

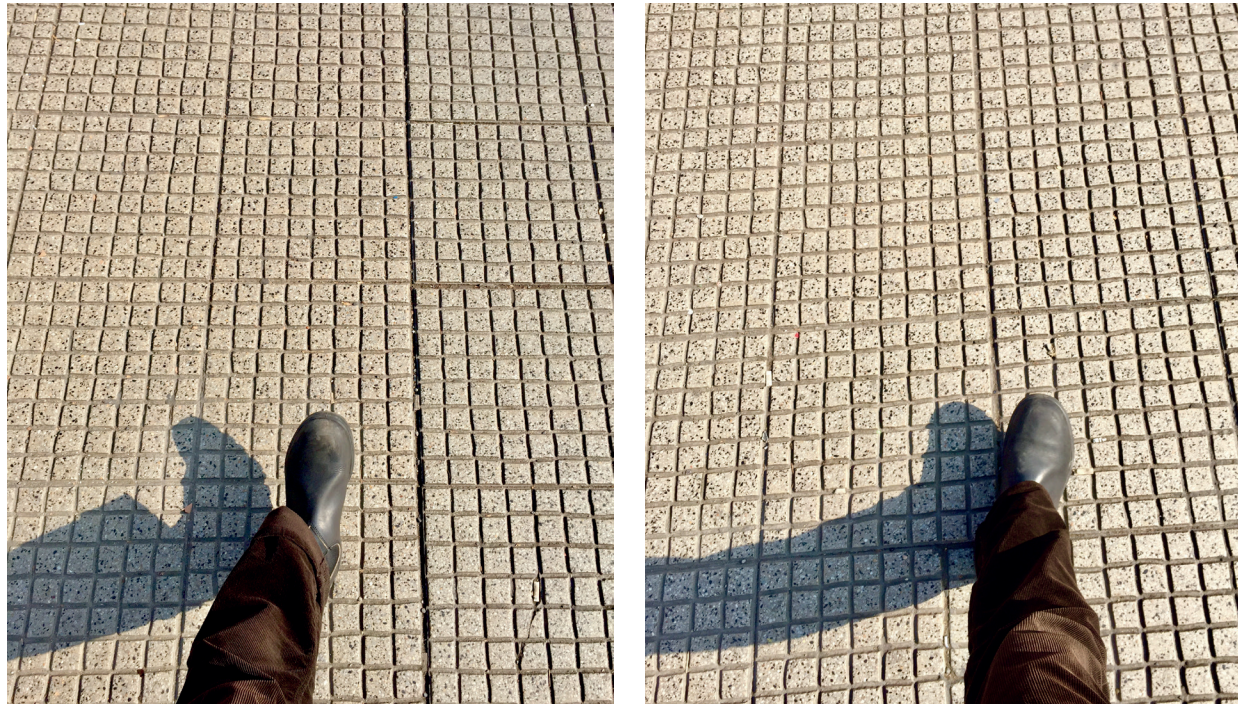
## A research on the walking experience of architecture



*Main Mentor :* Mieke Vink  
*Technical Mentor:* Jan van de Voort  
*Research Mentor:* Maurice Harteveld  
*Delegate:* Ellen Geurts

Jiri Brakenhoff  
Master Architecture, Urbanism & Building Sciences  
Architecture graduate  
16 June 2022  
Student number: 4388577

# The experience of walking

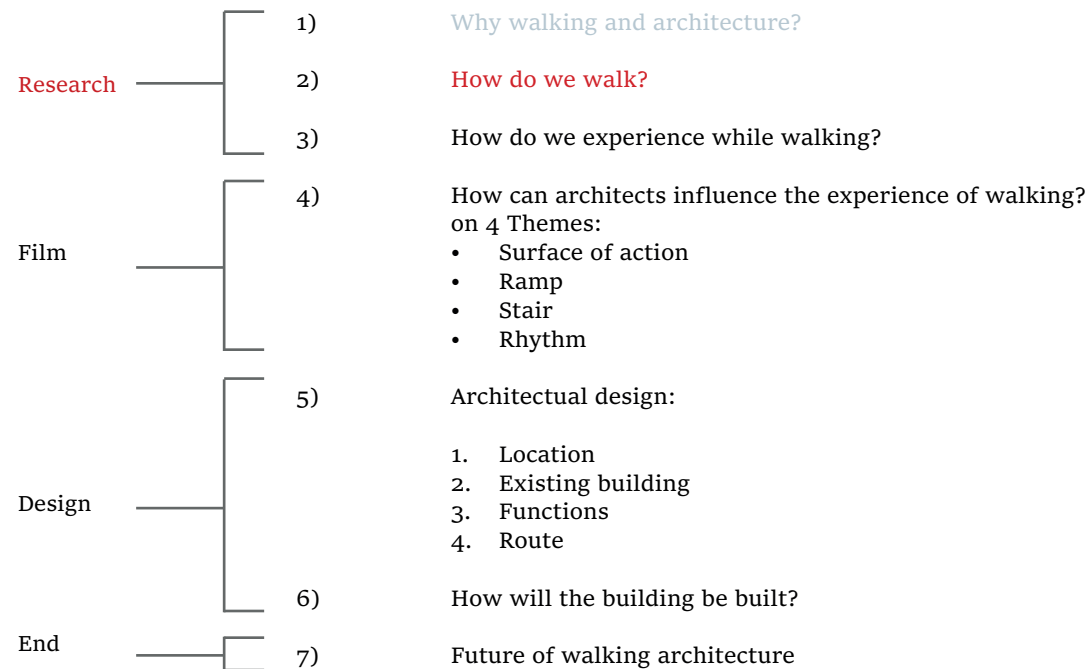


# The playground



*Aldo van Eyck's playground in Amsterdam*

## A research on the walking experience of architecture





*Gypsy Tent, Roma or Sinti in Athens/Greece 1929.*



*Gustave Caillebotte Paris Street, Rainy Day (1877), Oil on canvas*



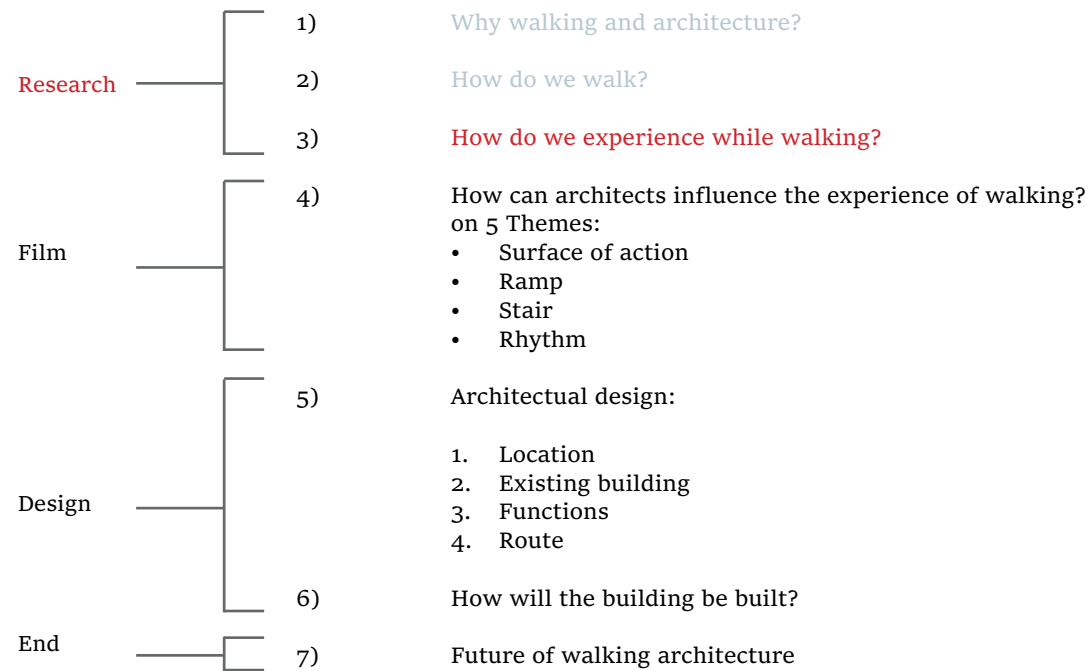
*Using mobile phones while walking (2018) by Christopher Smith*

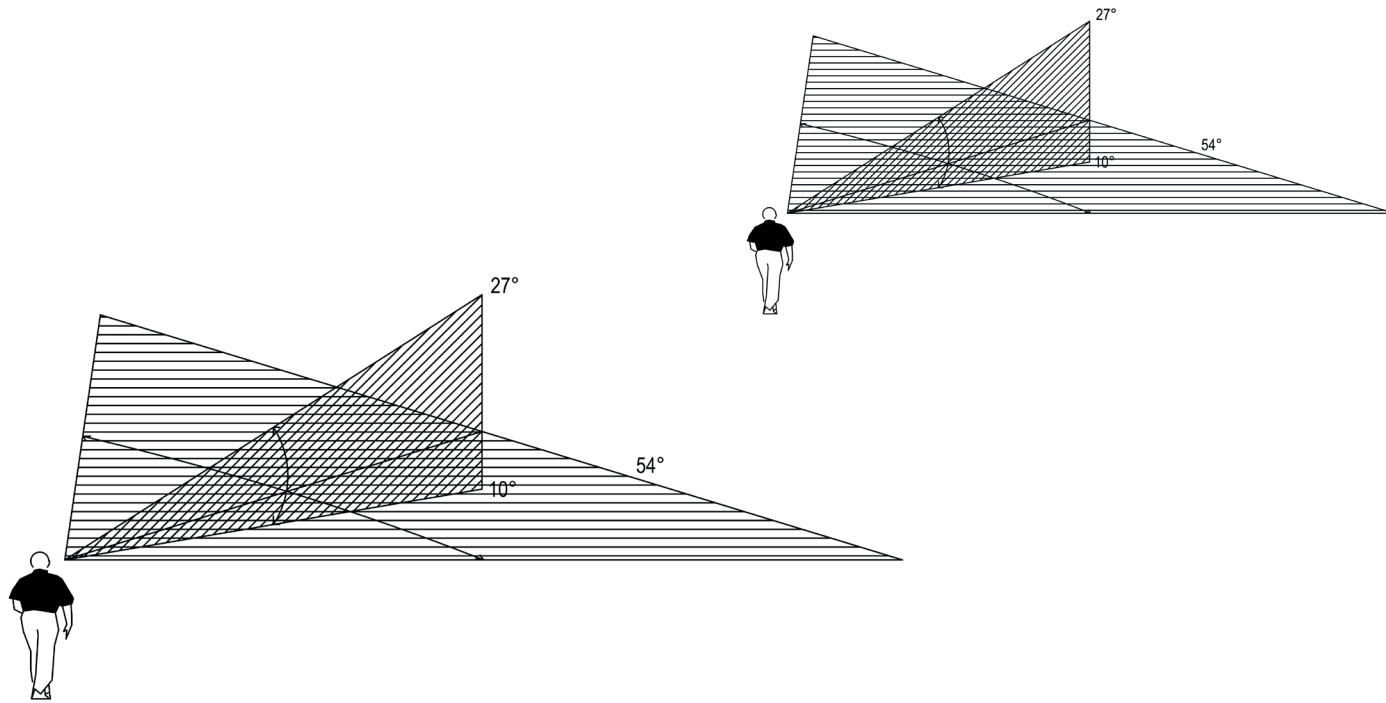
“Action is a medium of collecting sensory information about the environment, which in turn is shaped by architectural affordances. Affordances characterize the fit between the physical structure of the body and capacities for movement and interaction with the environment, thus relying on sensorimotor processes associated with exploring the surroundings.”

*o perception into action into perception into action  
to action into perception into action into perceptio  
perception into action into perception into action in  
ction into perception into action into perception*

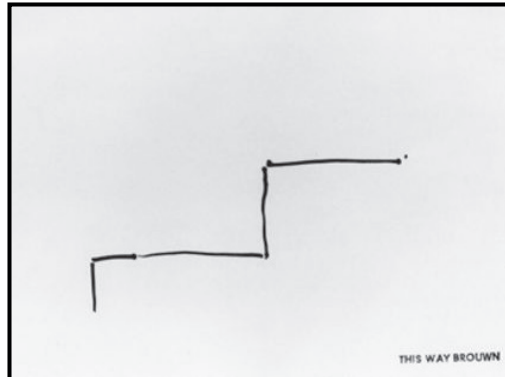
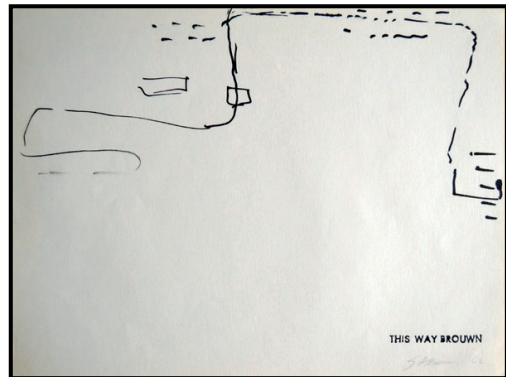
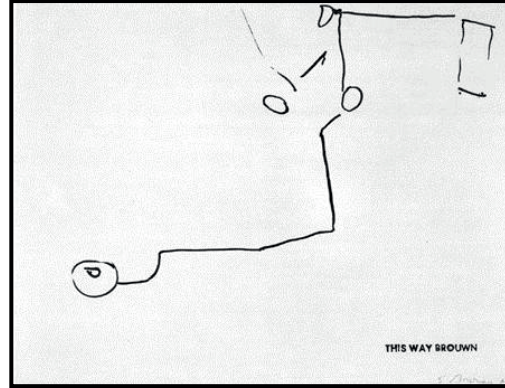
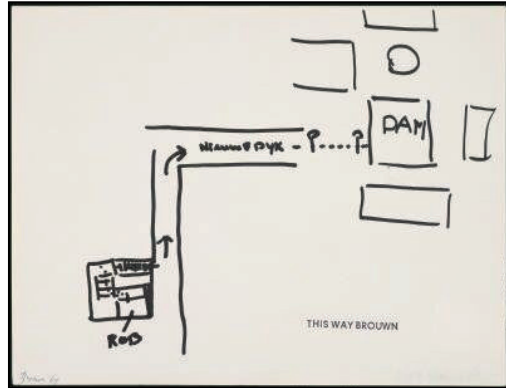


## A research on the walking experience of architecture









# The walking experiments

## (1) Urban drifting

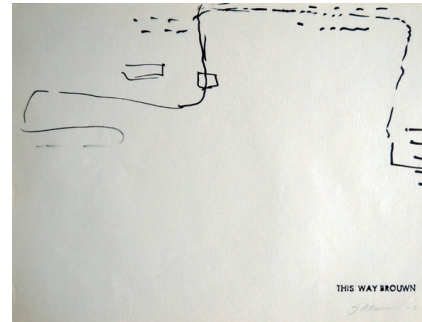
*Participate to integrate in the public domain in search of the space to investigate*



IAIN SINCLAIR

## (2) Translocate

*Actively engage with someone's perception*



STANLEY BROUWN

## (3) Typical spectator

*Passively wait until "it" happens*



FRANCIS ALYS

## (1) Urban drifting

*Participate to integrate in the public domain in search of the space to investigate*

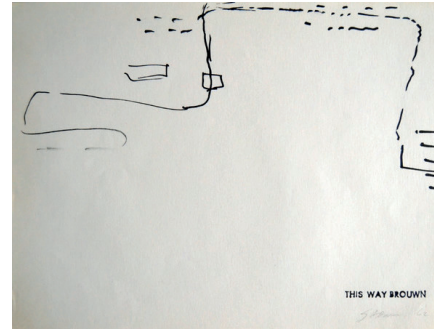


IAIN SINCLAIR

*This method is used to find location for the observations. Tool to search for something you don't yet.*

## (2) Translocate

*Actively engage with someone's perception*



STANLEY BROUWN

*This method is used to get an understanding of the situation that is found. By experiencing the situation by yourself.*

## (3) Typical spectator

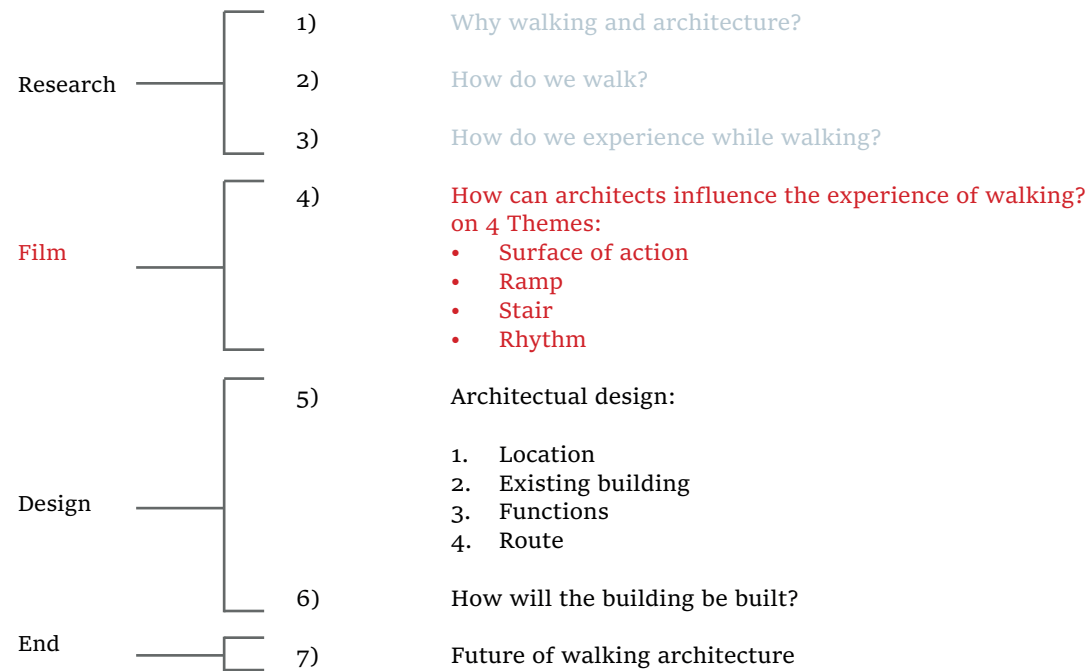
*Passively wait until "it" happens*



FRANCIS ALYS

*This method is used to get an understanding of the situation by observing the way other use this situation.*

## A research on the walking experience of architecture



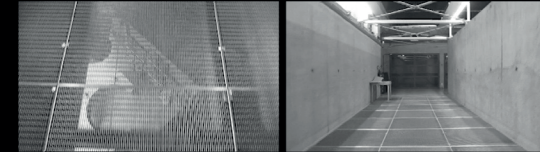
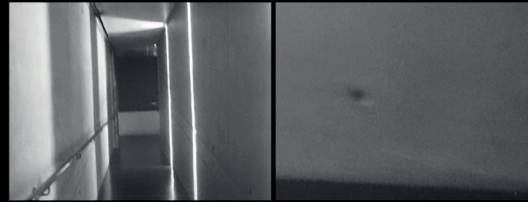
The walking experiments

Film 7:18 Min



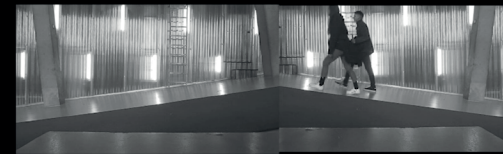
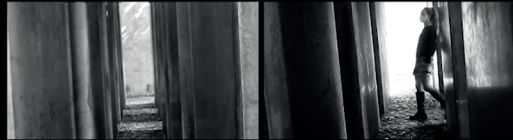
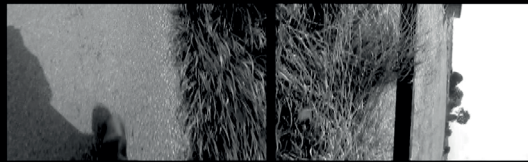


The ramp  
The rhythm  
The Surface  
The stair



23

31



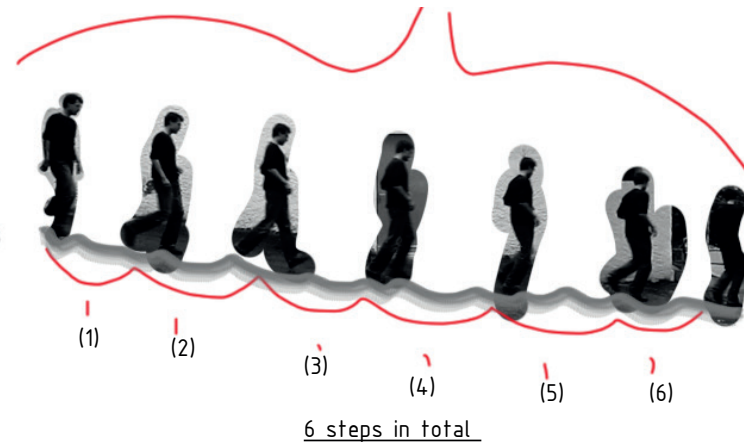
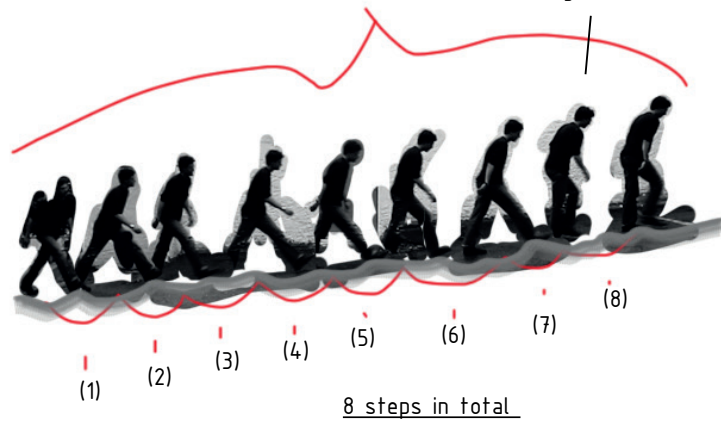
# The ramp



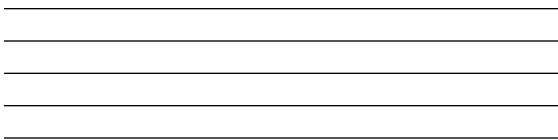
Walking up the slope in a slower pace

More concentration on the surface by bending down

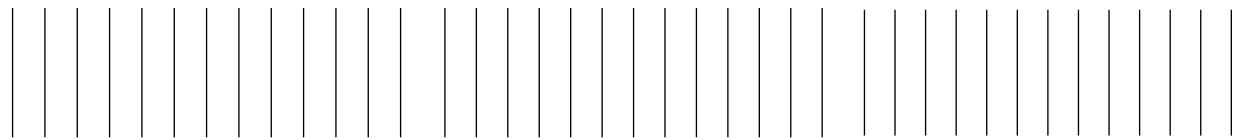
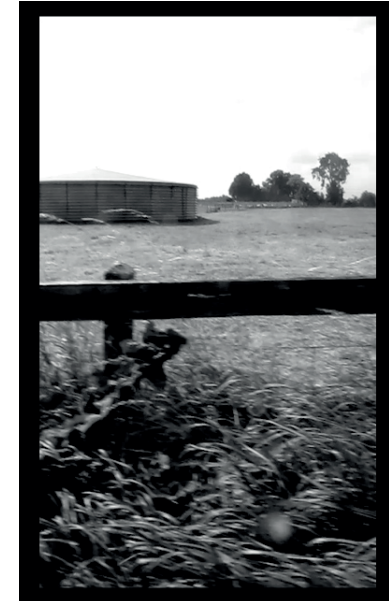
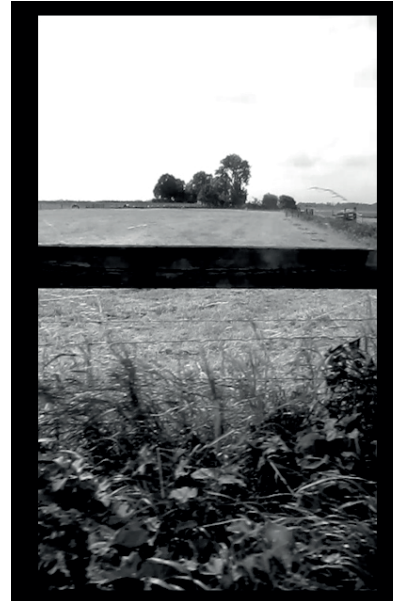
Walking down the slope in a faster pace



# The rythm



This clip shows the sense of speed that is indicated by a rhythm. Patterns and rhythms that are close to the spectator give a very clear indication of speed. This can for example be by the window frames that are very present and follow up on the high frequency on a façade that some is passing by.



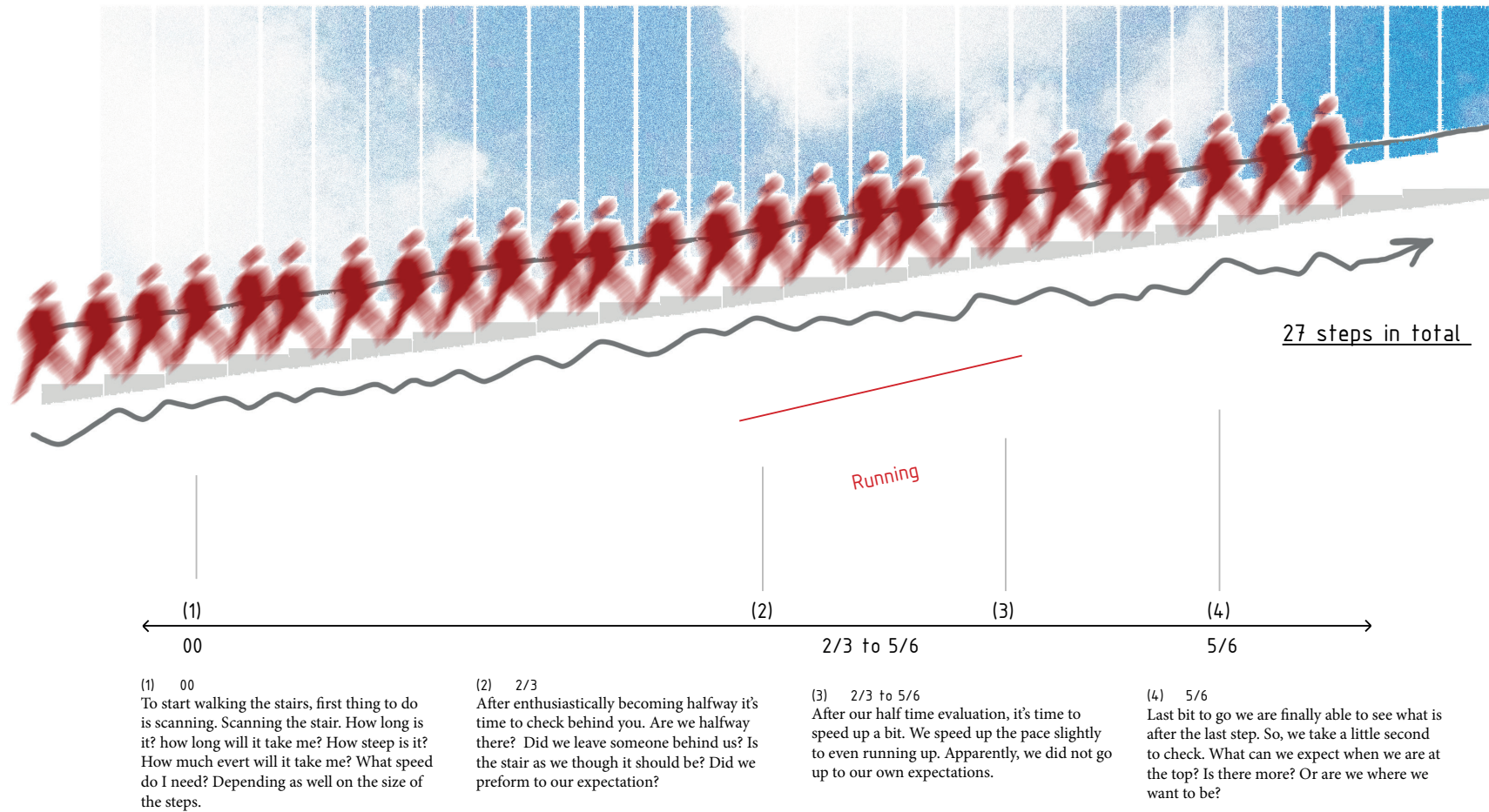
This short clip shows that designed rhythms are perceived differently from a distance that form close by. So, in a very narrow space a rhythm will be more present than on a wide square.

# The surface

:



# The stair

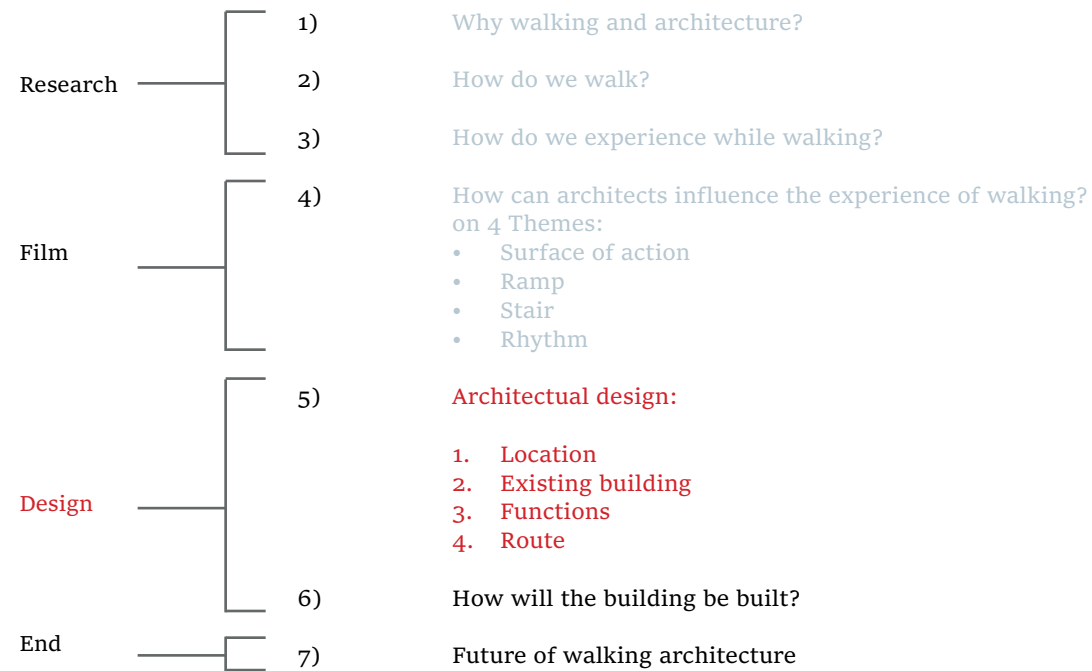


# The playground



*Aldo van Eyck's playground in Amsterdam*

## A research on the walking experience of architecture



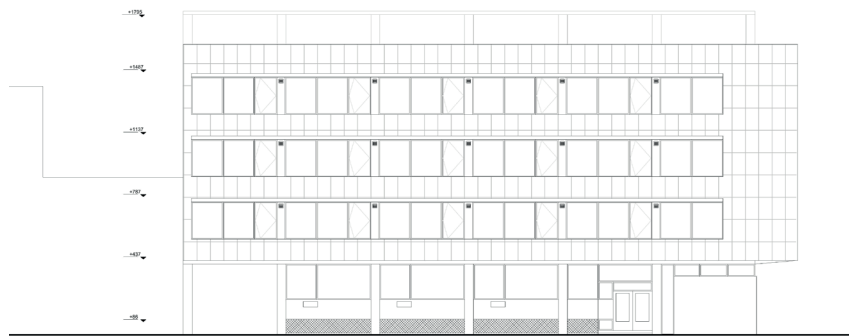


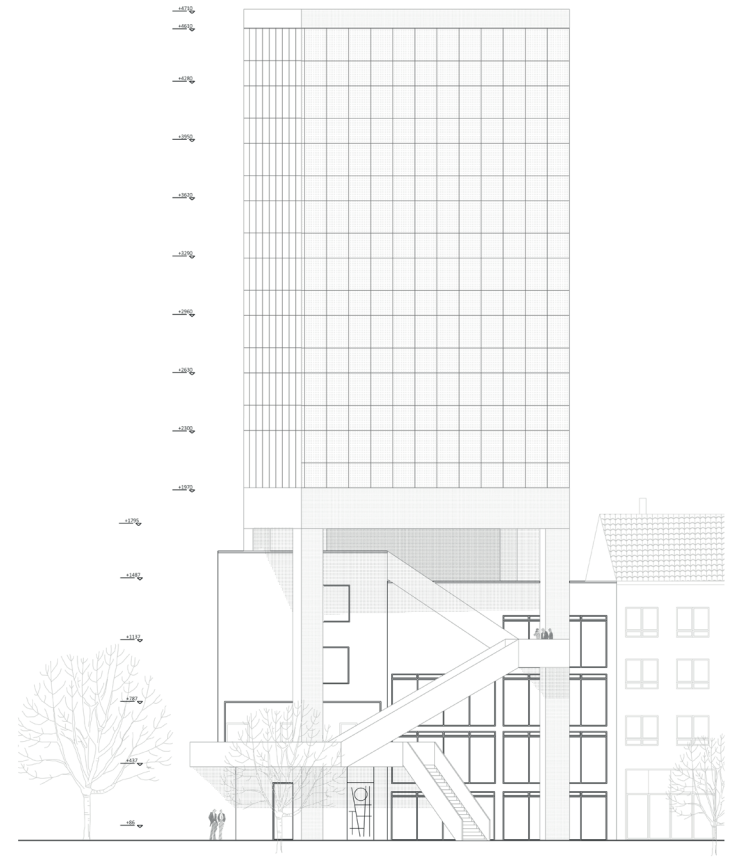
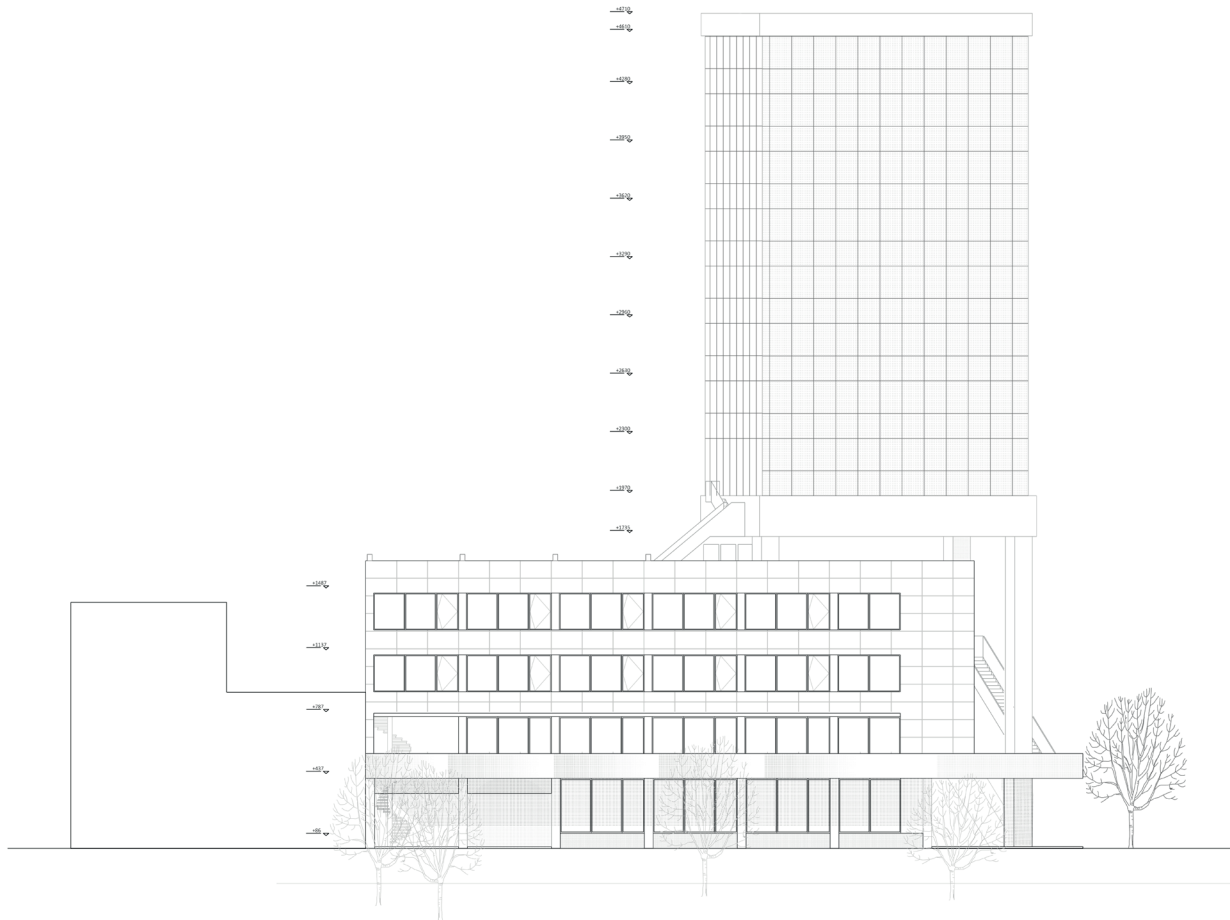




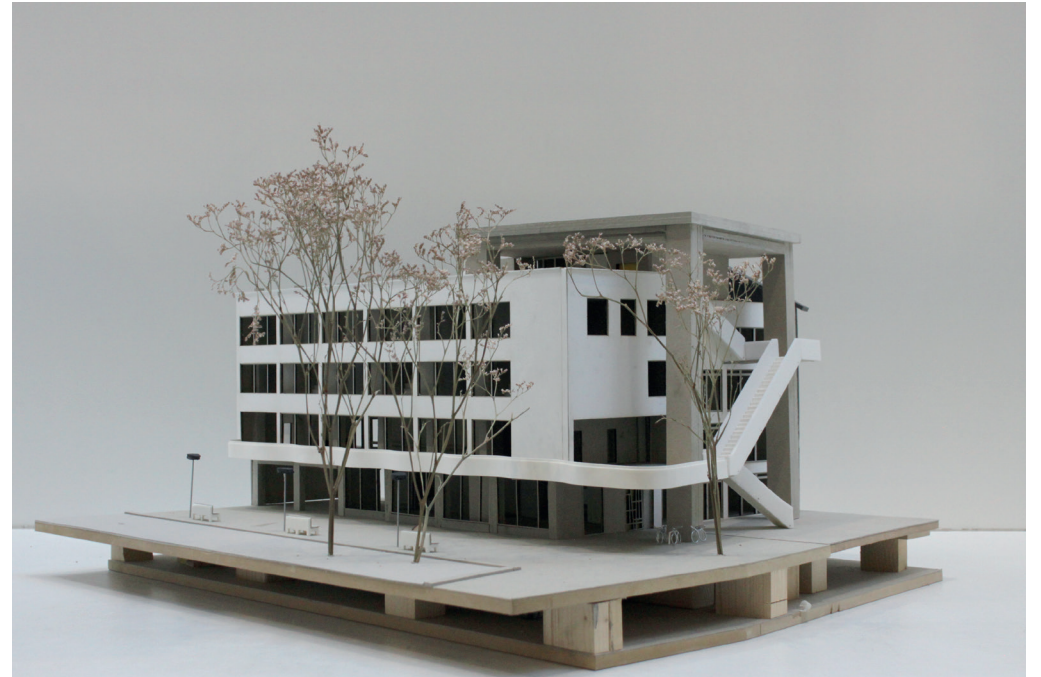


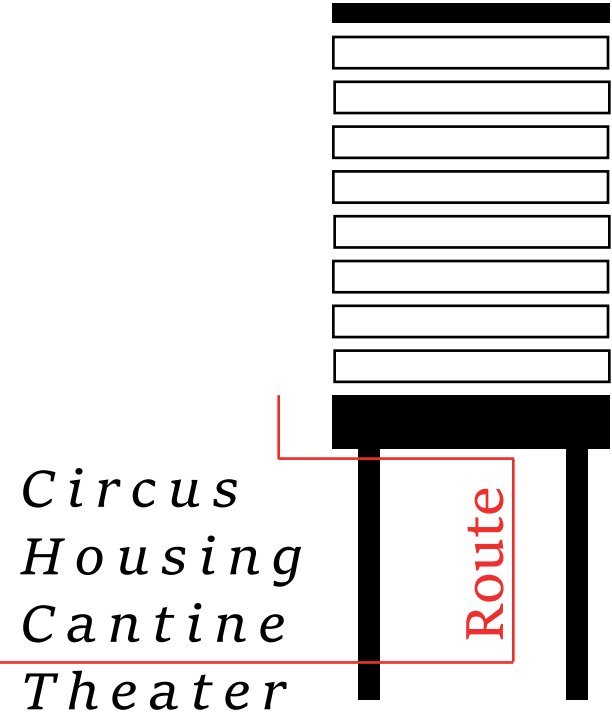
*“A youth club as a "cave", where Princess Beatrix visits a café-chantant on Saturday afternoon; a hall for about three hundred people, in which the Princess will see a cabaret; furthermore spaces for expression and exhibitions, for sports, games and meetings, a library and a sunny roof terrace, high above the roofs of Rotterdam, but still low compared to the old Sint-Laurenstoren.”*

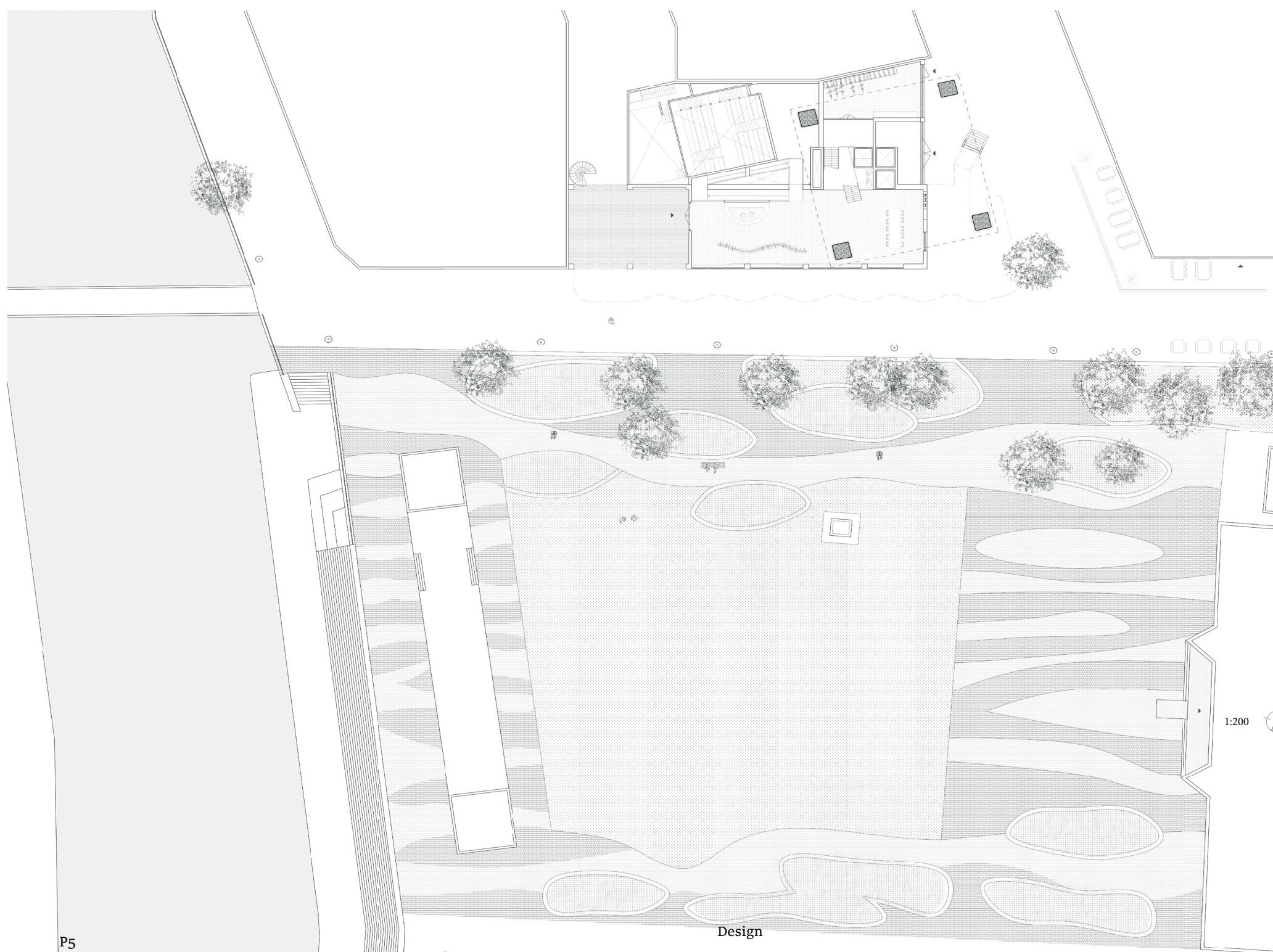




Scale 1:200







Entree

Slope

Theater

Slope

Cantine

Gallary

Staircase

Circus

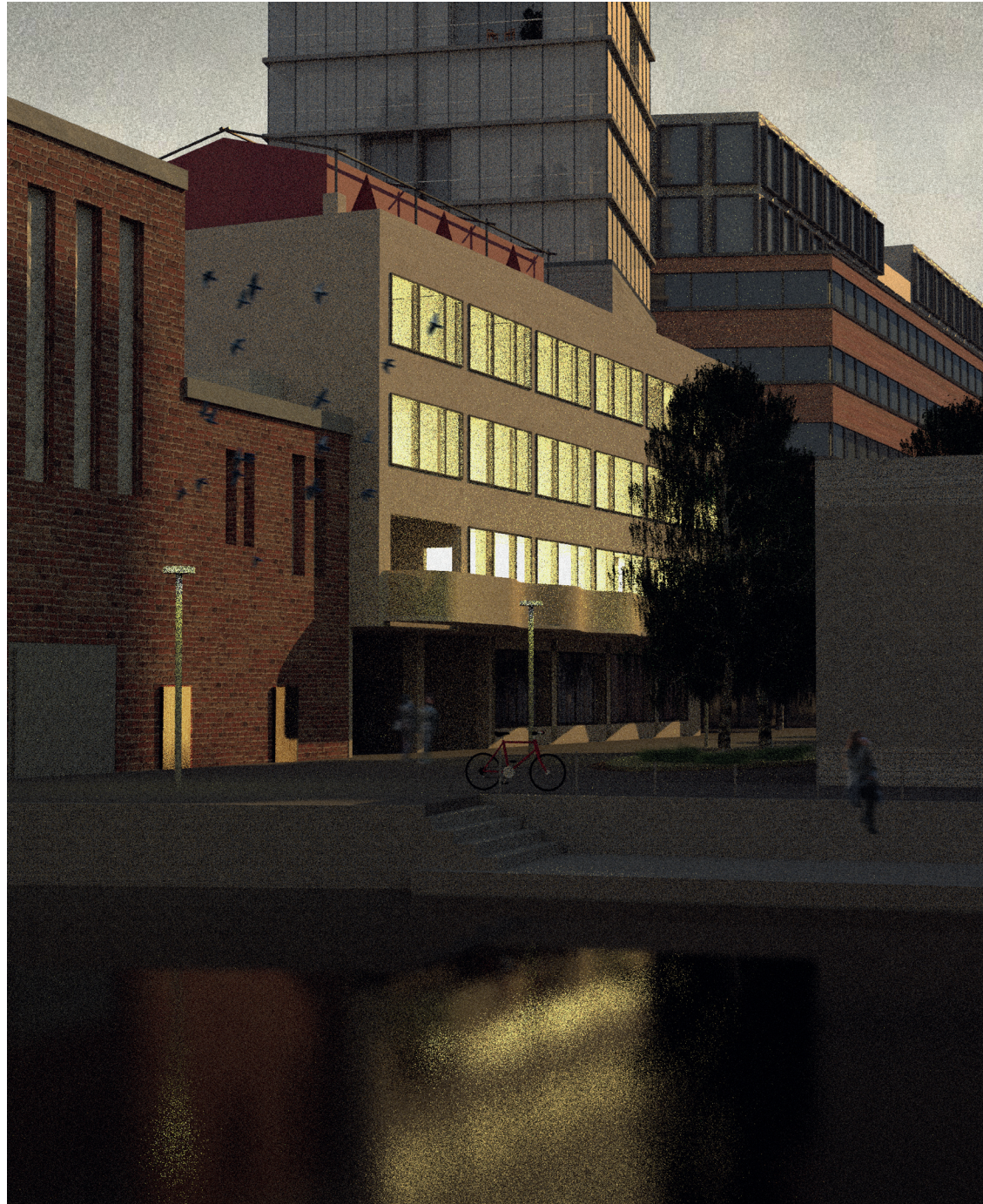
Housing

1:200

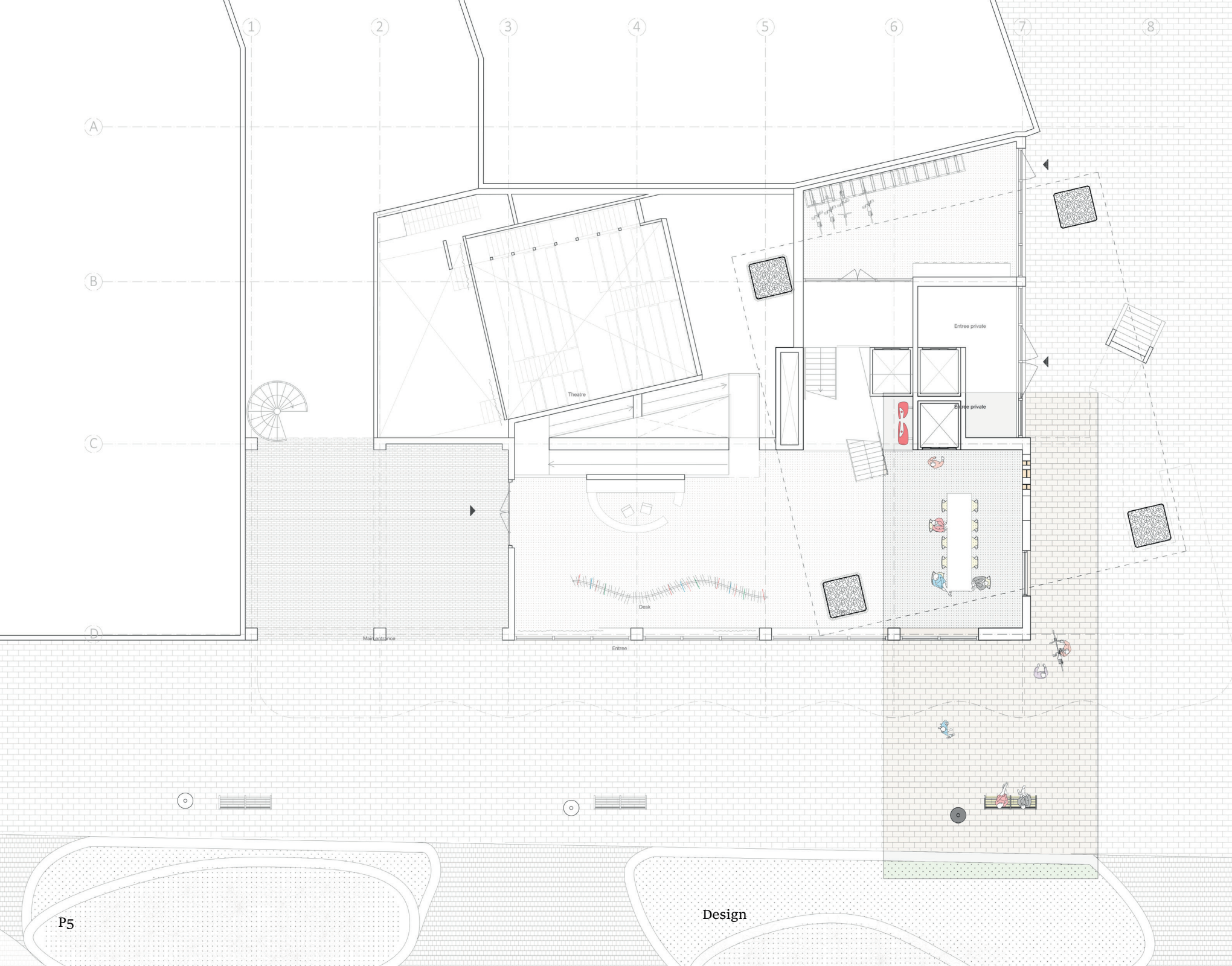


Design









Entrée

Slope

Theater

Slope

Cantine

Gallery

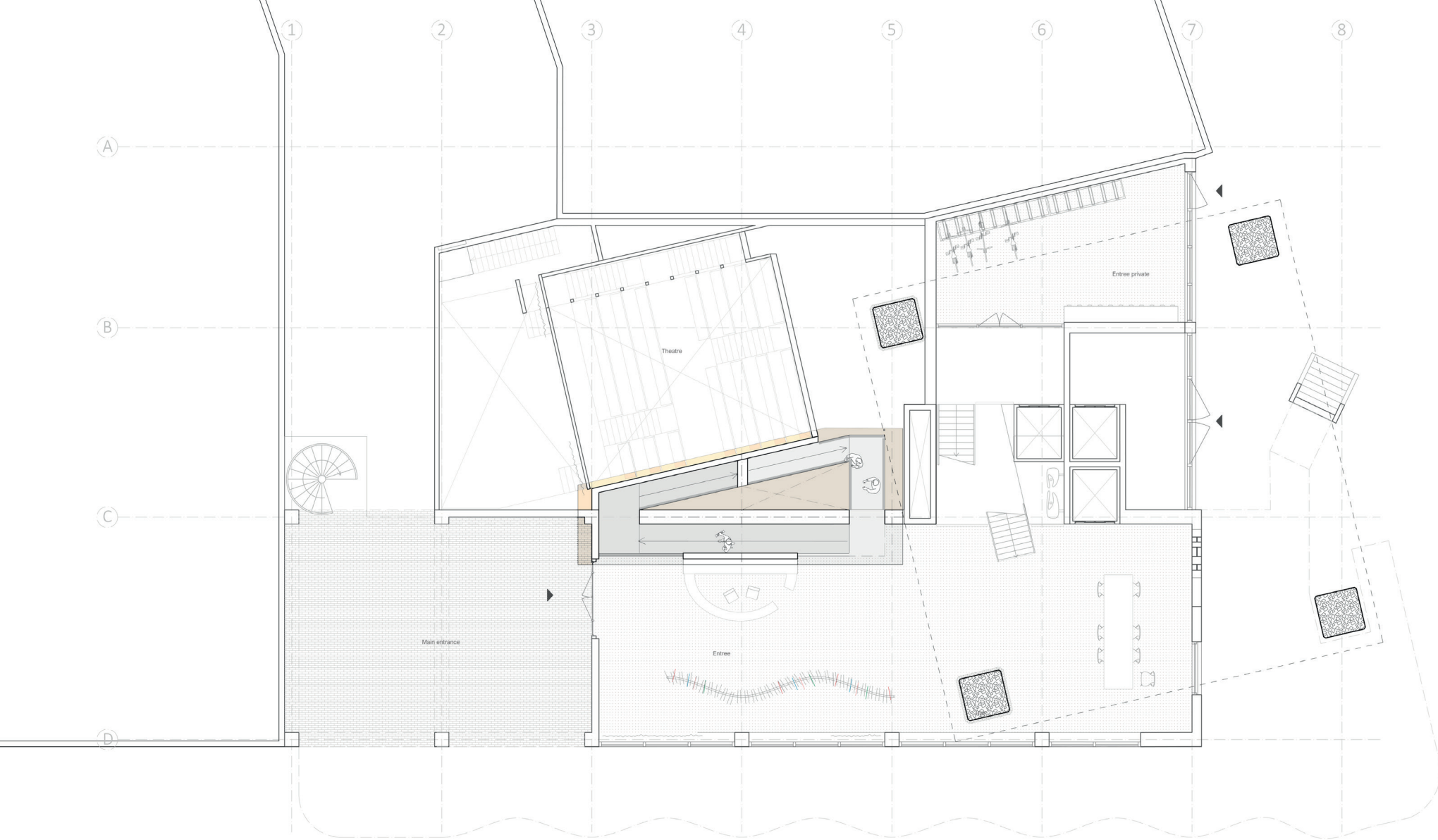
Staircase

Circus

Housing

P5

Design



Entree

Slope

Theater

Slope

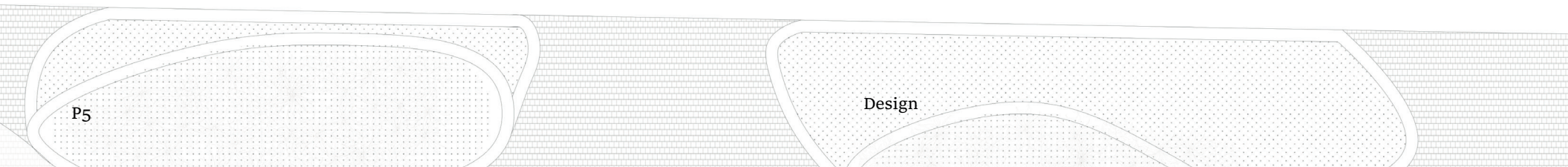
Cantine

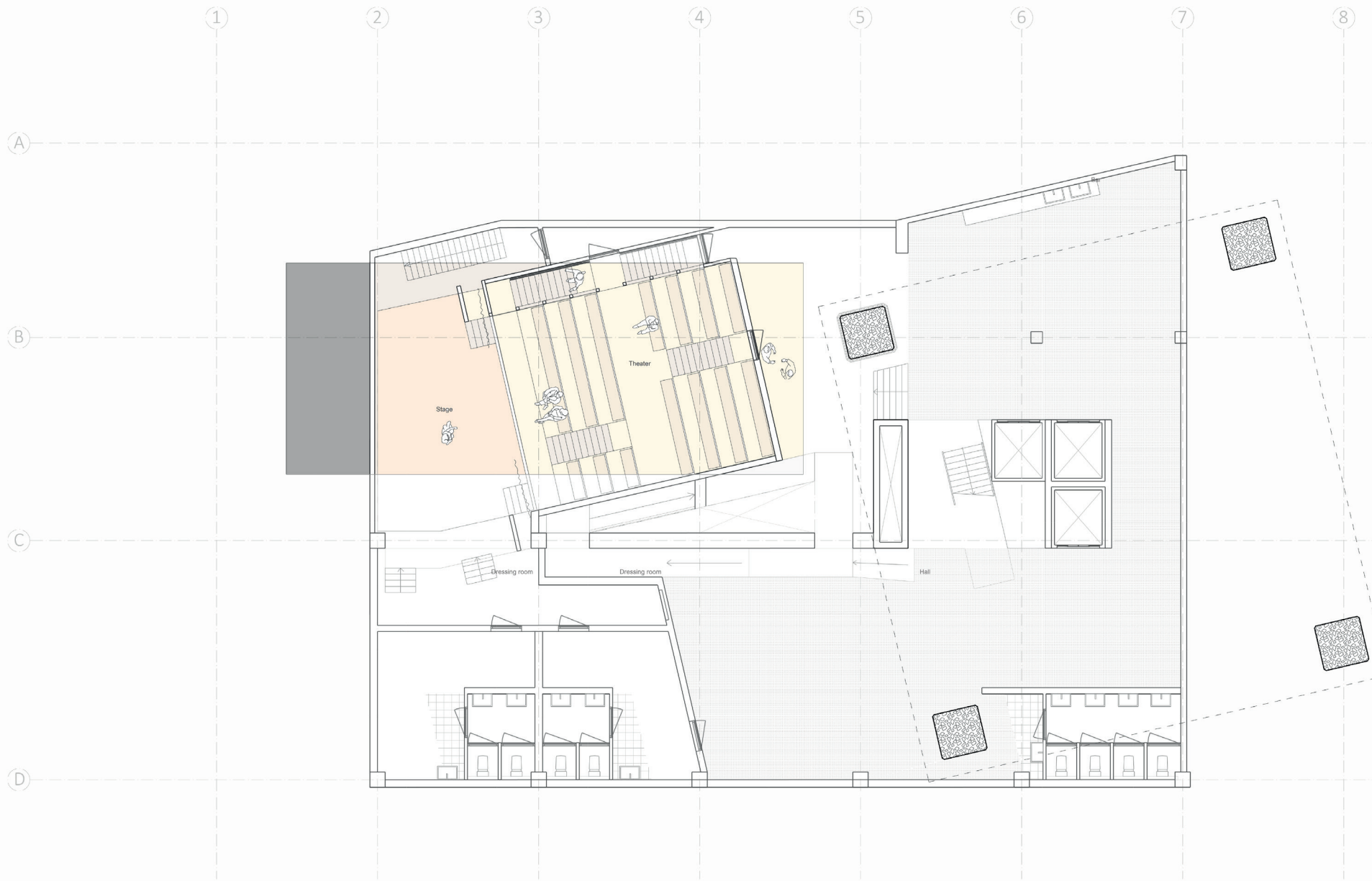
Gallary

Staircase

Circus

Housing





Entree

Slope

Theater

Slope

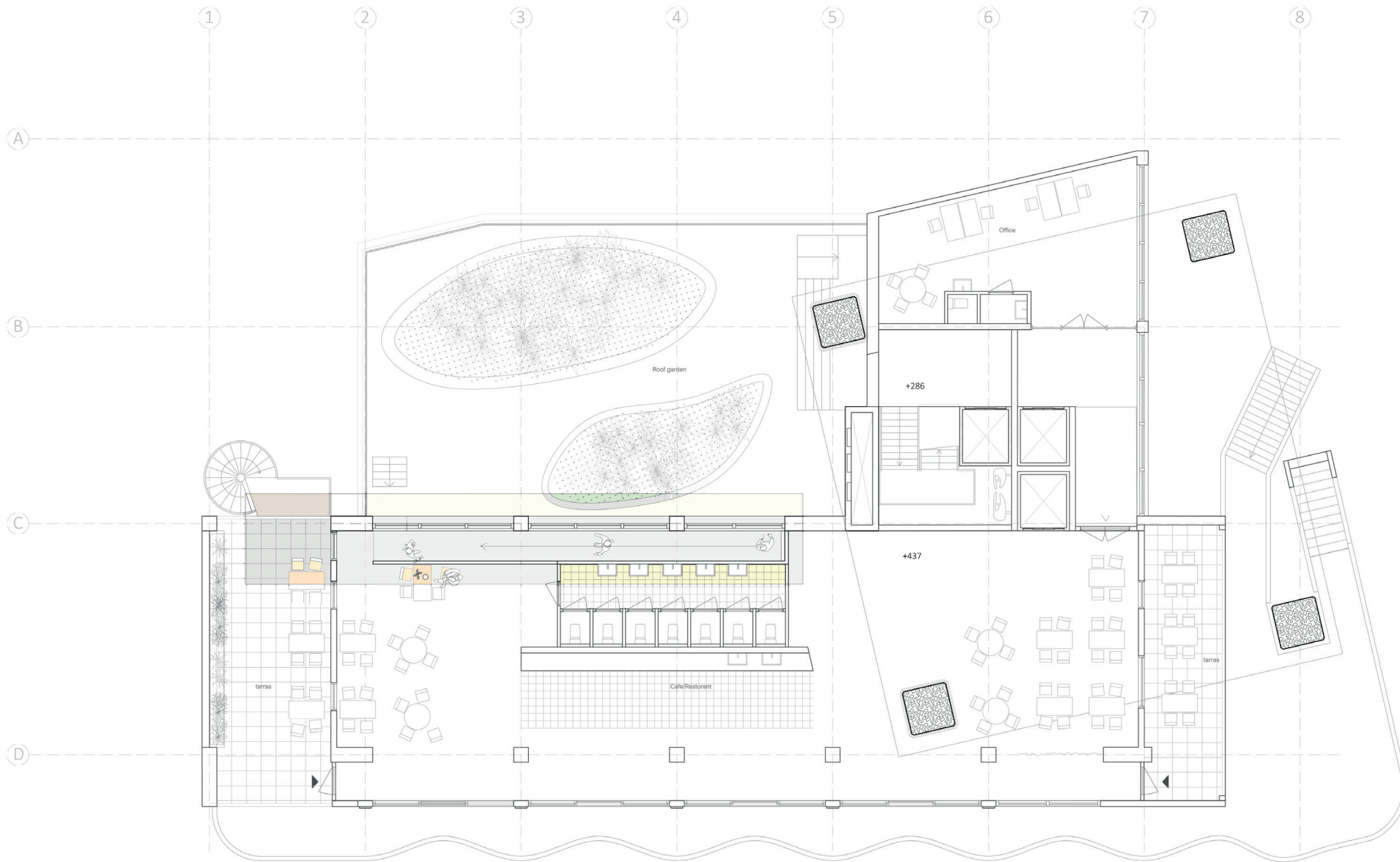
Cantine

Gallary

Staircase

Circus

Housing



Entree

Slope

Theater

Slope

Cantine

Gallary

Staircase

Circus

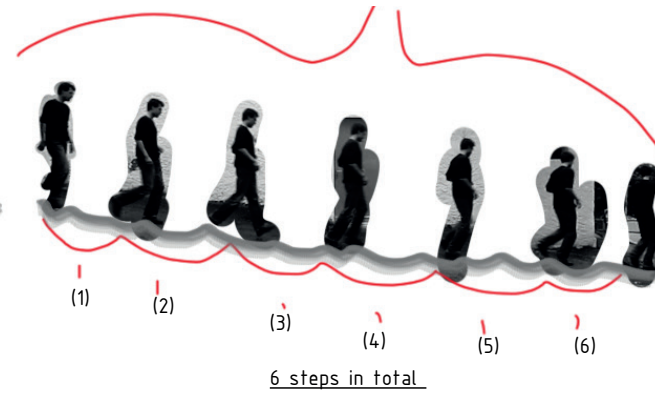
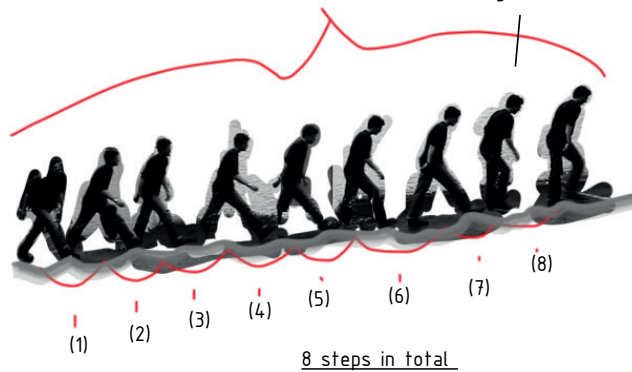
Housing

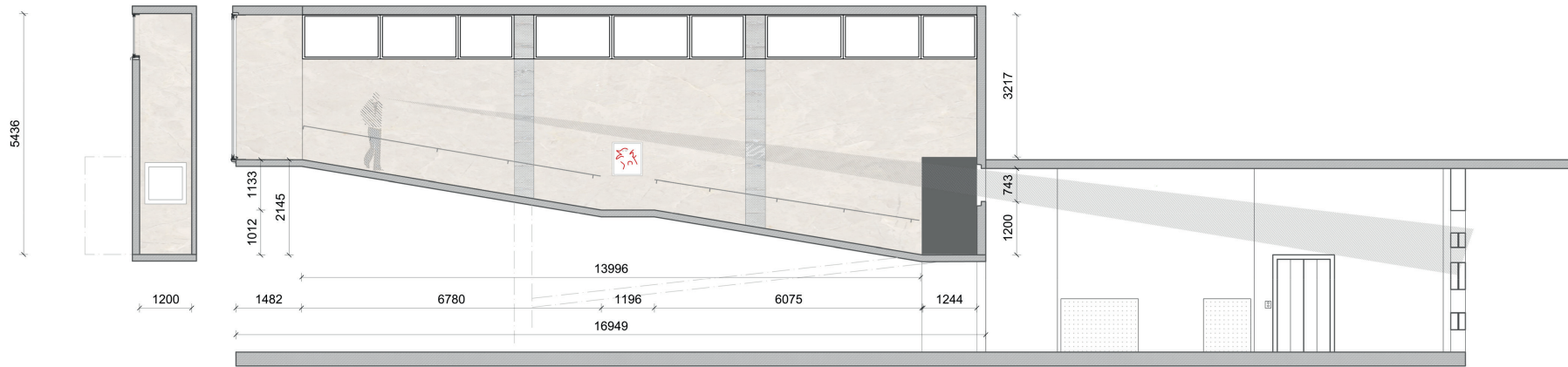


Walking up the slope in a slower pace

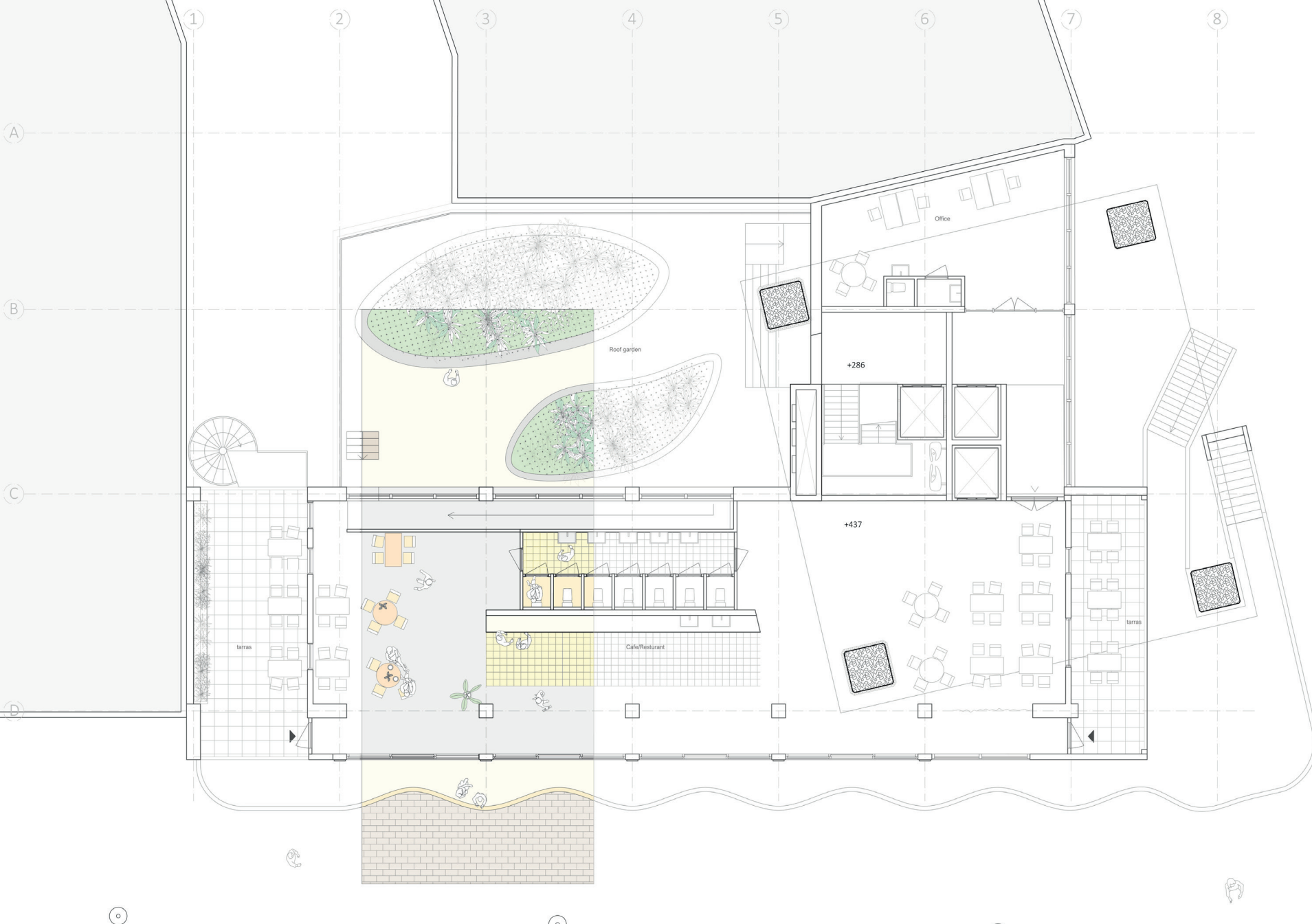
More concentration on the surface by bending down

Walking down the slope in a faster pace

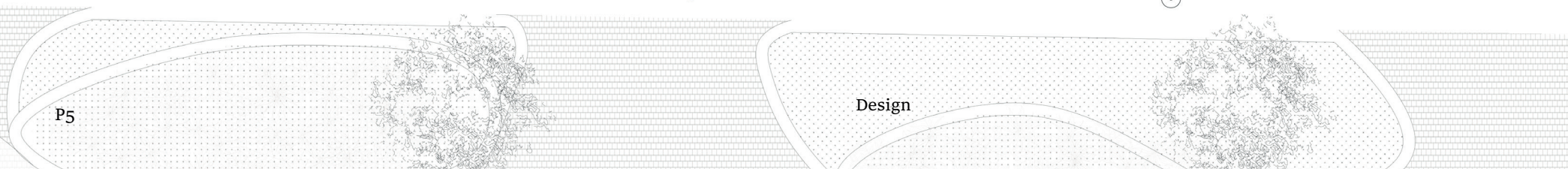


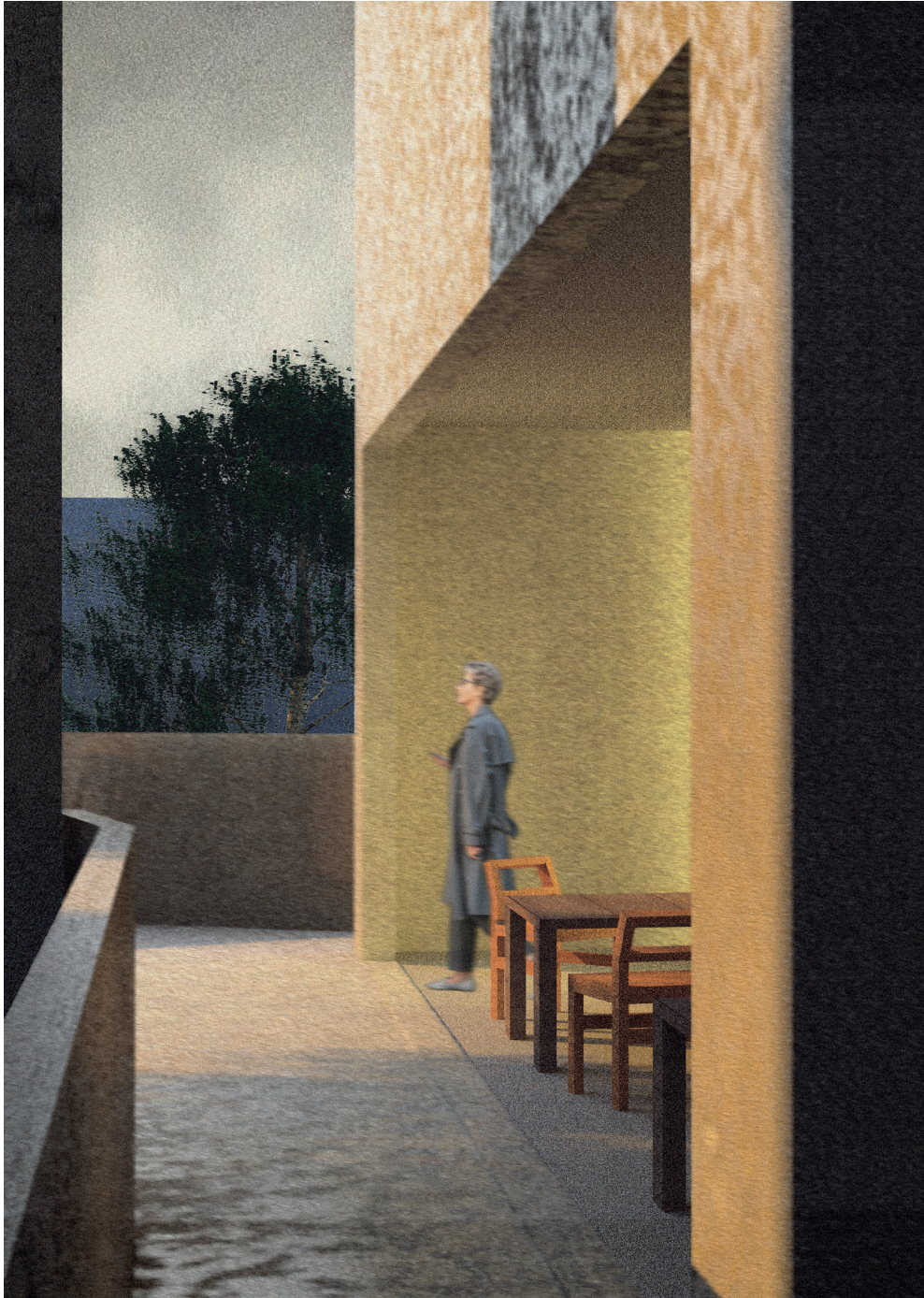


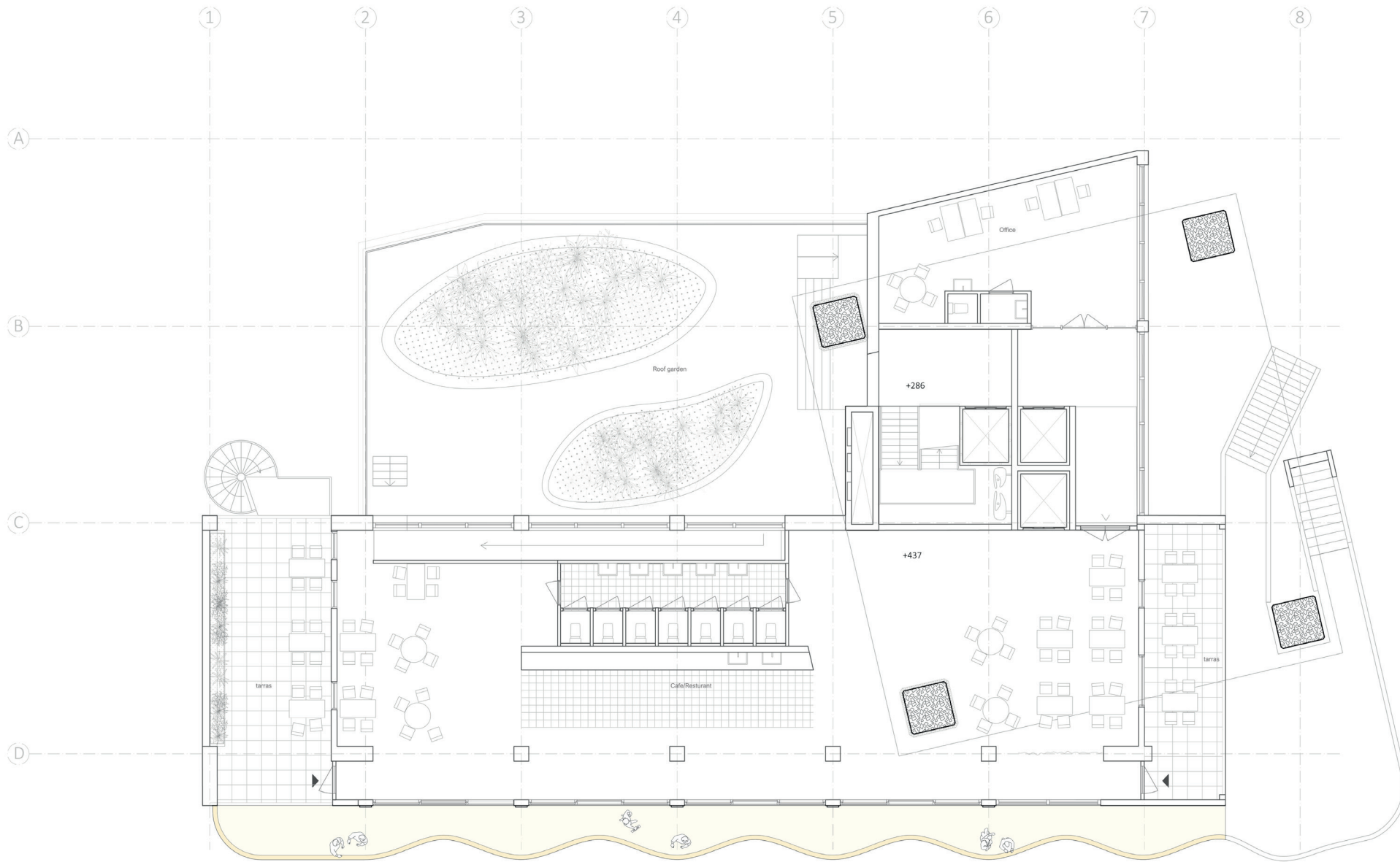




- Entree
- Slope
- Theater
- Slope
- Cantine**
- Gallery
- Staircase
- Circus
- Housing







Entree

Slope

Theater

Slope

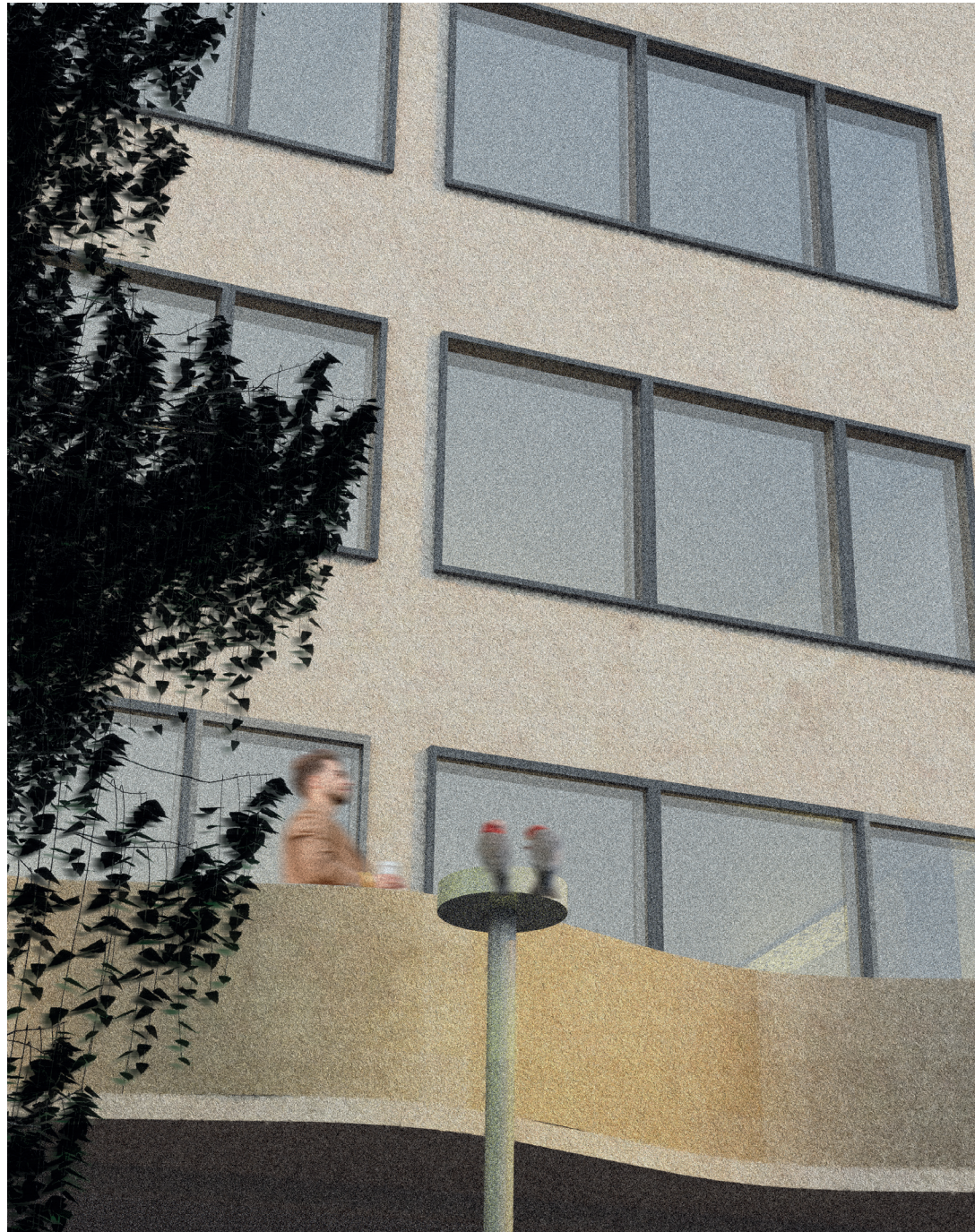
Cantine

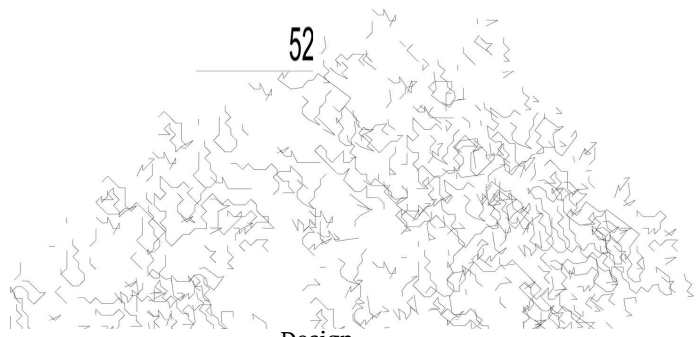
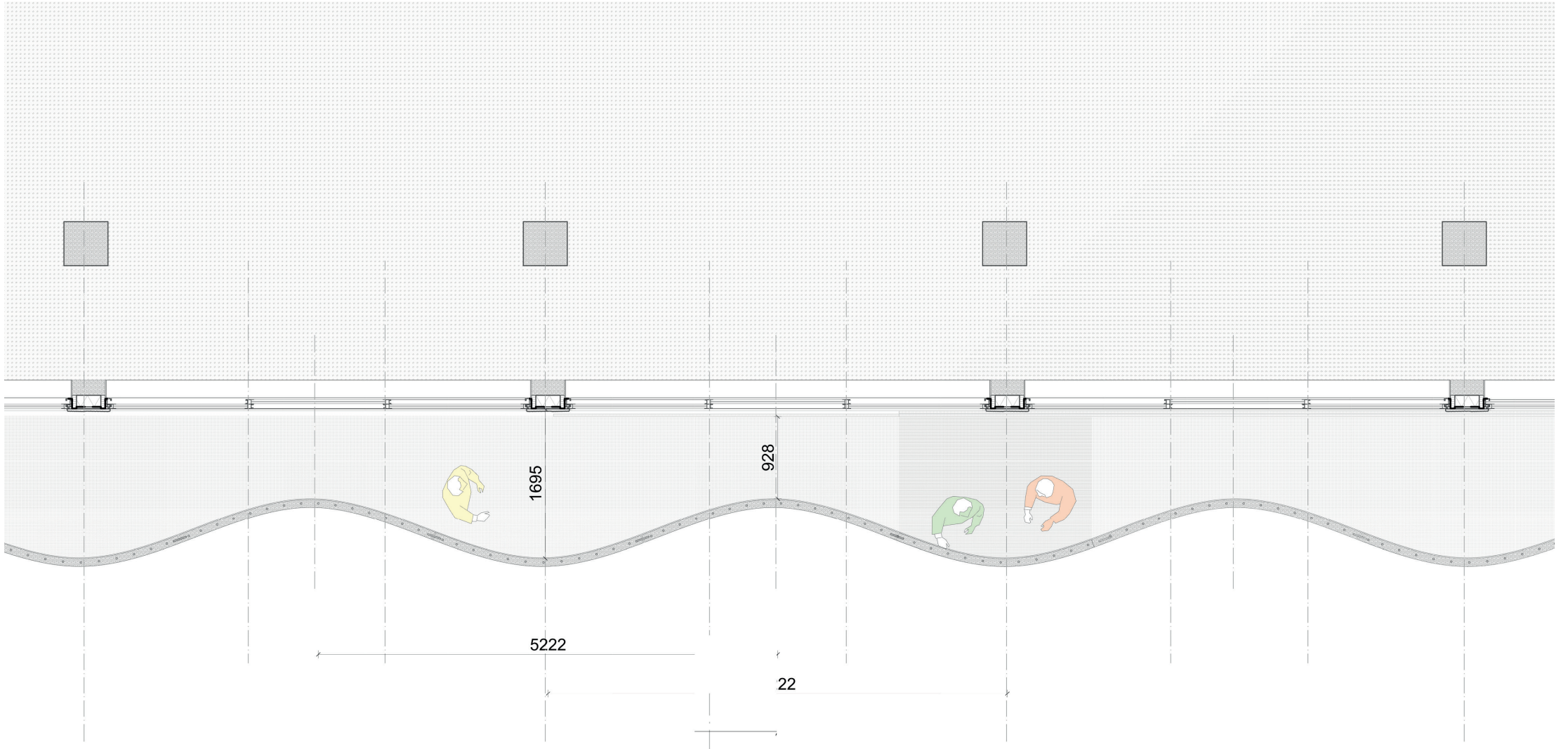
Gallary

Staircase

Circus

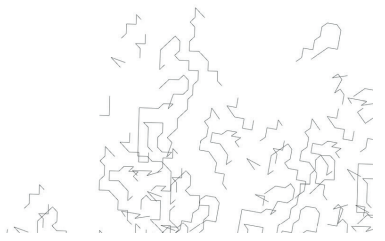
Housing

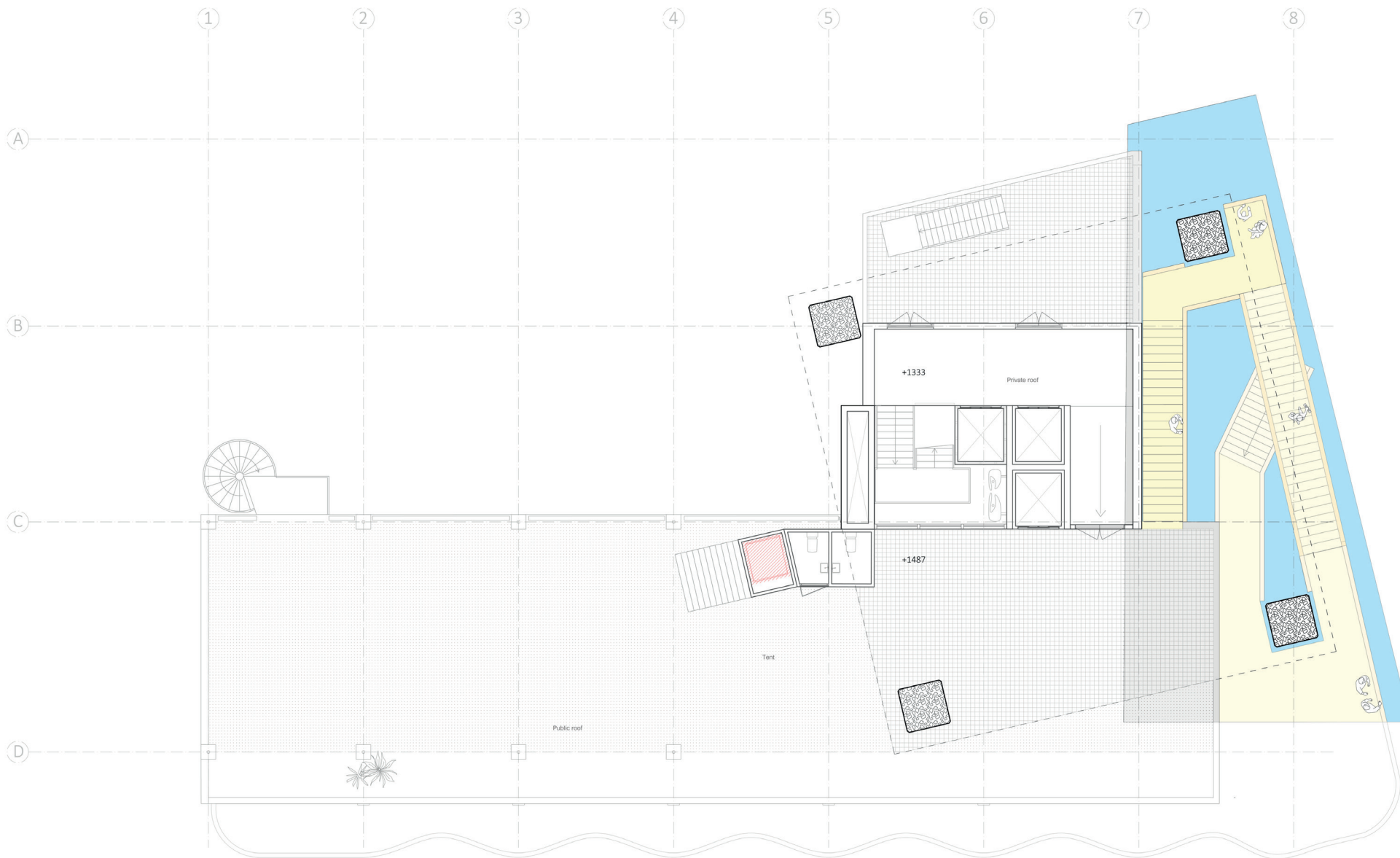




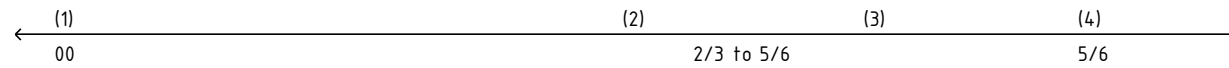
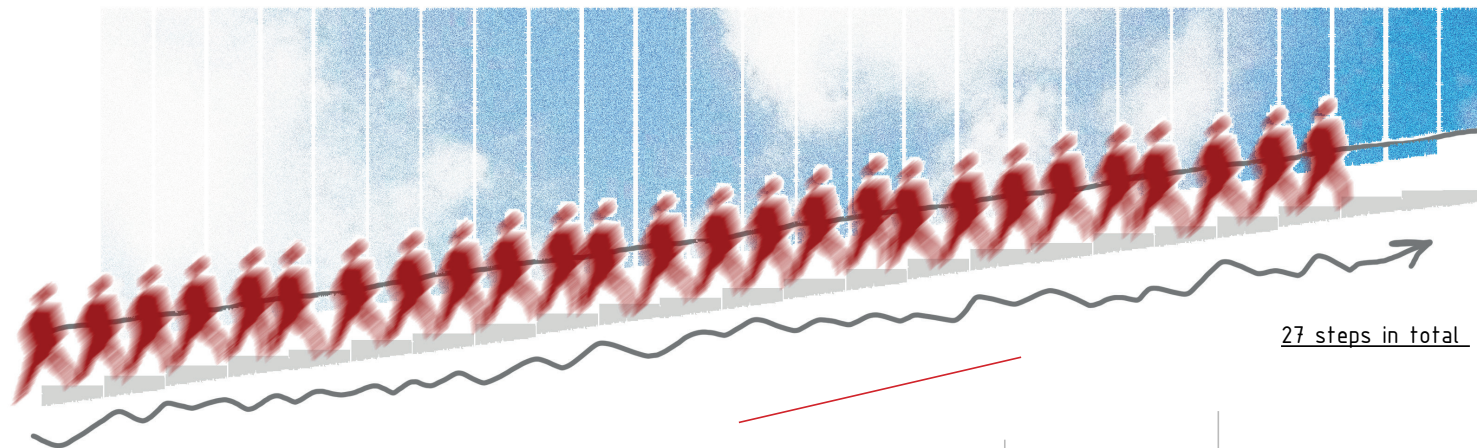
52

Design









(1) 00  
 To start walking the stairs, first thing to do is scanning. Scanning the stair. How long is it? how long will it take me? How steep is it? How much effort will it take me? What speed do I need? Depending as well on the size of the steps.

(2) 2/3  
 After enthusiastically becoming halfway it's time to check behind you. Are we halfway there? Did we leave someone behind us? Is the stair as we thought it should be? Did we perform to our expectation?

(3) 2/3 to 5/6  
 After our half time evaluation, it's time to speed up a bit. We speed up the pace slightly to even running up. Apparently, we did not go up to our own expectations.

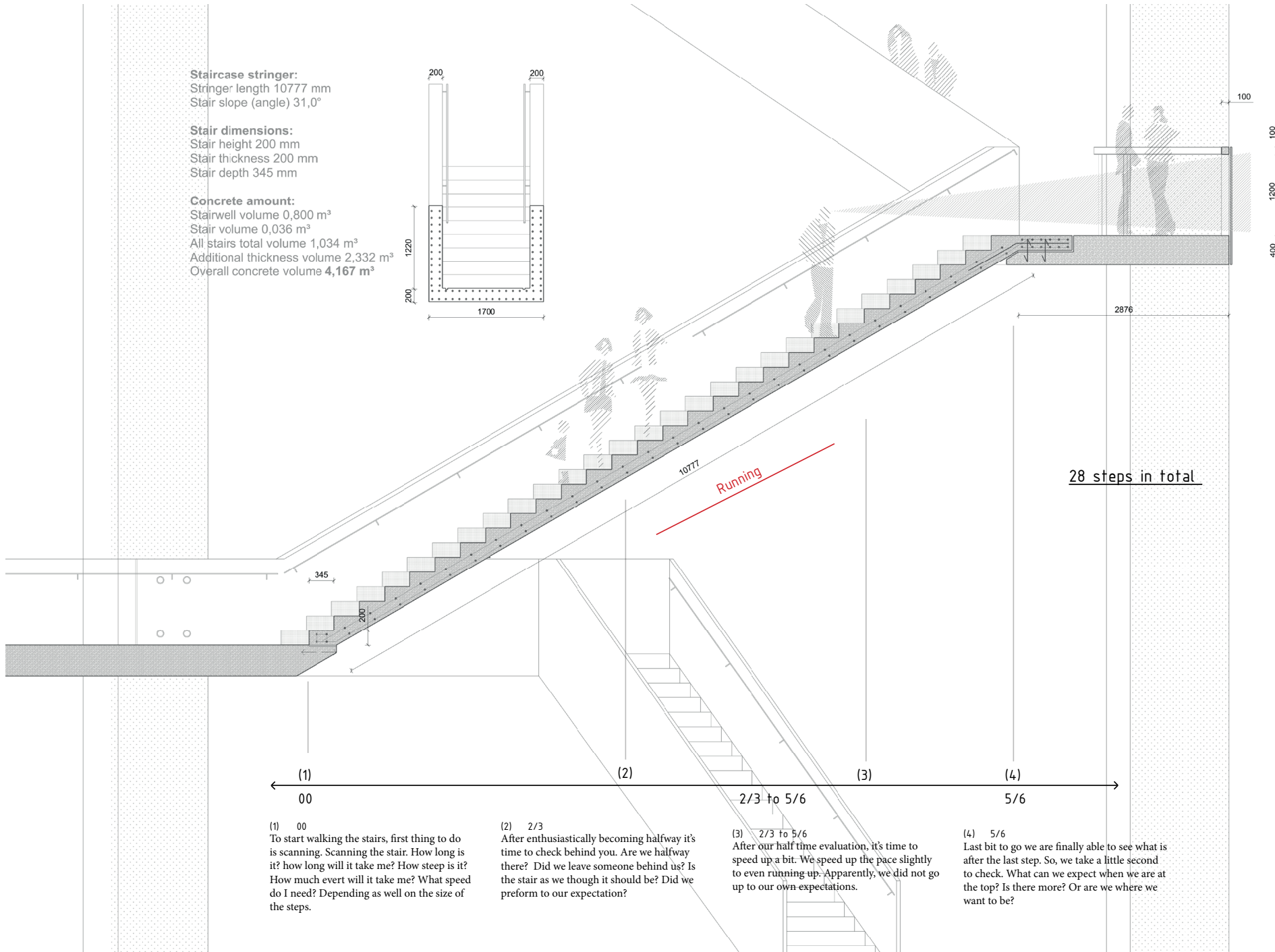
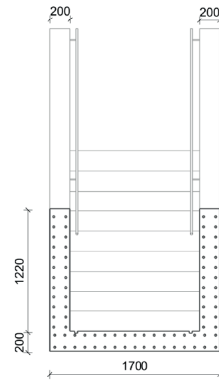
(4) 5/6  
 Last bit to go we are finally able to see what is after the last step. So, we take a little second to check. What can we expect when we are at the top? Is there more? Or are we where we want to be?



**Staircase stringer:**  
 Stringer length 10777 mm  
 Stair slope (angle) 31,0°

**Stair dimensions:**  
 Stair height 200 mm  
 Stair thickness 200 mm  
 Stair depth 345 mm

**Concrete amount:**  
 Stairwell volume 0,800 m<sup>3</sup>  
 Stair volume 0,036 m<sup>3</sup>  
 All stairs total volume 1,034 m<sup>3</sup>  
 Additional thickness volume 2,332 m<sup>3</sup>  
 Overall concrete volume **4,167 m<sup>3</sup>**



28 steps in total

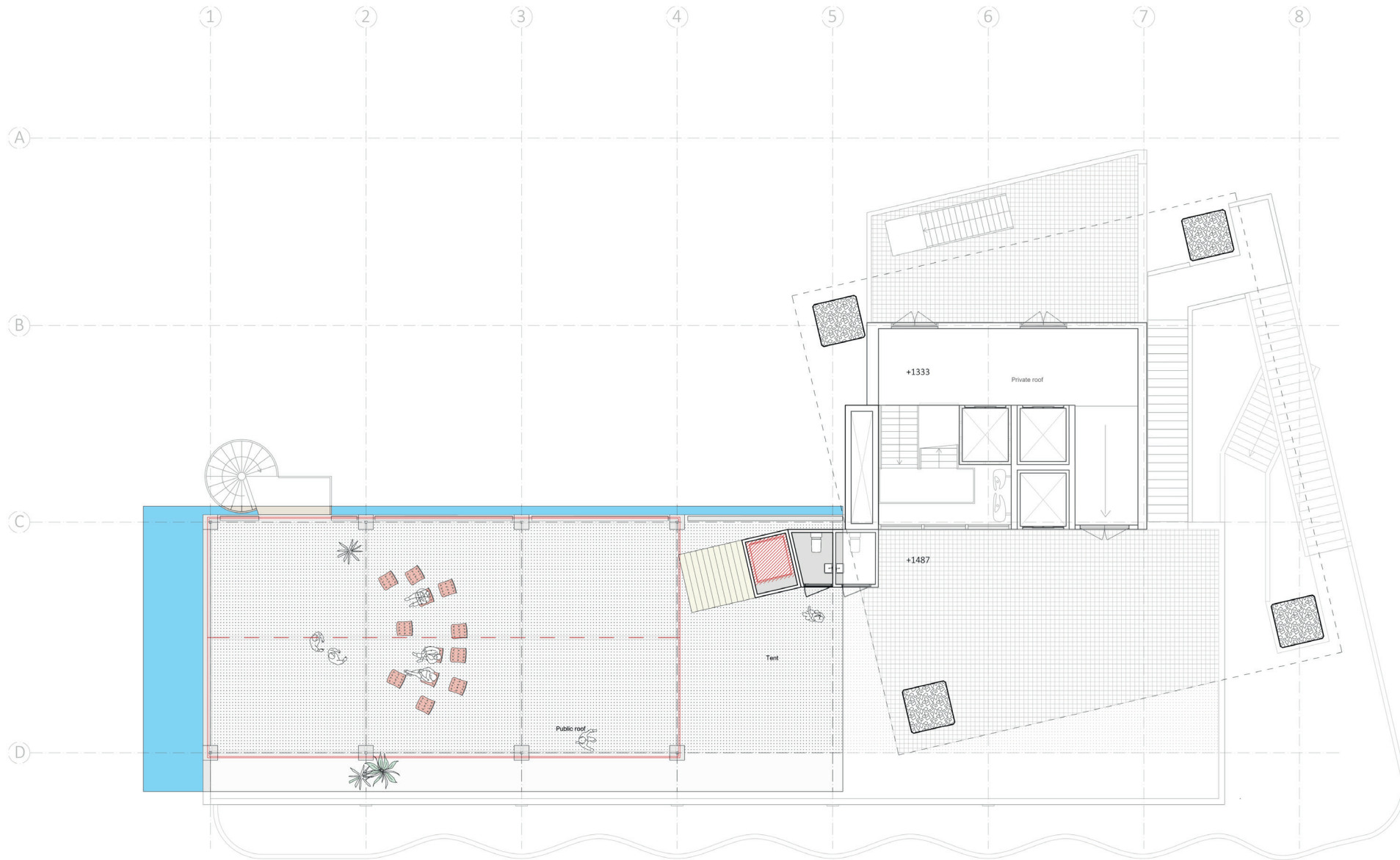


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Entree

Slope

Theater

Slope

Cantine

Gallery

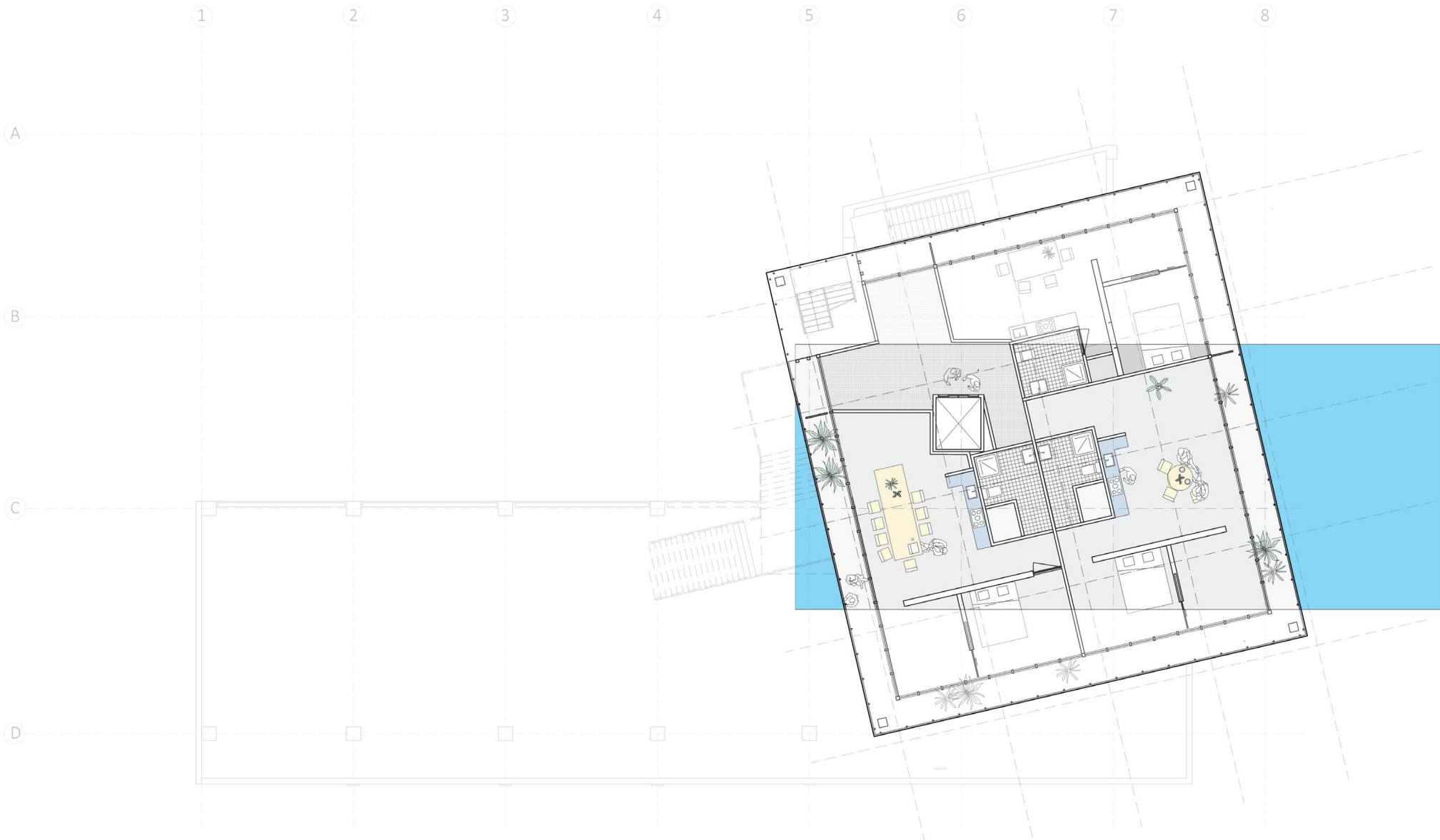
Staircase

Circus

Housing



Design



*Entree*

*Slope*

*Theater*

*Slope*

*Cantine*

*Gallary*

*Staircase*

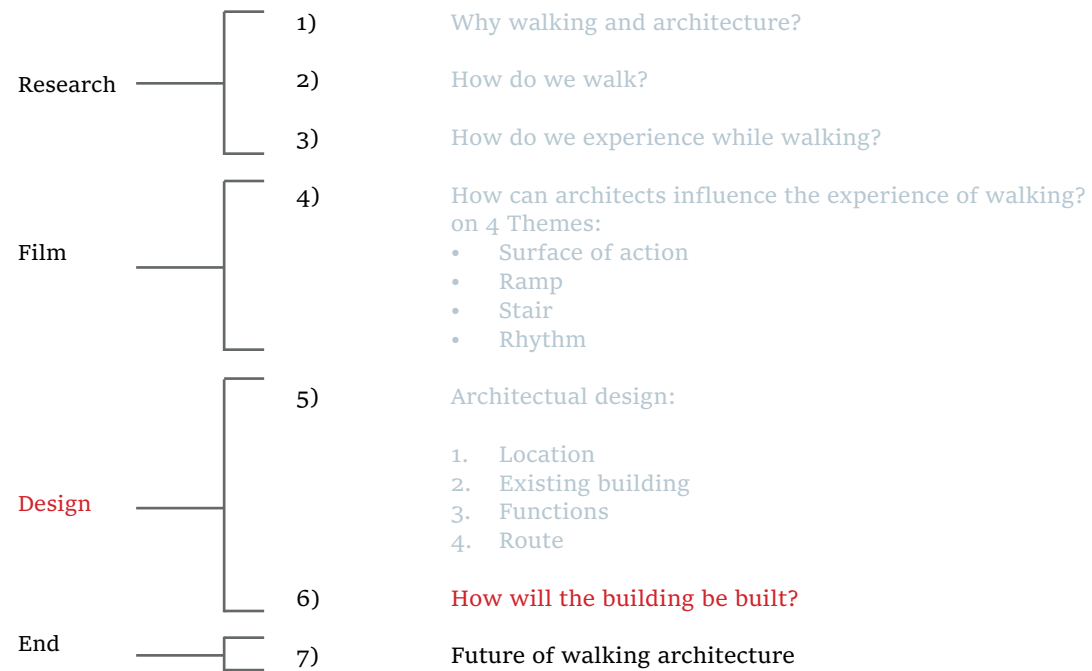
*Circus*

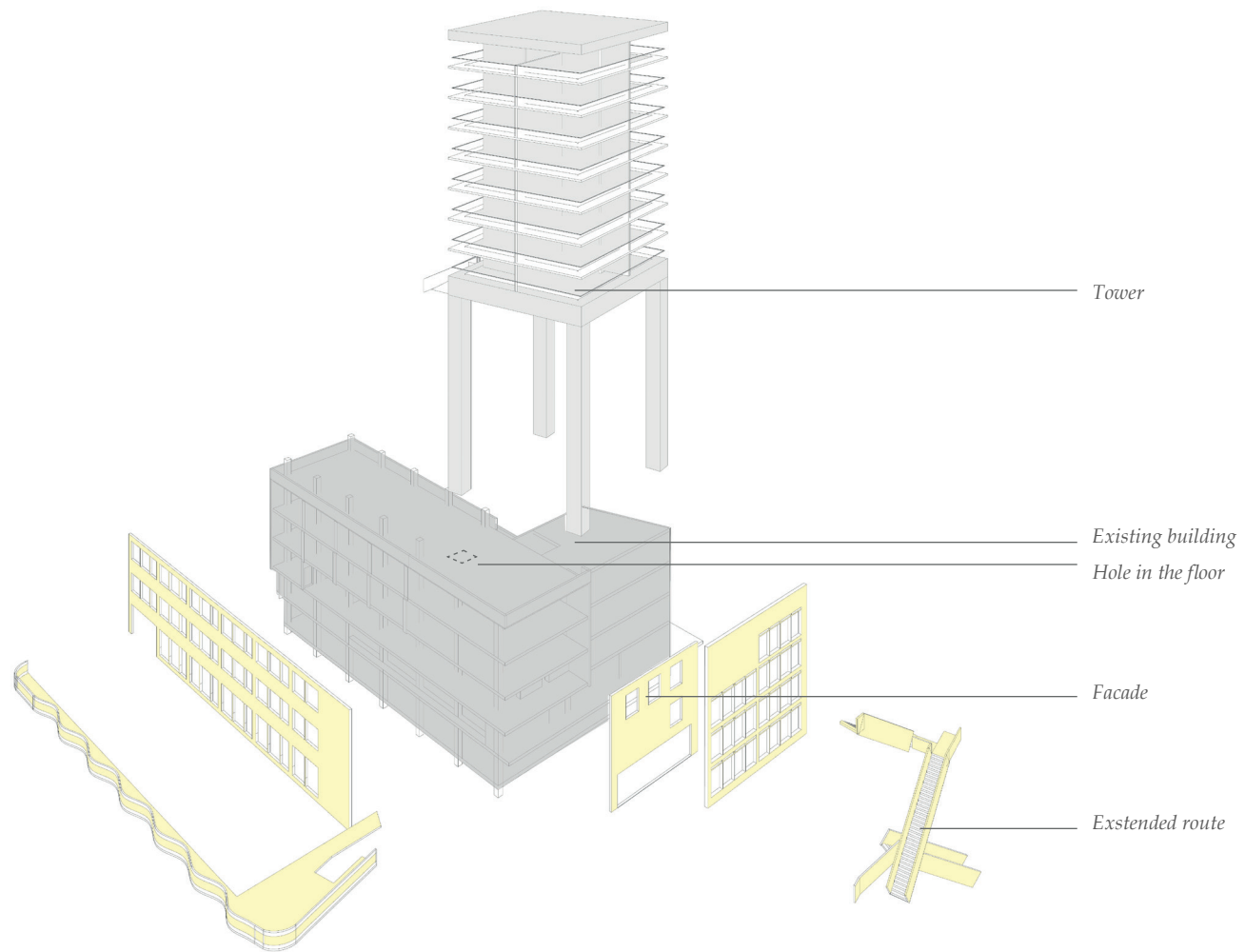
**Housing**



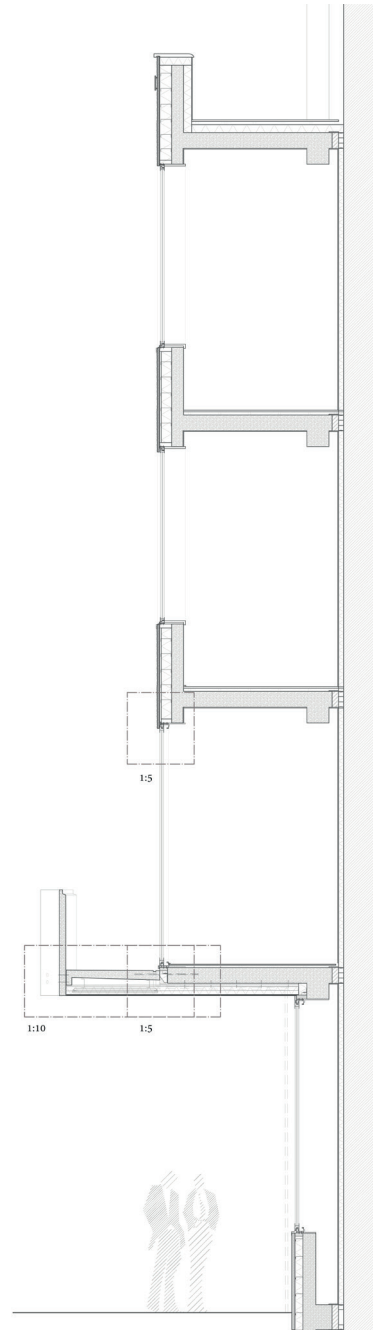


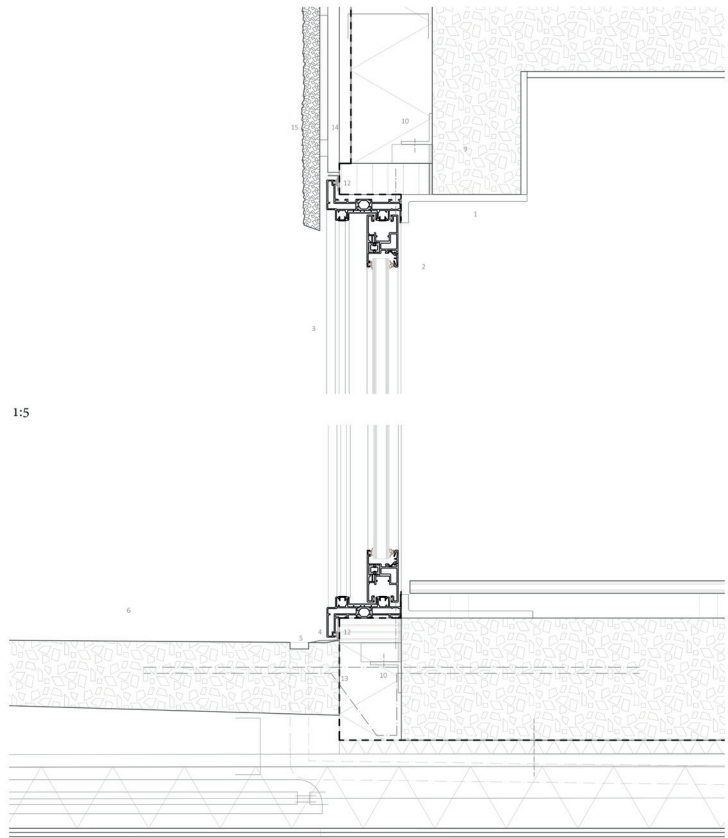
## A research on the walking experience of architecture





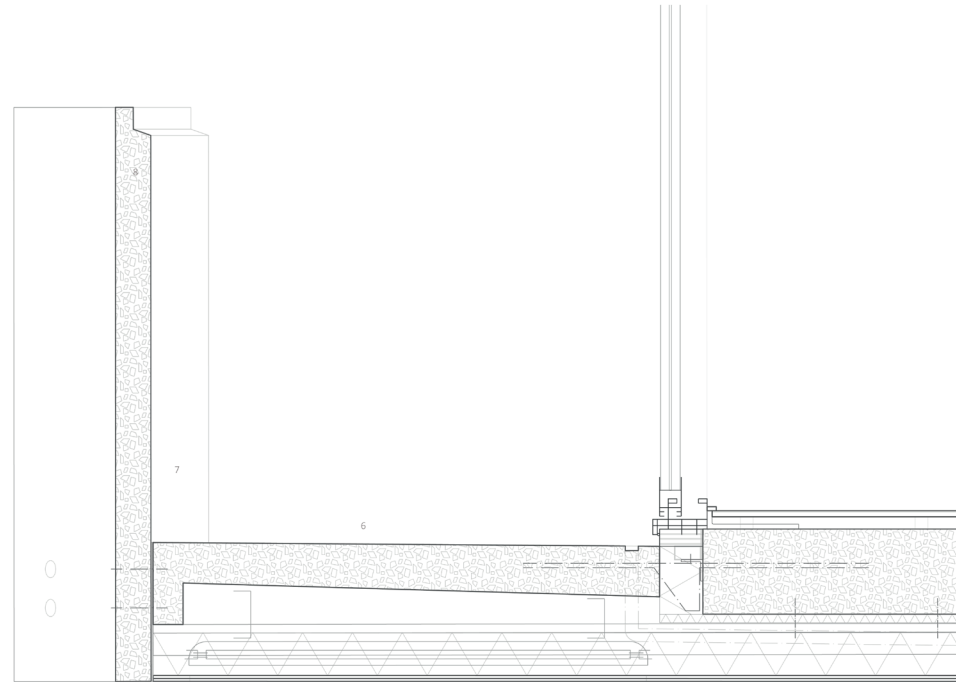






1:5

1:5



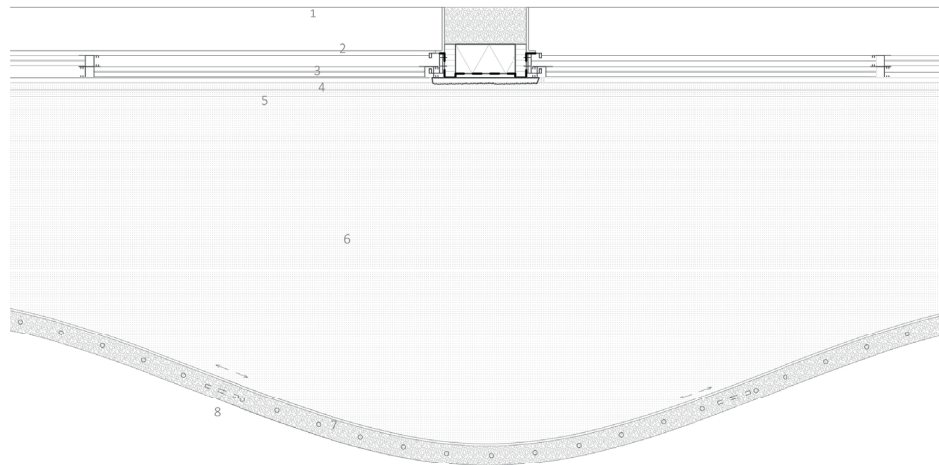
- |   |   |    |   |
|---|---|----|---|
| 1 | Natural stone                               | 9  | Existing concrete facade structure            |
| 2 | Triple sliding door                         | 10 | Metal L profile                               |
| 3 | HR++ Glass 4-16-4 mm                        | 11 | Schuco aluminium frame (Tripple sliding door) |
| 4 | Waterproof strip                            | 12 | Waterproof rubber filling                     |
| 5 | Pre-casted gutter                           | 13 | Vapor barrier                                 |
| 6 | Hi-Con concrete pre-casted curved gallery   | 14 | Aluminium cover to attach the stone panels    |
| 7 | Hi-Con concrete pre-casted balustrade       | 15 | Existing natural stone                        |
| 8 | Pins against movement in vertical direction |    |   |

1:20

Binnen

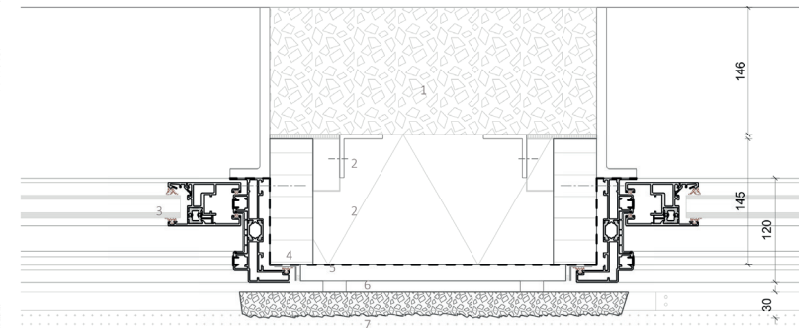
1:5

Binnen



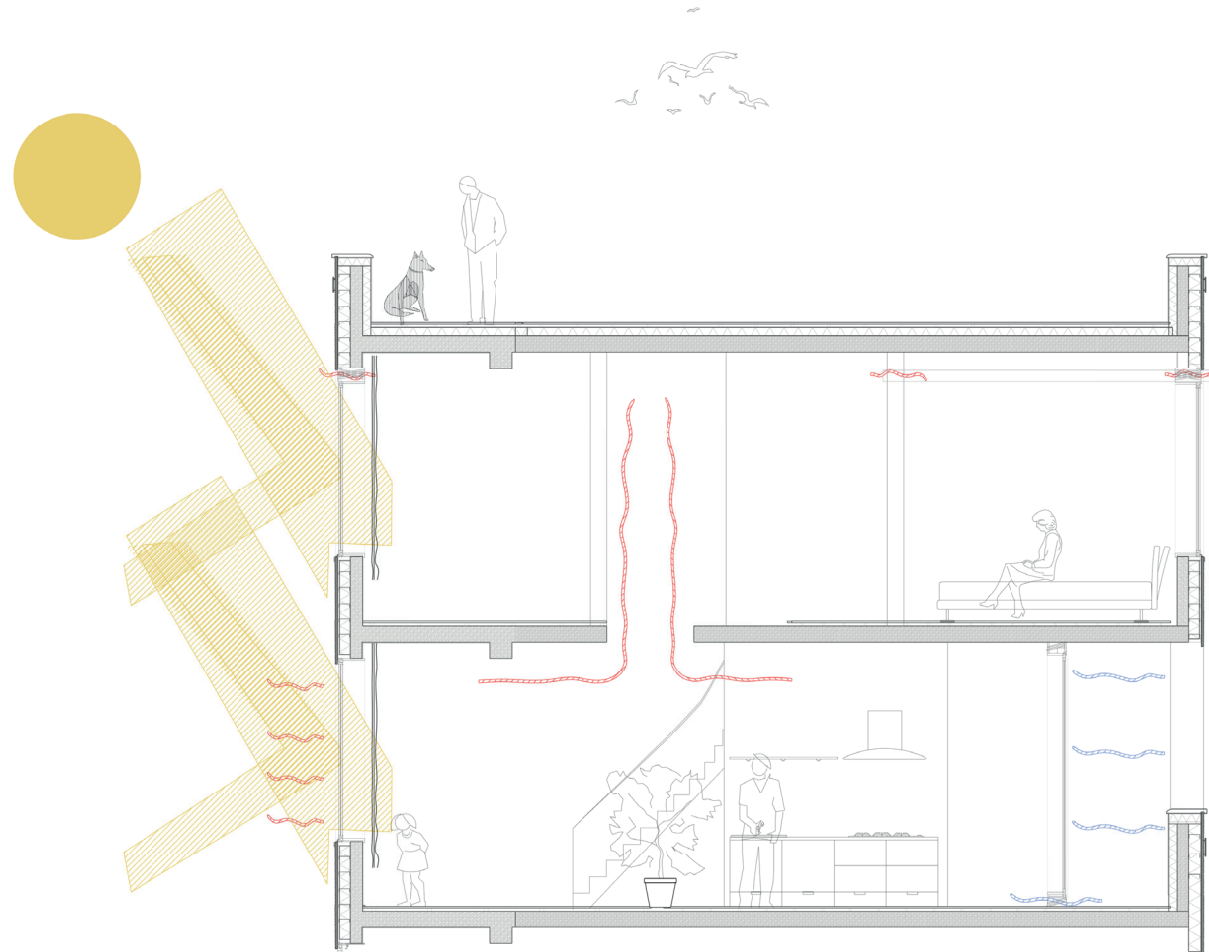
- 1 Nature stone
- 2 Triple sliding door
- 3 Hr++ Glass 4-16-4 mm
- 4 Waterproof strip
- 5 Pre-casted gutter
- 6 Hi-Con concrete pre-casted curved gallery
- 7 Hi-Con concrete pre-casted balustrade
- 8 Pins against movement in vertical direction

Duiten

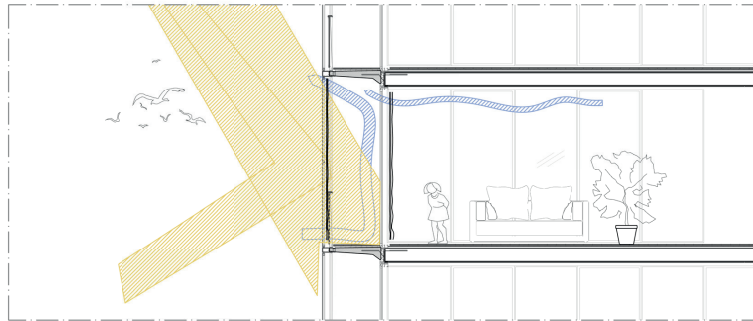


- 1 Existing concrete facade structure
- 2 Metal L profile
- 3 Schuco aluminium frame (Triple sliding door)
- 4 Waterproof rubber filling
- 5 Vapor barrier
- 6 Aluminium cover to attach the stone panels
- 7 Existing natural stone

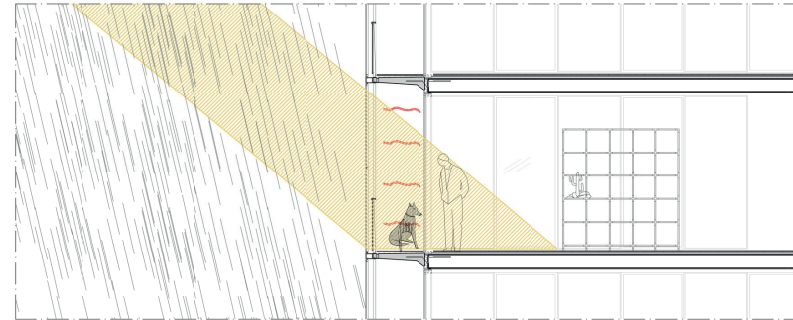
Duiten



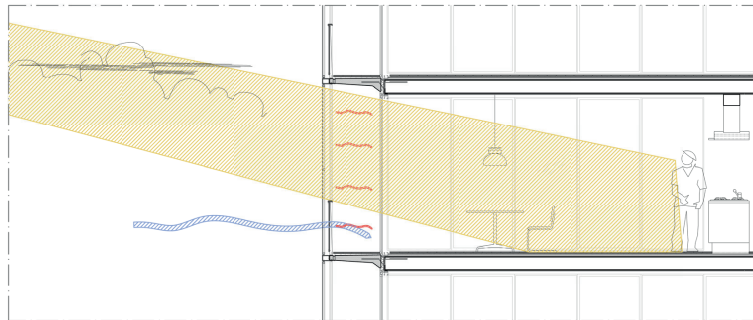
Summer: June sun inclination 60°  
 Curtain close to protected against overheating during the day.  
 Use colder air that is formed in the lower hallway that is always in the shadow. Let the hot air go out on the second floor.



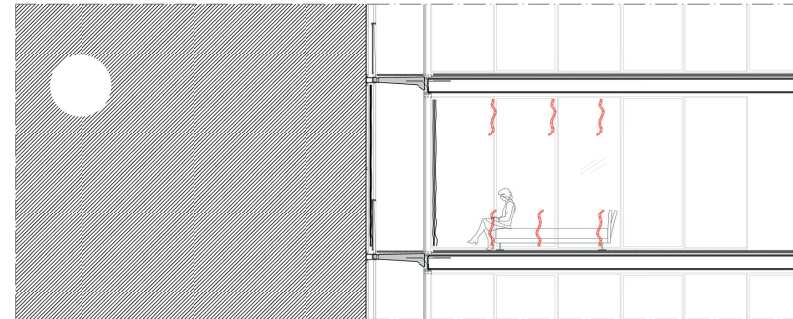
Summer: June sun inclination 60°  
 Sliding doors open, external curtain closed.  
 Protected against overheating during the day



Mid season September sun inclination 45°  
 Sliding doors closed, external and internal curtain open.  
 Heat collected by the greenhouse effect in the glazed facade

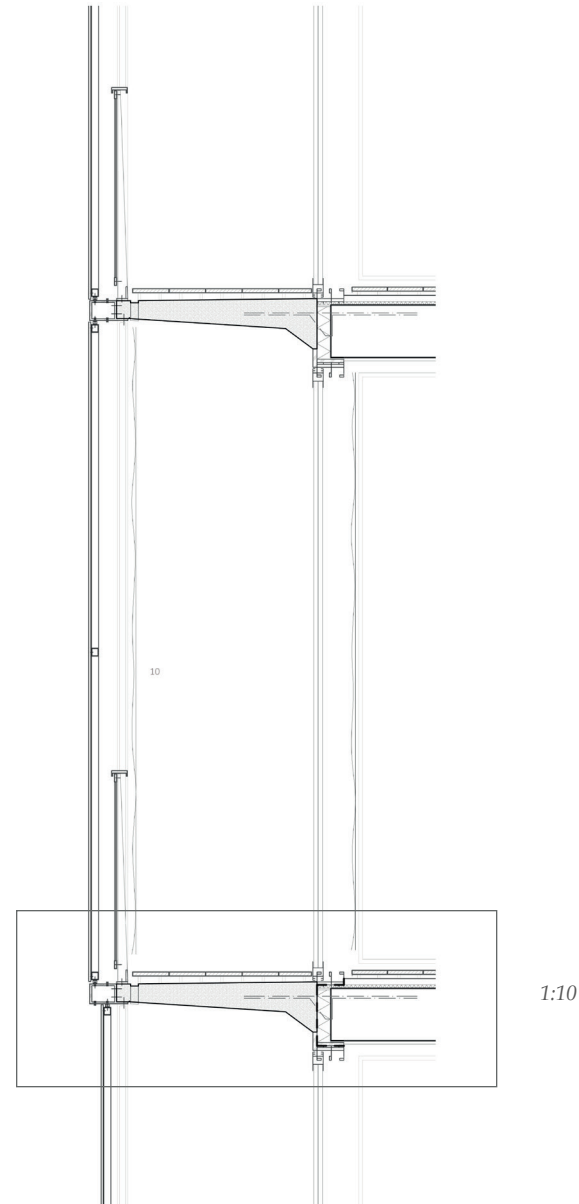


Winter: December sun inclination 15°  
 Sliding doors closed, external and internal curtain open.  
 maximum heat and light gain from the sun through the glazed facade



Night time  
 Sliding doors closed, external and internal curtain open.  
 maximum heat and light gain from the sun through the glazed facade

1:25



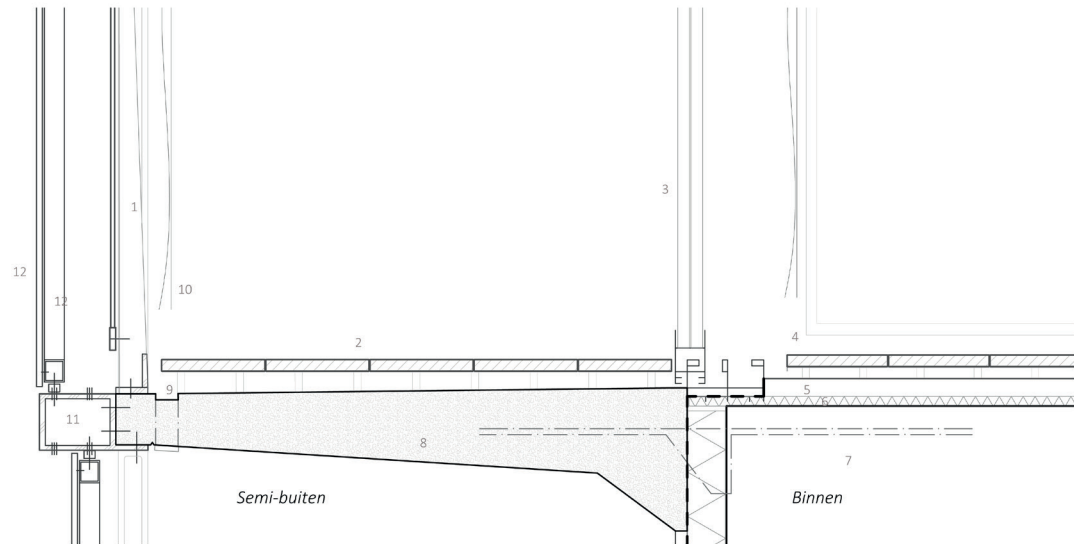
1:10

- 1 Steel balustrade with glass panel
- 2 Wooden outdoor balcony finish floor (increased)
- 3 Double sliding door - (hr++ double glass)
- 4 Wooden interior floor finish
- 5 Floating screed
- 6 Insulation
- 7 Construction floor concrete
- 8 Concrete pre-cast attachment
- 9 Drainage
- 10 Climate control curtains
- 11 Metal bearing column
- 12 Sliding panel - steel construction
- 13 Glass plate single glass

*Buiten*

*Semi-buiten*

*Binnen*



## A research on the walking experience of architecture

