

Development of Risk Assessment and Occupational Safety Management Model for Building Construction Projects

Authors : Preeda Sansakorn, Min An

Abstract : In order to be capable of dealing with uncertainties, subjectivities, including vagueness arising in building construction projects, the application of fuzzy reasoning technique based on fuzzy set theory is proposed. This study contributes significantly to the development of a fuzzy reasoning safety risk assessment model for building construction projects that could be employed to assess the risk magnitude of each hazardous event identified during construction, and a third parameter of probability of consequence is incorporated in the model. By using the proposed safety risk analysis methodology, more reliable and less ambiguities, which provide the safety risk management project team for decision-making purposes.

Keywords : safety risk assessment, building construction safety, fuzzy reasoning, construction risk assessment model, building construction projects

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