

*Entry Level Assessment Blueprint*

*Carpentry*



## ***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



***Specific Competencies and Skills 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**

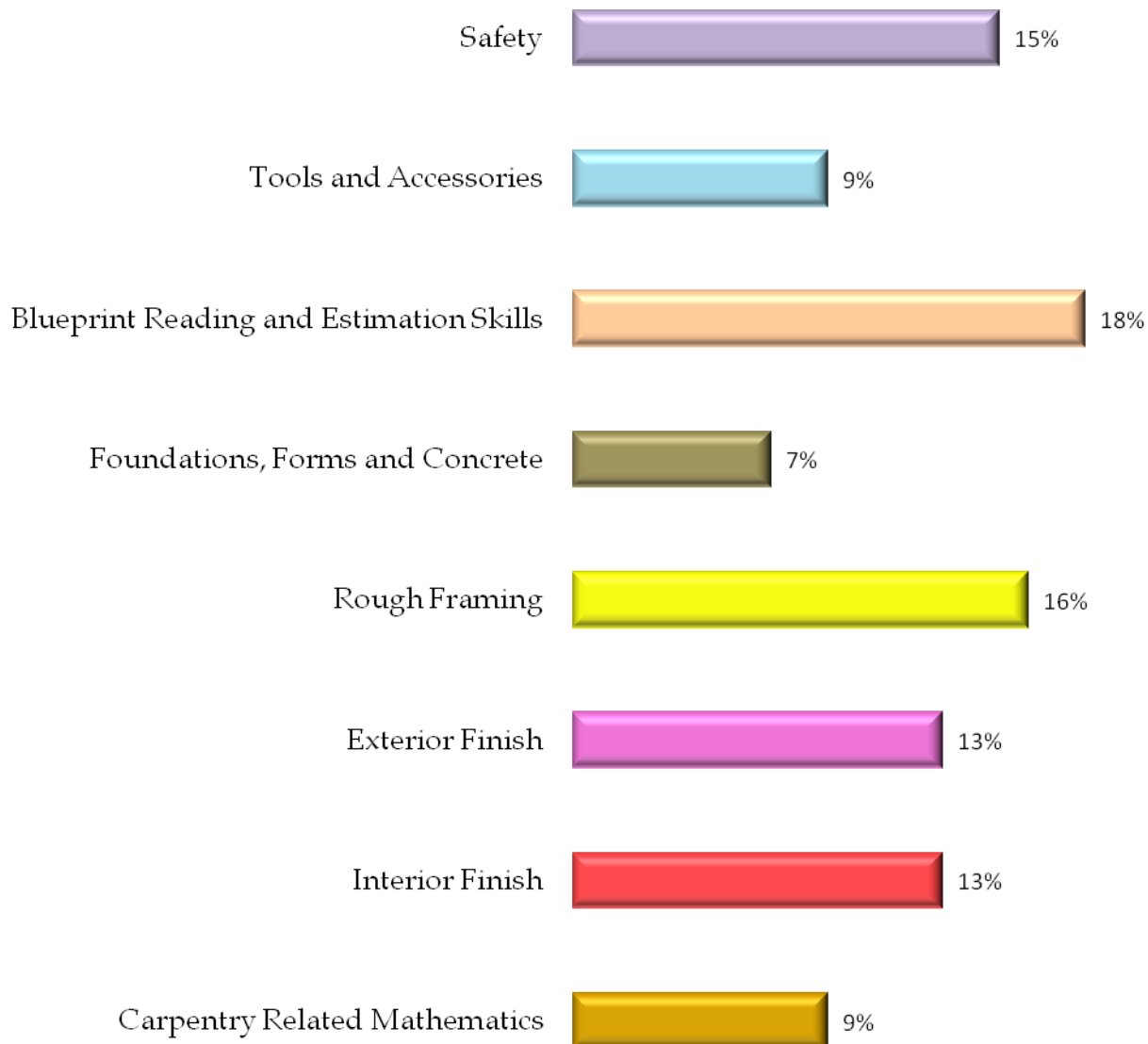
- Identify and install cornice and trim
- Calculate and install roofing
- Identify, prepare, and install windows and doors
- Calculate, lay out, and install siding

**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

**Written Assessment:****Administration Time:** 3 hours**Number of Questions:** 170**Areas Covered:**

**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

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

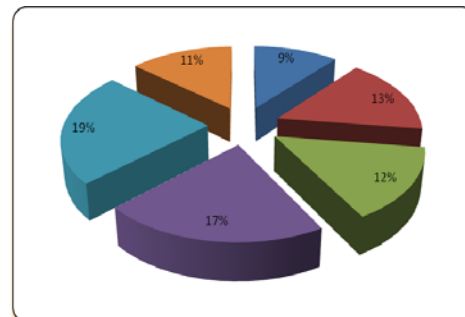
**Performance Assessment:**

**Administration Time:** 2 hours and 45 minutes

**Number of Jobs:** 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

**Maximum Time:** 20 minutes

**Participant Activity:** The test 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.

