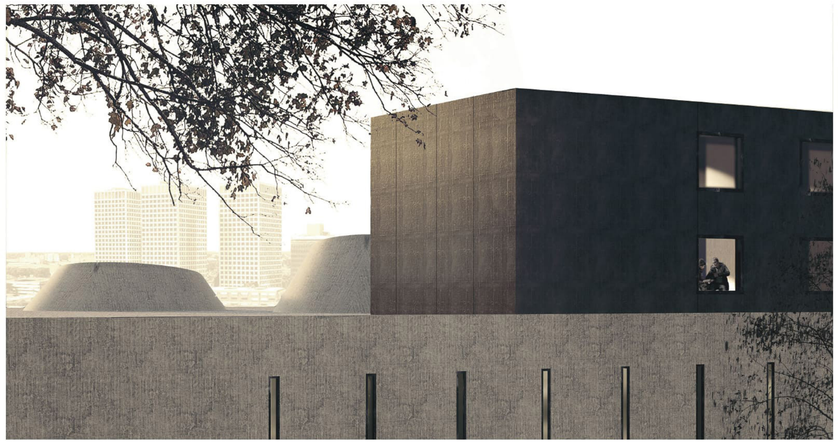
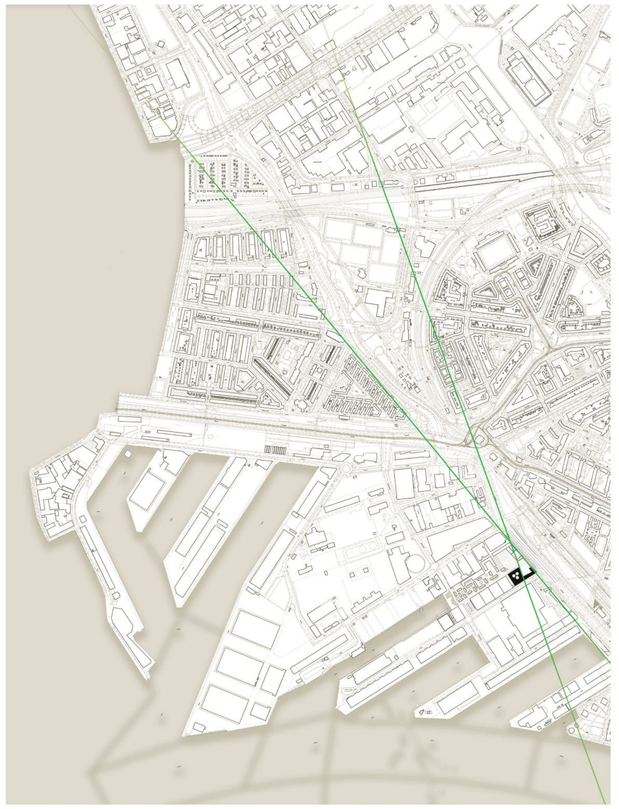


ROTTERDAM CULINARY CENTER

Vierhavensstraat, Rotterdam, The Netherlands



ROTTERDAM CULINARY CENTER

The Netherlands has traditionally been a destination for lovers of good food. Beyond a remarkable variety of cheeses, such as Gouda, Edam, or Maasdam, and its renowned margarine, few indigenous gastronomic references have successfully crossed its borders. However, the Netherlands has already reached the 10th place in the world in the list of countries with the most Michelin stars (Michelin Guide 2019) thanks to a large extent, to the professionalism and good work of a group of young chefs whose work stands out for its commitment and high creativity.

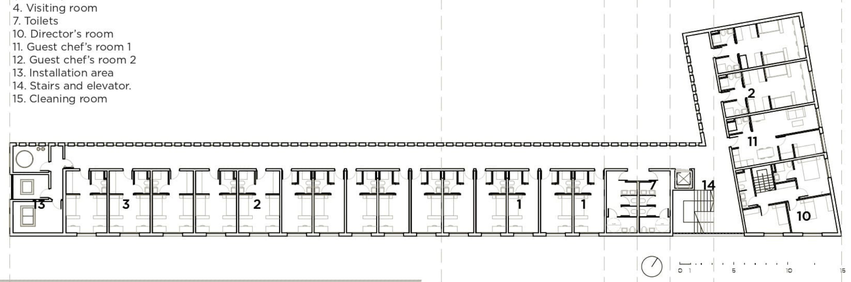
In order to consolidate the positive dynamics that Dutch gastronomy has experienced in the last decade, the construction of a Culinary Center is proposed in the city of Rotterdam. The main purpose of this new benchmark institution is training, research, and innovation in culinary techniques from a firm link to the Dutch geographical, productive and cultural context. The new academic center aims to attract students who wish to undertake a professional career in the world of cooking from a multidisciplinary approach. Consequently, training profiles in other disciplines, both technical and artistic, will be highly valued in the admission processes.

The project will be located in the Vierhavensblok area, an area of marked industrial and port character immersed in an urban regeneration process that is promoting the functional and constructive recycling of many existing structures to accommodate new uses linked, mostly, to creative disciplines. The building is bordered to the east by Vierhavensstraat, to the south by Keilestraat, to the west by a mixed-use industrial building, and to the north by a green area.

02_SECOND FLOOR (+7.00 m)

RESIDENTIAL AREA

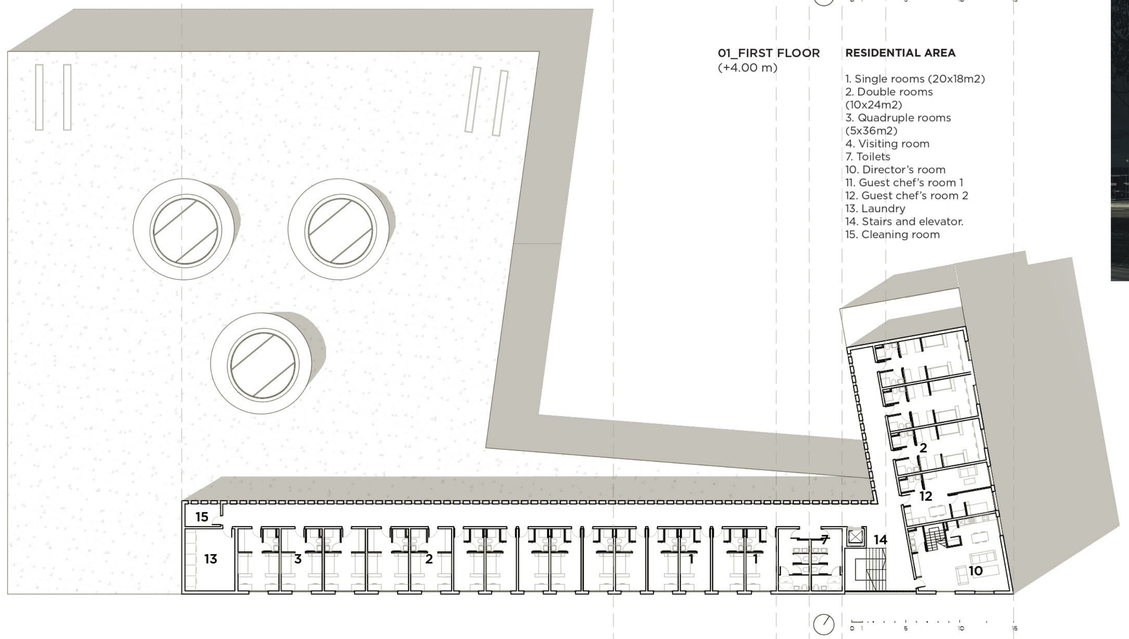
1. Single rooms (20x18m2)
2. Double rooms (10x24m2)
3. Quadruple rooms (5x36m2)
4. Visiting room
7. Toilets
10. Director's room
11. Guest chef's room 1
12. Guest chef's room 2
13. Installation area
14. Stairs and elevator.
15. Cleaning room



01_FIRST FLOOR (+4.00 m)

RESIDENTIAL AREA

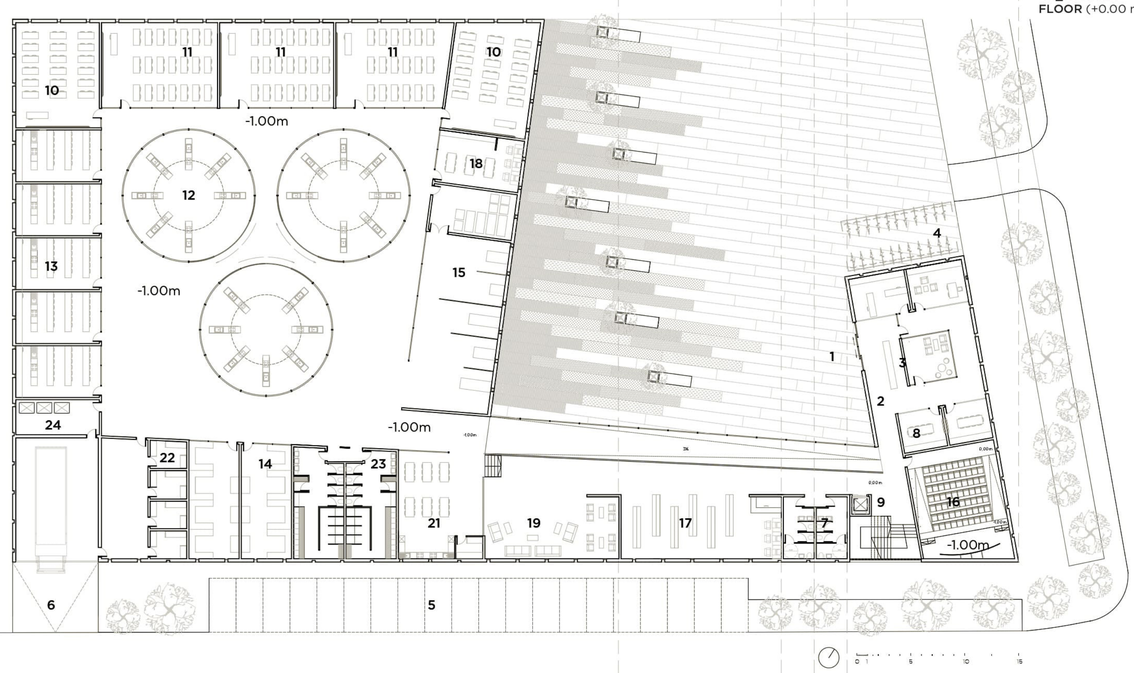
1. Single rooms (20x18m2)
2. Double rooms (10x24m2)
3. Quadruple rooms (5x36m2)
4. Visiting room
7. Toilets
10. Director's room
11. Guest chef's room 1
12. Guest chef's room 2
13. Laundry
14. Stairs and elevator.
15. Cleaning room

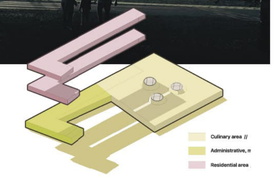


00_GROUND FLOOR (+0.00 m)

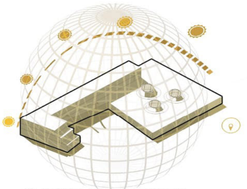
CULINARY AREA

1. Main entrance
2. Entrance hall
3. Reception
4. Bicycle parking (60)
5. Vehicle parking (20)
6. Loading / unloading dock
7. Toilets
8. Administrative area
9. Stairs and elevator.
10. Theoretical classrooms Mundo Salado_20 pers.
11. Theoretical classrooms Mundo Salado_20 pers.
12. Workshops / kitchen
13. Seminars
14. Creation laboratories
15. Multipurpose room / Exhibitions
16. Projection room (100 pax.)
17. Library / Audiovisual Archive
18. Teacher's room
19. Meeting room
20. Office
21. Food Storage
22. Cold rooms
23. Locker rooms
24. Trash room

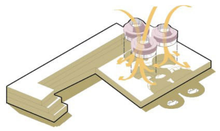




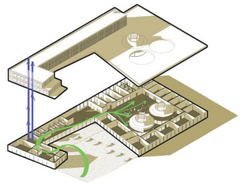
01. PROGRAM, PUBLIC/PRIVATE AREAS.



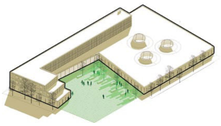
02. NATURAL LIGTHING BEHAVIOUR.



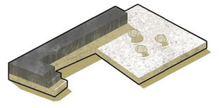
03. NATURAL LIGTHING INSIDE THE MAIN CULINARY AREA.



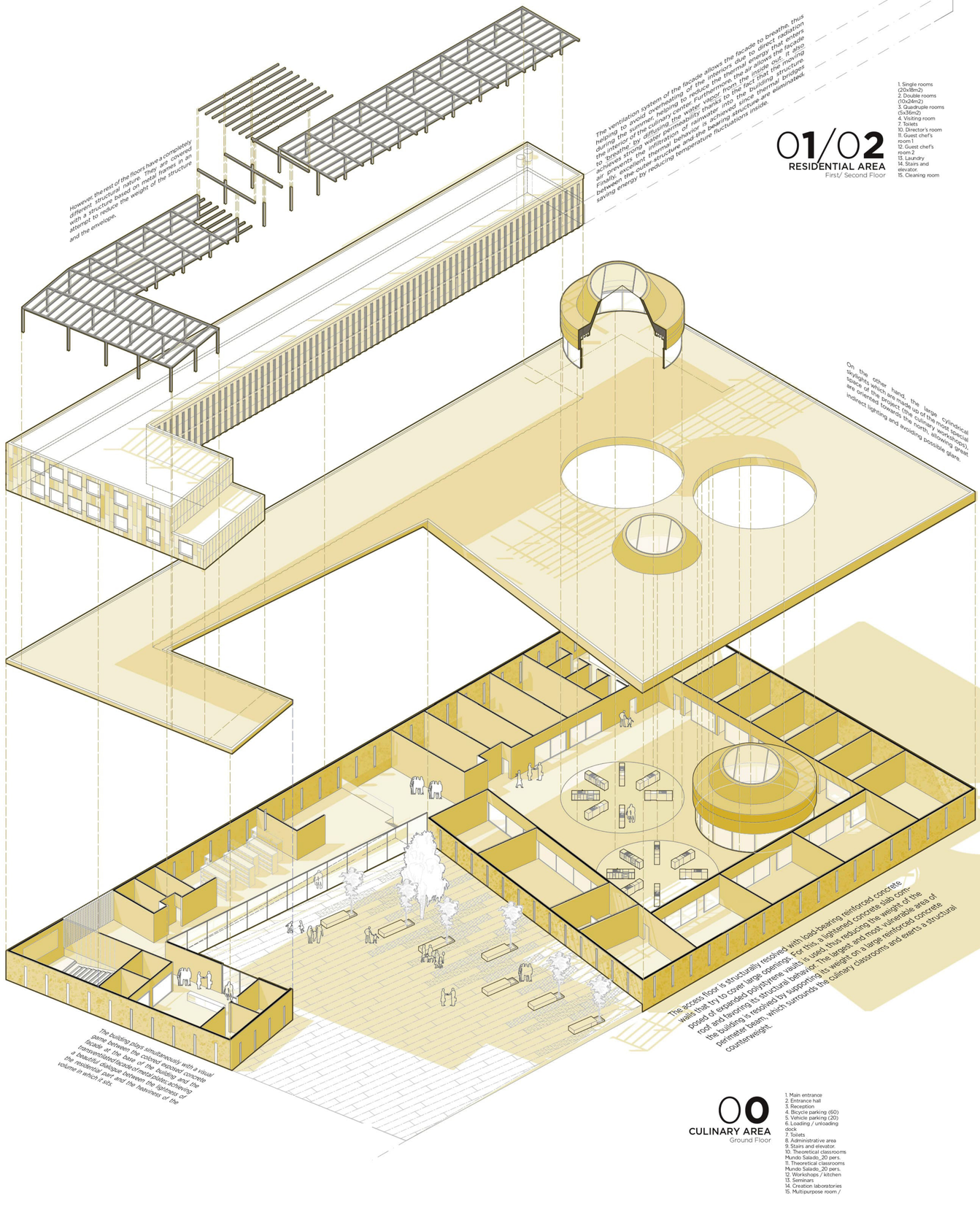
04. TOUR FROM THE OUTSIDE SQUAR TO THE MAIN CULINARY AREA.



05. MAIN SQUARE. CULTIVATION OF AROMATIC PLANTS FOR THE DEVELOPMENT OF CULINARY ACTIVITY.



06. MATERIALS. RELATION WITH ITS SURROUNDINGS.



ROTTERDAM CULINARY CENTER

-Vierhavensblok, Rotterdam, The Netherlands
-Program: educational, culinary, residential, mixed-use.

The culinary center lies in a hybrid building where teaching and communal living coexist, and it aims to be a point of reference, to become an icon of the city. At the same time, the building respects and interacts with the low-density neighborhood scale and its materials.

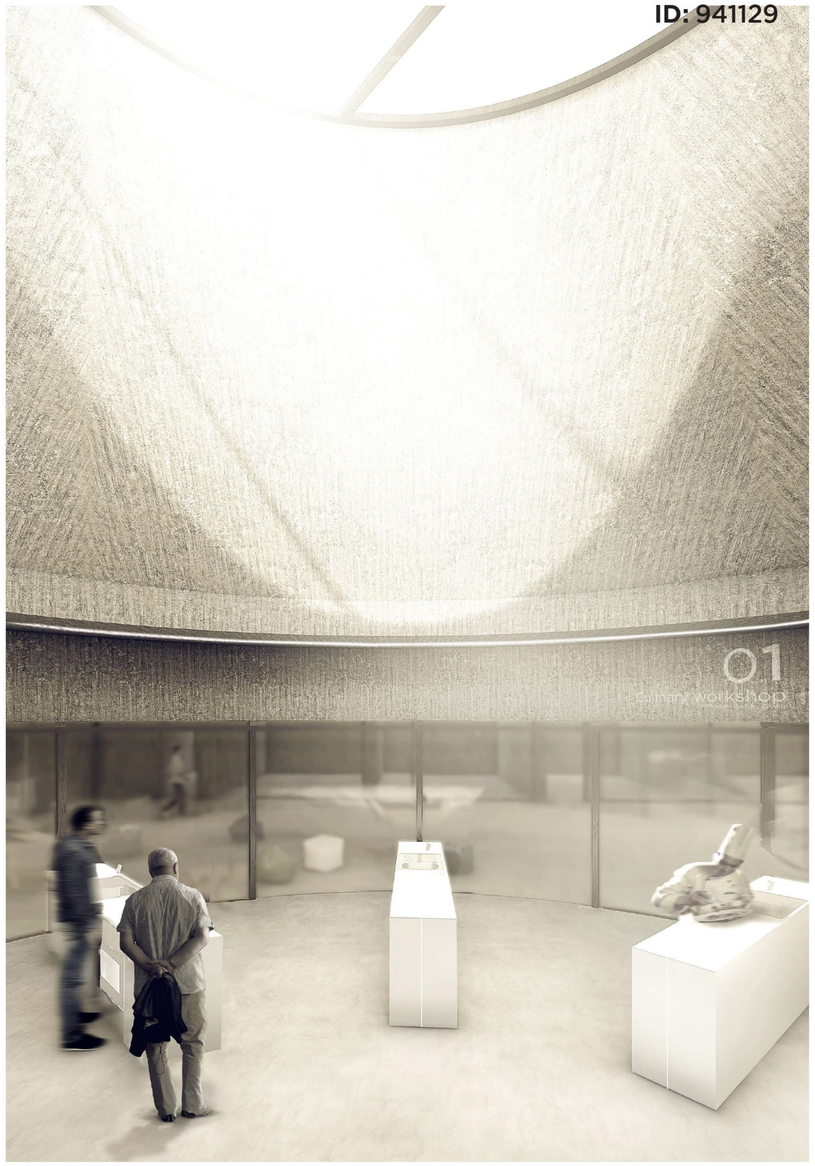
The building concentrates its most extensive and public program on the ground floor and offers multipurpose services to the most specific culinary areas. The residential area is concentrated on the two upper floors, achieving greater privacy.

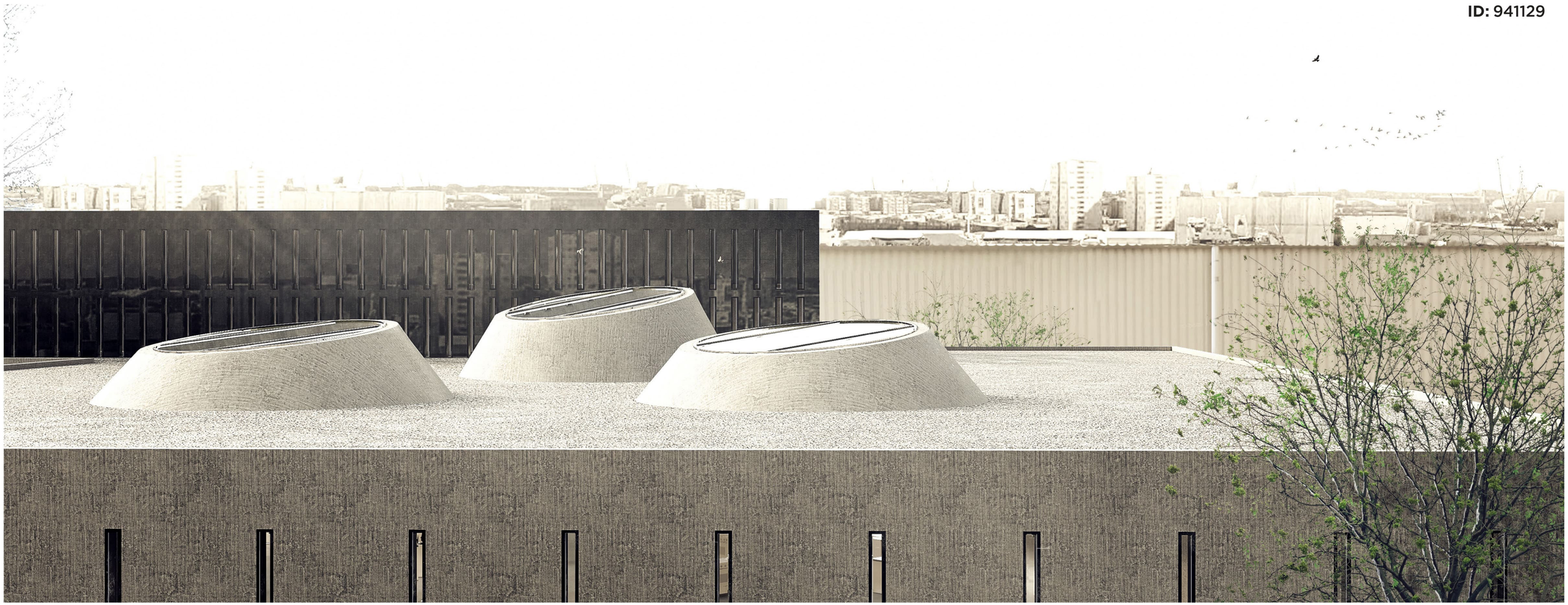
The whole idea is centered on a tour.

01) The starting point is a large square: the widest public space in the area and where local citizens or students can disconnect. It has a double function since it is a space where all kinds of crops and aromatic plants necessary for the development of culinary activity are grown.

02) Then, after entering the building, we find the most public areas, such as conference rooms and administrative uses. But it is the building itself that guides us to the most dreamed space of the project, while we observe the virtues of the urban landscape.

03) Finally, a world that is hidden from the outside appears by surprise. A spacious and bright space that empowers an environment where culinary teaching shines for its efficiency, and fluency. The core of the project focuses on this area, especially on the culinary workshops, which acquires great prominence due to its formal design: three large glass cylinders supported on a reinforced concrete structure that is illuminated from above. The light is diffused giving a special vitality to the space of classrooms that surrounds it. All this allows a strategic, transparent, and centralized vision of the interior space: this transparency allows shared teaching, which means, that everyone learns from everyone.





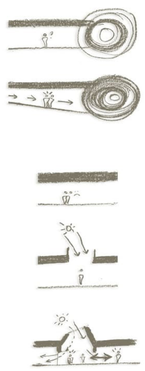
From a structural and constructive point of view, a clear contrast is achieved between the ground floor (mostly intended for culinary teaching areas) and the first and second floor, which are dedicated exclusively to the residential area for the students of the center. The access floor is structurally resolved with load-bearing reinforced concrete walls that try to cover large openings. For this, a lightened concrete slab composed of expanded polystyrene vaults is used, thus reducing the weight of the roof and favoring its structural behavior.

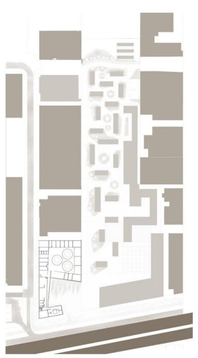
The largest and most vulnerable area of the building is resolved by supporting its weight on a large reinforced concrete perimeter beam, which surrounds the culinary classrooms and exerts a structural counterweight. However, the rest of the floors have a completely different structural nature. They are covered with a structure based on metal frames in an attempt to reduce the weight of the structure and the envelope.

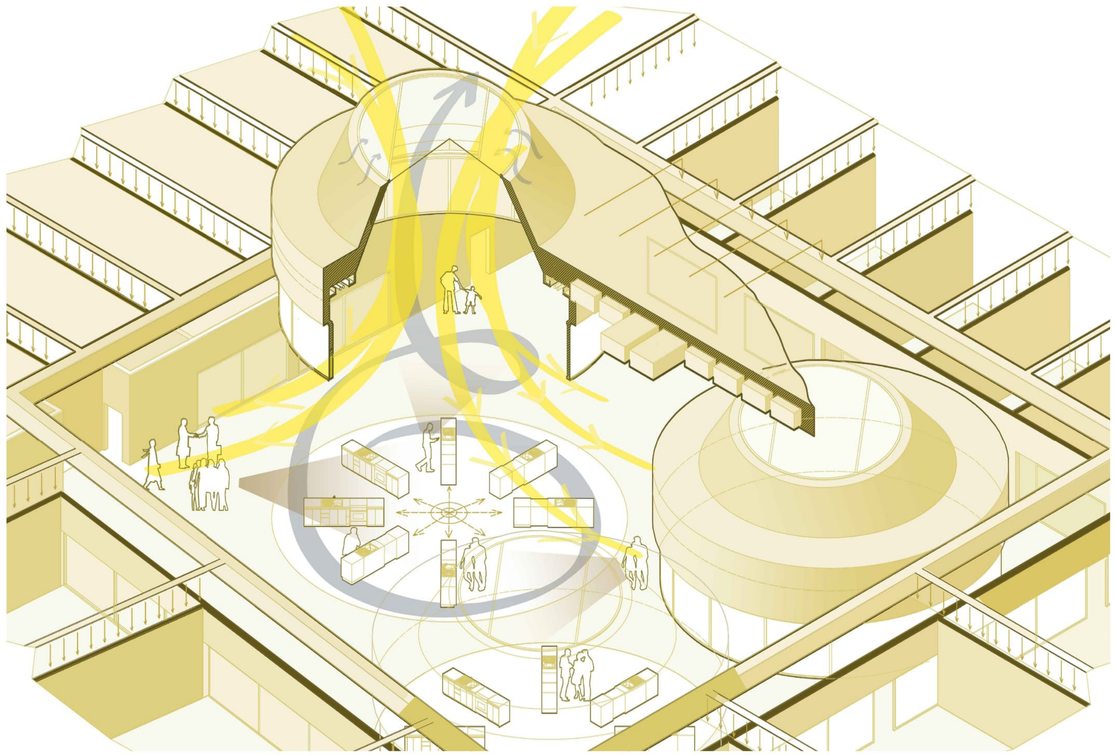
On the other hand, the large cylindrical skylights which are made up of the most special space of the project (the culinary workshops), are oriented towards the north, allowing great indirect lighting and avoiding possible glare.

The building plays simultaneously with a visual game between the colored exposed concrete façade at the base of the building and the transventilated façade of metal plates; achieving a beautiful dialogue between the lightness of the residential part and the heavness of the volume in which it sits.

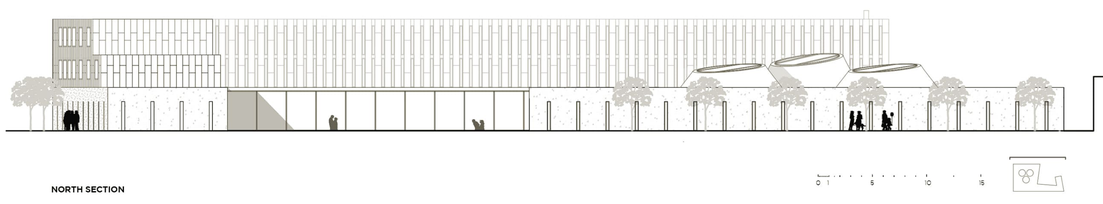
The ventilation system of the facade allows the facade to breathe, thus helping to avoid overheating of the interiors due to direct radition during the summer, helping to reduce the thermal energy that enters the interior of the culinary center. Furthermore, the air allows the façade to 'breathe' by diffusing the water vapor from the inside out. It also achieves strong water permeability thanks to the fact that the moving air prevents the infiltration of rainwater into the building structure. Finally, excellent thermal behavior is achieved since thermal bridges between the outer structure and the bearing structure are eliminated, saving energy by reducing temperatre fluctuations inside.



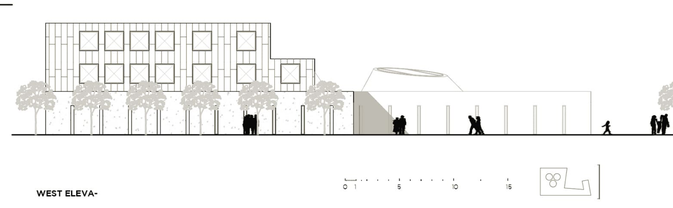




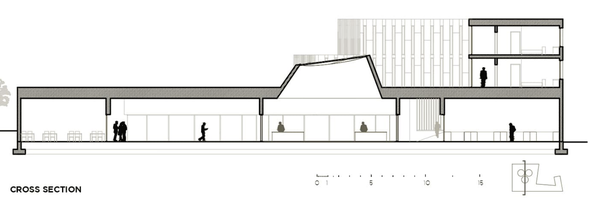
1. Interior exposed concrete lining with a polished finish
3. Regulation mortar 5cms
4. Compression resistant mineral rock wool thermal insulation 0.3 MPa 8cms
5. Recessed floor lighting
6. Sanitary floor 30cms
7. Self-protected polypropylene waterproofing sheet with mineral grains
8. Polypropylene geotextile
9. Layer of gravel aggregates
10. Slope of rocky substrates
11. Clay soil
12. Protective layer of pebble gravel d = 16mm
13. Protective separating layer, polystyrene geotextile
14. XPS thermal insulation 10cms, waterproof.
15. Chamfered meeting
16. Waterproofing sheet reinforcement
17. Glass fiber reinforced PCV sheet
18. EPDM elastic gasket 2cms
19. Lightening concrete for slope formation 7cms
20. Reinforced concrete slab composed of two 20cm "in situ" concrete sheets with 60cm expanded insulation (lightening) with brown coloring using oxides or synthetic resins.
21. Suspended ceiling made of Troldteckt plates (composed of chipboard in strips mixed with cement, excellent acoustics for classrooms)
22. Natural rock wool insulation 10cms
23. Sheet composed of two layers of concrete "in situ" 10cm by 60cm with brown coloring by oxides or synthetic resins.
24. Carpentry with stainless steel thermal bridge break, as an element to hold the glass.
25. Laminated safety glass, with layers bonded by polyvinyl butyral, impact resistant 3/5/4 and fire resistance EI 90, with intumescent interlayers.
26. Tempered safety glass, greater mechanical resistance and resistance to fire EI 90, with intumescent interlayers.
27. Concrete ring reinforced with brown coloration by oxides or synthetic resins.
28. Load bearing wall made up of two 15cm "in situ" concrete sheets with 15cm expanded insulation (lightening), with 30cm oxide or synthetic resin coloring.
29. EPDM elastic expansion joint
30. Reinforced concrete foundation 30cms
31. Cleaning concrete 10cms
32. Compact base
33. Waterproof nodular polypropylene sheet with projections and micro chambers, vertical drainage
34. Calendered polypropylene geotextile for protection and vertical drainage (thermo fused to waterproof sheet)
35. PVC porous DRAIN pipe for collecting runoff water Ø 20cm
36. Porous concrete trench
37. Slope of rocky substrates
38. Clay soil
39. 5cms paving stone with 2cms mortar joints, with waterproofing treatments
40. Regulation mortar 5cms
41. Concrete floor 10cms
42. Suspended ceiling made of Troldteckt plates (made of wood chipboard in strips mixed with cement, excellent acoustics for classrooms)
43. Reinforced concrete slab composed of two 20cm "in situ" concrete sheets with 60cm expanded insulation (lightening)
44. 40 cm reinforced concrete perimeter beam with brown coloring by oxides or synthetic resins
45. External cladding of metal plates
46. Fully ventilated air chamber 7cms
47. Thermal insulation of mineral wool 8cms
48. Resistant inner sheet of reinforced concrete 10cms
49. Self-supporting laminated gypsum cladding with 7.5 cm natural rock wool acoustic insulation.
50. Laminated safety glass joined by butyral 7cms
51. Stainless steel metal fastening of metal plates to a resistant inner sheet.
52. Aluminum flashing with lower thermal insulation.
53. Stainless steel carpentry with thermal interruption
54. IPE 220 steel beam
55. Steel vaults 60 cm
56. IPE 180 steel joists
57. Reinforced concrete layer 5 cm
58. Natural glass wool thermal insulation with compressive strength 0.3 **MPa 10cm**
59. Regulation mortar 5cms
60. Interior floor of ceramic tiles 3cms
61. Interior partition wall of reinforced concrete and self-supporting laminated plaster cladding with 7.5 cm natural rock wool acoustic insulation.
62. Brickwork windowsill
63. Aluminum flashing with anti-corrosion treatments
64. Wooden shelf
65. Insulated shutter box with mineral wool 20 x 20cms
66. Aluminum lintel



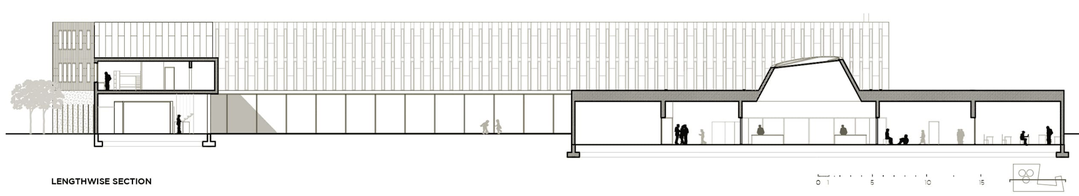
NORTH SECTION



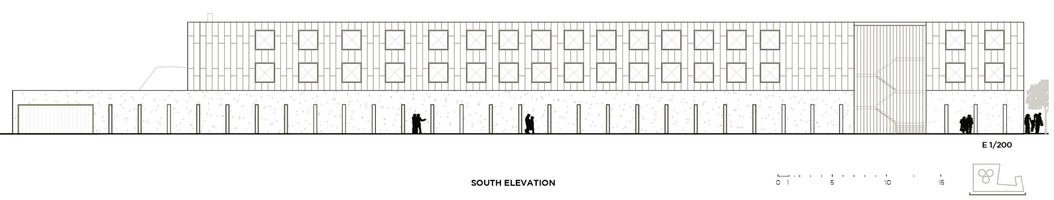
WEST ELEVA-



CROSS SECTION



LENGTHWISE SECTION



SOUTH ELEVATION

E 1/200