QUALITY MANAGEMENT OF DESIGN AND BUILD PROJECTS

SUMMARY

Quality management is a systematic process control throughout every phase of the building project. The quality management system should be built on the firm's existing operation systems and procedures and it must address all the requirements stated in the respective standards in order to meet the ISO 9000 standards.

The growing popularity of design & build in building projects may be attributable to its many benefits such as more unique and better quality housing, savings in total design and construction time, cost and manpower.

Under design and build contract, the main contractor is fully responsible for construction as well as design. The contractor has signed an agreement with the consultant who shall undertake the design responsibility. However, the contractor will still act as a auditor during the various design stages to ensure that the designs do satisfy the clients requirement, relevant codes and standards. The contractor can also take the opportunity to work closely with the consultant starting from the initial concept design stage based on the contractor's availability of resources and practical experience. The contribution from the contractor will improve the quality of the design as well as the quality of the final product.

For HDB design and build project, HDB's specification will set control on planning, design parameters; technical requirements and the quality of materials proposed shall be comparable to that being used in the HDB in-house projects. HDB will enter separate contracts with successful architect and engineer for the supervision of the works who at the same time perform the roles of qualified persons under the building control act. In general, the architect still has to administer the project as in the situation of a conventional construction contract.
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The contract for design and build project includes design development, plan submission and approval as well as the construction and completion of the approved plan. Therefore, the master programme shall include the design consultant’s submission of plans and issuance of construction drawings.

The contractor is required to set up a drafting team to establish and prepare coordination drawings in advance well before the construction activities. This is to ensure that the main contractor and the respective sub-contractors can carry out works right first time.

A case study in Chapter Four shows how the quality system is being implemented in a completed HDB Design and Build Project.

A survey result shows that the misconception of quality management still prevails in the industry although there are many benefits for organization that implement and maintain an efficient and effective quality system.

Quality of design and build project can only be achieved through proper planning and control of design and construction process.