Book Information

Architectural Drafting and Design

Author: Alan Jefferis, David A. Madsen, & David P. Madsen
7th Edition
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Exam Topics

I. INTRODUCTION TO ARCHITECTURAL DESIGN AND DRAFTING.
   • The World of Professional Architecture.
   • Architectural Drafting Format.
   • United States National CAD Standard.
   • Computer-Aided Design and Drafting in Architecture.
   • Architectural Lines and Text.
   • Sketching Applications.
   • Construction Procedures.

II. RESIDENTIAL DESIGN.
   • Construction Specifications.
   • Guidelines and Required Codes that Affect Building Design.
   • Room Relationships and Sizes.
   • Exterior Design Factors.
   • Conservation and Environmental Design and Construction.

III. SITE PLANNING.
   • Site Orientation.
   • Legal Descriptions and Site Plan Requirements.
   • Site Plan Layout.

IV. THE FLOOR PLAN.
   • Floor Plan Symbols.
   • Floor Plan Dimensions and Notes.
   • Floor Plan Layout.
V. SUPPLEMENTAL FLOOR PLAN DRAWINGS.
   • Electrical Plans.
   • Plumbing Plans.
   • Heating, Ventilating, and Air-Conditioning.

VI. ROOF PLANS.
   • Roof Plan Components.
   • Roof Plan Layout.

VII. ELEVATIONS.
   • Introduction to Elevations.
   • Elevation Layout and Drawing Techniques.
   • Millwork and Cabinet Technology, Cabinet Elevations, and Layout.

VIII. FRAMING METHODS AND PLANS.
   • Environmentally Friendly Framing Methods.
   • Structural Components of Framed Construction.
   • Design Criteria for Structural Loading.
   • Sizing Joists and Rafters Using Span Tables.
   • Determining Beam Sizes.
   • Drawing Framing Plans.

IX. FOUNDATION PLANS.
   • Foundation Systems.
   • Floor Systems and Foundation Support.
   • Foundation Plan Layout.

X. WALL SECTIONS AND DETAILS.
   • Sectioning Basics.
   • Section Layout.
   • Alternative Layout Techniques.
   • Stair Construction and Layout.
   • Fireplace Construction and Layout.

XI. COMMERCIAL DRAFTING.
   • Building Codes and Commercial Design.
   • Common Commercial Construction Materials.
   • Commercial Construction Projects.
   • Commercial Drafting.
**Sample Questions**

1. Drawing sections will be accomplished in five major stages.
   a. True
   b. False

2. To determine the size of a beam, the weight the beam is supposed to support must be known.
   a. True
   b. False

3. The design of a house stops once the room arrangements have been determined.
   a. True
   b. False

4. A reflected ceiling plan (RCP) is a drawing that shows the features located on the ceiling of a room or space.
   a. True
   b. False

5. A post-and-beam floor system is built using a standard foundation system.
   a. True
   b. False

6. An exclusive or private sale that is made before construction starts is called a(n) ____.
   a. appraisal
   b. proposed sale
   c. presale
   d. subdivision

7. Balconies and decks are ____ floors.
   a. elevated
   b. ground-level
   c. stationary
   d. recessed

8. A(n) ____ is an appliance used to convert independent DC power into standard household AC current.
   a. transformer
   b. inverter
   c. modifier
   d. union
9. The IRC requires the chimney to project ____" minimum above any construction within 10' of the chimney.
   a. 24
   b. 22
   c. 16
   d. 18

10. A ____ plan shows the size and location of all concrete pours.
    a. pour
    b. slab
    c. grade-to-slab
    d. slab-on-grade