

Lecture 2.8

Importance and purpose of specifications

Estimation & Costing

Agenda

- Definition of Specification
- Limitations of Drawings
- Purpose of Specifications
- Importance in Contracts
- Summary

Definition of Specification

What is a Specification?

A specification is a detailed description of the nature and class of work, materials to be used, and the standard of workmanship required for a project.

- It provides critical information that cannot be easily depicted on blueprints or drawings.
- It serves as a comprehensive guide for the contractor during the execution of the work.

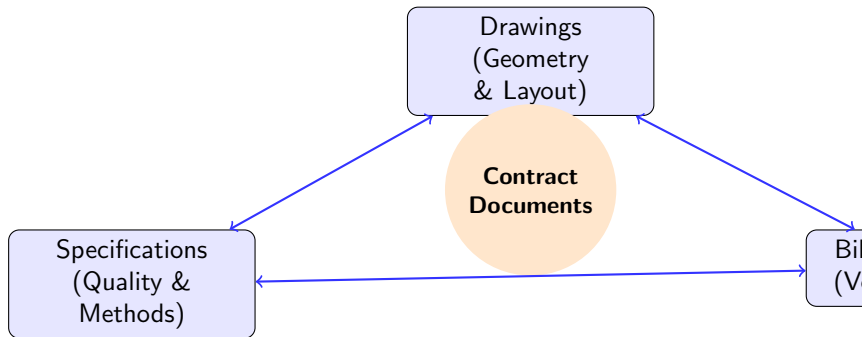
Limitations of Drawings

- **Dimensions vs. Quality:** Drawings show dimensions, layout, and sections, but cannot detail the exact quality of materials (e.g., cement grade, wood type).
- **Workmanship:** Drawings cannot describe the method of preparation, curing time, or specific workmanship standards.

Example

A drawing shows a 230 mm thick brick wall. The specification will define the class of bricks, mortar ratio (e.g., 1:6), and the curing process.

The Contract Triad



Purpose of Specifications

- **Quality Control:** Describes the exact quality and proportion of materials.
- **Workmanship Standard:** Defines the execution method and standards expected.
- **Cost Estimation:** Serves as a reliable basis for calculating the detailed cost of the project.
- **Equipment Definition:** Specifies the tools and plants to be deployed.

Legal Significance

Specifications form an essential part of the contract document and are legally binding.

- **Precedence:** In case of a discrepancy between drawings and specifications, the specifications generally take precedence.
- **Dispute Resolution:** Detailed specifications leave no room for ambiguity, minimizing disputes between the owner and the contractor.
- **Tendering:** They enable contractors to quote accurate and competitive rates during the bidding process.

Summary

- Specifications detail the **materials, methods, and workmanship** that drawings cannot convey.
- They form one of the most critical parts of the **contract documents**.
- Clear specifications are essential for accurate **cost estimation** and effective **quality control**.