Exposing Campus South

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“Exposing Campus South”
Location Hembrug

Stelling van Amsterdam

Location Hembrug within the SvA
Location Campus South
Exposing campus south
Development of Campus South

1909

1924

1941

2020
Buildings on Campus South

1. Ketelcentrale
2. Overslagloods
3. Harderij
4. Carbidgebouw
5. Waslokaal
6. Lorriegarage
Harderij

240.9 m²
155.3

188.8 m²
155.1

115.3 m²
155.2

115.3 m²

Harderij
Ketelcentrale
“What contributes to the inviting composition of Campus South, and how did this contemporary composition come into existence?”
“building plots on a ‘carpet’ of grass with trees...”
Visiting experience

Harderij interior

Ketelcentrale interior

Functional essence

Steam pipe axis
“Until which lengths are the existing characteristics and atmosphere leading in the design, and what do we maintain, renew or restore to create an ideal and future-proof environment that suits the new use?”

| Preservation: existing textures of structures leading for future - preserve what makes the character - only demolish if necessary for proper future usage |
| Restoration: appreciation of existing - repair and cleaning |
| Renovation: upgrading to present-day & future standards |
| Intervention: inspired on the existing - yet identifiable as a new part of the total structure |
| Permanent: groundwork for future adaptations - ensuring that the building can suit a communal program |
| Temporary: demountable, adaptable to future changes |
| Redesign: reacting respectfully on the existing, creates a new urban layout needed for the new program |
**Sustainability**

- **Ketelcentrale**
  - Heat from PVT
  - Gray water collection and reuse
  - Insulated cavity, roof and floor
  - Secondary window layer
  - Demountable interior structure
  - Zoning in floor heating/cooling
  - Mechanical ventilation with heat exchange

- **Harderij**
  - Heat from PVT and kitchens
  - Gray water collection and reuse
  - Insulated cavity, roof and floor
  - Secondary window layer
  - Demountable interior structure
  - Zoning in floor heating/cooling
  - Mechanical ventilation with heat exchange
Collaboration in program

Harderij

8:00

meeting

lunch

meeting

18:00
dinner

00:00

beer night

Ketelcentrale

8:00

work / study

work / study

22:00

work / study
Demolished
Added
Site

- lost railway track
- middenweg
- main axis
- Site
- brick facade
- multifaceted
- vertically arranged
- functional rectangular floorplan
- varying roof landscape
- big volumes with a max. building height of 12m
location Campus South

“the Station of Hembrug”
Entrance
Interventions
Southern facade

Existing

New
Western facade

existing

new
Northern facade

existing

new
Eastern facade

existing

new
Tripletion emphasized

existing

new
Tripletion emphasized
Ceiling material

Fundación Botín - SOURCE: https://urbannext.net/botin-foundation/
First floor
Foodmarket entresol
Demountable frame and floors
- Wooden floor finish
- Fermacel foam plate with floor heating (48mm)
- Underlayment (18mm)

- Concrete floor (160mm)
- Equalization layer (±50mm)
- Insulation (30mm)
- Concrete floor finish with floor heating (50mm)

- Aerated concrete
Where light meets the wall

detail J

- Lead strip inserted in brick wall

- L-profile (75.75.8)
Roof of the bar

- skylights
- zinc roof finish
- insulation
- pre-fabricated panels
- main frame
- white ceiling finish
Materials & colors existing

Materials & colors interventions

“The interventions are inspired by the existing in color, materiality, and finishing. Yet presenting themselves as clear new additions in the timeline of the building.”
Ventilation ducts

Ground floor

First floor
Foodstalls

850  900  1750

serving zone  cooking zone

exhaust
cooking zone
kitchen

serving zone
service desk
Essence of services, Twentsche foodhallen

Services visible
Floor heating zoning

Ground floor

First floor
the Ketelcentrale
Interventions
Southern facade

existing

new
Eastern facade

existing

new
Curtain wall
Solar study

Hor. cross-section

Thermobel TG Stopray triple glas
Connection to existing facade

- Outer brick wall (100mm)
- Insulation (50mm)
- Inner brick wall (100mm)
- Plaster (10mm)

- High efficiency insulation
- Alu strip

- Alu curtain wall with connection bolt welded on steel frame (triple glazed)

- Adjustment space

- HEB 220

- Metaglas energy secondary window layer (double glazed)
Connection to existing floor

- Concrete floor (160mm)
- Insulation (30mm)
- Concrete floor finish with floor heating (50mm)

- Alu curtain wall with connection bolt welded on steel frame (triple glazed)

- Plaster (10mm)
- Moist resistant layer
- Gypsum plate (20mm)
- Insulation (100mm)
- Gypsum plate (20mm)
- Water resistant layer

- Concrete floor with slope

Outside

Inside

- Concrete floor (160mm)
- Insulation (30mm)
- Concrete floor finish with floor heating (50mm)
Cutting the truss

- L-profile welded on roof truss
- Thermobreak
- Connecting head plate welded on roof truss
- Existing roof truss
- Concrete roofing plate (50mm)
- Sloping insulation
- Waterproof sheet (20mm)
- Water resistant layer
- Plaster (6mm)
- Sandwich panel (6-100-6)
- Alu strip
- Stone strips (20mm)
- Alu curtain wall with connection bolt welded on steel frame (triple glazed)
- HEB 220
- Outside
- Inside
- Sloping insulation
- Waterproof sheet (20mm)
- Water resistant layer
- Concrete roofing plate (50mm)
library

former function: center of knowledge

new function: portal to knowledge
Portal to knowledge

**education**

**art & culture**

**reading & literature**

**meeting, debate**

School 7, Den Helder

LocHal, Tilburg

Library Deventer, Deventer

Bibliotheek / Van Abbemuseum, Eindhoven
Functions and space needed

- Learn from technology
- Exhibiting local art works
- Workshops / Presentations
- Gather and debate
- Work and study
- Library
private working spaces

Exposition space
Media library
Library
Office
Conference room 1
Future tech

groups/communal working spaces

Reception

Interior

main axis
First floor

Conference room 2

Conference room 3
"The interventions are inspired by the existing in color, materiality, and finishing. Yet presenting themselves as clear new additions in the timeline of the building."
Services visible

SOURCE: https://www.seats2meetilburgspoorzone.nl
Ventilation ducts
Floor heating zoning
reflection
thank you.
Gutter

- Water resistant layer
- Waterproof sheet (20mm)
- Insulation (110mm)
- Moist resistant sheet / white finish (20mm)

Zinc gutter

- Plaster (10mm)
- Brick wall (160mm)
- Insulation (80mm)
- Brick wall (100mm)
Seperation wall connection