# Competency Task List – Secondary Component

# Construction Trades, Other CIP 46.9999

# High School Graduation Years 2020, 2021, 2022

## 100 Construction Trades Safety

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| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 101 | Follow OSHA standards. |   |   |
| 102 | Explain hazard communications. |  |  |
| 103 | Work with hazardous materials. |  |  |
| 104 | Use personal protective equipment (PPE). |  |  |
| 105 | Follow rules and regulations for fire protection. |  |  |
| 106 | Handle and store construction materials. |  |  |
| 107 | RESERVED |  |  |
| 108 | RESERVED |  |  |
| 109 | Follow electrical safety procedures. |  |  |
| 110 | Differentiate stuck-by and caught-in-between hazards. |  |  |
| 111 | Follow working from heights safety procedures. |  |  |
| 112 | Follow excavation site safety procedures.  |  |  |
| 113 | RESERVED |  |  |
| 114 | Follow concrete and masonry safety procedures. |  |  |
| 115 | Use ladders and scaffolding. |  |  |
| 116 | Follow safety procedures working in confined spaces. |  |  |
| 117 | RESERVED |  |  |

## 200 Hand Tools

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| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 201 | Use and maintain hand tools. |   |   |
| 202 | Use and maintain layout and measuring tools. |   |   |
| 203 | Use and maintain cutting tools. |   |   |
| 204 | Use and maintain shaping tools. |   |   |
| 205 | Use and maintain fastening tools. |   |   |
| 206 | Use and maintain dismantling tools. |   |   |

## 300 Power Tools and Equipment

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| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 301 | Operate a circular saw. |  |   |
| 302 | Operate battery and electric drills. |  |   |
| 303 | Operate belt and hand sanders. |  |  |
| 304 | Operate reciprocating saws. |  |  |
| 305 | Operate routers. |  |  |
| 306 | Operate a pneumatic nailer. |  |  |
| 307 | Operate a miter saw. |  |  |
| 308 | Operate a table saw. |  |  |
| 309 | Operate an electric planer. |  |  |
| 310 | Operate a grinder. |  |  |
| 311 | Operate powder-actuated tools. |  |  |

## 400 Plans and Blueprints

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| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 401 | Interpret building codes, zoning regulations, and permits. |  |   |
| 402 | RESERVED |  |   |
| 403 | Interpret plans, sketches, and blueprints. |  |  |
| 404 | Interpret standard abbreviations and symbols. |  |  |
| 405 | Estimate material from a print.  |  |  |
| 406 | Use an architect scale. |  |  |
| 407 | Identify structural components. |  |  |
| 408 | Interpret Americans with Disabilities (ADA) Act regulations. |  |  |

## 500 Site and Building Layout

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| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 501 | Use a builder’s level, transit, and/or laser level to determine site layout and building elevations. |   |   |
| 502 | Square a structure using the Pythagorean Theorem or by measuring diagonals. |   |   |

## 600 Concrete

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| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 601 | Use modern concrete materials. |   |   |
| 602 | Determine appropriate concrete finishing processes and equipment. |   |   |
| 603 | Estimate the amount of concrete needed for footers and slabs. |   |   |
| 604 | Lay out and build concrete forms. |   |   |
| 605 | Use equipment and tools for concrete. |  |  |
| 606 | Prep and place concrete. |  |  |
| 607 | Perform basic concrete finishing processes. |  |  |
| 608 | Use tools to edge, groove, and cut concrete. |  |  |

## 700 Block and Brick Masonry

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| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 701 | Describe the most common types of masonry units. |   |   |
| 702 | Identify concrete block by size and type. |   |   |
| 703 | Estimate masonry units needed for block construction. |   |   |
| 704 | Use masonry cutting techniques. |   |   |
| 705 | Lay out and construct a block laying project.  |  |  |
| 706 | Perform various masonry positions and bonds. |  |  |
| 707 | Lay block to a line. |  |  |
| 708 | Install masonry fasteners.  |  |  |
| 709 | RESERVED |  |  |
| 710 | Mix mortar to proper proportions and consistency. |  |  |
| 711 | Compare mortar types and applications. |  |  |
| 712 | Perform proper brick and block laying techniques. |  |  |
| 713 | Install block or brick walls. |  |  |

## 800 Floor Framing

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| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 801 | Identify and estimate different types of framing materials and systems. |   |   |
| 802 | Install girders and sills. |   |   |
| 803 | Perform layout of floor joists and openings. |   |   |
| 804 | Install various floor joists and band joists. |  |  |
| 805 | Install various types of bridging. |  |  |
| 806 | Install various types of columns and supports. |  |  |
| 807 | Install various types of subfloor materials. |  |  |

## 900 Wall Framing

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| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 901 | Install various components of interior and exterior walls. |   |   |
| 902 | Install various ceiling systems. |   |   |
| 903 | Install various steel framing components. |   |   |
| 904 | Identify and estimate different types of framing materials and systems. |  |  |

## 1000 Roof Framing

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| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 1001 | Identify and estimate different types of framing materials and systems. |   |   |
| 1002 | Install various roof components for gable roofs. |   |   |
| 1003 | Install various types of roof trusses. |   |   |
| 1004 | Install various types of roof sheathing materials. |  |  |
| 1005 | RESERVED |  |  |
| 1006 | Calculate, layout, and cut roof rafters. |  |  |

## 1100 Roof Coverings

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| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 1101 | Install various types of asphalt shingles. |   |   |
| 1102 | Install various types of underlayment materials. |   |   |
| 1103 | Install various types of flashing. |   |   |
| 1104 | Identify and estimate different types of roof covering materials and systems.  |  |  |

## 1200 Insulation Materials

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| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 1201 | Install various types of insulation and ventilation. |   |   |
| 1202 | Identify and estimate different types of insulation and ventilation materials. |   |   |

## 1300 Exterior Finishes

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| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 1301 | Install various types of horizontal sidings. |   |   |
| 1302 | Install various types of vertical sidings. |   |   |
| 1303 | RESERVED |   |   |
| 1304 | Identify and estimate different types of exterior finish materials. |  |  |
| 1305 | Install various types of windows. |  |  |
| 1306 | Install various types of exterior doors. |  |  |
| 1307 | Install various types of soffit and fascia. |  |  |
| 1308 | Install house wrap. |  |  |

## 1400 Basic Plumbing

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| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 1401 | Use and maintain basic plumbing tools.  |   |   |
| 1402 | RESERVED |   |   |
| 1403 | Identify and estimate different types of pipes and fittings. |   |   |
| 1404 | RESERVED |  |  |
| 1405 | Install various types of pipes, fittings, valves, and devices. |  |  |
| 1406 | Install faucets and drain assemblies. |  |  |
| 1407 | RESERVED |  |  |
| 1408 | RESERVED |  |  |
| 1409 | Install water supply systems. |  |  |
| 1410 | Install drain, waste, and vent systems. |  |  |
| 1411 | Install fixtures and equipment. |  |  |
| 1412 | Troubleshoot and repair common plumbing problems. |  |  |

## 1500 Residential Electric Circuits and Components

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| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 1501 | Identify electrical hazards and practice electrical safety. |   |   |
| 1502 | Apply the National Electric Code (NEC) to common residential installations. |   |   |
| 1503 | Interpret electrical drawings. |   |   |
| 1504 | Apply electrical theory. |  |  |
| 1505 | Construct electrical circuits. |  |  |
| 1506 | Use various wire types and sizes. |  |  |
| 1507 | Use electrical tools. |  |  |
| 1508 | Install ground fault circuit interrupters. |  |  |
| 1509 | Install arc fault circuit interrupters. |  |  |
| 1510 | Install over current protection devices. |  |  |
| 1511 | Install various electrical boxes. |  |  |
| 1512 | RESERVED |  |  |
| 1513 | Install various light fixtures. |  |  |
| 1514 | Install various receptacle circuits. |  |  |
| 1515 | Install various switch circuits. |  |  |
| 1516 | Install a 220-volt circuit. |  |  |
| 1517 | RESERVED |  |  |
| 1518 | Trim out and finish electrical circuits. |  |  |
| 1519 | Identify service entrance installation. |  |  |
| 1520 | Install low voltage electrical circuits. |  |  |
| 1521 | Install electrical panel installation. |  |  |

## 1600 Wall Components

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| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 1601 | Install various wall surfaces, including drywall. |   |   |
| 1602 | Install various interior moldings. |   |   |
| 1603 | Identify and estimate various materials for wall surfaces. |   |   |
| 1604 | Identify and estimate various types of interior moldings. |  |  |

## 1700 Interior Finishes

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 1701 | Identify and estimate different types of paints, stains, and their uses. |   |   |
| 1702 | Apply different paints and stains to different surfaces.  |   |   |
| 1703 | Clean painting tools. |   |   |
| 1705 | Apply various types of caulking. |  |  |
| 1706 | Install ceramic tile. |  |  |

## 1800 Stairways

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 1801 | Identify and estimate different types of stairways and components. |   |   |
| 1802 | Calculate, lay out, and cut stair stringers. |   |   |
| 1803 | Install stairways and components. |   |   |

1 Student Demonstrated Entry-Level Industry Proficiency as Indicated by (X)

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

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

Certifications: Comments: