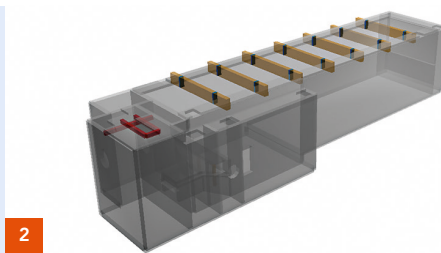


# Construction Engineering / Structural Engineering



Water  
Environment  
Civil Engineering  
Informatics  
Energy  
Architecture

Our department develops complex project solutions for facilities in the fields of hydraulic engineering, waste management, wastewater and stormwater management, and water supply. Furthermore, we solve problems for you relating to masonry and concrete construction, steel construction, wood construction and geotechnics for road construction and civil engineering as well as for commercial and industrial buildings.

Our strengths lie in assisting and consulting at the earliest project planning phases and in the intensive interchange between building design and structural engineering to achieve optimal, functional project solutions using varied structural designs.

Along with building design and structural calculations for new-build construction and alterations for civil engineering, building construction and earthworks, we provide services for surveying of existing conditions, rehabilitation and restoration of existing structures and also the assessment of structural stability. Based on our longtime experience, which also covers the fields of building physics, fire protection and concrete restoration, we provide you with holistic solutions.

The use of the most modern software in the fields of structural analysis, finite element method (FEM), foundation engineering as well as CAD, ensures high quality and performance.

With our know-how from a wide variety of successful projects, we can capably advise you

on the constructive realization of your project. For quality assurance, we conduct qualified construction supervision.

## Services

- Building design and structural engineering (German fee scale for architects and engineers) for masonry and concrete construction, steel construction, wood construction
- Internal and external structural stability, protection against buoyancy
- Slope stability calculations
- Earthquake checks
- Protection against subsidence damage
- Building construction drawings as well as formwork, reinforcing and shop drawings
- Building physics certification
- Passive fire protection (PFP)
- Concrete repair and restoration
- Qualified construction supervision, health and safety coordination

### 1 Constructive Civil Engineering:

Construction of a pumping station

### 2 Structural Engineering:

Spatial building and calculation models