SCHOOL EXTENSION BASLERGASSE

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Categories: Energy and sustainability, kirsch ZT gmbh, Middle Density, Project, Senseable Technologies

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The “Open Air” School of the city of Vienna, often referred to as the "*Baslerschule*", completed in 1951 and designed by Roland Rainer, is located on the southern outskirts of Vienna (23rd district) in the middle of a heterogeneous environment. This elongated, L-shaped, single-storey, landmarked building with a gabled roof received an extension in the 1970s in the form of four free-standing annexed classrooms constructed in wood adjoining the eastern end of school grounds.

The task was to replace the existing annexed classrooms—which were in extremely poor condition—with a building corresponding to the modern requirements for the construction of the school and to connect it with the main building. Furthermore, the option of redensification due to the

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continuous growth of the city of Vienna had to be kept in mind and factored into the planning.

It was in this way that a single-storey extension of prefabricated wood construction came into being, to which floors could be added if necessary. A glass-enclosed corridor serves as the connection to the existing structure. Currently, the annex building is being used as an elementary school (2 classes) and a special needs school (SES, 2 classes).

Spatial concept / Visual permeability & orientation

Based on this room layout and the time constraints, a modular system was developed from recurring spatial elements: classrooms, interconnected cloakrooms—which could also simultaneously be used as additional rooms (lessons in small groups)—and bathrooms.

These elements are grouped in a windmill-like fashion around the central circulation area, which can be used as a naturally illuminated communal area / foyer. The glass-enclosed connection to the existing structure, fixed glass partitions next to the classroom doors, and the visual permeability of the cloakrooms to the more private outer areas, create new visual relationships, lighting atmospheres, and orientation options in this central area. In the classrooms, the design is focused on providing an environment that promotes concentration and relaxation.

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The accessibility from both sides also allows for a division into two separate functional units.

The spirit of the existing main building and original “open air” school is carried on through the ability to exit directly from the classrooms through the cloakrooms (dirt barriers) into the open air (outdoor lessons).

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Construction and design / sustainability

The building is built entirely out of wood prefabricated components and has been designed as a prototype that allows for quick assembly and disassembly with maximum reusability of the individual components. The systematized typology also offers additional spatial combinations for further sites.

The size of the components is based on the transportability. The floor and ceiling components are constructed out of glulam, the walls are constructed from a beam and post construction planked and insulated on both sides. The building rests on a surrounding strip foundation, which has equally spaced vents to ensure that there is sufficient cross-ventilation beneath the building.

The connecting corridor to the existing building is a steel/glass construction.

The consistent choice of wood as the building material represents a forward-looking contribution to sustainability and resource efficiency.

Materiality / tactile naturalness

The foyer / circulation zone is planked with neutral white plasterboard. In the classrooms, the walls have been left as exposed white glazed wood surfaces. A full-length slat ceiling made from untreated silver fir and rubber flooring in all the common areas harmonizes the various uses of the space and provides an uninterrupted friendly learning and atmosphere.

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The ventilated façade is a vertical wooden slat structure (larch). Through the interplay of the various lengths and thicknesses of the slats in conjunction with a fresh color scheme (the protruding slats are in various shades of green), different color perceptions arise, depending on the lighting and the position of the viewer in passing.

Technology / keep it simple

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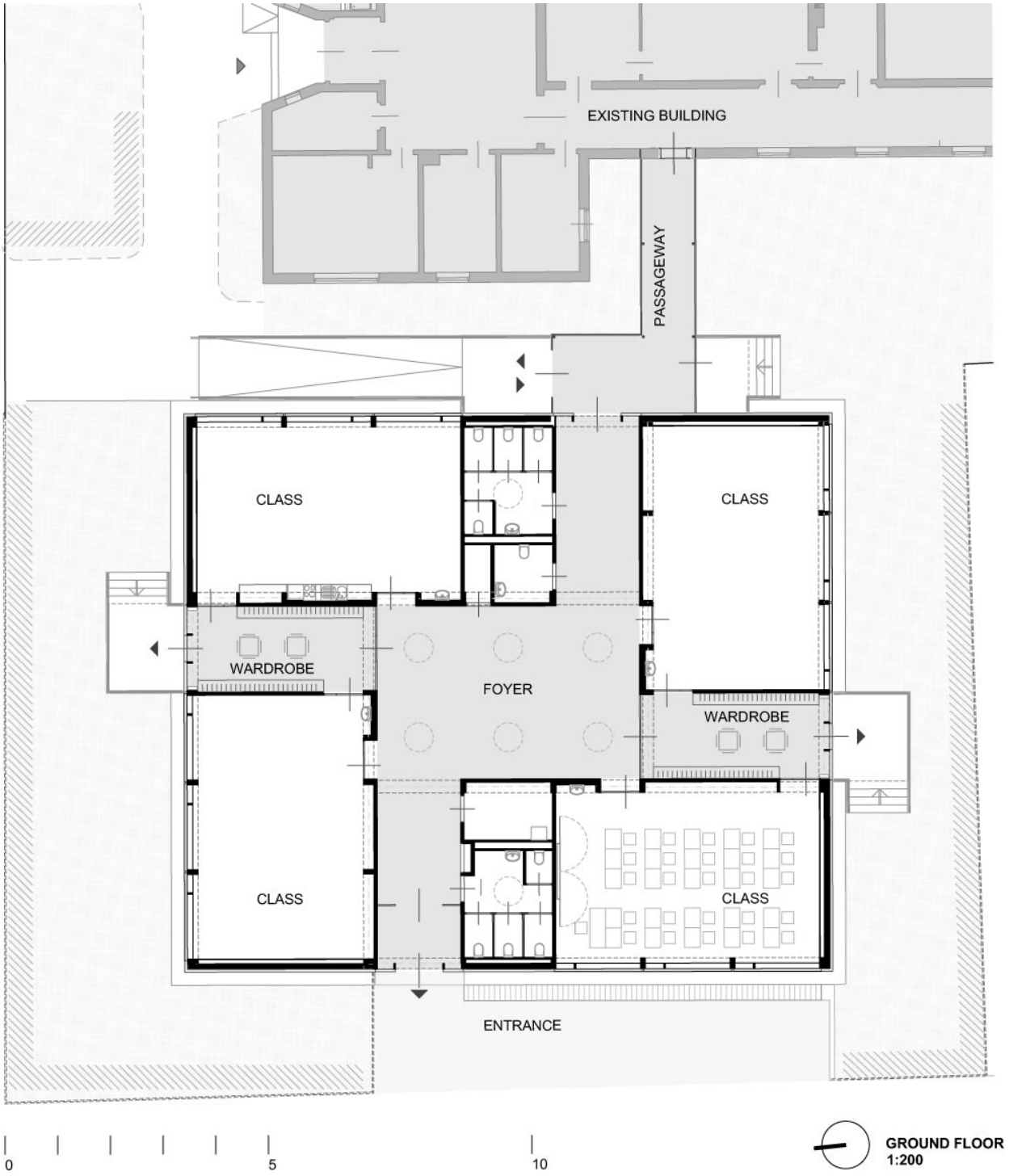

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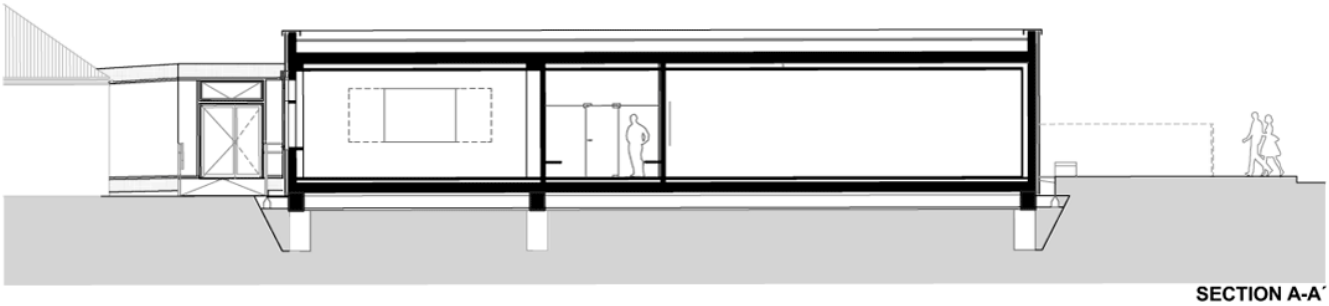

The building was erected as a low-energy construction.

The technical equipment was deliberately kept simple in accordance with the size of the building. The main power supply is carried out through the main building.

The aim of the "low-tech" approach (with no automated ventilation system) is for the user to identify with the building through the simplicity and immediacy of the control options.

Due to the lack of thermal mass in the wood construction, the required cooling by means of overnight ventilation is ensured by cross ventilation. Above the windows, manually operated awnings (rain- and burglar-proof) were constructed. The last occupant in the evening opens the classroom doors and flaps, and the first to arrive in the morning opens them back up.

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