



# 2024-2025

## Technical Skills Assessment

### Construction Trades

### Results by Standard

| Legend (%) |        |         |
|------------|--------|---------|
| 0-50%      | 51-75% | 76-100% |

| Assessment: Construction Trades                                                            | % Correct 21-22 | % Correct 22-23 | % Correct 23-24 | % Correct 24-25 |
|--------------------------------------------------------------------------------------------|-----------------|-----------------|-----------------|-----------------|
| Number tested: 196                                                                         |                 |                 |                 |                 |
| <b>CONTENT STANDARD 1.0: INDUSTRY SKILLS AND HABITS</b>                                    | 67.25%          | 74.36%          | 69.09%          | 69.61%          |
| <b>Performance Standard 1.3: OSHA Standards</b>                                            | 67.25%          | 74.36%          | 69.09%          | 69.61%          |
| 1.3.1 Define the purpose of OSHA.                                                          | 97.37%          | 97.12%          | 93.38%          | 94.42%          |
| 1.3.3 Describe the record keeping requirements for OSHA compliance.                        | 43.86%          | 59.62%          | 57.62%          | 54.88%          |
| 1.3.4 List safety and health hazards that OSHA may inspect for in a shop or on a job site. | 65.57%          | 72.36%          | 65.89%          | 67.09%          |
| <b>CONTENT STANDARD 3.0: MATH AND MEASUREMENT SKILLS</b>                                   | 72.22%          | 76.12%          | 72.76%          | 72.99%          |
| <b>Performance Standard 3.1: Basic Math</b>                                                | 73.03%          | 75.24%          | 76.32%          | 78.14%          |
| 3.1.1 Identify terms associated with basic math.                                           | 67.84%          | 69.87%          | 74.17%          | 74.11%          |
| 3.1.2 Identify symbols used in math problems.                                              | 88.60%          | 91.35%          | 82.78%          | 90.23%          |
| <b>Performance Standard 3.2: Mathematical Operations Using Whole Numbers.</b>              | 88.60%          | 92.31%          | 84.77%          | 84.19%          |
| 3.2.1 Label the place values of a whole number.                                            | 89.47%          | 93.27%          | 87.09%          | 84.19%          |
| 3.2.2 Add, subtract, multiply, and divide whole numbers.                                   | 86.84%          | 90.38%          | 80.13%          | 84.19%          |
| <b>Performance Standard 3.3: Fractions, Decimals and Percentages</b>                       | 75.24%          | 81.62%          | 77.19%          | 77.98%          |
| 3.3.1 Distinguish among types of fractions.                                                | 78.51%          | 82.69%          | 76.82%          | 79.53%          |
| 3.3.2 Reduce fractions to lowest terms.                                                    | 75.00%          | 86.54%          | 76.82%          | 78.84%          |
| 3.3.5 Add, subtract, multiply, and divide fractions.                                       | 61.99%          | 67.95%          | 67.99%          | 67.60%          |
| 3.3.8 Convert decimal fractions to common fractions.                                       | 92.11%          | 96.15%          | 91.72%          | 91.16%          |
| <b>Performance Standard 3.4: Basic Geometry</b>                                            | 53.07%          | 53.61%          | 54.30%          | 59.07%          |
| 3.4.4 Calculate the area of geometric figures.                                             | 48.68%          | 48.56%          | 47.35%          | 55.12%          |
| 3.4.6 Estimate cubic yards.                                                                | 57.46%          | 58.65%          | 61.26%          | 63.02%          |
| <b>Performance Standard 3.5: Measuring Operations</b>                                      | 71.93%          | 75.67%          | 71.13%          | 68.65%          |
| 3.5.1 Identify terms associated with measuring.                                            | 37.28%          | 44.23%          | 34.77%          | 31.63%          |
| 3.5.2 Identify basic measuring tools used by carpenters.                                   | 82.89%          | 87.50%          | 82.78%          | 80.23%          |
| 3.5.8 Read measurements on tapes.                                                          | 92.98%          | 89.90%          | 84.77%          | 84.19%          |

|                                                                                                                         |                        |                        |                        |                        |
|-------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------|------------------------|------------------------|
| <b>Assessment: Construction Trades</b>                                                                                  | <b>% Correct 21-22</b> | <b>% Correct 22-23</b> | <b>% Correct 23-24</b> | <b>% Correct 24-25</b> |
| <b>Number tested: 196</b>                                                                                               |                        |                        |                        |                        |
| 3.5.9 Demonstrate the ability to use basic measuring tools and the 3-4-5 method to lay out the perimeter of a building. | 73.25%                 | 78.37%                 | 76.66%                 | 73.60%                 |
| <b>CONTENT STANDARD 5.0: USE AND MAINTENANCE OF HAND AND POWER TOOLS</b>                                                | 66.86%                 | 74.41%                 | 70.57%                 | 70.66%                 |
| <b>Performance Standard 5.1: Common Carpentry Hand Tools</b>                                                            | 69.74%                 | 73.24%                 | 67.11%                 | 67.21%                 |
| 5.1.1 Explain the care and safe use of hand tools.                                                                      | 58.77%                 | 69.23%                 | 58.28%                 | 59.53%                 |
| 5.1.2 Identify and match carpentry hand tools to their correct uses.                                                    | 71.93%                 | 74.04%                 | 68.87%                 | 68.74%                 |
| <b>Performance Standard 5.2: Power Tools</b>                                                                            | 65.84%                 | 74.83%                 | 71.80%                 | 71.87%                 |
| 5.2.1 Identify terms associated with power tools.                                                                       | 45.61%                 | 63.46%                 | 54.97%                 | 59.77%                 |
| 5.2.2 Explain the general safety rules pertaining to power tools.                                                       | 62.28%                 | 75.00%                 | 67.22%                 | 66.74%                 |
| 5.2.3 Explain how to maintain power tools properly.                                                                     | 78.07%                 | 79.81%                 | 85.10%                 | 83.72%                 |
| 5.2.4 Explain the safe operation for portable and stationary power tools.                                               | 64.33%                 | 76.92%                 | 72.63%                 | 72.56%                 |
| 5.2.5 Explain rules for the safe use of pneumatic fasteners.                                                            | 87.28%                 | 93.75%                 | 88.74%                 | 88.84%                 |
| 5.2.8 Match saw blades to their correct uses.                                                                           | 55.26%                 | 61.06%                 | 58.94%                 | 61.63%                 |
| 5.2.9 Complete a safety test for specific tools.                                                                        | 83.77%                 | 87.98%                 | 83.77%                 | 83.02%                 |
| 5.2.10 Perform rip and miter cut-off operations.                                                                        | 50.88%                 | 59.62%                 | 62.58%                 | 58.37%                 |
| <b>CONTENT STANDARD 6.0: SITE PREPARATION, CONCRETE FORMS AND FORMING</b>                                               | 70.18%                 | 74.04%                 | 72.02%                 | 69.65%                 |
| <b>Performance Standard 6.1: Leveling Instruments</b>                                                                   | 78.51%                 | 78.37%                 | 78.15%                 | 77.44%                 |
| 6.1.11 Locate and square corners.                                                                                       | 78.51%                 | 78.37%                 | 78.15%                 | 77.44%                 |
| <b>Performance Standard 6.2: Concrete Footings and Foundations</b>                                                      | 61.84%                 | 69.71%                 | 65.89%                 | 61.86%                 |
| 6.2.11 Calculate the cubic yards of concrete needed to pour a structure.                                                | 61.84%                 | 69.71%                 | 65.89%                 | 61.86%                 |
| <b>CONTENT STANDARD 7.0: FRAMING</b>                                                                                    | 61.40%                 | 67.64%                 | 64.34%                 | 62.07%                 |
| <b>Performance Standard 7.1: Floors and Sills</b>                                                                       | 55.26%                 | 64.42%                 | 58.61%                 | 59.07%                 |
| 7.1.2 Identify floor and sill framing and support members.                                                              | 55.26%                 | 64.42%                 | 58.61%                 | 59.07%                 |
| <b>Performance Standard 7.2: Floors and Sill Installation</b>                                                           | 55.70%                 | 70.19%                 | 63.25%                 | 63.26%                 |
| 7.2.1 Demonstrate the ability to lay out a floor system.                                                                | 55.70%                 | 70.19%                 | 63.25%                 | 63.26%                 |
| <b>Performance Standard 7.3: Wall and Partition Members</b>                                                             | 61.99%                 | 64.74%                 | 61.59%                 | 61.40%                 |
| 7.3.1 Identify and describe the function of the wall framing members.                                                   | 76.75%                 | 80.77%                 | 79.80%                 | 75.81%                 |
| 7.3.5 Calculate rough opening (R.O.) dimensions for doors.                                                              | 67.54%                 | 70.19%                 | 63.25%                 | 66.74%                 |
| 7.3.7 Calculate the length of headers for rough openings.                                                               | 41.67%                 | 43.27%                 | 41.72%                 | 41.63%                 |
| <b>Performance Standard 7.4: Frame a Single-story Structure</b>                                                         | 63.42%                 | 69.52%                 | 67.35%                 | 62.84%                 |
| 7.4.1 Demonstrate the ability to lay out a wall and partition locations on a floor.                                     | 74.56%                 | 81.25%                 | 78.15%                 | 71.86%                 |
| 7.4.2 Cut studs, trimmers, cripples, and headers to length.                                                             | 47.37%                 | 50.00%                 | 39.74%                 | 43.72%                 |
| 7.4.3 Assemble corners, Ts, and headers.                                                                                | 39.04%                 | 45.67%                 | 49.34%                 | 38.14%                 |

|                                                                                       |                        |                        |                        |                        |
|---------------------------------------------------------------------------------------|------------------------|------------------------|------------------------|------------------------|
| <b>Assessment: Construction Trades</b>                                                | <b>% Correct 21-22</b> | <b>% Correct 22-23</b> | <b>% Correct 23-24</b> | <b>% Correct 24-25</b> |
| <b>Number tested: 196</b>                                                             |                        |                        |                        |                        |
| 7.4.4 Construct wall sections for a single-story structure.                           | 78.51%                 | 86.54%                 | 85.76%                 | 79.07%                 |
| 7.4.5 Erect and brace wall sections for a single-story structure.                     | 77.63%                 | 84.13%                 | 83.77%                 | 81.40%                 |
| <b>CONTENT STANDARD 8.0: ROOF CONSTRUCTION TECHNIQUES</b>                             | 55.53%                 | 63.85%                 | 60.93%                 | 57.44%                 |
| <b>Performance Standard 8.2: Construct a Roof</b>                                     | 54.50%                 | 62.38%                 | 61.09%                 | 55.93%                 |
| 8.2.1 Estimate material needed to frame a roof.                                       | 54.39%                 | 53.37%                 | 58.28%                 | 53.02%                 |
| 8.2.2 Lay out rafter locations on top plate and ridge board.                          | 57.02%                 | 72.12%                 | 65.23%                 | 59.77%                 |
| 8.2.4 Apply roof sheathing.                                                           | 51.75%                 | 57.21%                 | 58.94%                 | 53.95%                 |
| 8.2.5 Erect trusses by hand and or light crane.                                       | 54.82%                 | 66.83%                 | 61.92%                 | 56.98%                 |
| <b>Performance Standard 8.4: Roofing Materials</b>                                    | 59.65%                 | 69.71%                 | 60.26%                 | 63.49%                 |
| 8.4.2 Discuss safety rules pertaining to roofing.                                     | 59.65%                 | 69.71%                 | 60.26%                 | 63.49%                 |
| <b>CONTENT STANDARD 9.0: INTERIOR STAIRCASE CONSTRUCTION</b>                          | 61.11%                 | 64.42%                 | 59.60%                 | 59.84%                 |
| <b>Performance Standard 9.2: Staircase Construction</b>                               | 61.11%                 | 64.42%                 | 59.60%                 | 59.84%                 |
| 9.2.1 Calculate number and size of risers and treads for a stair of given dimensions. | 61.11%                 | 64.42%                 | 59.60%                 | 59.84%                 |
| <b>CONTENT STANDARD 11.0: WINDOWS, EXTERIOR AND INTERIOR DOORS, AND ASSOCIATED</b>    | 32.46%                 | 38.94%                 | 32.45%                 | 29.30%                 |
| <b>Performance Standard 11.2: Window Unit Installation</b>                            | 32.46%                 | 38.94%                 | 32.45%                 | 29.30%                 |
| 11.2.2 Demonstrate the ability to install various window units.                       | 32.46%                 | 38.94%                 | 32.45%                 | 29.30%                 |
| <b>CONTENT STANDARD 13.0: JOB COORDINATION</b>                                        | 72.37%                 | 71.63%                 | 70.86%                 | 72.56%                 |
| <b>Performance Standard 13.2: Inspection and Code Requirements</b>                    | 72.37%                 | 71.63%                 | 70.86%                 | 72.56%                 |
| 13.2.1 Explain the purpose of Building Codes.                                         | 72.37%                 | 71.63%                 | 70.86%                 | 72.56%                 |