

AT_Allgemeine Sonderschule 4_Linz

Image 01:
 Exterior view
 ©Dietmar Tollerian



Image 02:
 Exterior view
 ©Dietmar Tollerian



Image 03:
 Exterior view pre renovation
 ©grundstein



Building Specifications

Address Teistlergutstrasse 23, 4040 Linz, Austria

Building Category Other

Year of Construction 2010

Special Qualities Passive House

Location 48° northern latitude, 14° eastern longitude, 266 m above sea level, located at the outskirts of Linz surrounded by single family houses

Climate Cfb (warm temperate, fully humid, warm summer) (monthly mean temperature below 19 °C, at least six 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: The floor plan is designed to enable an air flow through from the main rooms to the exhaust openings in the roof of the stairway.

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

Airflow Guiding Components: Air intake and exhaust openings are weatherproof and are used for night ventilation in summer and instead of mechanical ventilation in spring and autumn. Windows can be opened manually.

Airflow Enhancing Components utilize the stack effect caused by the roof openings in the stairway.

Actuators, Sensors and Control Strategies

Control Strategies: The night ventilation openings are manually controlled by the facility management.

IEA EBC Annex 62 Ventilative Cooling

Building Energy Systems (Heating, Ventilation, Cooling, Electricity)
<p>Heating: The building is connected to the district heating system to cover its space heat demand and part of the hot water heating demand. A 23,44 m² solar thermal heating system is integrated into the façade to contribute to the hot water heating.</p> <p>Ventilation: Most rooms are connected to a mechanical ventilation system with heat recovery. The mechanical ventilation is time controlled.</p>
Building Ownership and Building Facility Management Structures
<p>Owned by Immobilien Linz GmbH & Co KEG Architect: grundstein, Helmut Siegel</p>
Aknowledgements
<p>Oberösterreichischer Holzbaupreis; Anerkennung in der Kategorie Öffentliche Bauten</p>
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