Interdisciplinary Project based Design S

Project analysis

MIXED USE ARCHITECTURE, OFFICE BUILDINGS, RESIDENTIAL - 2017 - LANDSHUT, GERMANY

Architects: Architekturbüro Leinhäupl + Neuber

Area: 1400.0 m²
“Concrete meets Corten” Residential and Office Building

Functions

- 2 offices and 1 apartment
- Basement - underground car parking

Materials

- 3-storey reinforced concrete building clad with corten steel slabs
- Ceiling and roof with concrete core activation
- Narrow and difficult building ground with 70% slope inclination

Guiding Principles

- recyclable and regional building materials
- avoidance of composite materials
- minimization of energy consumption

Orientation

- follow different contour lines of the mountain
- adapts to the topography
- views to the old town of Landshut
- Slope water from the mountain is used for heating and cooling
Building analysis
Basement analysis

Parking 365 m²
Verticale circulation 25 m²
Ground floor analysis

- Offices: 200 m²
- Verticale circulation: 25 m²
- Bathroom: 11 m²
- Meeting room: 35 m²
- Kitchen: 20 m²
First floor analysis

- **Offices**: 113 m²
- **Relax space**: 60 m²
- **Meeting room**: 30 m²
- **Bathroom**: 11 m²
- **Others rooms**: 25 m²
- **Verticale circulation**: 25 m²

Colors indicate:
- **Verticale circulation**: 25 m²
- **Others rooms**: 25 m²
- **Bathroom**: 11 m²
- **Meeting room**: 30 m²
- **Relax space**: 60 m²
- **Offices**: 113 m²
Second floor analysis

- Verticale circulation: 25 m²
- Relax room: 90 m²
- Offices: 37 m²
- Kitchen: 13 m²
- Others rooms: 16 m²
- Bathroom: 8 m²
Functions diagram

- 8% private office
- 17% common office
- 3.3% cafeteria
- 7.2% vertical circulation
- 4.7% meeting room
- 25% offices
- 2.1% bathroom
- 6% relax room
- 28% parking
- 23.7% others (print room, circulations...)
Light analysis
Light analysis

- Rooms without natural light
- Rooms with natural light

- Basement
- Ground floor
- First floor
- Second floor

- Offices
- Relax rooms
- Parking
- Bathrooms
- Meeting rooms
- Kitchens
- Circulations

45% 55%
Office capacity

Minimum spaces pro worker
- 2.5-3m high
- 2m² free surface
- 8-10m³ working space
- 1.5m between tables

Accesses
- min. 1m corridors and doors
- min. 0.8-0.9m 1 person
- min. 1.2-1.4m 2 persons
- min. 1m stairs

Parking
- min. 4.5x 2.25m each spot
- min. 2.5m corridors

Tables
- 60-72 x 60-84cm 1 person
- 60-72 x 90-126cm 2 persons
- 105-130 x 96-130cm 3 persons

Bathroom
- min. 1 bathroom (< 100m² or <10 pers.)
- min. 2 bathrooms (< 200m² or <30 pers.)
- min. 3 bathrooms (< 300m² or <40 pers.)

Cafeteria
- required for offices with more than 50 pers.
<table>
<thead>
<tr>
<th>Ground</th>
<th>First Floor</th>
<th>Second Floor</th>
<th>Basement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cafeteria: 20m2</td>
<td>Misc Room: 25m2</td>
<td>Misc Room: 16m2</td>
<td>Parking: 225m2</td>
</tr>
<tr>
<td>Meeting Rooms: 21m2</td>
<td>Meeting Rooms: 18m2</td>
<td>Kitchen: 13m2</td>
<td>Circulation: 25m2</td>
</tr>
<tr>
<td>Bathroom: = 11m2</td>
<td>Bathroom: = 11m2</td>
<td>Bathroom: = 8m2</td>
<td>Total Sqm: 250</td>
</tr>
<tr>
<td>Circulation: = 25m2</td>
<td>Circulation: = 25m2</td>
<td>Break Room: 56m2</td>
<td>Max Cars: 14</td>
</tr>
<tr>
<td>Office: 125m2</td>
<td>Office: 70m2</td>
<td>Office: 23m2</td>
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</tr>
<tr>
<td>Break Room: 37m2</td>
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</tr>
</tbody>
</table>

**Total Sqm:** 202  **Total Sqm:** 186  **Total Sqm:** 116  **OVERALL SQM: 507**

**Max Persons:** 20  **Max Persons:** 18  **Max Persons:** 11  **# OF PERSONS: 49**
Thank you