



Job Ready Assessment Blueprint

Building Construction Occupations



Test Code: 3011 / Version 01

“Measuring What Matters”

Specific Competencies and Skills Tested in this Assessment:

Safety and General Knowledge

- Recognize and adhere to worksite safety issues (housekeeping and health related)
- Utilize appropriate personal protective equipment (PPEs)
- Demonstrate understanding of ladder and scaffold safety
- Recognize and adhere to governmental regulations (OSHA, MSDS, etc.)
- Demonstrate safe and appropriate use of hand tools
- Demonstrate safe and appropriate use of power tools



Carpentry

- Identify carpentry materials
- Describe, layout, and construct wood floor framing
- Calculate, layout, and construct stairs
- Identify, layout, and construct wood wall framing
- Describe, calculate, and construct ceiling and roof framing
- Identify and install roofing materials (shingles, fasteners, and flashing)
- Identify, estimate, and install exterior windows and doors
- Identify, measure, and apply exterior finishes (siding and trim)
- List, describe, and install interior finishes (drywall, doors, and trims)



Masonry

- Identify, estimate, and install footings and foundations
- Identify, estimate, and install brick and block
- Identify, estimate, and place/pour concrete applications

Specific Competencies and Skills continued:

Electrical

- Identify, estimate, and install rough electrical
- Identify, estimate, and install finish electrical

Plumbing

- Identify, estimate, and install rough plumbing (PVC, ABS, copper, PEX)
- Identify, estimate, and install finish plumbing fixtures



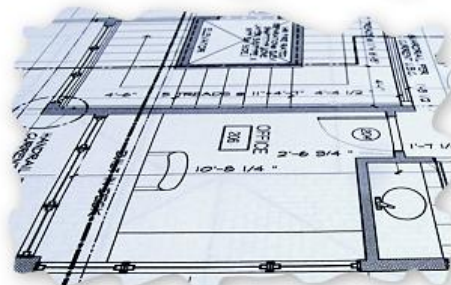
Energy Efficiency

- Identify, estimate, and install insulation
- Recognize various ventilation applications
- Identify "green" construction technology



Blueprints and Site Layout

- Recognize blueprint terms, symbols, and abbreviations
- Interpret blueprints
- Demonstrate use of architect's scale
- Layout building using various calculations, squaring, and leveling methods

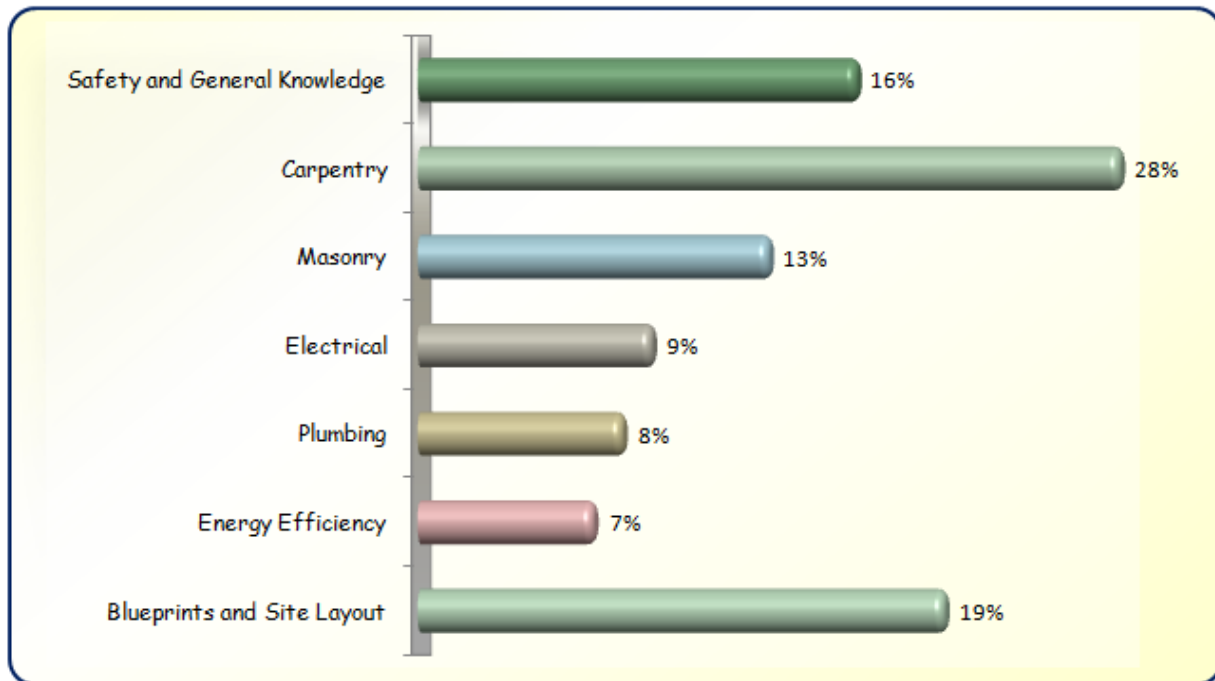


Written Assessment:

Administration Time: 3 hours

Number of Questions: 150

Areas Covered:



Sample Questions:

OSHA is a federal agency governing

- A. occupational safety
- B. housing for the poor
- C. minimum wages
- D. zoning laws

To protect an outside drywall corner, it may be reinforced with a corner

- A. board
- B. lath
- C. bead
- D. rite



How many courses of concrete block will be needed for a wall 8 feet high?

- A. 12
- B. 14
- C. 16
- D. 17

According to Underwriters' Laboratories, wire used specifically for ground should have insulation colored

- A. green
- B. white
- C. blue
- D. orange

Which gable roof would require the most lumber and shingles?

- A. 8/12 pitch
- B. 6/12 pitch
- C. 5/12 pitch
- D. 1/12 pitch

Performance Assessment:

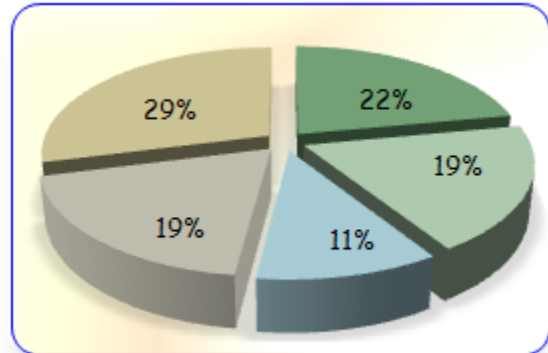
Administration Time: 2 hours and 25 minutes

Number of Jobs: 5

Areas Covered:

22% Soldering Pipe

Length of copper tubing, reaming, joint preparation, soldering technique, soldered joints, finished project, use of tools, safety, and time to complete Job 1.



19% Rafter Layout

Placement of rafter crown, rafter length, overhang length, bird's mouth location and configuration, bird's mouth layout, tail plumb and ridge plumb cuts (6/12 pitch), use of tools, safety, and time to complete Job 2.

11% Calculate and Cut a Stud

Stud cut length, stud cut square, safety, and time to complete Job 3.

19% Rough and Finish Electrical

Setting of boxes, cable choice, cable installation, pre-wire boxes, choice of switch, switch box connections, installation of switch, receptacle, receptacle box connection, use of tools, safety, and time to complete Job 4.

29% 8-Inch Block Wall Construction

Block course constructed according to print, correct length, height, straightness of wall, wall plumb and level, fullness of joints, joints finished and tooled, use of tools, safety, and time to complete Job 5.

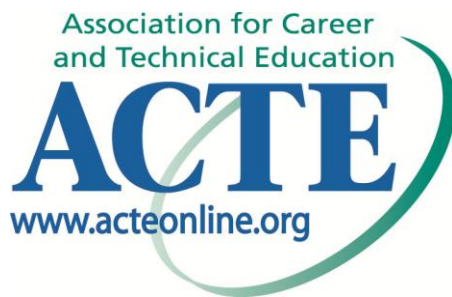
Sample Job: 8-Inch Block Wall Construction

Maximum Time: 45 minutes

Participant Activity: The participant is to construct a block wall 47-5/8 inches long by 24 inches high, with correct height, length, straightness, level, and plumb. Wall will have full, finished, and tooled joints.



The Association for Career and Technical Education (ACTE), the leading professional organization for career and technical educators, commends all students who participate in career and technical



education programs and choose to validate their educational attainment through rigorous technical assessments. In taking this assessment you demonstrate to your school, your parents and guardians, your future employers and yourself that you understand the concepts and knowledge needed to succeed in the workplace. Good Luck!



The Pennsylvania Builder's Association utilizes this assessment to assist in determining competencies for granting skill certificates to students graduating from Pennsylvania secondary trade programs that have been endorsed by the Pennsylvania Builders Association (PBA).

PBA's services include support to workforce training and education by linking industry employers with educators to grow the workforce of tomorrow. PBA serves Pennsylvania communities and consumers through its steadfast efforts to protect homeownership rights and advocate for affordable housing options. PBA is affiliated with the National Association of Home Builders.