



2021-2022

Technical Skills Assessment

Cabinetmaking and Bench Carpentry

Results by Standard

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

Assessment: Cabinetmaking and Bench Carpentry Number tested: 57	% Correct 17-18	% Correct 18-19	% Correct 20- 21	% Correct 21-22
CONTENT STANDARD 1.0: LAB ORGANIZATION AND SAFETY SKILLS	81.51%	85.01%	87.25%	77.09%
Performance Standard 1.1: General Safety	81.51%	85.01%	87.25%	77.09%
1.1.1. Describe general shop safety rules, procedures and housekeeping duties.	80.00%	85.48%	84.72%	76.32%
1.1.2. Demonstrate knowledge of OSHA/EPA and their role in workplace safety.	65.71%	77.42%	91.67%	80.70%
1.1.3. Comply with the required use of safety glasses, ear protection, gloves, and shoes during lab/shop activities (i.e., personal protection equipment - PPE).	97.14%	95.16%	98.61%	80.70%
1.1.4. Utilize safe procedures for handling of tools and equipment.	41.43%	38.71%	55.56%	47.37%
1.1.5. Operate lab equipment according to safety guidelines.	78.57%	83.87%	81.94%	67.54%
1.1.7. Utilize proper ventilation procedures for working within the lab/shop area.	91.43%	95.16%	93.06%	81.58%
1.1.12. Secure hair and jewelry for lab/shop activities.	95.71%	98.39%	97.22%	90.35%
1.1.14. Follow verbal instructions to complete work assignments.	90.00%	95.16%	97.22%	88.60%
1.1.15. Follow written instructions to complete work assignments.	85.71%	91.94%	87.50%	82.46%
CONTENT STANDARD 2.0: MANUAL AND POWER TOOLS	65.14%	73.71%	73.75%	68.16%
Performance Standard 2.1: Hand Tools	64.29%	72.58%	75.69%	69.52%
2.1.1 Identify hand tools and their appropriate usage.	47.62%	56.99%	66.67%	60.23%
2.1.2 Demonstrate the proper techniques when using hand tools.	62.86%	75.27%	73.15%	69.01%
2.1.3 Demonstrate safe handling and use of appropriate tools.	91.43%	91.94%	93.06%	84.21%
Performance Standard 2.2: Power Tools and Equipment	65.71%	74.46%	72.45%	67.25%
2.2.1. Identify power tools and their appropriate usage.	79.05%	82.80%	77.78%	74.27%
2.2.2. Identify equipment and their appropriate usage.	63.81%	70.97%	76.85%	66.08%
2.2.3. Demonstrate the proper techniques when using power tools and equipment.	56.19%	65.59%	63.89%	64.33%
2.2.4. Demonstrate safe handling and use of appropriate power tools and	63.81%	78.49%	71.30%	64.33%
CONTENT STANDARD 3.0: FUNDAMENTAL DESIGN	66.47%	70.12%	74.56%	70.64%
Performance Standard 3.2: Print Reading Techniques	64.29%	61.29%	62.50%	61.84%

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3.2.1. Interpret basic elements of a working drawing (e.g., annotation, dimensions, line types, etc.).	64.29%	61.29%	62.50%	61.84%
Performance Standard 3.3: Measures and Scaling Techniques	76.57%	80.00%	88.33%	77.89%
3.3.1. Identify industry standard units of measure (e.g., standard, decimal, metric, etc.).	85.71%	87.10%	100.00%	82.46%
3.3.2 Define industry standard measurement terms (e.g., linear, square ft., tolerance, squareness, concentricity, perpendicular, parallel, etc.).	58.57%	62.90%	73.61%	64.91%
3.3.4. Measure to the nearest 1/16th inch with a tape measure.	90.00%	93.55%	97.22%	88.60%
Performance Standard 3.4: Freehand Technical Sketching Techniques	52.00%	56.13%	62.22%	62.11%
3.4.1. Identify industry standard units of measure (e.g., standard, decimal, metric, etc.).	57.14%	69.35%	70.83%	71.05%
3.4.3. Demonstrate proper use of precision measuring tools (e.g., micrometer, dial indicator, caliper, etc.).	48.57%	47.31%	56.48%	56.14%
Performance Standard 3.6: Mathematical Concepts	77.14%	82.26%	85.42%	82.02%
3.6.3. Add, subtract, multiply and divide fractions, decimals, and whole numbers.	76.19%	77.42%	84.26%	81.29%
3.6.5. Determine the cost of materials needed for a furniture/cabinetmaking project.	80.00%	96.77%	88.89%	84.21%
Performance Standard 3.7: Layout Principles and Practices	54.29%	77.42%	72.22%	66.67%
3.7.5. Layout parts using measurement practices.	54.29%	77.42%	72.22%	66.67%
CONTENT STANDARD 5.0: MANUFACTURING PROCESSES	54.08%	63.36%	58.33%	55.14%
Performance Standard 5.2: Milling Operations	46.67%	50.54%	47.84%	50.29%
5.2.2. Select the proper milling tools for specific operations (e.g., table saw, drill press, joiner, lathe, band saw, jigsaw, routers, etc.)	71.43%	75.81%	72.22%	69.30%
5.2.3. Demonstrate the steps to square a board.	33.33%	39.78%	37.04%	39.77%
5.2.4. Demonstrate cutting and handling techniques used for lumber and sheet goods.	40.00%	35.48%	31.94%	49.12%
5.2.6. Demonstrate safety operating procedures, (e.g. feather boards, holders, and power feeders).	48.57%	56.45%	55.56%	48.25%
Performance Standard 5.4: Joinery Techniques	50.48%	53.76%	46.30%	44.44%
5.4.2. Determine the appropriate joinery applications.	51.43%	58.06%	41.67%	40.35%
5.4.5. Construct various joints (i.e., dado, miter, rabbet, butt).	50.00%	51.61%	48.61%	46.49%
Performance Standard 5.5: Sanding	61.07%	73.79%	69.44%	67.32%
5.5.1. Identify terms used with sanding processes and techniques (e.g., grit, belt, disc, hand, etc.)	68.57%	74.19%	81.94%	71.93%
5.5.2. Properly prepare a surface for a treatment or finish.	64.29%	82.26%	73.61%	71.93%
5.5.4. Select the proper tool and abrasive for shaping and smoothing materials.	35.71%	53.23%	37.50%	44.74%

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5.5.5. Select the proper grit sizes and sequences for shaping and smoothing operations.	75.71%	85.48%	84.72%	80.70%
Performance Standard 5.6: Assembly	53.75%	63.51%	56.77%	49.67%
5.6.1. Identify terms used with assembly procedures (e.g., dry fitting, clamping, gluing, etc.)	57.14%	63.44%	49.07%	45.03%
5.6.2. Select the proper assembly tools for specific operations (e.g., c clamps, bar clamps, pipe clamps, etc.)	62.86%	70.97%	63.89%	50.88%
5.6.3. Demonstrate assembly and clamping procedures.	52.86%	72.58%	66.67%	59.65%
5.6.4. Demonstrate common case construction techniques (e.g., face frame, frameless, etc.)	44.76%	58.06%	52.78%	47.95%
5.6.7. Construct a project that includes a drawer and a door.	37.14%	62.90%	51.39%	47.37%
5.6.8. Use specific quality control criteria to check the accuracy and squareness of a project.	61.90%	55.91%	58.33%	49.71%
Performance Standard 5.7: Finishing	48.57%	69.35%	70.83%	63.16%
5.7.5. Utilize the proper health and safety procedures when working with finishes.	48.57%	69.35%	70.83%	63.16%
Performance Standard 5.8: Installation	63.57%	75.00%	68.75%	67.54%
5.8.8. Adjust doors and drawers.	41.43%	56.45%	45.83%	53.51%
5.8.9. Clean work site.	85.71%	93.55%	91.67%	81.58%
CONTENT STANDARD 6.0: CABINETRY AND MILLWORK INDUSTRY	75.71%	85.48%	83.33%	78.07%
Performance Standard 6.1: Career Exploration	75.71%	85.48%	83.33%	78.07%
6.1.3. Create an employment application and resume.	75.71%	85.48%	83.33%	78.07%