

aE journal

NR 16 2025/2026

Graduation **Architectural Engineering**

Shifting Perspectives

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winner of the
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**aE alumni
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design approaches & more!**

News aE in action

Shifting Perspectives

“Where architecture, engineering and society meet”

Dear reader,

Welcome to the new edition of the graduation work from the Architectural Engineering Graduation Studio. A studio that has structured its program around sustainability and circularity challenges. Through approaches such as “Open Building,” “Second Life,” and “Harvest,” it offers different perspectives. Materials and production methods are critically examined, leading to new insights and design opportunities.

Shift

The development of circularity, digitalization, and industrialization within the construction sector also reveals a broader shift: the transition from buildings as unique objects to buildings as product- and system-based assemblies.

Where circularity was once primarily a sustainability ambition, it is now becoming a fundamental design principle from the very start of the process. Buildings are increasingly designed as material banks, where components can be disassembled and reused at the end of their lifecycle.

From Architecture to Industrial Design

Due to the rapid growth of modular and prefabricated construction systems, production is shifting toward controlled factory environments. Instead of traditional on-site construction, building elements are developed as standardized modules that can be easily assembled, replaced, or extended. Modular construction therefore transforms architecture into a matter of systems design rather than purely spatial composition.

There is also a growing focus on material innovation. Materials are no longer selected solely based on aesthetics or structural performance, but increasingly on their full ecological and circular potential: reusability, CO₂ impact, and disassembly potential. As a result, materials themselves become design objects, comparable to product components in industrial design.

From Specific to Generic

Architecture is thus becoming less of a one-time act and more a continuous process of development, testing, and improvement. Within the Architectural Engineering Graduation Studio environment, this shift becomes visible in the way projects are approached: not only as spatial proposals within a specific context, but as prototypes of a larger system.

Within this development lies an important opportunity: architecture can evolve into a discipline that not only responds to societal challenges, but actively helps shape them through thoughtful, reusable, and scalable design solutions.

“Where architecture, engineering and society meet”

Impactful design happens where architecture, engineering and society meet through system thinking and social engagement. This approach is essential for creating designs that contribute to a more connected and resilient society, while fostering new expressions of architectural identity.

Enjoy reading!

Anne Snijders
April 2026

Kick-off Modelling your fascination



For every new Graduation studio there's new fascinations. Within the Architectural Engineering Graduation studio, students get to model their fascination at the start of their trajectory. Within the first two weeks they have to critically analyse what they find most interesting to further explore within the architectural realm. This model, and train of thought can then guide them through out the entirety of their project. By portraying this fascination in a model, students can immediately get a feel for what it actually means.

CBE Award 2025 aE Studio Winner



aE Studio student Niels Teunissen has been elected as the winner of the CBE Award 2025 in the category Materials & Components, also known as The ‘Tillmann Klein’ Award. The Circularity in the Built Environment award recognizes the contribution BK graduation students make to the transition towards a circular built environment. Niels’ design proposal “Reconsidering Façade Culture” presents a low-tech solution to production of façade elements (see p. 8).

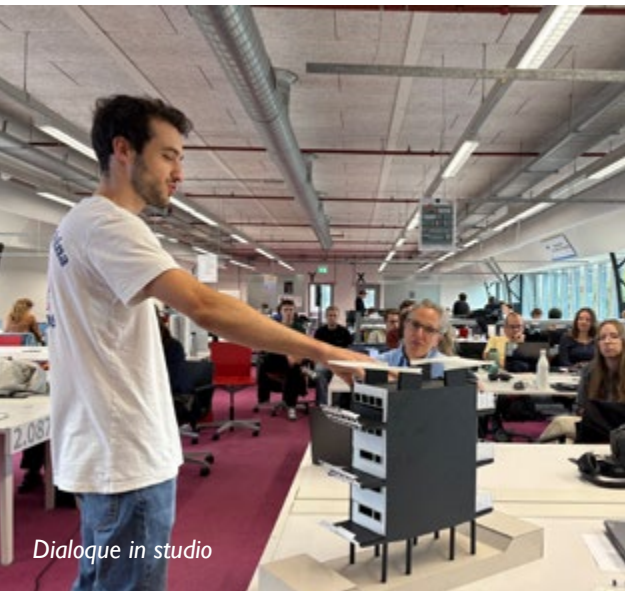
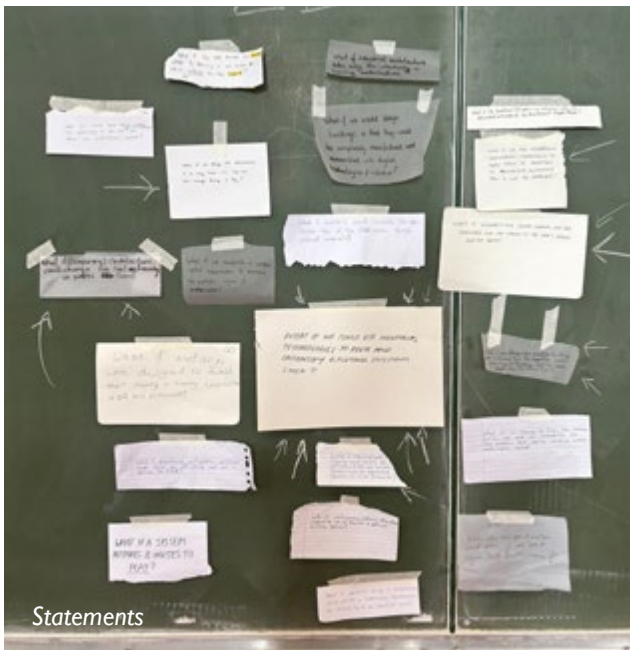
aE Studio Nominee



Along with Niels’ façade elements, aE Studio student Gaspard Marteu’s graduation project was nominated for the ‘Building CBE Award’, where the building as a whole was considered as an addition to designing in a circular manner. The project proposes a floating culture hub, built from locally sourced, bio-based materials such as reed, willow, alder, eelgrass, and seaweed, grown on floating ecosystem islands. Which highlights the importance of circularity within the whole building system (see p. 18).

in Dialogue Q5 Industrial Design in Architecture

In this course, Architectural Engineering and Heritage & Architecture collaborate with Atelier Rijksbouwmeester and Industrial Design Engineering (IDE). We will explore the role of architecture in industrial production through various disciplines and perspectives. Therefore, this Q5 course is open to TU Delft students from Architecture and the Built Environment and Industrial Design Engineering, as well as sociologists, economists, planners, and all students interested in the development of industrial (housing) construction.



Dialogue in studio



Workshop by Bas Flipsen from IDE

Storytelling Through physical materials



In the aE graduation studio, prototyping is used as a method to support storytelling. By working on conceptual models at the start and later curating an exposition for the A2's, students get to think critically about the reasoning behind their choices and especially about the drawings and (physical) elements they use to portray this story.

Activities Field trips and visits



We visited the Gemeente Eindhoven, where Manon Grond (the strategic urban planner at the municipality) held a small talk about their new developments and what the future (of especially the Knooppunt XL) will look like. Here, students got the chance to ask questions regarding the urgency of their chosen problems and how they relate to developments within the context they are designing in.

We also visited the TU/e to receive a lecture from Tom Frantzen who is currently working as a professor at the “Habraken Chair of Open Architecture” at TU/e. Students got the chance to pitch their projects and exchange knowledge with their peer students from BK Eindhoven University.

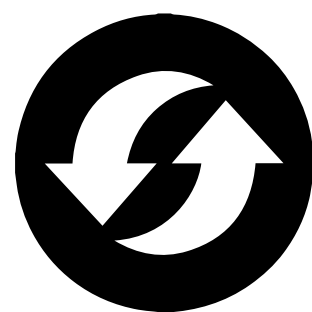
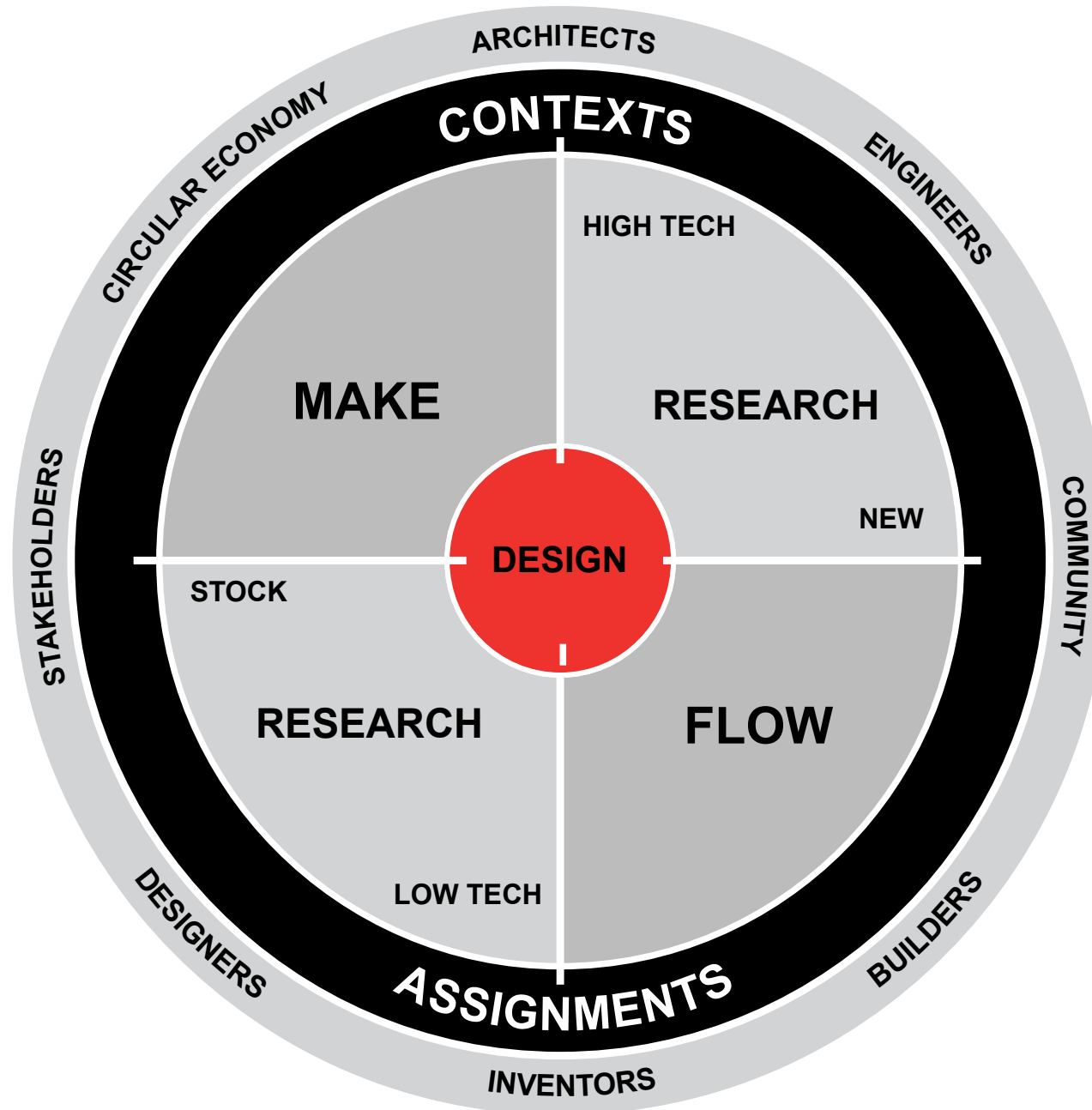


aE in action News

Introduction aE Graduation Studio

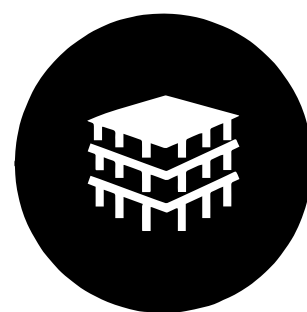
Approach

In the Architectural Engineering Graduation Studio we are looking for innovative solutions in engineered architectural design, while encouraging students to explore their role as architects in facing today's challenges. Understanding existing potentials, knowing the possibilities of renewal and discovering how to design, innovate and initiate change are central themes in the aE Graduation Studio. Under the guidance of a team of enthusiastic (guest) lecturers and tutors, students search for innovative technical solutions for diverse problems in various contexts. The three main research by design domains promoted in the aE studio are 'Make', 'Flow' and 'Stock', as described below on this page. Each domain requires a different approach and offers unique design solutions, while creating multiple value for the built environment together.



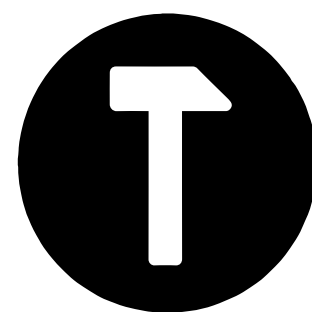
FLOW

In Flow we see buildings as structures interwoven with their wider system. The sustainable performance of buildings has everything to do with flows. Well managed flows of people and resources contribute to valuable, comfortable and healthy spaces and cities.



STOCK

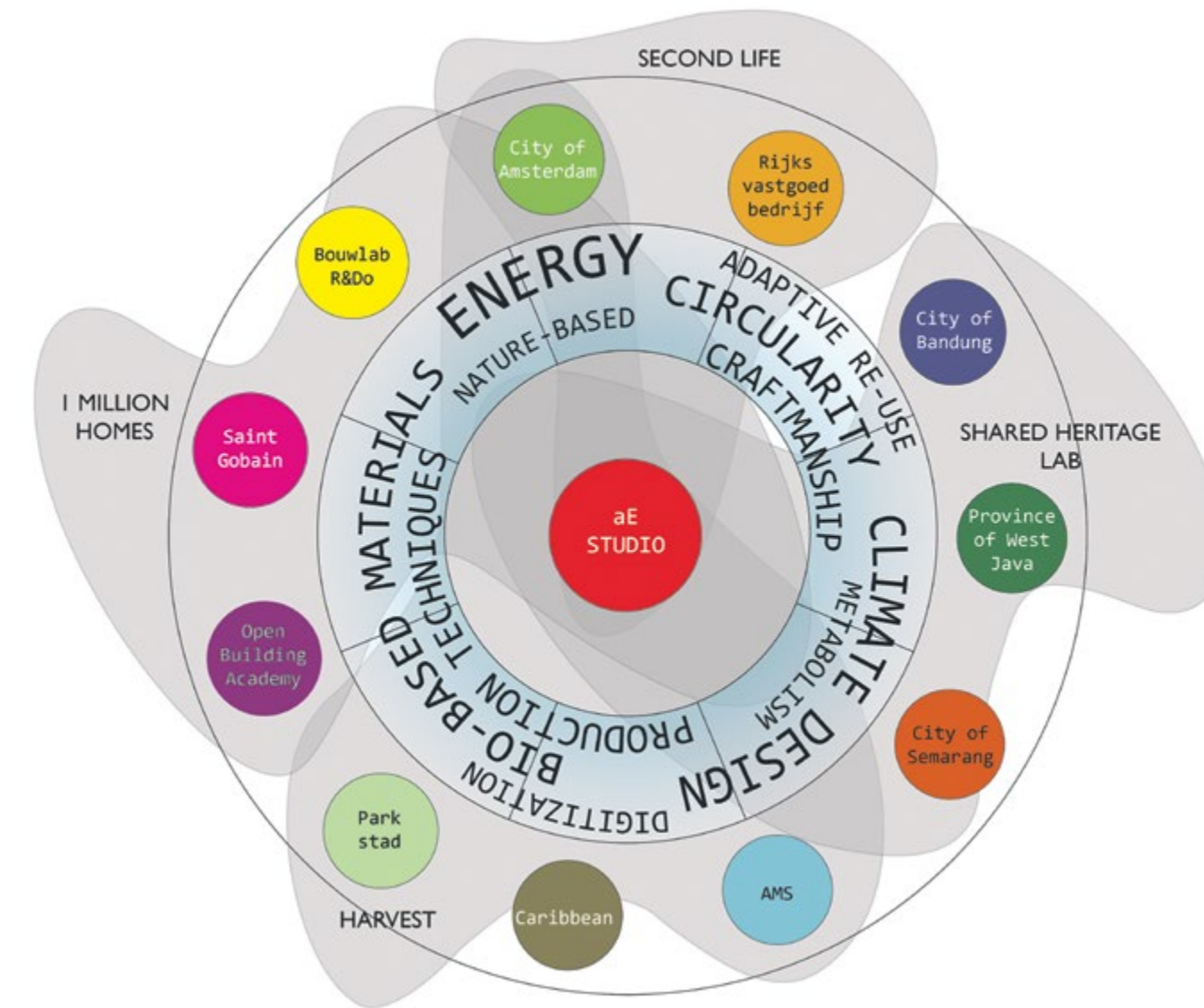
Stock is about the potential of the existing by looking differently to what is already there, by making use of a technical fascination, in relation to current or future needs. Ideas for intervention can vary: the upgrade of existing housing stock, office buildings or product development of interiors.



MAKE

Make is about new (digital) production methods, the (re)-use and development of materials and systems for existing and new applications. How do we change the future of our environment, our homes and our cities, using a bottom up approach towards a better and more sustainable future?

Collaboration & Knowledge Exchange

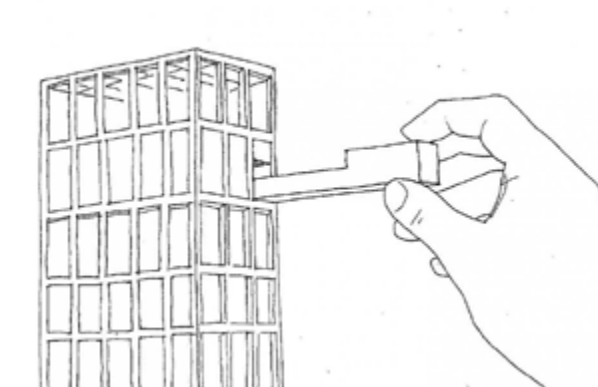


aE Graduation Studio combines design and technical innovation throughout all scales in architecture. In our Architectural Engineering program we seek innovative and inspiring architectural solutions for environmental and societal issues together with various stakeholders. With today's local and global challenges we are driven by the need to think differently about materials, craftsmanship, energy generation and efficiency, user participation and bottom-up or top-down approaches. In view of the current and constant changes of society, we need to see the built environment and the role of the architect in a new perspective. A vast amount of buildings are vacant and unused while a large percentage of the existing housing stock does not meet today's requirements. But also new buildings have to deal with changing circumstances. Smart and responsible solutions are therefore vital in refurbishing and designing new future-proof buildings.

Agenda



UN SUSTAINABLE DEVELOPMENT GOALS



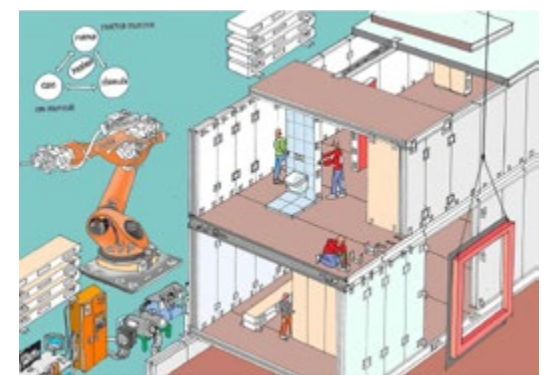
OPEN BUILDING



CIRCULARITY



SECOND LIFE



DIGITALISATION



HARVEST

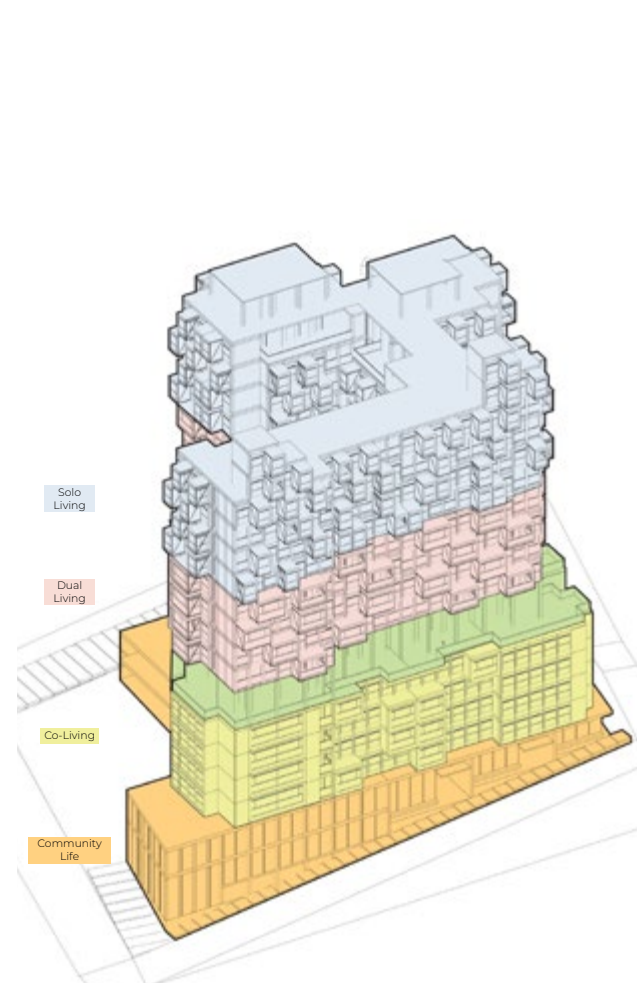
Program Open Building

High-Tech Design Approaches

Industrial housing can help mitigate the housing shortage but tends to empower builders over residents, restricting housing adaptability. Can the “Open Building” concept, enhanced by digitization and automation, offer a sustainable housing solution while increasing flexibility resident input?

Industrial housing can alleviate the housing shortage but typically limits resident input and adaptability. Open Building, introduced by John Habraken in the 1960s, enables flexible, renewable housing by separating the structure (support) from the interior (infill), allowing easy modifications. Integrating this with digitization and automation promotes dynamic, resident-influenced designs and cost-effective mass customization.

To address housing needs, efficiently utilizing and transforming existing buildings is essential, alongside innovative financing and expanding mass customization to meet environmental goals and manage costs. Open Building research, particularly by aE studio graduates, is advancing adaptable living solutions. More details are available at www.openbuilding.co/academy.



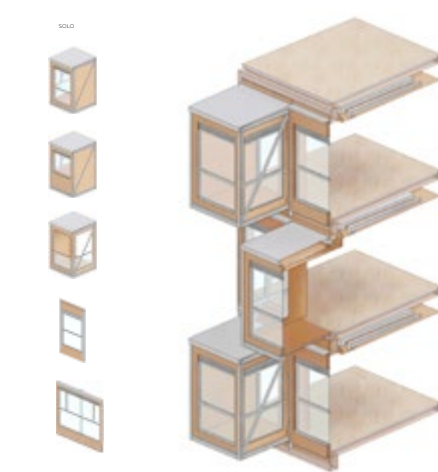
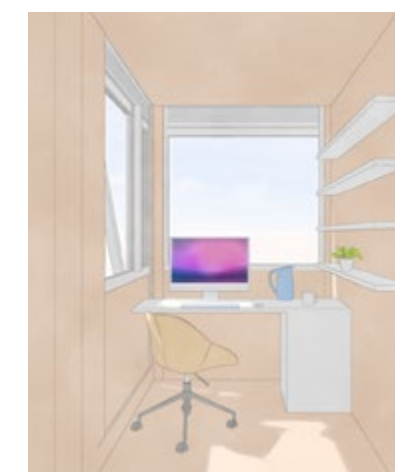
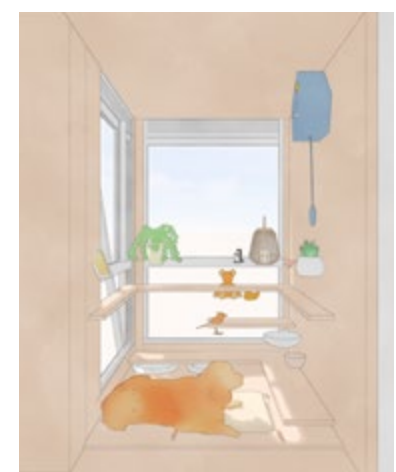
UNITS OF ONE
Tsz Lok Ng

This thesis explores solo living in high-density urban Hong Kong through modular, adaptable housing. Six typologies balance autonomy and community, supported by a hybrid timber-steel system for vertical expansion and sustainability. Grounded in precedent and structural research, the project promotes socially responsive, flexible, and environmentally conscious urban dwellings for independent residents.



WIND DRIVEN DESIGN
Thijs Kroft

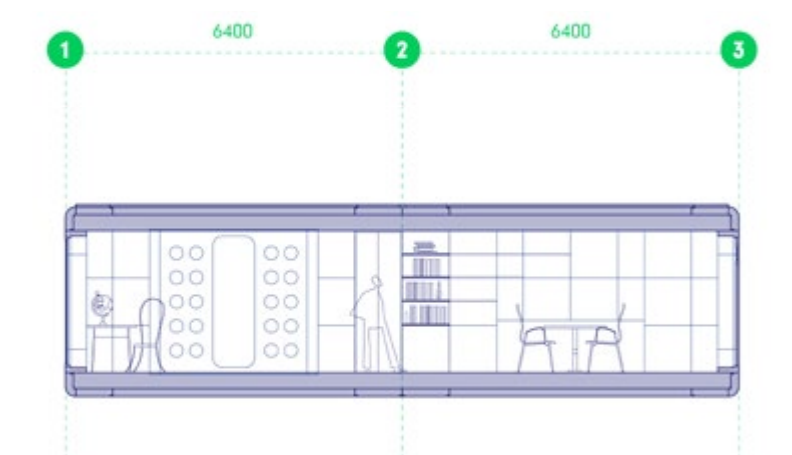
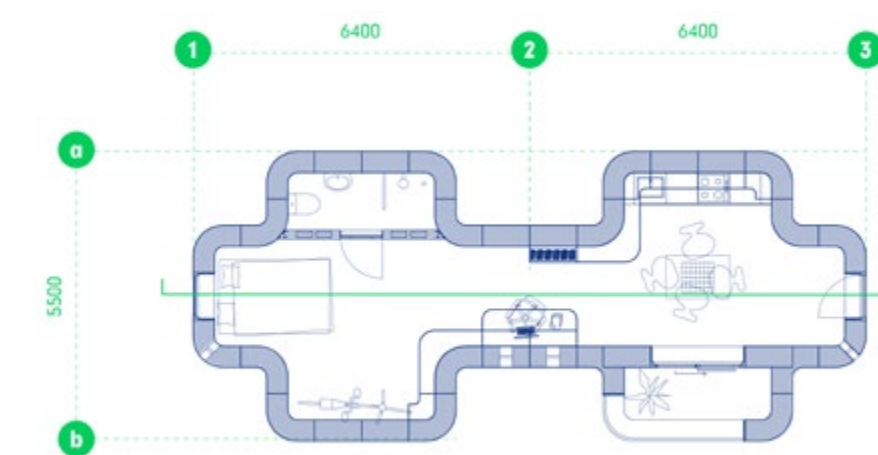
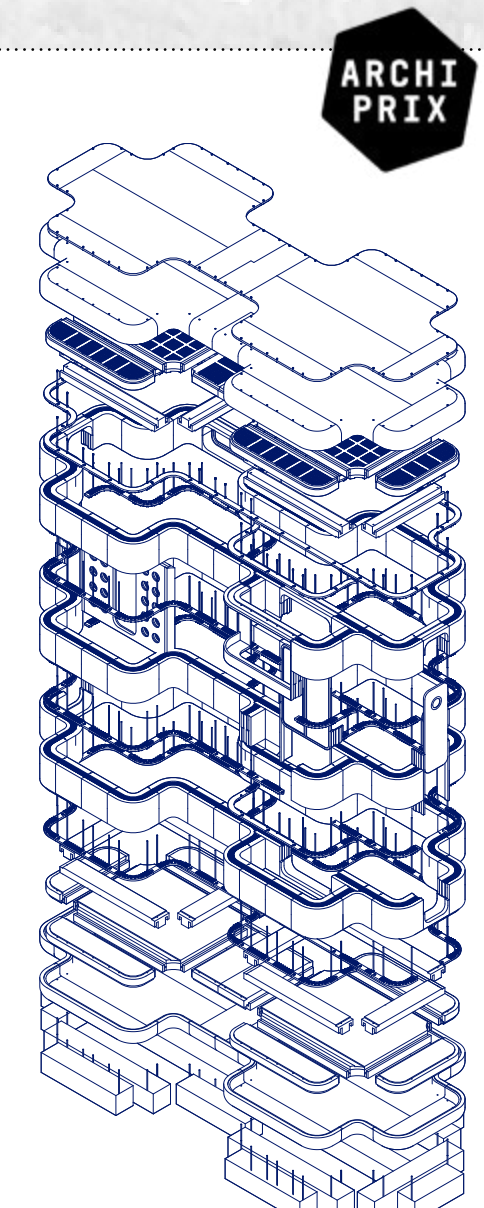
This research uses CFD simulations to evaluate design strategies mitigating wind discomfort in Rijnhaven, Rotterdam. Interventions like aerodynamic shaping, podiums, and open floors improve street-level conditions. The study proposes a workflow for architects to integrate wind analysis early, enhancing outdoor comfort, safety, and informed, context-sensitive high-rise design.



BUILDING WITH RECYCLED PLASTIC MATERIALS

Nadine Nossbaum

This project repurposes plastic-aluminium beverage cartons (PolyAl) into modular, circular housing. By transforming waste into fully recyclable building components, it reduces carbon footprint, addresses resource-intensive construction, and meets TU Delft's flexible housing needs. The work advocates viewing discarded materials as valuable resources for sustainable, future-oriented architecture.



PERMANENCE ENABLING CHANGE
Daniel van Eijnatten

This project applies Open Building principles to transform the Geschutfabriek in Zaandam into adaptable housing. A permanent structural support combines with flexible infill systems, modular partitions, and reversible facades. Public space and passive climate strategies enhance sustainability, enabling diverse uses, user expression, and long-term resilience within an evolving urban context.



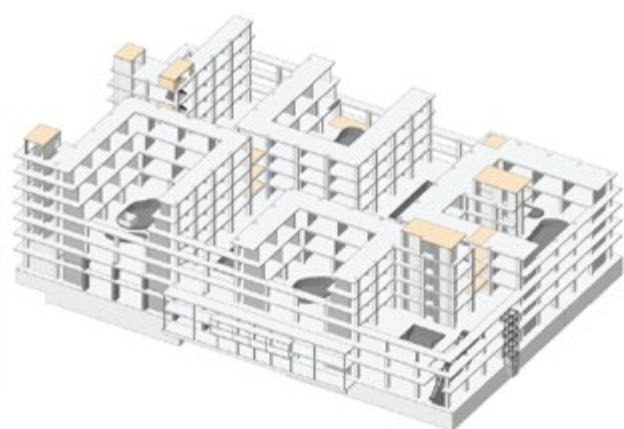
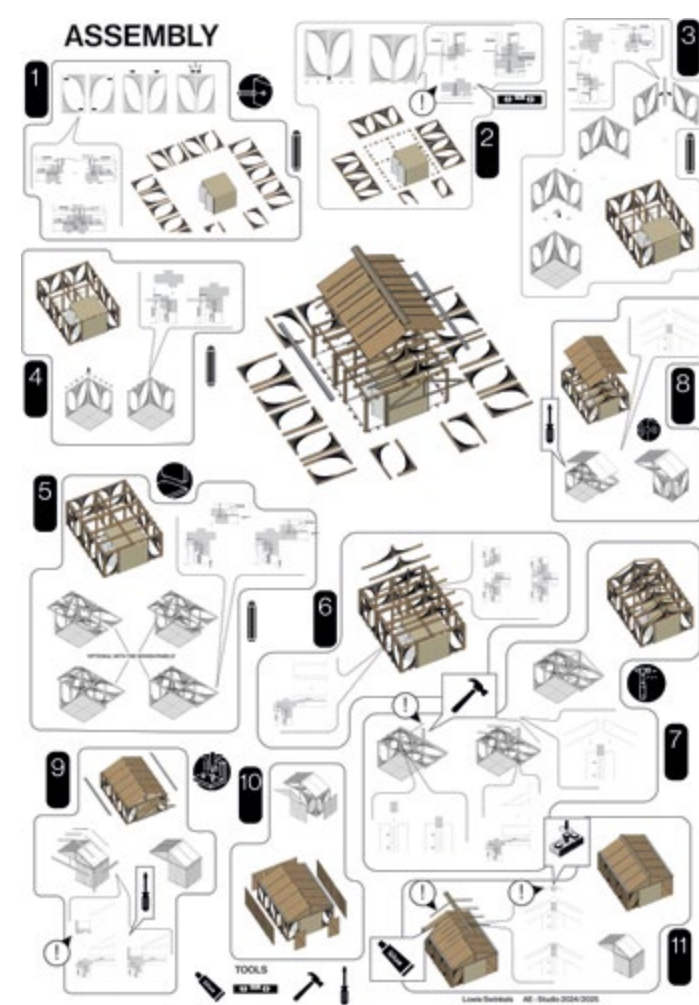
Program Open Building

Low-Tech Experiments



REFUGEE RESILIENCE CAMP Lowie Swinkels

By prioritizing safety, buildability, and social cohesion, the project seeks to create an environment in which refugees can regain stability, dignity, and a sense of agency. The design focuses on modular, easy-to-assemble units arranged around shared courtyards to encourage community interaction, enable mutual support, and maintain safety through natural social control. This approach goes beyond temporary shelter, laying the foundation for rebuilding lives in a humane and inclusive environment.



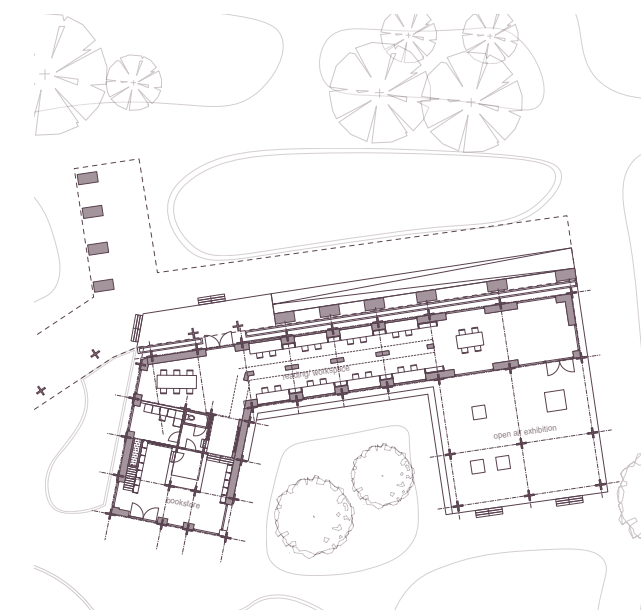
RECONSIDERING FAÇADE CULTURE Niels Teunissen

The project reimagines architecture as a regenerative practice rooted in ecological systems. By linking material production, landscape restoration, and spatial design, it proposes climate-responsive building strategies that integrate cultivation, community, and construction—transforming architecture into an adaptive process where environmental stewardship and inhabitation actively shape one another.



INDIGENOUS BUILDING TECHNIQUES Lilani Oei

This research examines how indigenous building techniques can inspire contemporary tectonic architecture. Four recurring construction logics—Stack, Wrap, Fill, Scaffold—are analyzed alongside modern case studies. Experimental prototypes using reclaimed material from Boonjans (in Rotterdam) demonstrate how traditional ecological knowledge supports circular, adaptable, and expressive construction, positioning the city as a material-rich landscape.



THE COOPERATIVE SEEDPOD Merijn Oldenburger

The Cooperative Seedpod introduces a self-building method that strengthens housing cooperatives through shared collaboration. Future residents construct most of the temporary seedpod, gaining skills for their permanent project. Once completed, it is dismantled and reused elsewhere, fostering knowledge exchange while creating an early placemaking space for emerging cooperatives.



Program Open Building

Wood as the Structural Material

Wood is no longer seen only as a lightweight construction material, but is evolving into a fully-fledged structural material alongside concrete and steel. In architecture, this shift enables new possibilities such as fast prefab assembly, significant CO₂ reduction through carbon storage within the material itself, and an aesthetic in which the exposed structure becomes a key design feature.

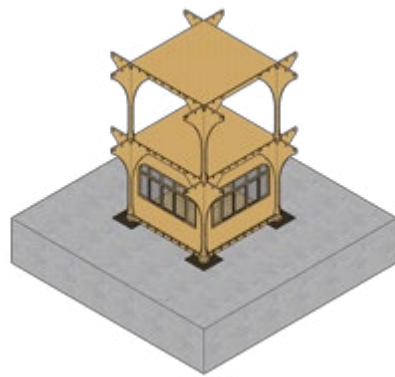
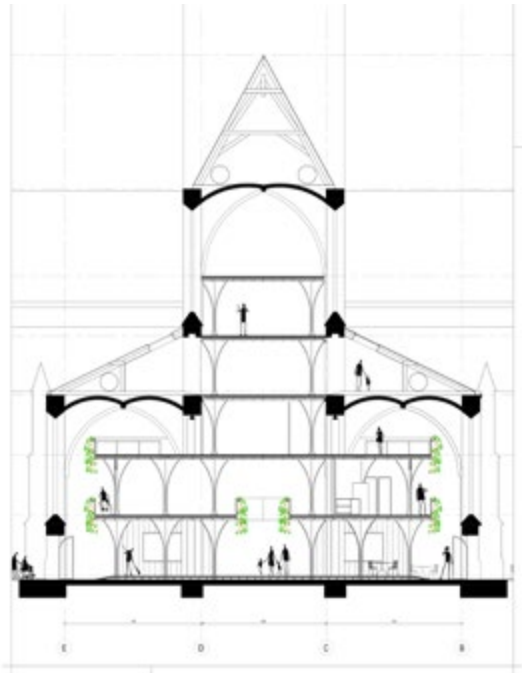
It is not the wood itself, but the joints that often determine the structural behaviour of a building. Innovative timber connections are therefore an important field of research. Examples include wood-to-wood systems such as large-scale finger joints, demountable connectors for circular construction, and hybrid systems combining friction and steel dowels. These techniques make it possible not only to strengthen timber structures, but also to make them more flexible and reusable.

This potential becomes especially relevant in mid-rise buildings where hybrid systems are widely used. Research by design is done in the optimization of such structures enabling adaptable reuse at its most.



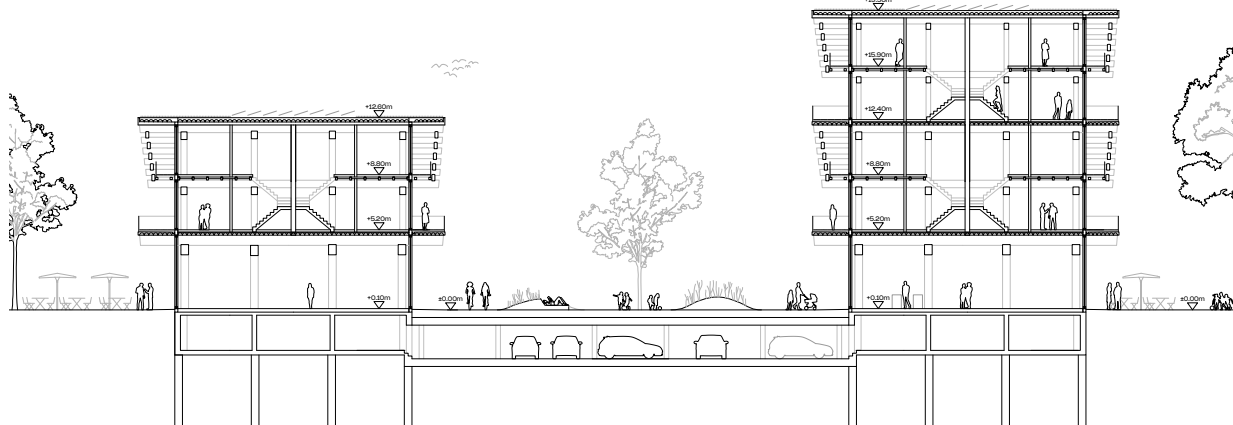
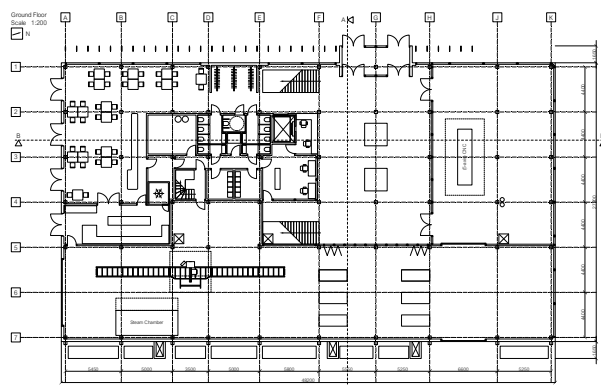
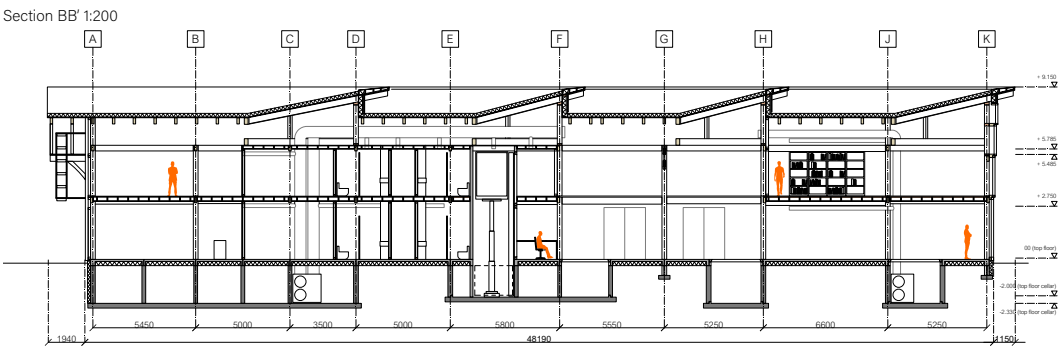
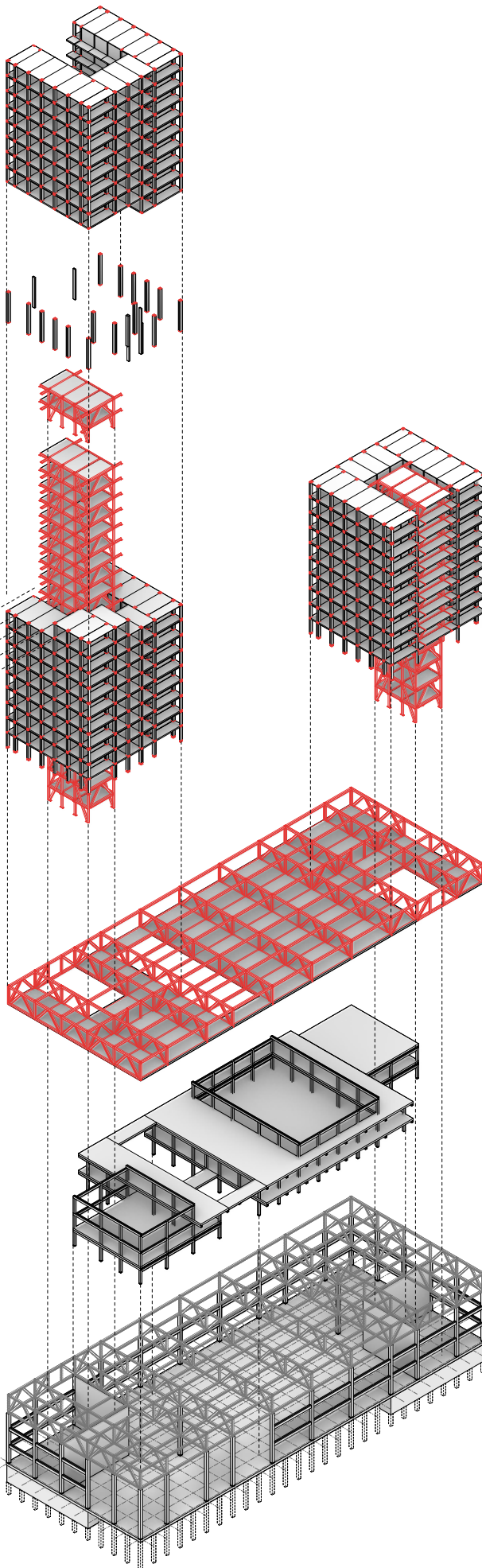
REBIRTH OF THE CHURCH
Brent Burm

With thousands of churches becoming vacant by 2030, this research explores modular wooden infill systems as adaptable alternatives to demolition. It examines criteria, existing systems, modularity, and technical requirements for multistory insertions. The study concludes that adaptable, interchangeable, and material-efficient wooden systems can feasibly repurpose vacant churches.



AN ADAPTIVE HYBRID TIMBER HIGHRISE DESIGN FOR TU DELFT CAMPUS
Thomas de Bont

This graduation project investigates how hybrid timber construction can create an adaptive, multifunctional high-rise on the TU Delft campus. By combining engineered timber with steel and concrete, the design reduces carbon emissions while maintaining structural performance. Prefabricated timber modules enable spatial and technical adaptability, supporting circularity, flexibility, and long-term evolution of the building.



A STRATEGY FOR INDIGENOUS WOOD ARCHITECTURE
Tjeerd Prins

This project explores sustainable Dutch forestry by promoting native tree species and their architectural applications. Focusing on a Gelderland farm, it maps wood types for structural use and reconnects the public with the wood chain through an innovation center combining production, education, and recreation, aligning architecture with forest ecology and processes.



UNTREATED
Maximilian Friedmann

This project explores using solid, minimally processed timber to create a distinct architectural identity for contemporary housing. Challenging standardized mass timber practices, "unTREEted" emphasizes wood's natural grain, shape, and imperfections, promoting material authenticity, texture, and construction culture over the uniformity of engineered panels.

Q5 Industrial Design in Architecture:

Unfixing the Hearth: Mass-Producing Spatial Equality

THE KITCHEN IS A POLITICAL SPACE. FIXITY IS AN ACTIVE ACT OF ISOLATION. THE UNFIXED HEARTH IS AN ACT OF ARCHITECTURAL DISOBEDIENCE.

THE HEARTH IS AN INDEPENDENT ENTITY. A PERMANENT FRAME ENSURES LONGEVITY THROUGH ADAPTABILITY. STRUCTURAL LOGIC MUST REMAIN LEGIBLE AND COMPREHENSIBLE.

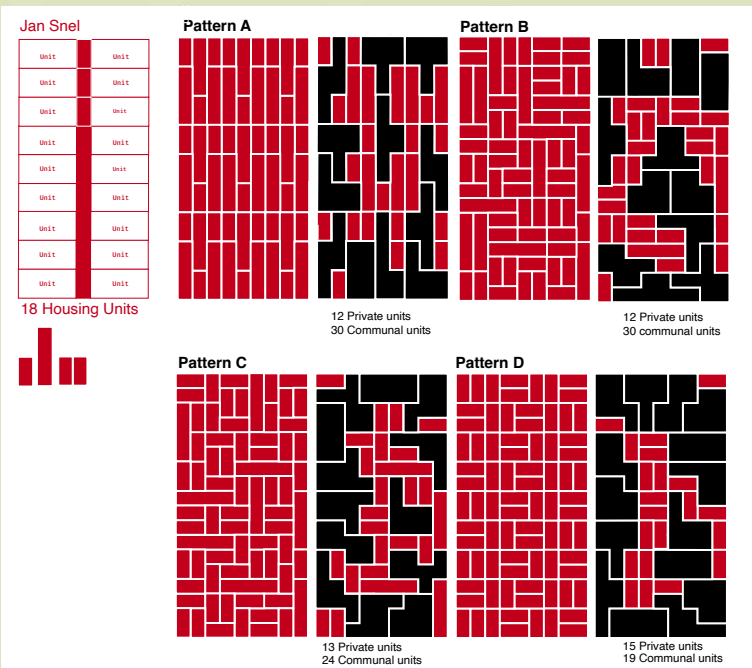
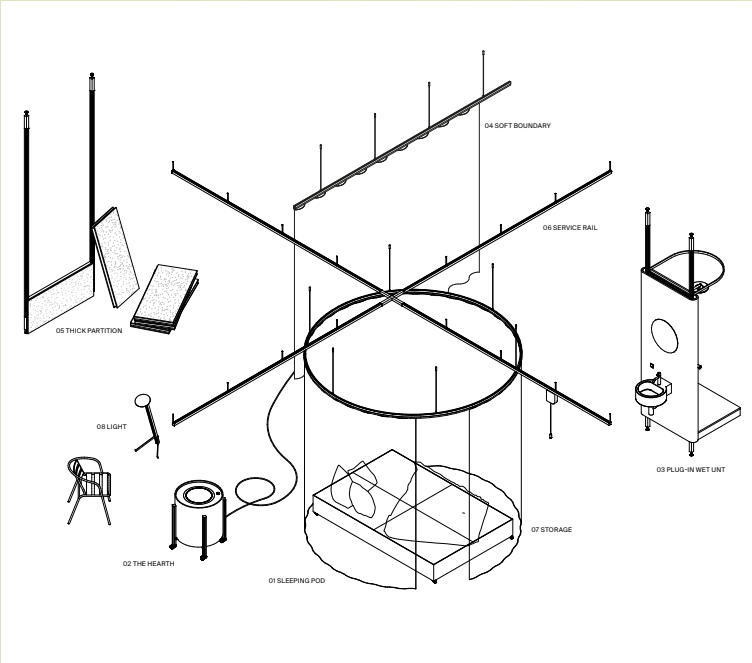
THE SCALE OF THE DOORWAY DEFINES THE AUTONOMY OF THE OBJECT. THE RADICAL PILOT TRANSFORMS THE LABOR INTO A COLLECTIVE ACT. A SINGLE PLANE DISSOLVES THE HIERARCHY OF WORK. THE MOBILE HEARTH ALLOWS THE FLOORPLAN TO ADAPT TO LIFE.

Early modernism tried to liberate the home through efficiency, but only succeeded in isolating the worker inside a static, fixed room. True emancipation requires spatial agency. By replacing the built-in kitchen with a mobile, mass-produced industrial tool, we move the „feminine“ sphere of care from the neglected margins of architecture to the center of industrial priority.

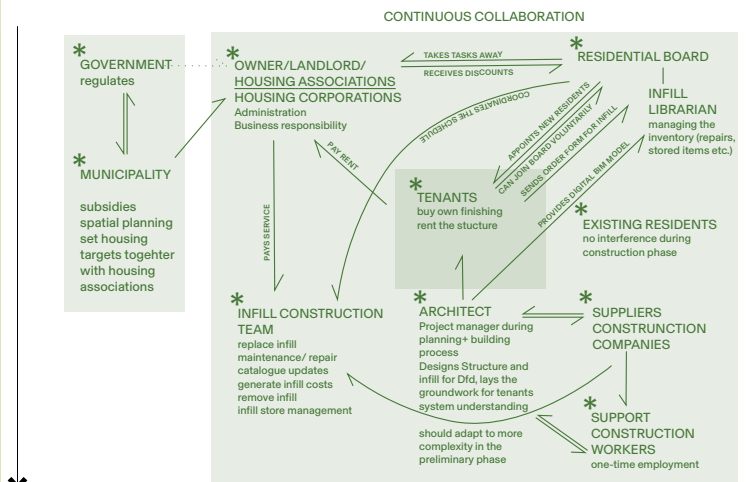
Source: Concepts by Hanna Hoffmann & Tim Schmidt

where Architecture, Industrial Design Engineering & Society meet

desings & research
done by students
following the course
ARIT 1506



Proposed Stakeholder System



Para-site

Proposed by Tim Ipkovits & Max Illig

The catalogue of temporary interventions presents a system of modular, non-destructive inhabitation components designed to activate vacant office and institutional floor area without permanent renovation.

Each element operates as a discrete, deployable object — independently functional, yet conceived as part of a larger assemblage that negotiates a new domesticity within the found condition of the host building. The system is organized along a spectrum of built-out, from the most minimal single intervention to the fully assembled unit, allowing inhabitation to scale in direct proportion to the duration and conditions of its tenure.

beyond the Unit

Proposed by Laura Otalora

Most industrialized buildings have proven they can deliver volume. What they have not focused on is nurturing the social fabric that comes with inhabiting a place. What they have not mastered is the space between the units: the threshold, the courtyard, the accidental encounter on a staircase.

So, here is the question: can you industrialize the space between them? Can you treat the connector, the in-between, as the unit itself? What if we build the community first, and the unit second?

“Freeing up the private units, enhancing the connectors Pattern” are being studied in different configurations

Designing for the Second Tenant

Proposed by Jette Meckbach & Olivia Fauel

This project set out to extend participation beyond the first tenant, and in doing so, it reframes adaptability as something that must be embedded within both architectural and organizational systems. A key contribution of the proposal is the translation of Open Building principles into a concrete framework, combining spatial strategies with tools such as a catalogue of infill elements, a rental contract, and a governance structure.

The proposed system depends on sustained coordination, institutional support, and active user engagement, raising questions about its robustness in everyday practice. The project points out these issues, positioning architecture as part of an ongoing process rather than a finished product.

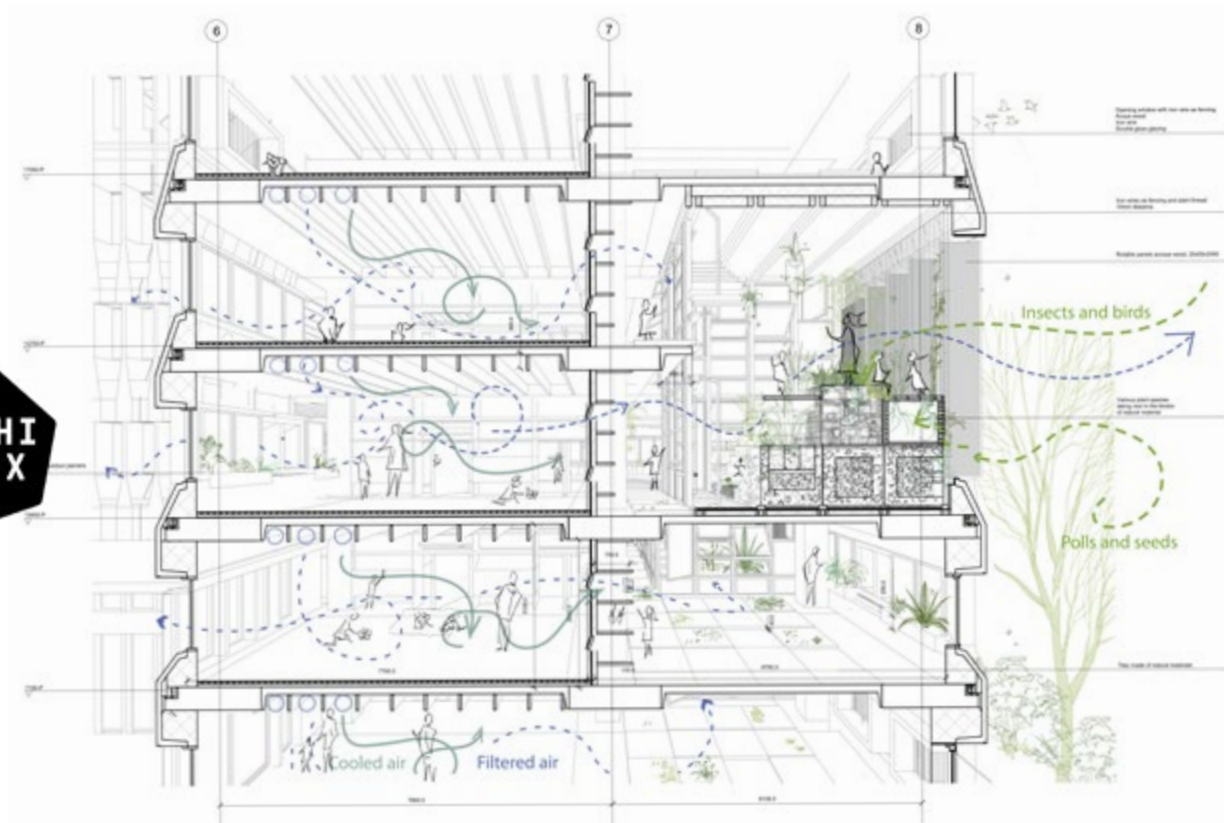
Program Second Life

Nature Based Solutions

The program “Second Life” focuses on the transformation of Post-65 buildings, (built from 1965 to 1995). Many of these are currently under the national spotlight, as they must be either repurposed or renovated to meet modern performance requirements. This is particularly relevant since demolition is no longer a solution in the current environmental climate.

In light of climate change, innovation in the construction sector is in the public interest. Utilizing existing structures (instead of demolishing them) can help cut CO₂ and NOX emissions, reduce the demand for new infrastructure and lead to a more carefully and sustainably designed built environment participating to healthier spaces and lifestyles.

Besides Post-65 residential areas, many existing building typologies are going out of use. Students from the aE graduation studio have focused on rethining several structures to give them second life and take advantage of their existing qualities. Their goal was to explore potential roles these buildings can fulfil in the contemporary urban fabric. Starting points for their designs included material circularity, energy management, and the creation of flexible work-living spaces.



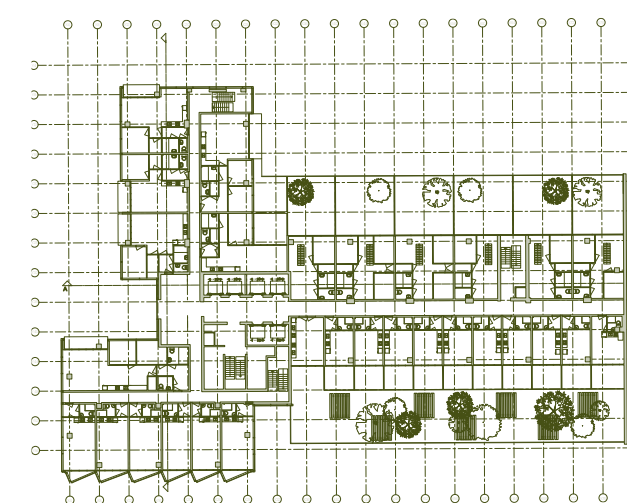
DESIGNING THE WILD WITHIN Sterre Joore

This project transforms Rotterdam's 1977 Blakeburg building into a living, multi-use space blending nature, education, and housing. Guided by seven principles—community, reciprocity, natural elements, sustainability, flexibility, participation, and scalability—it integrates landscape, natural ventilation, and adaptive reuse, merging city and nature to create a resilient, inclusive, and evolving urban environment.



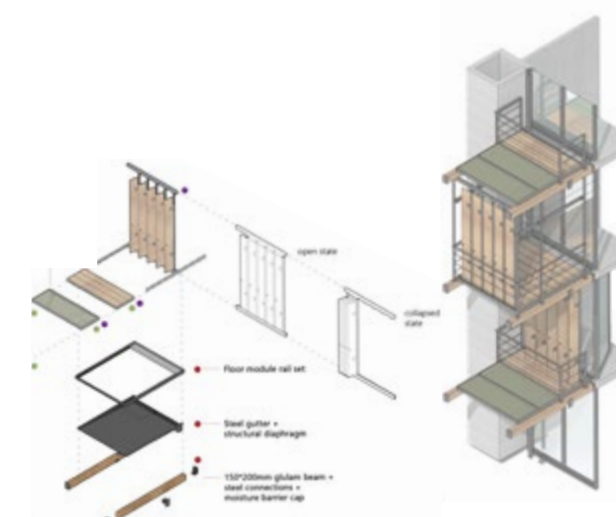
ROBUST CLIMATE SYSTEMS FOR OPTIMIZED THERMAL COMFORT Anouk de Graaff

This project explores integrating sustainable climate systems into office-to-residential transformation. De Cooolse Poort in Rotterdam becomes diverse housing using hybrid, mainly passive solutions. Green spaces at ground and core enhance biodiversity and cooling. Cross ventilation ensures healthy indoor climates, while sustainable materials reduce environmental impact and support long-term livability and resilience.



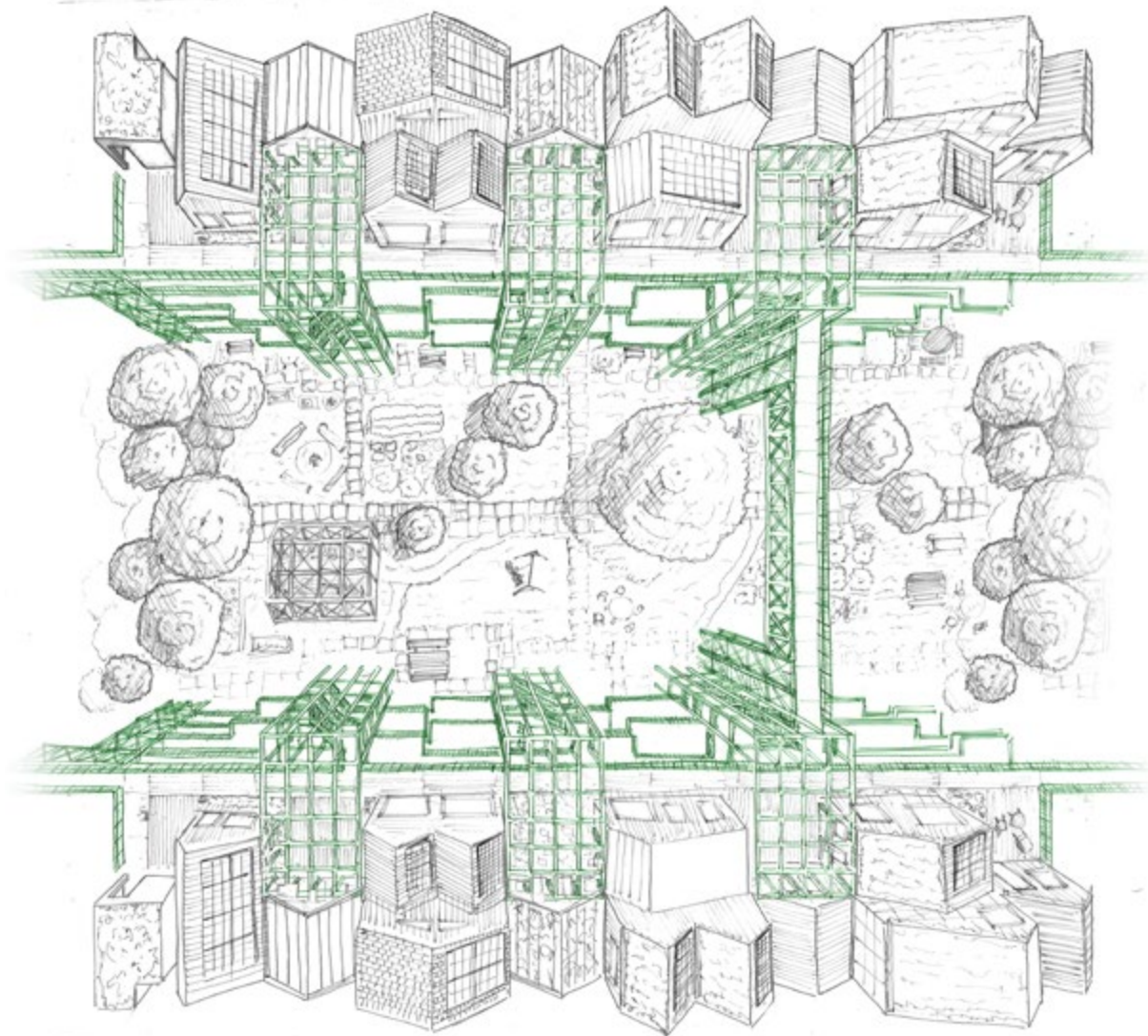
TAIWAN RENEWAL HANDBOOK Tsong Han Ou

This project proposes a climate-responsive renovation of a typical Taipei concrete high-rise, addressing global warming and outdated building practices. Using low-cost, low-tech interventions, it enhances natural ventilation, passive cooling, and shading, while integrating community programs and open spaces to foster neighborhood interaction and a self-sustaining, climate-adaptive living environment.



Program Second Life

Resource Based Solutions



MORE WITH LESS Renger Heijnen



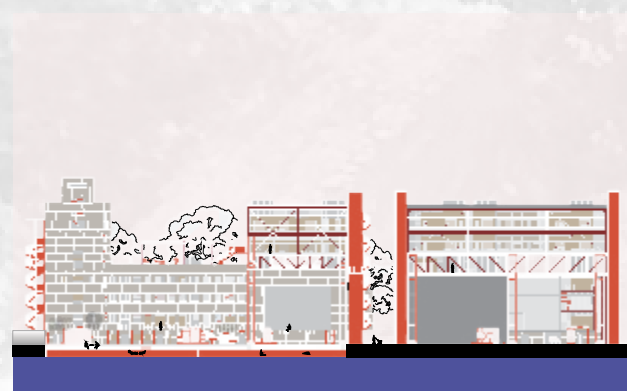
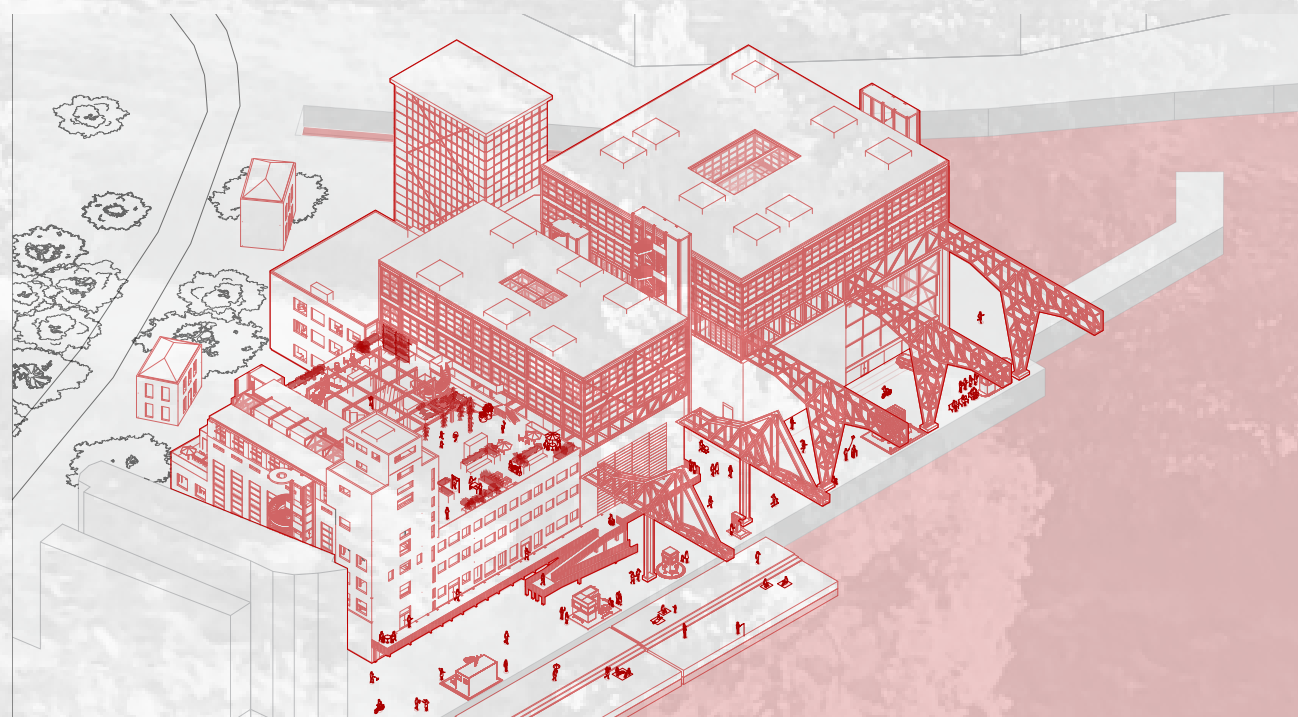
“More with Less” transforms 1960s Amsterdam social housing to enhance liveability, adaptability, and sustainability. Using circular economy principles, it reuses materials, adds dwellings, and designs flexible units. Combined with public spaces, gardens, and shared areas, the project fosters community interaction, creating a socially vibrant, eco-friendly, and long-lasting neighbourhood.



STRUCTURE OF FREE ZONES Klaudia Kurzac



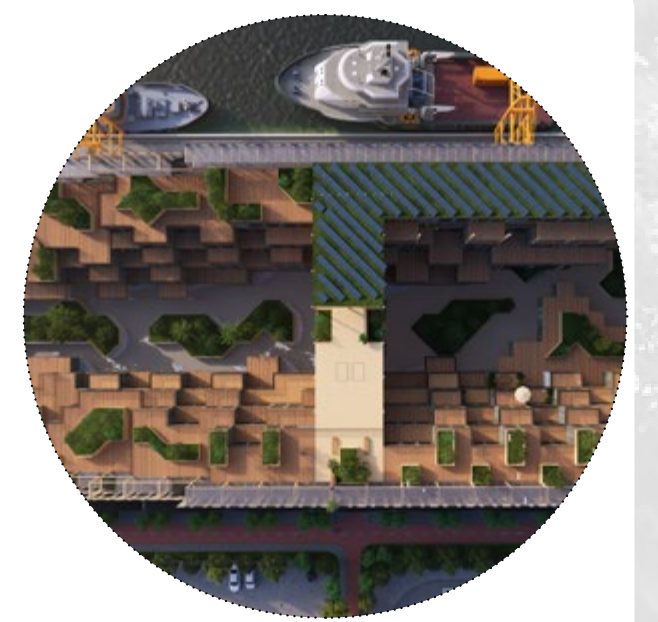
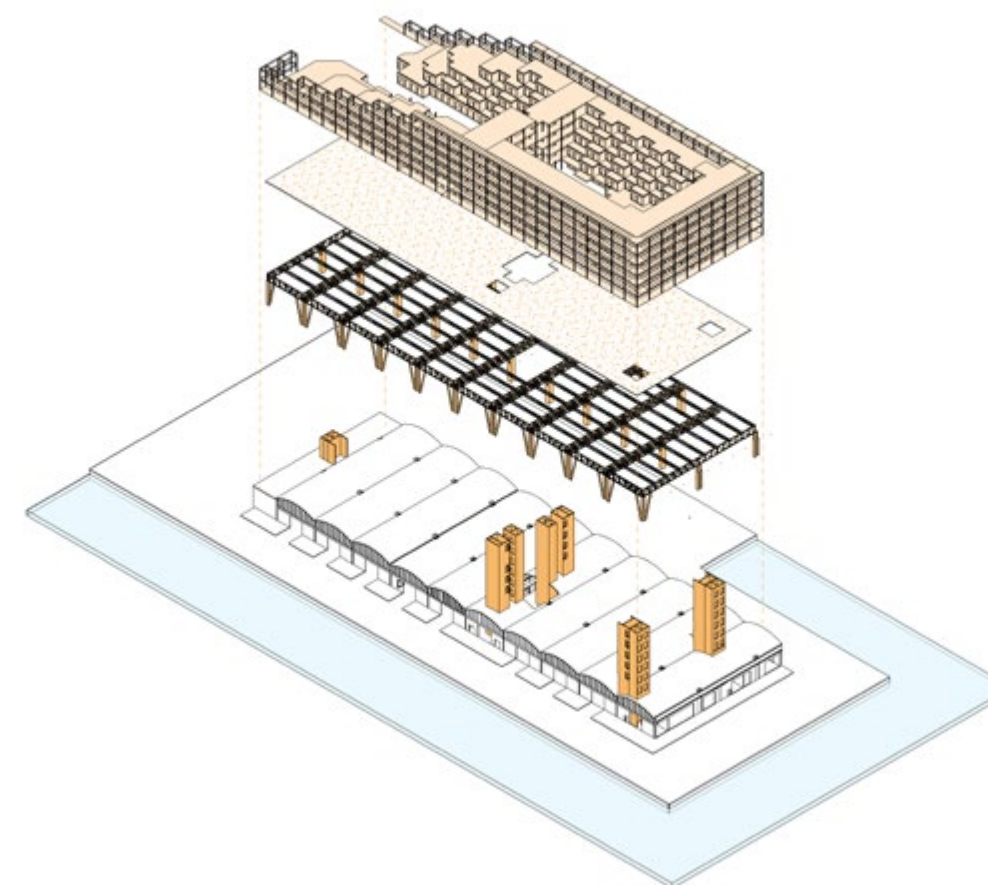
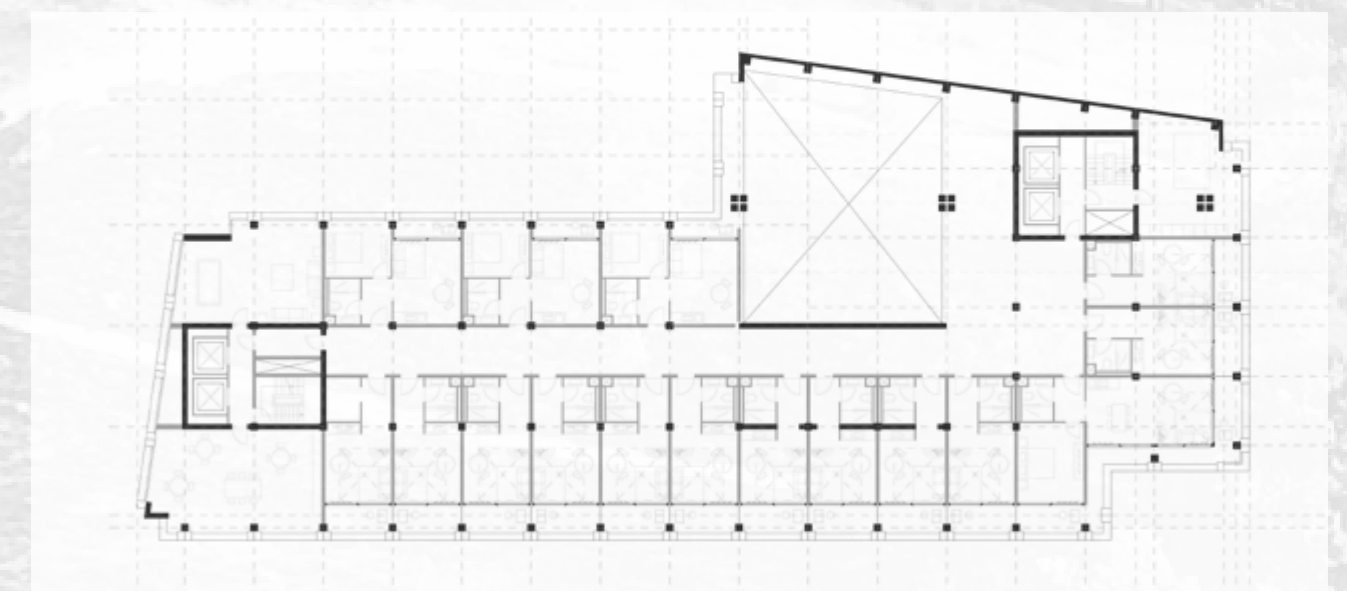
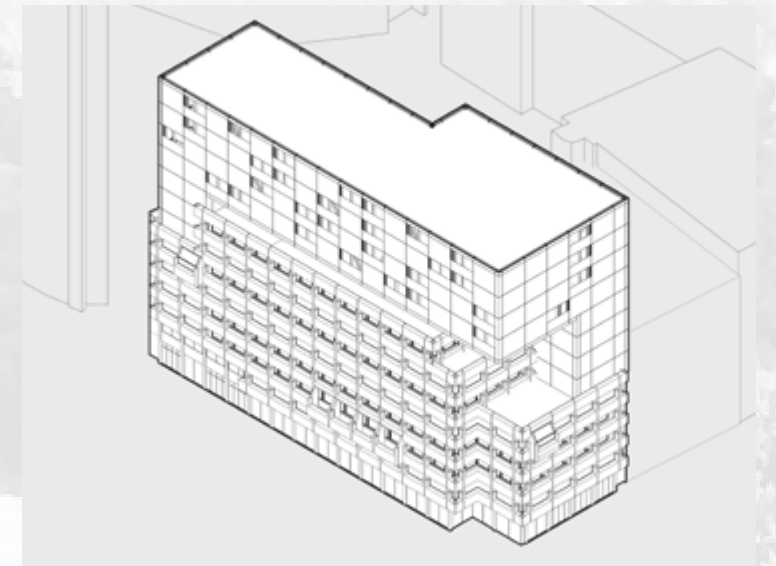
The project examines urban vacancy and affordable, inclusive space through adapting vacant industrial buildings via community-led approaches. Studying Dutch squatting communities—OT301, Tetterode, Plantage Dok, Het Domijn, Poortgebouw, and Boschgaard—it proposes adaptive, incremental strategies supporting autonomy and self-building, applied to Landbouwbelang facing redevelopment.



ADAPTING BELLEVUE Lucas Hartog



Since the 1950s, brutalism has sparked debate, reflected in discussions over Bellevue in The Hague and proposals to replace it with two 180-meter towers. Instead of demolition, this project reimagines Bellevue as a mixed-use building, preserving its brutalist character through targeted interventions that enhance livability while respecting its historic identity.



THE SHELLS David Oudega



This research examines integrating housing and industry in Haven-Stad, Amsterdam, to address the city's housing shortage and underused industrial sites. It proposes urban, architectural, and technical strategies, implemented in phases. The study concludes that harmonious coexistence is feasible by minimizing nuisances, leveraging synergies, and prioritizing residents' needs.

Program Harvest

Designing with Water

In our Harvest programme, we begin the (re)design process of a building by first understanding the character and conditions of the local landscape. What if we could construct our buildings using locally harvested materials? How would this reshape architecture? And what changes would it bring to the local construction value chain and its stakeholders?

Different landscape types - from wetlands and forests to urban areas - offer unique material production opportunities - and call for the development of distinct building typologies. A typical Harvest project goes beyond designing and materializing the building itself; it also involves creating a circular material system. Rather than simply extracting resources, the focus is on sustainable landscape stewardship, fostering regenerativity, and ensuring long-term value creation.



LEVEN OP EEN NATTE BODEM

Pim Braakhuis

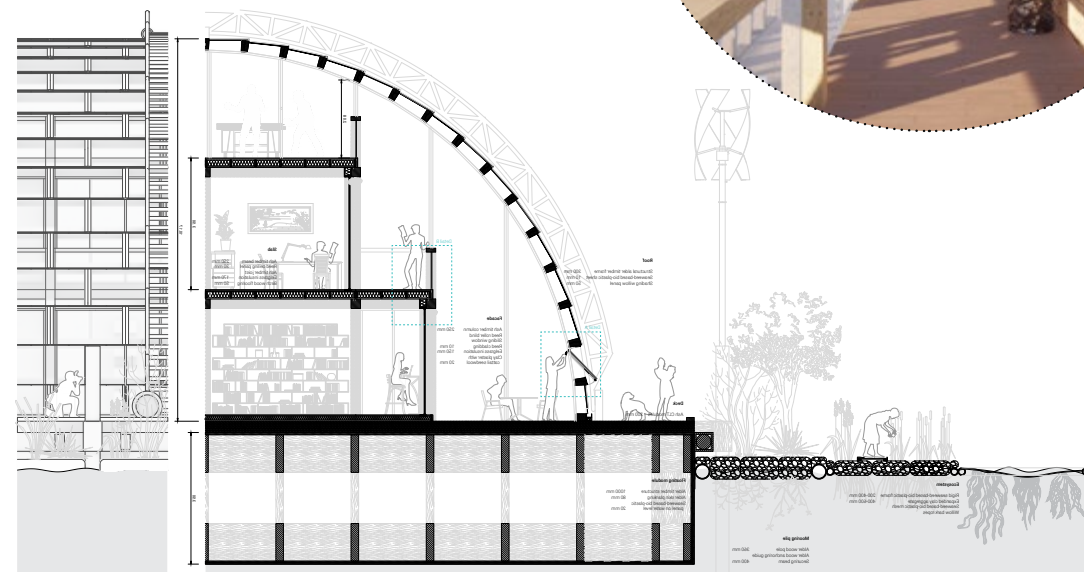
This research develops an integrated spatial strategy for housing on Dutch peatlands, addressing climate change and the housing crisis. It proposes amphibious stilt housing, adaptive water management using the APSSI system, and lightweight construction across urban, cluster, and dwelling scales, envisioning a water-driven planning culture aligned with the National Delta Programme.



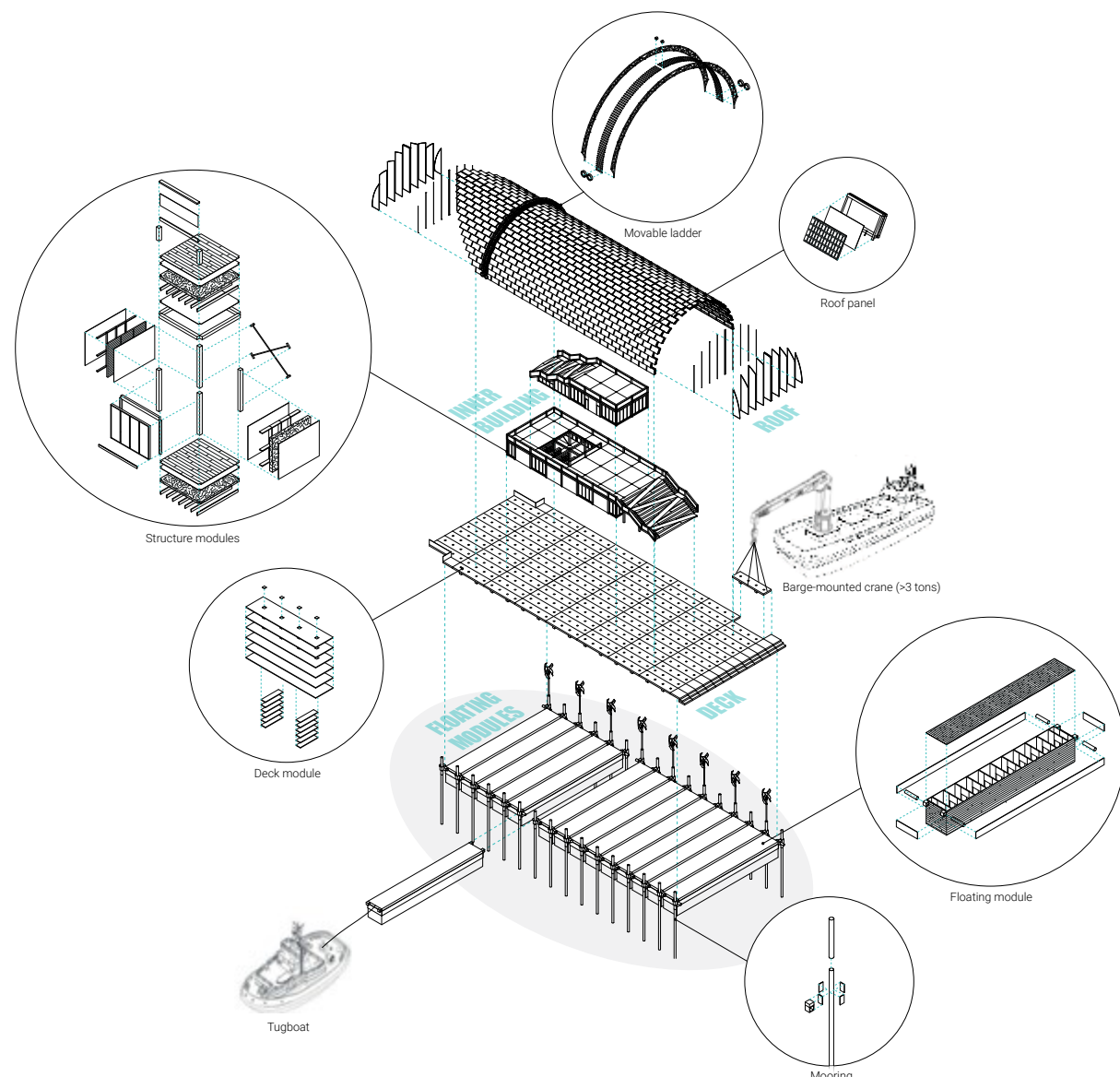
FROM WATER TO STRUCTURE

Gaspard Marteau

Urban industrial waterfronts are transforming as cities densify. This project proposes a regenerative framework in Amsterdam's Haven-Stad: floating, modular architecture built from grown bio-based materials cultivated on ecosystem islands that filter water, boost biodiversity, and absorb CO2. Community-led cycles link plant growth to building lifespans, enabling adaptable, circular, disassemblable development.



ARCHI
PRIX



FROM SWAMP TO STRUCTURE

Josephine Beger

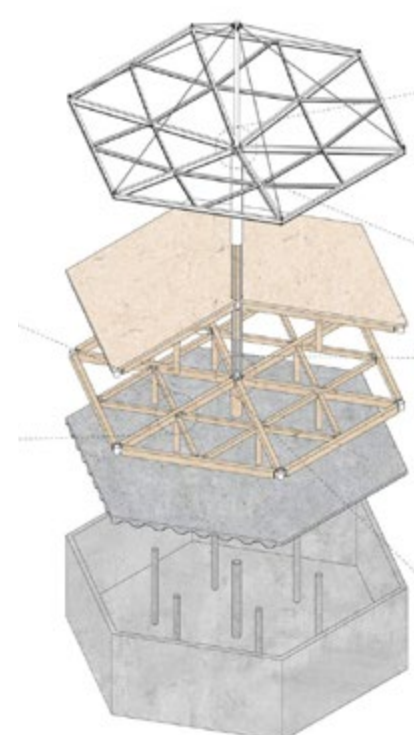
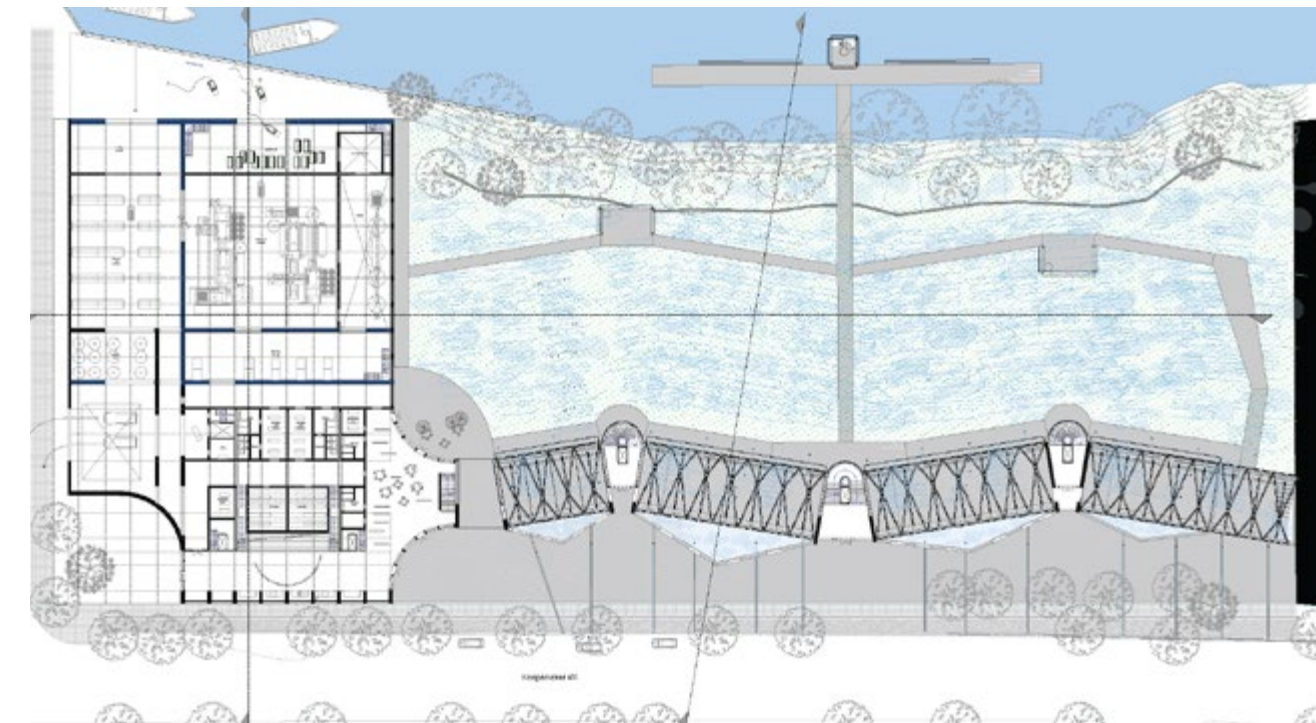
From Swamp to Structure reimagines architecture as an ecological metabolism rooted in living landscapes. Focusing on rewetted peatlands in Berlin-Brandenburg, it proposes paludiculture and cattail-based construction as climate-responsive alternatives to extractive practices. A River Spree factory and mixed-use building integrate cultivation, research, production, and public space, reconnecting urban development with regenerative material cycles.



FLOATING HAVEN

June Choi

This study investigates large-scale floating architecture, focusing on technical feasibility, energy self-sufficiency, and sustainable water management. Using mixed methods, it proposes a modular hexagonal structure demonstrating stability, renewable energy production, and rainwater collection. The scalable design integrates wastewater treatment, offering a flexible and sustainable solution for marine infrastructure.



Program Harvest

Landscape Based Design



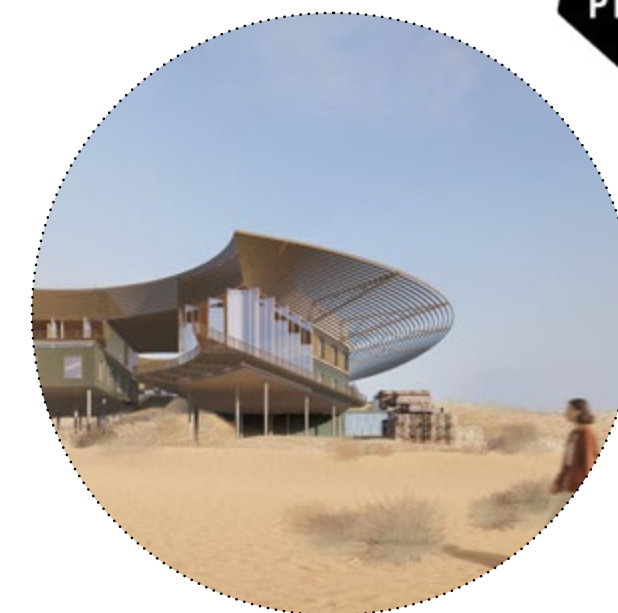
REFORMING GROUNDS
Joanna Petrova

This project explores repurposing industrial and agricultural surplus into building materials for a new regional vernacular. Focusing on Maastricht's ENCI Quarry, it proposes post-extractive sites as material hubs for learning and making. It promotes circular construction, community self-build, and resilience, demonstrating how surplus materials can shape sustainable, locally rooted architecture.



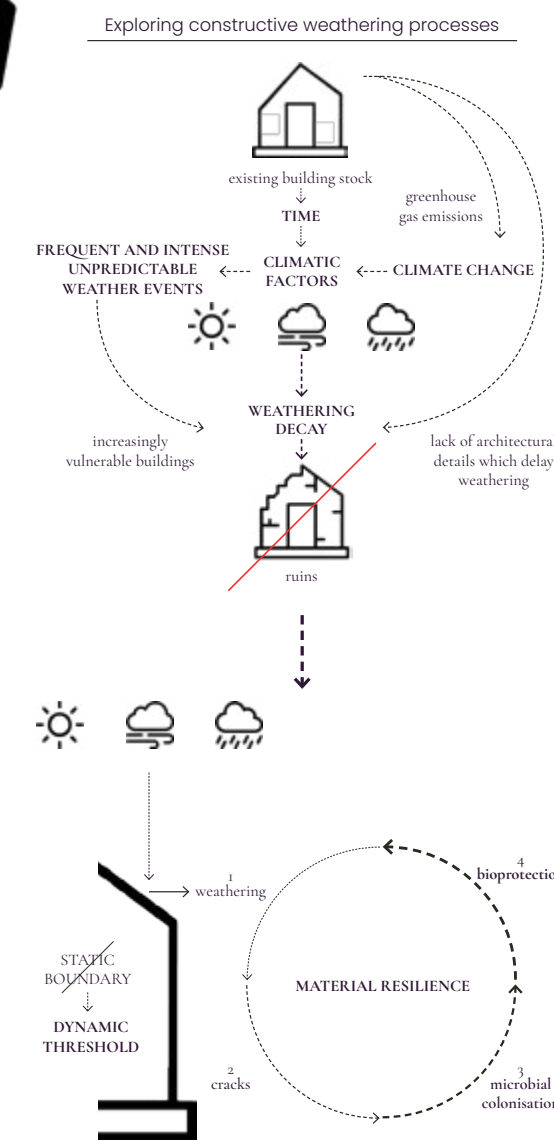
RETHINKING HVAC SYSTEMS
Annemijn Visser

This research examines passive and bio-inspired strategies to reduce operational energy and embodied carbon in housing. Using the Behling Diagram framework—form, passive, active systems—techniques were tested on a Hague residence and ranked by spatial quality and carbon efficiency. Form and sunspaces performed best, informing a comparative early-design sustainability catalog.



LAYERS OF RESILIENCE
Marina Cătălina Perşunaru

Addressing climate and biodiversity crises, this project explores adapting architecture to accelerated material decay. Embracing weathering as resilience, it uses sunlight and rainwater to foster protective bioprocesses. A rehabilitation centre beside a Meijndel bunker integrates curated decay, adaptive programming, and layered heritage, forming a living system that extends lifespan.



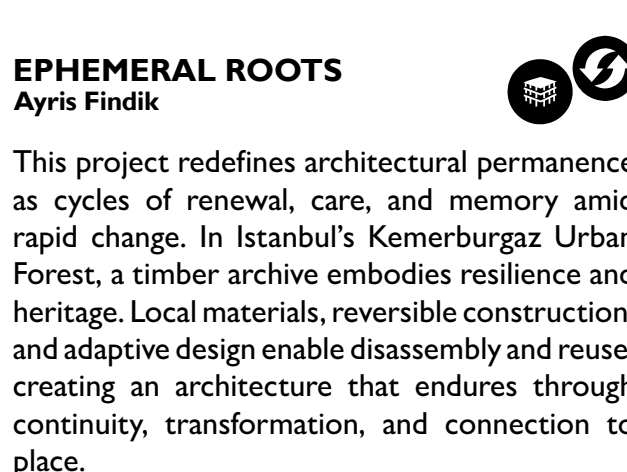
THE FORT OF THE FUTURE
Anne Eder

The Fort of the Future, located in Utrecht, reimagines Dutch Waterline forts as resilient, self-sufficient architecture responding to climate and energy challenges. A rammed-earth exterior, built from on-site soil, encloses a soft interior. Courtyards, canals, green infrastructure, and a public roof integrate water management, recreation, housing, and long-term adaptability.



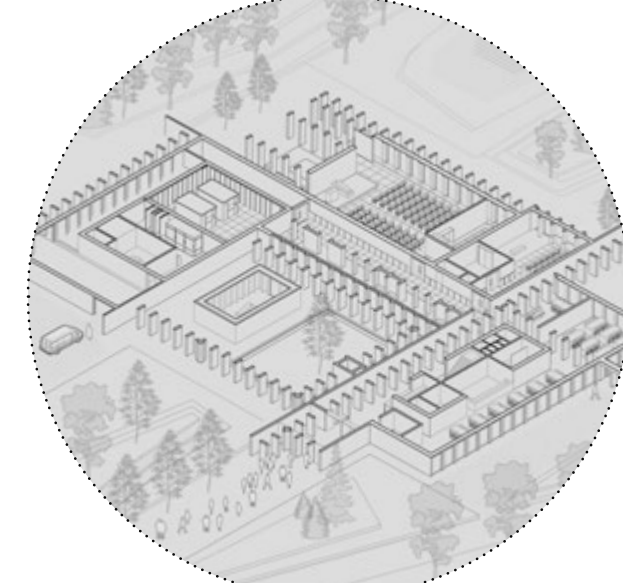
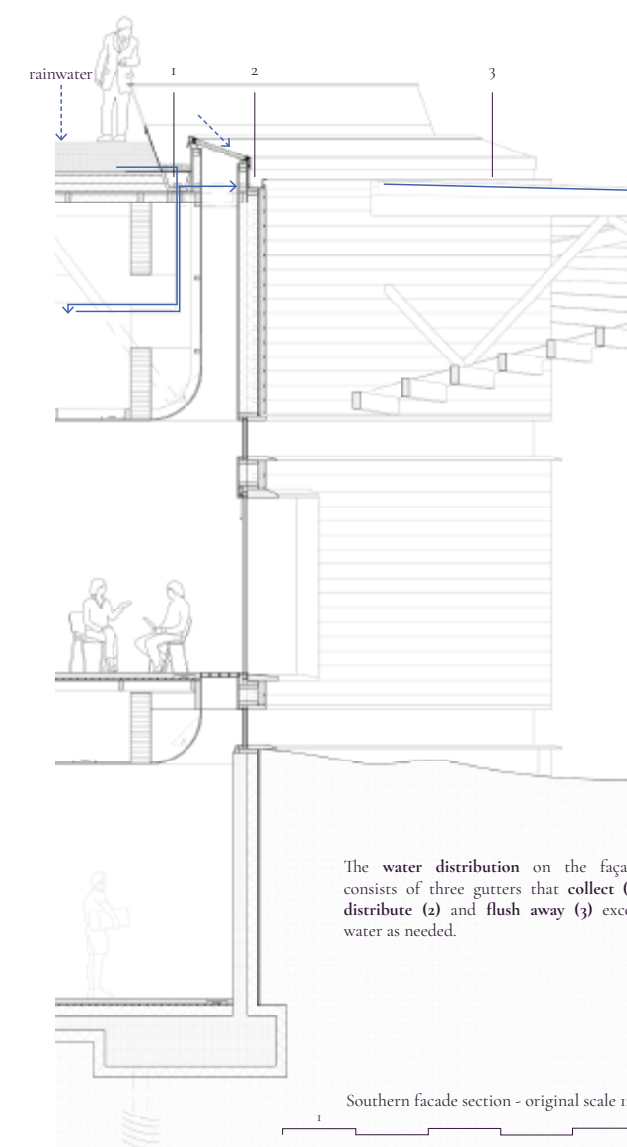
LEARNING IN GREEN
Serena Ginesi

Adolescence is a formative period when environmental factors can trigger or worsen mental health issues. Dutch high school students face notable mental health challenges affecting achievement and life satisfaction. While not solving root causes, biophilic design can mitigate impacts by integrating six restorative principles into school architecture and landscapes to support adolescent wellbeing.



EPHEMERAL ROOTS
Ayris Findik

This project redefines architectural permanence as cycles of renewal, care, and memory amid rapid change. In Istanbul's Kemerburgaz Urban Forest, a timber archive embodies resilience and heritage. Local materials, reversible construction, and adaptive design enable disassembly and reuse, creating an architecture that endures through continuity, transformation, and connection to place.



ALS DE KLOKKEN NIET MEER LUIDEN - TECTONICS OF FAREWELL
Gijs Boer

This thesis explores geobased materials to rebuild sustainable value chains through social, ecological, and technological approaches. It proposes a hybrid clay-earth system and applies it to a farewell centre in Oosterhout, integrating local materials and ecological strategies to create contemplative, landscape-based architecture emphasizing durability, regional identity, and material care.

Alumni

Interview with aE alumna Baan Taweel



When did you graduate from @aE Studio?
I graduated from aE Studio in January 2024. My graduation project focused on a relevant question: how could we continue to live in the Netherlands if all dikes were to break by 2050? This topic allowed me to explore climate change, water management, and spatial design simultaneously. During my graduation project, I explored how architecture and infrastructure could adapt to rising sea levels and flooding scenarios. I investigated floating structures, adaptive landscapes, and resilient urban systems. The project pushed me to think beyond traditional boundaries of architecture and engineering, combining creativity with technical feasibility. This approach helped me develop a strong interest in innovative and future-oriented design solutions.

After your graduation you started at Witteveen+Bos. How can you relate your graduation project and your interests at the time to your current activity?
After completing my graduation, I realized that I wanted to explore the technical side of the field more deeply. While the conceptual phase of design fascinated me, I was curious about how ideas actually become reality. I wanted to

better understand the process behind realizing projects, from early concept development to construction and implementation. In particular, I was interested in working on innovation and exploring how new technologies and ideas could be applied in real-world projects. Which then influenced me to start at Witteveen+Bos. I joined the Complex Project Management and the Digital Constructions group, where I had the opportunity to work on innovative technologies and learn about project development from a broader perspective.

Developing an idea and designing a project is only one part but understanding how to manage a project, communicate with stakeholders, and navigate decision-making processes is equally crucial. Through my work in complex project management, I have gained insight into these aspects and learned how important it is to consider them early in the design phase. This combination of innovation, technical knowledge, and project management aligns closely with the interests I developed during my graduation project.

In addition, I worked with the European Space Agency (ESA), and multiple other partners, on a project that explores innovative construction methods and technologies in extreme environments. Working on a project connected to ESA provided a unique opportunity to think beyond conventional building contexts and consider how design and construction can adapt to entirely new conditions.

How does your background as an architectural engineer influence you?
My background as an architectural engineer has had a strong influence on how I approach challenges and opportunities. It has taught me to think from multiple perspectives and to combine creativity with technical knowledge. One of the most valuable lessons I learned during my studies is that nothing is “too crazy.” Everything is possible, as long as you can support your ideas

with a strong concept and a clear narrative. This mindset encourages experimentation and innovation. It also helps me remain open-minded when exploring new technologies and approaches. This balance between creativity and practicality is something I apply in my daily work.

During my studies, I worked with different disciplines such as architecture, environmental design, and urban planning. This has made it easier for me to collaborate with professionals and understand their different perspectives.

Where or how do you see yourself in the future?
All the knowledge and experience I gain now will become part of my professional “toolbox.” When I eventually start my own studio, I want to be able to oversee projects from concept to realization. This will allow me to create innovative designs that are not only visionary but also feasible and well-executed. My ambition is to focus on designing with nature, particularly with water. I am fascinated by how natural elements can shape our built environment and create meaningful, resilient spaces. In my future work, I would like to focus on themes such as serenity, ancient civilizations, and simplicity.

Do you have any additional tips or experiences you would like to share with potential future aE graduates?
My advice for future aE graduates is to do as much research as possible, combine ideas, and remain open to different possibilities. The strength of being an architectural engineer lies in the balance between creativity and technical knowledge. This combination allows you to work in many different fields and explore various career paths. I also recommend engaging in conversations with professors, mentors, and fellow students. These discussions can lead to new insights, opportunities, and collaborations. Don’t hesitate to ask questions and challenge ideas this is an important part of learning and growing.

Stay curious and keep experimenting! Innovation often comes from combining ideas in unexpected ways.



ESA (European Space Agency) project

Interview with aE alumna Camille Gbaguidi



When did you graduate from @aE Studio?
I graduated in 2022 with the project “The Role of Emergent and Developing Countries in the 21st Century: A Vision for Sustainable Housing Development in Benin.” The project explored sustainable, long-term construction methods and housing typologies designed to accommodate a very young and rapidly growing population. It went beyond proposing a simple housing solution; instead, it was grounded in in-depth research on social and cultural patterns. The outcome was a sustainable, ideally autonomous housing block system aimed at having a positive environmental impact by reducing energy consumption and long-term operational costs, while improving thermal comfort and overall quality of life for a wide range of inhabitants, from single households to multi-generational families.

Recently, working at Lederer Ragnarsdóttir Architekten Berlin, how have you been able to relate your graduation project and your interests at the time to your current job?
This is an interesting question, as the projects I have worked on since graduation are located in Germany, a context that differs significantly from my thesis. However, there are still clear

connections. Most recently, I worked on a construction project that relates back to my graduation project in terms of the intentional selection of materials to achieve technical goals such as thermal comfort and reduced energy consumption. The project is a concert hall that also functions as a practical educational space for university students training to become organists. Due to high acoustic requirements and budget constraints, material selection became a key focus throughout all design development phases and continued to be a central topic on site. At the same time, the project explored alternative methods of climate control beyond traditional HVAC systems. In collaboration with a ventilation specialist, we designed and built a ventilation tower that regulates the indoor climate of the entire building through heat exchangers.

This approach reflects my ongoing interest in making more intentional material choices and exploring low-tech solutions that maintain thermal comfort, even in public buildings. This is particularly challenging in highly regulated environments like the German construction industry. However, the project demonstrates that there is real potential, especially when architects collaborate closely with technical specialists from an early stage to challenge established practices and building codes.

How does your background as an architectural engineer influence you?
Before studying at TU Delft, I attended an art school. When I started at TU Delft, my focus shifted from a purely design-driven approach to one that is more detail-oriented, buildable, and grounded in in-depth research, especially during the aE Studio. Today, as an architectural engineer and designer, I feel that I can merge these two worlds in a professional context.

In my recent work, particularly during the construction phase, our problem-solving skills are no longer tested in theory but must be applied directly on site. While this can be stressful, it is

also incredibly exciting and rewarding to see ideas that we have developed over months come to life. We often find architectural solutions to predominantly technical challenges, working closely with specialists in fields such as acoustics and ventilation.

Where or how do you see yourself in the future?
At the moment, I try to stay present and approach both life and my professional career step by step. Since graduating, I have spent two and a half years working in a traditional architectural office environment, which has taught me a great deal about myself and the values I look for in a team setting. I have developed strong communication skills, particularly in coordinating with technical planners and project partners, something I would like to build on further in my future endeavours.

In addition to my architectural work, I have also remained involved in a variety of activities: I continued as part of the tutoring team for the Concrete Design Competition masterclass, worked on web development for an architecture office, created graphic design work for a leading company in the sports service sector, and even participated as an extra in a Hollywood film production. Over the next five years, I hope to continue refining my skills while remaining flexible and open to new opportunities. As architects, we are problem solvers, and as our profession evolves, we must evolve with it.

Do you have any additional tips or experiences you would like to share with potential future aE graduates?
This is likely the last project where you are truly your own client, so it is important to listen to yourself and pursue your own vision. If there is a topic that genuinely excites you, something that keeps you thinking, it can become a strong thesis foundation. See your thesis not as the end of your studies, but as the beginning of your professional journey. Be curious and persistent in your research, and have the courage to challenge ideas, even those of your peers or tutors. If your research is thorough, you should be the expert in the room.

For me, it was important to build a strong conceptual and research foundation rather than presenting a solution that only scratches the surface. Trust yourself and enjoy the process.

Finally, remember that you are surrounded by valuable resources, not only in the form of tutors, libraries, and online material, but also in the people around you. Your peers, with their diverse backgrounds and experiences, are one of the most valuable resources you have.



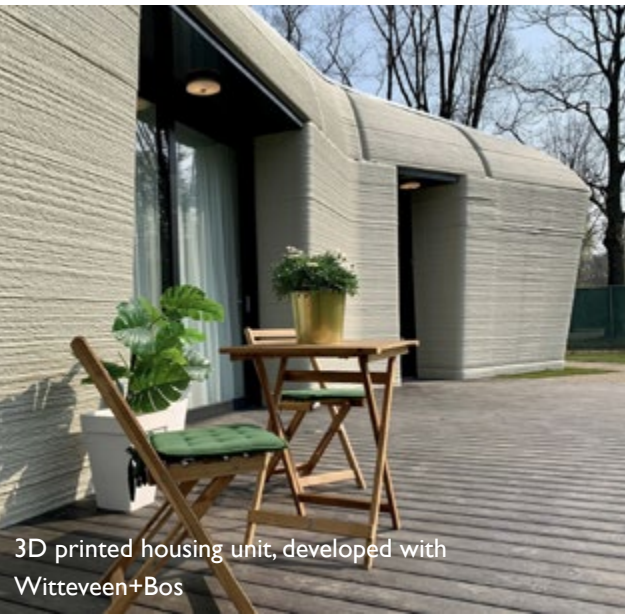
Source: Lederer Ragnarsdóttir, the educational concert hall using Poroton Ziegel hollow bricks,



Impression of “A Vision for Sustainable Housing Development in Benin”, graduation project



Futuristic Impression of ‘Plan B’, graduation project



3D printed housing unit, developed with Witteveen+Bos

Graduation **Architectural Engineering**



Kick-off meeting aE Studio nr. 35, 20 November 2025

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