P5 Presentation

Fenix II

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ANALYSIS
1920’s

San Francisco
1922

Fire
1948

Fenix Food Factory
2013

1944
Bombing

1955
Fenix II

- Repetition
- Size
- Memories
HISTORY

1950’s

Fenix I & II

Corners square
1950’s

**HISTORY**

SAN FRANCISCO 1922

1944 Bombing

1955 Fenix II

Fenix Food Factory 2013

The Building

**ANALYSIS**

**NEEDS TO BE COMBINED WITH**

**Fenixloods II**

The integration of electric cranes and the combination of cranes, floor hatches, bridges and installations were destroyed. Most of the middle part of the building and a auto repair shop. During construction a fire ding into a temporary cultural function.

In the middle section a new canteen, office space, and many other culinary and cultural initiatives.

In this period the warehouse was used as an area were infectious to pioneer de Kaap.

The low rents and the rugged character of the area were infectious to pioneer de Kaap.

In 2006 the municipality acquired both developments at Katendrecht and the area were infectious to pioneer de Kaap.

The quay was reconstructed, rearranged with Wilhelminapier. The Rijnhavenbrug was completed in 2012 and from that year onwards developments at Katendrecht and the 1955 Fenix II 1950’s 1922

Fire 1948

**Change**

2006 Fenix II

1948 Fire

1922 San Francisco

1944 Bombing
HISTORY

1960’s - 2000’s

Rotterdam
HISTORY

1960’s - 2000’s

Kattendrecht
The Building Fenixloods II expanded significantly. The old wooden sheds warehouses for the upcoming harbour industry.

In the late 19th century wooden sheds served as storage of households that moved to America. Europe. The building was mainly used for 'San Fransisco', the then biggest warehouse of.

In 1915 the NASM rented a site on the southwest side of the Rijnhaven from the municipality because the fleet and the number of lines of the H.A.L. to the United States had made for a new and much larger warehouse.

The two story building was 25,000 m² and had a length of 360 m.

The integration of electric cranes and the possibility for three steamships to dock at once made the building unique. (Flexus 2018, P. 181)

Right after the second world war, the plan to rebuild the warehouse was set into motion. (Flexus 2018, P. 182.)

In 1944 a conflict destroyed the middle part of the building and a auto repair shop. During construction a fire destroyed most of the installations were destroyed. Most of the in the middle section a new canteen, office space, washing facilities, a bicycle shed and garages are established, including Theater Walhalla, the Codarts Circus School, the Fenix Food Factory and many other culinary and cultural initiatives.

The low rents and the rugged character of the area were infectious to pioneer de Kaap.

In this period the warehouse was used as an installation for the H.A.L. and many other companies. In 1955 a decision was made to split the building up into two separate buildings. (Flexus 2018, P. 182.)

Wilhelminapier. The Rijnhavenbrug was completed in 2012 and from that year onwards several developments in the area were constructed. In 2006 the municipality acquired both 2006 Fenix II and many other developments at Katendrecht and the Codarts Circus School, the Fenix Food Factory and many other culinary and cultural initiatives.

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## VALUE ASSESSMENT

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<th>1920’s</th>
<th>1950’s</th>
<th>2010’s</th>
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<td>Emigration</td>
<td>Separation</td>
<td>Urban hotspot</td>
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<tr>
<td>Largest warehouse</td>
<td>Side design</td>
<td>Multifunctionality</td>
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<td>Vertical connections</td>
<td>Box in box</td>
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<td>Rhythm</td>
<td>Closed facade</td>
<td>Informal character</td>
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<td>Articulation</td>
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<td>Temporality</td>
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</table>
CONDITION

Urban position

Skin and installations

Division
CONDITION

Division - Multifunctionality
Skin and installations
BUILDING TYPOLOGY

Pakhuismeesteren

RDM

Maassilo

St. Job

Storage typology
Transformed to a hotel with a mercado on the ground floor. The hotel has 217 rooms combined with gathering spaces and long stay apartments. Utilizing the height of the construction, the architects added two stories on top in order to create the required space.

Transformed to event location by removing columns to create bigger spaces.

Trying to keep as many authentic details as possible as well as the industrial appearance. A broader renovation would also take place.

Transformed into 109 loft-apartments and penthouses. The owners could choose the interior division of their property. The uniquely expressive facade is kept, reminding of the docking activities on the side of the port.

Transformed to a creative campus area for students and fresh entrepreneurs as a collaboration of the port company, the highschool of the city. The complex is an ongoing project adjusting to the needs of the city, though retaining it’s industrial character.

Storage typology
REFERENCES

De Hallen, Amsterdam

Piazza Ceramique, Maastricht

LocHal, Tilburg

Museo del Oro Quimbaya, Colombia
## BRIEF - FUNCTIONS

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<tr>
<th>Culinary</th>
<th>Creative</th>
<th>Cultural</th>
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<td>Kitchen lab</td>
<td>Shop</td>
<td>Foyer</td>
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<tr>
<td>Cooking class &amp; offices</td>
<td>Offices</td>
<td>Offices</td>
</tr>
<tr>
<td>Cooking storage</td>
<td>Workshop</td>
<td>Storage</td>
</tr>
<tr>
<td>Bar</td>
<td>Exhibitions</td>
<td>Exhibitions</td>
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<tr>
<td>Kitchen</td>
<td>Bike shop (existing function)</td>
<td>Shop</td>
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<tr>
<td>Restaurant</td>
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<td>Workspaces</td>
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<tr>
<td>Market</td>
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<td>Cafe</td>
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</table>
# BRIEF - ATMOSPHERES

<table>
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<tr>
<th>Culinary LEARNING SEQUENCE</th>
<th>Creative EXPRESSIVE SEQUENCE</th>
<th>Cultural EMIGRATION SEQUENCE</th>
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</thead>
<tbody>
<tr>
<td>Learning</td>
<td>Learning</td>
<td>Home</td>
</tr>
<tr>
<td>Shopping</td>
<td>Relaxing</td>
<td>Novel</td>
</tr>
<tr>
<td>Enjoying</td>
<td>Expressing</td>
<td>Trip</td>
</tr>
<tr>
<td></td>
<td>Inspiring</td>
<td>Arriving</td>
</tr>
</tbody>
</table>

- **Warm**
  - Natural
  - Soft
  - Cozy

- **Clean**
  - Heavy
  - Inspiring

- **Intense**
  - Hard
  - Cold
  - Mechanic
ADAPTABILITY

ANALYSIS

RESEARCH & BRIEF

DESIGN & INTERVENTION

Cultural

ADAPTABILITY

Site
100 years
Structure
50 years
Installation
30 years
Skin
20 years
Space plan
10 years
Stuff
5 years
ADAPTABILITY
What is the capacity of Fenix II to transform into a cultural, culinary and creative hotspot among the harbour warehouse buildings of Rotterdam?

What is the significance of an open, multifunctional space for the adaptive reuse of the Fenix II as a cultural, culinary and creative urban hotspot?
HOLISTIC APPROACH

PHYSICAL
- Comfort
- Ergonomics
- Security
- Durability

MENTAL
- Spatial Experience
- Aesthetics
- Stimulation
- Honesty

EMOTIONAL
- Balance
- Expression
- Freedom
- Growth

SPIRITUAL
- Relation
- Contact
- Knowledge
- Understanding
DESIGN & INTERVENTION
URBAN CHARACTER

OLD

NEW

COMMERCIAL

RESIDENTIAL

INTERNATIONAL

LOCAL

Urban characters

Urban route
URBAN DURABILITY

Fenix I

Fenix II

Provimi

Connection
Story
Public
CONNECTIONS TO SURROUNDINGS

- Provimi
- Port
- Deliplein
- Fenix I
CONNECTIONS TO SURROUNDINGS - PORT

Quay

Light
CONNECTIONS TO SURROUNDINGS - DELIPLEIN
CONNECTIONS TO SURROUNDINGS - FENIX SQUARE

High speed

Turn

Bike connection

Height difference

Levels

New square

Permeability

Levels

Capture

Water
CONNECTIONS TO SURROUNDINGS - FENIX SQUARE
FENIX SQUARE
FENIX II FUNCTIONS

Cooking workshop
Art workshop
Museum offices
Museum Exhibition
Museum Auditorium
Museum Shop
Bar
Art Exhibition
Cooking classes

1st Floor
FENIX II - FUTURE FUNCTIONS

San Francisco Museum - Adaptability
INTERVENTION

- Exterior
  - Exterior facades
- Interior
  - Space principles
  - Intermediate zones
  - Interior facades
  - Elevated floors
  - Climate design
  - Atrium
- Exterior
  - Roof
Retraining frames and replacing glass with monument glass.

Covering up exposed reinforcement for protection.

Restoring the exterior of the facade with new render.

Reconditioning
EXTERIOR FACADES

East facade

Reconditioning details
SPACE PRINCIPLES

Change of focus

Vertical

Horizontal
SPACE PRINCIPLES

Interior Design

Transparency

Form
SPACE PRINCIPLES

Human Scale

Modularity

Dimensions
SPACE PRINCIPLES

Connections

Zoning

Circulation
INTERMEDIATE ZONES

- Plinth
- Edge strip with closed cells
- Concrete with floor heating pipes 50mm impregnated with liquid-tight and colour agents
- Reinforced Concrete (structural floor) 100mm
- EPS Insulation 120mm
- Water Vapour Barrier
- Sand layer

Pavement
INTERIOR FACADES

Projection

Structure

Composition
INTERIOR FACADES STRUCTURE

Structure

Materialisation

Perforated sound diffusing panels

Accoustic Panels with sound absorbing material

Transparent Coloured Tinted Acrylic Plexiglas
INTERIOR FACADES
INTERIOR FACADES

Rhythm & Articulation
INTERIOR LANDSCAPE

Height difference
ELEVATED FLOORS CONCEPT

- Finish Flooring
- Floor Heating
- Structural Floor
- Elevated Floor
- Renovated

climate regulation
Demountable
Adaptable finishing

Plateus
ELEVATED FLOORS PRINCIPLE

Floor frames principle

Floor elements span direction

Lignatur floor elements
ELEVATED FLOOR SYSTEM

Finish Flooring

Fermacel floor plates

Vasco floor heating insulation plates

Lignatur Box element (LKE) 120mm

Laminate (finishing)
CLIMATE DESIGN PRINCIPLE
INSULATION

- EPS 120mm Rc = 3,6
- Double glas Rc = 2,8
Air treatment units with heat recovery
CLIMATE DESIGN - ENERGY

Energy winter

Energy summer

3500 - 3000 W/h

15-20 °C

3-6 °C

4-8 °C
CLIMATE DESIGN - WINTER SITUATION

Ventilation

Floor heating
CLIMATE DESIGN - SUMMER SITUATION

Ventilation

Floor cooling
CLIMATE DESIGN SYSTEMS

Ventilation grilles

Floor heating

Infared panels
Connection from Deliplein to Fenix II
Connection from Fenix II to quay
ATRIUM

Connection to natural elements

Opening up

Neighbourhood

City
ATRIUM
ATRIUM - GREEN WALLS

- Exterior finish
- Insulation
- Ventilation ducts
- Water pipes and electric cables
- Steel structure
- Drip system
- Growth wall
PV cells integrated in the glass roof
ATRIUM - GUTTER DETAIL

- Steel L-profiles
- Secondary support lattice girder
- Gutter
- Plywood support for gutter
- Purlin
GREEN ROOF

Urban garden

Sedum dak

City tradition

Energy

Water management
Substrate >120mm
Filter fabric
Drainage layer
Moisture retention layer
EPS 120mm insulation
Vapour barrier
Existing roof
GREEN ROOF

1. Planting
2. Substrate
3. Root barrier
4. Drainage
5. Water barrier
6. Insulation
7. Existing roof

Height

EXTENSIVE GREEN ROOF
Height: 6 - 20 cm
Weight: 60 - 150 kg/m²
Vegetation: mosses, sedums, herbs and grasses

SEMI-INTENSIVE GREEN ROOF
Height: 12 - 25 cm
Weight: 120 - 200 kg/m²
Vegetation: grasses, herbs and shrubs

INTENSIVE GREEN ROOF
Height: 15 cm > 1m
Weight: 180 - 500 kg/m²
Vegetation: lawn, perennials, shrubs and small trees
GREEN ROOF

Substrate 80mm
Filter fabric
Drainage layer
Moisture retention layer
EPS 50mm slope insulation
Vapour barrier
Existing roof

Roof edge detail

Enhanced performance
ATRIUM - PUBLIC CHARACTER
INTERIOR DESIGN
# Interior Atmospheres

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<td><strong>EXPRESSIVE SEQUENCE</strong></td>
<td><strong>EMIGRATION SEQUENCE</strong></td>
</tr>
<tr>
<td>Warm</td>
<td>Clean</td>
<td>Intense</td>
</tr>
<tr>
<td>Natural</td>
<td>Fine</td>
<td>Hard</td>
</tr>
<tr>
<td>Soft</td>
<td>Heavy</td>
<td>Cold</td>
</tr>
<tr>
<td>Cozy</td>
<td>Inspiring</td>
<td>Mechanic</td>
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**Warm**

**Cold**
MATERIALISATION & INFILL

CULINARY

TRANSPARENT

BLACK WASH

WHITE WASH

CULTURAL

CREATIVE

Wood

Polycarbonate

Metal
MATERIALISATION & EXPERIENCE

Quite - Intense

Warm - Cold

Bright - Dark
CULINARY FUNCTIONS

Restaurant
CULINARY FUNCTIONS

Cooking offices
CULINARY FUNCTIONS

Bar
CULINARY FUNCTIONS

Cooking class

Intermediate zone

Restaurant
CREATIVE FUNCTIONS

Creative offices
CREATIVE FUNCTIONS

Art exhibition
CREATIVE FUNCTIONS

Art shop
CULTURAL FUNCTIONS

Museum entrance
CULTURAL FUNCTIONS

Museum interior
CULTURAL FUNCTIONS

Cafe
Height difference
• 2700 Kelvin (extra warm white) --> restaurant, cafe
• 3000 Kelvin (warm white) --> intermediate zones, museum entrance
• 4000 Kelvin (neutral white) --> shops, offices
• 6400 Kelvin (cold/ daylight white) --> exhibitions, workshops, classrooms
LIGHTING FIXTURES

Restaurant

Office museum

Exhibitions - Shops

Culinary workshop

Artistic Offices

Atrium
HOLISTIC APPROACH

PHYSICAL
- Comfort
- Ergonomy
- Security
- Durability

MENTAL
- Spatial Experience
- Aesthetics
- Stimulation
- Honesty

EMOTIONAL
- Balance
- Expression
- Freedom
- Growth

SPIRITUAL
- Relation
- Contact
- Knowledge
- Understanding
ADDITIONAL DRAWINGS
FLOOR PLANS
SECTIONS
ELEVATIONS
East Facade
North facade
South facade