

Structural analysis

Many buildings are decades old, and are nonetheless expected to remain in place for generations. Structural analyses are carried out to detect load-bearing deficits and reserves, and to ascertain the structural integrity and safety of the buildings under examination – both for today and for the future. Thanks to advancements in research and development, we now have access to highly efficient methods of ascertaining load-bearing reserves which might otherwise remain unclear.

Roadway and railway infrastructure is exposed to increasing levels of traffic-related stress and many buildings are increasingly converted to accommodate other uses. These developments lead to uncertainty. Do the buildings in question, often designed years ago, continue to meet the structural specifications for their current and future use? What about their stress, fire and earthquake resistance?

We offer the following services:

- Current-state surveys
- Structural analyses
- Qualitative and quantitative verification
- Evaluation of the proportionality of measures
- Planning and implementation of measures

We support our customers from the introduction of current-state surveys to the management of on-site reinforcement measures. When conducting our structural analyses, we do not shy away from complex structural models, but we nonetheless remain pragmatic, select the level of detail that is appropriate to the task at hand and also pursue risk-based verification.

Thanks to our close cooperation with universities and other research centers, our engagement in standards-setting boards, we always have immediate access to the latest findings.