

Construction of the school complex ‚Millermoaler Schull‘ Echternach (L)

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| Project | New construction of a school with a day care centre, mensa for 600 employees with student restaurant and CDI integrated into the school campus in Echternach |
| Client | Administration Communale Echternach (L), public |
| Award | 1st Prize - negotiated procedure |
| Services | WW+, Esch-sur-Alzette (L) / Trier (D) architecture similar to HOAI LPH 1-9 energy class AB |

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| Partner Architecture | atelier PRO, architectes (NL) LPH 1-2 |
| Paysagiste | Ernst + Partner Landschaftsarchitekten, Trier(D) |
| Civil engineering | SGI Ingénierie S.A, Junglinster (L) |
| Technical eng. | Goblet Lavandier & Associés, Niederanven (L) |
| Infrastructure/ | |
| Project management | Schroeder & Associés SA, Luxembourg (L) |

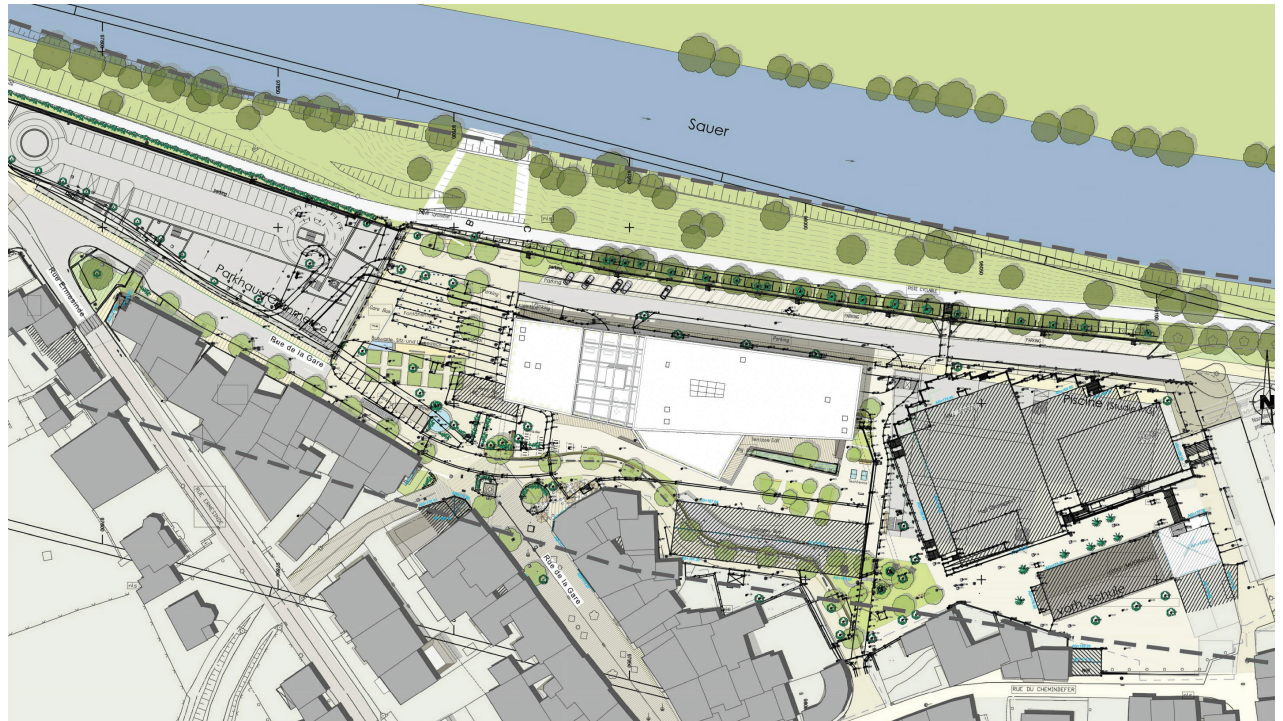
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| Facts | <ul style="list-style-type: none">• New school complex for cycles 3-4, day care centre (Maison Relais) and CDI (Centre pour le développement intellectuel)• Participatory process with users and client• Philosophy of the « integrated model »: synergies between school & day care (Maison Relais), shared use of space• Wood-/hybrid construction - efficient energy concept• Aiming for DGNB Gold certification (German Sustainable Building Council) |
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Dates and numbers

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| Gfa | 9.299 m² |
| Nfa | 5.892 m² |
| Ufa | 8.571 m² |
| Gv | 40.907 m³ |
| Total area | 0,51 ha |
| Planning | 12/2018 - 07/2019 |
| Realisation | 08/2019 - 12/2022 |
| Construction costs | 23.458.000 € net |
| Costs total | 31.693.000 € gross |

The School - Objectives

The first building block in the implementation of the master plan, carried out by the Escher architecture firm WW + architektur + management, which, together with the Dutch firm atelier Pro (LPH 1-4), was able to win the negotiation process, is a school project based on the "integrated model". This means the shared use of the building complex through the functions of teaching (cycles 3-4), morning reception and afternoon care, as well as the CDI (Center pour le développement intellectuel) with the creation of corresponding synergies. In order to meet this requirement and task, discussions were held with a working group specially set up for the project consisting of teachers, caregivers, educators and parents, as well as representatives of the municipal administration, in order to accompany the planning phase and to optimally accommodate the space programme already developed by the municipality with the users. In addition, consultations took place with the Ministry of Education, Children and Youth, the Ministry of Sport and the Ministry of Public Service in order to create complete transparency regarding legal concerns and requirements at an early stage.



The premises of the new building are designed for the teaching of up to 500 children. Construction work on the project, which is aiming for DGNB (German Sustainable Building Council) gold certification, began in March this year. The school is scheduled to be handed over to its users at the beginning of 2023.

Urban planning concept

On the newly reclaimed site created by the relocation of the former bus station, the new school building stretches along the Sauer promenade and connects to the existing school complex for cycles 1 and 2, and to the access to the pedestrian zone. In order to adapt to the surrounding building structure and to connect to the square extending in front of the building, the building was designed at different heights. To the east, for example, it is four storeys high, matching the ridge heights of the surrounding buildings, and to the west it is three storeys high. Towards the schoolyard, the façade is broken up by a volume projection on the first floor. These differences in level create accessible roof areas on the 2nd and 3rd floors, which offer a view of the city skyline and the schoolyard to the south and a generous panoramic view of the park, the Sauer River and the city to the west.

The school complex, which extends over 100m, offers two opposing universal-access entrances in the centre of the building. On the one hand, there is the possibility of accessing the building from the north along the Sauer, while on the other hand, it can be reached by foot or by bicycle from the residential areas to the south and from the pedestrian zone via the schoolyard.

From both entrances, one reaches a spacious reception area in the heart of the building. From here, the main staircase extends upwards through an open atrium to all floors. The roof glazing above creates movement and communication zones flooded with daylight, which enable visual connections over several floors and make the events in the school building accessible for all users. On the ground floor, the glazed entrances create a transparent visual axis between the Sauer promenade and the schoolyard.

Design idea / materiality

The light-flooded entrance hall forms the connection between the school, Maison Relais and CDI. The staircase, which can be used for games and theatre performances, is located here, as well as the adjoining rooms, such as the movement room, Airtramp, dining rooms and teaching kitchens. The generously glazed movement and dining rooms are deliberately located on the ground floor to ensure direct access to and a view of the schoolyard.

The kitchen and the hot buffet are directly opposite. The children can also look over the cooks' shoulders as they prepare the fresh meals. The atrium and main staircase, which extend over all floors, connect to the classrooms and Maison Relais rooms, as well as the studios. Connected to the large open main staircase are 'boxes' that divide zones of movement, yet still create connections in between. These open, theme-related spaces are for communal use. This results in corridor zones that are not only used for access, but primarily as play, exhibition, recreation and rest zones. In this way, the play and corridor zones merge with the teaching areas and promote contact between the individual classes.

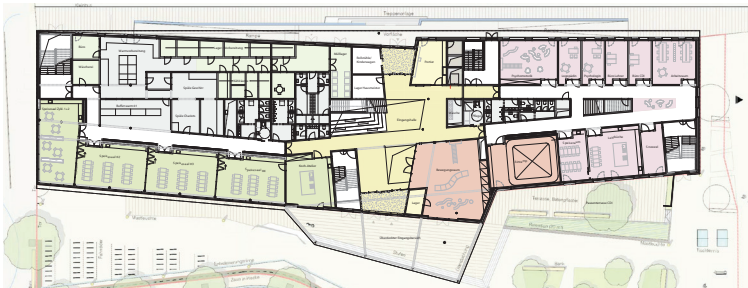
Basically, the philosophy of the new "integrated model" is that a majority of the rooms, including some classrooms, are also available for the Maison Relais. In order to be able to realise this multifunctionality, a main focus is placed on the in-built furniture. In terms of the materials used for the interior, the focus is on natural, warm materials such as spruce for the walls and windows, as well as the ceilings of the classrooms, due to the wooden construction. These materials are complemented by natural rubber and timber flooring, as well as a child-friendly colour scheme. Special attention is also paid to acoustics, so the wooden ceilings of the classrooms are designed to be acoustically effective.

In accordance with the timber construction, this was not only visibly emphasised in the interior of the building, but also with the façade. Except for the base, which is made of concrete due to the situation of the building being in the flood zone, the façade surfaces of the upper floors are made of vertical pre-greyed larch wood panelling.

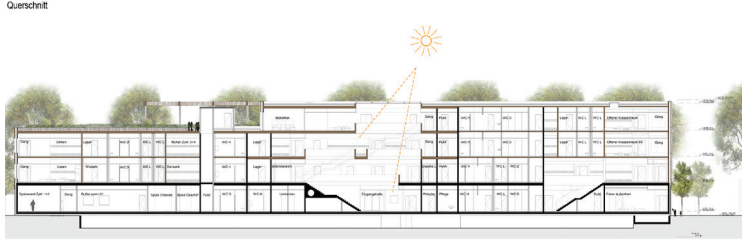




Construction site 05/2022



ground floor



Facade section



1st floor



2nd floor



3rd floor



North view



South view

- classrooms
- functional rooms
- kitchen
- staff
- CDI
- psychomotor
- sanitary
- roof terrace