

## A study to identify the areas to be improved in ICTAD specifications

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Since the introduction of ISO 9000 quality standards, the pursuit of quality assurance has become a dominant theme in many industries; the construction industry is no exception. Organisations adopt quality assurance systems to demonstrate their commitment to quality and ability to meet customer requirements. Sri Lanka, being a developing country, does not show such a commitment towards quality assurance in the construction industry; only a handful of construction companies have so far obtained ISO certification. Contract documents, particularly in projects executed by contractors with no documented quality assurance systems, play a major role in achieving project quality. Specifications, Construction Drawings, and Conditions of Contract are the most important documents as far as quality of the works is concerned. Although, consultants are free to adopt their own specifications for construction work, a recent study indicates that the specifications published by the ICTAD are the most widely used specifications for building works in Sri Lanka. Previous studies also reveal that contractors and consultants are concerned about the adequacy of these ICTAD Specifications to assure quality of the works. Therefore the objective of this study was to identify the areas in ICTAD Specifications for building works that need significant improvements.

Two questionnaire surveys were carried out to: (a) assess the extent of use of items in ICTAD Specifications; and (b) identify the frequently used items which require significant improvement with respect to quality aspects. According to the results of the surveys, there are 19 items that need significant improvement; this was statistically tested with a significance level of 5%. Seven of these items come under material section and 12 items are under work items section. The questionnaire surveys also revealed that materials, workmanship and construction methods are important factors in determining quality of construction works. Specifications, together with Conditions of Contract, control these factors during execution of the works. Particularly, when the Conditions of Contract do not insist on a quality assurance system during the construction period, quality of building works would depend mainly on the Specifications; therefore, any improvements to them would be of utmost importance. Also, the relevant ISO 9001 requirements were studied to ascertain the shortcomings in the quality aspects in those materials and work items in Specifications that should be significantly improved. It was found that the above items could be significantly improved using the relevant ISO 9001 quality requirements as a guideline.

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