

PRODUCTIVITY BOOST – SHORTER CONSTRUCTION TIME – COST SAVINGS

Case study: High-rise building RWE Tower, Dortmund, Alemania



Unstoppable trend

In urbanized areas, dense construction is indispensable. Due to lack of space, construction is increasingly increasing in height - residential and office high-rise buildings are CO2-efficient and can be built quickly and economically thanks to reinforced concrete skeleton construction with a curtain wall.

Prefabrication

The use of prefabricated reinforcement leads to program security. This makes it easier to plan tactical or linear construction, earlier concrete pour is possible, work can be carried out with a smaller team or weekend work can be dispensed with. This results in cost savings.

RWE-Tower, Dortmund

By using BAMTEC reinforcement elements, one day could be saved per storey in this 20-storey building. One floor was completed in one working week (Mon-Fri).

Construction time savings: 20 days

27'500 m2 gross floor area / 2'600 t reinforcement steel hereof 300 t BAMTEC

Calculation cost savings

Type of Project	High-Rise	
Shell construction costs	in \$ / €	12'000'000
Overhead costs construction site	in %	10%
	in \$ / €	1'200'000
Building time shell construction	en días	360
Overhead costs/day	in \$ / €	3'333
Reduction construction time	en días	20
Savings overhead costs	in \$ / €	66'667
BAMTEC Reinforcement	en toneladas	300
Savings per ton	in \$ / €	222

*Source: www.bauprofessor.de

The construction site overhead* amounts to between 5 and 10 %. For high-rise buildings, the value is likely to be above 10 %.

- The use of prefabricated reinforcement (e.g. BAMTEC, modular reinforcement, etc.) pays off even with low construction time savings
- The time saved can be used to postpone the start of construction in order to optimise the planning and construction solutions.
- BAMTEC SAVES COSTS – ALWAYS



Calculate the savings of your project here:

<http://bit.do/bam-calc>