Test Code: 5920
Version: 01

**Specific competencies and skills tested in this assessment:**

**Preparing to Draw**
- Identify drafting tools, and equipment (including CAD)
- Identify and select paper sizes/types, determine scale, and layout
- Identify various line types

**Geometric Construction**
- Construct and manipulate geometric elements
- Construct and manipulate lines, arcs, and angles
- Place dimensions and notes

**Applied Mathematics**
- Demonstrate knowledge of basic mathematical operations
- Perform calculations involving fractions, decimals, and percents
- Demonstrate knowledge of geometry
- Demonstrate knowledge of trigonometry
- Calculate weights, measures, area, and volume
- Convert scales
- Convert survey measurements to architectural measurements
- Determine pitch, rise, run, and slope

**Drawing Techniques - Supplementary Views**
- Identify pictorial drawings (i.e., isometric, oblique, perspective and presentation)
- Demonstrate knowledge of schematic diagrams
- Demonstrate knowledge of orthographic drawings

**Planning**
- Examine space relationships
- Identify building styles
- Determine client needs
- Incorporate building codes and regulations
- Identify construction material, properties, and use
Architectural Drafting (continued)

Architectural Drawing Types
Identify architectural terms and symbols
Identify and develop roof styles
Identify and develop floor plans
Develop basement and foundation plans
Identify kitchen and bath arrangements
Develop interior and exterior elevations
Develop a building section
Develop a wall section
Draw architectural details

Site Plans
Draw and dimension site and plot plans
Interpret landscape plans
Interpret contours and topographical profiles
Identify setbacks
Identify utilities

Structural Drawings
Draw structural details
Draw framing plan
Identify structural systems

Mechanical and Electrical Systems
Identify and apply electrical terms, symbols, and systems
Identify and apply plumbing terms, symbols, and systems
Identify and apply HVAC terms, symbols, and systems

Supplemental Drafting Activities
Draw cover sheet and title block information
Develop schedules
Use reference sources
Arrange and coordinate drawings
Document revisions

Specifications
Describe responsibilities of related parties (i.e., design professional, client, and contractor)
Identify component and material specifications (CSI standards)

Sustainable Architecture and Design
Identify various rating systems (i.e., LEED, R-Value, etc.)
Recognize recyclable and/or “green” building materials
Identify various sustainable design systems
Utilize site for solar/environmental considerations
Architectural Drafting (continued)

Written Assessment:

Administration Time: 3 hours
Number of Questions: 184

Areas covered:

- 6% Preparing to Draw
- 7% Geometric Construction
- 14% Applied Mathematics
- 6% Drawing Techniques - Supplementary Views
- 10% Planning
- 20% Architectural Drawing Types
- 8% Site Plans
- 6% Structural Drawings
- 5% Mechanical and Electrical Systems
- 8% Supplemental Drafting Activities
- 3% Specifications
- 7% Sustainable Architecture and Design

Sample Questions:

A hexagon drawn outside a circle is
- A. circumscribed
- B. tangent
- C. inscribed
- D. rotated

Which of the following abbreviations represents a national building accessibility standard?
- A. UBC
- B. SBC
- C. ABC
- D. ADA

A landscape plan uses much of the same information as a _____ plan.
- A. structural
- B. plumbing
- C. plot
- D. floor
**Architectural Drafting (continued)**

Automatic fire sprinkler systems are usually activated by
A. electrical sensors  
B. master alarm control valves  
C. a fusible link  
D. a pull box

Which of the following is an example of passive solar energy?  
A. photovoltaic panels  
B. rainscreens  
C. windmills  
D. Trombe walls

**Performance Assessment:**

Administration Time: 2 hours and 45 minutes  
Number of Jobs: 3

**Areas Covered:**

- **17%**  
  **Architectural Symbols and Abbreviations**  
  *Section A: Identify symbols and abbreviations, Section B: Identify symbols and abbreviations, and time to complete Job 1.*

- **34%**  
  **Elevation**  
  *Building structure, windows, doors, and siding, notes and dimensions, line work, and time to complete Job 2.*

- **49%**  
  **Kitchen and Bath Floor Plan**  
  *Building structure, kitchen and bath layout, sheet size setup, line work, dimension, notes, and time to complete Job 3.*

**Sample Job:**  
Architectural Symbols and Abbreviations

**Maximum Job Time:** 15 minutes

**Participant Activity:** Each participant will carefully draw the architectural symbols for the items as provided.