The Marinepassage

a case study project for circular design & material usage strategies in architecture

Jelmer Amory  |  4209710
Architectural Engineering Graduation |  P5

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Roel van de Pas  |  architecture tutor
Pieter Stoutjesdijk  |  research tutor
Engbert van der Zaag  |  building technology tutor
Frits van Loon  |  examiner
plans
elevations
sections
Fragment South Facade
details
Vertical Details South Facade

FACADE COMPONENT (5400x2700mm):
- 0.8mm zinc cladding
- 20mm PureGlue plywood
- Air cavity
- Water barrier
- 130mm sheep wool (Rc=4.5)
- 180x100mm ‘vuren’ wooden beams
- Vapor barrier
- 20mm PureGlue plywood

RAISED FLOOR SYSTEM (500mm):
- 220mm existing in situ concrete floor
- 270mm prefab concrete floorslab patches
- 460x75mm slotted wooden beams
- (450mm grid)
- 130mm hemp insulation boards (Rc=3.5)
- 440mm air cavity
- 2x 20mm PureGlue plywood flooring
- (1350x450mm grid)
- Aluminium spacers

ROOF COMPONENT (2700x2700mm):
- Water barrier
- 20mm PureGlue plywood
- Air cavity
- Water barrier
- 250mm sheep wool (Rc=6.0)
- 300x100mm ‘vuren’ wooden beams
- Vapor barrier
- 20mm PureGlue plywood

PURLIN (5400mm; 2700mm grid):
- 300x100mm wooden beam
- Extended dowel connections

SOLAR PANELS:
- 1650x1000mm PV cell panels
- Adjustable mounting
Vertical Details West Facade

- **Rooftop Finish:**
  - 50mm ThermoWood timber cladding
  - 50mm ThermoWood slats
  - Stainless steel brackets

- **Structural Beam (27m; 5400mm grid):**
  - 750-1500x250mm dowel laminated timber (DLT)
  - Hardwood dowels
  - Steel pull rod stability crosses

- **Curtain Wall Panels (3000x2700mm):**
  - 195x85mm insulated aluminium mullions
  - HR++ glazing

- **Roof Component (2700x2700mm):**
  - Water barrier
  - 20mm PureGlue plywood
  - Air cavity
  - Water barrier
  - 250mm sheep wool (Rc=6.0)
  - 300x100mm ‘vuren’ wooden beams
  - Vapour barrier
  - 20mm PureGlue plywood

- **Solar Panels:**
  - 1650x1000mm PV cell panels
  - Adjustable mounting
suspended facade column (9m; 270mm grid)
300x150 wooden beam
bolted stainless steel facade connections

facade component (5400x2700mm):
0.8mm zinc cladding
20mm PureGlue plywood
air cavity
water barrier
130mm sheep wool (Rc=4.5)
180x100mm 'vuren' wooden beams
vapour barrier
20mm PureGlue plywood

facade corner element:
50mm ThermoWood timber cladding
50mm ThermoWood slats
stainless steel hinges

structural column (9m; 5400mm grid):
750x250mm dowel laminated timber (DLT)
hardwood dowels
steel pull rod stability crosses

curtain wall panels (3000x2700mm):
195x85mm insulated aluminium mullions
HR++ glazing