

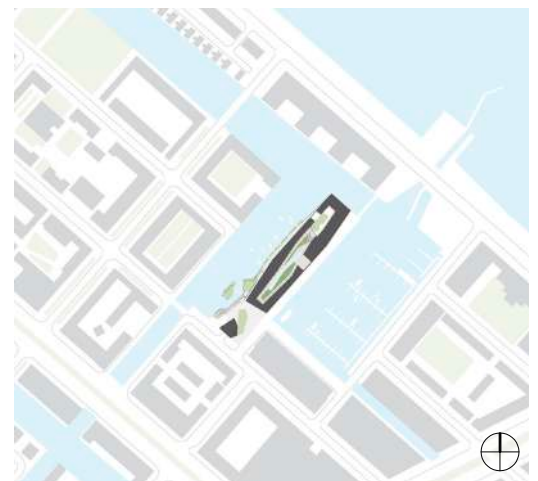
jonas



Jonas, IJburg, Amsterdam

Jonas is located at the harbor of Amsterdam IJburg and accommodates 190 mid-market rental studios, 83 owner-occupied apartments and a range of supporting facilities. It's a building with an innovative housing concept and a spectacular spatial interior that received the highest possible sustainability certificate: BREEM Outstanding. Jonas will enhance social cohesion, in what is still a new city district, by creating a sustainable, inviting heart for the neighborhood. Orange Architects designed Jonas, with a mixed-use program, for Amvest in collaboration with ABT, Felixx Landscape Architects, Site Urban Development and city maker Floor Ziegler. Ballast Nedam West was in charge of construction.

The name Jonas refers to the story of 'Jonas and the Whale'. It stands for adventure, but also for protection and comfort inside a 'big body'. It is a heroic building with a warm heart. But Jonas is also a sustainable and attractive building that stands out from the surrounding buildings in IJburg – if only because of the special site on the headland and the special program it accommodates. The building expresses in a striking manner themes that belong to this location: water, quayside and the craft of shipbuilding. As a result, Jonas feels natural, because the building embraces the 'soul of the place' and renders it visible.



location

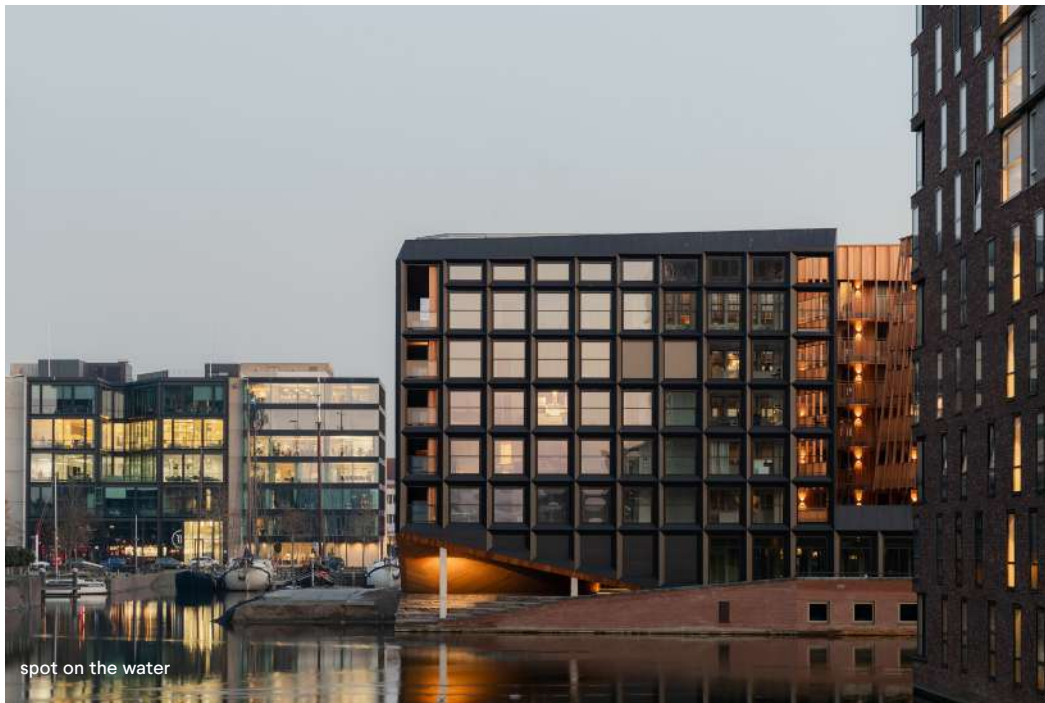


concept



Together with its surroundings, the building forms a 'living landscape'. At the front of the building a public forecourt is bordered by a timber 'pavilion' with steps, which act as a three-dimensional playground. The pavilion also marks the entrance to the car park and serves as a tribune for all kinds of activities, such as a film screening or outdoor events. The green exterior, with trees providing shade, invites people to linger and — in the summer — there is even a city beach on the water's edge.





spot on the water

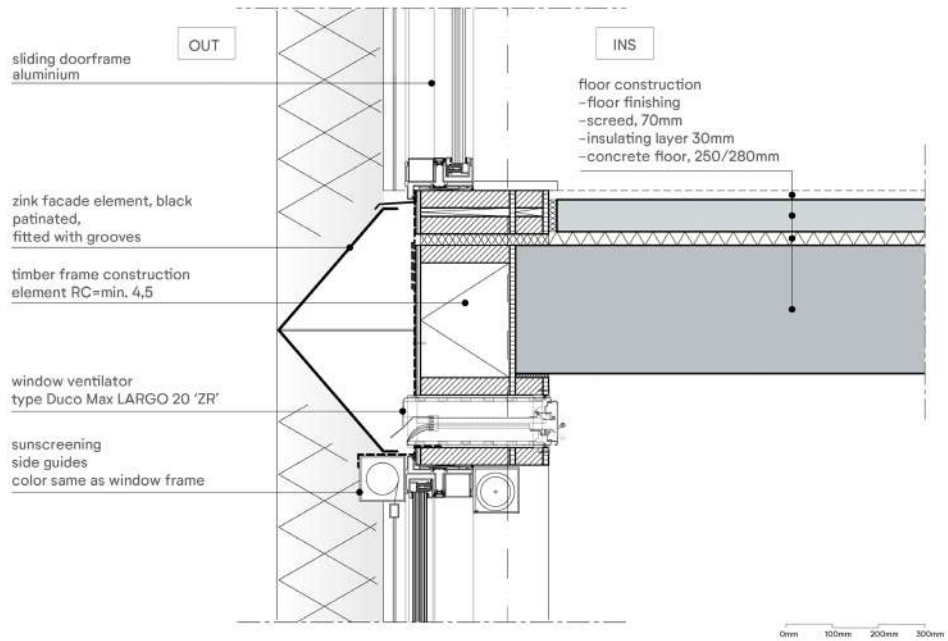
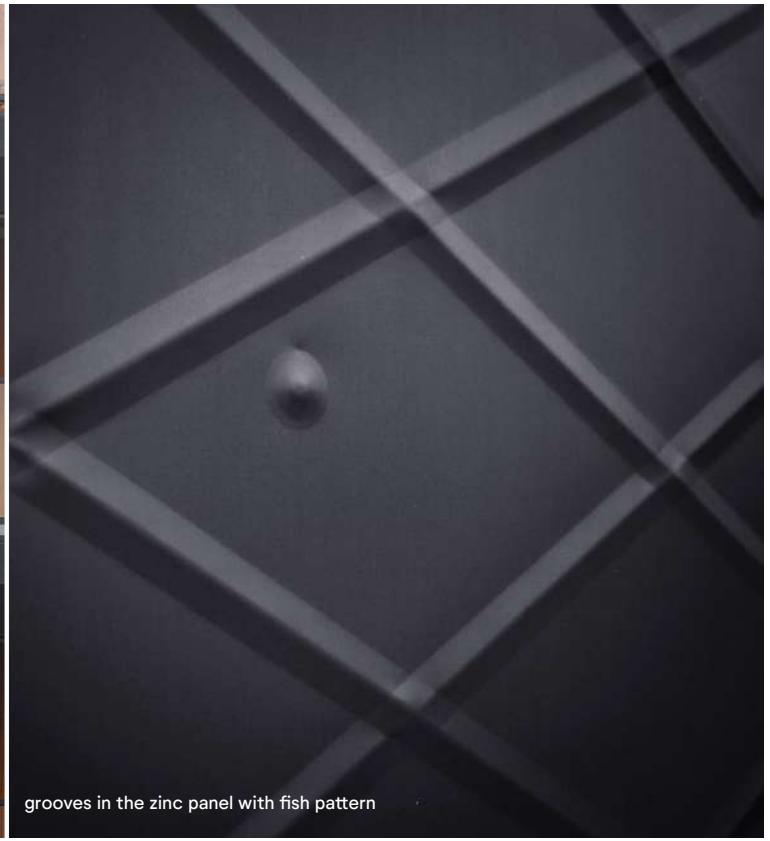
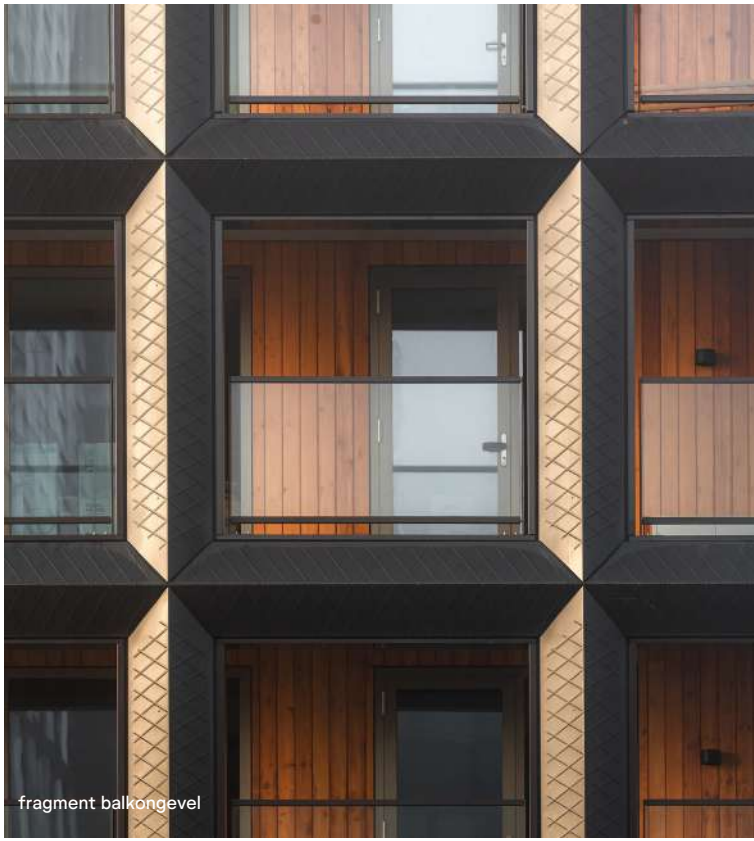


promenade

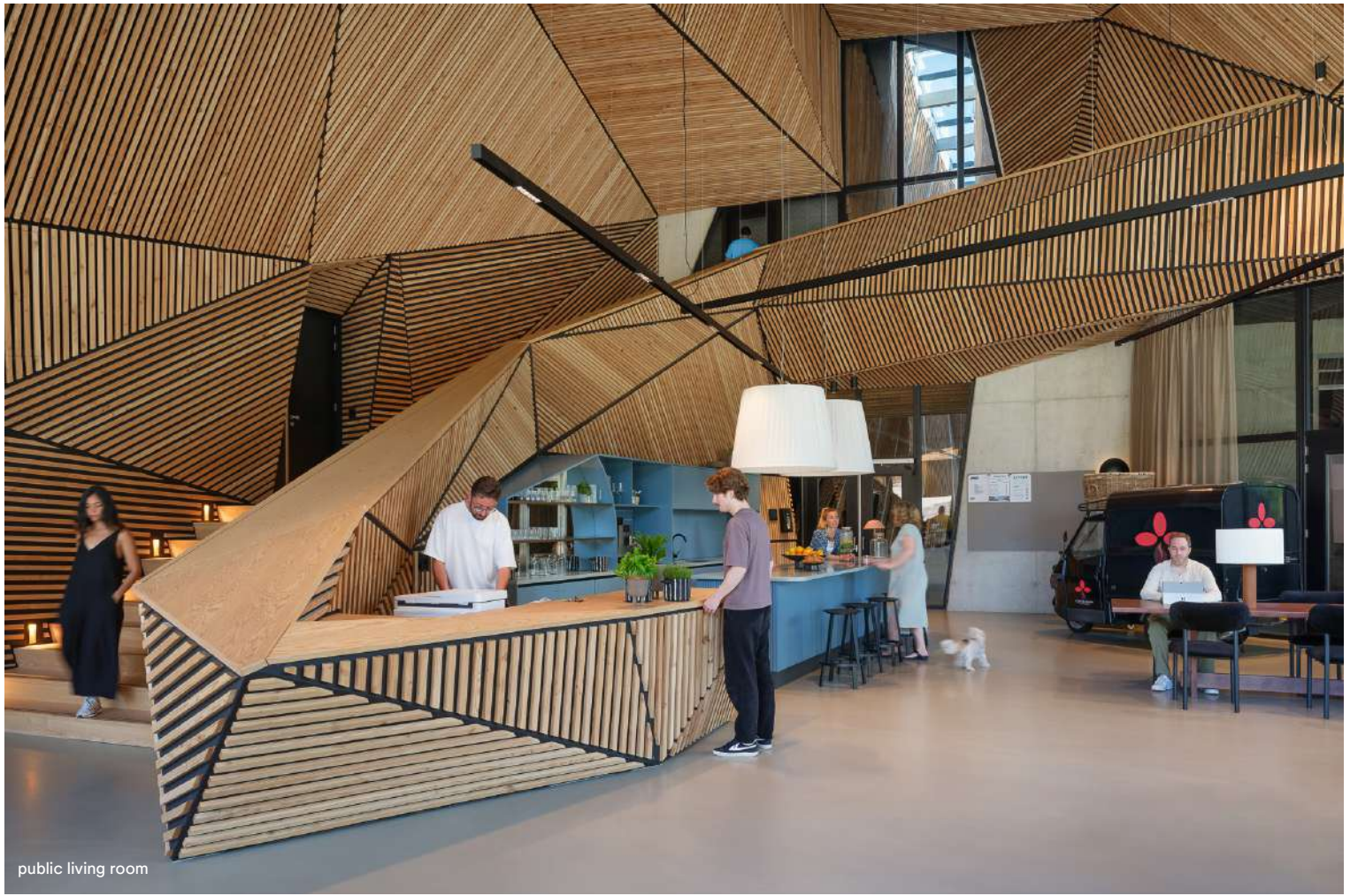
The building with its irregular openings creates the impression that the windows are gently undulating across the facade. That makes Jonas a bit different. It is not covered in stone but faced in dark, pre-patinated zinc. The facade does not touch the ground but is lifted off it. The volume is not rectangular but diamond-shaped. That makes it both familiar and alienating, sculptural yet rational, recognizable yet innovative.



Jonas at the harbour

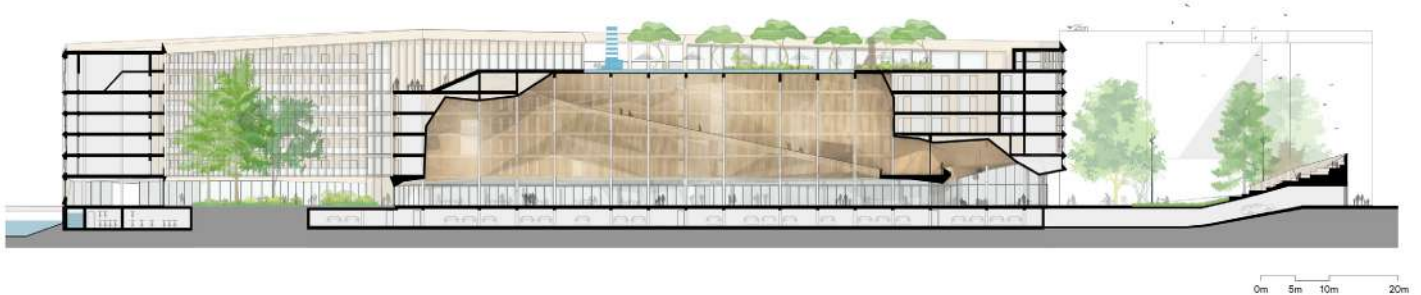


detail of the zinc-clad facade

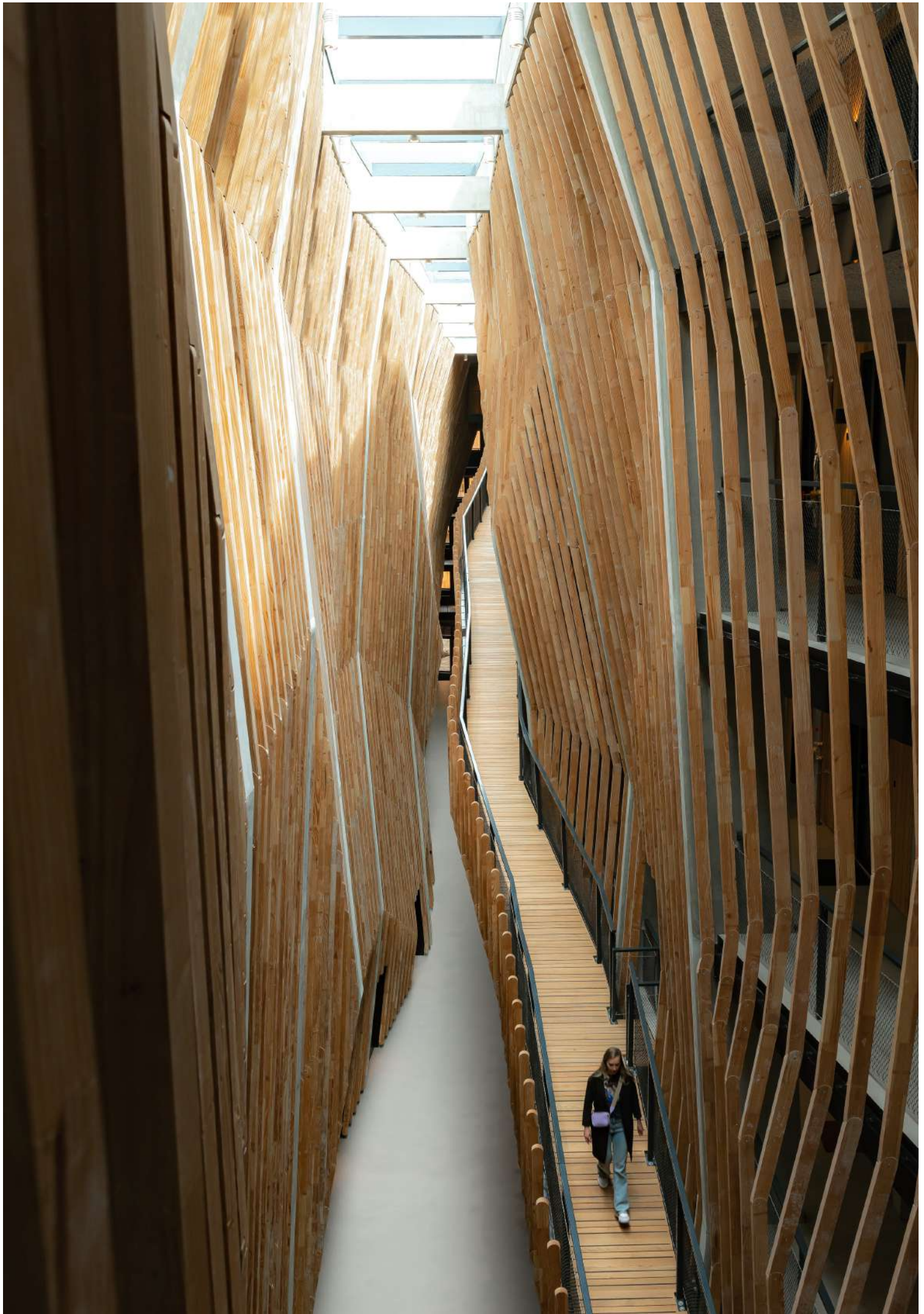


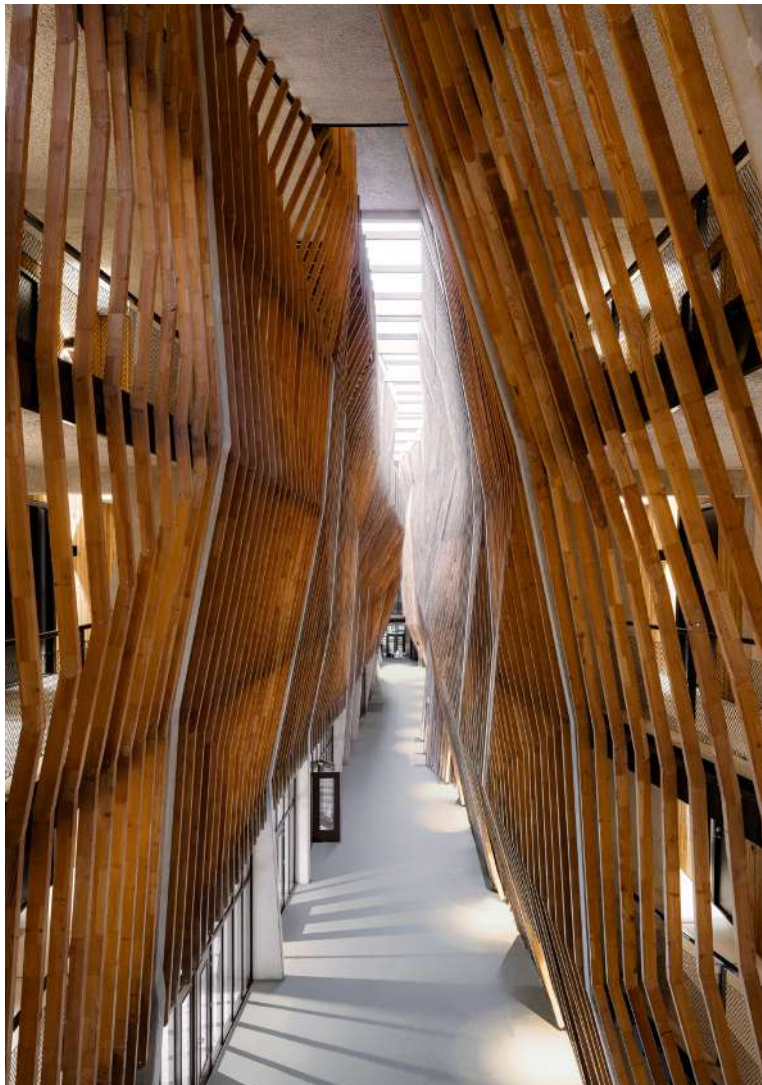
public living room

But the real surprise of Jonas awaits inside. This is welcoming, warm and spectacular. It expresses a modern and sustainable community life. The interior is unexpected and surrealistic. The spatial concept is based on the way traditional wooden ships are constructed: a skeleton consisting of a series of trusses arranged in a row, which form the main structure. This allows large hollows to be carved out of the volume, and the required housing program, a total of 273 apartments, is contained within the 'skin' of the building.

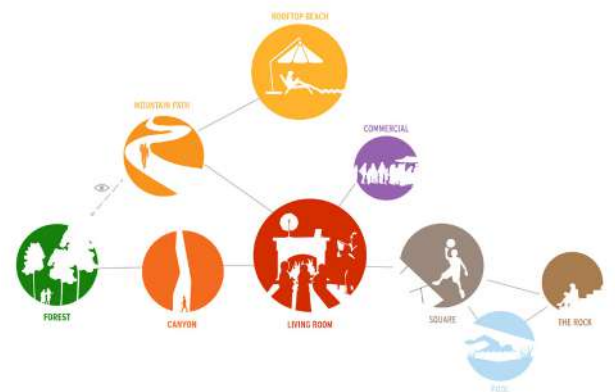


section over the living room, canyon and forest patio





The landscape is not limited to the surroundings of the building, but also penetrates deep into Jonas. A communal route, shaped as a canyon, extends through the building, linking together the public and collective program, including the living room, the cinema, the mountain path, the forest patio and the rooftop beach and bar. The commercial facilities in the plinth, all supporting the concept and bigger picture of Jonas, provide extra dynamism on the ground floor and the quay. This part of the program is also accessible for the public. The residential concept of Jonas is supported by a community manager, who's close to the residents and is to be consulted for matters like booking the guestrooms, the yoga studio or a shared car. He is also responsible for organizing various activities together with residents and locals.



necklace of public and collective facilities



yoga room



study room



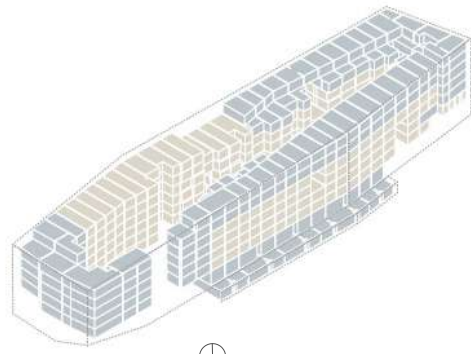
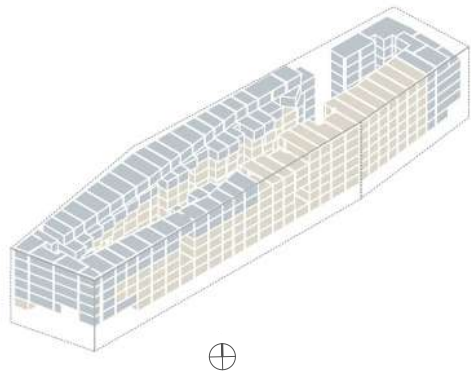
cinema



guest room



rooftop bar

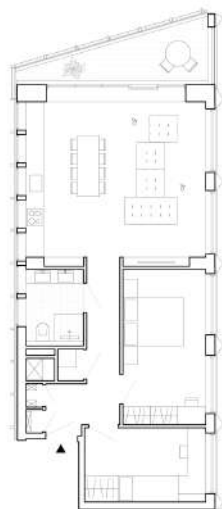


rental apartments
owner-occupied apartments

mix of rental and owner-occupied apartments



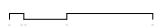
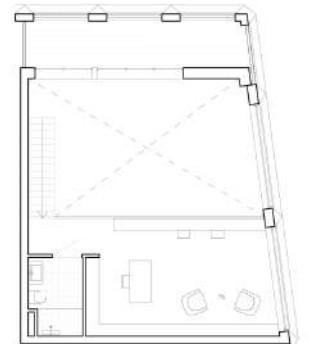
studio (S)

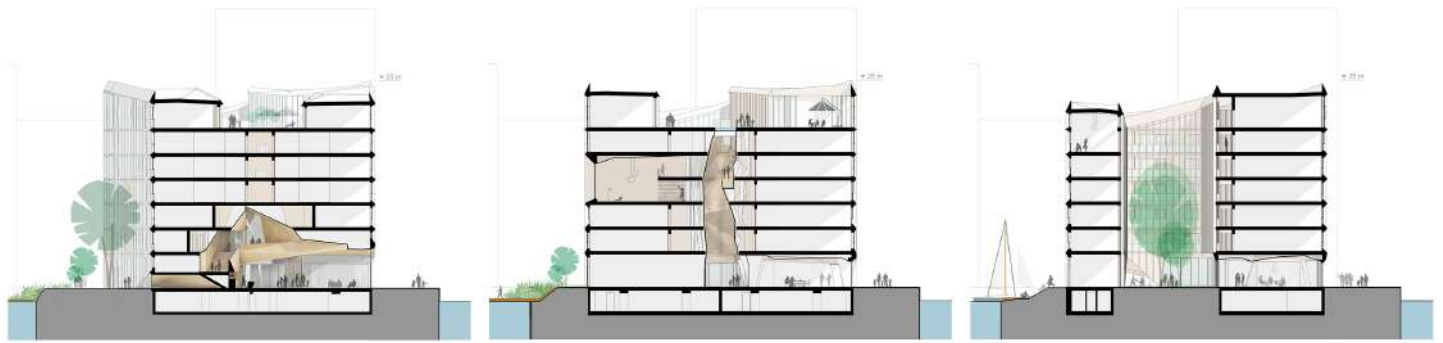


appartement (M)



penthouse (XL)





the living room

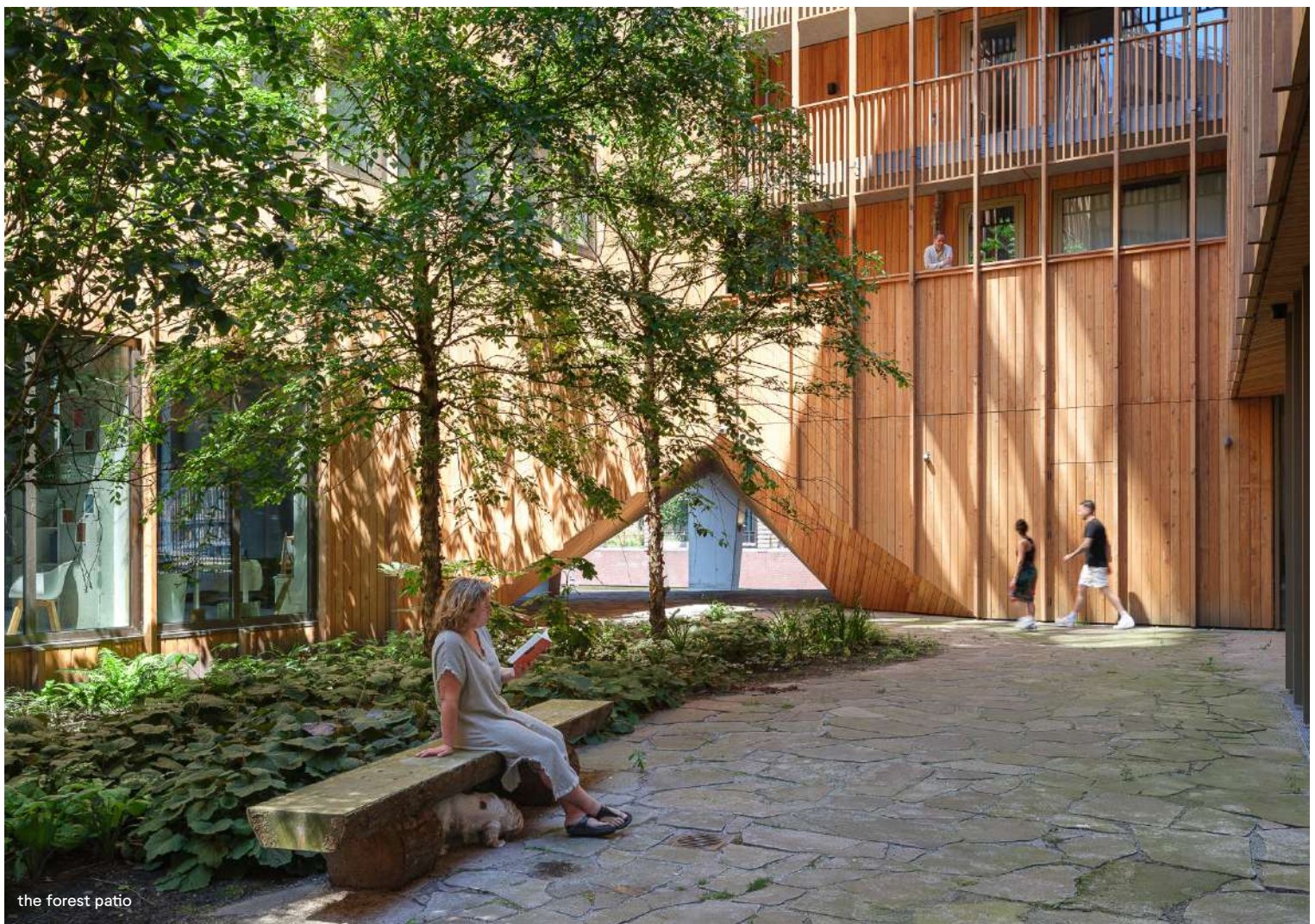
the canyon

the forest patio

cross sections

Besides the attention for social sustainability, Jonas is brimming with technically sustainable elements. The zero-energy building boasts a large number of solar panels on the roof. The sustainable energy is used for, among others, the mechanical installations and lighting system. Moreover, a low-temperature heating system connects to the public heating grid. The cold storage source uses the nearby water: Thermal Energy from Surface Water (TEO). As a result, the homes can be both heated and cooled.

In addition to providing a future-proof energy supply, the design aims to reduce the use of materials and to reuse raw materials. The environmental impact of materials was an important selection criterion, and the use of various raw materials was considered on multiple occasions during the process. The shadow price and carbon footprint of construction materials were constantly monitored and optimized. For example, the concrete is CSC certified, and at least a quarter of the granulate consists of recycled material, taken from construction waste for example. European Douglas wood is used both inside and outside.

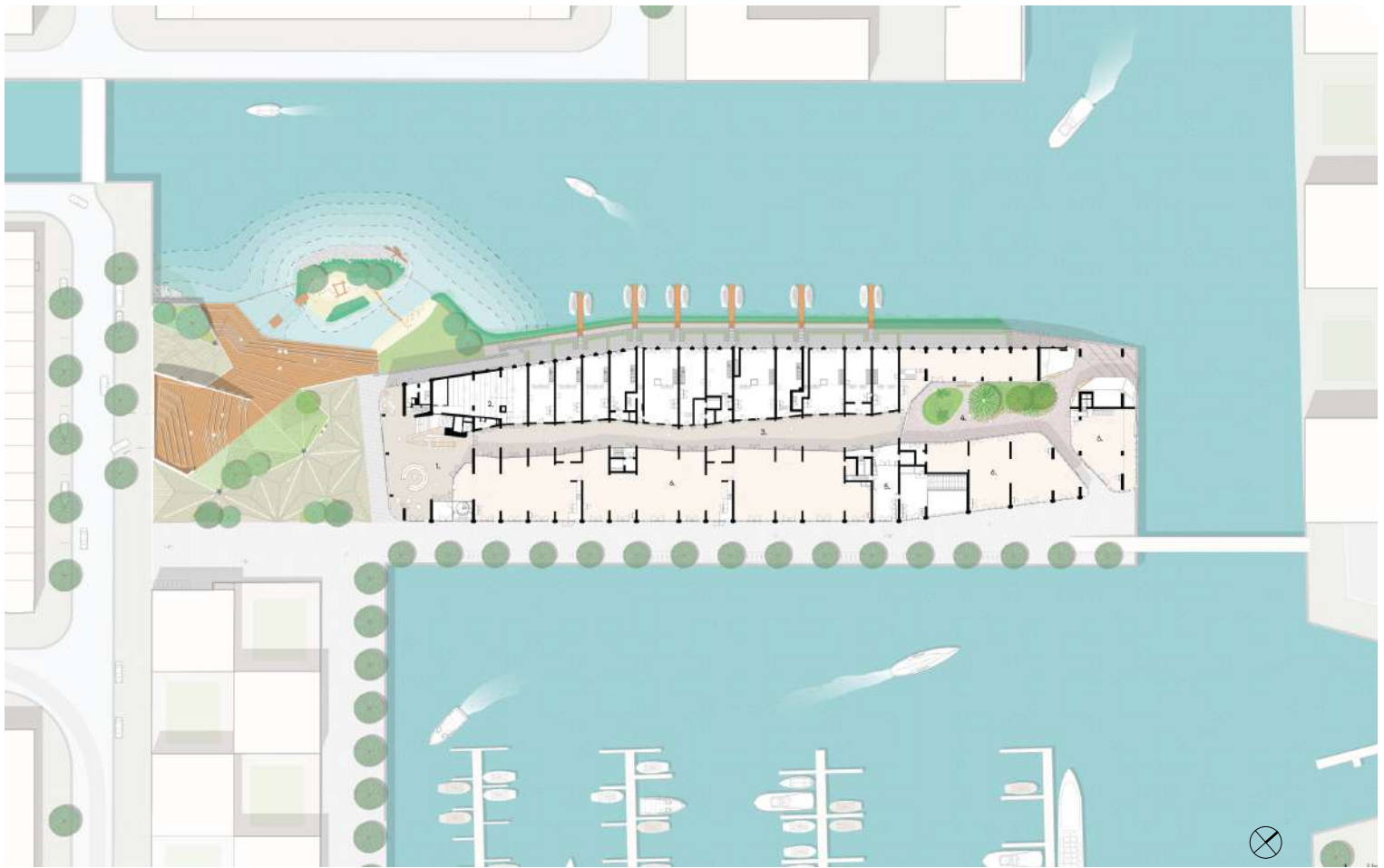


the forest patio



“ Jonas will increase social cohesion in the young city district by offering a sustainable, inviting heart for the neighbourhood. ”

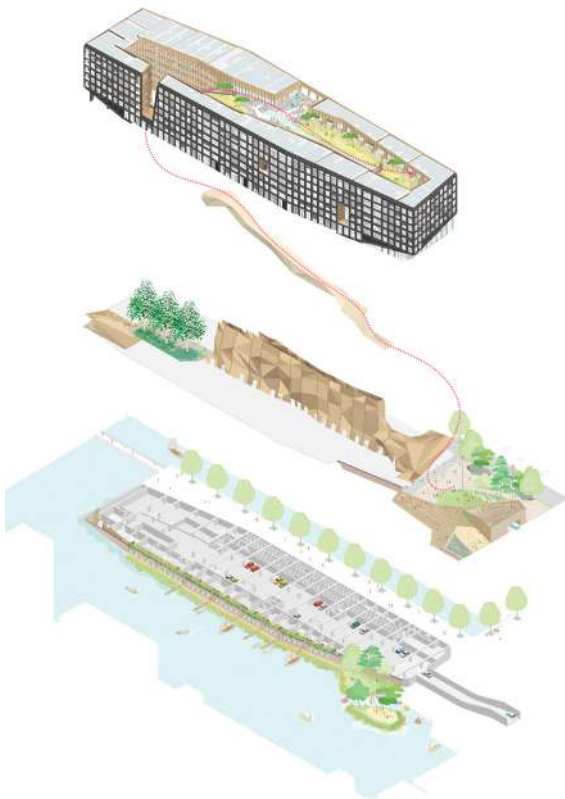


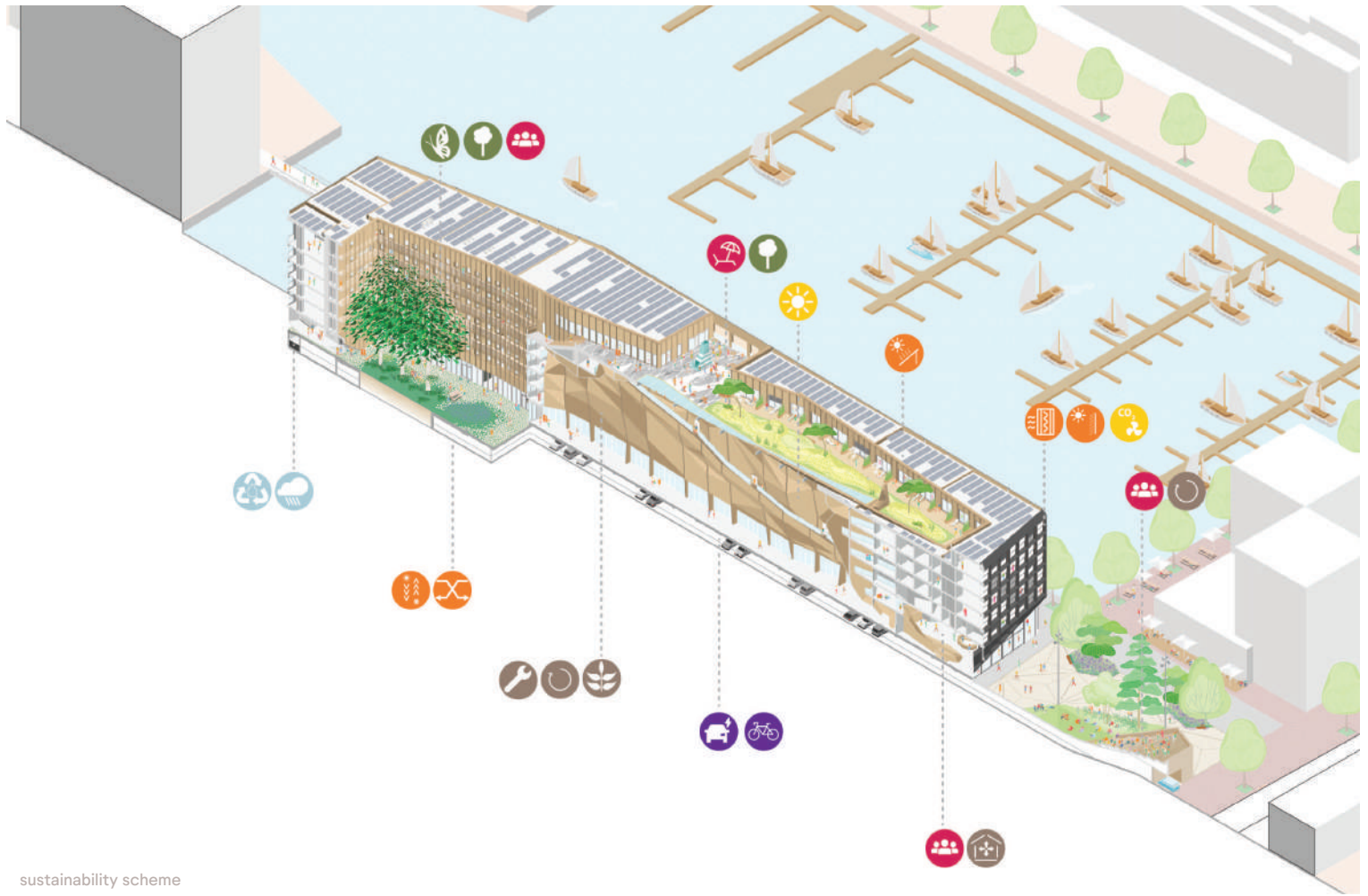


Jonas at the harbour of IJburg, with a publicly accessible plinth

The landscaping is nature-inclusive and is aimed at strengthening the ecological values of the area. For example, native riverside vegetation is planted. Moreover, mussel reefs are created in the water as a natural way of improving water quality and increasing biodiversity. A special feature to be built is a wall for sand martins. This species of bird belongs in this area but it is now under increasing pressure because of all the construction taking place. The sand martin wall will ensure that this species finds a home in the area again.

In addition to the measures to boost flora and fauna, Jonas wants to help in various ways to counter the effects of climate change. Rainwater, for example, is collected in the basement and reused to flush toilets in the public spaces and commercial units on the ground floor. The vegetation on the rooftop beach slows down water run-off. The moving water layer on the glass roof above the canyon provides for a pleasant experience of the rooftop beach and cools the glass in the summer. The patio, where a number of mature trees are planted in open ground, is a shaded place for contemplation, an extremely suitable spot in which to withdraw on a hot summer day.





sustainability scheme

From the first sketch on, the ambition has been to make Jonas one of the most sustainable residential buildings in the Netherlands. To quantify this, the BREEAM sustainability method has been used as a guideline. The design of Jonas received the highest possible certification: BREEAM Outstanding – as only the second residential building in the Netherlands. For this reason Jonas also won two BREEAM awards in 2020: in the ‘Homes Projects’ and in the ‘Regional Award – Western Europe’ category.

WORLD

RESOURCES

- 1 one compact building
- 2 sun shading on all necessary windows
- 3 optimized insulation
- 4 850 solar panels on top roof
- 5 heat/cold storage with thermal energy from surface water
- 6 floor heating connected to city heating
- 7 efficient ventilation system with natural intake
- 8 efficient LED lighting system with motion detection

CIRCULARITY

- 9 maximized flexibility on the ground floor
- 10 25% of the main structure is made from recycled concrete
- 11 environmental effect is calculated for all materials
- 12 easy demountable zinc facade

NATURE

- 13 environmental research on existing biodiversity
- 14 mussel reefs to stimulate underwater life
- 15 cabinets for bats and nesting stones for birds
- 16 green roof and patio
- 17 new greenery along waterside
- 18 rainwater infiltration on roofs
- 19 rainwater buffering of 38 m³ in basement
- 20 rainwater reuse
- 21 place for organic waste collection

WE

WELL-BEING

- 22 optimal daylighting with large windows
- 23 unobstructed views around the harbor
- 24 sound calculation for optimized acoustics
- 25 all necessary windows have sun shading
- 26 lots of meeting points such as a collective living room
- 27 high accessibility through wide common corridors
- 28 wooden canyon in the middle of the building
- 29 designated space for waste collection
- 30 vertical operable windows in all apartments

HEALTH

- 31 high frequency lighting in all rooms
- 32 CO2 controlled mechanical ventilation
- 33 promoting use of attractive vertical routing
- 34 facilities for promoting bike use
- 35 pedestrian-oriented outdoor space around building
- 36 attractive routing from canyon to collective roof
- 37 shared indoor exercise space
- 38 optimal thermal comfort per room controlled by user

SOCIAL

- 39 shared electric cars and shared mobility solutions
- 40 facilities to actively promote use of public transport
- 41 shared guestrooms for family and friends
- 42 collective roof top with bar
- 43 diverse meeting points to encourage chance encounters
- 44 collective indoor spaces
- 45 easy accessibility of communal program
- 46 embrace diverse community with different typologies
- 47 community engagement is highly available
- 48 identify and encourage spaces residents can design

+ VALUE

CONTEXT

- 49 height and mass fits the context
- 50 buildings stands out due shape and appearance
- 51 the architecture fits the nautical context
- 52 zinc facade has unique contextual pattern
- 53 program activates new public square
- 54 entrances are easy findable
- 55 routing of pedestrians and cyclist is kept in mind
- 56 car parking is underground and not visible

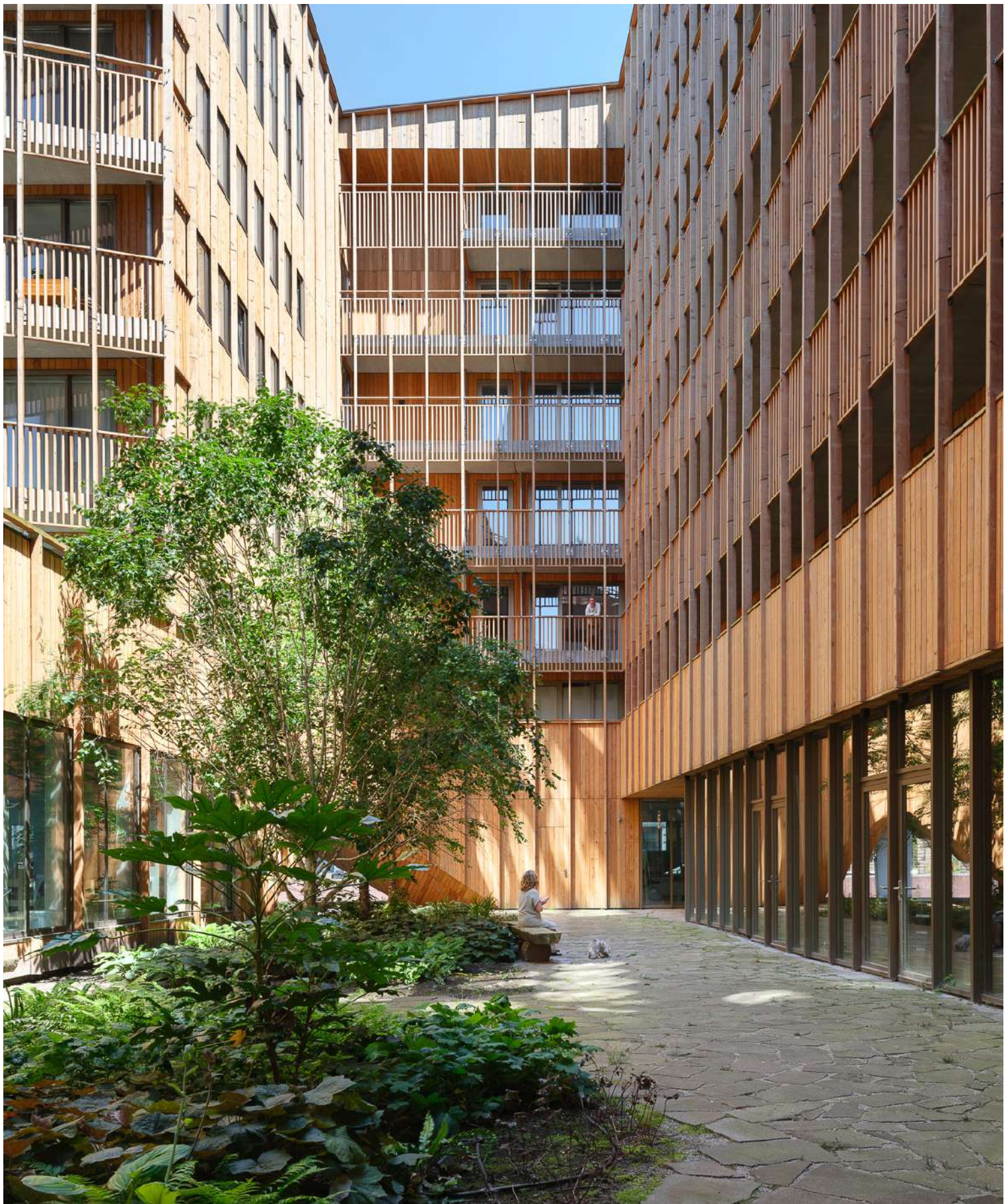
ECONOMIC

- 57 optimized area use by compact building
- 58 flexible space in commercial plinth
- 59 robust and high quality materials
- 60 commercial program adds to local economy
- 61 strong local focus that increases the lifespan
- 62 BIM modeled to reduce construction faults

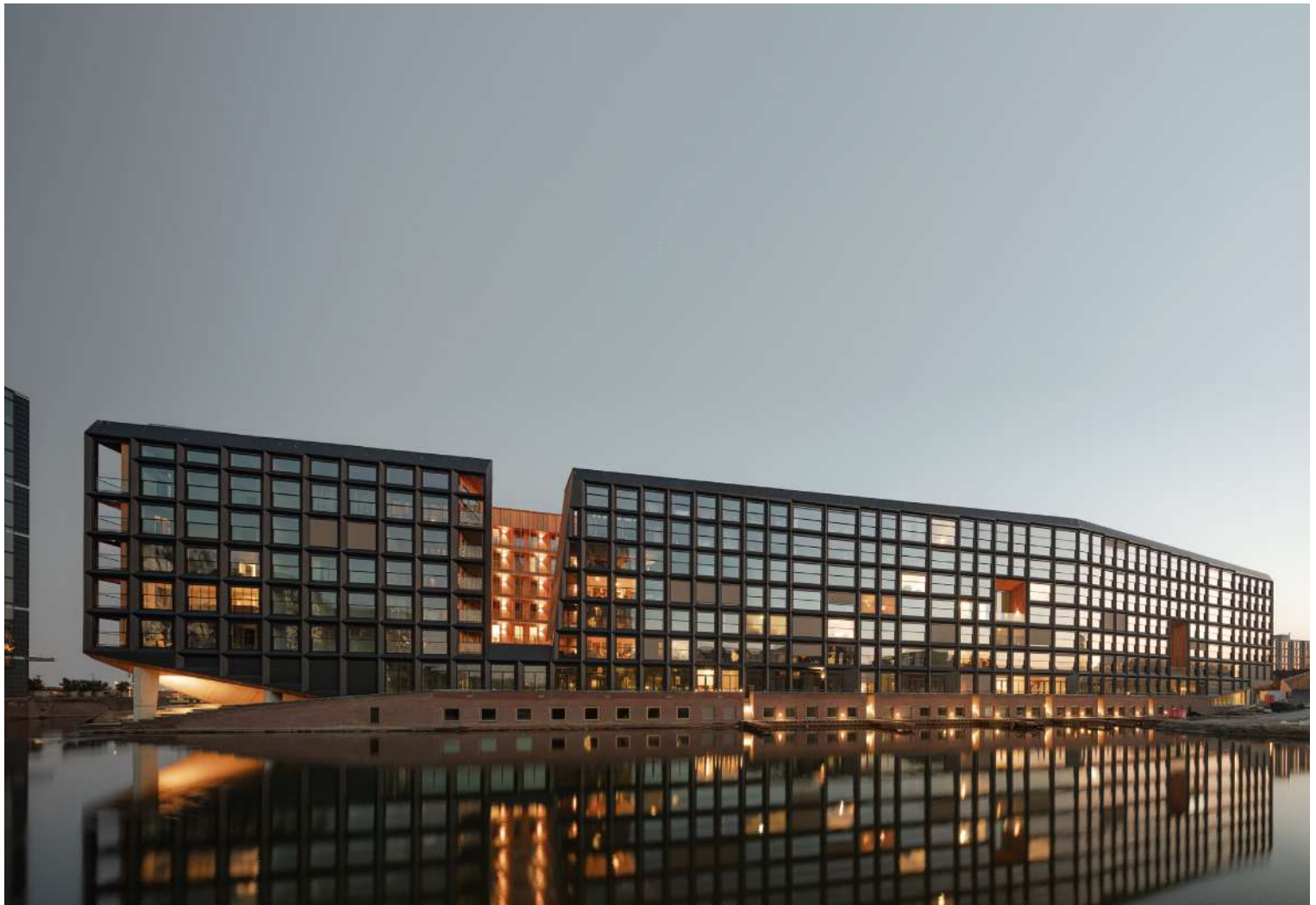
COMMUNAL

- 63 collective living room to stimulate social interaction
- 64 work spaces for tenants and sustainable office
- 65 social program in plinth
- 66 city makers and neighbourhood involvement in the process
- 67 public square and well designed public space
- 68 spaces and facilities to promote community initiatives
- 69 support and promote local businesses and local artists
- 70 waste reuse and small scale circular economy initiatives
- 71 engage community during construction phase





Everything in Jonas is geared to stimulate social interaction and encounters to ensure the building becoming a focal point for activities and act as a catalyst for the neighborhood. Besides the technical sustainability, Jonas demonstrates that a green, healthy environment and social sustainability are important principles, which are perhaps of the greatest importance for the success of the building and its surroundings. By connecting the various collective spaces in and around the building like a pearl necklace, an enchanting living environment is created, that is accessible not just to the building's occupants but also partly to IJburg residents who visit the building. All this resulted in a cohesive program that enlivens the headland. A building that you can visit and where you can engage with other people. A real heart for IJburg!



Project details

Location: Krijn Taconiskade 1 – 567, Amsterdam, The Netherlands
Design: 2017
Delivery: 2023
Gross floor area: 29.950 m²
Programme: Mixed-use
Client: Amvest
Architect: Orange Architects
Advisors: ABT, Felixx Landscape Architects,
Bureau Stadsnatuur, Publiik&Vos,
Site Urban Development, Floor Ziegler,
JMJ Bouwmanagement
Contractor: Ballast Nedam West
Photography: Sebastian van Damme, Stijn Poelstra,
Emile Hoens via Flaredepartment



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