

Role of Codes and Standards in Design / Engineering

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Abstract: *It is to provide general overview of the Codes and Standards and present the human perception about the requirement of Codes and Standards.*

Keywords: Technical standard, common language, rules and specifications

1. Introduction

Codes and Standards is requirement to refer in design, construction, and operations to avoid, reduce, or eliminate undesirable results/occurrences

Creation of Codes and Standards with passage of time evolve gathering knowledge, facts and testing which provide a common language and requirements for the design, construction, and operations.

This is to avoid individual's perception towards a common requirement which may lead to different approach and undesirable results.

2. Codes and Standards

A code is a set of rules and specifications for the correct methods and materials used in a certain product, building or process.



Codes provide the guidelines for design, fabrication, construction and installation

A technical standard is a proven requirement. It is usually a formal document that establishes uniform engineering or technical criteria, methods, processes and practices.

Standards allow for common design interoperability, and they ensure quality, reliability and safety

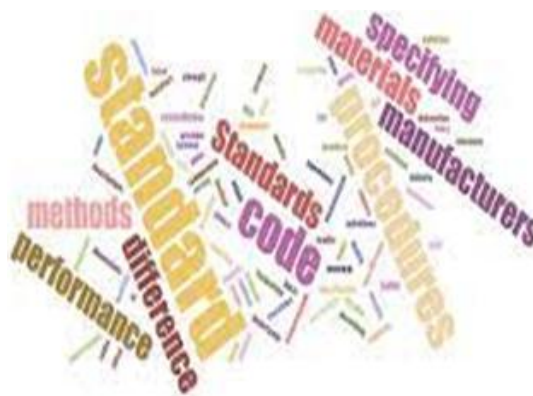
3. Enriching Minds with Codes and Standards



- Codes and Standards give the engineer significant guidance on design of systems such as fire protection system.
- It would be easy for an engineer or technician to develop this critical knowledge base with codes and standards.
- A designer will use the standard to design the product, and a manufacturer will use the standard for the manufacturing of the product.
- Awareness of the existence and applicability of codes and standards is a major responsibility of the designer.



- In addition, failure of the designer to meet the requirements set forth in the standards can lead to poor quality of system/product.



Benefits of Codes and standards

- It provides a list of allowable materials
- Minimum Design / fabrication requirements
- Inspection and Testing Requirements
- Enhance knowledge of engineer.
- Engineer will have proficiency in design review.
- Specific project or product specification is being made based on codes/standards

Result

- Optimized and reliable system or the product.