

Day Care Center St. Clemens, Ruwer (GER) - Competition

project	New construction of the Day Care Center St. Clemens, Trier-Ruwer
client	Catholic Church St. Clemens, Trier-Ruwer (GER)
participation	3rd prize, restricted realisation competition
services	WW+, Esch-sur-Alzette (LUX) / Trier (GER) architecture
facts	-new construction of the day care center St. Clemens -integration of the existing extension -preservation of a large-scale playground -handling of different height levels especially in the outdoor facilities -high level of preservation with regard to the tree population
dates and numbers	
gfa	1.070 m²
ufa	1.071 m²
gv	3.286 m³
competition phase	01/2018 - 04/2018



siteplan

Urban integration

The architectural concept calls for a two-storey building to keep built-up areas to a minimum and to provide maximum green space. Particular attention is paid to blending the project harmoniously into the adjacent building and the landscaped surroundings. Naturally, the replacement structure integrates into the existing building to be preserved and, with its typical flat roof, forms an identity-forming conclusion to the adjacent 'Auf Mohrbüsch' street. The structure of the new building will be located away from the property boundary at the access road, in order to provide ample area for a clearly defined outdoor space and to create better traffic flows. The building shape and development are designed to ideally conform to the shape and circumstances of the property, to continue the urban development concept of a salient location amidst residential buildings and the Ruwertal green area, while leaving adequate space in the southern part for outdoor play areas.

Development

The main entrance exhibits a well-proportioned forecourt on the north side of the building. From there, via a recessed entrance vestibule, at ground level and accessible, one enters onto the open foyer, whose representative and inviting character becomes the central meeting point of the kindergarten and at the same time acts as an important interface for the building. As places of encounter are an important element of daily nursery life for children, the ground floor,



detail facade



ground floor

which houses numerous common areas and meeting places, features special transparency and a generous layout. The first floor is reached via a wide staircase, centrally located in the play hall of the ground floor, or alternatively via a lift, which ensures barrier free accessibility in the building. The forecourt is structurally and visually separated from the pedestrian access, next to employee parking spaces and the drop off and pick up areas.

Functional solution

The large structure of the kindergarten is divided into two areas, which are each used for activities support (southern part of the building) and staff organization (northern part of the building). To ensure a bright and friendly atmosphere in the main rooms, these face south and west according to their function and following the trajectory of the sun. The group and theme rooms, with their respective adjoining rooms, open in this direction towards the open space and allow an unobstructed view of nature. The large and open game floor, connects the individual functional areas with each other. The multipurpose room, group and theme rooms of the kindergarten are separated from the movement corridor by substantial sliding elements and, when open, are an extension of this area so that variable use of the rooms is possible. If required, the side rooms attached to the group rooms can also be widely opened and switched to group rooms. They then form a unity and create connection situations, which enables the children to play through the various subject areas. The ground floor houses the building, research and multi-purpose rooms in the southern part of the building. All rooms have direct access to the outside. In addition to the rooms for the kindergarten management and the parents' room, the toilet areas (children's, staff, and visitor WCs) as well as the fresh food kitchen are located on the ground floor of the northern part of the building. The kindergarten management office has a direct view of the forecourt so that monitoring access is easily done from there. The kitchen will remain in its original place in the existing building and will only be adapted to necessary space requirements of the room plan program. Over the vestibule of the entrance area you enter the foyer, which also houses a bistro. The ample glazing provides a view through the spacious 'playground' onto the Ruwertal valley. The consistently open layout of the floor plan on all levels maintains visual relationships between the individual rooms through

its transparency and highlights their spatial relationships. This exerts a positive impact on internal communication. The design offers its users a sense of security and orientation through a clear structuring process. At the same time, openness is achieved through well considered use of material, light and openings.

Construction and materials

The load-bearing wall components of the activity-friendly kindergarten are built of solid wood frame construction. The ceilings are also proposed as a stacked board system. Depending on the static or acoustic requirements, a hybrid design is also conceivable. The building foundation is formed by a floor slab with integrated strip footings, which also serves as a frost apron. The wooden area is covered with a plastered thermal insulation layer of mineral rock wool. The plaster finish of the existing building is retained, making it possible for existing buildings and the additions to blend naturally into a single building. Deliberately placed natural finish wood slats, acting as a curtain in the form of ventilated façade elements, accentuate an otherwise simple outer shell, giving it clear address with heightened identity and recognition value. Adaptation to the environment leads to the choice of wood as a building material. The slats create a change from small-scale openings and large glass surfaces. Depending on exterior light, shadowy areas vary, creating different moods in the façade and in the rooms. Staff can open the windows independently and thus individually regulate the room climate. Inside, a consistent and child-friendly furnishing concept dominates, consisting of wooden wardrobe furniture, colourful seating, multifunctional second-floor play furniture and flexible storage systems that create a friendly and warm atmosphere and invite you to linger and relax. Consistent with the holistic energy concept, robust, durable and sustainable materials that are easy to maintain and remain attractive over a long period of time were deliberately chosen to ensure the economy of the building's operation.

Exterior

In the outdoor areas of the kindergarten, a distinction is made between farm areas and expansive green



elevation north



elevation south

space. The courtyards serve as a potential extension of their adjacent interiors. The sprawling play area with its 3,000 sqm. in the rear nursery area is contained by hedges, trees and natural mounds as well as a light free-growing bowery to create the most natural and sustainable environment possible. In order to generate the most welcoming atmosphere possible in the individual free play areas made up of a sandbox, climbing frame and lawns for mobility games, existing trees are preserved as a valuable addition to the location's quality standard. Where felling of trees or shrubs is necessary, new planting will be done in a suitable location on site.

Economy - Energy concept - Fire prevention

The starting point of the energy concept is an optimized architectural concept, which is tailored to the use of existing and natural resources, as well as optimized operating and maintenance costs. The combination of sustainable construction — a very good ratio of facade area to building volume, a balanced ratio of transparent and non-transparent surfaces, possibility of prefabrication of the wood frame and window elements and rapid completion by using the element construction method — with an efficient use of energy makes it possible to achieve a holistic concept for the kindergarten. The basis for this concept is framed by consistent room organization on cardinal compass points, a compact building form and optimized thermal insulation. All rooms have a view of nature through the large windows with sunshades in front and receive good natural light, creating a bright and friendly atmosphere.