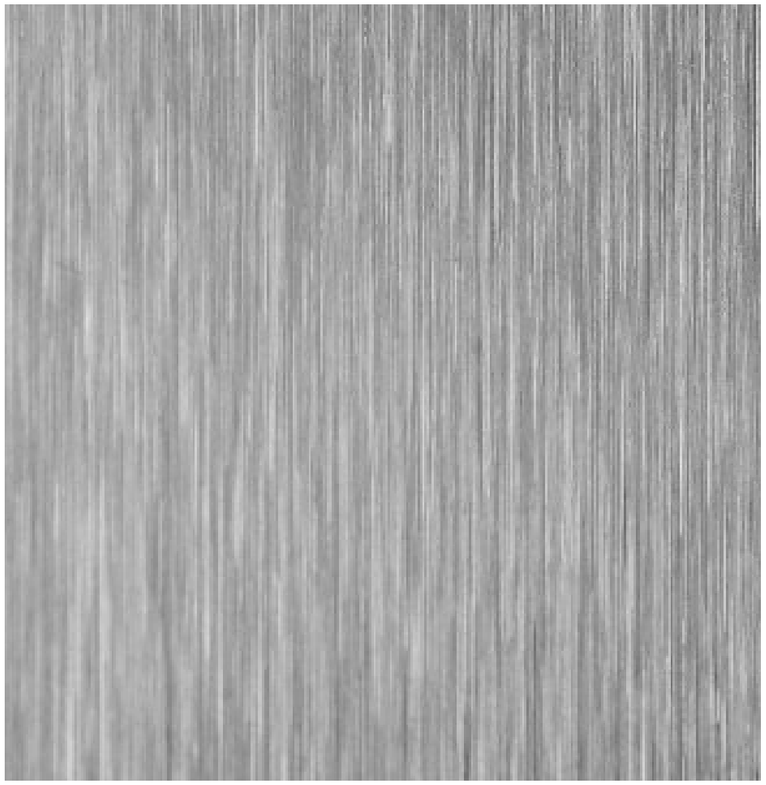
Phase 2:
Steel Structure

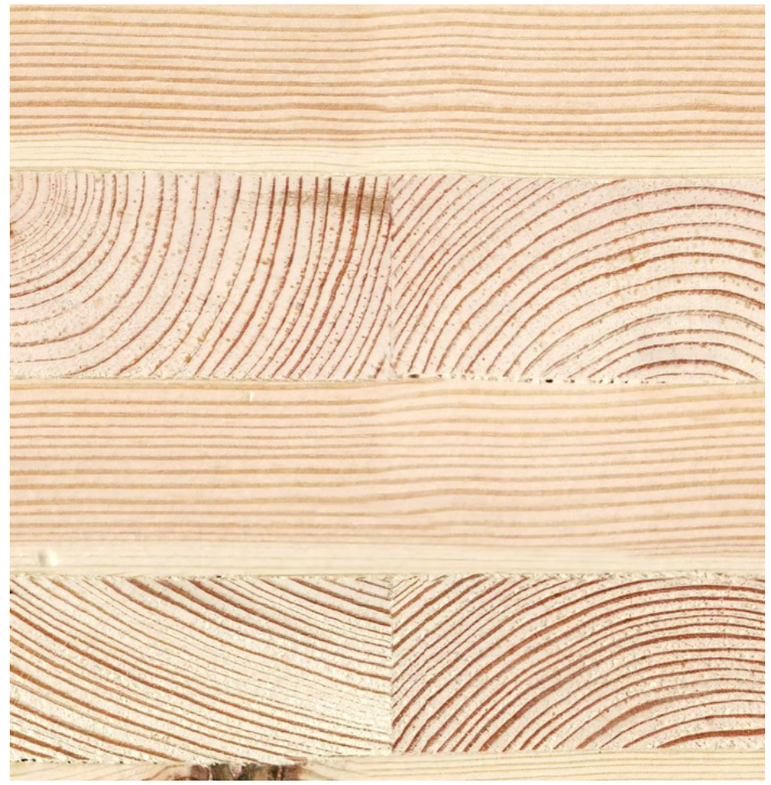


Phase 3:
Wooden Floors

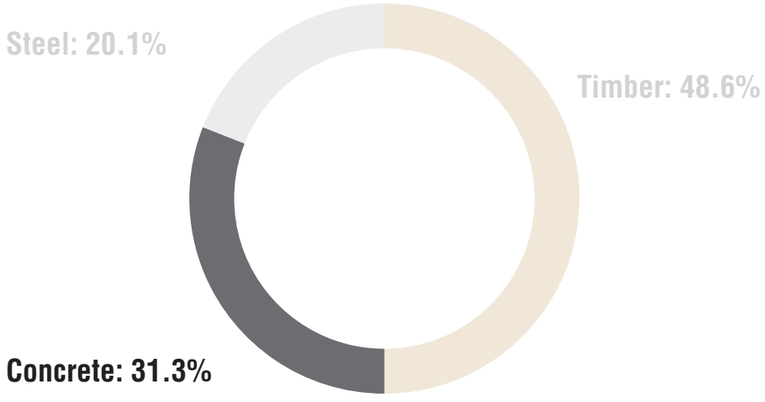




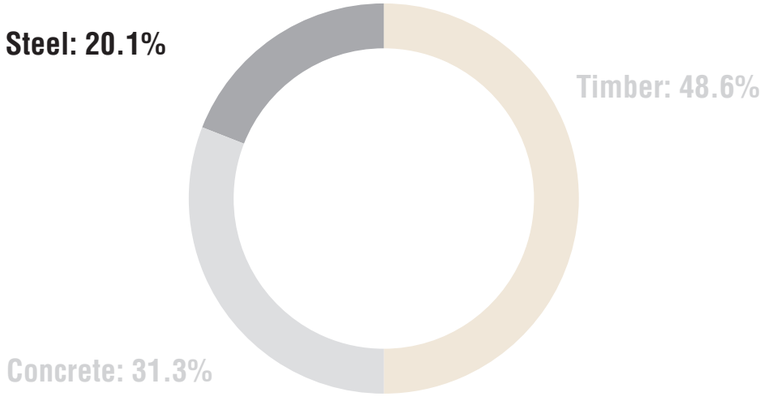




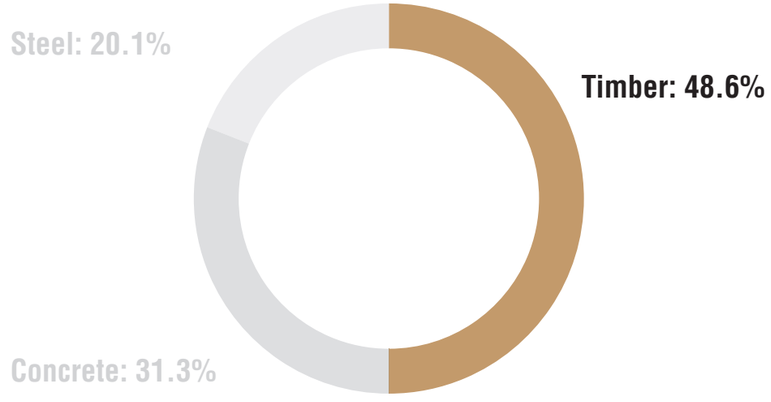
Concrete Core

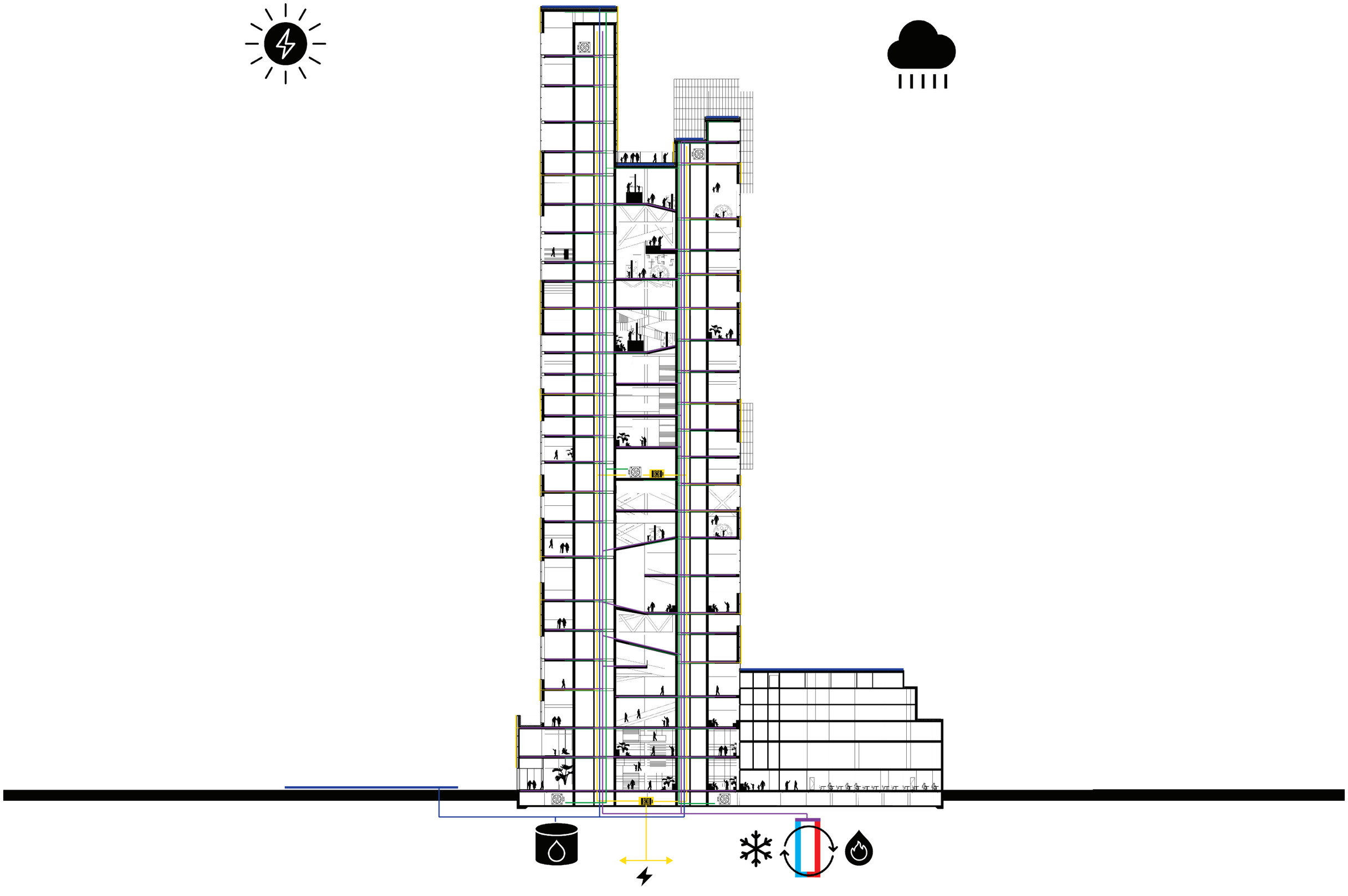


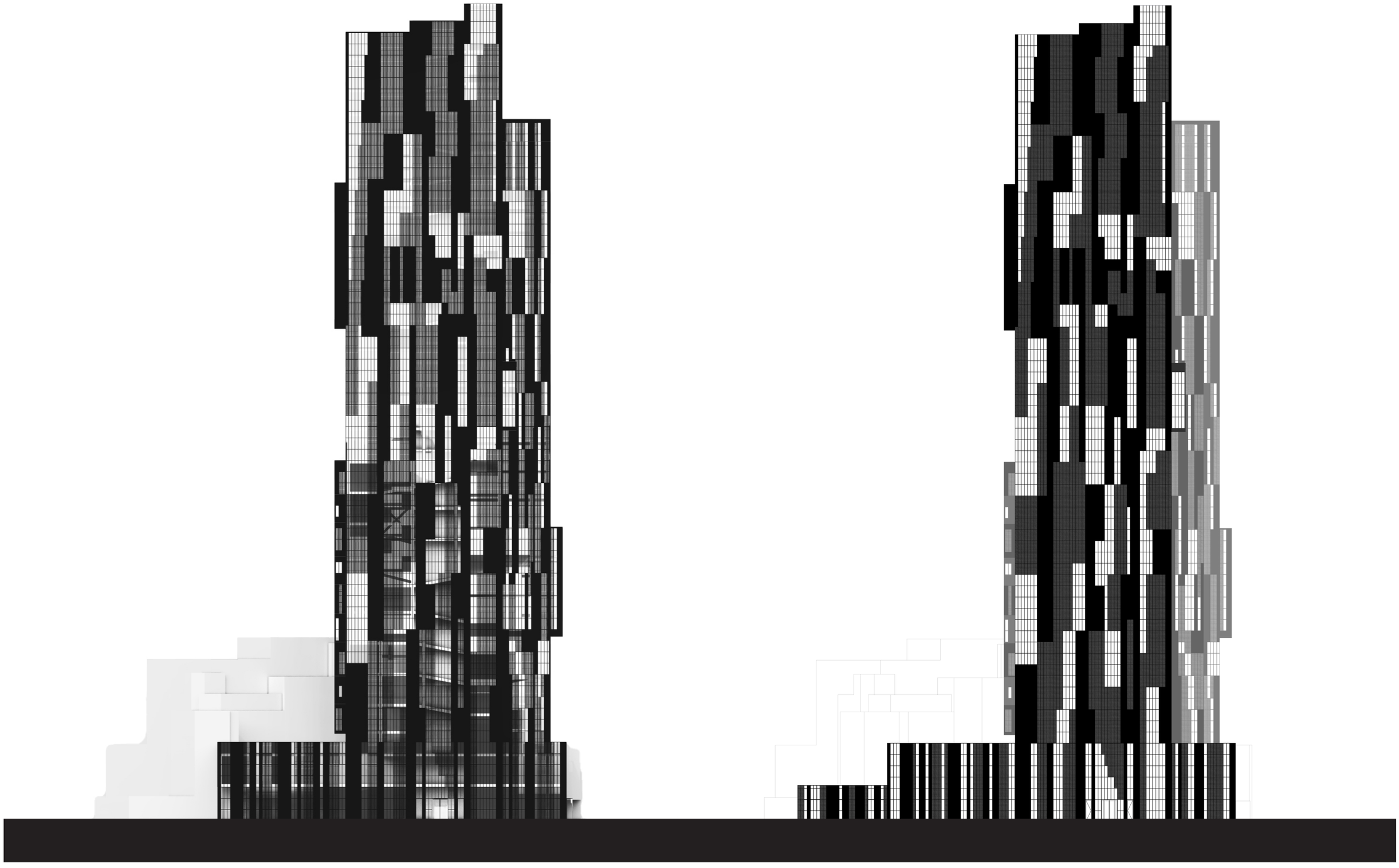
Steel Columns & Beams



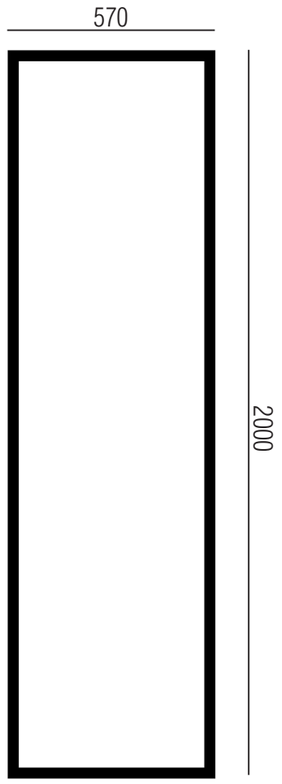
Wooden Floor







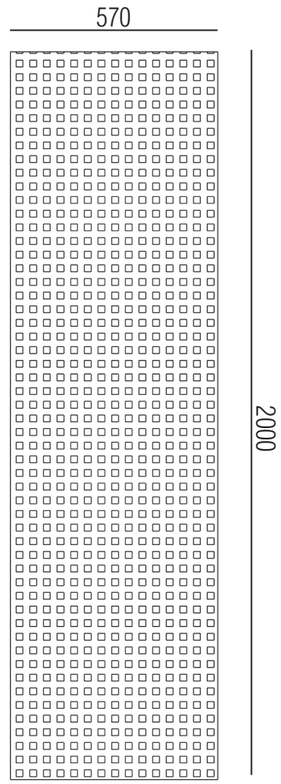
Transparent



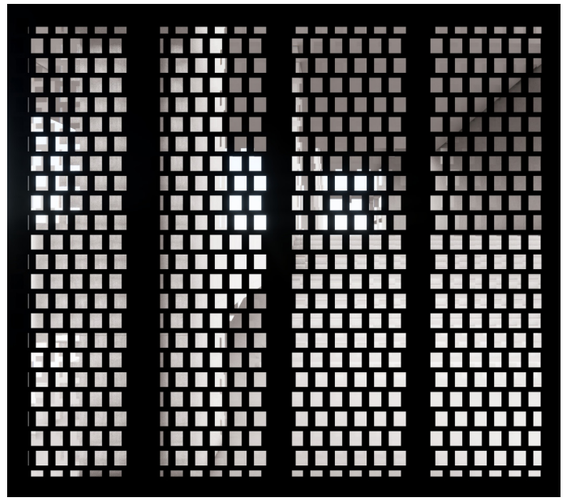
Public | Unique | Eye Catching Moments
Connection with Urban Context |Quality of Space
34.2 % of Facade = 6310 m^2 Transparent Facade



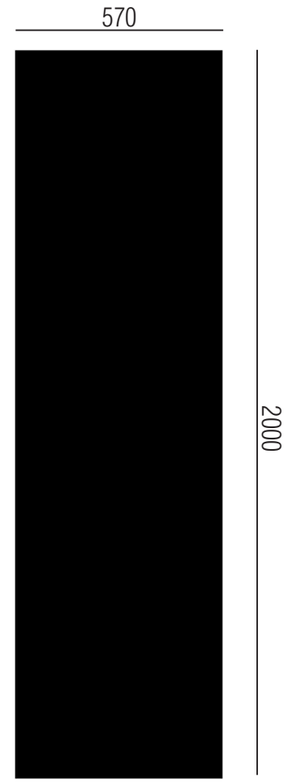
Semi-Transparent



Semi-Public | Educational | Cultural
Spatial Quality through Daylight | Solar Protection
34.5 % of Facade = 6365 m^2 Semi-Transparent Facade

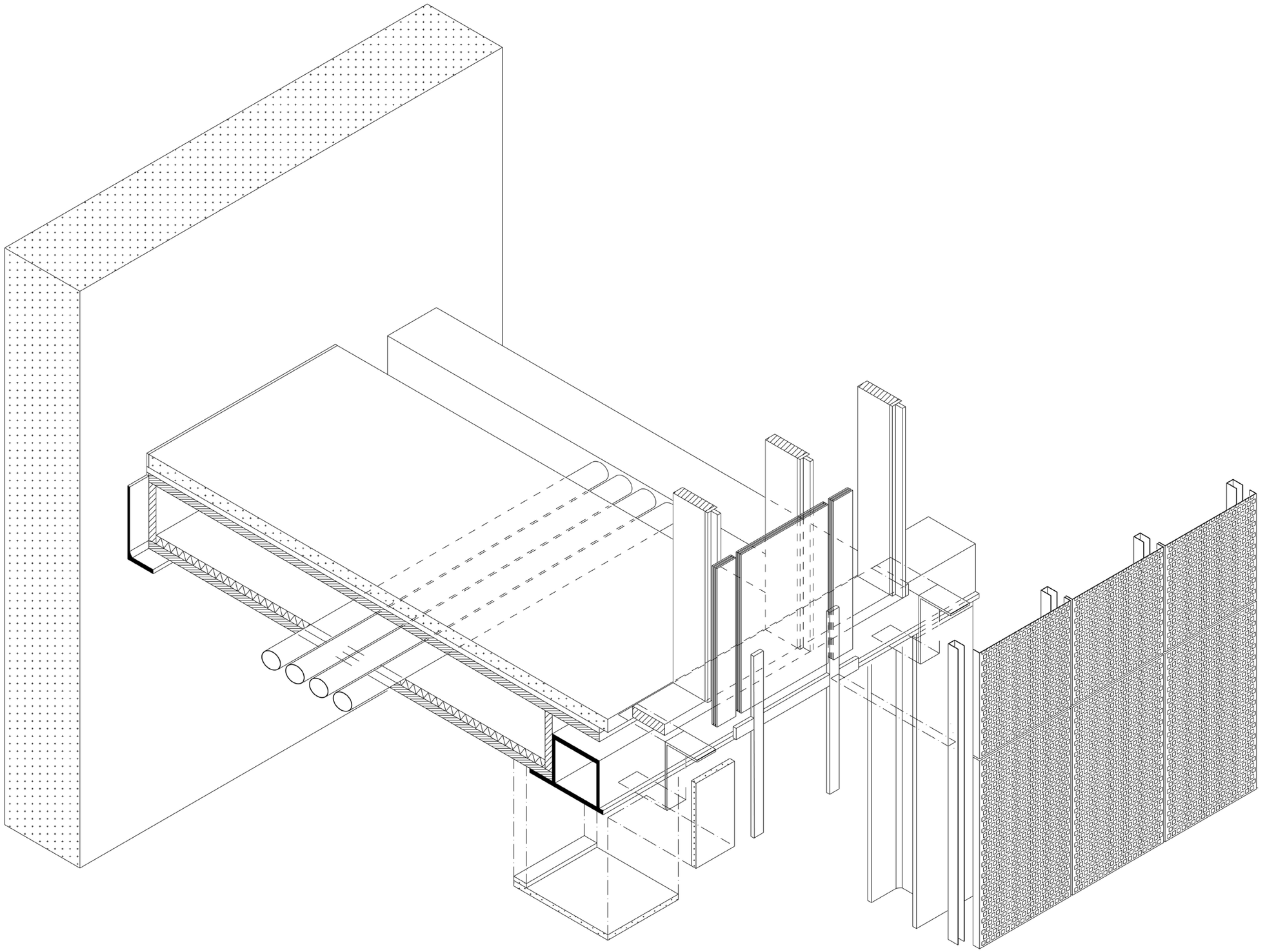


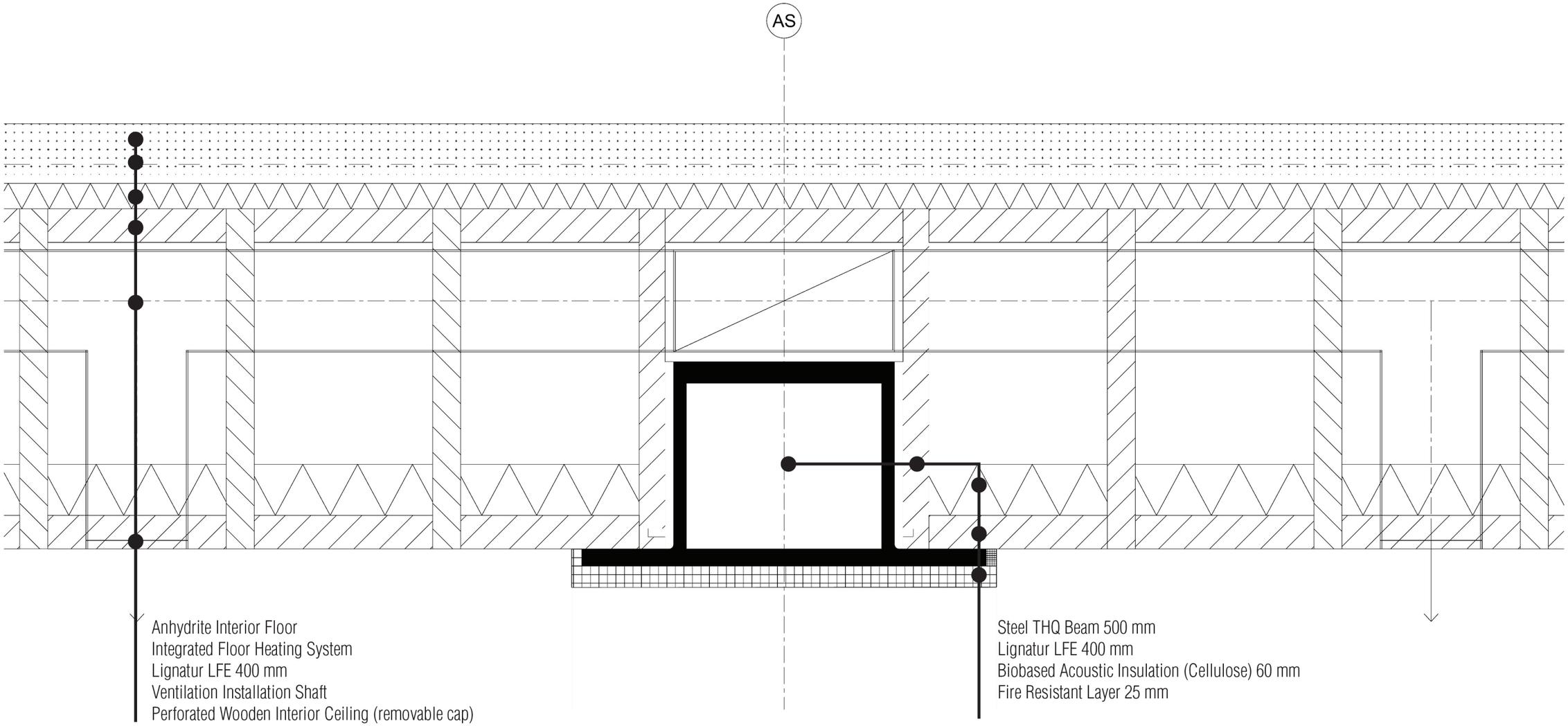
Opaque

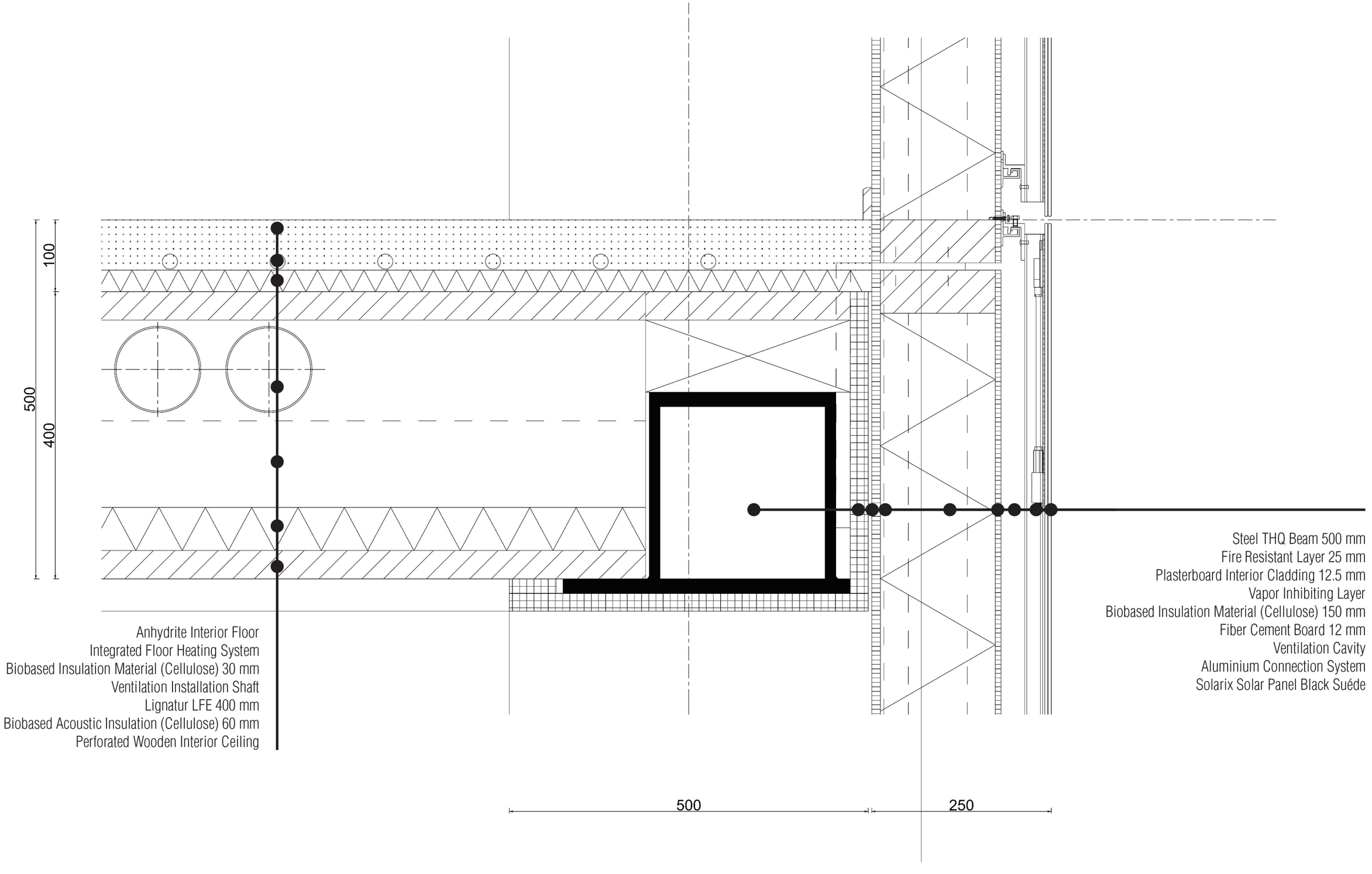


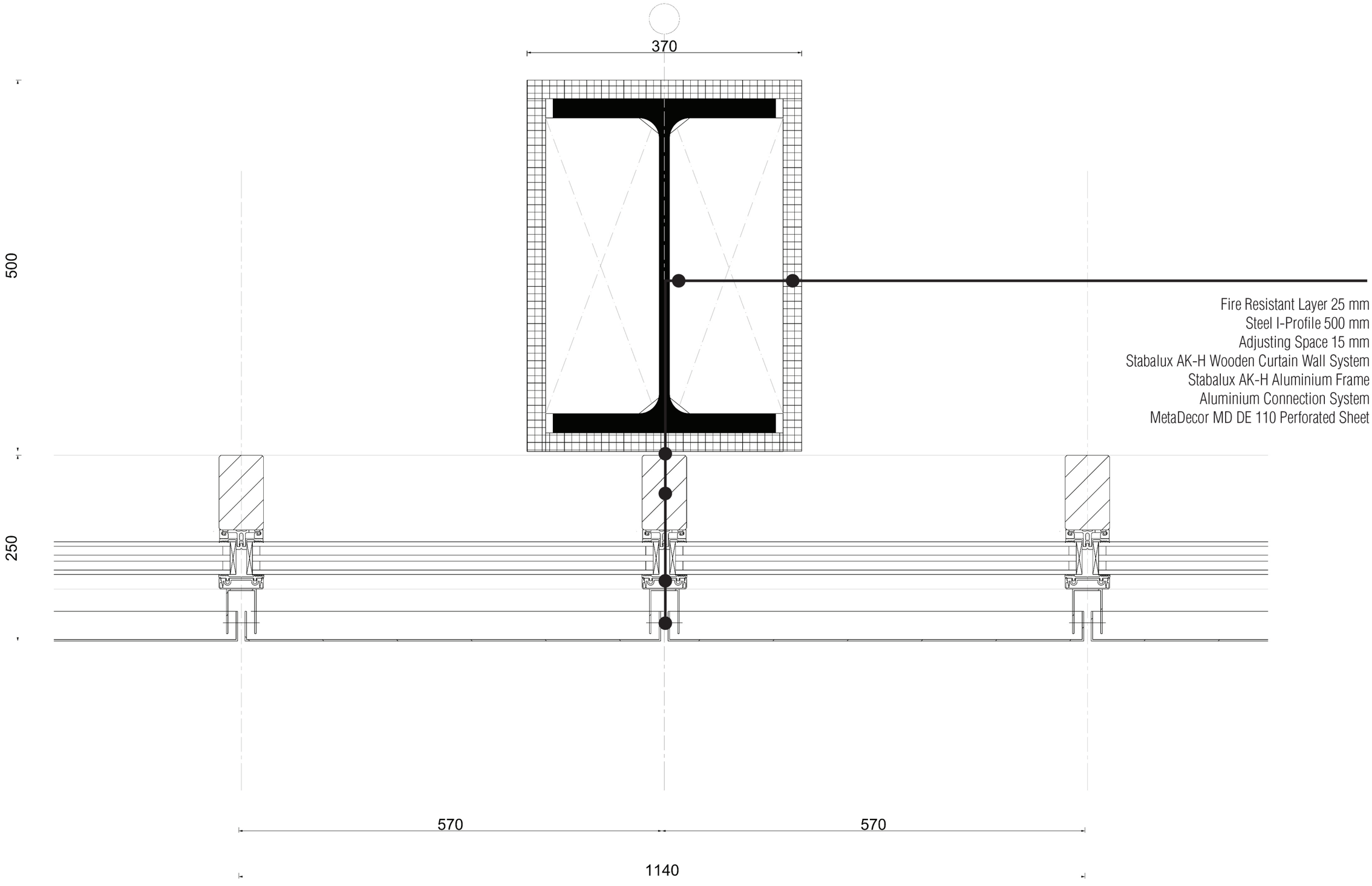
Non-Public | Technical | Event Space | Art Gallery
Quality of Interior Space through Climatic Design
31.3 % of Facade = 5774 m^2 Opaque Facade






AS
Anhydrite Interior Floor
Integrated Floor Heating System
Lignatur LFE 400 mm
Ventilation Installation Shaft
Perforated Wooden Interior Ceiling (removable cap)
Steel THQ Beam 500 mm
Lignatur LFE 400 mm
Biobased Acoustic Insulation (Cellulose) 60 mm
Fire Resistant Layer 25 mm
500


100
500
400
Anhydrite Interior Floor
Integrated Floor Heating System
Biobased Insulation Material (Cellulose) 30 mm
Ventilation Installation Shaft
Lignatur LFE 400 mm
Biobased Acoustic Insulation (Cellulose) 60 mm
Perforated Wooden Interior Ceiling
Steel THQ Beam 500 mm
Fire Resistant Layer 25 mm
Plasterboard Interior Cladding 12.5 mm
Vapor Inhibiting Layer
Biobased Insulation Material (Cellulose) 150 mm
Fiber Cement Board 12 mm
Ventilation Cavity
Aluminium Connection System
Solarix Solar Panel Black Suéde
500
250


370
500
250
570
570
1140
Fire Resistant Layer 25 mm
Steel I-Profile 500 mm
Adjusting Space 15 mm
Stabalux AK-H Wooden Curtain Wall System
Stabalux AK-H Aluminium Frame
Aluminium Connection System
MetaDecor MD DE 110 Perforated Sheet

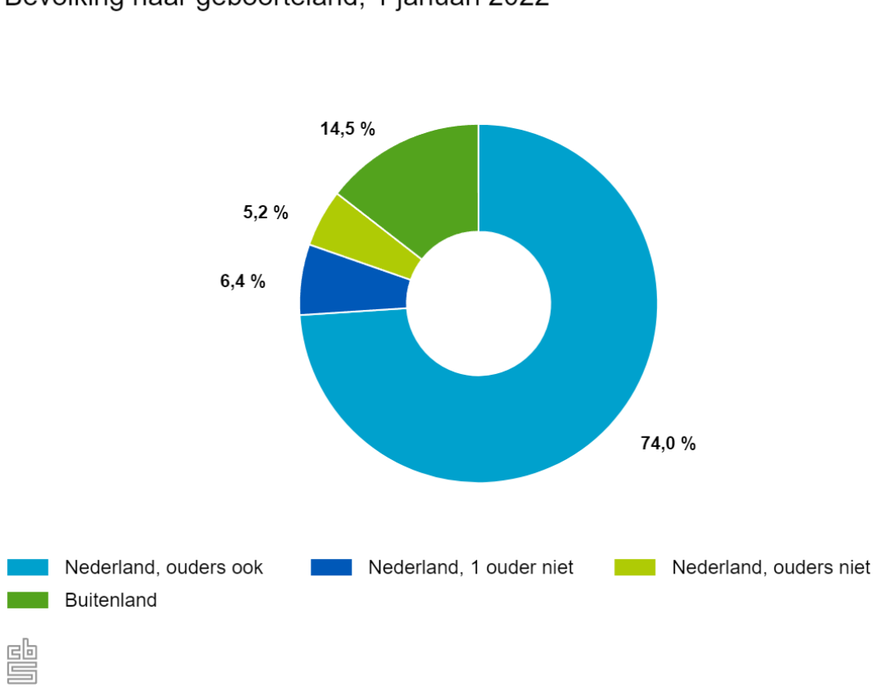
Appendix A - Final Reflection

Final Reflection:

This reflection contains two parts, design-related reflection and graduation-related reflection. Each entails a dialogue on specific questions about the process and development of the project.

Design Reflection:

Starting the reflection, I will describe what my project is about. The Cultural City Hub is a social condenser, that blends cultural and educational programs, but also multiple paths of life. In Dutch society, we see that over a quarter of the population relates to a different country, where one parent, both parents or themselves are born abroad, figure 1 (Centraal Bureau voor de Statistiek, 2023). In Dutch society, we can conclude that 'Culture' means 'Cultures'. When looking at education, *the Dutch education system does not represent this multiplicity of cultures,* therefore creating an imbalance within the system and society. The Cultural City Hub combines cultures and education into a Vertical Campus, creating the campus for the future.



(Figure 1. Hoeveel inwoners hebben een herkomst buiten Nederland, Centraal Bureau voor de Statistiek, 2023)

My posed problem for the project; *'the public environment within the Hague Central Station district has been neglected throughout the years, creating a separation between the social environment and the technical environment within the district.'*, focused my initial design ambitions on the urban city scale, then the vertical building scale. With my positioning on campus in mind; *a campus of the future is not just one building*, but *a multifunctional social condenser within the urban fabric*, focusing first on the urban city scale made sense. Continuing on the initial capacity plan from P1, a new urban redevelopment plan for the Hague Central Station district was developed focussing on the reconnection of the social environment and the technical environment. The plan included four existing buildings with educational- and cultural values, and five new additions related to the topic of Cultural City Hub. The four existing buildings are; the National Archive, the Royal Library, Bezuidenhoutseweg 67 and the Leiden University AvB tower as part of the urban redevelopment plan, a demolition- and addition plan was designed. After my initial P2 presentation, the mentors had some concerns about the redevelopment plan. I had to be more critical and careful about the existing urban fabric and rethink my position on why I needed this plan.

Using this feedback I restructured the redevelopment plan based on two major urban problematic aspects from P1, *poor quality of public space* and *Poor accessibility through the area*. These two problems were divided into four themes. The four themes are; *Urban porosity*, *Façade transparency*, *Spatial hierarchy* and *Load bearing construction*. This allowed me to be more careful and critical with my approach to the existing fabric. It helped me create a more critical way of thinking about key aspects of my project, both on urban and building scale (Keywords diagram Cultural City Hub.)



(Figure 2. Keywords diagram Cultural City Hub.)

Moreover, during my design process for the vertical campus, I concluded that the posed problem did not include educational aspects, resulting in an additional design problem dedicated to the discipline of education; *'The multiplicity of cultures is not represented within the Dutch education system.'* This problem allowed me to rethink what educational- and cultural spaces meant to me, and after feedback from my mentors during P3, connected them to one of my main design ambitions for the vertical campus, *culture connects education.* From my perspective, cultural spaces are interactive, informative, social and fluent, whilst educational spaces have a duality between social and private, each with its own characteristics. Implementing cultural- and social interactive programs within the circulation spaces transformed the function of circulation from monofunctional to multifunctional. My perspective on educational spaces, rephrased in my project as; *life-long-learning spaces*, is based on formality. Within my project, there are social learning spaces and silent learning spaces. The different typologies of educational programs, such as lecture halls, classrooms, media centres and study spaces, are divided based on their formality and individually connected to the cultural circulation system.

When reflecting on my process as a whole, I think that the feedback from my mentors during both P2 and P3 presentations helped my project tremendously. Besides, the comments during P2 about being careful and critical of the choices that I make within the project helped me realise and rethink what my project is about.

'*How can the implementation of culture and education contribute to the reconnecting of the social environment with the technical environment within the Hague Central Station district?'* is the research question I used for the Cultural City Hub. When I talk about the social environment, I talk about the people using and interacting with one another. The technical environment resonates with the built object and the urban systems that allow the people to interact with one another. Within the Hague Central Station district, there are, as mentioned earlier, four buildings with cultural and educational value. However, as the research from P1 presented, they are currently underperforming due to the posed problem presented earlier in this graduation plan. To redevelop, or reconnect, the social environment with the technical environment within the district into a vibrant public hub, the Cultural City Hub, a redevelopment plan was needed for the urban fabric. Additional cultural and educational programs in the form of five new buildings, such as the vertical campus, were added to further strengthen the connection between the social and technical.

Graduation Reflection:

1. **What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?**

My graduation topic; Cultural City Hub – reconnecting the social to the technical, connects the master track architecture to the studio topic of public building. By creating a new vertical campus, education and culture are the drivers of reconnection between the social and technical environments.

2. **What is the relevance of your graduation work in the larger social, professional and scientific framework?**

As elaborated earlier, the connection between the social and the technical in the Hague Central Station District has been dissolved over the years, resulting in a field of urban nothingness where the buildings are isolated architectural objects floating side-by-side, with humans merely as guests. By re-establishing this connection through culture and education, the district and the city of the Hague will become more lively and resilient, resulting in a better functional and liveable city.

Appendix B - Design Posters P2/P3/P4

Cultural City Hub

Reconnecting the Social and the Technical

'City Cultural Hub – a **social condenser** of different **cultural and educational activities** that combine multiple levels of education, but also **multiple paths of life**.'

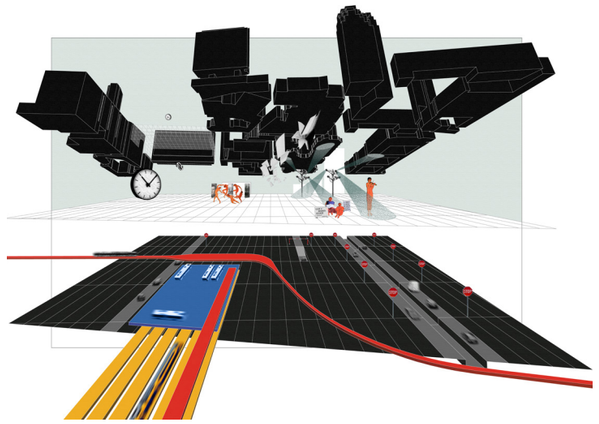
AR3AP100 Public Building Graduation Studio
The Vertical Campus - 'a public hub of the future in the hague'

P2 Presentation | 25/01/2024
By Tijn Jansen | 4713702

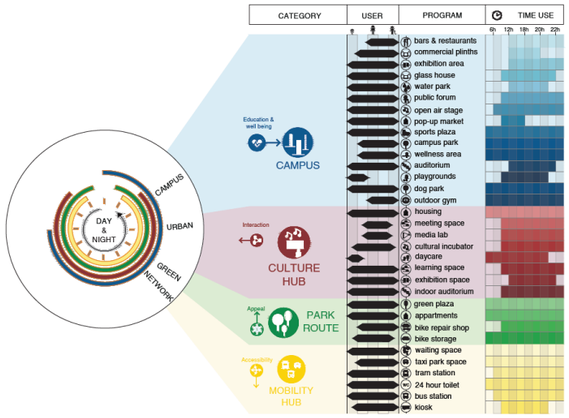
PD - Dr. Ir. S. Corbo | TBD - Ir. F. Eckardt | TD - Ir. S. Lee | BE Dr. M. Dabrowski

Problem Statement:

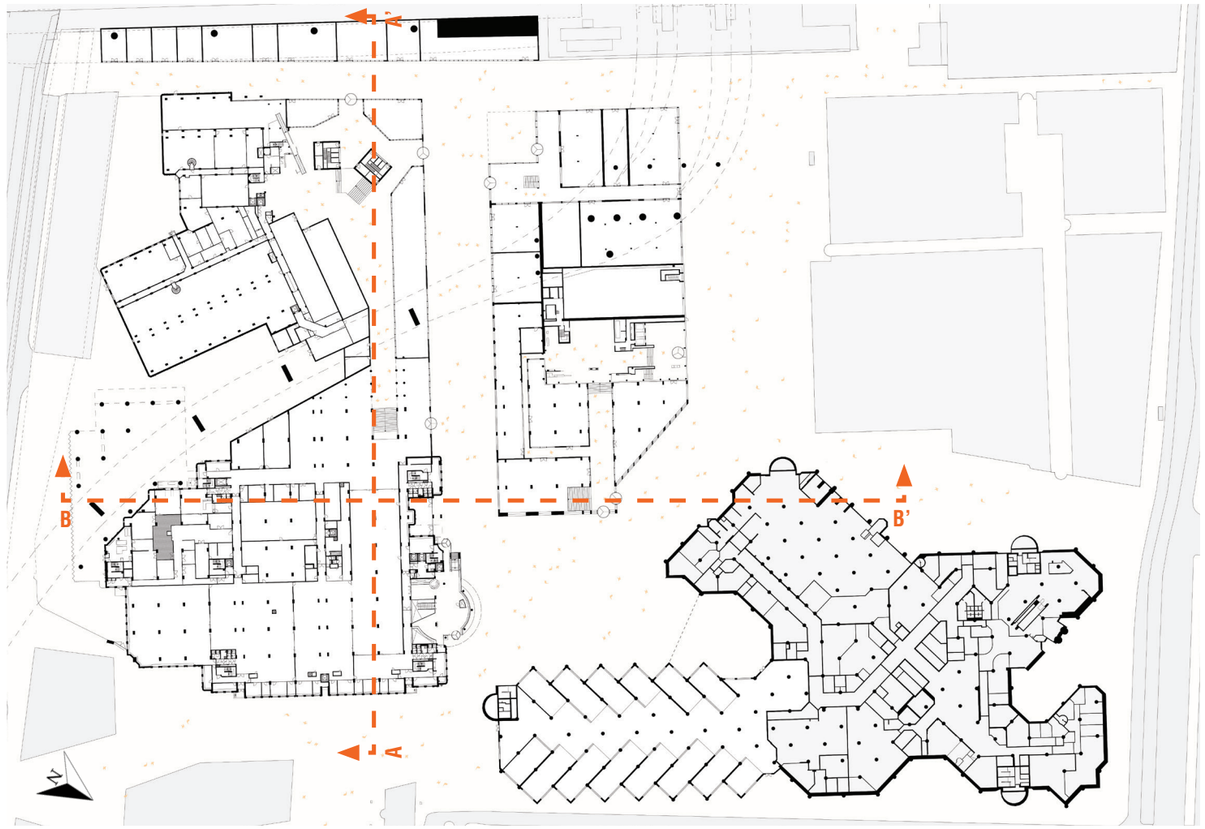
' The problem of the Central Station District is the **lack of connectivity and accessibility** within the site due to **closed-off, fragmented spaces** and a clear **separation between buildings**, hindering effective communication and use of the area.



Program Exploration:

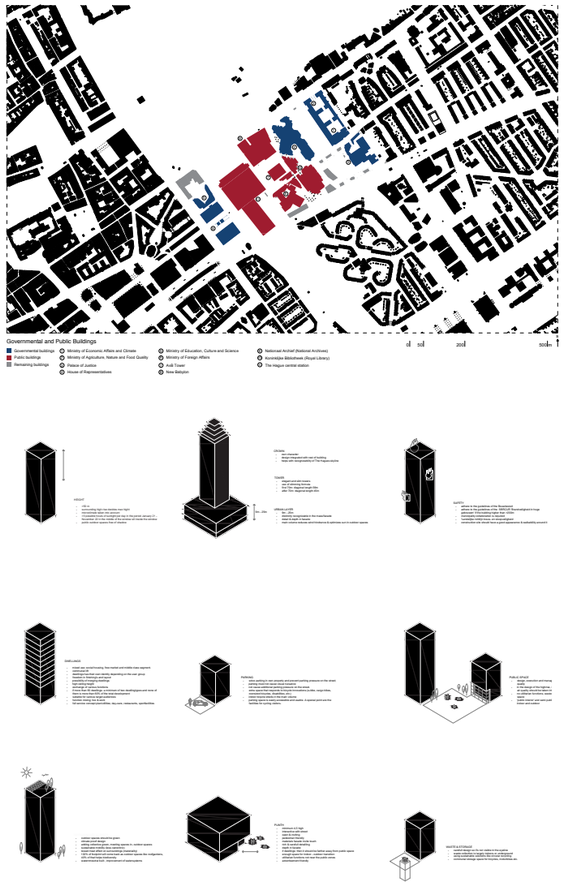


Ground Floorplan (1:1000)

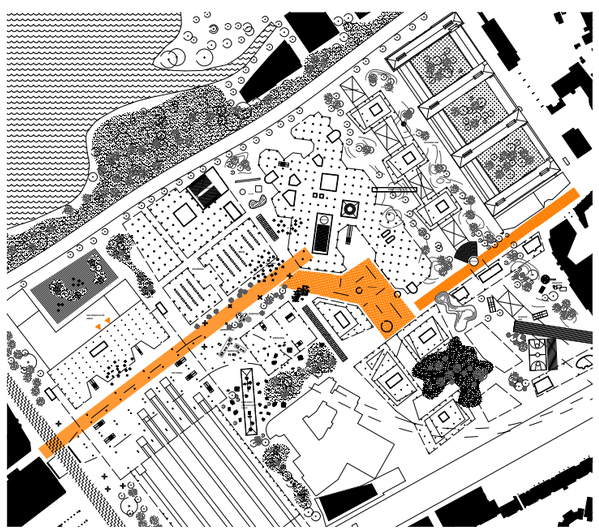


Visual Documentation and Analysis

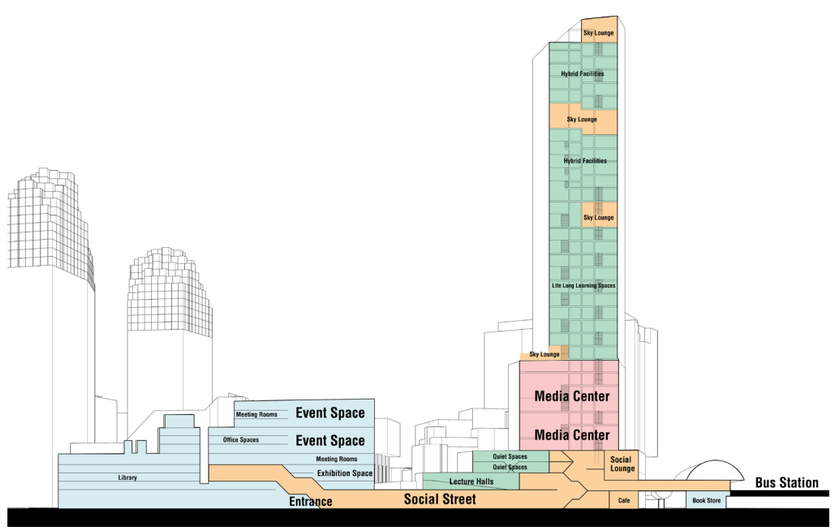




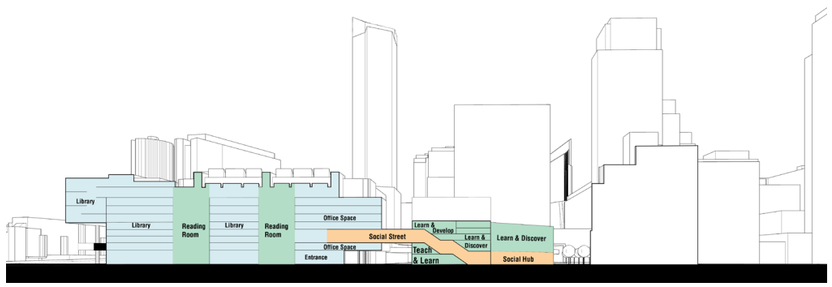
Capacity Plan - Urban Plinth



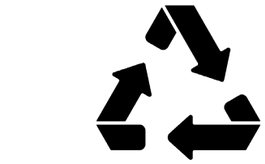
Urban Section AA' (1:1000)



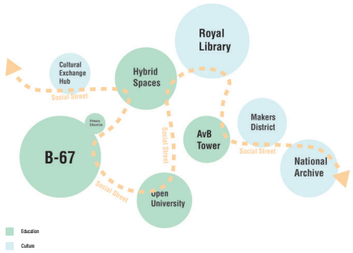
Urban Section BB' (1:1000)



Cultural City Hub - Concept



Redeveloping current inventory

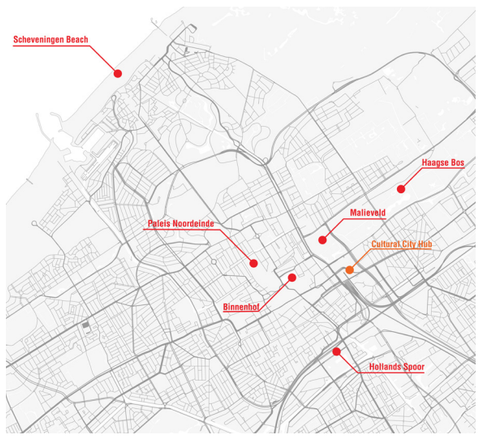




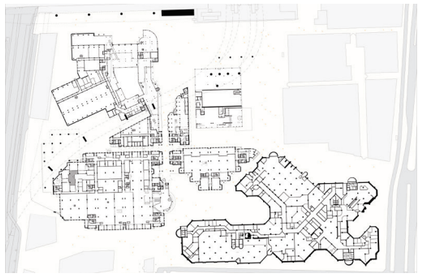
Cultural integration in education



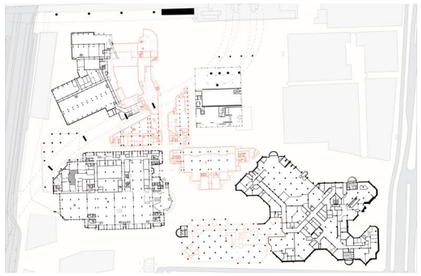
For the city, by the city



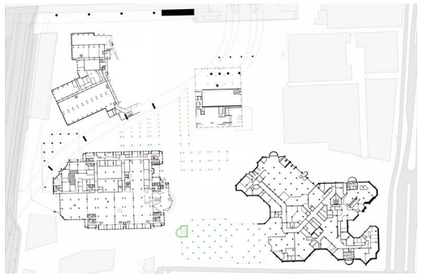
Current Situation



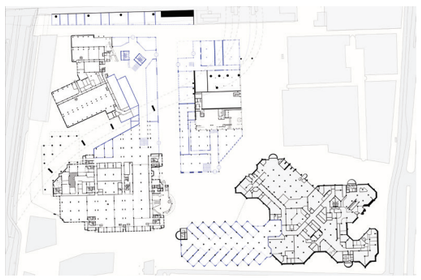
Demolish



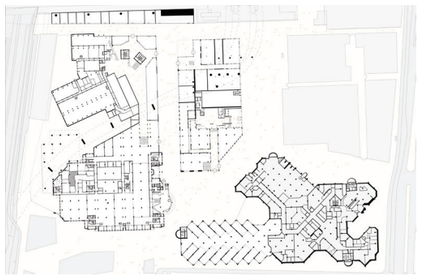
Reuse



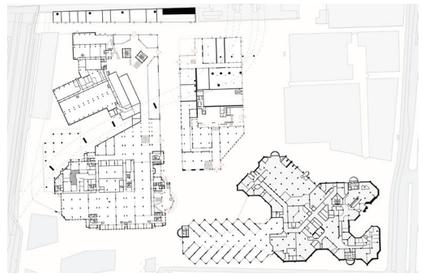
Addition



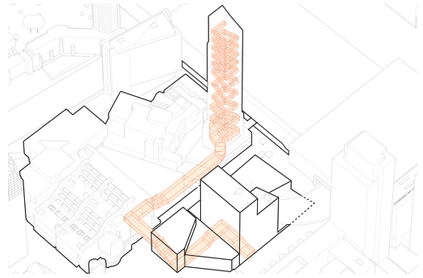
New Proposal



Cultural City Hub - Accessibility



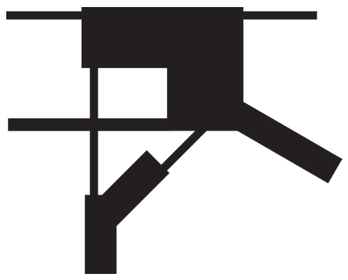
Cultural City Hub - Circulation



Cultural City Hub - Interior and Exterior



Cultural City Hub - Old Urban Fabric



Cultural City Hub -New Urban Fabric



Cultural City Hub - Building Catalog



Royal Library

Library Facilities (40.000 m2)

Museum of Literature and Children's books

DEN acadamy

RKD, Institute for Art History

Storage, Mechanical, Circulation spaces



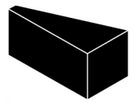
National Archive

Archive Space (22.000 m2)

Meeting Rooms

Office Spaces

Storage, Mechanical, Circulation spaces



Cultural Exchange Hub

Lounge + Cafe

Exhibition Space

Event Spaces

Meeting Rooms

Office Spaces

Storage, Mechanical, Circulation spaces



Cultural Commercial

Art Gallery

Book Shop

Cafes

Local Shops



Open University

Social Hub

Learn and Discover

Learn and Develop + Innovation Center

Teaching, Learning and Development

Storage, Mechanical, Circulation spaces

B67 - Primary Education

Entrances

Play and Learn

Outdoor Spaces

Storage, Mechanical, Circulation spaces



Hybrid Tower

Entrance Lounge + Cafe

Media Center + Center of Advanced Virtuality

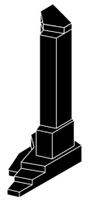
Hybrid Work and Study Space

Lecture Halls

Social Sky Lounges

Life Long Learning Spaces

Storage, Mechanical, Circulation spaces



Makers District

Lounge + Cafe

Workshop Spaces

Dance Studio

Music Classrooms

Local Shops

Storage, Mechanical, Circulation spaces



AvB Tower

Lecture Hall

Study Spaces

Student Apartments + Amenities

Social Space

Storage, Mechanical, Circulation spaces

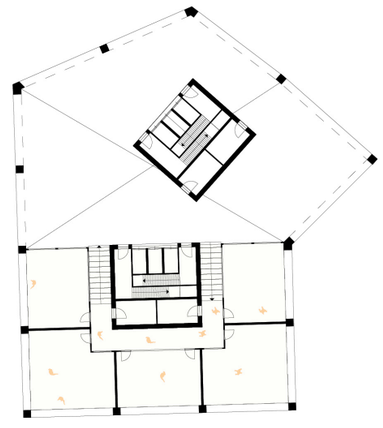


Tower Ensemble - Spacial Structure

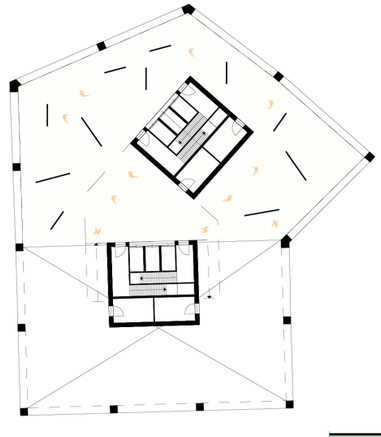


Tower Ensemble - Facade Explorations





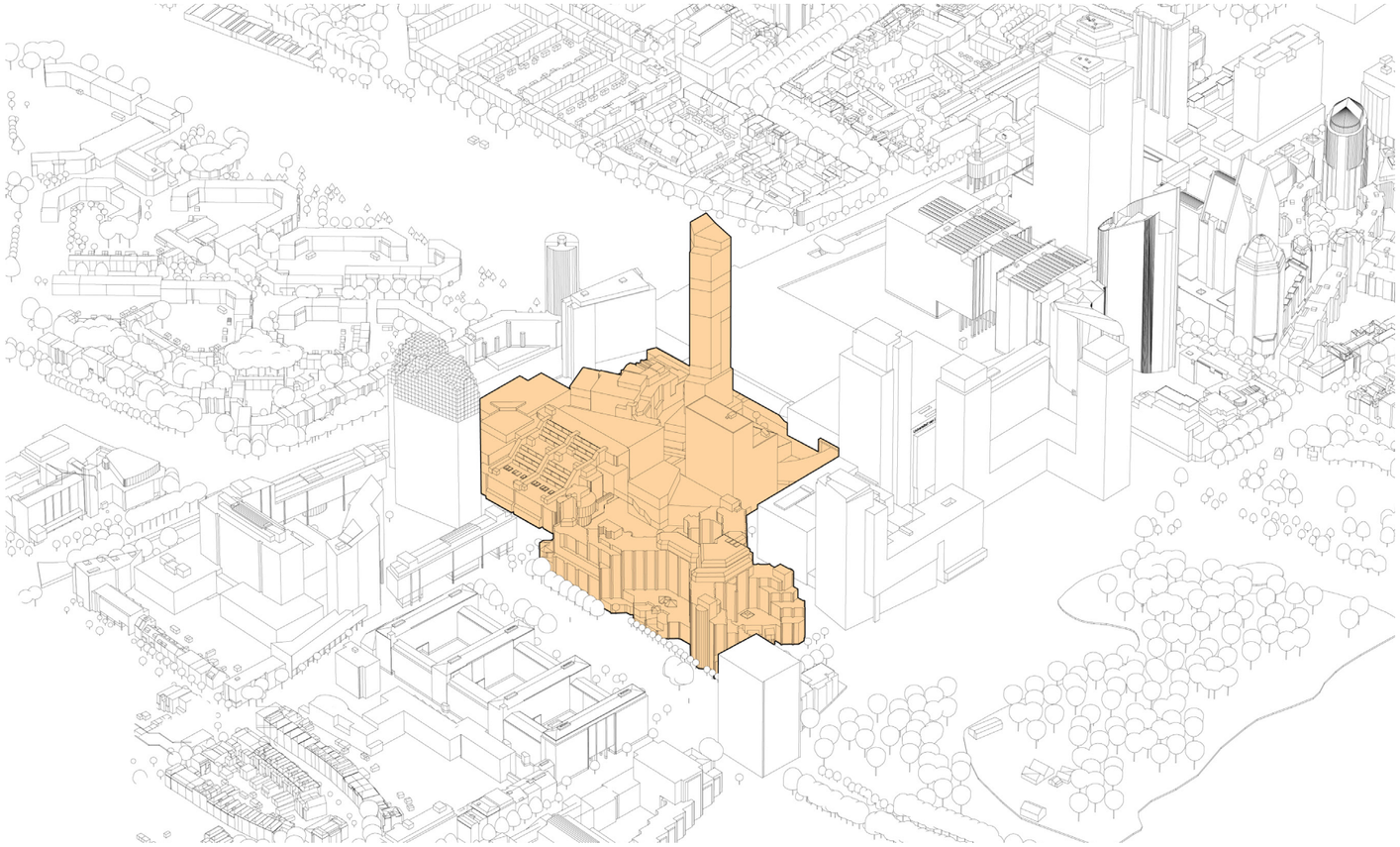
Floor 25



Floor 26

Tower Ensemble - Conceptual Section & Typical Floorplans

Cultural City Hub - Mass Model Overview

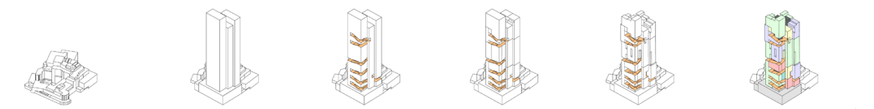


Cultural City Hub

'The campus of the Future'



Generation Process:



Phase 0: Current Situation

Phase 1: Densification

Phase 2: Circulation

Phase 3: Clustering

Phase 4: Transform

Phase 5: Program

Catalog Of Buildings



Royal Library

Library Facilities (40.000 m2)
Museum of Literature and Children's books
DEN acadamy
RKD, Institute for Art History
Entrance, Storage, Mechanical, Circulation spaces



Open University

Social Hub
Learn and Discover
Learn and Develop + Innovation Center
Teaching, Learning and Development
Entrance, Storage, Mechanical, Circulation spaces



Cultural Exchange Hub

Exhibition Lounge & Cafe
Event Spaces
Meeting Rooms
Office Spaces
Entrance, Storage, Mechanical, Circulation spaces



Cultural Commercial

Art Gallery
Book Shop
Cafes
Local Shops



National Archive

Archive Space (22.000 m2)
Meeting Rooms
Office Spaces
Entrance, Storage, Mechanical, Circulation spaces



B67 (part) - Primary Education

Play and Learn Spaces
Outdoor Playground
Entrance, Storage, Mechanical, Circulation spaces



Hybrid Tower

Center of Advanced Virtuality
Lecture Halls
Life Long Learning Spaces
Media Center
Social Spaces
Sky Lounge
Entrance, Storage, Mechanical & Circulation spaces



Makers District

Lounge + Cafe
Workshop Spaces
Dance Studio
Music Classrooms
Local Shops
Entrance, Storage, Mechanical, Circulation spaces



AvB Tower

Lecture Hall
(Social) Study Spaces
Student Apartments + Amenities
Social Spaces
Entrance, Storage, Mechanical, Circulation spaces



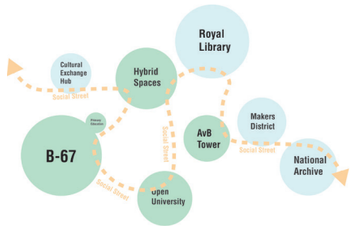
Urban Floor Plan: (1:1000)



Cultural integration in Education

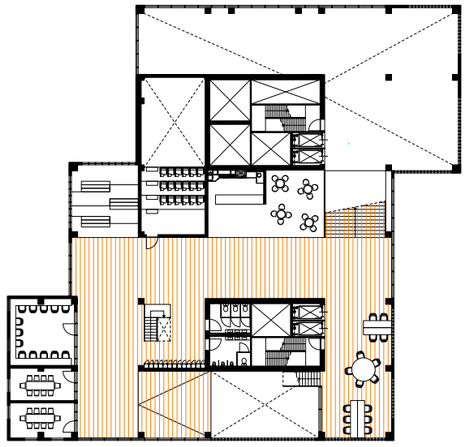


Cultural and Educational expansion in one place

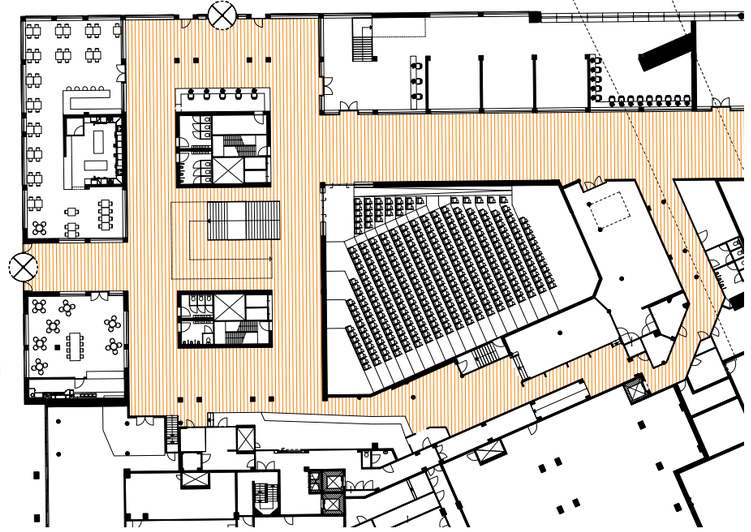


Connection via Social Infrastructure

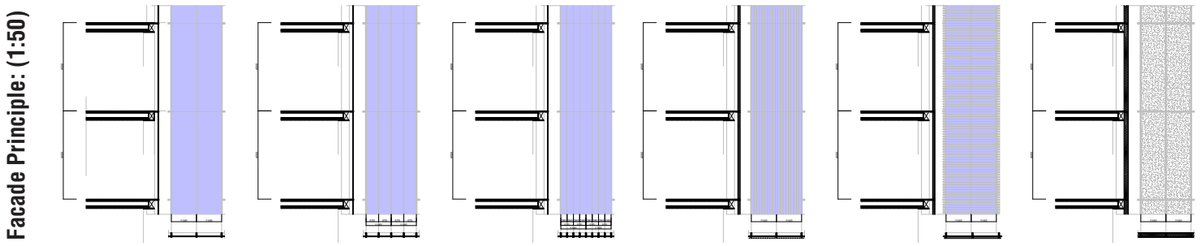
- Circulation
- Media Center
- Life Long Learning: Silent
- Life Long Learning: Social
- Social Space
- Lecture Hall



Floor Plan: (1:200)



Ground Floor Plan: (1:200)



Facade Principle: (1:50)

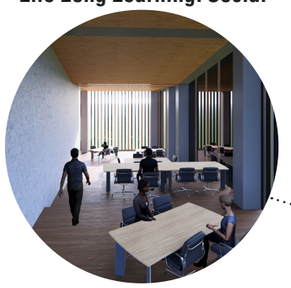
Life Long Learning: Silent



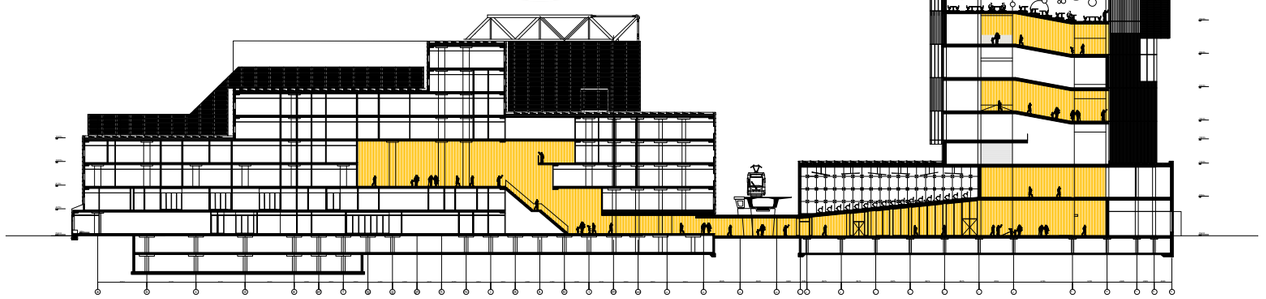
Social Space



Life Long Learning: Social







Urban Section: (1:200)

The City Cultural Hub

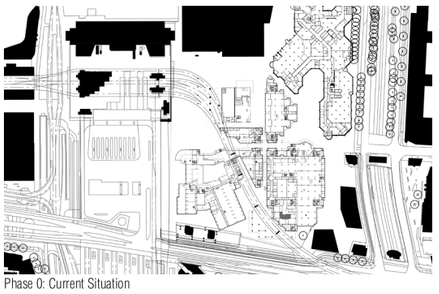
A Campus for the Future

AR3AP100 Public Building Graduation Studio
The Vertical Campus - a public hub of the future in the hague

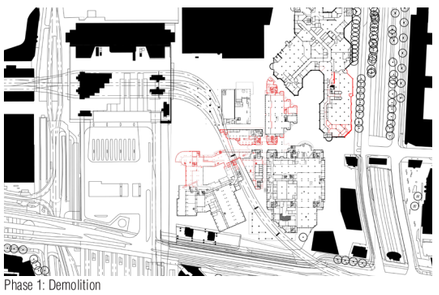
P4 Presentation | 30/05/2024
By Tijn Jansen | 4713702

PD - Dr. Ir. S. Corbo | TBD - Ir. F. Eckardt | TD - Ir. S. Lee | BE: Dr. M. Dabrowski

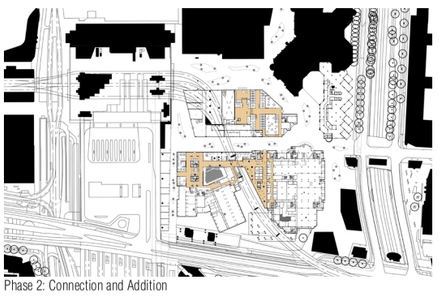




Phase 0: Current Situation



Phase 1: Demolition



Phase 2: Connection and Addition

New Situation | Poor Quality of Public Space



New Situation | Accessibility through the Area



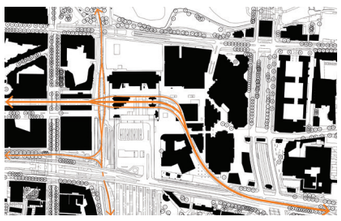
Movement: Pedestrian



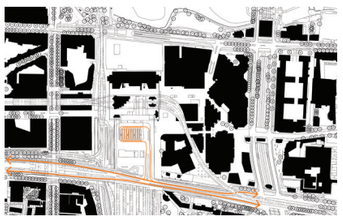
Movement: Car



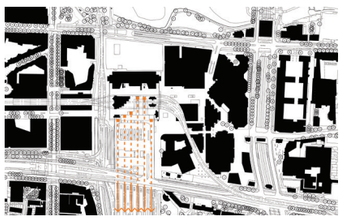
Public Transport: Tram



Public Transport: Bus



Public Transport: Train



Catalog Of Buildings



Royal Library

Library Facilities (40.000 m2)
Museum of Literature and Children's books
DEN academy
RKD, Institute for Art History
Entrance, Storage, Mechanical, Circulation spaces



B67 (part) - Primary Education

Play and Learn Spaces
Outdoor Playground
Entrance, Storage, Mechanical, Circulation spaces



Open University

Social Hub
Learn and Discover
Learn and Develop + Innovation Center
Teaching, Learning and Development
Entrance, Storage, Mechanical, Circulation spaces



Vertical Campus

Centre of Advanced Virtuality
Lecture Halls
Life Long Learning Spaces
Media Center
Social Spaces
Sky Lounge
Entrance, Storage, Mechanical & Circulation spaces



Cultural Exchange Hub

Exhibition Lounge & Cafe
Event Spaces
Meeting Rooms
Office Spaces
Entrance, Storage, Mechanical, Circulation spaces



Makers District

Lounge + Cafe
Workshop Spaces
Dance Studio
Music Classrooms
Local Shops
Entrance, Storage, Mechanical, Circulation spaces



Cultural Commercial

Art Gallery
Book Shop
Cafes
Local Shops



Leiden University

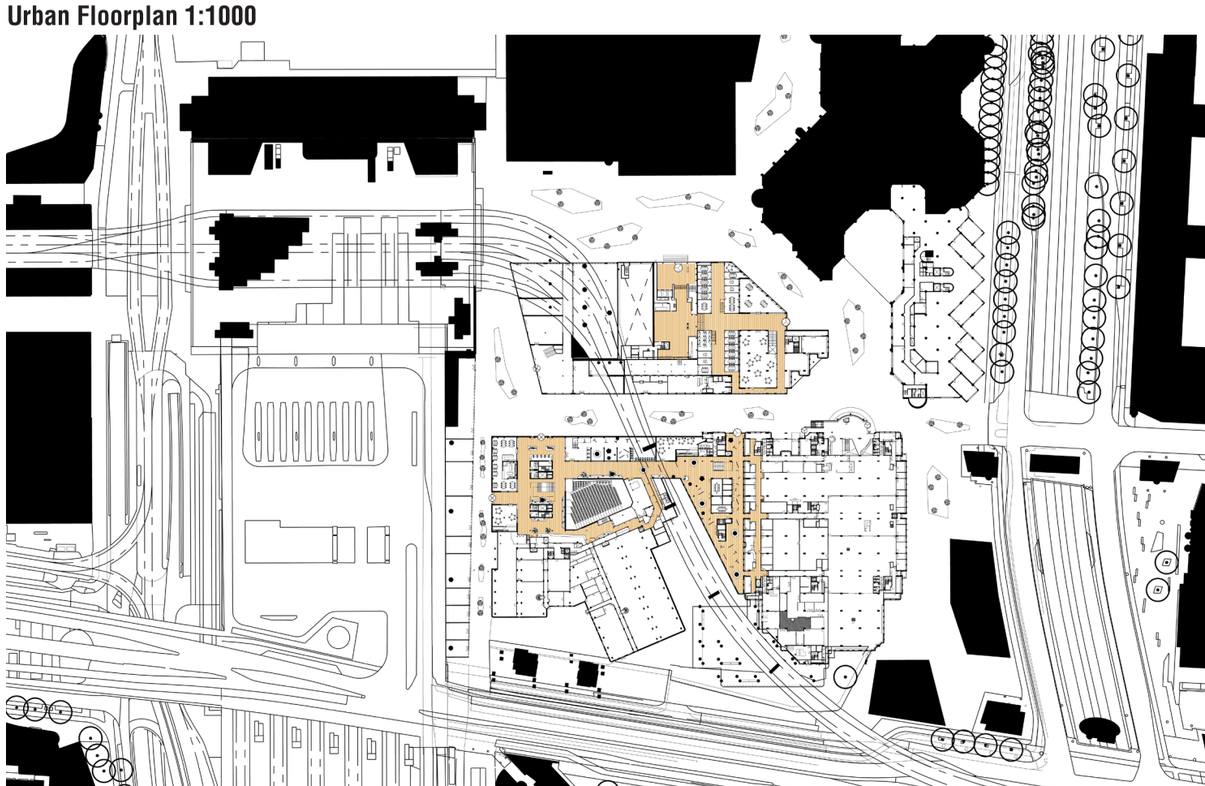
Lecture Hall
(Social) Study Spaces
Student Apartments + Amenities
Social Spaces
Entrance, Storage, Mechanical, Circulation spaces



National Archive

Archive Space (22.000 m2)
Meeting Rooms
Office Spaces
Entrance, Storage, Mechanical, Circulation spaces

Urban Floorplan 1:1000



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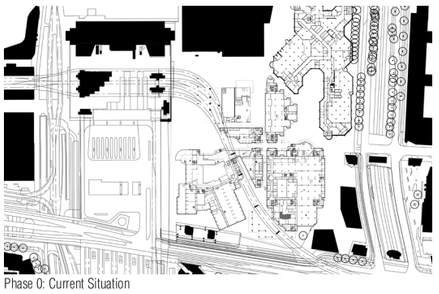

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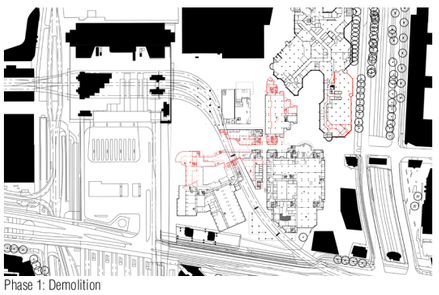

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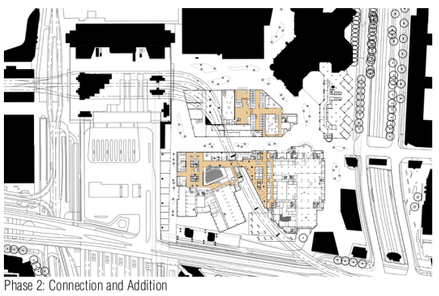

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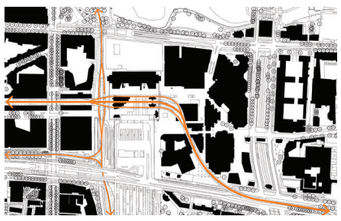

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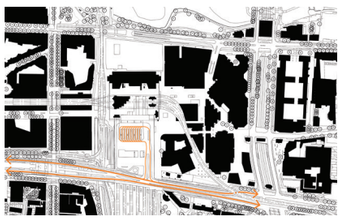

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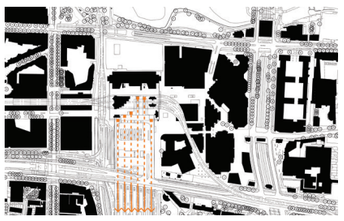

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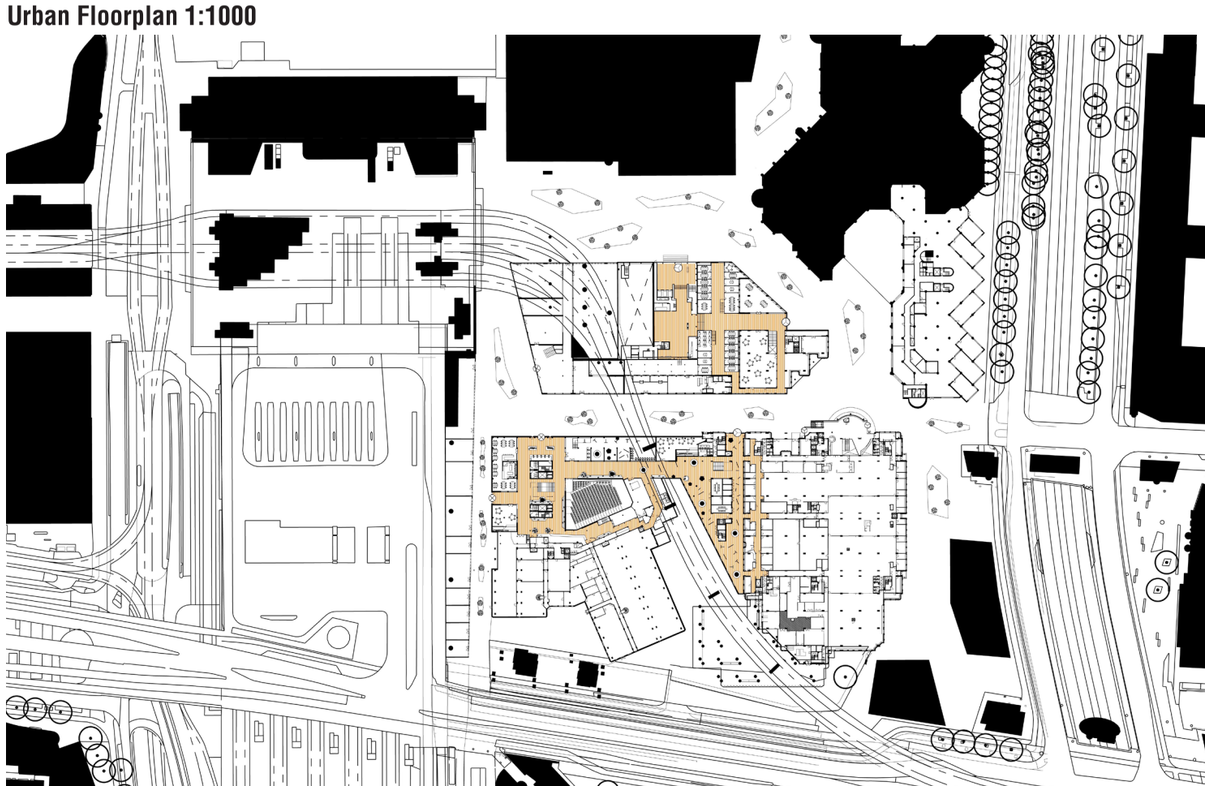
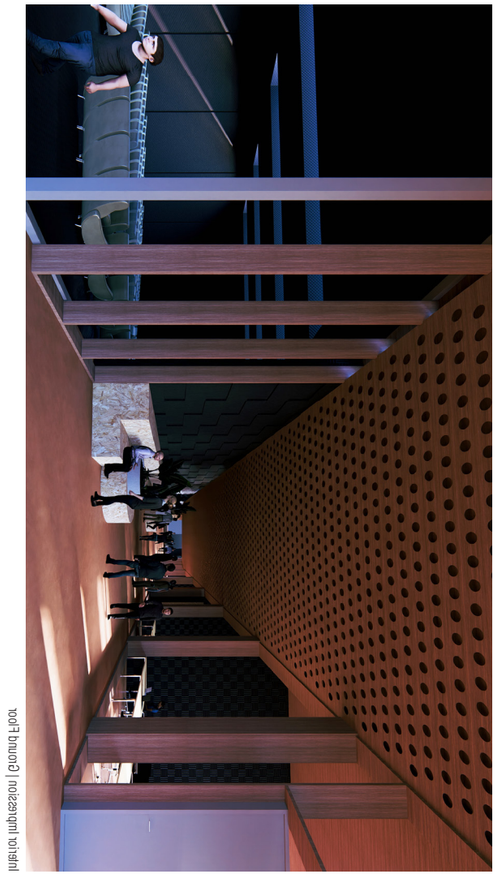
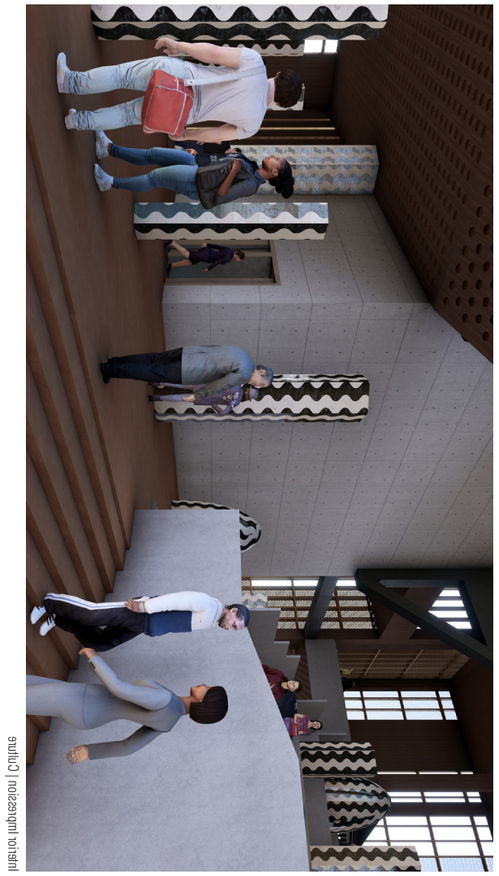
Urban Floorplan 1:1000



Interior Impression | Ground Floor



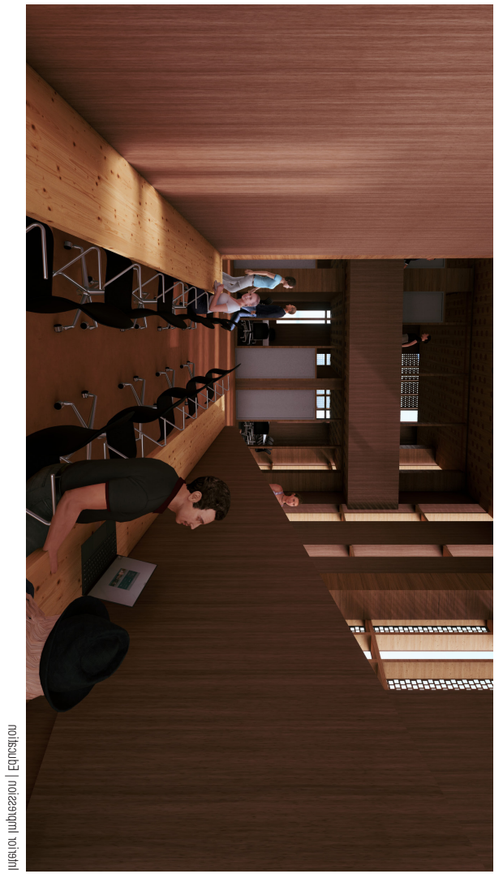
Interior Impression | Culture



Interior Impression | Education



Interior Impression | Education



Ground Floor Plan | Culture 1:100



Ground Floor Plan | Education 1:100



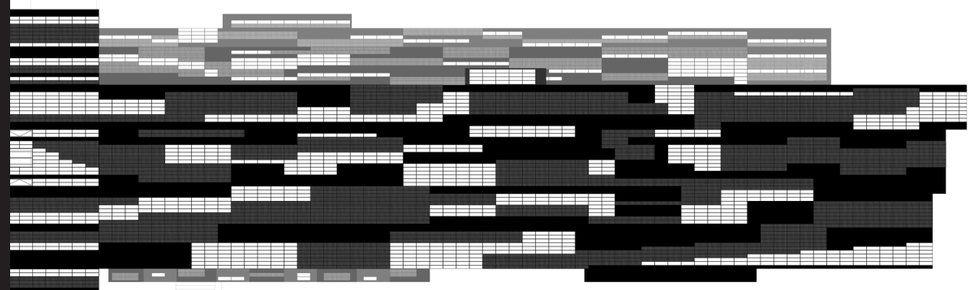
First Floor Plan | Culture 1:100

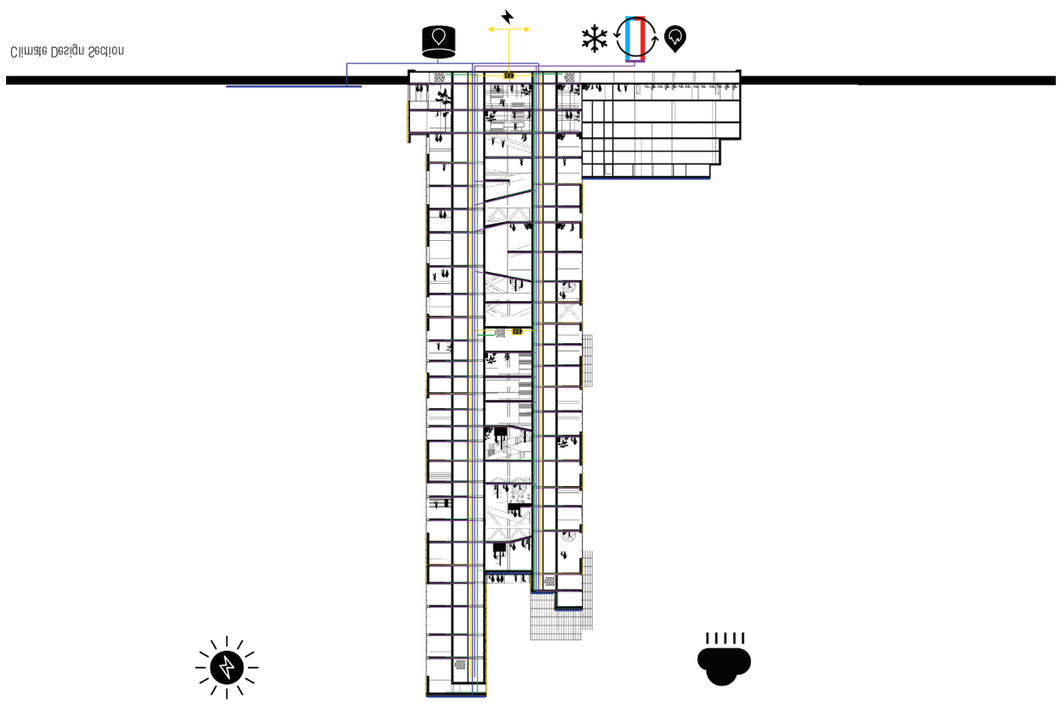
First Floor Plan | Education 1:100

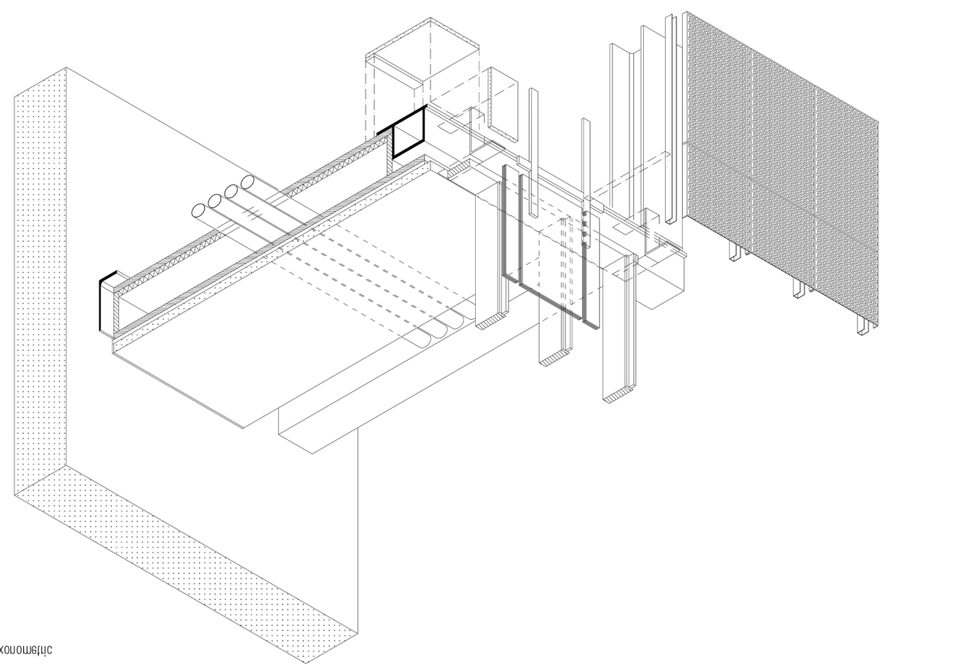
Section Archive 1:500



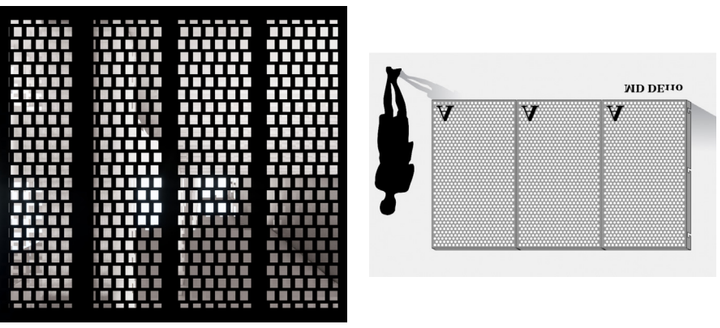
Facade Elevation 1:500



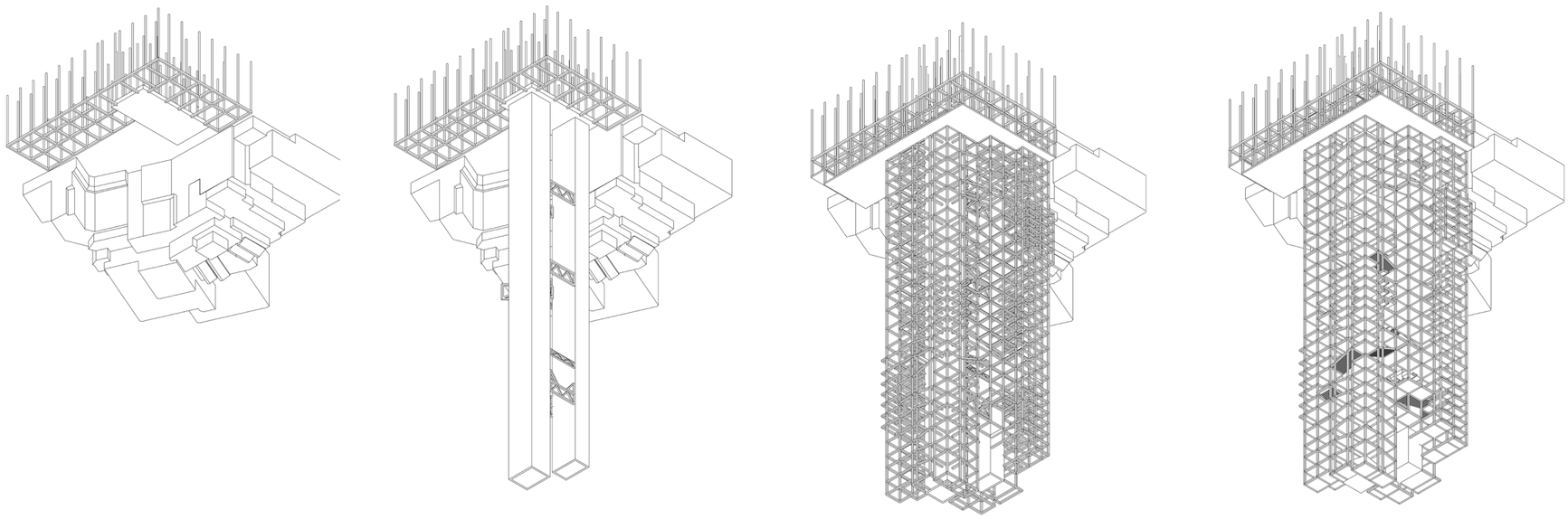

Climate Design Section
Sustainability Principals | Materials
Concrete Core
Steel Columns & Beams
Wooden Floor


Facade 1:20 Axonometric


Facade Logic | Opaque
Non-Public | Technical | Event Space | Art Gallery
Solarix Black Collection
Quality of Interior Space through Climatic Design
No 'Full Glazed Spaces'
Solar Panels for Renewable Energy
Black for Highest Efficiency
31.3 % of Facade = 5774 m³ Opaque Facade
Preventing 4000 kg/m³ CO₂ over Lifespan = 4 Trees CO₂ Absorption
4000 x 5774 = 23099 Trees CO₂ Absorption


Facade Logic | Semi-Transparent
Semi-Public | Educational | Cultural
MetaDecor DE110
Spatial Quality through Daylight
Solar Protection
Aluminium Perforated Panels
40% Opaque | 60% Transparent
34.5 % of Facade = 6365 m³ Semi-Transparent Facade


Facade Logic | Transparent
Public | Unique | Eye Catching Moments
Stabalux AK-H
Connection with Urban Context
Quality of Space
Showcase Publicness
Timber Construction
Aluminium Exterior
HR Triple Glazing
34.2 % of Facade = 6310 m³ Transparent Facade


Load Bearing Structure | Order of Assembly
Phase 0:
Phase 1:
Phase 2:
Phase 3:
Foundation
Core
Steel Structure
Wooden Floors