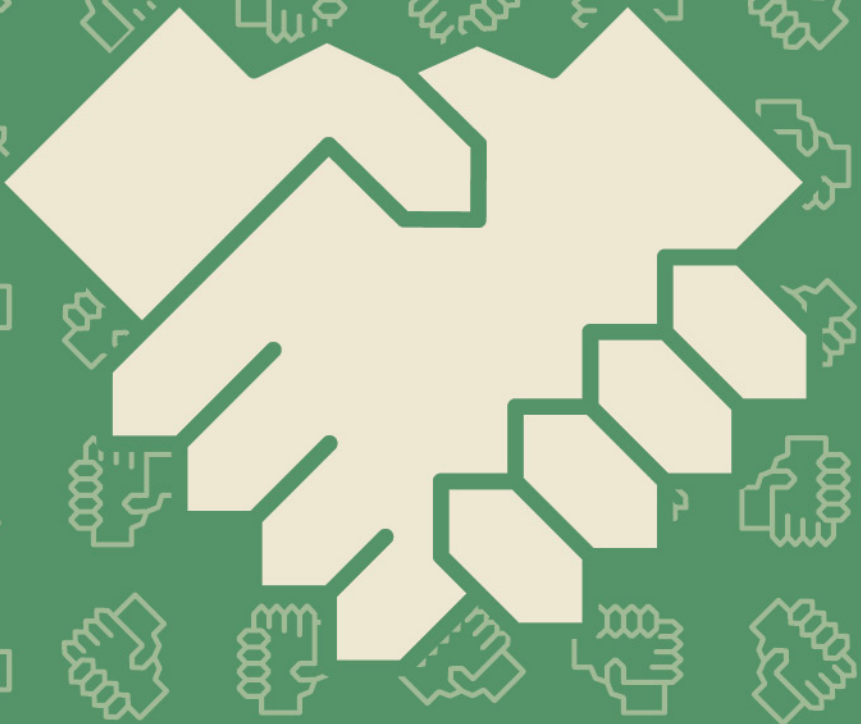
Tim®



Our mission

We aim to standardise timber construction.

We support our clients in realising their timber ambitions, adhering to municipal and regional goals, and accelerating the larger transition to timber construction.

Tim® is not a conventional construction system. Tim is an integrative methodology: timber construction with a plus.

We harness the strength of wood in a fully integrative set of construction nodes, where structure, insulation, façades, and more come together in technically feasible, practically executable connections.

Tim provides the freedom to design and build flexibly, fast and safe. This helps to turn timber construction into a more affordable method and a strategy for quality.

Meet Tim: timber, made simple.

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What stands in the way of affordable timber construction?

The construction sector needs to become more sustainable. Climate targets are clear, regulations are becoming stricter, and the transition to timber and bio-based materials is inevitable. But how can we make timber construction both affordable and scalable for urban residential development?

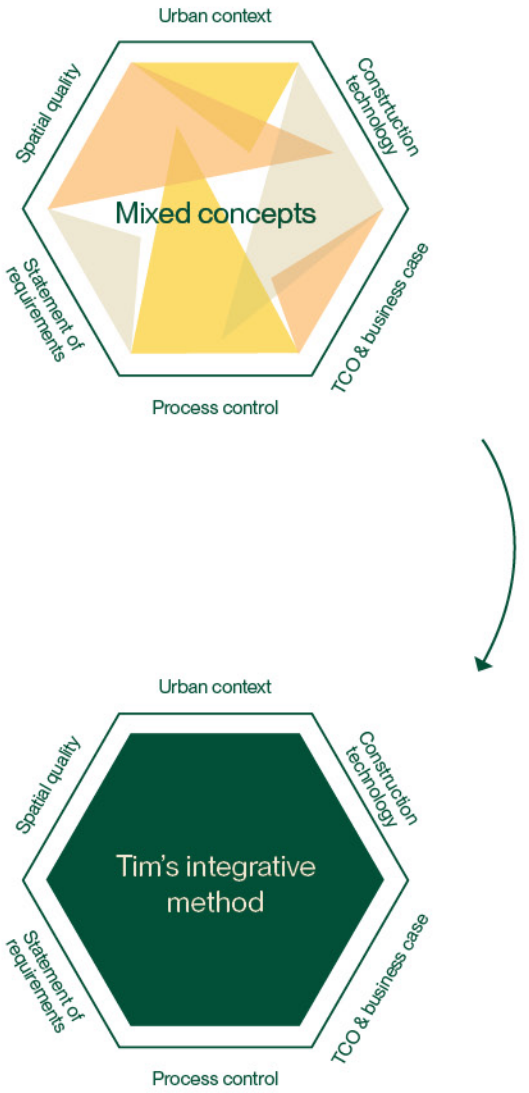
Problem: Flexibility

Mixed concepts

The bio-based supply chain is relatively new and fragmented, consisting of mixed 2D and 3D solutions that do not provide the flexibility required for complex urban challenges and the diversity of projects in urban development.

Integrative methodology

In reality, construction sites rarely have perfectly rectangular shapes. Urban plots exist within erratic contexts. Housing preferences are constantly changing. Trends and developments are as dynamic as the city itself. In other words: we need an integrative construction methodology that provides complete freedom, without the constraints of standard dimensions or rigid systems.



Conditions for urban development

Opportunity: Integration

Bio-based supply chain

The traditional construction supply chain is efficient but not future-proof. Bio-based construction often lacks cohesion. There is a need for a methodical integration of materials at a more detailed level, enabling a broadly applicable and scalable approach.

Interdisciplinary team

A methodology that aims to address multiple challenges in urban construction at once, requires an interdisciplinary team. Experts in design, physics, engineering, and execution should work closely together from day one. On top of this, clients demand a solid and trustworthy team that consistently delivers quality and keeps the process manageable.

Tim®: the solution

As a construction methodology, Tim® focuses on the smallest technical unit within a building: the construction node. Integrating all material layers into a comprehensive set of standard nodes, the methodology provides a flexible and scalable approach. This allows us to design and build without being constrained by fixed modules and the site's shape and complexity.

Tim® focuses on construction nodes

Integrative solution

By introducing detailed construction nodes, Tim® brings together various bio-based supply chain partners. Each node perfectly combines materials from different suppliers. The nodes are fully engineered and optimised, resulting in realistic, feasible, and executable solutions. They meet all requirements for structural integrity, fire safety, and acoustics, avoiding unfortunate surprises in later stages of the construction process.

Ceiling finish

Ceramic finish

Wood finish

CLT

Timber frame construction (HSB)

Flaxboard

Window frame

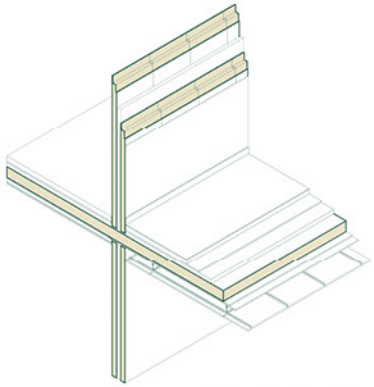
Door frame

Insulation

Ballast

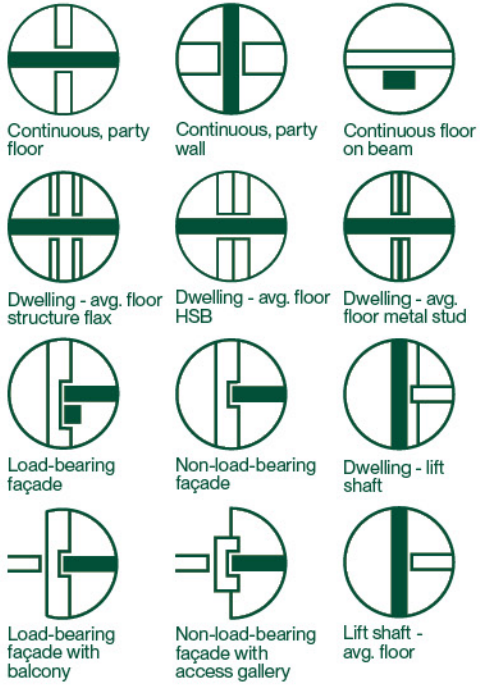
Roof finish

Components



Standard nodes

The TimSet

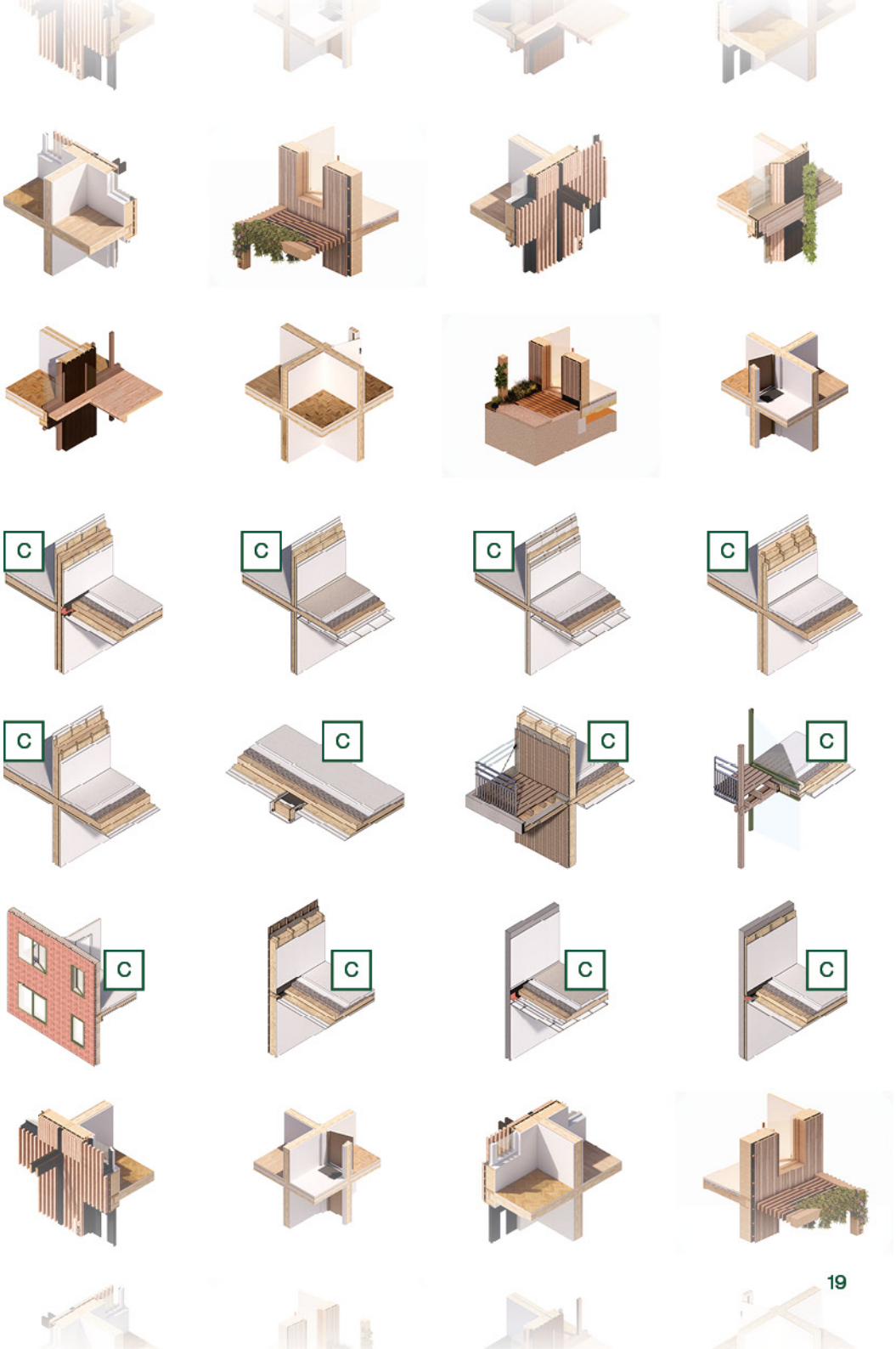


TimSets

A growing collection of standard nodes

The TimSet is a dynamic and continuously expanding collection of standard nodes. For every construction assignment, the set offers nodes of different materials and functional configurations. Specifically for housing corporations, we have developed a unique subset, fully aligned with their statement of requirements and housing typologies, ensuring immediate compliance with all standards and requirements.

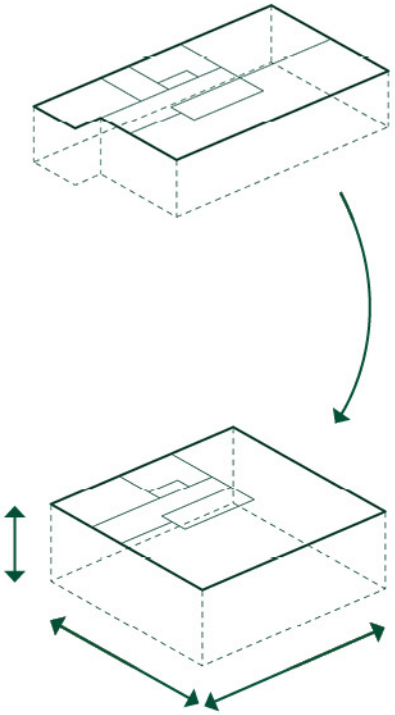
Subset of corporation nodes C



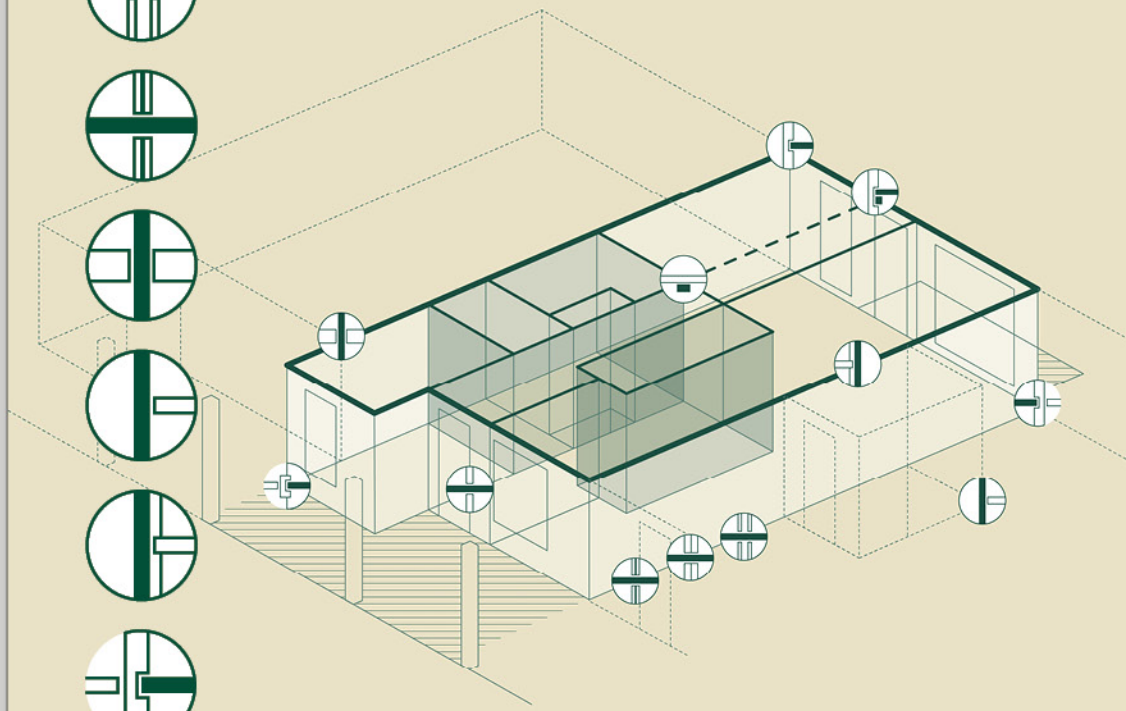
Building with a TimSet

Intelligent nodes, flexible shell

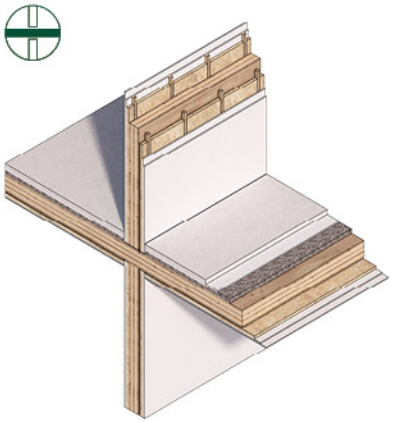
The TimSet allows us to construct a complete and flexible shell using intelligent nodes. Floors, walls, and layouts are integrated directly into the assembly, without constraints of standard dimensions. Dealing with a higher or lower floor height? A wider apartment? No problem. The system is adaptive: larger spans get thicker floors and additional columns or walls, without compromising creative freedom.

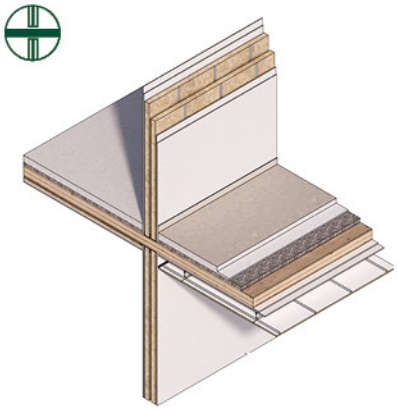


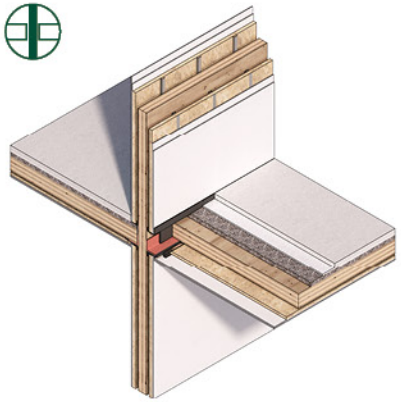
TimParametric

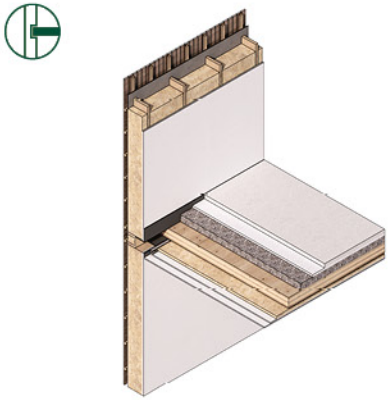


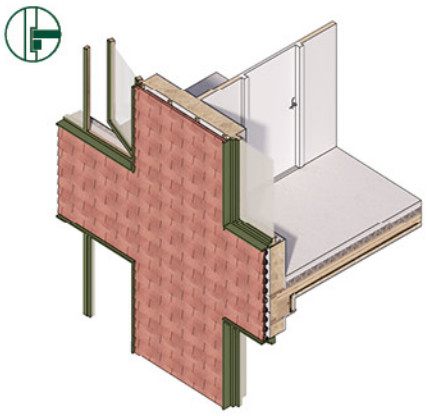
A complete and flexible shell built from intelligent construction nodes

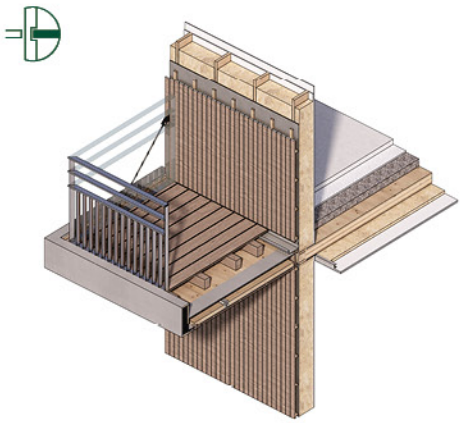


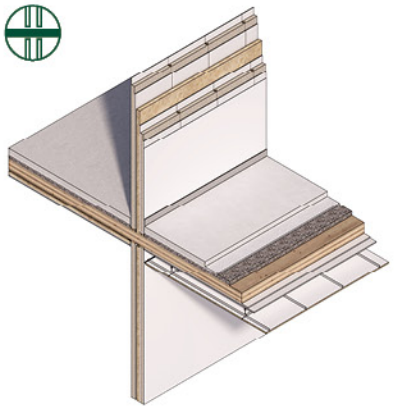


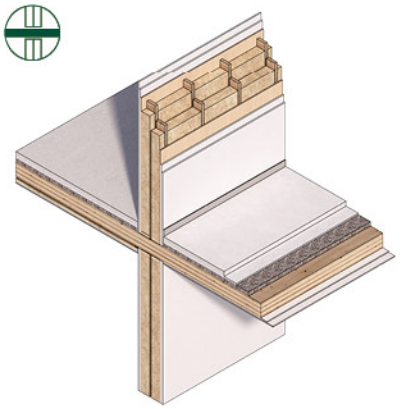


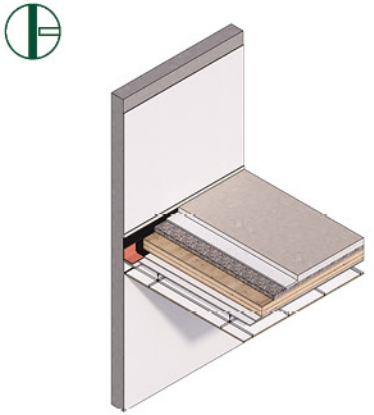


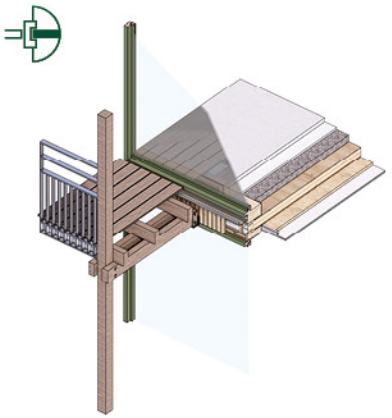


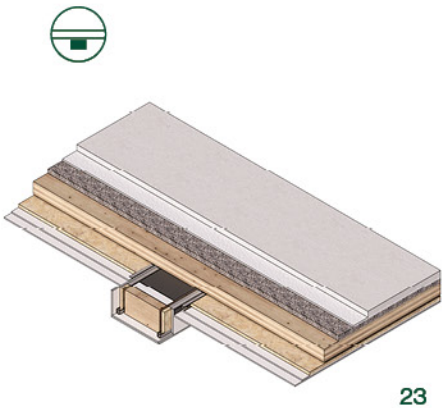






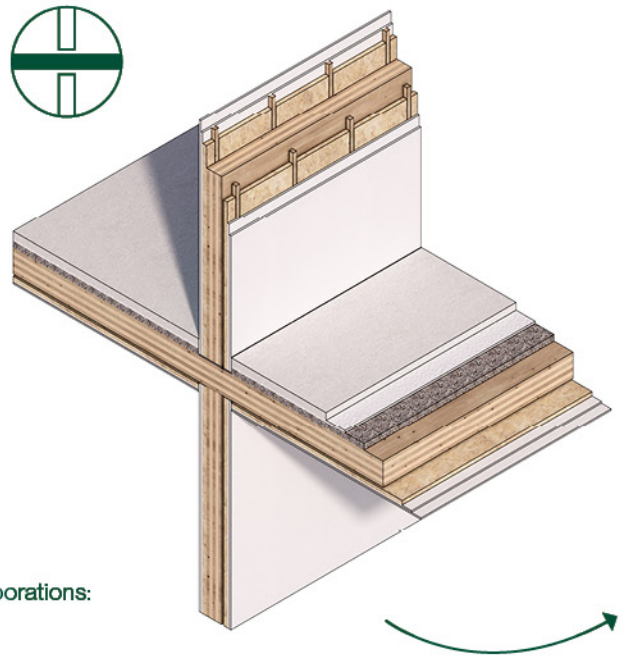




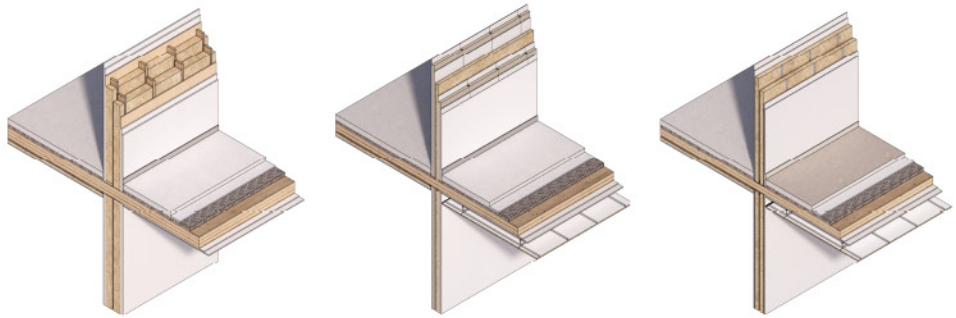


Clever variations, ready-to-go

Each node in the TimSet comes along with a range of variations. These include adjustments for additional floor heights, lighter or heavier materials, and cost optimisation. This allows us to anticipate specific situations in the construction process. No improvisation after the fact— just well-considered, immediately applicable solutions.



Standard node for TimCorporations: party floor/wall



1 HSB

2 flax

3 metalstud

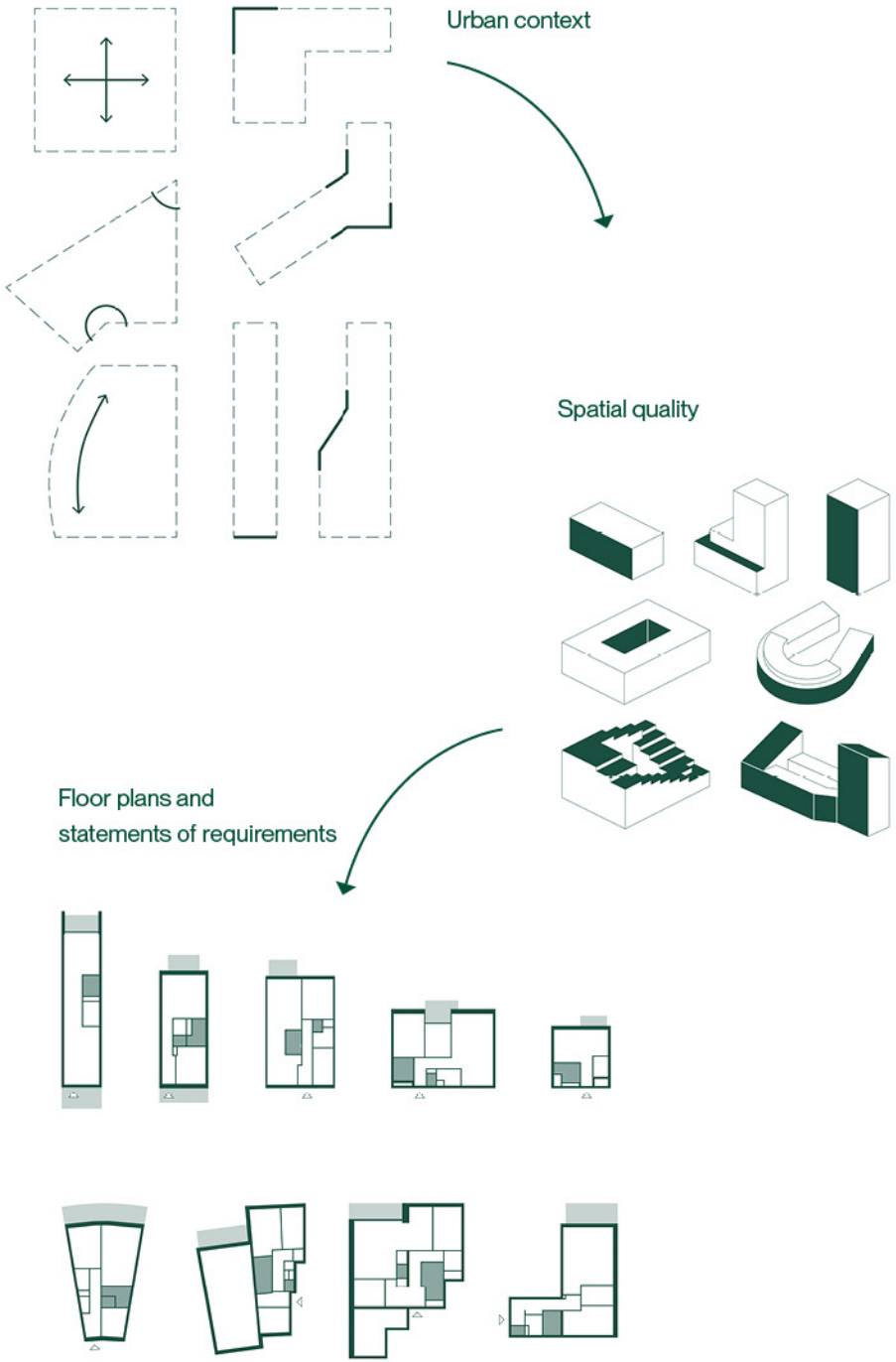
Node variations: party – shared circulation area

Typological freedom

Our methodology grants designers and developers full freedom to make optimal use of each plot. Whether it concerns compact urban blocks or larger, spacious volumes, Tim® works for a wide range of building types and certified high-quality layouts. This allows us to deliver flexible, functional, and future-proof housing solutions at any location.

“With the TimSet, we can fully design and carry out every assignment without leaving residual gaps.”

Jurriaan van Stigt - LEVS architecten



“Each construction node meets the highest standards for structural integrity, fire safety, acoustics, and more.”

Joost Lauppe - Lüning

Safety & guarantees

Safety is central to Tim®. Our research has focused on how to engineer construction nodes that comply with all technical requirements for residential buildings: structural safety, fire protection, sound insulation, and water resistance. The fundamental principles we developed are documented in our workbook. Thanks to this approach, we guarantee that our buildings always meet the required standards.

Spatial quality

Timber construction can only become the standard if it makes for beautiful, liveable environments. That is why Tim® grants designers the freedom to create innovative, high-quality designs using a variety of materials that both protect and harmonise with their surroundings. Our cities do not follow a standard – and neither does Tim®. This is how we create sustainable value for the future.

"We provide freedom in design choices and we bring our designs into reality."

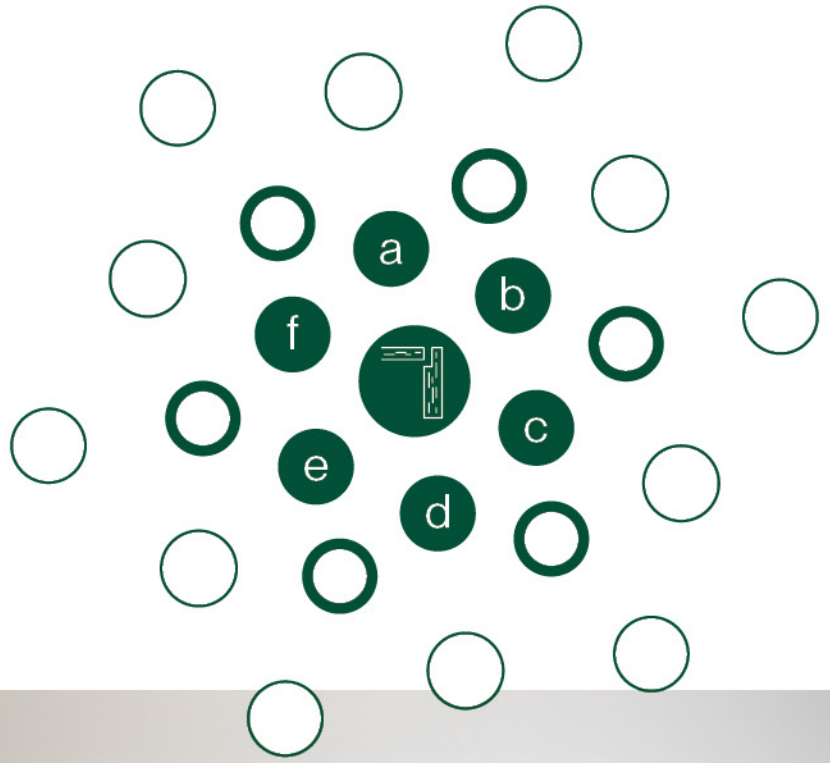
Danielle de Nijs - Construction company De Nijs

“New partners and products can be continuously integrated.”

Bart Arends - Construction company De Nijs

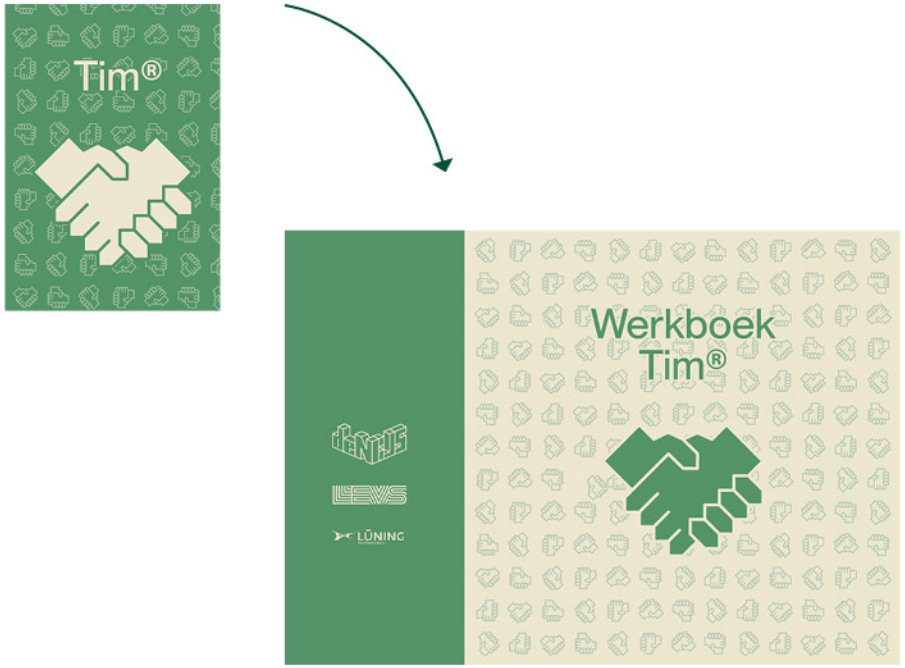
Timber construction+

The core element of Tim® is timber construction: our main tool for creating real impact. However, the material transition is about more than that. We integrate bio-based alternatives across all material layers in our construction nodes. Freedom of material choice is essential when having to meet a variety of project requirements. We are continuously expanding and looking to welcome new partners into shaping the future of construction, together.



The Technical Workbook

The Technical Workbook is the centrepiece our knowledge and innovation. It consolidates all our construction nodes, technical details, research findings, and solutions. It is a dynamic collaborative document for which LEVS, De Nijs, and Lüning work together, involve partners, and provide clients with insight into the possibilities Tim® offers.



Details

Construction physics

Noise and vibrations

Fire NTA 6125

Construction definitions

Beam height definitions

Terms & definitions

Floor span

Installations

Duct dimensions

Housing modules for corporations

Basic floor plans

Façade selection matrix

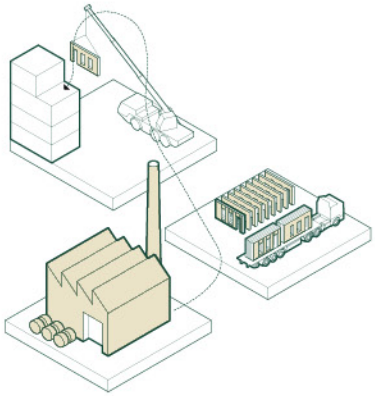
MJOB (Multi-Year Maintenance Plan)

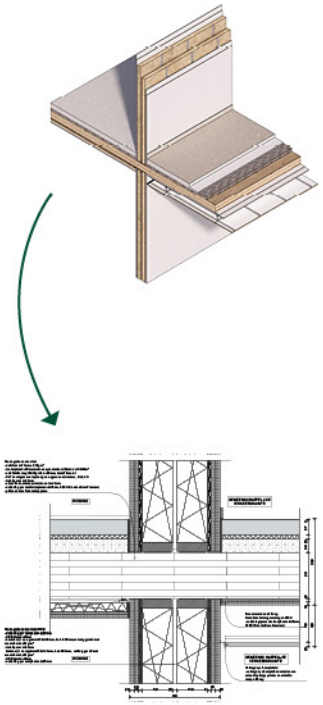
How Tim® makes timber construction affordable

How can we work towards a feasible business case? Tim® reduces costs by combining clever efficiency, process advantages, and product integration. This makes high-quality and flexible timber construction viable for every housing segment—without compromising design freedom.

Lighter, faster, more flexible

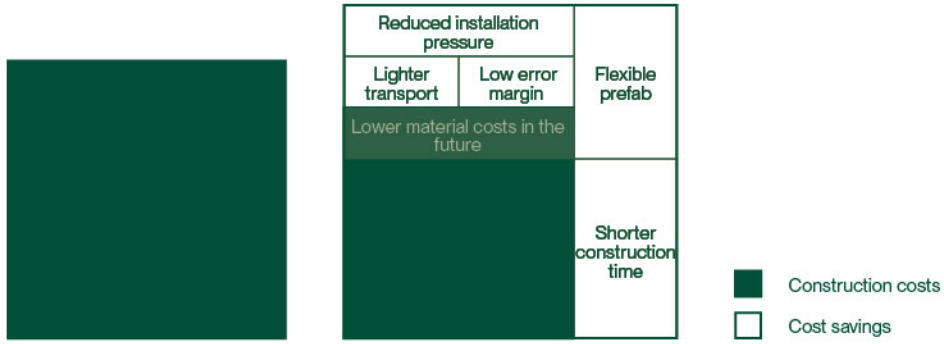
Bio-based materials are currently more expensive than concrete, steel, and sand-lime brick. However, bio-based construction offers not only climate benefits but also significant process advantages: lighter transport, faster construction, reduced installation pressure due to breathable and vapor-open construction, and extremely low error margins. Moreover, bio-based materials are expected to become more affordable in the future. This way, we can significantly reduce construction costs.



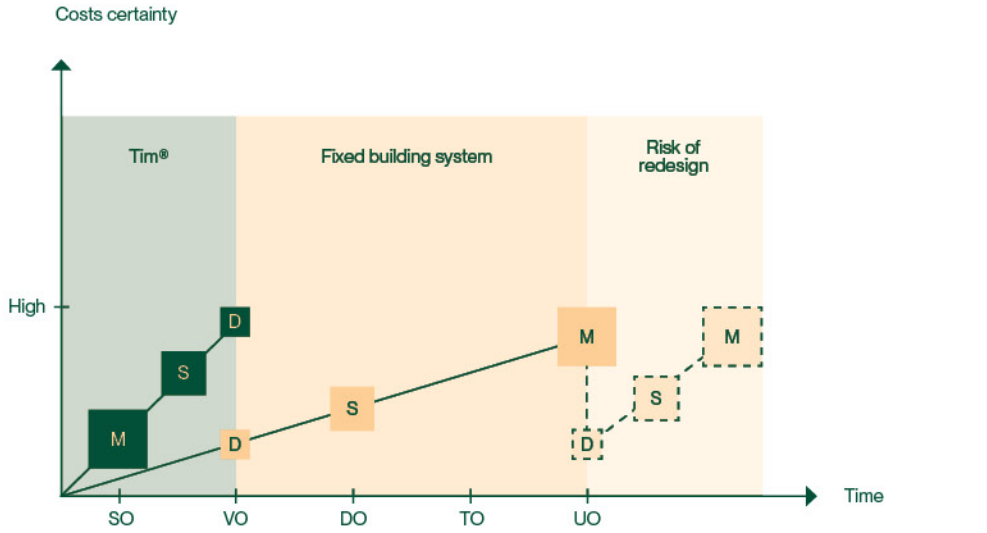


Direct detailing

Tim® brings together technical choices, structural challenges, and detailing early on in the process. This integration prevents costly redesigns during later phases and significantly accelerates the construction process. The result: reduced risks, lower costs, and a more efficient realisation of bio-based residential buildings.



Construction costs



Costs certainty

Process control

As a well-coordinated team, we integrate design, engineering, and execution into a single, comprehensive approach. Drawing on shared experiences from previous successful projects, we help our clients in keeping control over the entire process from the outset. Thanks to this collaboration, we work cost-efficiently, effectively, and with full process control—from the initial concept to project completion.

Client

TimTeam

De Nijs	LEVS	Lüning - Oosterhoff
Contractor	Architect	Consultant construction, (physics and services)

- Integrative team
- Timber construction expert
- Proven collaboration

Houtbouwproject

- Statement of requirements
- Concept Design
- Developed Design
- Technical Design
- Construction Documentation
- Construction

- Project team meeting
- Building regulations
- Design coordination
- Participation
- Zoning plan procedure
- Permit applications
- Budget
- Specifications
- Cost calculation
- Site meeting
- Construction coordination
- Project management
- Quality control

Closeout

PPM/TCO

Handover documentation

Aftercare

Evaluation

This is how Tim® achieves timber construction objectives

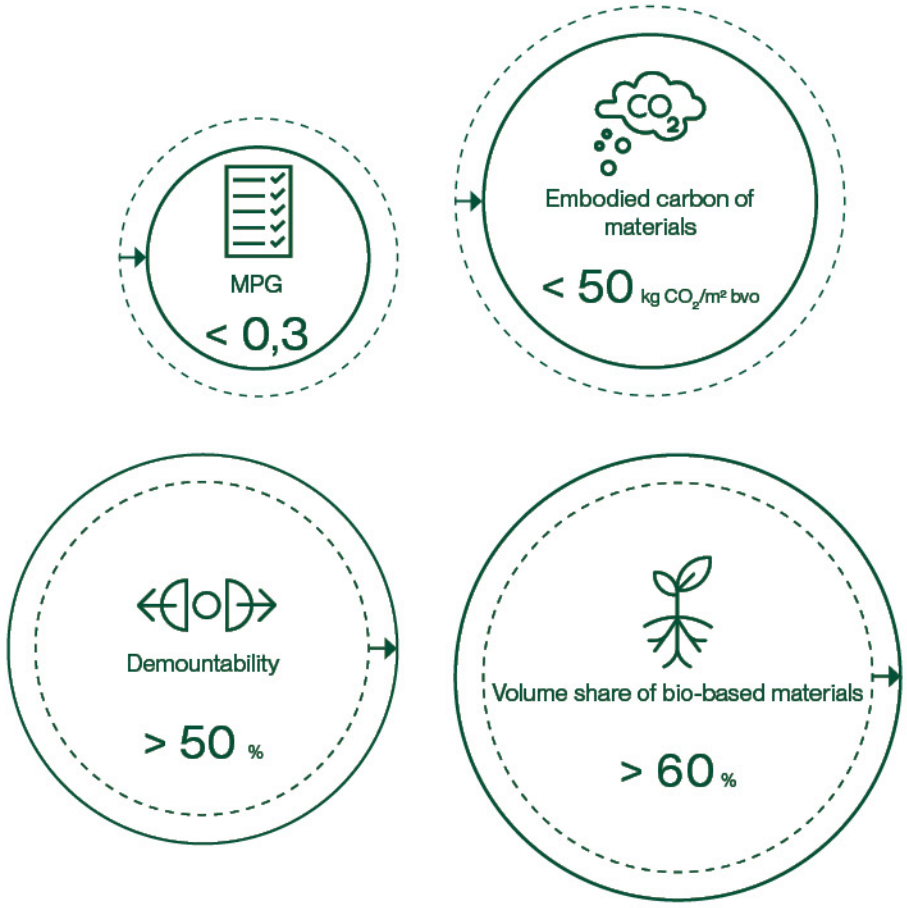
More and more stakeholders are working to upscale timber construction and meet municipal and national ambitions. Tim® makes this possible. We ensure that timber construction can be done realistically and competitively, within the scope of project requirements. Moreover, we achieve an exceptionally high percentage of bio-based and circular materials, without compromising feasibility or quality.

Catalyst for urban ambitions

Cities want to accelerate their timber construction output. Signatories of the Timber Building Covenant in the Amsterdam Metropolitan Area aim to build 20% of new developments in timber from 2025 onwards.

Tim® and The New Normal

To make the material transition concrete and measurable, we work according to the principles of Het Nieuwe Normaal (The New Normal). This framework establishes clear performance levels for circular construction and helps clients and contractors set ambitious yet achievable goals. By meeting The New Normal's target levels, we ensure that our timber construction projects are not only sustainable but also demonstrably future-proof.



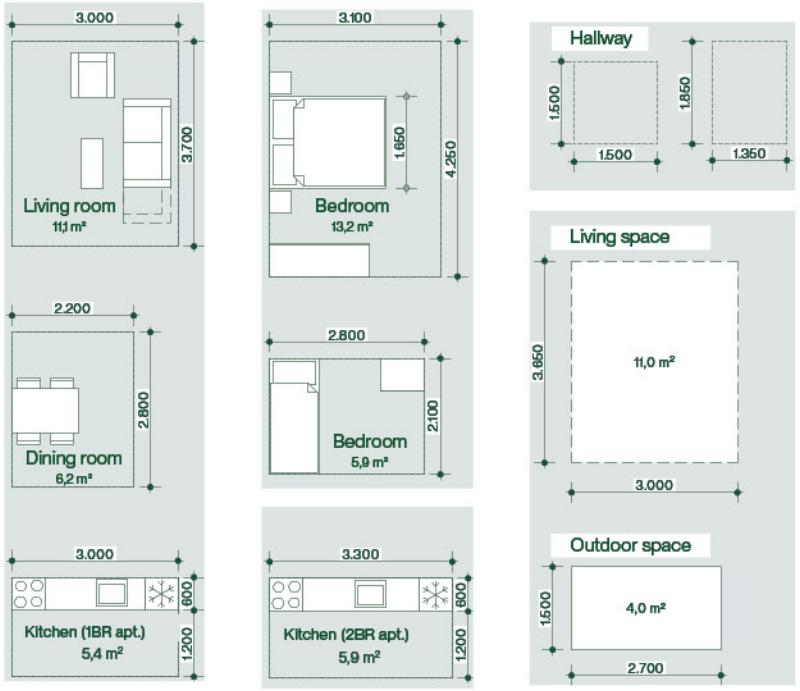
Tim® helps reach ambitions

Tim® for Housing Corporations

Tim® for Housing Corporations is specifically designed for urban social housing. Based on in-depth research into the needs and challenges of housing corporations, we have developed a TimSet and methodology that perfectly align with their projects. This makes timber building feasible, scalable, and suitable for urban social housing developments.

Statements of requirements (PvEs)

With the TimSet for Housing Corporations, we can realise buildings that seamlessly meet the various statements of requirements (PvEs) of housing corporations. All housing modules fit within our methodology, enabling a range of housing typologies. Affordability and process control are central, allowing corporations to build more efficiently without compromising on quality.



Selection of housing modules

Challenges

1 A suitable home for every tenant

2 Affordability for everyone

3 Healthy indoor climate and modern amenities

4 Meeting urban climate targets

5 Sustainable and social neighbourhoods

6 Future-proof project team collaborations

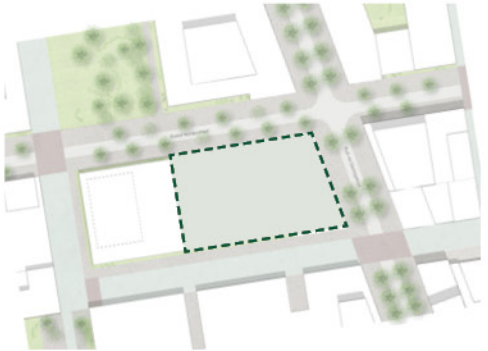
Exemplary application of the Tim® method

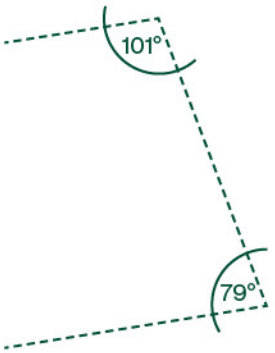
Hypothetical project

Imagine a dynamic urban neighbourhood consisting of different settings: from a bustling main street to a quiet waterfront with a green buffer strip. In a flexible building block, we aim to provide 116 homes for different target groups: city dwellers, active seniors, and young families. Social spaces, conjunctive greenery, and a vibrant ground floor shape the foundation for a future-proof living environment.

Realistic plot

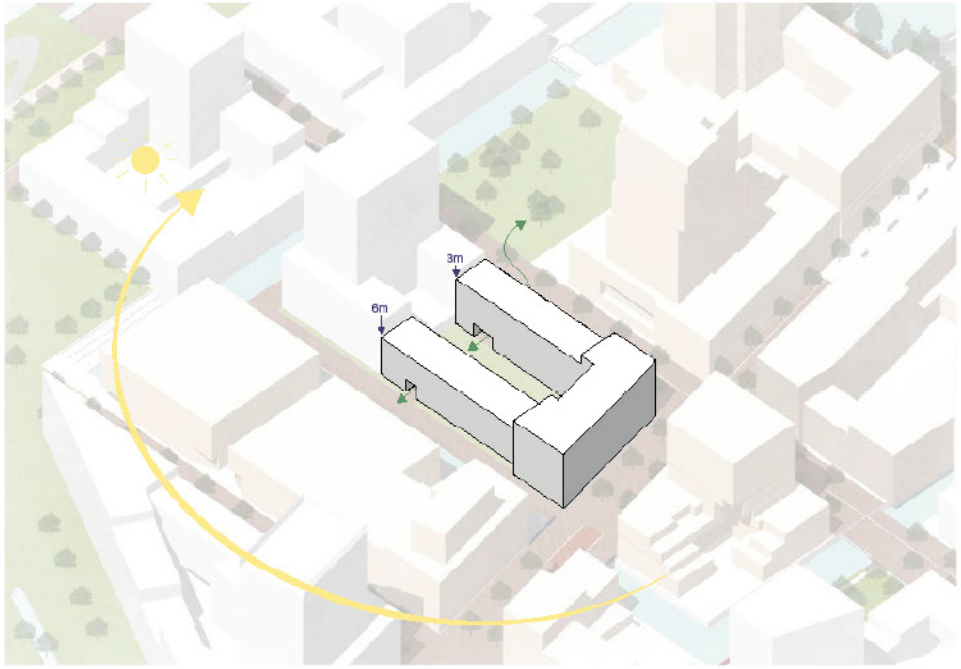
The plot's sharp and obtuse corners make this an interesting case: an everyday urban plot that needs to be put to use efficiently.

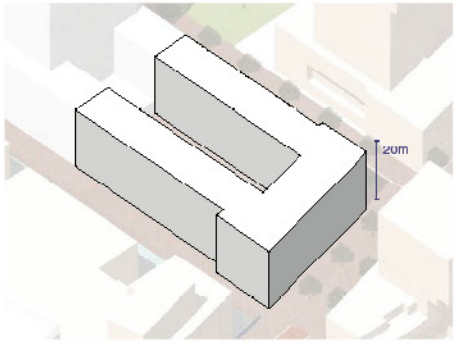


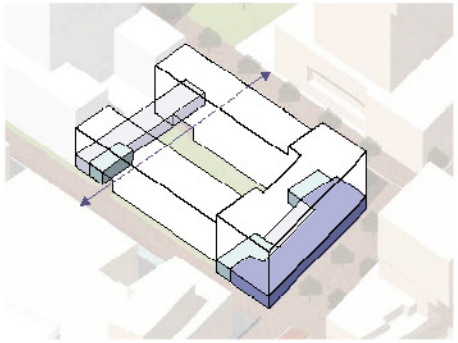


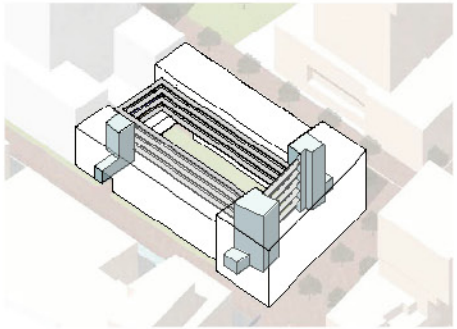
Programme & access

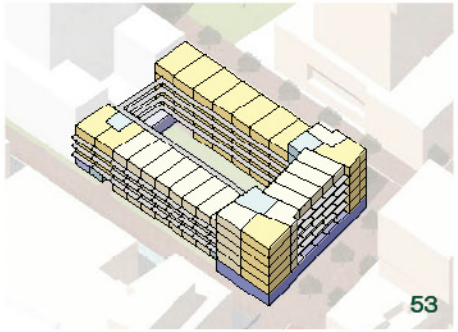
The permeable building block combines an urban exterior with a calm, green inner courtyard. A passage for residents quickly takes them to water and park areas. Homes along the waterfront foster vibrancy, while commercial spaces activate the main street. Spacious entrances, an internal gallery, and a rooftop park with a communal garden make it an accessible residential block, full of character.











Studio

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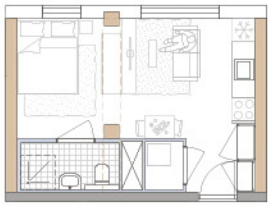
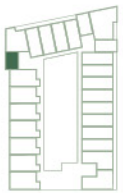
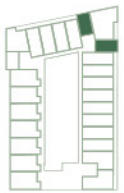


4 x
27,8 m²

4 x
35,8 m²





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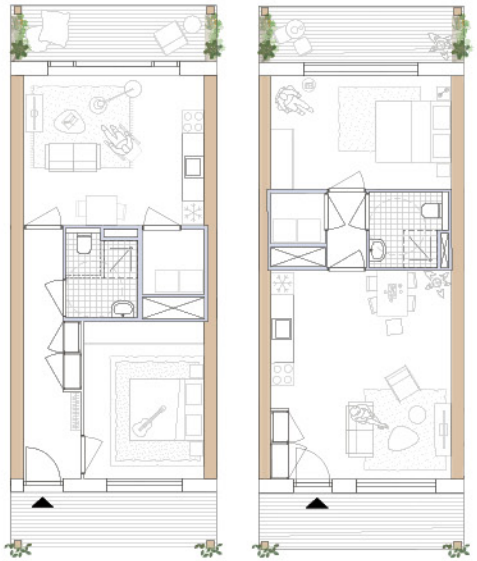
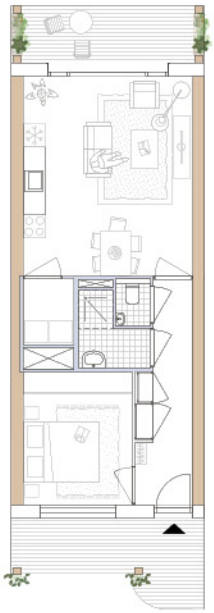
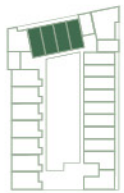
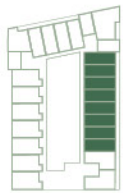


16 x
assisted living apartments (2 types)
49,9 m²



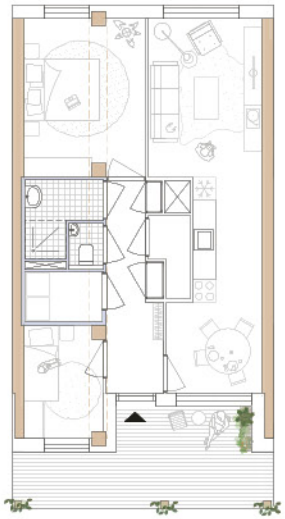
31 x
49,9 m²



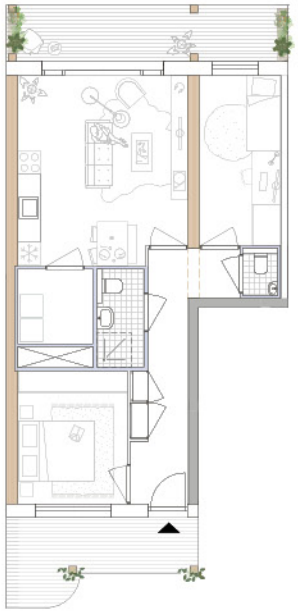


2BR

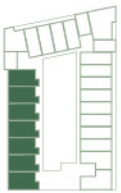
1:200

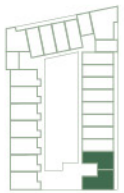


28 x
64,0 m²



6 x
62,6 m²

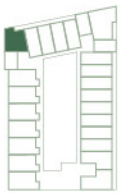




2BR

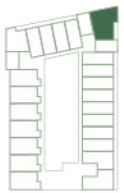
-corner

4 x
65,4 m²



3BR

4 x
96,1 m²

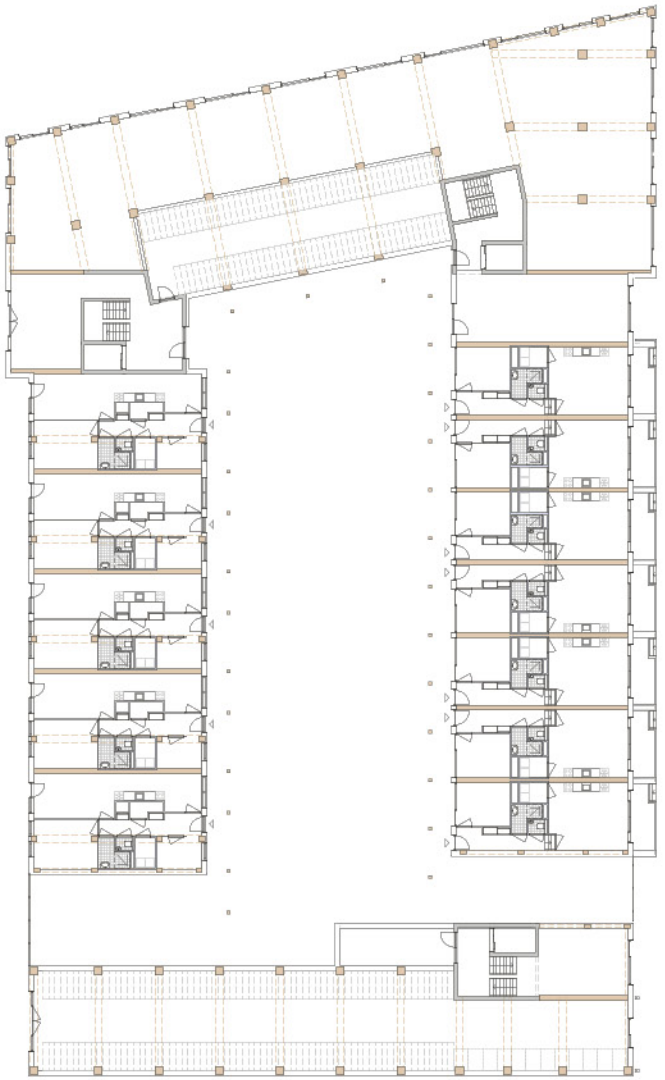


“Designing places where everyone feels at home. That is what drives us.”

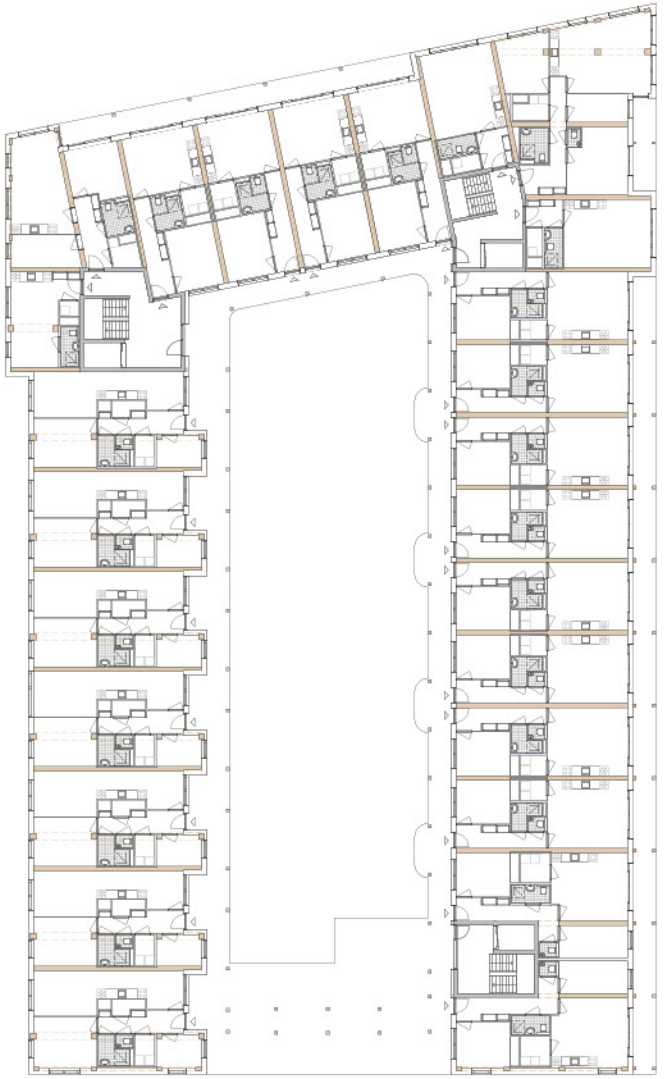
Dennis Meijerink - LEVS architecten

GF

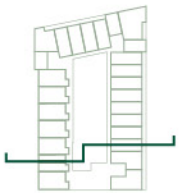
1:500

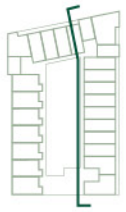


1st



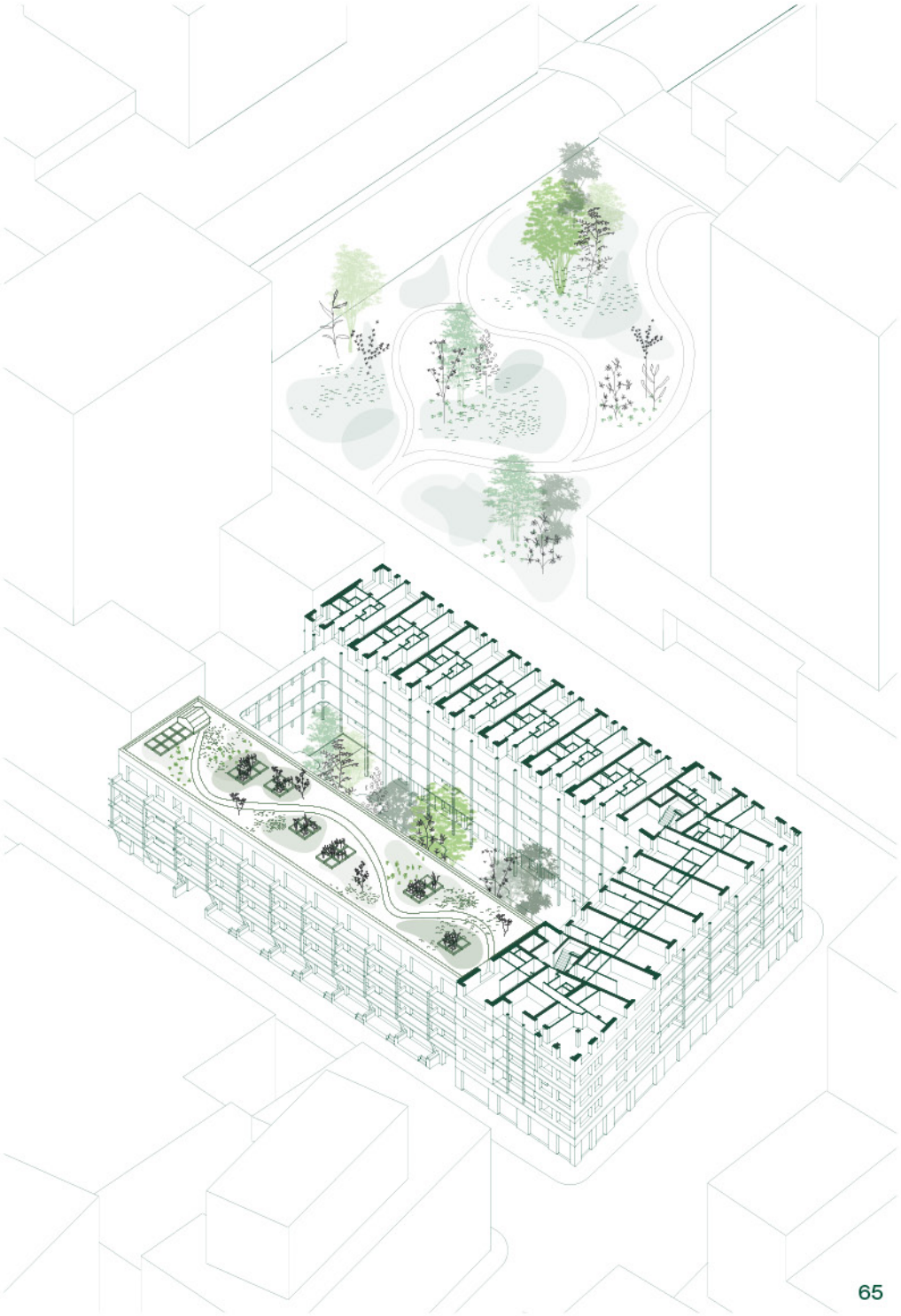
1:400





Quality of life

From greenery on the streets to rooftop parks, the building connects water and green spaces through balconies, a rooftop garden, and a communal courtyard. Residents get to enjoy living along the street and interacting with each other in galleries and shared outdoor spaces.



Façade design variations

This particular example features ceramic roof tiles and glazed brick slips, but the façade node offers many more possibilities. Multiple materials and manufacturers have yet been integrated, allowing extensive design freedom and variation in appearance.

Ceramic tiles

Micro-concrete

Ceramic brick slips

Ceramic roof tiles

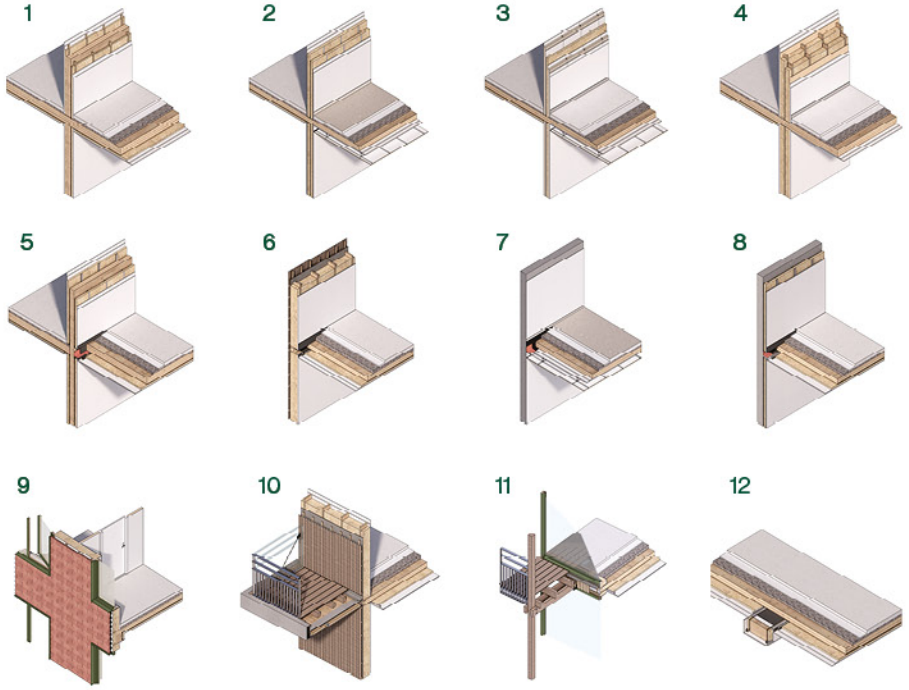
Glazed ceramic slips

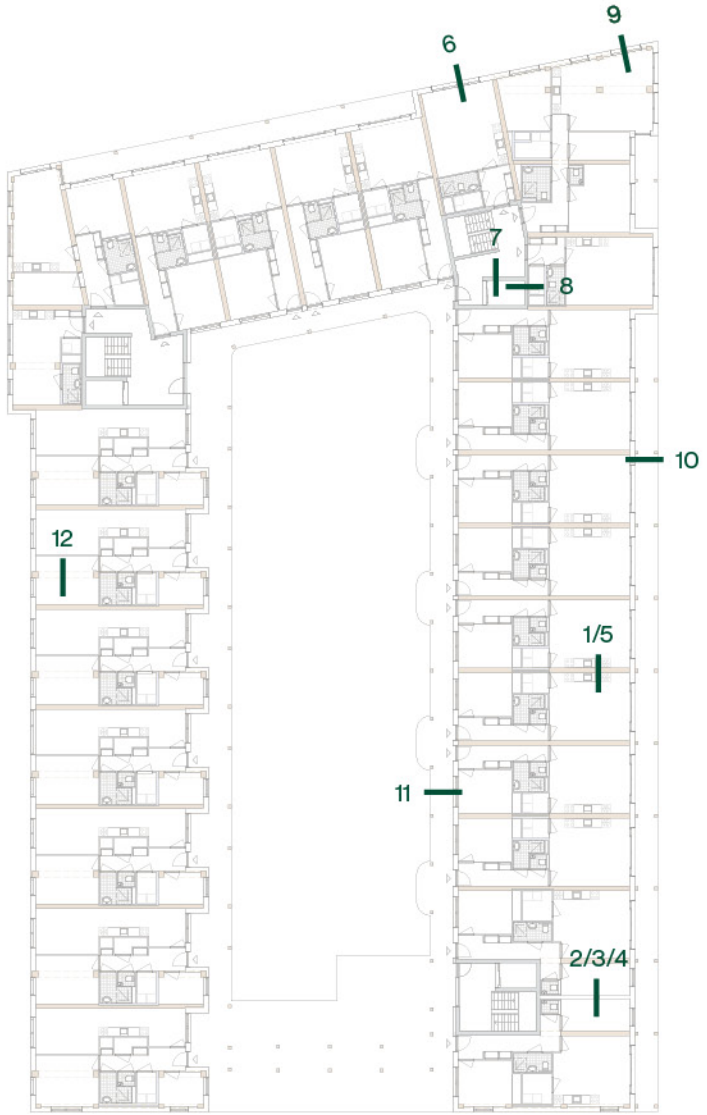
“My house feels warm, natural, and 100% like a modern-day home.”

Resident

The TimSet for Corporations

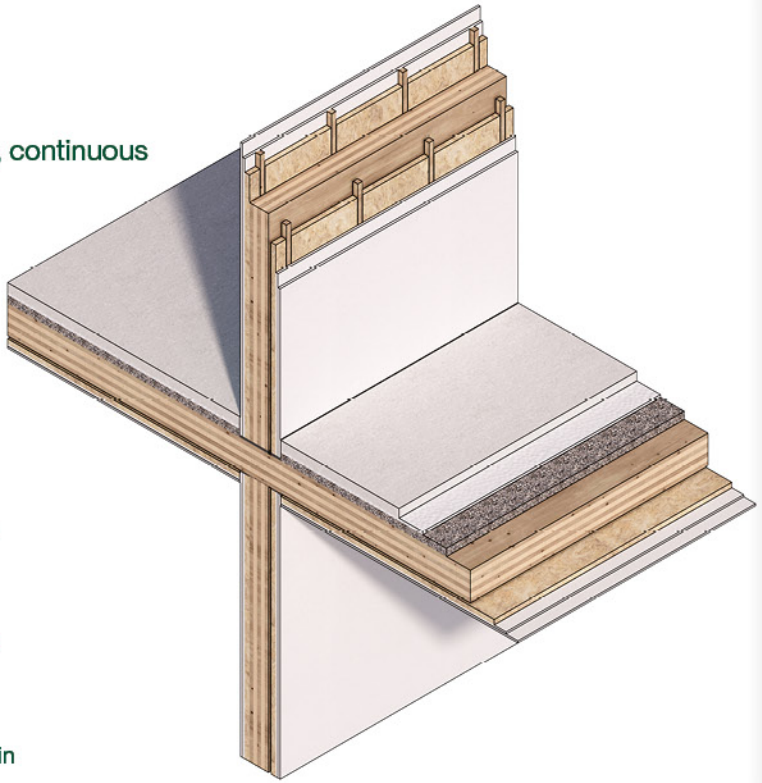
With the TimSet for Housing Corporations, we construct the entire building using carefully coordinated nodes. Each node is fully detailed and aligned with housing corporation requirements. On these next pages, we demonstrate a selection of these nodes in more detail.





1

Party wall node, continuous floor slab



≥ 52dB

≥ 48 dB

≥ 120 min

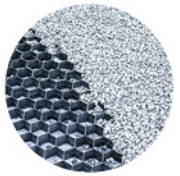
CLT

Spruce

OSB

Gypsum fiberboard

Mineral wool

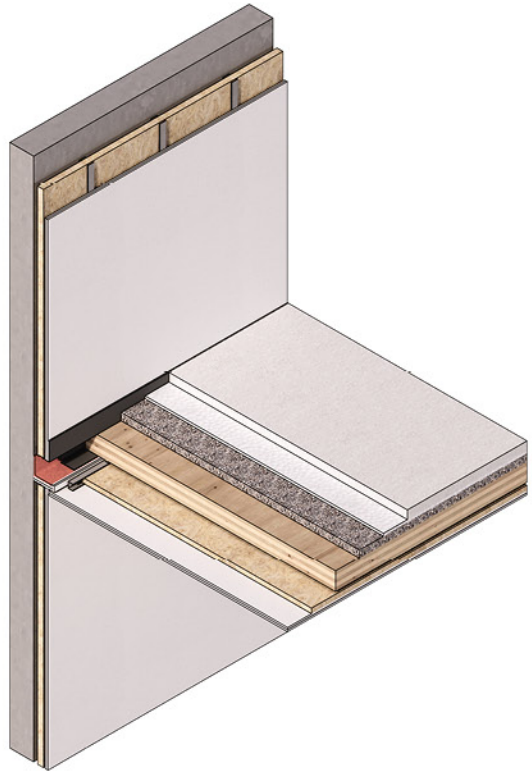


Gravel

Example nodes
1, 8, 9, and 10

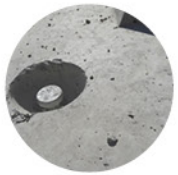
8

Apartment - elevator shaft



≥ 52dB

≥ 120 min

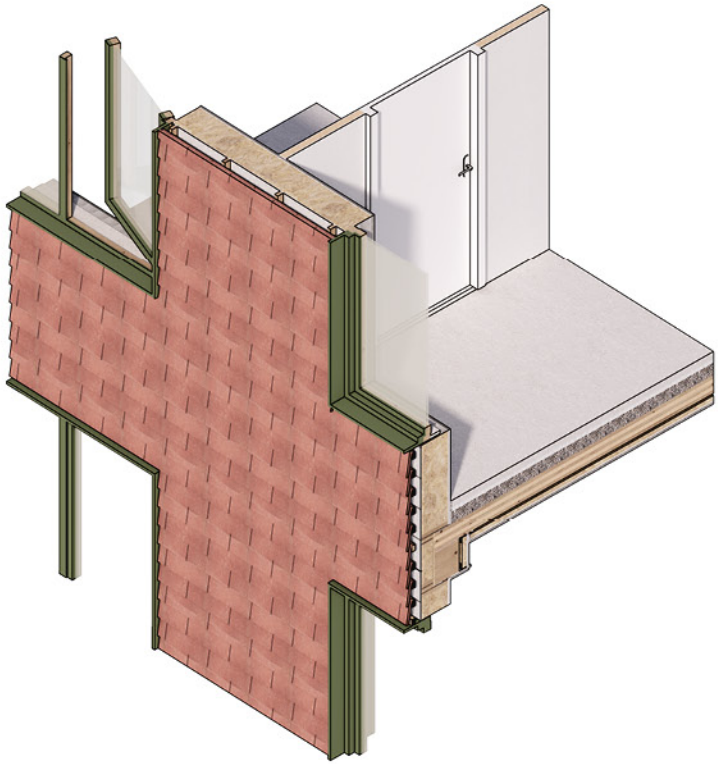


Concrete

Metal anchor

9

Load-bearing ceramic façade



≥ 52dB

≥ 48 dB

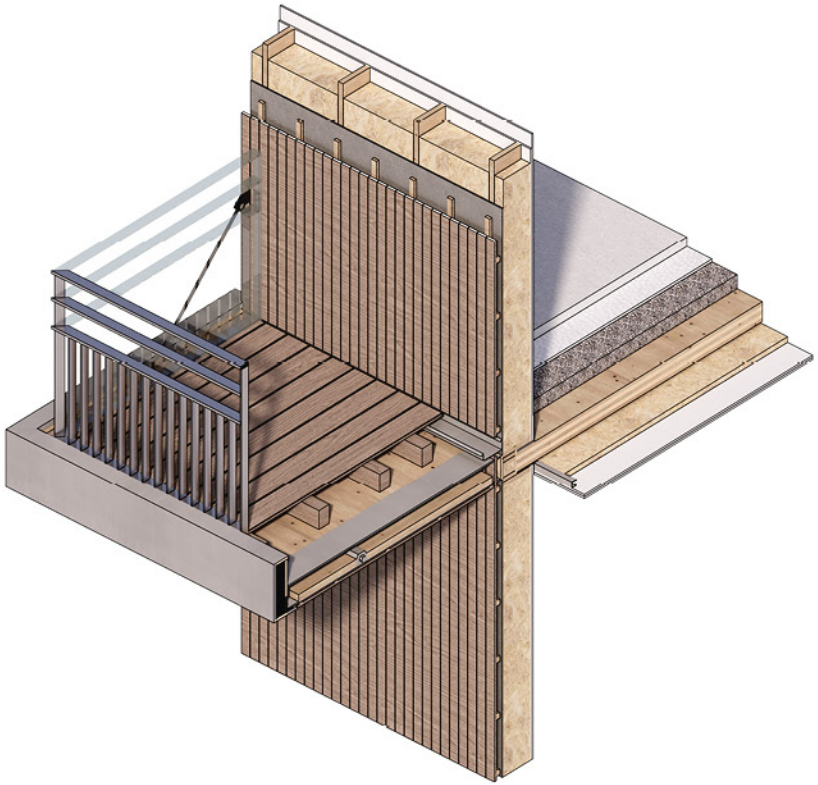
≥ 120 min

Ceramic tile

Wood-alu frame

10

Load-bearing façade with balcony



≥ 52dB

≥ 48 dB

≥ 120 min

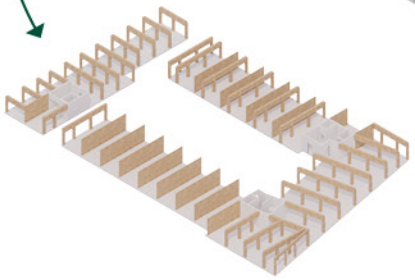
Hardwood

Pre-weathered larch

Structure

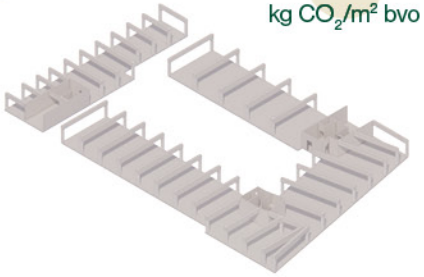
The structure consists of CLT walls and floors, with additional columns and beams for wider spans. Concrete cores containing stairs and elevators provide stability. Special areas, such as commercial spaces and bicycle storage on the ground floor, could alternatively be made out of concrete as well.

Additional row of columns for spans wider than 6m



Base plinth: wood

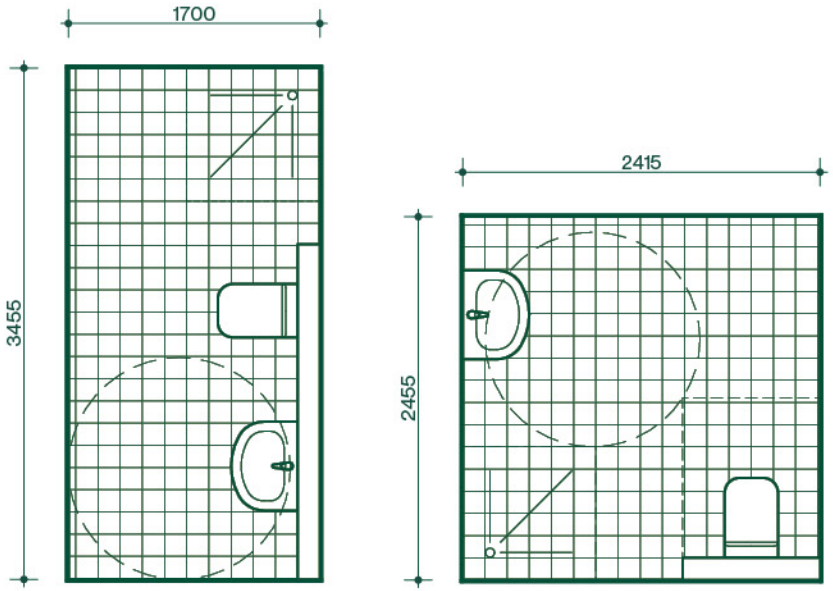
+30
kg CO_2/m² bvo



Plinth variant: concrete

Bathroom unit

The bathroom in Tim® homes is a standardised 6 m² ‘wet room’, delivered efficiently as a prefabricated 3D-element. All installations are demountable and centrally maintainable. Thanks to intelligent positioning and layout, the toilet can easily be separated later, making the home more flexible and suitable for lifelong living.



Sustainable performance

Using the framework of Het Nieuwe Normaal (The New Normal), we map out the sustainability scores of the example building. This makes circular construction tangible, measurable, and comparable.

1	MPG	0,35	max. 0,8
2	Emissions CO_2 from materials	2030 target value: 139	195
3	Storage CO_2 in materials	125	kg CO_2/m² bvo
4	Volume share bio-based	74%	
5	Demountability index	50%	
6	Reuse potential	40%	

"Simply put: our method ensures quality homes that store a significant amount of CO_2."

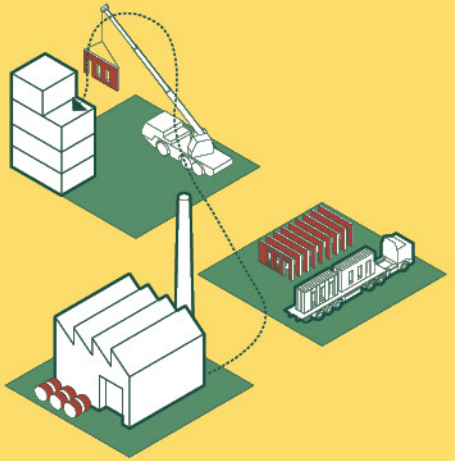
Rudi Roijakkers - Oosterhoff

Tim® is...

1
Design & construction using integrative nodes

2
Complete flexibility

3
Cost-efficiency & fast construction



4
Living sustainably & healthy

The team behind Tim®

We are a well-coordinated and experienced team: De Nijs, LEVS architecten, and Lüning. We combine our disciplines, knowledge, and experience to apply timber construction to complex urban projects. Each of us works on timber projects, and together, our experiences contributed to the development of Tim®. In this way, we carefully and efficiently guide the process—from vision to execution.

Constructing company
M.J. de Nijs en Zonen
Warmenhuizen
denijs.nl

De Nijs constructs, develops, transforms, renovates, and restores. We combine proven craftsmanship with innovative technological developments, co-creation, and Lean management. This approach continually enhances the quality of our work and our organisation.

LEVS architecten
Amsterdam
levs.nl

LEVS architecten is a leading design firm specialising in architecture and urban planning, with expertise in the big urban design challenges of our time: making cities more sustainable, greener, and denser while creating communities.

Adviesbureau Lüning
Amsterdam
luning.nl

Lüning Consulting Engineers has specialised in innovative and architectural timber structures for over 40 years. The firm designs, calculates, and details timber constructions, embracing continuous innovation as the core of our work.

Publication
Concept, text, design:
LEVS architecten

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Tim® is a full-service biobased construction method, making timber construction affordable and adaptable.