

Risk Assessment in Construction of K-Span Buildings in United Arab Emirates (UAE)

Authors : Imtiaz Ali, Imam Mansoor

Abstract : Investigations as a part of the academic study were undertaken to identify and evaluate the significant risks associated with the construction of K-span buildings in the region of UAE. Primary field data was collected through questionnaires obtaining specific open and close-ended questions from carefully selected construction firms, civil engineers and, construction manager regarding risks associated to K-span building construction. Historical data available for other regions of the same construction technique was available which was compared for identifying various non-critical and critical risk parameters by comparative evaluation techniques to come up with important risks and potential sources for their control and minimization in K-Span buildings that is increasing in the region. The associated risks have been determined with their Relative Importance Index (RII) values of which Risk involved in Change of Design required by Owners carries the highest value (RII=0.79) whereas, Delayed Payment by Owner to Contractor is one of the least (RII=0.42) value. The overall findings suggest that most relative risks as quantified originate or associated with the contractors. It may be concluded that project proponents undertaking K-span projects in planning and budgeting the cost and delays should take into account of risks on high account if changes in design are also required any delays in the material by the supplier would then be a major risk in K-span project delay. Since projects are, less costly, so owners have limited budgets, then they hire small contractors, which are not highly competent contractors. So study suggests that owner should be aware of these types of risks associated with the construction of K-span buildings in order to make it cost effective.

Keywords : k-span buildings, k-span construction, risk management, relative improvement index (RII)

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