Commercial Drawings

Preparation for NCCER Exam 27201-01

Commercial Drawings

- The principles of scaling and dimensioning for commercial drawings are **the same as** those for residential drawings.

Commercial Drawings

- The drawings for a commercial project are **more complex** than residential drawings.

Commercial Drawings

- A major commercial project may have **fifty to sixty** drawings in its plan set.

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- One complete set of plans **is kept in the field office for reference.**

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- Drawings marked C1, C2, and C3 are **Civil** drawings.

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- A drawing marked L1 would be the first **Landscape** drawing.

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- The size of an object is shown using **dimension** lines.

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- The meaning of an abbreviation used in a drawing can be found in the **legend**.

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- Architectural drawings include **floor plans**.

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- Topographical features can be found on the **site plans.**

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- Structural drawings start with the **detail drawings.**

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- A diagram of the plumbing system layout would be found in the **mechanical** drawings.

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- A construction worker must read the project specifications **to pick up details not found in drawings.**

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- Conflicts in the drawing set **should be clarified by the architect in writing.**

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- The core drawings in any plan set are the **architectural** drawings.

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- The main purpose of the **site plan** is to locate the structure within the confines of a building lot.

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- Features that appear on commercial site plans that do not appear on residential site plans include **position of new existing utilities**.

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- An elevation is a distance above or below a known point of reference called a **datum.**

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- The most notable difference between commercial and residential floor plans is the **amount of detail.**

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- For large buildings, the architect will divide the floor plans into sections using **grid lines.**

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- The location of in-wall chases and recesses can be found on **wall sections.**

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- An overall view of the structure, rather than the detail needed in construction, is provided by an **elevation drawing.**

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- Foundation plans and roof framing plans are included in the **structural** drawings.

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- The placement of reinforcing bar or wire mesh reinforcement would be shown on a **section.**

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- Some project plans use a **callout sequence marking** instead of a grid system.

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- Isolated reinforced concrete footings located under loadbearing columns form a **shallow foundation.**

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- Details for the placement of stairs, recesses, or a chimney would be found in the **framing plan.**

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- Plumbing drawings for water systems usually show **two** separate systems

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- Incoming water systems operate **under pressure.**

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- Through-wall piping must **not be rigidly connected to the wall** due to different rates of expansion and contraction between the piping and the masonry.

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- Riser diagrams are used **on plumbing and electrical drawings.**

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- The written description of the work and duties required of the owner, architect, and consulting engineer are listed in the **specifications.**

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- If there is a discrepancy between the drawings and the specifications, **the person in charge of the project must resolve it.**

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- The most commonly used specification format in North America is ***MasterFormat*** ™.

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- Information on the quantities, sizes, lengths, bending dimensions, and placement location of all rebar for a project is given in the **bar list.**