DE WOON-MAKER
A Building for Makers: Workshop and Residence.

SET OF DRAWINGS

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CONCEPTUAL DIAGRAMS

Public Plinth

Urban Block and Surrounding

Access from all sides + Makerspace in the centre

Collective Makerspace & Public Courtyard
CONCEPTUAL DIAGRAMS

Circulation

Apartment Block on top of the public plinth

Efficient access by cutting out the volume and adding a gallery

Small bay widths allow efficient units

Private / Living
FLOOR PLANS

Basement

scale 1.250

70 individual storage units ca. 5 m²

technical inst. ca. 37 m²

machine room

storage ca. 18 m²

storage

storage

storage

storage

technical inst. ca. 80 m²

machine room

machine room

bike stalling for ca. 300 bikes

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ELEVATIONS

West and South

scale 1.250
ELEVATIONS

Inside of the Courtyard

scale 1.250
APARTMENT TYPES

Distribution

Type A: 62x  Type C: 16x  Maisonette: 7x  Shared Apartment: 12x  Shared Maisonette: 2x
Type B: 26x  Type D: 16x

Total number of apartments: 152
APARTMENT TYPES

Type A

38 m²
+ 5.2 m² balcony
1-2 people
1.5 rooms

scale 1.50
APARTMENT TYPES

Type B

79 m²
+ 11 m² balcony
2-4 people
4 rooms

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APARTMENT TYPES

**Type C/D**

- **Type C**: 58.5 m²
  - + 5.2 m² balcony
  - 2-3 people
  - 3 rooms

- **Type D**: 58.5 m²
  - + 11 m² balcony
  - 2-3 people
  - 3 rooms
APARTMENT TYPES

Maisonette

76 m²
+ 10,4 m² balcony
2-4 people
4 rooms

scale 1.50
APARTMENT TYPES

Shared Apartment

- 95.2 m²
- + 13.5 m² balcony
- 4 people
- 5 rooms
- 4 ind. rooms of 14 m²

Collective workshop

Additional work space

+ to rent temporarily

+ included in collective

+ flexible room

+ access to

Individual workshop

Collective housing for temporary rent

Individual apartments of several sizes

"Desk" work space
APARTMENT TYPES

183.4 m²
+ 27 m² balcony
8 people
9.5 rooms
8 ind. rooms of 14 m²

scale 1.75

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APARTMENT TYPES

Room in shared apartment - Day time

Room in shared apartment - Night time

Shared Maisonette

Type A
CONSTRUCTION

Concrete base for the workshops created an industrial atmosphere and lifts the dwellings above the ground.

Prefabricated CLT-elements on top for a warm living atmosphere and a reference to the making theme in the material itself.
CONSTRUCTION

Concrete construction

Wood construction

Load-bearing structure
CLIMATE DESIGN

LIVING

summer sun

winter sun

under floor heating

ventilation unit on the roof using heat recovery

rain water collection

 triple glazing

load-bearing structure in wood

fresh air

natural cross-ventilation

exhaust ventilation

MAKING

green roof

fresh air in

stale air out

green roof

WORKSHOPS

machines

air in

air source heat pump with heat recovery

machines

air out

rain water collection

sewage system

air to water heat pump uses heat from machines
Overview: Section and Elevation

scale 1:100
1:20 Floor plan fragment of the attachment of the gallery

Mounting in the prefabricated element

Steel T-beam as bearing for gallery

CLT wall element, 150 mm
Insulation layer, 180 mm (with timber beams as subconstruction for facade)
Wood fibreboard, 15 mm
Waterproofing
Counterbatten
Battens from European Larch

Prefabricated composite timber-concrete slab
T-beam as bearing
DETAILS

Loggia

scale 1.5

Wood plank, European Larch
Steel beam
Waterproofing, 2nd layer
Sloping insulation
Waterproofing, 1st layer
CLT-element, 150 mm
European Larch latch

Floor covering, 10 mm
Prefabricated floor screed element, 45 mm
Heat conductive panel sheet
Underfloor heating, dry system element, 40 mm
Cover plate for load distribution, 15 mm
Additional mass, 45 mm
Trickle protection
Load-bearing structure: CLT, 150 mm
DETAILS

Transition from concrete to wood

Prefabricated concrete slab, 150 mm
Waterproofing
Insulation, 130 mm
Fixation of stick system facade, steel bracket
Concrete beam, 260 mm