

**Competency Task List – Secondary Component**  
**Building/Property Maintenance & Manager CIP 46.0401**  
**High School Graduation Years 2023, 2024, 2025**

**100 Safety**

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
101	Follow general shop safety procedures.		
102	Wear personal protective equipment.		
	RESERVED (103)		
104	Identify the components of the Occupational Safety and Health Act (OSHA) and state its purposes.		
105	Lift and carry objects using ergonomics.		
106	Follow Safety Data Sheets (SDS).		
107	Follow general ladder safety.		
108	Identify scaffolding and other elevated work surfaces.		
109	Identify classes of fires and types of fire extinguishers.		
110	Follow fall protection safety procedures.		
111	Identify the requirements of building permits.		

**200 Building and Property Maintenance**

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
201	Follow building and property maintenance (BPM) lab rules and procedures.		
	RESERVED (202)		
203	Follow safety rules for tools, machines, and processes.		
	RESERVED (204)		
205	Identify lab tools and equipment.		
206	Keep daily timecards and project logs.		

207	Record daily units/hour records.		
	RESERVED (208)		
	RESERVED (209)		
210	Use safe methods of storing materials and supplies.		
211	Use measuring devices.		
212	Estimate quantities of materials.		
	RESERVED (213)		
	RESERVED (214)		

### 300 Carpentry and Repairs

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
301	Identify common building materials.		
302	Read and interpret building plans.		
303	Prepare a bill of material.		
304	Layout stock.		
305	Layout angles.		
306	Find the center line of stock.		
307	Use a sliding T-bevel to transfer an angle.		
308	Transfer a cut line using a marking gauge.		
309	Test a level for accuracy in the vertical and horizontal positions.		
310	Check a horizontal surface using a level.		
311	Check a vertical surface using a level.		
312	Snap a chalk line.		
	RESERVED (313)		
314	Bore holes with various drill bits.		
	RESERVED (315)		
316	Select nails for a specific job.		
317	Drive and remove nails using a claw hammer.		
	RESERVED (318)		

319	Pull nails with a wrecking bar or other nail removal tools.		
	RESERVED (320)		
321	Select and install screw-type fasteners.		
322	Identify fasteners and anchors for various uses.		
	RESERVED (323-326)		
327	Check for square.		

## 400 Portable Power Tools

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
401	Follow safety rules and procedures for using portable power tools.		
402	Operate portable electric and battery-operated drills.		
403	Operate a metal cutting (abrasive disc) chop saw.		
404	Operate a portable jigsaw and reciprocating saw.		
405	Operate a router.		
406	Operate a disc grinder.		
407	Operate an oscillating multi-tool.		

## 500 Table Saws

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
501	Follow safety rules and procedures for using a table saw.		
502	Rip stock on a table saw using a rip fence.		
503	Crosscut stock on a table saw with a miter gauge.		

## 600 Drill Presses

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
601	Follow safety rules and procedures for using a drill press.		
602	Drill holes in metal using a drill press.		
603	Drill holes in non-metallic materials using a drill press.		
	RESERVED (604)		

## 700 Compound Miter Saws

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
701	Follow safety rules and procedures for using a compound miter saw.		
702	Cut stock to length on a miter saw.		
703	Cut angles on a miter saw.		
704	Cut compound angles on a miter saw.		

## 800 Bench Grinders

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
801	Follow safety rules and procedures for using a bench grinder.		
802	Sharpen cutting tools on a bench grinder.		
803	De-burr stock on a bench grinder.		

## 900 Tool and Machine Maintenance

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
901	Replace or repair broken tools.		

902	Examine power tool and cords for damage and replace or repair.		
903	Lubricate moving parts of power tools as recommended by the manufacturer.		
904	Replace saw blades and other cutting tool accessories when dull.		
905	Sharpen edge cutting tools.		
906	Remove dust from power tool stators and rotors.		
907	Remove paint, oils, water, and lubricants from tool handles and power tool housings and chassis.		
908	Examine extension cords for damage and replace or repair male/female cord ends.		

## 1000 Structural Floors

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
1001	Identify floor members.		
1002	Install joist hangers.		
1003	Install or replace bridging between joists.		
1004	Repair (remove or replace) plywood sub-flooring on joists.		
1005	Describe platform, balloon, and post and beam framing.		
1006	Layout and install sill plates.		
1007	Layout and install floor joists and openings.		
1008	Layout and install subflooring.		

## 1100 Roofs

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
1101	Identify roof members.		
1102	Identify roof types.		
1103	Install and repair roof sheathing.		
1104	Install roofing materials on shingled roofs.		

1105	Remove and replace damaged shingle(s).		
1106	Apply sealing compounds and caulking.		
1107	Install common rafters.		
1108	Install and repair roof flashings.		

## 1200 Stairs and Staircases

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
1201	Repair stair stringers.		
1202	Repair stair risers and treads.		
1203	Install and repair a stair railing.		
1204	Layout and install a stair stringer.		
	RESERVED (1205)		
1206	Repair a balustrade.		

## 1300 Doors and Windows

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
1301	Install a lock set.		
1302	Hang an interior door.		
1303	Cut and install molding.		
1304	Trim a door jamb.		
1305	Trim a window, stool, apron, casing, and extension jambs.		
1306	Cut a gain for butt hinges and install butt hinges.		
1307	Cut a miter using a miter saw.		
1308	Set finish nails with a nail set.		
1309	Assemble miter joints by nailing.		

## 1400 Interior Walls

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
1401	Cut drywall with a utility knife.		
1402	Install drywall board.		
1403	Install metal corners prior to finishing drywall.		
1404	Tape and smooth drywall.		
1405	Cope an inside corner.		
1406	Miter an outside corner.		
1407	Install rubber cove base.		
1408	Repair suspended ceiling grids and tiles.		
1409	Describe installation of metal studs.		

## 1500 Exterior Walls

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
1501	Install and repair siding components.		
1502	Install, repair, and clean gutter and spouting components.		
1503	Identify wall frame members.		
1504	Layout, cut, and install wall frame members and wall openings.		
1505	Install siding underlayments, housewraps, and flashings.		

## 1600 Masonry Skills

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
1601	Perform masonry work.		
1602	Identify and use masonry tools.		
	RESERVED (1603)		

1604	Identify safety hazards for masonry workers.		
	RESERVED (1605)		
	RESERVED (1606)		
1607	Cut block and brick with a masonry hammer and brick set.		
	RESERVED (1608-1610)		
1611	Strike off a block wall.		
1612	Clean mortar from block and brick work.		
	RESERVED (1613-1616)		
1617	Identify anchors for masonry repair jobs.		

## 1700 Concrete

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
1701	Build forms for a concrete slab.		
1702	Mix concrete.		
1703	Place a concrete slab.		
1704	Float concrete.		
1705	Finish concrete.		
1706	Patch steps and walkways.		
1707	Re-set masonry anchors.		

## 1800 Floor and Wall Tile

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
1801	Estimate the quantity of tile needed.		
1802	Use tile terminology and determine applications.		
1803	Use adhesives and mortars.		
1804	Use tile tools and equipment.		
1805	Install various types of tile.		



## 1900 Residential Electrical Circuits

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
1901	Apply the National Electric Code (NEC) to common installations.		
1902	Practice electrical safety.		
1903	Use electrical tools.		
1904	Interpret electrical drawings.		
1905	Identify common electrical symbols.		
1906	Use a multimeter to identify alternating current and direct current.		
1907	Identify wire sizes and ampacities.		
1908	Identify wire types.		
1909	Use connectors/wire nuts to connect or splice wire.		
1910	Dispose of fluorescent bulbs.		
1911	Change fluorescent bulbs.		
	RESERVED (1912)		
1913	Reset an electric circuit breaker.		
1914	Install a ground fault circuit interrupting outlet.		
	RESERVED (1915)		
	RESERVED (1916)		
1917	Install an adjustable bar hanger.		
1918	Install a light fixture.		
1919	Install a duplex receptacle.		
1920	Install a single pole switch circuit.		
1921	Install a split wire duplex receptacle.		
	RESERVED (1922)		
1923	Install a recessed light.		
1924	Install outlet boxes.		
	RESERVED (1925)		
1926	Install Romex to boxes.		
	RESERVED (1927)		

1928	Install a three-way switch circuit.		
1929	Install a four-way switch circuit.		
	RESERVED (1930-1932)		
1933	Install old work boxes.		
1934	Check and replace a 24-volt transformer.		
1935	Install circuit breakers.		
	RESERVED (1936)		
1937	Perform proper grounding techniques.		
	RESERVED (1938)		
1939	Install low-voltage wiring.		
1940	Install coaxial cable for television reception.		
1941	Install cabling for computer workstations.		
1942	Replace or install a ceiling fan.		

## 2000 Residential Plumbing Systems

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
	RESERVED (2001)		
	RESERVED (2002)		
2003	Interpret plumbing symbols.		
2004	Interpret plumbing drawings.		
2005	Identify types of pipes.		
2006	Identify plumbing pipe fittings.		
	RESERVED (2007-2009)		
2010	Sweat solder copper pipe and fittings using propane, MAPP, or Prestolite gas.		
2011	Install and replace copper pipe and fittings.		
2012	Solvent weld polyvinyl chloride (PVC) plastic pipe.		
2013	Install and repair PVC plastic pipe and fittings.		
2014	Repair wastewater drains.		

2015	Install, replace, and repair commodes.		
2016	Install lavatories and sinks.		
2017	Hook up water supply lines and wastewater lines.		
2018	Install or replace a garbage disposal unit.		
2019	Clean and/or replace wastewater traps and pipes.		
2020	Replace and repair a faucet set.		
2021	Identify, install, and/or replace valves.		
2022	Use compression tools for copper pipe.		
2023	Install and replace Cross-linked Polyethylene (PEX) pipe and fittings.		

## 2100 Finishing Materials

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
2101	Protect furniture, materials, and surrounding surfaces from overspray and paint spatter.		
2102	Tape door and window trim to protect from finishing materials.		
2103	Prepare a surface prior to applying a finish.		
2104	Stain wood surfaces with wiping oil stains.		
2105	Apply a finish material with a brush and a roller.		
	RESERVED (2106)		
2107	Apply oil base paints.		
2108	Apply acrylic based paints.		
	RESERVED (2109)		
2110	Clean paint brushes and rollers.		
2111	Investigate the use of high velocity low pressure (HVLP) spray painters.		

## 2200 Reserved

## 2300 Portable Circular Saws

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
2301	Use a portable circular saw.		
2302	Rip stock with a portable circular saw.		
2303	Cross cut wood using a portable circular saw.		
2304	Cut miters with a portable circular saw.		
2305	Plunge cut with a portable circular saw.		

## 2400 Environmental Control Systems

Item	Task	(X) Indicates Proficiency <sup>1</sup>	Secondary Course Crosswalk
2401	Identify the scales on a thermometer.		
	RESERVED (2402)		
2403	Define British Thermal Unit (BTU).		
2404	Describe types of heat transfer.		
2405	Identify the components of a gas fuel heating system.		
2406	Identify the components of an oil fuel heating system.		
2407	Describe filter replacement requirements for forced air systems		
2408	Replace a thermostat.		

<sup>1</sup> Student Demonstrated Entry-Level Industry Proficiency as Indicated by (X)

Secondary CTE Instructor Signature \_\_\_\_\_ Date \_\_\_\_\_

Student Signature \_\_\_\_\_ Date \_\_\_\_\_

[PA In-Demand Occupations List \(PA IDOL\)](#)  
[Industry-Recognized Credential Resource Guide](#)