# Competency Task List – Secondary Component

# Mason/Masonry CIP 46.0101

# High School Graduation Years 2023, 2024, 2025

## 100 Masonry Training Lab

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| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 101 | Identify masonry hand and lab tools and equipment.  |   |   |

## 200 Safety Practices

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| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 201 | Use personal protection equipment. |   |   |
| 202 | Follow masonry hand tool safety.  |   |   |
| 203 | Follow mortar mixer safety. |   |   |
| 204 | Erect and dismantle steel tubular scaffolding within OSHA guidelines. |   |   |
| 205 | Place material and stock scaffolding. |   |   |
| 206 | Use safety data sheets (SDS) information. |   |   |

## 300 Blueprints

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| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 301 | Identify types of blueprint plans. |  |   |
| 302 | Read and Interpret blueprint plans. |  |   |

## 400 Masonry Hand Tools

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| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 401 | Read and use a modular and spacing ruler. |  |   |
| 402 | Mark and use a masonry guide or corner pole. |  |   |
| 403 | Secure mason's line to line blocks, pins, and line stretchers. |  |  |
| 404 | Set a trig properly. |  |  |
| 405 | Use a hammer and chisel to cut block and brick. |  |  |
|  | RESERVED (406) |  |  |
| 407 | Identify and use masonry jointers to finish mortar joints. |  |  |
|  | RESERVED (408) |  |  |

## 500 Building Site

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| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 501 | Lay out and level a building using a transit. |   |   |
| 502 | Square a building using the 3-4-5 Pythagorean Theorem. |   |   |

## 600 Power Tools

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| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 601 | Operate a portable masonry gas cut-off saw. |   |   |
| 602 | Operate a mortar mixer. |   |   |
| 603 | Operate a stationary or portable masonry saw. |   |   |
| 604 | Operate a hammer drill. |   |   |
| 605 | Identify cutting blades for a masonry saw. |  |  |

## 700 Masonry Fasteners

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| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 701 | Use masonry fasteners and reinforcements. |   |   |

## 800 Bricklaying Techniques

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| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 801 | Identify brick types and bonds. |   |   |
| 802 | Lay out proper dry bond of a brick wall. |   |   |
| 803 | Lay brick to the line. |   |   |
| 804 | Install window and door openings (jambs) in brick walls. |  |  |
| 805 | Install flashing for windows and doors. |  |  |
| 806 | Install weep holes/vents. |  |  |
|  | RESERVED (807) |  |  |
| 808 | Install a soldier course. |  |  |
| 809 | Lay a brick and block composite wall. |  |  |
| 810 | Build brick columns. |  |  |
| 811 | Construct a brick veneer wall. |  |  |
| 812 | Discuss a brick cavity wall. |  |  |
| 813 | Corbel a brick wall. |  |  |
| 814 | Clean a brick wall. |  |  |
| 815 | Lay a course of rowlocks. |  |  |
| 816 | Lay a course of headers. |  |  |
| 817 | Construct a brick jamb lead. |  |  |
| 818 | Construct a 4" brick inside corner. |  |  |
| 819 | Construct a 4" brick outside corner. |  |  |
| 820 | Perform trowel techniques for brick. |  |  |

## 900 Block Laying Techniques

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| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 901 | Identify block types and bonds. |   |   |
| 902 | Lay block to the line. |   |   |
| 903 | Construct a brick ledge. |   |   |
| 904 | Discuss a control joint. |  |  |
| 905 | Install window and door openings in block walls.  |  |  |
| 906 | Set lintels. |  |  |
| 907 | Construct block piers. |  |  |
| 908 | Clean a block wall. |  |  |
| 909 | Parge a block wall. |  |  |
| 910 | Construct a jamb block lead. |  |  |
| 911 | Construct a corner block lead. |  |  |
| 912 | Perform trowel techniques for block.  |  |  |
| 913 | Layout bond for block. |  |  |

## 1000 Mortar

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| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 1001 | Identify types of mortars and their characteristics. |   |   |
| 1002 | Mix mortar (other than mortar mixer). |   |   |
|  | RESERVED (1003) |   |   |
| 1004 | Temper mortar. |  |  |
|  | RESERVED (1005) |  |  |

## 1100 Chimneys and Fireplaces

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| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 1101 | Identify parts of a chimney and fireplace. |   |   |
| 1102 | Discuss fireplace construction. |  |  |
| 1103 | Construct a brick chimney. |  |  |
| 1104 | Construct a block chimney. |  |  |
| 1105 | Determine flashing methods where the chimney meets the roof.  |  |  |
|  | RESERVED (1106) |   |   |
|  | RESERVED (1107) |   |   |

## 1200 Arch Construction

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| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 1201 | Identify arch terminology. |   |   |
| 1202 | Identify types of arches.  |   |   |
| 1203 | Construct an arch. |   |   |
|  | RESERVED (1204) |  |  |

## 1300 Masonry Estimation

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| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 1301 | Estimate mortar, number of units, and material costs for brick work. |   |   |
| 1302 | Estimate mortar, number of units, and material costs for block work. |   |   |
| 1303 | Estimate the area, volume, and cost for various masonry applications. |   |   |

## 1400 Thin Veneer

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| --- | --- | --- | --- |
| Item | Task  | (X) Indicates Proficiency 1 | Secondary Course Crosswalk |
| 1401 | Identify thin veneer applications. |   |   |
| 1402 | Describe finishing thin veneer. |   |   |

1 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)](https://nam10.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.workstats.dli.pa.gov%2FProducts%2FIDOL%2FPages%2Fdefault.aspx&data=04%7C01%7Celw12%40psu.edu%7C465d2f58a43f45631dac08d9e0349a4c%7C7cf48d453ddb4389a9c1c115526eb52e%7C0%7C0%7C637787338795980555%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=yZW%2BaPOFwIBGxV3Jk72%2BGXlAbGWgkjCVKy%2FQtYol1F0%3D&reserved=0)

[Industry-Recognized Credential Resource Guide](https://www.education.pa.gov/K-12/Career%20and%20Technical%20Education/Resources/Teacher%20Resources/IndustryRecognized/Pages/default.aspx)