Spangen Quarter

Justus van Effencomplex

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Overview
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Overview

Architect: Michiel Brinkman
Location: Rotterdam, The Netherlands
Date: 1919 - 1921
Building Type: Multi-Family Housing
Construction System: Load bearing masonry and precast concrete
Context: Urban
Style: Modern
Site Plan

3. Ground-floor plan
1: Entrance to courtyard
2: Stairs to upper floors
3: Private gardens
4: Shared gardens and playground

Drawing Scale: 1:1000
Floor Plans

1. Third-floor plan
2. Second-floor plan
3. First-floor plan
4. Ground-floor plan

1. Entrance/hall
2. Kitchen
3. Storage
4. Living room
5. Bedroom
6. Balcony
7. Access balcony
8. Loggia
Exploded Perspective
Elevations
Elevations
Sections
Socialist Government
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Followed the introduction of suffrage
Socialist Government

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New Housing Department under the socialist government; run by August Plane
Socialist Government

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New Housing Department under the socialist government; run by August Plane

Spangen Quarter- the first project developed under the new housing department
Rotterdam
Rotterdam

Spangen Housing District
Rotterdam

Many socio-economically deprived neighbourhoods
Rotterdam

Many socio-economically deprived neighbourhoods
Historically poor area
Rotterdam

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Historically poor area
Many immigrants
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Many immigrants
Spangen Quarter is on the northwest fringe of the city
The Residents
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Near a harbour; labour workers
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First residents were carefully chosen to live in the project due to it’s “radical form and social intent”
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- family stability
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- progressiveness
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                                  - political affiliation
                                  - family stability
                                  - progressiveness

Presently a low cost residency
The Building
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Two blocks on the Spangen poldor
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Two blocks on the Spangen poldor
Residential four storey apartment complex
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264 apartments
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Perimeter and central units that form two interior courtyards
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Perimeter and central units that form two interior courtyards
Uniform blocks opposed to a picturesque urban landscape
Access
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Access to the dwellings made from the semi-private courtyards
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The first and second levels are accessible directly from the ground
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Access to upper units granted by the shared gallery space on the third floor
Climate Zone
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Lighting and Solar Access
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The courtyards promote air flow between the unit blocks.
Solar Shading
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Use of overhanging gallery to shade lower level apartments
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Trees and other greenery used as passive shading devices
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Use of concrete and masonry creates and excellent thermal mass for the building
Privacy
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Dense configurations of perimeter enclosure with vault entries
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Central shared bathhouse
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Back of building turned to street creating the sense of a miniature city within the complex
Community Spaces
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Two Green Courtyards
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‘Above the Street’; a gallery space that borders the front of the upstairs apartments that varies from 2.3 to 3.3m wide run over 1000 meters
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Central bath house
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Central bath house

The enclosed community space allows children to have outdoor activities under neighbour’s surveillance
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The low quality window frames also caused the appearance of the building to look shabby
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In 2012, the restoration of the Spangen Quarter provided better insulation and heating systems to meet current living conditions. It currently requires minimal energy consumption and is now resource-efficient in terms of limiting the waste of environmental resources. The original aesthetics and integration of private and common spaces remains untouched thus strengthening the heritage of Dutch architecture.
Bibliography

- Rob Dettingmeijer, The Fight for a Well Built City, (Delft 1982), 28-29