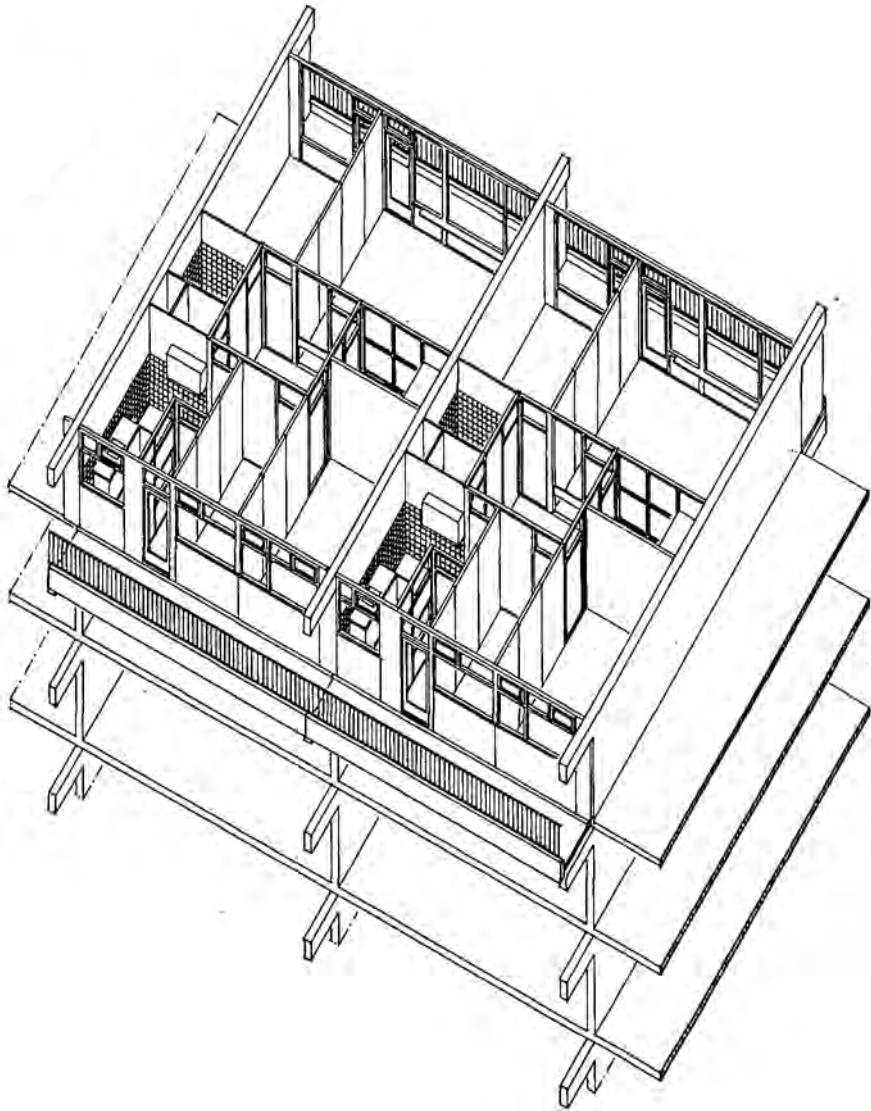


Heritage >

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Building Technology



Redesign the Facade

In this workshop students make a redesign for the facade of existing apartments, based on the redesigned floor plans of the first workshop 'Heritage meets Dwelling'. Students study the many functions of the facade, its limits and opportunities, to make an integral design and to develop a vision on what a good facade-zone should do for living quality in all its aspects.

Design rules are:

- Redesigned floor plan is the starting point
- New facade design should improve the total quality and functioning of the dwelling
- New facade should support (and improve) the conceptual idea of the redesign

All new facade designs should address the following aspects:

- Energy efficiency
- Use and functions of facade and rooms
- Spatial quality
- Outdoor space
- Daylight
- Construction possibilities
- Aesthetic expression
- Heritage value and image

Possible strategies are improving the existing facade, replacing by a new facade or adding extra layers. Developing concepts for facades renovation addresses the very relevant theme of energy performance and sustainability.

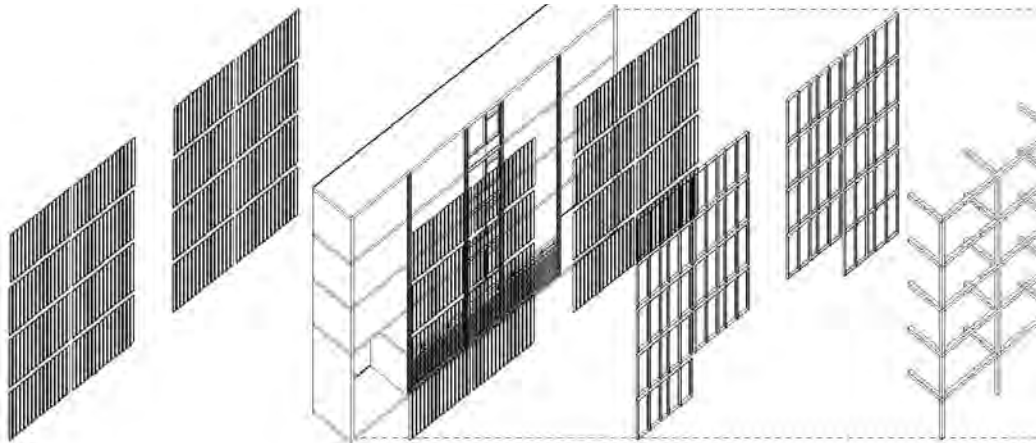
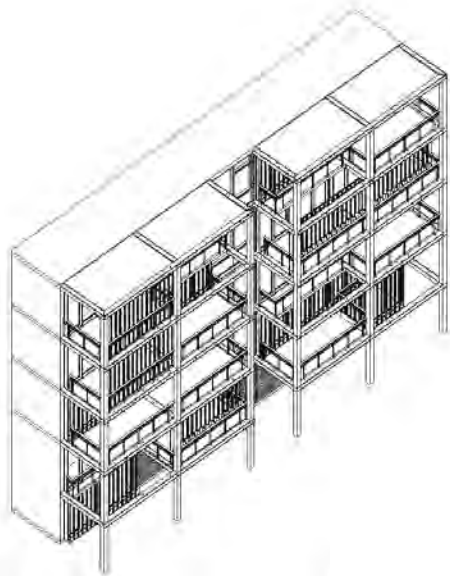
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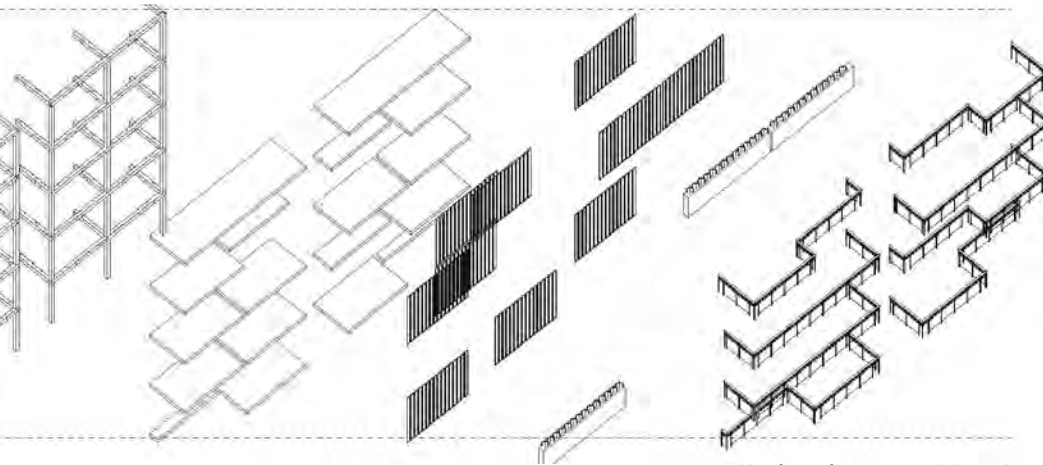
Rick Hoofd

Ruben van den Boom

Aims for our design:

1. Eliminating visual barriers between front and back by deleting interior separation walls
2. Bring natural daylight to the living space by creating voids
3. Connecting garden with interior by extended balconies with planters





Assembly of: new facade: internal thermal screen, old structure, personalized curtain, new glazing, new external structure, extended balcony space, screen, planters, railing

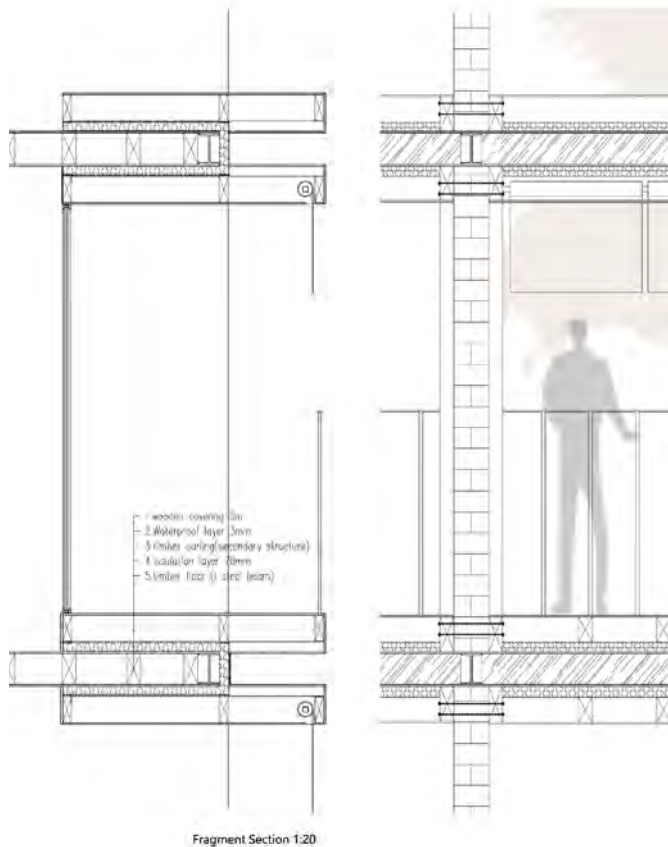
Algemeen Belang

Yonghui Huang

Chi Teng

Yuan Chen

The façade-design expresses the different floor plans, creating variance of the skin while keeping the original rhythm of symmetry. Fragments, including boxing windows and balconies, strengthen connections between inside and outside. Landings are extended as a communication space, making full use of the feeling of transparency and openness in the glazed stairwell. Another ambition of the skin is to achieve better energy efficiency and better indoor climate.



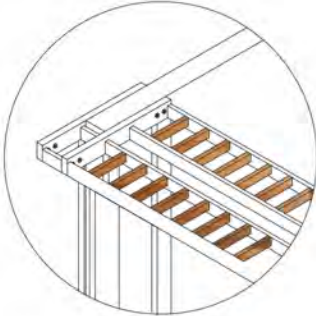
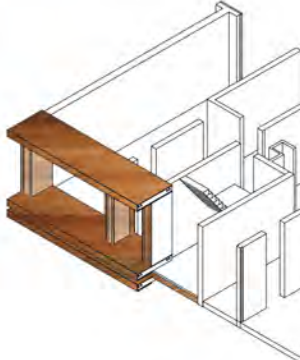
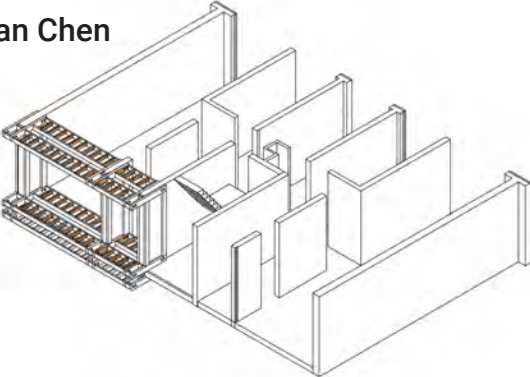


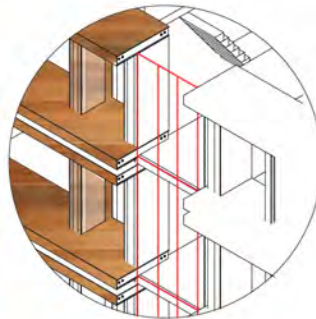
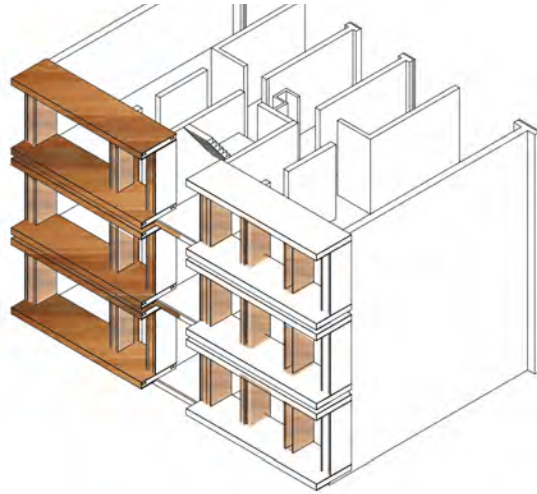
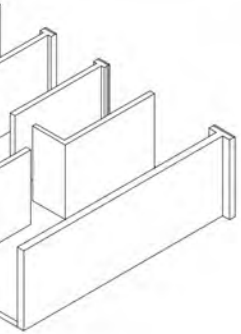
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Construction process:

- 1: remove existing wall*
- 2: attach wooden beams to masonry load bearing wall*
- 3: supporting beams*
- 4: add purlins*
- 5: wooden exterior cover*
- 6: renovation of existing staircase window frame, adding double glazing*

Algemeen Belang

Andrea Gentilini

Jeroen Haers

Observations:

1. Courtyard is a big quality but not usable for everyone
2. Poor thermal comfort
3. Privacy issue in transition private to public space

Design solutions:

1. Bring the green up to enlarge and improve living space
2. New insulating skin as an extension towards courtyard creates more thermal comfort and extra space
3. Extended green facade creates a gradual transition from private to public space.

