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CONSTRUCTABILITY AND PLANT UTILISATION: THE CASE OF FACADE SCAFFOLDING SYSTEM SELECTION

Abstract:

In the process of selecting options of construction methods and organisation of works, buildability is one of key issues that affect project outcomes. The decisions in this respect affect not only the duration of construction processes, but also plant utilisation rates, productivity of crews, work safety and, eventually, economic efficiency. Some systematic procedure of buildability assessment is likely to support the planners in the process of selecting options under a number of criteria and providing aggregated scores that point to the best solution.

The paper puts forward a method of multi-attribute assessment for buildability analysis. The proposed procedure of analysis is illustrated by a case of selecting a facade scaffolding. On the basis of opinion surveys among construction engineers, scaffolding systems were assessed and ranked in terms of buildability.

Keywords:

Constructability, multi-attribute decision making, scaffolding systems

JEL Classification: L74, C43