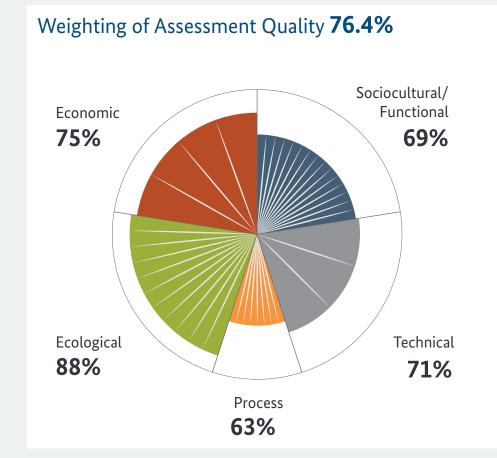
Day Care Centre

New Construction | Ulm | Grade 1.6 | SILVER



Educational Building (New Construction)	Silver according to BNB_UN 2013
Client	Ministry of Defense
Architect / Planner	Günter Hermann Architekten Stuttgart
Auditor	Iris Schaaf, Staatliches Hochbauamt Ulm
Completion	September 2015
Gross Floor Area (GFA)	1,120 m ²
Gross Construction Costs	€ 39 million
Construction Costs (KG 300, 400)	1,695 €/m² _{GFA} (net)
Operation Costs	806 €/m² _{GFA} (net)
Life Cycle Costs	2,886 €/m² _{GFA} (net)
Primary Energy Demand (LCA)	total: 265 kWh/(m² _{NFAa} a)
Global Warming Potential (LCA)	34.77 kg CO ₂ eqv./(m ² NFAa a)

The new day care centre of the Federal Armed Forces Hospital in Ulm is located between the main hospital building and Albert-Einstein-Allee situated in the southwest of the property.

The project achieves the silver standard with the total degree of fulfilment of 76.4 % and the grade of 1.62. It was rated as one of the first construction projects of the Federal Ministry of Defense (BMVg) applying the module BNB Education Buildings.

The single-story building with a floor area of approximately 23 m x 61 m is freely arranged on the site and fits suitably into the surrounding park of the hospital.

The building is designed on a regular grid in timber frame construction and thus offers maximum flexible indoor use. Group rooms are oriented east towards the outdoor play areas and the adjacent forest, the staff rooms and adjoining areas as well as sanitary and technical rooms are facing the hospital building aligned.

The clear arrangement of the functional areas in a dual zoning ensures good orientation and an undisturbed operation within the building.

The determining facade element is the floor-to-ceiling glazed post and crossbar construction. This provides an unobstructed view to the surrounding outdoor area for toddlers as well. The post and crossbar facade system as well as all other windows and doors meet the requirements of the German Energy Saving Ordinance EnEV2009.

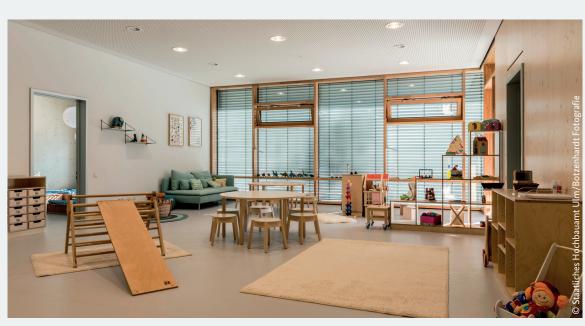
Concept Evaluation

The project has been realized as a highly efficient building based on the passive house standard with a high proportion of renewable raw materials. The result is a single-storey building in timber frame construction including an extensively greened flat roof. The facade is designed as a rough-cut timber formwork.

Environmental Risk Evaluation

An excellent indoor air quality can be attested to the project, which was previously unmatched in timber constructions. Even before occupancy, the workplaces and amenity places in the new daycare center showed air quality values, which are usually to be regarded as the best comfort values and VOC target values for interior spaces.











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