PRINSES JULIANAKAZERNE
The transformation of a closed off barrack into an open, public health & vitality centre as a new meeting point of the neighbourhood.
Floor plan ground floor in situation 1:500
01 The design

Floor plan first floor
1:500

Cross section
1:500

01   The design
01 Indoor Street

01.01 Cross section 1:100
Horizontal Window Detail
1:10

1. outer cavity leaf, 90mm
   M50 brick 190x90x40mm
2. cavity wall insulation, 70mm
   HR thermo pearls EPS
3. inner cavity leaf, 210mm
   Waalformat brick 210x100x50mm
4. wooden window frame, existing
5. insulation 50mm
   Kingspan Kooltherm
   0,020 W/m.K
6. insulating HR++ glass, 36mm
7. plasterboard 12,5mm
8. stucco 10mm
01 Indoor Street

01.03 Vertical Detail Ground Floor
1:10

1 insulating HR++ glass, 36mm
2 wooden window frame, existing
3 outer cavity leaf, 90mm
4 cavity wall insulation, 70mm
5 HR thermo pearls EPS
6 inner cavity leaf, 210mm
7 Waalformaat brick 210x100x50mm
8 insulation 50mm
9 Kingspan Kooltherm 0,020 W/m.K
10 plasterboard, 12,5mm
11 stucco, 10mm
12 tiles, 10mm
13 Mosa Solids 5110MR
14 screed, 40mm
15 BBB hollow system concrete floor, 210mm
16 insulation, 150mm
17 insulation, 100mm
01.04 Vertical Detail First Floor

1. insulating HR++ glass, 36mm
2. wooden window frame, existing
3. outer cavity leaf, 90mm
   M50 brick 190x90x40mm
4. soldier course
5. cavity wall insulation, 70mm
   HR thermo pearls EPS
6. inner cavity leaf, 210mm
   Waalformaat brick 210x100x50mm
7. insulation 50mm
   Kingspan Kooltherm 0,020 W/m.K
8. plasterboard, 12,5mm
9. stucco, 10mm
10. linoleum decking, 2,5mm
    Armstrong Uni Walton LPX underflooring, 7,5mm
11. screed, 40mm
12. BBB hollow system concrete floor, 210mm
13. free hanging acoustic insulating ceiling
    with vibration-free hangers
    plasterboard, 12,5mm
14. ventilation duct, Ø160
15. vent,
    Ducoklep 15 ‘ZR’
16. LED lighting strip
17. lowered ceiling, 2x15mm
    fire resisting plasterboard
18. stucco, 10mm
1 linoleum, 2,5mm Armstrong, Uni Walton underflooring, 7,5mm
2 screed, 40mm
3 B88 hollow system concrete floor, 210mm
4 free hanging acoustic insulating ceiling with vibration-free hangers plasterboard, 12,5mm
5 ventilation duct, Ø160
6 lowered ceiling, 2x15mm fire resisting plasterboard
7 stucco, 10mm
8 wooden handrail
9 balustrade, laminated tempered glass fixation glass balustrade, extruded aluminium Storax TL30 with top cover plasterboard
10 load baring wall Waalformat brick 210x100x50mm
11 steel beam HEA 300
12 ceiling rail sliding door system Rimadesio Siparium Libro
13 LED armature
01.06 Vertical Detail Second Floor

1. Insulating HR++ glass, 36mm
2. Wooden window frame, existing
3. Nature stone cornice
4. Brick facade, 90mm M50 brick 190x90x40mm
5. Rollack course
6. Situ concrete
7. Limestone, 180mm
8. Insulation, 50mm Kingspan Kooltherm 0,020 W/m.K
9. Plasterboard, 12,5mm
10. Linoleum decking, 2,5mm Armstrong Uni Walton LPX underflooring, 7,5mm
11. Insulation, 20mm Optimi vacuum insulation 0,005 W/m.K
12. Screed, 40mm
13. BBB hollow system concrete floor, 210mm
14. Insulation 50mm, Kingspan Kooltherm 0,020 W/m.K
15. Free hanging acoustic insulating ceiling with vibration-free hangers plasterboard, 12,5mm
16. Ventilation duct, Ø160
17. Lowered ceiling, 2x15mm fire resisting plasterboard
18. Stucco, 10mm
02.01
Horizontal Window Detail Second Floor
1:10

1. wooden paneling, 20mm
2. stucco, 10mm
3. wooden window frame, existing
4. insulation, 330mm
   Kingspan Kooltherm 0.020 W/m.K
5. wooden window frame, existing
6. insulation, 50mm
   Kingspan Kooltherm 0.020 W/m.K
7. load barring hollow column
   Waalformaat brick 210x100x50mm
8. nature stone frame
9. wooden window frame, existing
10. insulating HR++ glass, 36mm

11. insulation, 50mm
   Kingspan Kooltherm 0.020 W/m.K
12. outer cavity leaf, 90mm
   M50 brick 190x90x40mm
13. nature stone frame
02.02
Vertical Window Detail Ground Floor
1:10

1 insulating HR++ glass, 36mm
2 wooden window frame, existing
3 nature stone window still
4 outer cavity leaf, 90mm
   M50 brick 190x90x40mm
5 nature stone facade band
6 cavity wall insulation, 70mm
   HR thermo pearls EPS
7 inner cavity leaf, 210mm
   Waalformat brick 210x100x50mm
8 insulation, 50mm
   Kingspan Kooltherm
   0.020 W/m.K
9 built in wooden bench
10 oak wooden parquette flooring
11 BBB hollow system concrete floor,
   210mm
12 insulation, 150mm
13 situ concrete
14 insulation, 100mm
03  New Building
Horizontal Principle Detail
1:10

1. Insulating HR+++ glass, 44mm clear glazing
2. Aluminium curtain wall Schüco, FW50+
3. Facade column, 250x100mm Accoya wood
4. Insulating HR+++ glass, 44mm frosted glazing
5. Composed construction column, 120x340-100x295-120x340mm, Accoya wood
6. Insulating HR+++ glass, 44mm clear glazing
1 insulating HR+++ glass, 44mm clear glazing
2 composed construction column, 120x340-100x295-120x340mm, Accoya wood
3 aluminium curtain wall Schüco, FW50+
4 facade column, 250x100mm Accoya wood
5 insulating HR+++ glass, 44mm clear glazing
6 insulating HR+++ glass, 44mm clear glazing
7 insulating HR+++ glass, 44mm frosted glazing
Horizontal Outer Corner Detail

1:10

1. Insulating HR+++ glass, 44mm clear glazing
2. Aluminium curtain wall Schüco, FW50+
3. Facade column, 250x100mm Accoya wood
4. Insulating HR+++ glass, 44mm clear glazing
5. Insulating HR+++ glass, 44mm clear glazing
6. Insulating HR+++ glass, 44mm clear glazing
1 composed construction column, 120x340-100x295-120x340mm, Accoya wood
2 aluminium curtain wall Schüco, FW50+
3 insulating HR+++ glass, 44mm clear glazing
4 aluminium corner piece
5 insulating HR+++ glass, 44mm
Vertical Detail Ground Floor
1:10

1. slats, 50x50mm with 1/15 slope
Accoya wood, 100mm spacing
2. Insulation, 80mm
Kingspan Kooltherm 0.020 W/m.K
3. situ concrete
4. tiles, 600x600mm
5. damp barrier
6. insulation, 100mm
Kingspan Kooltherm 0.020 W/m.K
7. prefab concrete element
8. insulating HR+++ glass, 44mm
9. aluminium curtain wall
Schüco, FW50+
10. insulation, 270mm
Rockwool
11. situ concrete
12. linoleum decking, 2.5mm
Armstrong Uni Walton LPX
leveling underflooring, 7.5mm
13. screed with floor heating, 50mm
14. hollow-core beam floor, 330mm
03.06  
Vertical Detail First/Second floor
1:10

1 slats, 50x50mm with 1/15 slope Accoya wood, 100mm spacing
2 glued slats, 50x50mm with 1/15 slope Accoya wood
3 composite deck
4 damp barrier
5 construction floor element, Lingnatur 320
6 insulation, 270mm Rockwool
7 linoleum decking, 2,5mm Armstrong Uni Walton LPX
8 dry building floor heating, Uniwarm
9 construction floor element, Lingnatur 440 acoustic type 3.0
10 insulation, 40mm Rockwool
11 vent with heating strip, Duco ClimaTop 60
12 aluminium curtain wall Schüco, FW50+
13 insulating HR+++ glass, 44mm
1. roof edge, 50xXXmm with 1/15 slope, Accoya wood
2. glued slats, 50x50mm with 1/15 slope, Accoya wood
3. slats, 50x50mm with 1/15 slope, Accoya wood, 100mm spacing
4. solar collector tubes
5. two layers of bitumen roofing
6. insulation, 150mm with 1/15 slope
7. vapor barrier
8. construction floor element, Lingnatur 320
9. insulation, 270mm Rockwool
10. construction floor element, Lingnatur 320 acoustic type 3.0
11. insulation, 40mm Rockwool
12. vent with heating strip, Duco ClimaTop 60
13. aluminium curtain wall Schüco, FW50+
14. insulating HR+++ glass, 44mm
Swimming Pool
Horizontal Detail
1:10

1. Insulating HR+++ glass, 44mm frosted glazing
2. Aluminium curtain wall
   Schüco, FW50+
3. Facade column, 250x100mm
   Accoya wood
4. Facade lamella, 250x80mm
   Accoya wood
5. Insulating HR+++ glass, 44mm frosted glazing
6. Composed construction column,
   120x340-100x295-120x340mm,
   Accoya wood
7. Insulating HR+++ glass, 44mm frosted glazing
03.03  
Vertical Detail Ground Floor  
1:10  
1  glued slats, 50x50mm with 1/15 slope  
2  insulation, 80mm  
Kingspan Kooltherm 0,020 W/m.K  
3  situ concrete  
4  tiles, 600x600mm  
5  damp barrier  
6  insulation, 100mm  
Kingspan Kooltherm 0,020 W/m.K  
7  prefab concrete element  
8  insulating HR+++ glass, 44mm frosted glazing  
9  aluminium curtain wall  
Schüco, FW50+  
10  insulation, 270mm  
Rockwool  
11  stainless steel drain  
12  situ concrete  
13  tiles, 10mm  
14  screed with floor heating, 50mm  
15  filter for skimmer swimming pool
03.04 Vertical Detail First/Second Floor 1:10

1. slats, 50x50mm with 1/15 slope
   Accoya wood, 100mm spacing
2. glued slats, 50x50mm with 1/15 slope
   Accoya wood
3. composite deck
4. damp barrier
5. construction floor element, Lingnatur 320
6. insulation, 270mm Rockwool
7. linoleum decking, 2,5mm Armstrong Uni Walton LPX
6. leveling underflooring, 7,5mm
8. dry building floor heating, Uniwarm
   with insulating underfloor
9. vapour barrier
10. construction floor element, Lingnatur 440 acoustic type 3.0
11. insulation, 40mm Rockwool
12. aluminium curtain wall Schüco, FW50+
13. insulating HR+++ glass, 44mm frosted glazing
03.05 Vertical Detail Roof 1:10

1. roof edge, 50xXXmm with 1/15 slope
   Accoya wood
2. glued slats, 50x50mm with 1/15 slope
   Accoya wood
3. slats, 50x50mm with 1/15 slope
   Accoya wood, 100mm spacing
4. solar collector tubes
5. two layers of bitumen roofing
6. insulation, 150mm with 1/15 slope
7. vapor barrier
8. construction floor element, Lingnatur 320
9. insulation, 270mm Rockwool
10. construction floor element, Lingnatur 320 acoustic type 3.0
11. insulation, 40mm Rockwool
12. aluminium curtain wall Schüco, FW50+
13. insulating HR+++ glass, 44mm