

## ARIZONA CTE CAREER PREPARATION STANDARDS & MEASUREMENT CRITERIA

<b>CARPENTRY, 46.0400.3</b>	
<b>STANDARD 1.0—MAINTAIN A SAFE WORK ENVIRONMENT IN CARPENTRY</b>	
1.1	Identify regulations pertaining to job site hazards and safety in carpentry
1.2	Use appropriate personal protective equipment for carpentry
1.3	Apply the procedures for the handling of hazardous materials/chemicals including the use of MSDS (Material Safety Data Sheets)
1.4	Evaluate types of fires and use of appropriate fire extinguishers
1.5	Maintain worksite safety and housekeeping (lighting, safety, etc.)
1.6	Identify first aid procedures
1.7	Identify safety plan for emergency situations
1.8	Demonstrate safe procedures for lifting heavy objects
1.9	Follow safe procedures in set up of scaffold and use of ladder
1.10	Demonstrate safe work procedures around electrical hazards
1.11	Explain the purpose of OSHA and how it promotes safety on the job
1.12	Use correct procedures for lockout/tag out
1.13	Report safety hazards
<b>STANDARD 2.0—OPERATE HAND AND POWER TOOLS/EQUIPMENT UTILIZED IN CARPENTRY</b>	
2.1	Use and maintain hand tools
2.2	Use and maintain portable power tools, powder actuated tools, pneumatic tools, and extension cords
2.3	Use and maintain stationary power equipment
2.4	Inspect condition of hand and power tools before use.
<b>STANDARD 3.0—USE PLANS, SPECIFICATIONS AND CODES</b>	
3.1	Identify blueprint terms, components, and symbols
3.2	Identify a set of drawings/symbols/scales and legends
3.3	Read material schedules on blueprints

These technical knowledge and skill standards were validated by a Skill Standards Validation Committee on October 24, 2007, and used in the adaptation, adoption, and development of test items for pilot testing in Spring 2008.

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3.4	Relate information on blueprints to actual locations
3.5	Identify and use drawing dimensions
3.6	Recognize building codes (i.e. national, state, and local)
<b>STANDARD 4.0—LAY OUT BUILDING LINES</b>	
4.1	Identify the use and care of precision measuring instruments
4.2	Recognize building lines
4.3	Use a builder's level to determine site and building elevations
<b>STANDARD 5.0—PERFORM CONCRETE/MASONRY WORK</b>	
5.1	Prepare and pour a footing
5.2	Construct a foundation wall or pier
5.3	Lay brick/block to specification
5.4	Cut brick and block accurately
5.5	Demonstrate the process of depositing, spreading, consolidating, and striking off concrete in a form
<b>STANDARD 6.0—CUTTING AND SHAPING STOCK</b>	
6.1	Crosscut stock to size.
6.2	Bore holes.
6.3	Square stock to 90 degrees.
6.4	Cut miter joint.
<b>STANDARD 7.0—ASSEMBLING AND FASTENING COMPONENTS</b>	
7.1	Apply clamping devices.
7.2	Fasten stock with metal fasteners (for example, nails, screws, staples, and other mechanical fasteners).
7.3	Identify nailing schedules for selected materials according to national, state, and local building codes.
7.4	Explain the safe use of nail guns.
<b>STANDARD 8.0—LAYOUT AND INSTALL FLOOR SYSTEMS</b>	
8.1	Install sill plate(s)

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8.2	Set posts
8.3	Construct and/or place girders/beams
8.4	Match selected fasteners used in floor framing to their correct uses according to national, state, and local building codes
8.5	Estimate the amount of material needed to frame a floor assembly
8.6	Construct floor assembly
8.7	Install joists for a cantilever floor
8.8	Install a subfloor using tongue and groove/OSB panels
8.9	Identify different floor systems (e.g. - cantilever, TGI truss, conventional, etc.)
<b>STANDARD 9.0—DEMONSTRATE WALL AND CEILING FRAMING</b>	
9.1	Lay out basic wall lines including plates, corner posts, door and window openings, partition Ts, bracing and plan for installation of fire stops
9.2	Assemble wood stud walls
9.3	Assemble metal stud walls
9.4	Lay out, assemble, erect, and brace exterior walls for a frame building
9.5	Cut and install ceiling joists on a wood frame building
<b>STANDARD 10.0—FRAME AND FINISH A ROOF</b>	
10.1	Construct conventional roof or set truss systems
10.2	Install roof sheathing
10.3	Frame a roof opening
10.4	Erect a gable roof using trusses
<b>STANDARD 11.0—IDENTIFY THERMAL AND MOISTURE PROTECTION</b>	
11.1	Install insulation material
11.2	Install vapor barrier
11.3	Identify type and use of vapor barrier
11.4	Identify type and use of insulation

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<b>STANDARD 12.0—APPLY EXTERIOR FINISHES</b>	
12.1	Install frieze boards or soffit
12.2	Install exterior moldings and trim
12.3	Demonstrate the installation of various types of siding
12.4	Apply correct installation to eliminate water intrusion
<b>STANDARD 13.0—INSTALL DOORS AND WINDOWS</b>	
13.1	Install doors
13.2	Install door hardware
13.3	Install windows
<b>STANDARD 14.0—INSTALL INTERIOR TRIM AND STAIRS</b>	
14.1	Install baseboards and casings
14.2	Lay out and cut stringers
14.3	Determine the number and sizes of risers and treads required for a stairway
14.4	Build a small stair unit
14.5	Lay out a skirt board
<b>STANDARD 15.0—INSTALL INTERIOR WALL AND CEILING FINISH</b>	
15.1	Demonstrate the proper techniques for cutting drywall
15.2	Fasten drywall to ceiling and walls
<b>STANDARD 16.0—INSTALLING, MOLDINGS, PANELING, AND OTHER MILLWORK</b>	
16.1	Install ceiling molding(s).
16.2	Install threshold.
16.3	List wall paneling installation procedures
16.4	Define steps in casing a window
<b>STANDARD 17.0—INSTALLING CABINETS AND CABINET TOPS</b>	
17.1	Install wall cabinet(s).

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17.2	Install base cabinet(s).
17.3	Install medicine cabinet.
17.4	Assemble prefabricated cabinet(s).
17.5	Install pulls and knobs.
17.6	Install prefabricated cabinet top(s).
<b>STANDARD 18.0—INSTALLING SHELVING AND ACCESSORIES</b>	
18.1	Install shelving.
18.2	Install accessories (e.g. - grab bars, door knobs, toilet paper dispensers, etc.)
18.3	Install mirrors.
<b>STANDARD 19.0—INSTALLING WOOD FLOORING AND FLOOR COVERING</b>	
19.1	Install underlayment.
19.2	Install finished wood flooring.
19.3	Install tongue and groove flooring
19.4	Identify different kinds of flooring material.
<b>STANDARD 20.0—PAINTING AND FINISHING</b>	
20.1	Prepare exterior surface(s).
20.2	Caulk exterior surfaces.
20.3	Prepare interior surface(s).
20.4	Repair damaged drywall.
20.5	Repair damaged plaster.
20.6	Apply finish to ceilings, walls, and sidings.
20.7	Apply finish to trim and moldings.
20.8	Apply stain to surface.
20.9	Install wall covering(s).