

The lightweight principle - An important key for embodied carbon reduction in construction

In addition to the reduction of Co2 emissions in the operation of built infrastructure, the avoidance of Co2 emissions in the construction of buildings is increasingly coming to the forefront of efforts. In particular, the load-bearing structures must be considered in a special way. Overall, three directions appear to play a key role. First, and from our point of view directly realisable, is the question of quantity, the consumption of materials. Secondly, the question of the suitability of materials and the carbon footprint. And thirdly, the possibilities of achieving a circular economy in the building sector. All three directions fit very well with lightweight construction, also because optimisation strategies have always had an important place in the tool box of our profession. Focusing on the increasingly important reuse of materials and components is the order of the day.