



JOB READY ASSESSMENT BLUEPRINT

CARPENTRY

Test Code: 4215

Version: 01

Specific Competencies and Skills Tested in this Assessment:

Safety

- Demonstrate safe material handling practices
- Display comprehension of workplace/job-site safety procedures (OSHA)
- Exhibit knowledge of SDS and personal protective equipment (PPE)
- Display understanding of hand tool safety issues
- Display understanding of power tool safety issues

Tools and Accessories

- Use and maintain hand tools
- Use and maintain power tools
- Use and maintain measuring, layout, and marking tools

Blueprint Reading and Estimation Skills

- Demonstrate awareness of general building codes
- Display comprehension of dimensions and scales
- Read and understand various views and elevations
- Display understanding of symbols, lines, and details
- Extrapolate information from a set of plans
- Estimate materials quantities
- Demonstrate awareness of green building practices

Foundations, Forms, and Concrete

- Lay out foundation
- Construct and align footing and foundation forms
- Install, brace, align, and remove formwork
- Understand concrete characteristics

Carpentry (continued)

Rough Framing

Demonstrate understanding of floor systems

Demonstrate understanding of wall systems

Demonstrate understanding of roof systems

Calculate, lay out, and install stairs

Exterior Finish

Identify and install cornice and trim

Calculate and install roofing

Identify, prepare, and install windows and doors

Calculate, lay out, and install siding

Interior Finish

Install insulation

Install and finish interior walls and ceilings

Install interior doors

Install standing and running trim

Install cabinets and associated hardware

Carpentry-Related Mathematics

Perform basic mathematical operations: whole numbers, fractions, and decimals

Perform linear, square, and cubic computations

Perform algebraic and geometric functions

Carpentry (continued)

Written Assessment:

Administration Time: 3 hours

Number of Questions: 170

Areas Covered:

15%	Safety
9%	Tools and Accessories
18%	Blueprint Reading and Estimation Skills
7%	Foundations, Forms, and Concrete
16%	Rough Framing
13%	Exterior Finish
13%	Interior Finish
9%	Carpentry-Related Mathematics

Sample Questions:

Trimmer studs strengthen the sides of an opening and bear the direct weight of the

- A. wall
- B. header
- C. window
- D. sill

Hinges and a track are used in what type of door system?

- A. pocket
- B. swinging
- C. bifold
- D. bypass

Which saw is used to cut an inside corner using base molding?

- A. compass saw
- B. coping saw
- C. hack saw
- D. zip saw

If pine boards are sold for \$800.00 per 1,000 board feet, what is the cost to purchase 550 board feet?

- A. \$440.00
- B. \$460.00
- C. \$480.00
- D. \$500.00

Carpentry (continued)

Three types of valley shingle installation are

- A. open, woven, and closed-cut
- B. Dutch cut, French cut, and English cut
- C. half-lap, side-lap, and top-lap
- D. cal-fil, wainscoat, and overlap

With vinyl siding, which of the following is normally installed last?

- A. J-channel
- B. corner pieces
- C. siding panels
- D. starter strip

Use _____ nails when installing exterior trim to prevent corrosion.

- A. sinker
- B. galvanized
- C. steel
- D. resin-coated box

Riser dimension plus tread dimension should fall between

- A. 16 to 17 inches
- B. 17 to 18 inches
- C. 18 to 19 inches
- D. 16 to 19 inches

The top and bottom metal framing members are referred to as

- A. conduit
- B. ducts
- C. jambs
- D. track

The chemical reaction that occurs between water and cement is called

- A. evaporation
- B. aging
- C. hydration
- D. drying

Carpentry (continued)

Performance Assessment:

Administration Time: 2 hours and 45 minutes

Number of Job: 7

Areas Covered:

- 9% **Tool and Material Identification**
Participant will accurately identify a variety of tools and materials, including saws, bits, saw blades, wrenches, nails, fasteners, lumber, finishing, layout, and marking tools.

- 13% **Square Layout**
Participant will use the appropriate equipment and techniques to lay out and chalk a square.

- 12% **Establish a Starting Course for Vinyl Siding Using a Builder's Level**
Participant will properly set up and use a builder's level to establish a level chalk line for the starting course of vinyl siding on a wall.

- 17% **Blueprint Reading and Exterior Sole Plate Layout**
Participant will lay out a sole plate according to instructions and include all necessary markings.

- 19% **Rafter Layout**
Participant will lay out one common rafter using provided plans and materials showing all necessary corrections and adjustments.

- 11% **Stairway Stringer**
Participant will layout a 3-tread stringer according to instructions and record correct number of risers, treads, and measurements.

- 19% **Interior Frame**
Participant will install an interior frame in a given opening using appropriate procedures, tools, and equipment.

Sample Job: Square Layout

Estimated Job Time: 20 minutes

Participant Activity: The participant will chalk out a 12-foot by 12-foot square using blue chalk and placing blocks at the corners, as shown in the drawing provided.