Abstract:
A view in statistics about defects in civil engineering shows that in industry high costs arise to repair defects at buildings. The reason for these defects can be found mostly in the planning of the building: Over 50% of the faults can be ascribed on that. Engineering design methods help to enhance the quality of products and beside improve the product development processes. Nevertheless they are implemented only rarely in civil engineering yet. Hence transferring methods from engineering design to civil engineering design should improve the design of buildings. In a research project funded by BayForrest the transfer and implementation of engineering design methods to civil engineering was investigated. To better understand why and how methods in civil engineering should be adapted similarities and differences of civil and mechanical engineering will be described. For the implementation of methods approaches were established and are presented in this paper. The results should be documented at two complete exemplary development processes: The planning of a semidetached house and the design of a façade element.

Stichworte: Method implementation; civil engineering; quality faults.