

# Kesselhaus Commercial West With Full Fit-Out on the 1st and 2nd Floors

## Building Overview

Planning and construction of the building follow the guidelines of the 2000-Watt Society

[www.local-energy.swiss](http://www.local-energy.swiss)

The additional requirements for primary energy demand and greenhouse gas emissions during construction and operation are met. Increased sound insulation requirements according to SIA 181 are targeted for all building components. Standard sound insulations requirements are guaranteed.

The Kesselhaus is a listed historical monument of regional significance and is protected under cantonal heritage regulations. The protection scope includes the location, exterior appearance, and load-bearing structure. The heritage protection authority must be consulted for approval of the tenant fit-out.

## Construction

Entire building in solid construction, non-load-bearing interior walls in masonry/gypsum stud walls.

Existing and new ceilings in reinforced concrete, staircase in cast-in-place concrete, tower in steel construction with composite Holorib floors.

## Flat Roof/Terrace

Flat roofs built according to SIA standards. Non accessible flat roofs with extensive green roofing and photovoltaic system. Lightning protection system installed.

Terrace floors on 4th and 6th floors with concrete slabs. Railings in round steel tubes and wire mesh, hot-dip galvanized.

4th-floor terrace with concrete staircase access.

## Facade

Existing structure in concrete skeleton construction with cement stone infill (cleaned, re-profiled, and retouched).

Prefabricated steel structure installed for sunshade mounting.

## Windows

Loggia area (outer layer): Historic windows to be removed, restored, and reglazed.

All other windows: New hot-dip galvanized steel windows in historic style, with triple insulating glazing (clear white glass, partially cathedral glass). Spacer bars and interme-

diate mullions: Black. Sound insulation:  $R_w + C_{tr} > 25$  dB (measured on site), partially openable window sashes

## Sun Protection (Shading)

External vertical awnings with acrylic awning fabric, ZIP-guided, motorized, mounted on the prefabricated steel structure. In loggia areas, the shading is interior, divided horizontally into two sections. Control by tenant, override by central building automation system (wind, sun, frost, etc.); No blackout function.

## Exterior Doors

Main staircase entrance: Double-leaf door, powder-coated with glass insert, push handles on both sides.

Terrace doors (4th and 6th floors): Hot-dip galvanized steel frame door, possibly with porthole window.

## Intercom/Mailbox

Mailbox system in the entrance vestibule, standard size, with integrated video intercom system connected to a tenant-managed cloud solution (no fixed stations). Additional intercom system at the main entrance per floor.

## Locking System

Electronic access control system included in the base building setup.

Alternative access system possible by the tenant.

## Signage/Facade Labeling

Common areas (entrance, staircase, lift) according to the signage concept (in progress).

Facade: According to the signage concept (in progress) and subject to regulatory approval. Tenant-specific adaptations as part of the tenant fit-out.

## Staircase

Outside the insulation perimeter.

Stair flights and landings in exposed concrete, floor in polished hard concrete.

Walls and ceiling: Existing structure (cleaned, re-profiled, retouched).

Stair railing: Painted metal (reddish-brown) with wire mesh, handrail in black.

Windows: Historic windows to be removed, restored, and reglazed with cathedral glass.

Lighting: Design tube lights mounted on ceiling and walls, emergency exit signage.

### Lift Systems

Passenger Lift East (Basement to 6th floor) with cabin dimensions 120/200/230 cm (doors 90/210 cm), 1050 kg, 1.6 m/s, featuring high-quality interior finish (walls red, ceiling black, mirror, floor polished hard concrete), wheelchair-accessible, with a capacity of 14 people.

Freight Lift: connects the delivery area on the ground floor with the basement; access to rental space via the connection corridor in the basement to Passenger Lift East, cabin dimensions 130/240/210 cm, 1600 kg, 1 m/s.

Walls, ceiling and cabin doors in galvanized steel, protective bumpers in two rows of wood, floor in checker plate.

Shaft doors: 130/210 cm, primed; lighting color: 2700 Kelvin.

### Sanitary Facilities

Fully equipped wheelchair-accessible WC on the ground floor and gender-separated showers in the basement for shared use; Fully equipped gender-separated WCs on each floor; Floor polished and sealed hard concrete, walls glazed tiles (10×10 cm)/plastered/painted wood composite material

### Surroundings

Shared use of the Papieri-Areal outdoor areas with paved surfaces, green spaces, plantings, underground waste container systems, children's playgrounds, etc.

### Underground Parking

Parking spaces in Underground Garages A/B, directly connected to the building.

Visitor parking available above ground on the Papieri-Areal or in the publicly accessible section of the underground garage (pooling system).

### Bicycle Parking

Bicycle racks along the facade, partially covered by canopies, with additional spaces available in the surrounding area.

## Rental Space

### SIA 500

All rooms are accessible without barriers. Office South, 4th floor, with stair lift.

Fully equipped wheelchair-accessible restroom on the ground floor for shared use.

### Ceiling heights (partially with lower beams)

	Offices West, North	Tower	Offices South	Atrium
1. floor	2.56 m	2.10–2.56 m		16.9 m
2. floor	2.86 m	2.80 m		
3. floor	2.78 m	2.74 m	2.37–3.72 m	
4. floor	2.90 m	2.84 m	6.68 m	
5. floor	4.40 m	2.75 m		
6. floor			2.81 m	

### Load capacity

Rental unit: 300 kg/m<sup>2</sup>

Terrace: 300 kg/m<sup>2</sup>

### Materials for Atrium and Loggia

Flooring Existing/new, decoupled subfloor, red-tinted hard concrete, polished.

Chutes visible, illuminated with surrounding railing, partially covered with steel plates, surrounding concrete threshold; Tower surrounding metal grid and concrete threshold; Loggia: Existing clinker (cleaned, reprofiled, sealed) with concrete thresholds.

Walls East and South existing (cleaned, reprofiled, retouched) with patina and historical fixtures, pipes, etc.; Office glazing metal, powder-coated with closed doors; Glazing to Loggia Powder-coated; Loggia East Insulated and plastered, remainder is existing (cleaned, reprofiled, retouched). Ceiling Existing ceiling (cleaned, reprofiled, retouched) with 2 skylights; Loggia ceiling Existing, insulated, and plastered. Full fit-out for 1st and 2nd floor: Fully furnished and equipped as a lobby lounge with seating areas, meeting corners, and phone booths.

## Materials for Tower

Exterior materialization: reen metal cladding with a hammered surface (acoustically effective on the 5th floor) and exposed concrete in board formwork.

Interior materialization:

Walls: Metal cladding, partially acoustically effective

Flooring: Concrete/Holorib, decoupled reinforced concrete subfloor, tenant finish (max. 15 mm); on the 1st floor, glass floor with a view of illuminated chutes

Ceiling: Painted Holorib ceiling, on the 1st floor, exposed concrete in the center, with surrounding painted metal ceiling, on the 5th floor, painted metal ceiling with skylights

Windows: Different designs and lighting per floor, on the 1st floor fully glazed, on the 5th floor portholes, skylights, and facade windows with external blinds, other floors with rectangular glazing in various designs

Full fit-out of the 1st and 2nd floors: Carpet flooring, suspended lighting, fully furnished and equipped as meeting rooms.

## Materials for Offices

Flooring: Concrete floor, existing/new, decoupled subfloor, tenant finish (max. 15 mm); Circulation areas: Concrete floor, existing or new, decoupled subfloor, polished reinforced concrete.

Office South, 4th floor: Partially glass floor with a view into chutes.

Walls: Walls and Columns Existing (cleaned, reprofiled, re-touched); Exterior walls/walls to stairwell: Insulated, plastered; New interior walls: Masonry with base plaster or dry-wall, plastered and painted; Office South, 3rd floor both sides with large-scale glazing, powder-coated, Office South, 4th floor windows into the atrium, fixed glazing, powder-coated.

Ceiling: Concrete ceiling, existing (cleaned, reprofiled, re-touched)/new.

Full fit-out of the 1st and 2nd floors: Carpet flooring, plastered and painted walls, acoustic measures, suspended basic lighting.

## Interior Doors

Commercial entrance doors to the staircase: Steel frame door with glazed insert and mullions, external push handle, hot-dip galvanized, partially double-leaf.

Doors in office glazing: Steel frame door, powder-coated EI30.

Tower: Steel frame door, sheet metal-clad, powder-coated green, with porthole window.

Connecting door East 1st floor: Inner door designed as double double-leaf door; the connecting door on the loggia serves as an emergency exit for the neighboring commercial space and will be alarm-monitored.

Loggia: Double-leaf steel frame door with glazed insert, side steel frame door, hot-dip galvanized, possibly with porthole window.

## Metalwork

Gallery railings: Round steel tubes and wire mesh, hot-dip galvanized.

## Electrical Installations

Offices: Electrical supply up to tenant sub-distribution with main switch and surge protection; recess in the screed floor in the window area of individual offices with empty conduit for potential tenant-installed floor ducting (expansion of sub-distribution and distribution within the rental area by the tenant); metering at the main distribution (ANB measurement).

Fiber optic connection from BEP to OTO socket.

Emergency exit signage in rental areas is the responsibility of the tenant.

All commercial rental units equipped with KNX for shade control and intercom; video intercom via app (indoor intercom station can be installed in the tenant fit-out); lighting control and temperature control (heating/cooling) can be integrated in the tenant fit-out.

Tower: Empty conduits routed to the tower with preparation for a floor socket in the center of the room (except for the 1st floor, which has a glass floor).

Atrium and galleries: Basic electrical infrastructure, including fixtures, emergency exit signage, atrium lighting with hanging spotlights, gallery lighting with tube lights.

Full Fit-Out (1st and 2nd Floors)

Offices: Expanded sub-distribution with KNX control components and fuse protection for sockets;

Floor duct along the facade with sockets and network (UKV) connections (1 UKV and 1 triple socket per workstation, 1 switched as per plan).

Lighting control via presence detectors and switches.

Meeting rooms: 1st floor: Expanded sockets and network (UKV) connections via power columns. 2nd floor: Floor boxes for sockets and network. Lighting control via presence detectors and switches.

### Heating and Cooling

Heat and cooling generation within the site-wide energy system (100% CO<sub>2</sub>-neutral).

Underfloor heating with free cooling (exceptions: Tower 1st floor, Office South 4th floor).

Spiral radiators installed along the facade in Atrium, Office South (3rd and 4th floors), and Office West/North (5th floor).

Cooling supply lines extend to the outer shaft edge (distribution within the rental space by the tenant).

Cooling consumption metered, while heat consumption is billed at a flat rate based on heated floor area (m<sup>2</sup>).

Temperature control via room thermostat.

Full Fit-Out (1st and 2nd Floors): 1st floor meeting room equipped with a recirculating air cooling unit.

### Ventilation Systems/Climate Control

Ventilation system with heat recovery, filtration, change-over, and optional humidification (tenant fit-out).

Supply air in summer: Cooled to 21°C (room temperature may be higher, at an outdoor temperature of 30°C, max. 26°C room temperature).

Supply air in winter: Heated to 21°C.

Additional recirculating air coolers can be installed as part of the tenant fit-out.

Atrium ventilation via manual window openings only.

Offices connected to ventilation lines including distribution ducts and fire dampers; distribution within the rental space by the tenant.

Demand-based hygiene ventilation with an average air exchange rate of 2 across the entire building.

Full Fit-Out (1st and 2nd Floors): Fully completed demand-based ventilation with swirl diffusers; Exhaust air via diffusion grilles.

### Fire Protection and Smoke Extraction (RWA)

The atrium is classified as Atrium Type B according to VKF regulations.

Due to emergency evacuation through the atrium, a smoke and heat extraction system (RWA) is required and has been verified through a performance certificate. Supply air via chutes on the 1st floor, exhaust air via fans in skylights on the 5th floor. Additional air supply over doors on the 2nd and 3rd floors. Fire protection curtains installed on the 2nd to 5th floors, activating upon fire alarm detection to prevent smoke from entering the walkways. Maximum occupancy of the atrium: 50 people. Furniture placement in the atrium is restricted (including material requirements and overall fire load). The fire protection concept must be adhered to at all times during both the tenant fit-out and building operation.

### Sanitary Facilities

Preparations for the installation of a kitchenette.

Rental space is connected to cold and hot water, with a wastewater connection (DN 100) up to the outer shaft edge for tenant-installed sanitary facilities. Separate meter for cold and hot water.

Full Fit-Out (1st and 2nd Floors): One kitchenette per floor installed.

### Acoustics

The following surfaces will be acoustically effective:

Exterior cladding of the Tower (5th floor)

Partially perforated metal cladding inside the Tower

Additional acoustic measures (depending on use) within the tenant fit-out

Full Fit-Out (1st and 2nd Floors): Acoustic panels on ceilings, partially on walls.

### Construction Cleaning

The rental unit will be handed over broom-clean for the tenant fit-out.

### Disclaimer

This short construction description is based on the current state of planning and outlines only key aspects of the project. Changes remain expressly reserved.