



New workshop and office building

The Zurich Electricity Works (EKZ) is one of Switzerland's largest energy suppliers. As an independent public-law company with around 1,400 employees, it supplies electricity to customers in around 130 municipalities and over 40 municipal and municipal utilities. Almost one million people benefit from the secure, environmentally friendly electricity supply and services provided by this energy company.

To optimize its operations in Dietikon, the EKZ construction department planned the construction of a new workshop and warehouse building with an office floor. A public tender for the construction planning and subsequent execution was issued, which IE won. During the planning phase, the project was expanded to include the creation of additional jobs in Dietikon, resulting in four office floors instead of the originally planned one.

The requirements were:

- Modern office workspaces
- Multifunctional workshop for inspection and repair of transformers and high-voltage switches
- Underground parking garage for special vehicles with customized ceiling heights and ramps

Engineered by IE.

PLANNING AND CONSTRUCTION PERIOD

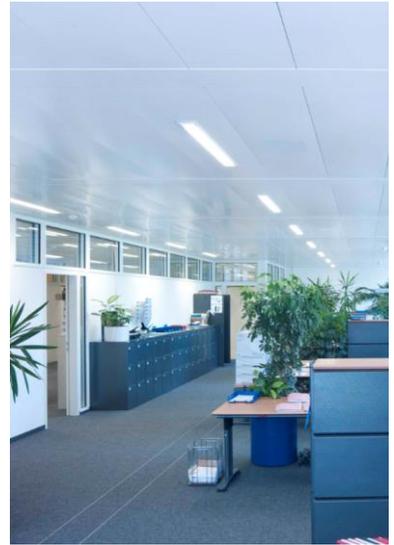
- › 3 years

CONSTRUCTION SCOPE

- › New workshop and office building
- › Length x width x height: 47,3 x 31,4 x 21,5 m
- › Area (GFA): 7'576 m²
- › Building volume (SIA Norm 116): 41'830 m³

SERVICES IE

- › Concept planning with building application
- › General planning



The building in Dietikon stands on an island in the Limmat River, with groundwater at a depth of 4.5 meters. This presented a particular challenge in terms of groundwater lowering, piling, and excavation pit closure. The concrete support structure was covered with prefabricated concrete and metal window elements. Modern workplaces were created through the choice of materials, the color concept, and optimal coordination of the lighting conditions inside.

Ongoing operations on the site had to remain undisturbed so that EKZ could continue to fulfill its role as a reliable electricity supplier. For this reason, numerous temporary structures were built on the site in advance and utility lines were rerouted. Fire protection measures and escape routes were key considerations in the building design itself for the open-plan office structures.

Building services

Mechanical ventilation with heat recovery gently ventilates the entire building, ensuring a hygienic exchange of air at all times. In summer, mechanical ventilation is used for night cooling. Additional comfort with minimal energy consumption is provided by the floor plate, which has a water register installed in it. By utilizing the cold groundwater, the outside air entering the ventilation system can be pre-cooled to a minimal extent during the summer months. An air/water heat pump is used to utilize the waste heat from the turbines in the power plant for domestic hot water and to supplement the heating system. Heat and electricity are supplied via underground channels.

EKZ's commitment to solar energy above the rooftops of Dietikon

A photovoltaic reference system has been installed on the roof of EKZ's newly constructed office building on Überlandstrasse in Dietikon, which will be used to test the latest solar modules. EKZ will pass on the results of its long-term experience to its customers. The project is being carried out in close cooperation with the Zurich University of Applied Sciences (ZHAW) and Oerlikon Solar. Customers will also benefit from the experience gained during the construction of the reference system: in the future, EKZ will offer planning and installation services for solar systems.

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