HOUSE OF CIRCULARITY

PARK POMPENBURG

DIAGRAMS
THE URBAN CONNECTOR

the House of Circularly becomes a pivot point between the two districts
THE URBAN CONNECTOR
the House of Circularity becomes a pivot point between the two districts
HOUSE OF CIRCULARITY
a hybrid building that stimulates circular interaction
THE INTERNAL CIRCULATION

the yellow stairs as the multi-level connecting element to stimulate interaction
THE INTERNAL CIRCULATION
the yellow stairs as the multi-level connecting element to stimulate interaction
THE INTERNAL CIRCULATION
the yellow stairs as the multi-level connecting element to stimulate interaction
ENCOURAGING CROSS-POLLINATION

transparency, accessibility, openness, and visibility to stimulate interaction between users
ENCOURAGING CROSS-POLLINATION

transparency, accessibility, openness, and visibility to stimulate interaction between users
THE HYBRIDIZATION OF CIRCULAR ACTORS AND THE PUBLIC
the plinth as an open and accessible structure for various user groups

circular restaurant
dedicated workspaces
children's workshop

xDomain | City of the Future
1/200
THE HYBRIDIZATION OF CIRCULAR ACTORS AND THE PUBLIC
the plinth as an open and accessible structure for various user groups
THE CIRCULAR INTERMEZZO
the town as a repetitive flexible steel structure with a hybrid character

technical space for mechanical transition

community platform

material collection point

storage for different materials

local market place

hydroponic farming + urban farming school

xDomain | City of the Future
--
THE APARTMENTS
the tower as a repetitive flexible steel structure with a hybrid character

apartment d

apartment c

apartment b

apartment a

apartment e

apartment f

apartment g

apartment h

xDomain | City of the Future
A MODULAR STRUCTURE

A repetitive steel skeleton structure with dry joints makes reuse for future purposes possible.
Rainwater harvesting for domestic use

Rainwater harvesting to use for planters through integrated irrigation system
Every apartment provided with terraces, planters, and vegetable gardens.

Green rooftops to mitigate the indoor climate.
Local food production through kitchen gardens and urban farming.
CLIMATE DESIGN

the towers as generative entities

Turning local vegetable waste into compost

Planters as a protective shell to catch dust particles

xDomain | City of the Future
1/200
Planters as a protective shell to prevent overheating

Planters as a protective shell to reduce acoustic pollution
Planets contribute to produce oxygen (from CO₂ to O₂)

Solar panel cladding to generate energy
INDOOR CLIMATE
natural ventilation | integrated sunscreen | insulating planters

- Aluminum window frame with self-regulating natural ventilation
- Aluminum window frame with integrated sunscreen
- MERo raised floor with integrated heating and cooling system
- Planters as a protective shell to:
  - prevent overheating
  - reduce acoustical pollution
  - catch dust particles
  - produce oxygen (from CO₂ to O₂)
- SOLAXESS white solar panel cladding to generate energy
THE GREEN BATTERY

Generating energy by cladding the facade with white solar panels.
THE ENTRANCE AT THE GROUND FLOOR

the yellow stairs as the multi-level connector and guide through the plinth
THE MAIN ENTRANCE AT THE PLATEAU

the yellow stairs as the multi-level connector and guide through the plinth
URBAN FARMING

urban farming (schools) at the intermezzi to stimulate local food production
THE PLATEAU AND LUCHTSINGEL EXTENSION
the plateau as an urban connective and a platform for public interaction
THE ‘NEW’ HOFPOORT
the two towers mark the transition between Rotterdam Central District and Rotterdam North
THE HOFBOGEN AS A PUBLIC EXTENSION

the Hofbogen as a 1,9 km urban extension that connects Rotterdam North with Pompeinburg
THE GREEN AXIS
the plaza becomes an urban connector between the Høfogden, Blaak, and the Central District
PARK POMPENBURG AS A PIVOT POINT

Park Pompeenburg has a very prominent and valuable position within the city's urban fabric that could
attach various neighborhoods together.
THE SKYLINE OF ROTTERDAM

The two towers will become important additions to the skyline, marking the transition between two districts.