

Effects of Faulty Design and Construction on Building Maintenance

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This paper outlines individual and major groups of design and construction defects in large buildings in Saudi Arabia and their relative severity. A survey of a randomly selected sample of 30 maintenance contractors and 20 owners from the Eastern Province of Saudi Arabia was undertaken. The survey included 11 major groups of defects and the subdefects in each group. The relative severity effect of each defect on building was assessed and then ranked, based on a severity index by both maintenance contractors and owners. According to owners, 32 defects were rated as "most severe" and 35 defects were rated as "moderately severe." However, according to maintenance contractors 16 defects were rated as "most severe," 49 defects as "moderately severe" and two defects as "slightly severe." It was also found that maintenance contractors and owners generally agree on the ranking of the severity of the defect.