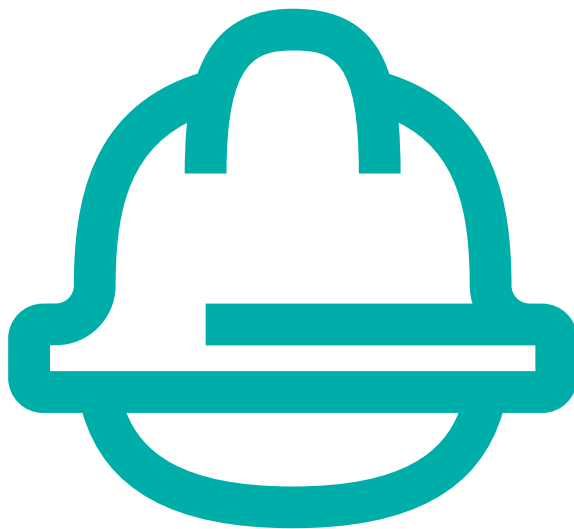




Carpentry

General Assessment Information

Blueprint Contents

General Assessment Information	Sample Written Items
Written Assessment Information	Performance Assessment Information
Specific Competencies Covered in the Test	Sample Performance Job

Test Type: The Carpentry industry-based credential is included in NOCTI's Job Ready assessment battery. Job Ready assessments measure technical skills at the occupational level and include items which gauge factual and theoretical knowledge. Job Ready assessments typically offer both a written and performance component and can be used at the secondary and post-secondary levels. Job Ready assessments can be delivered in an online or paper/pencil format.

Revision Team: The assessment content is based on input from secondary, post-secondary, and business/industry representatives from the states of Maine, Massachusetts, Michigan, Montana, Pennsylvania, and Texas.



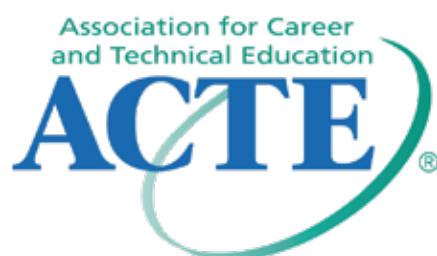
46.0201- Carpentry/Carpenter



Career Cluster 2- Architecture and Construction



47-2031.01 – Construction Carpenters



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!



Home Builders Institute (HBI), an affiliate of the National Association of Home Builders (NAHB), is a national leader for career training in the building industry. HBI's educational materials are designed to be relevant in today's rapidly changing environment, bringing increased professionalism, competency and effectiveness to those entering the residential construction workforce.

HBI/NAHB assessments are based on national skill standards set by NAHB industry professionals and educators as are the materials contained in the Residential Construction Academy Series. Participants passing the assessments are eligible for certification through HBI/NAHB at the entry, semi-skilled or skilled levels.

Written Assessment

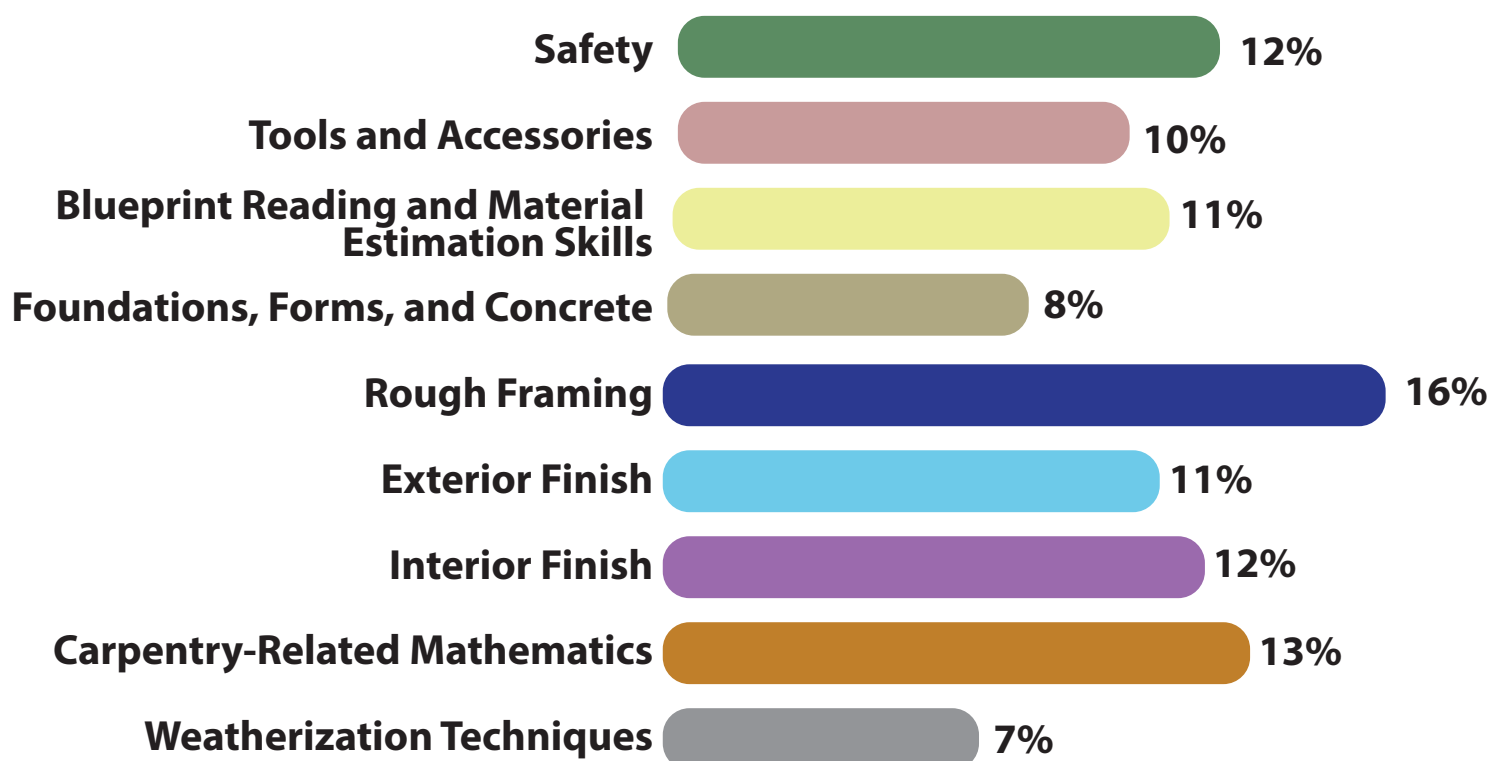
NOCTI written assessments consist of questions to measure an individual's factual theoretical knowledge.

Administration Time: 2 hours and 30 minutes

Number of Questions: 148

Number of Sessions: This assessment may be administered in one, two, or three sessions.

Areas Covered



Specific Standards and Competencies Included in this Assessment

Safety

- Display comprehension of workplace/job-site safety procedures (OSHA)
- Demonstrate knowledge of safe material handling practices
- Demonstrate knowledge of safe power tool usage
- Demonstrate understanding of proper usage of PPE

Tools and Accessories

- Demonstrate knowledge of hardware and fasteners
- Display comprehension of safe hand and power tool usage
- Display understanding of measuring tools

Blueprint Reading and Material Estimation Skills

- Demonstrate scale interpretation and application
- Demonstrate knowledge of various types of blueprints
- Calculate material quantities
- Demonstrate understanding of building codes and their application

Foundations, Forms, and Concrete

- Demonstrate understanding of concrete characteristics
- Demonstrate knowledge of concrete safety
- Demonstrate understanding of lay out foundation and site work skills

Rough Framing

- Identify floor systems
- Identify wall systems
- Identify roof systems
- Demonstrate understanding of lumber
- Identify types of door and window openings
- Identify and utilize rough framing hardware
- Demonstrate knowledge of stairs
- Apply the order of operations

(Continued on the following page)

Specific Standards and Competencies (continued)

Exterior Finish

- Identify types of windows
- Identify characteristics of exterior finish hardware
- Identify roofing components
- Identify characteristics of exterior doors
- Identify types of siding

Interior Finish

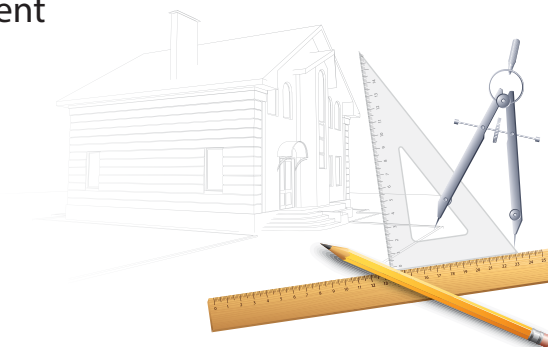
- Demonstrate understanding of installing and finishing interior walls and ceilings
- Display understanding of installing interior doors
- Display knowledge of installing standing and running trim
- Demonstrate understanding of installing cabinets and associated hardware
- Display understanding of installing flooring (e.g., hardwood, laminate, tile)
- Identify characteristics of stair trim and handrails

Carpentry-Related Mathematics

- Perform basic geometry calculations
- Calculate area, volume, linear feet
- Convert decimals to fractions

Weatherization Techniques

- Demonstrate knowledge of exterior weather barriers
- Demonstrate knowledge of air sealing and proper insulation
- Demonstrate understanding of water management



Sample Questions

Ground Fault Circuit Interrupters (GFCIs) must be used on a job site for all receptacles that are part of a temporary wiring system, such as

- A. extension cords
- B. recess lights
- C. outlets
- D. receptacles

What type of nails are commonly used in formwork because they allow for easy removal?

- A. spiral shank
- B. masonry
- C. duplex
- D. sinker

Which part of a blueprint provides information about the materials and thickness used in wall construction?

- A. floor plan
- B. section view
- C. schedule
- D. legend

Sand, gravel, water, and cement are all ingredients in

- A. plaster
- B. concrete
- C. paint
- D. brick

Select Structural No. 1 is the commercial grade of lumber used to build beams and

- A. stringers
- B. frames
- C. sashes
- D. trimmers

(Continued on the following page)

Sample Questions (continued)

Only use galvanized hardware and nails when working with _____ lumber.

- A. construction grade
- B. kiln-dried
- C. pressure treated
- D. engineered

A ridge vent is installed to

- A. direct water away
- B. facilitate ventilation
- C. provide insulation
- D. protect from weather

When finishing drywall/sheetrock, _____ is/are installed in the outside corners.

- A. joint tape
- B. compound
- C. corner beads
- D. trim

How many cubic feet are in a cube that is 5 feet by 5 feet by 5 feet?

- A. 50 cubic feet
- B. 100 cubic feet
- C. 125 cubic feet
- D. 200 cubic feet

Cap nails are used to

- A. install exterior house wrap
- B. fasten electrical boxes to studs
- C. anchor brackets to concrete
- D. secure metal roofing panels

Performance Assessment

NOCTI performance assessments allow individuals to demonstrate their acquired skills by completing actual jobs using the tools, materials, machines, and equipment related to the technical area.

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

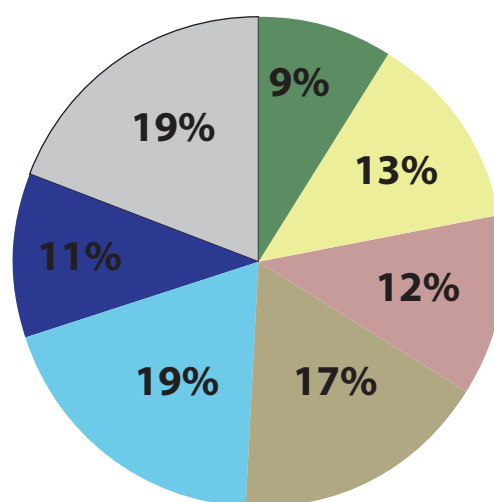
Participant will properly set up and use a builder's level to establish a level chalk line for the starting course of vinyl siding on a wall.

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.



(Continued on the following page)

Areas Covered (continued)

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 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.

