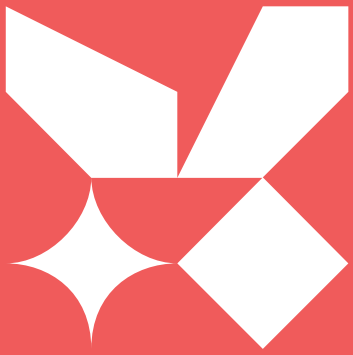
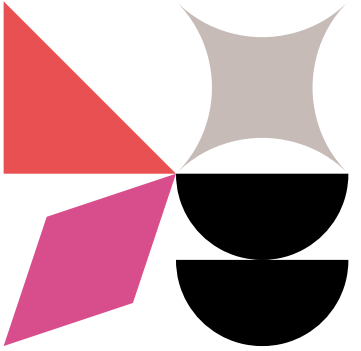


orange
architects



together

Welcome to Orange Architects! Creative, ‘hands on’, proactive and international.

Our office is located in the centre of the world port city of Rotterdam. Traditionally a city of national and international trade, a city with residents from around the globe. This is our home, and we share with Rotterdam the identity of our company: creative, ‘hands-on’, proactive and international. Welcome to Orange Architects!

WORK FIELDS

Orange Architects is a multidisciplinary and internationally operating design firm for architecture, urban design, interiors and outdoor space, headed by Patrick Meijers and Jeroen Schipper. Both partners graduated as architects and urban designers from Eindhoven University of Technology, where their education covered the full spectrum of the design profession. The assignments tackled by Orange Architects vary from feasibility studies to complete commissions, and from general urban plans to detailed interiors. Over the past 25 years, the office has drawn up numerous designs for private and public clients, some 35 of which have been built and another 25 are in preparation or under construction.

PEOPLE

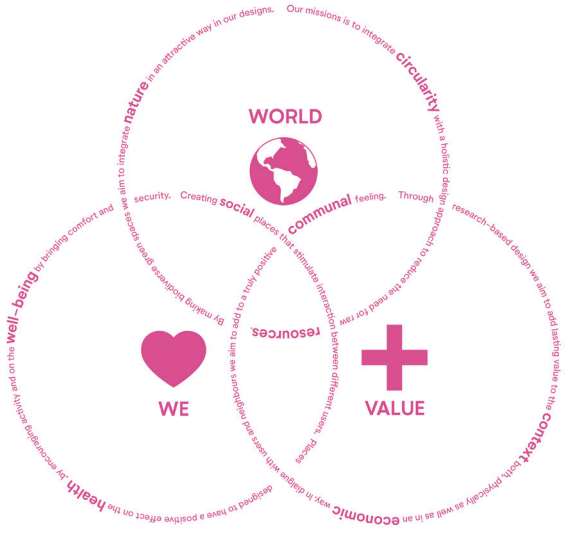
People are the central concern in all our projects. We not only want to construct attractive buildings but also create inspiring surroundings. Pleasant places in which to live, work and relax. We believe that the big challenge and the major transition we face in the coming years is an opportunity to make sustainable, attractive and well-programmed urban landscapes. Environments that are not monofunctional and exclusive, but multifunctional and accessible to everybody.

ATTITUDE

Orange Architects formulates attractive, conceptually advanced and smart answers to complex spatial challenges. What distinguishes us is our rational attitude which we combine with a sensitivity to context, to local culture, to the client’s wishes, and to the future users of our projects. Drawing on our knowledge and expertise, Orange Architects transforms all the ideas, dreams and wishes of clients into inspiring and sustainable living environments.

We believe that we can make better living environment **together.**

We share knowledge with experts in the field of sustainability, and with our integral approach sustainability is an important design ambition in all our buildings right from the first sketches. We work on the basis of a broad definition of sustainability, built upon three pillars: WORLD | WE | VALUE. Our mission is to incorporate and unite these themes in all our projects, from the first sketches to completion. This is the way we want to make buildings that positively influence the quality of life.



WORLD

We want to have a positive impact on nature and the environment with our buildings. We can achieve this by carefully selecting sustainable materials and reducing the consumption of energy and water. In addition, we aim for flexible and circular buildings that can adapt to changing needs or can be partly reused.

Nature-inclusive building is an important aspect that we try to integrate into all our designs.

RESOURCES

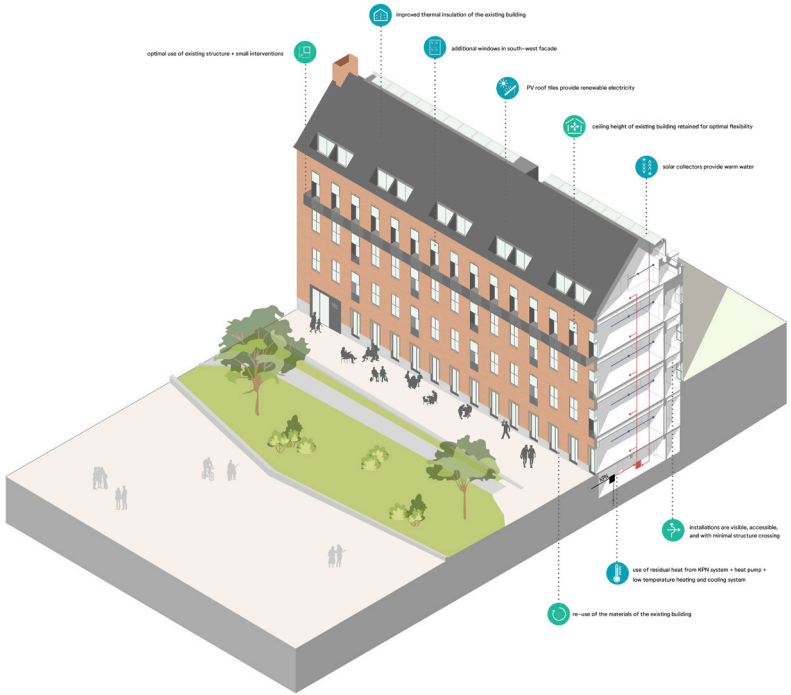
By considering climate and orientation in the design of the volume and skin right from the start of the process, we can reduce the building's energy and water consumption. For the remaining energy needs, we work with energy and installation consultants to integrate sustainable installation concepts into our designs. We see the careful incorporation of elements to generate renewable energy in the built environment as an important aspect of integral design.

CIRCULARITY

The design of smart, circular buildings offers an opportunity to apply new circular business models. Such buildings will also significantly reduce demand for new raw materials in the future. By considering the possibilities of disassembly and by working with a material passport, we can turn future buildings into material depots. The materials used must of course be carefully selected on the basis of their environmental impact, for example their toxicity and capacity to store CO2. In addition to these material values, we aim for flexibility in design, by making spaces that can be adapted in response to changing functions and requirements. In this way we can extend the life-span of the building in a sustainable manner.

NATURE

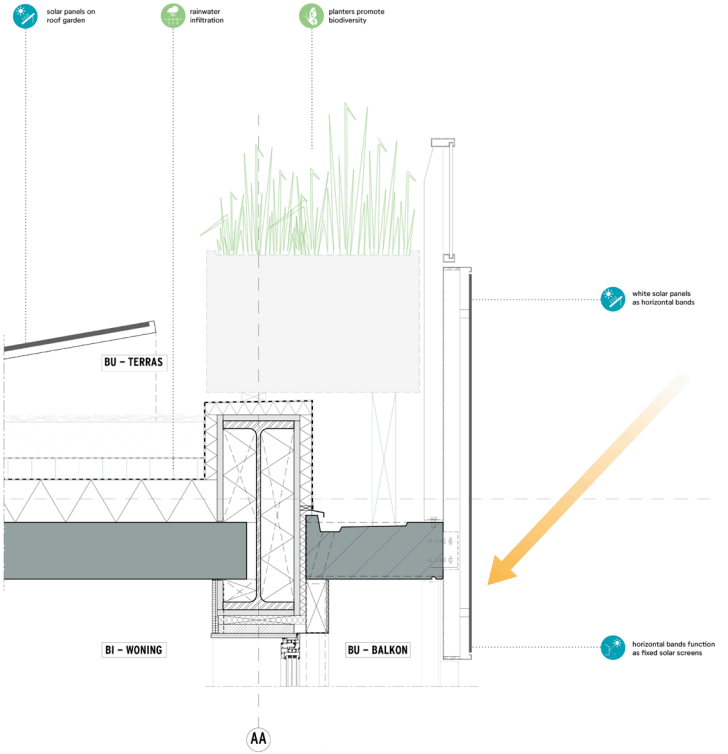
In collaboration with landscape architects, we integrate nature inside, around and on top of our buildings. This has a positive effect on both the health and welfare of users and on biodiversity. Green indoor and outdoor spaces offer possibilities for recreation, local food production and water storage when it rains. Collecting and storing rainwater improves climate-change resilience, while the water can also be used for various purposes inside the building.



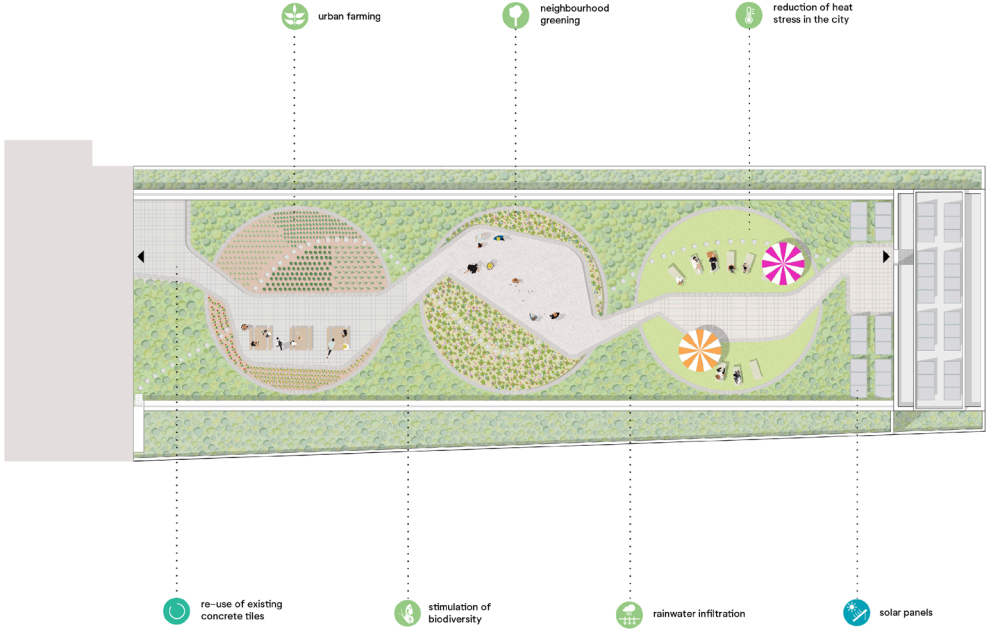
“The roof tiles of the former PTT building have been replaced with solar slates in a neutral, dark color. As a result, these PV panels are practically invisible, and the high–quality aesthetic appearance of the roof has been preserved”

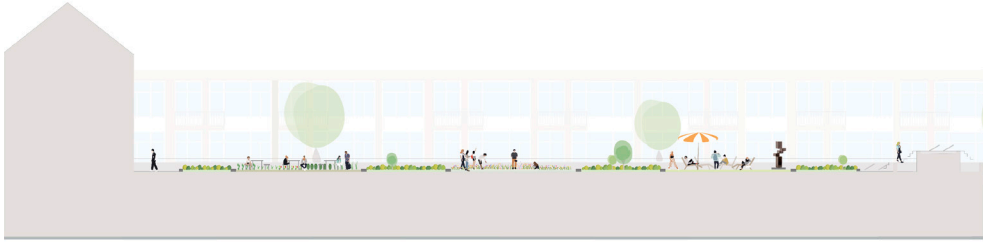
solar roof | PTT Binnenrotte

facade with integrated solar panels | Floating Gardens



“In the facade of Floating Gardens nature, renewable energy generation and aesthetic quality are combined down to the last detail”





“The sustainable VenduDak is an example of urban greening, from a gray, paved surface to a biodiverse and nature-inclusive garden”

received two BREEAM awards | Jonas

WE

We design with the conviction that a well-designed environment has a positive influence on the health and well-being of its occupants. In this way we create spaces that stimulate social interaction through healthy and comfortable interior climates. Spaces that encourage people to exercise and take the stairs instead of the elevator. We make buildings for active users, where spatial mobility concepts and sustainable means of transport are integrated into the design in a logical manner.

WELL-BEING

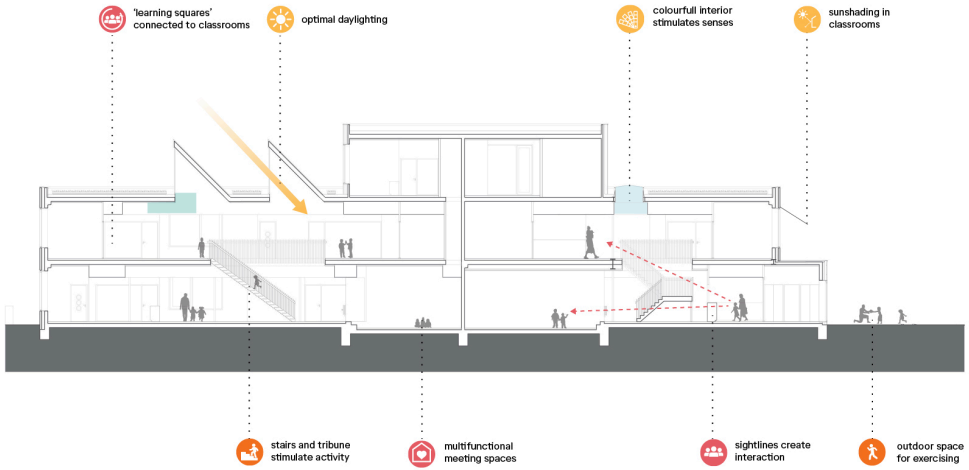
Our buildings are designed with an eye for the well-being of users. On the basis of the desired programme, we make spaces that not only offer comfort and safety, but also maximize focus and productivity. We make exciting spaces and architectural routes through the buildings that we design, spaces that surprise and intrigue. The well-being of people can be positively stimulated with the natural light, the right materials — often natural — and colour schemes. Moreover, the accessibility of buildings is important in allowing everybody to experience the architecture.

HEALTH

To stimulate the health of users, buildings must have a comfortable interior climate, sufficient daylight and fresh air. We encourage physical exercise by integrating facilities for cyclists and pedestrians, and by designing spaces in such a way that people are encouraged to take the stairs. Integrating greenery into the building or designing attractive outdoor green spaces ensures that people can enjoy clean and fresh air.

SOCIAL

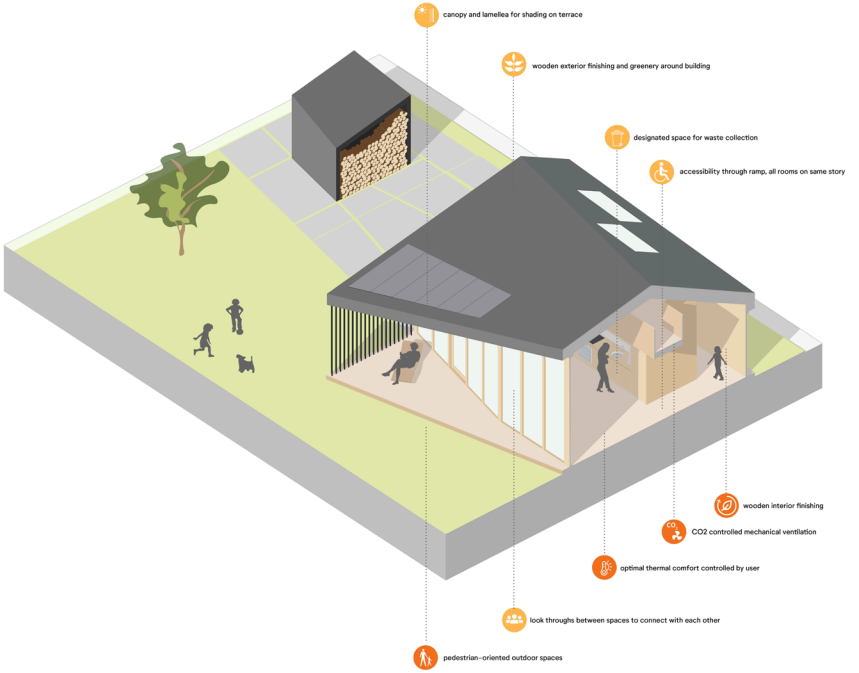
We want to design spaces that foster social interaction between the various users of the building and its neighbours through, for example, shared areas. We try to design these spaces in such a way that they invite activity and involvement by users. Shared spaces for social interaction not only improve the health and welfare of the users but can also ensure more affordable homes while allows for a varied programme.



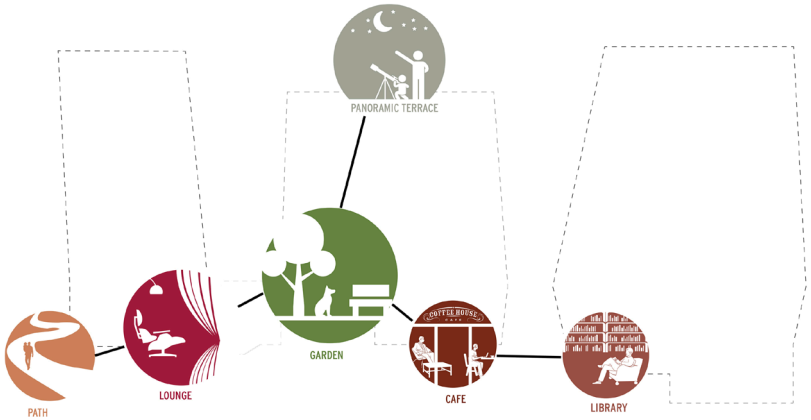
“Zonnehof combines two schools under one roof, each with its own identity in light, color and organization”

daylight in the heart of the schools | Zonnehof

cozy and sustainable stay | Holiday Home



“The holiday home truly enhances the well-being and health with a complete wooden finishing, optimal daylighting through large windows, a big terrace and lots of greenery around the building”



“Kaap Noir embraces the soul and spirit of Katendrecht, with its edgy naval history. The bold and industrial looking mixed use building, with flexible loft like floorplans and exoskeleton of steel, shelters a warm and playful heart for public and communal services”

“warm and playful heart” | Kaap Noir

gold-colored spires refer to St. Petersburg's monumental center | New Gold Dream

VALUE

Our ambition is to create added value for the local context, not only physically but also in a social and economic sense. That is why we devote so much attention to the environment of the building: attention for the spatial quality, the programming and the solidity of our designs, as well as the lifecycle costs that they entail. Our goal is to create spaces and buildings in consultation with and embraced by their users, ensuring they are of lasting value for their surroundings.

CONTEXT

We carefully investigate what a building needs to be: a new icon for the area, or a careful extension to the existing urban fabric and part of a larger system. Our aim is to preserve and strengthen local values as much as possible by meticulously integrating a building into its surroundings. Designing on the basis of the 'genius loci' allows existing structures to be strengthened, and thus the building can be of social and economic value to a larger area.

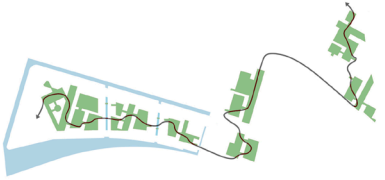
ECONOMIC

By deploying high-quality materials and by detailing in a well-thought-out and careful manner, we contribute to the solidity, sustainability and flexibility of the building. This lowers maintenance costs in the long term and reduces the need to replace materials, which in turn has a positive effect on the lifecycle costs of the building. Devising ways to build in a future-proof way ensures that materials can retain their value. By setting up a BIM model, we try to reduce the costs of failure and to contribute to a more efficient design and construction process.

COMMUNAL

We believe that by using available space efficiently and designing attractive public space, we can create places that are embraced by users and people from the surroundings. Designing in dialogue with users and neighbours, and integrating local culture, makes people feel part of the building and the community. This results in places where people want to be and encounter one another, and places that people feel responsible for.

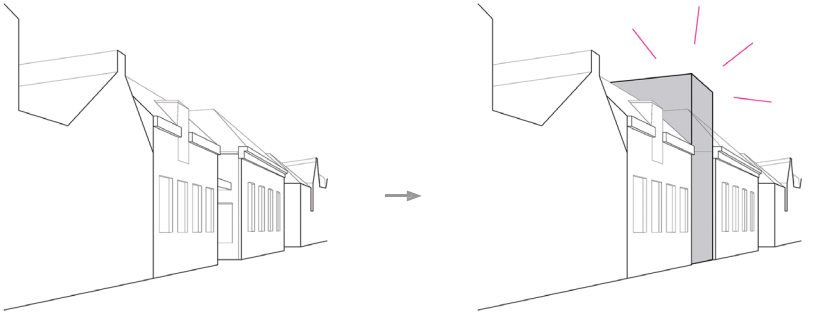
iconic



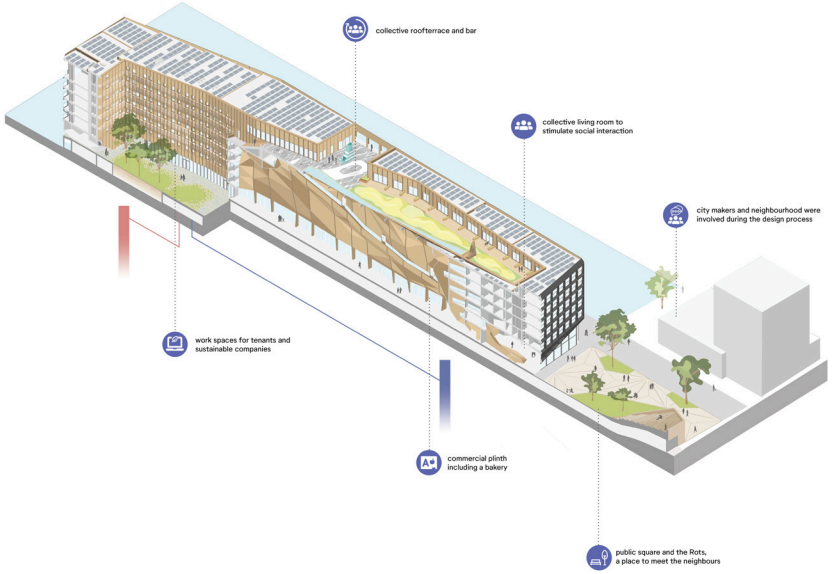
comfort

“New Gold Dream’s gold-colored spires form a special roofscape, which refers to St. Petersburg’s monumental center”

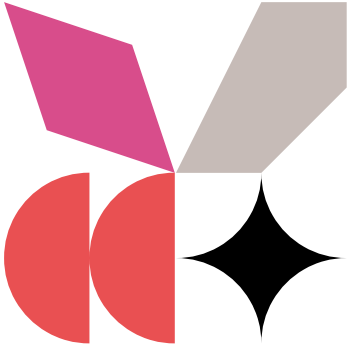
entrance | Museum Maassluis



“The new entrance of the Maassluis museum functions as a beacon in the surrounding roof landscape, integrated into the historic street scene through the use of contemporary shapes and high-quality materials and detailing ”



“Jonas is a new concept for collective and sustainable living, containing a mix of different types of rental and owner-occupied apartments, wrapped around beautiful designed public spaces ”



project overview

PTT Binnenrotte, Rotterdam

Design | 2017

Realisation | 2019

Size | 3.585 m²

The roof tiles on the market side have been replaced with solar slates in a neutral, dark color. As a result, these PV panels are practically invisible, and the high-quality aesthetic appearance of the roof has been preserved. The energy concept has been customized for this building. Residual heat from the data equipment of the KPN servers in the basement is used to preheat the tap water and to heat the floors in the apartments and restaurant. Water is also heated with solar boilers on the flat roof at the rear of the building. The building is heated and cooled with electric heat pumps. Enough energy is generated to supply the needs of almost all apartments and some of the restaurant.

WORLD

RESOURCES

- additional windows south west facade
- improved thermal insulation of the existing building
- PV roof tiles provide electricity
- solar collectors provide warm water
- use of residual heat from KPN system + heat pump + low temperature heating and cooling system
- efficient mechanical ventilation with heat-recovery system
- LED lighting with light detectors for efficiency

CIRCULARITY

- use of existing structure + well-considered interventions
- ceiling height of existing building retained for flexibility
- re-use of the materials of the existing building
- installation visible, accessible, without crossing structure

WE

WELL-BEING

- optimal daylighting through generous windows
- attractive views towards the city centre from all levels
- optimized acoustics with acoustic insulation
- optional blinds on ground floor for shading in summer
- the existing building is made accessible from streetlevel by partly lowering the existing ground floor, adding a new core with elevator and wide circulation spaces
- operable windows in all regularly occupied rooms

HEALTH

- promoting the use of a new generous stairway
- new entrances oriented towards the main public square
- optimal thermal comfort per room controlled by user

SOCIAL

- generous balcony fits the metropolitan atmosphere
- terraces & porous plinth facing city square
- accessibility of public space in plinth

VALUE

CONTEXT

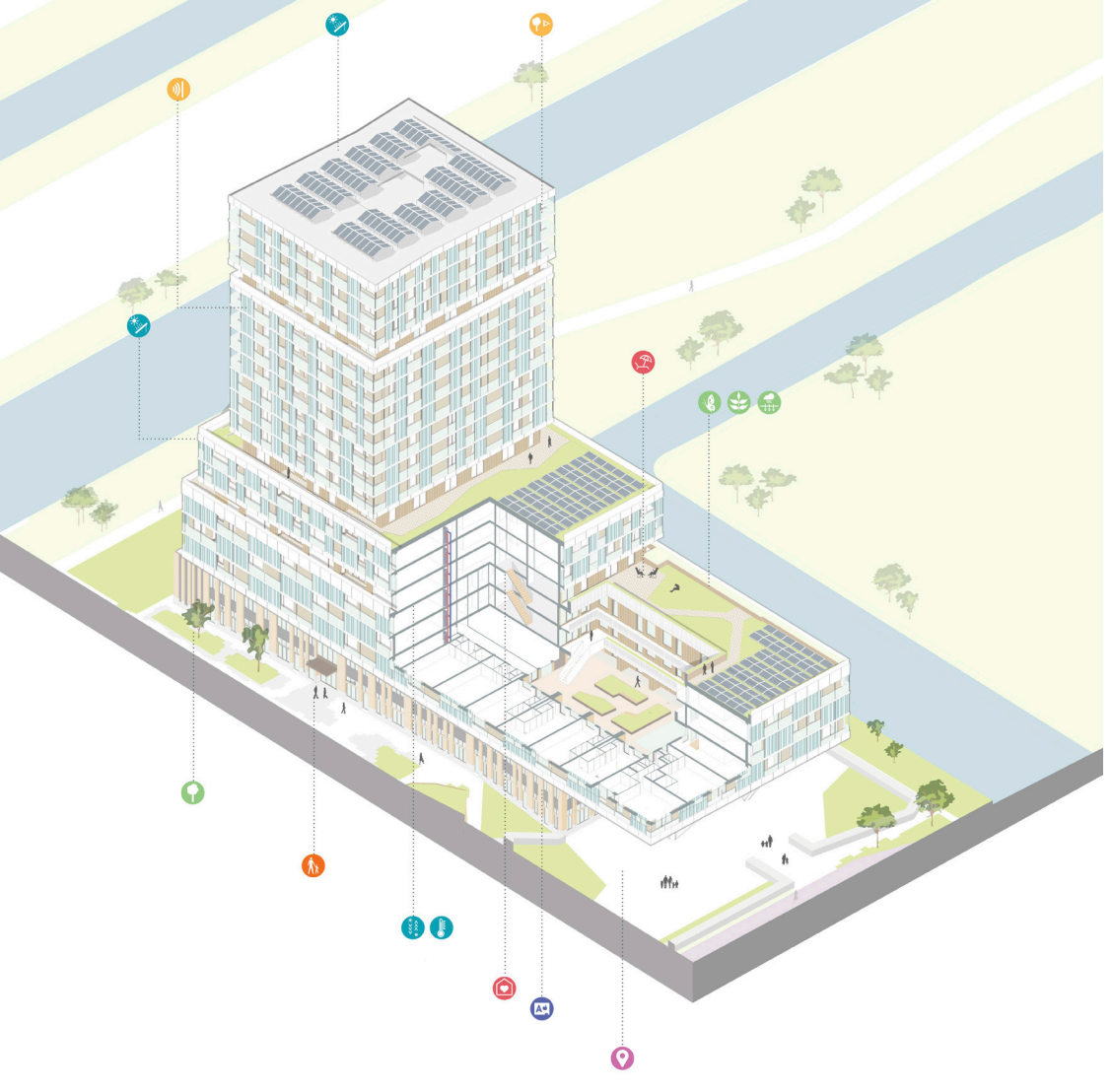
- a transformation that feels natural
- preserving and emphasizing the industrial character of the existing building
- keeping as much as possible of the existing building
- dark colours fits the character and the new energy roof
- activating plinth along the city square
- new entrances in prominent positions

ECONOMIC

- robust and high quality materials
- program adds to local economy

COMMUNAL

- terrace as added value to the public space in front
- the transformation works as catalyst of change in the area as it is an important spot, connecting different center areas and have been a blind spot for to long



Floating Gardens, Amsterdam

Design | 2016 >

Size | housing 19.250 m² | school 3.250 m²

In Floating Gardens, the entire facade of the building contributes to sustainable living. The horizontal facade bands consist of unique, white solar panels and function as fixed sun blinds. Vertical printed glass panels provide the necessary acoustic measures, while wooden cladding and planters create a green appearance. In the facade, nature, renewable energy generation and aesthetic quality are combined, down to the last detail.

WORLD

RESOURCES
- optimized orientation
- set backs and vertical panels for sun shading
- highly insulated, EPC < 0,15
- white solar panels in facade
- heat/cold storage with individual pumps
- floor heating in all apartments
- mechanical ventilation with heat recovery system
- LED lighting

CIRCULARITY
- maximized flexibility in schoolplan
- re-use of materials of existing building
- use of wooden facade cladding in patio
- easy demountable and reusable facade elements

NATURE
- environmental research on existing biodiversity
- new greenery for mitigation and compensation
- cabinets for bats / nesting stones for birds / beehotels
- green collective gardens on roofs
- new greenery in public space
- possibilities for urban farming
- rainwater infiltration on roofs

WE

WELL-BEING
- great views over the Brettenzone
- vertical glass panels in second skin for sound protection
- set backs for shadow on balconies
- collective gardens and living room to meet each other
- accessibility through wide common corridors and ramps
- green gardens with wooden facade cladding
- operable windows in all regularly occupied rooms

HEALTH
- CO2 controlled mechanical ventilation
- facilities for promoting bike use
- pedestrian-oriented outdoor spaces
- attractive route from patio to roof garden
- (shared) exercise spaces
- optimal thermal comfort per room controlled by user

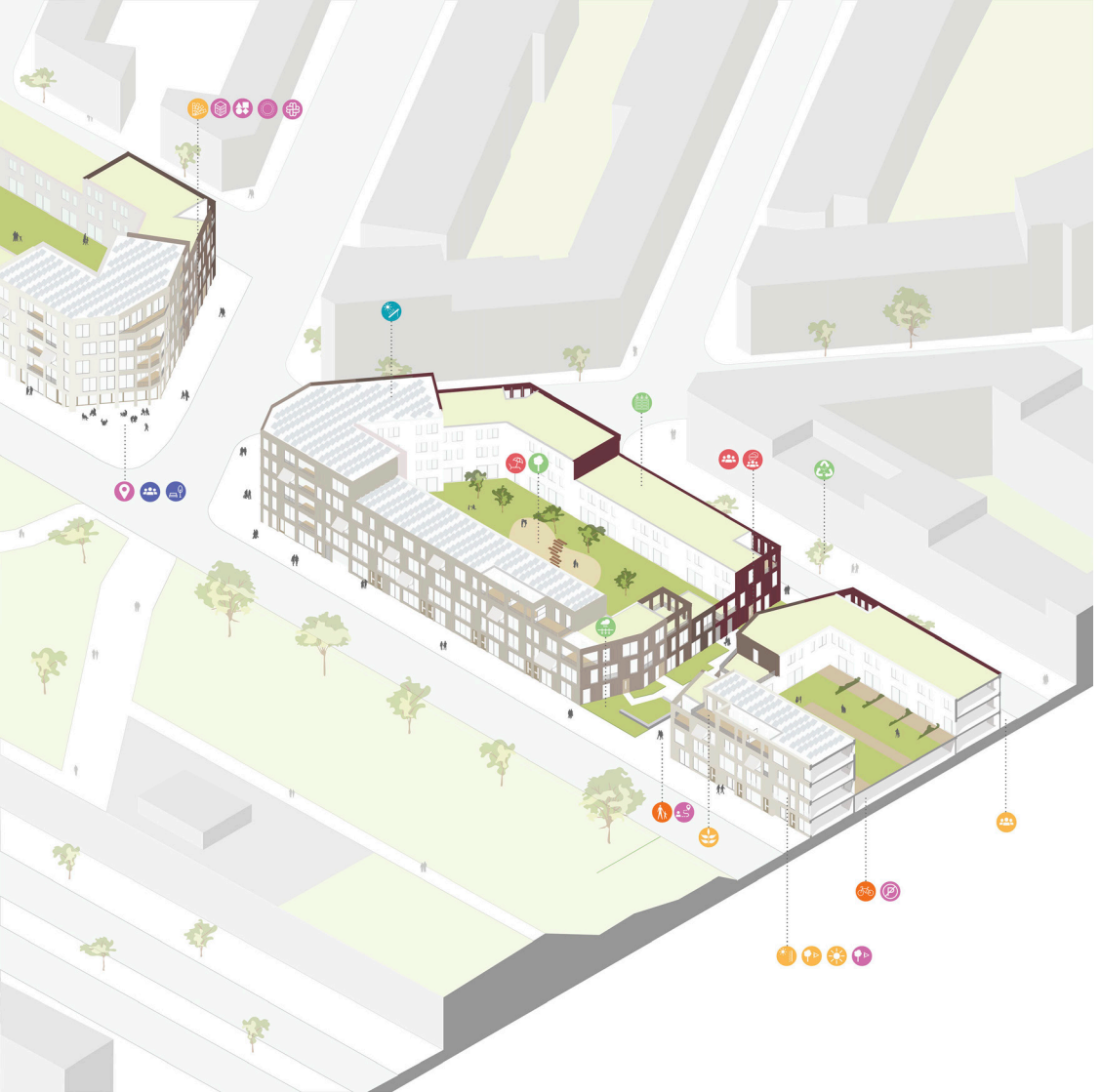
SOCIAL
- school in plinth of the building
- collective roof garden and patio
- benches in public space to meet each other
- collective indoor living room
- accessibility of public spaces and communal programs
- possibilities for collective food garden

VALUE

CONTEXT
- mass forms an entrance to the park
- building stands out from Haarlemmerweg
- greenery on building adds to greenery in the park
- school program activates the plot
- entrances are easy findable
- routing of pedestrians and cyclist is kept in mind
- car parking is underground/not visible

ECONOMIC
- optimized area use by combining school and apartments
- future proof design with water buffering roofs
- flexible space plan for school
- robust and high quality materials
- strong local focus due integrating school
- BIM modeled to reduce construction faults

COMMUNAL
- school forms social program in plinth
- well designed and attractive public space
- building works as catalyst for work-living district
- collective spaces to promote community initiatives



The Hudsons, Rotterdam

Design | 2016 >

Realisation | under construction

Size | 29.100 m²

Sustainability is an important theme for The Hudsons. It is taken to a higher level in this project by being fully integrated into the concept. The five building blocks are self-sufficient in terms of energy, with a water-neutral building envelope and maximum reuse of materials. Since the apartments are fitted with all-electric amenities, there will be no use of fossil fuels.

WORLD

RESOURCES

- integrated (optional) sunscreens
- epc = 0,2 ; gpr = 8,5
- collective solar panels on roofs of taller segments
- district heating
- floor heating and cooling system
- mechanical ventilation + heat recovery system (app.)
- energy efficient outdoor lighting

CIRCULARITY

- leftover material will be stored at the local material depot

NATURE

- environmental research on existing biodiversity
- compensation of nature during and after building process
- vegetation for stimulating biodiversity
- green roofs as water buffer
- collective green courtyard and passages
- rainwater infiltration half open pavement in front gardens

WE

WELL-BEING

- big windows for optimal daylighting
- panoramic view towards the park
- measures taken for optimized acoustics (doors, balcony's)
- sun screens on all facades (optional)
- 'delftse stoep' stimulates street life and interaction
- accessibility through wide common spaces (app.)
- quality of different outside spaces
- colour schemes fit the activity in the surrounding area
- operable windows in all regularly occupied rooms

HEALTH

- CO2 controlled mechanical ventilation
- promoting use of stairs in apartment entrances
- easy accessible bike storages in single-family houses
- pedestrian areas connecting neighborhood and park
- limit noise and pollution on building site
- optimal thermal comfort per room controlled by user

SOCIAL

- collective gardens per block
- front doors all around the block with transition zone in front
- embrace diverse community with intergenerational living
- encouraged to claim/personalize public space

VALUE

CONTEXT

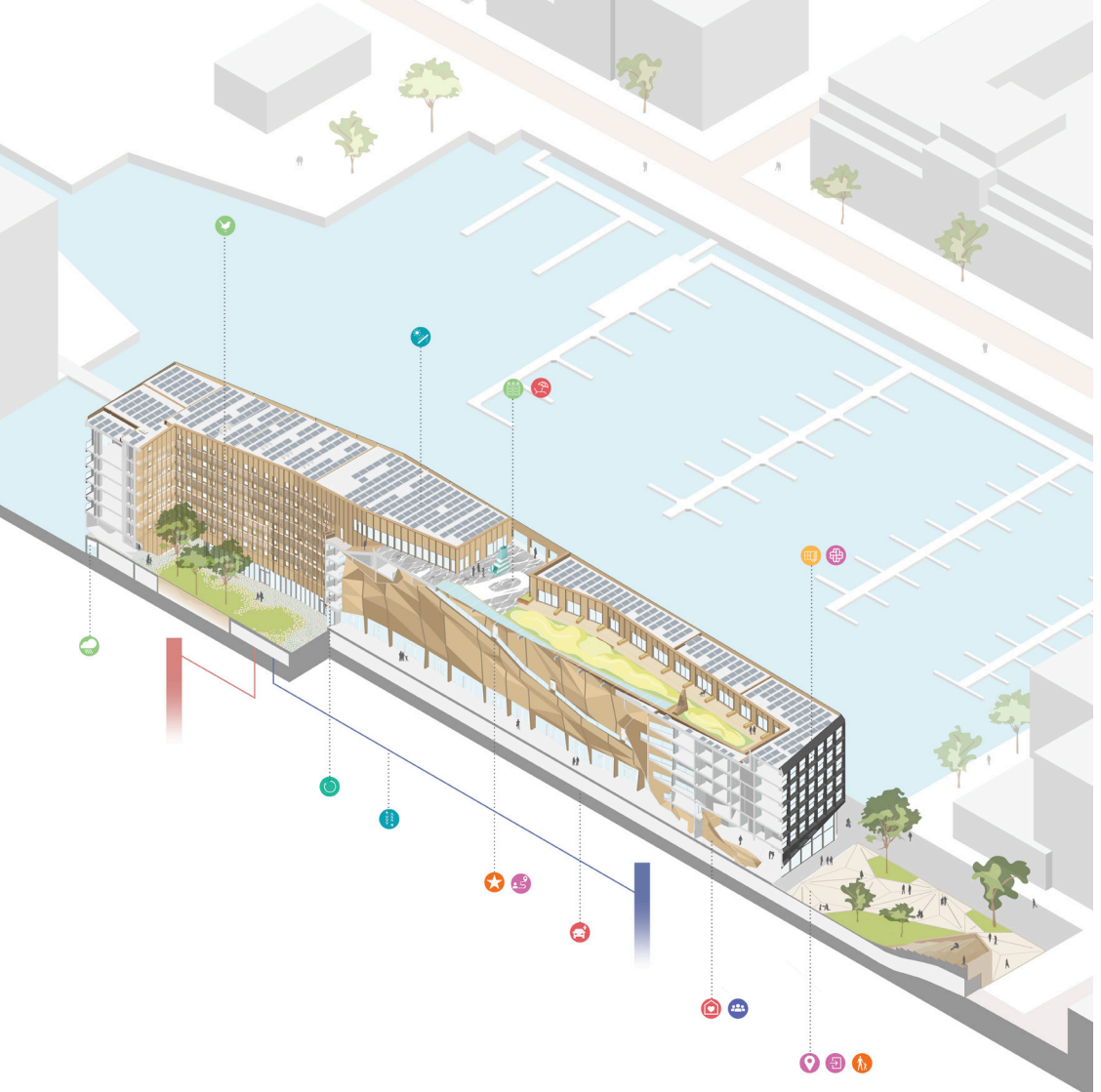
- height and mass fits the context
- appealing building that embraces the neighborhood
- 19th century identity and the Dakpark are both present
- facades open up towards the Dakpark
- facades color gradient matches the context
- public program activates the main entrance to the Dakpark
- routing of pedestrians and cyclist is integrated in the design
- car parking is not visible and solved inside the blocks

ECONOMIC

- optimized area use by making more smaller building blocks
- flexible program on ground floor
- robust and high quality materials
- housing career opportunities for local residents
- additional program has a positive influence on the economy

COMMUNAL

- public function on a local scale facing a public square
- neighbourhood involvement important part of the process
- public square and well designed public space
- cooperation with small scale circular economy (Buurman)



Jonas, Amsterdam

Design | 2017 >

Realisation | under construction

Size | 29.950 m²

Sustainability is integrated in the broadest sense of the word in Jonas. The smart energy concept consists out of a geothermal energy system connected to the surface water and a large amount of pv-panels on the roof. Nature is integrated in, around, and on top of the building to stimulate biodiversity and to collect rainwater. The project has a strong focus on communal living, providing shared electric cars and a large amount of collective indoor and outdoor spaces. World | We | Value; Jonas has it all!

WORLD

RESOURCES

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

CIRCULARITY

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

NATURE

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

WE

WELL-BEING

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

HEALTH

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

SOCIAL

- shared electric cars and shared mobility solutions
- facilities to actively promote use of public transport
- shared guestrooms for family and friends
- collective roof top with bar
- diverse meeting points to encourage chance encounters
- collective indoor spaces
- easy accessibility of communal program
- embrace diverse community with different typologies
- community engagement is highly available

VALUE

CONTEXT

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

ECONOMIC

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

COMMUNAL

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

S – West, Eindhoven

Design | 2017

Realisation | 2021

Size | 29.665 m²

The green courtyard connects the residents of the four different building volumes. The greenery is continued on the lower roof parts, where block “Frederik” has a collective roof terrace. Solar panels have been placed on the upper roof parts, which, together with a collective thermal energy storage system, ensure a sustainable energy concept.

WORLD

RESOURCES

- optimized glass percentage to reduce energy needed for cooling
- integrated sun screens
- solar panels on the higher roofs
- collective heat cold storage
- low temperature floor heating system
- balanced ventilation system in tower

NATURE

- green roofs
- collective green inner courtyard
- rainwater infiltration in courtyard
- rainwater buffering in souterrain

WE

WELL-BEING

- optimal daylighting for all apartments
- shading in summer with sun screens and trees
- accessibility through integrated ramps
- inner courtyard with greenery and landscape qualities

HEALTH

- CO2 controlled mechanical ventilation
- collective bike storage easy accessible by ramp
- routing pedestrians through court yards

SOCIAL

- shared electric cars
- collective roof-terrace and garden
- meeting points in entrance halls
- mixed program; sale, rental and social housing

VALUE

CONTEXT

- height and mass matches with surrounding buildings
- 4 different identities within one family
- design reflects the industrial heritage of the location
- materials, patterns and colours of exterior fit surrounding
- commercial program activates the plinth
- generously designed entrances fitting the large urban scale
- extended routing through the blocks
- car parking in souterrain, not visible from streetlevel

ECONOMIC

- high density area, compact cores and floor plans
- use of robust and high quality materials
- commercial program adds to local economy
- BIM modeled to reduce construction faults

Holiday home, Texel

Design | 2018

Realisation | 2021

Size | 70 m²

The tiny holiday home was designed using sustainable solutions: nearly invisible solar panels on the roof, natural ventilation, a concrete floor in the interior which acts as a thermal mass, highly insulated roof, walls and windows. The holiday home truly enhances the well-being and health with a complete wooden finishing, optimal daylighting through large windows, a big terrace and lots of greenery around the building.

WORLD

RESOURCES

- sloping roof faces south for solar panels
- compact and optimized floor plan
- small windows facing north, big windows facing south
- lamellae and canopy protect against overheating
- optimized insulation, EPC = 1,4
- black integrated solar panels
- low temperature floor heating

CIRCULARITY

- compact building needs as little material as possible
- adaptable and flexible floor plans
- complete wooden interior and exterior finishing
- structure is mostly made out of wood
- wooden skin is easy demountable and re-usable
- prefabrication of whole wooden structure
- above ground level only dry connections

NATURE

- environmental quickscan of site location
- lots of green around the holiday home
- possibilities for vegetable garden
- rainwater drainage not linked to sewer, soil infiltration
- possibilities for composting on site

WE

WELL-BEING

- optimal daylighting through large windows
- unobstructed views from living room around the plot
- canopy and lamellea for shading in on terrace
- look throughs between spaces to connect with each other
- accessibility through ramp, all rooms on same story
- wooden interior finishing and greenery around building
- designated space for waste collection

HEALTH

- CO2 controlled mechanical ventilation
- wooden finishing materials
- pedestrian-oriented outdoor spaces
- attractive circulation route through holiday home
- easy constructible building to limit noise and pollution
- optimal thermal comfort controlled by user

SOCIAL

- big terraces to meet with family and friends
- attractive living room to sit with guests
- extra sleeping space for guests

VALUE

CONTEXT

- low and compact holiday home fits the context
- special shaping of exterior stands out
- shape merges with natural environment
- keeping existing greenery
- wooden cladding fits natural atmosphere
- program activates the garden
- entrance is easy findable

ECONOMIC

- optimized area use of the holiday home
- easy demountable in the future
- flexible space plan for changing needs
- robust and high quality materials
- complete 3D modeled to reduce construction faults
- prefabrication of whole wooden structure

De Zwaan, Zwolle

Design | 2018 >

Size | 17.600 m²

The public green courtyard between the building blocks provides diverse meeting points to encourage chance encounters. Due to the balconies facing the courtyard and the attractive permeability of the block, the inner heart of the project becomes a lively and social place to stay.

WORLD

RESOURCES
- optimized glass percentage for thermal comfort
- optimized insulation, EPC< 0,15
- PV roof tiles provide electricity
- thermal energy system for heating and cooling
- efficient floor heating system
- mechanical ventilation system with heat recovery
- efficient lighting system

CIRCULARITY
- possibility to combine, split or transform spaces
- use of recycled concrete
- material passport Circular Building Platform

NATURE
- environmental research on existing biodiversity
- measures for protecting and compensating existing trees
- nesting facilities for birds, bats and insects
- collective green garden
- rainwater infiltration in the garden and sedum roofs
- layered water buffering system

WE

WELL-BEING
- optimal daylighting
- unobstructed views for visual comfort
- balconies facing inner courtyard for acoustic comfort
- shading in summer by integrated sunscreens
- collective garden
- accessibility through wide common corridors and ramps
- greenery and landscape qualities
- operable windows in all regularly occupied rooms

HEALTH
- CO2 controlled mechanical ventilation
- promoting use of stairs (garden on the elevated deck)
- facilities for promoting bike use
- pedestrian-oriented outdoor spaces
- attractive circulation routes in the garden

SOCIAL
- shared electric cars and shared mobility solutions
- collective outside gardens
- diverse meeting points to encourage chance encounters
- accessibility of public spaces
- rich mix of apartment types

VALUE

CONTEXT
- height and mass fits the context
- iconic corner building creates an accent
- genius loci of the place is used in the design (de Zwaan)
- green courtyard connects the greenery in the area
- materials and colours fit surrounding
- commercial program in the plinth activates specific spots
- entrances are easy findable
- routing of pedestrians and cyclist is possible through site
- car parking is half sunken underground

ECONOMIC
- optimized area use (high density)
- demountable building elements
- flexible space plan for changing needs
- robust and high quality materials
- commercial program adds to local economy
- part of the development of the area Waterplein
- BIM modeled to reduce construction faults

COMMUNAL
- city makers and neighbourhood involvement in the process
- well designed public space inside the plot
- the plan is a part of redevelopment of the area
- co-creation process together with future residents

Noorderkaap, Amsterdam

Design | 2016 >

Size | 3.020 m²

By strongly focusing on the context and history of the site, robust and industrial apartment buildings are shaped, that will withstand the test of time. A collective heat-cold storage system in combination with floor heating will provide the necessary comfort in the apartments. The roofs of the sculpturally designed blocks consist of enclosed terraces and green roofs with solar panels. A green roof above the underground parking ensures that the building volumes are free standing in an attractive park-like setting along the IJ.

WORLD

RESOURCES
- sun protection glass
- minimized energy use with EPC of 0,39
- 85 solar panels on highest roofs
- heat/cold storage
- low temperature floor heating system
- mechanical ventilation units with heat recovery

CIRCULARITY
- top part consists of demountable steel construction
- weathering steel facade panels can be re-used

NATURE
- vegetation roofs
- buildings stand along public park
- rainwater buffering in green roofs

WE

WELL-BEING
- big windows for optimal daylighting
- unobstructed views over the IJ river
- collective pavilion in urban plan
- operable windows in all regularly occupied rooms

HEALTH
- CO2 controlled mechanical ventilation
- facilities for promoting bike use
- pedestrian-oriented outdoor spaces
- attractive experiences along the IJ
- shared outdoor exercise spaces
- optimal thermal comfort per room controlled by user

SOCIAL
- collective pavilion to meet each other

VALUE

CONTEXT
- height and mass fits the context
- split into contrasting top and bottom volume
- industrial architecture fits the past of the site
- raw concrete and weathering steel create industrial appearance
- program activates the water front
- entrances are easy findable
- routing of pedestrians and cyclist is kept in mind
- car parking is underground/not visible

ECONOMIC
- flexible space plan for changing needs
- use of robust and high quality materials
- offices in plinth adds to local economy
- strong local focus that increases the lifespan
- prefabricated elements to reduce construction faults

COMMUNAL
- collective pavilion for the community
- public square and well designed public space

Waalfront, Nijmegen

Design | 2018 >

Realisation | under construction

Size | 8.170 m²

Due to their positioning in the Fort Krayenhoff park, the three pavilions offer an unobstructed view of the greenery and the Waal. Nature-inclusive measures such as the integration of nesting stones for bats and birds in the fortress wall increase park-like living.

WORLD

RESOURCES

- optimized glass percentage
- setbacks to optimize sun protection
- optimized insulation, EPC = 0,3
- solar panels on roof
- floor heating connected to district heating

CIRCULARITY

- use of local materials for fortress wall and facade panels
- easy demountable and reusable skin
- prefabrication of facade panels

NATURE

- integration of bat- and birdhouses and insect hotels in fortresswall
- greenery on top of parking
- buildings embedded in green park
- rainwater infiltration in park and green roof

WE

WELL-BEING

- optimal daylighting
- unobstructed views for around the building
- shading in summer
- wheelchair accessibility
- salvaged privacy
- operable windows in all regularly occupied rooms

HEALTH

- CO2 controlled mechanical ventilation
- promoting use of stairs
- facilities for promoting bike use
- pedestrian-oriented outdoor spaces
- attractive experiences along circulation routes

SOCIAL

- collective outside park to meet each other
- collective exchange point for packages

VALUE

CONTEXT

- unrectangular and low blocks fits the park site
- iconic and appealing buildings that stands out
- brick wall brings back history of fortress wall
- contours of the canals have been made visisble
- entrances are easy findable
- routing of pedestrians and cyclist is kept in mind
- car parking is underground/not visible

ECONOMIC

- optimized area use with compact cores
- robust and high quality materials
- BIM modeled to reduce construction faults
- strong local focus that increases the lifespan
- prefabrication of facade to reduce construction faults

Porseleinen Hof, Delft

Design | 2015 >

Size | 11.980 m²

The spacious atrium in the heart of the building gives an expression to the communal living in Porseleinen Hof. The sky bar, located on the fourth floor, provides access to a collective roof terrace, surrounded by an intensive green roof and planters. The collective indoor and outdoor spaces allow residents to meet all year round. A private car is not necessary – large bicycle parking, shared cars and a good connection to the tram and bus station make sustainable transport possible.

WORLD

RESOURCES

- optimized compactness of building block
- optimized glass percentage for thermal comfort
- possibility to integrate sun screens in window frame
- optimized insulation, EPC = 0,2
- solar panels on the roofs
- thermal energy system for heating and cooling
- low temperature floor heating system
- mechanical ventilation with heat recovery
- efficient lighting system < 10 W/m2

CIRCULARITY

- demountable Aberson tile system

NATURE

- environmental research on existing biodiversity
- urban farming plot is kept in the urban scheme
- biodiversity is stimulated with birdhouses
- green collective roof with planters as balustrade in the apartment building
- collective green on site in front of family houses
- rainwater infiltration on green roofs
- rainwater buffering
- rainwater reuse for watering roof garden

WE

WELL-BEING

- unobstructed views
- acoustic measure in front of window
- possibility to integrate sun screens with window frame
- collective atrium and roof terrace with skybar
- accessibility through wide common corridors and ramps
- wooden finishing of the atrium
- colour schemes are made for all collective spaces
- designated space for collective waste collection
- operable windows in all regularly occupied rooms

HEALTH

- CO2 controlled mechanical ventilation
- promoting use of stairs by making attractive route
- facilities for promoting bike use
- pedestrian-oriented outdoor spaces in front of houses
- attractive experiences through atrium
- optimal thermal comfort per room controlled by user

SOCIAL

- shared electric cars
- well connected to tram and bus station
- shared skybar next to collective roof
- collective roof
- delftse stoep in front of houses
- collective skybar and atrium
- easy access of communal program

VALUE

CONTEXT

- height and mass fits the context
- iconic building stands out on the corner
- greenery on building adds to greenery in the area
- restaurant activates the ground floor
- entrances are easy findable
- routing of pedestrians is kept in mind
- car parking is integrated in the volume of the building
- plasticity of the facades add to lively experience of the blocks

ECONOMIC

- optimized area use
- flexible structure for future development
- robust and high quality materials
- restaurant adds to local economy
- BIM modeled to reduce construction faults

COMMUNAL

- all sides orientation give s a lively impression on all streets
- building is part of redevelopment of industrial site

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