SUMMARY

Quality in construction is defined as conformance with requirements, as defined by the owner, designer, contractor, and the regulatory agencies (ASCE, 1990). It is achievable by committed, trained and knowledgeable people in design practices, construction companies and client organisations involved in the building project. The objective of meeting these requirements rests with the design organisations. There is no doubt that design organisation bear the greater burden of ensuring quality as it defines the requirements of the owner’s in the form of specification and drawings which in turn the contractors used for their construction. Any deviations in defining the owner’s requirements at this stage can lead to substantial cost increase due to their rectification (Bubshait et al., 1999). The costs due to poor quality in design and engineering have been estimated at about 9.5% (Burati et al., 1992) and 8% (Trainor, 1983) of the total project cost.

The need to manage quality in the design (briefing, designing and specification) phase of a building project rather than trying to control quality in the construction phase stems from the proposition that prevention is better than cure. The management of the process involved in these stages is therefore vital if the likely causes of quality problems are to be identified and prevented.

There is very little information available regarding the quality practices of design organisations in Singapore. This study was undertaken to with the trio objectives of (1) identifying quality practices relevant to local design organisations, (2) determining their prevalence among the local design organisations, and (3) evaluating the effectiveness of the quality practices.

From the statistical analysis, quality practices having a bearing on the quality of service of local design organisations are identified. This includes the individual study on prevalence and effectiveness of such practices as well as the
linkage. Views of the companies with and without ISO certification are also studied to understand the perspective of the local design organisation towards quality services. Some of the most commonly used and effective design practices are:

- Design professional in the organisation are qualified
- The design process is planned
- Review/verification of design drawings
- Project documents are indexed and properly filed
- Project documents are regularly updated
- Working procedures and communication lines are defined through discussion with the client and/or client’s representative

There is a need to raise the awareness of quality management among the design organisations. It is important to promote the implementation of quality system to achieve the best possible standards of cost, time and quality. The study reveals a strong need for the establishment of feedback system between the client, construction contractor and the design organisations. There is also a need for the design organisations to recognise the importance of training their workforce. There is also a lack of interest in the local construction industry towards promoting better relations and trust between the design and construction organisations. On the other hand, there is a high recognition of the importance of ensuring a good design and good documentation for the project.