Main conclusion technical research

Design research

Form

Strong orthogonal lines in existing facade

Addition in line with existing system

A simple but strong shape is added to form a new whole, but with a new material, wood.

- New function, balconies needed
- Possible orthogonal layout of balconies
- Creating a calmer order
- Assesses the bulkiness of balconies by cutting corners

Balcony layout

Apartment layout

Strong orientation to south - northside dwellings get less sun

Creating deep apartments on southside - wide apartments on northside

Impression - surroundings

Added layers

Tjerk ten Doeschate | 1513516 | AE studio | P4 presentation
Section - 1:200 - climate system

- PVT panels
- Balanced ventilation w/ heat recovery
- FIWihex in greenhouse low temp. floor heating
- CHP distribution
- Seasonal heat storage

Section - 1:100 - transformation changes

- Parapet locally removed for walking bridges
- Installations room moved one story up for walkway
- Concrete facade partially cut away for balconies
- Little greenhouse balconies w/ operable windows
- Fresh air vents in raised floor. Extract air through lowered ceiling hallway and bathroom
- New timber construction fastened to existing parapet
- New wooden window-frame & additional insulation
- Access to all building parts by new walking bridges

Tjerk ten Doeschate | 1513516 | AE studio | P4 presentation
Plans | Rooftop floor 1:200
aluminium facade system - 50mm wide

Timber girder

Stabilisation steel rod

Drainage through greenhouse facade