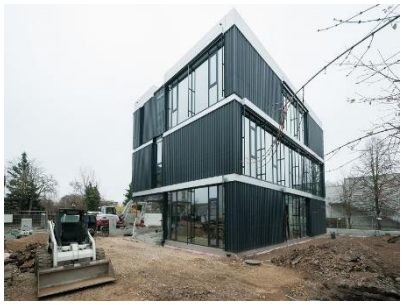
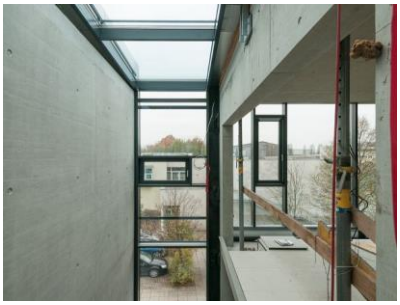
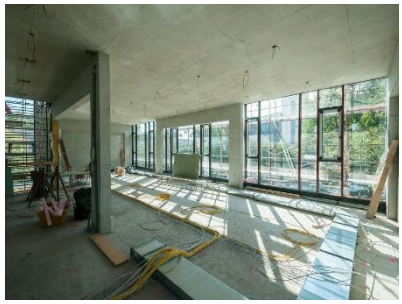
AT_St. Pölten_GVU St. Pölten

Image 01: Exterior view ©dasleitwerk	**Image 02:** Interior view atrium ©dasleitwerk	**Image 03:** Interior view groundfloor ©dasleitwerk
		

Building Specifications

Address	Hötzendorfstraße 13, 3100 St. Pölten, Austria
Building Category	Office
Year of Construction	2014
Special Qualities	n/a
Location	48° northern latitude, 16° eastern longitude; 267 m above sea level; located near the center of a town with a population of approximately 52.000; surrounded by other multi-story-buildings separated by green spaces;
Climate	Cfb (warm temperate, fully humid, warm summer); monthly mean temperature below 20 °C, at least five months with a monthly mean temperature above 10 C;

Vent. Cooling Site Design Elements (Solar Site Design and Wind Exposure Design, Evaporative Effects from Plants or Water)

n/a

Vent. Cooling Architectural Design Elements (Form, Morphology, Envelope, Construction&Material)

Morphology: An Atrium from ground to second floor enables natural ventilation of the offices.
Construction & Material: Walls and ceilings are executed as fairfaced concrete, which enables the usage of thermal mass.

Vent. Cooling Technical Components (Airflow Guiding Components, Airflow Enhancing Components, Passive Cooling Components)

Airflow Guiding Components: Windows can be opened automatically.

Airflow Enhancing Components: Utilization of the stack effect of the atria.

Actuators, Sensors and Control Strategies

Sensors: In- and exterior temperature sensors, rain and wind sensors

Control Strategies: The Ventilative Cooling system is controlled based on the interior and exterior temperatures as well as on the rain and wind conditions, with the possibility to manually override the control system.

Building Energy Systems (Heating, Ventilation, Cooling, Electricity)

Heating: A Groundwater heat pump supplies the space heat demand. It is distributed utilizing the thermally activated concrete.
Ventilation: A mechanical ventilation system is installed. It is controlled according to the CO2 levels in each room.
Cooling: Groundwater can be used for free cooling of the thermally activated concrete.
Electricity: A 17 kWp PV-system is installed on the roof with 10° pitch.

Building Ownership and Building Facility Management Structures

The building is owned by *Gemeindeverband für Umweltschutz und Abgabenerhebung im Bezirk St. Pölten*.
Architect: Architekt DI Josef Ruhm

Aknowledgements

n/a

Datasheet Source:
Institute of Building Research & Innovation