

46.0201 Carpentry/ Carpenter

Safety/Occupational Orientation 100

101 Identify and follow all basic safety practices and procedures. 101

102 Identify and follow all lab safety practices and procedures. 102

103 Identify and follow all construction industry safety practices and procedures. 103

104 Follow procedures in Safety Data Sheets (SDS) system. 104

105 Identify and follow all OSHA safety standards at the construction site. 105

107 Demonstrate the ability to construct scaffolding. 107

Hand tools 200

201 Demonstrate proper use of small hand tools. 201

202 Demonstrate proper use of sawing tools. 202

203 Demonstrate proper use of fastening tools. 203

204 Demonstrate proper use of measuring tools. 204

205 Demonstrate proper use of cutting tools. 205

206 Demonstrate the ability to sharpen cutting tools. 206

207 Demonstrate proper use of ladders. 207

208 Demonstrate proper use of finishing tools. 208

209 Demonstrate the ability to properly maintain hand tools. 209

Power Tools 300

301 Demonstrate proper use of stationary electric power tools. 301

302 Demonstrate proper use of pneumatic tools systems. 302

303 Demonstrate proper use of portable electric power tools. 303

304 Demonstrate proper maintenance of electric power tools. 304

305 Demonstrate proper maintenance of pneumatic power tools. 305

Blueprints Reading 400

401 Read and interpret blueprints. 401

402 Read, interpret and comprehend standard symbols and abbreviations. 402

403 Read and interpret building specifications. 403

404 Read and interpret a plot plan. 404

405 Read and interpret a foundation plan. 405

406 Read and interpret elevation plans. 406

407 Read and interpret details and section views. 407

408 Read and interpret floor, wall and roof framing plans. 408

409 Demonstrate the knowledge of building and zoning codes. 409

410 Demonstrate knowledge of the Americans with Disabilities Act (ADA) regulations. 410

Site Preparation and Layout 500

501 Determine factors needed to be considered before the start of a building project. 501

502 Demonstrate knowledge to acquire a building permit. 502

503 Determine knowledge of PA One Call System, Inc. 503

504 Describe how to establish elevations and grades from benchmarks using a transit level. 504

505 Demonstrate how to stake out a building foundation using the Pythagorean theorem. 505

506 Demonstrate knowledge on how to use batter boards. 506

Footings and Foundations 600

601 Demonstrate how to determine footer type. 601

602 Demonstrate proper use of leveling instruments. 602

603 Demonstrate and establish footer lines and elevations. 603

604 Demonstrate layout and construct forms. 604

605 Demonstrate layout and construct footers. 605

606 Demonstrate layout foundations. 606

607 Demonstrate layout and construct forms for concrete slabs. 607

608 Demonstrate knowledge of how to properly install reinforcing bars. 608

609 Demonstrate knowledge of how to properly erect vertical and horizontal framework. 609

**Framing - Floor
Construction** 700

701 Determine methods used to fasten sill plates. 701

702 Properly install fasteners used in floor framing. 702

703 Properly measure and install sill plates. 703

704 Properly measure and install floor joists, including manufactured floor joists. 704

705 Properly measure and install joists for a cantilever floor. 705

706 Properly layout and construct cross and solid bridging. 706

707 Properly layout and install sub-flooring. 707

708 Properly measure and frame floor openings. 708

**Framing - Wall
Construction** 800

801 Determine fastening methods and properly install fasteners in wall construction. 801

802 Properly measure, layout and construct a wall. 802

803 Properly select and install various types of insulation. 803

804 Properly measure, layout and construct door openings. 804

805 Properly measure, layout and construct window openings. 805

806 Properly measure, layout and construct solid headers. 806

807 Properly measure, layout and install sheathing. 807

808 Properly plumb, align and brace walls. 808

809 Demonstrate knowledge of steel framing/properly install metal studs. 809

**Framing - Roof
Construction** 900

901 Determine fastening methods used during roof construction. 901

902 Properly install fasteners used in roof construction. 902

903 Properly measure, layout, cut and install a ridgeboard. 903

904 Properly measure, layout, cut and install hip, jack and truss rafters. 904

905 Properly measure, layout, cut and install roof trusses. 905

906 Properly measure, layout, cut and install brace roof trusses. 906

907 Properly measure, layout, cut and install roof sheathing. 907

908 Properly measure, layout, cut and install roof openings. 908

910 Properly measure, layout, cut and install roofing paper. 910

911 Properly measure, layout, cut and install shingles. 911

912 Properly measure, layout, cut and install capping. 912

Exterior Finish 1000

1001 Determine fastening methods used during exterior finishing operations. 1001

1002 Properly install fasteners used in exterior finishing operations. 1002

1003 Properly measure, layout and install house wrap. 1003

1004 Properly measure, layout and install exterior doors. 1004

1005 Properly measure, layout and install windows. 1005

1006 Properly measure, layout and install siding. 1006

1007 Properly measure, layout and install soffits and fascias. 1007

1008 Properly measure, layout and install gutters and downspouts. 1008

1009 Properly measure, layout and install an exterior set of stairs. 1009

Interior Finish 1100

1101 Determine fastening methods used during interior finishing operations. 1101

1102 Properly install fasteners used in interior finishing operations. 1102

1103 Properly measure, layout and install tape and finish drywall. 1103

1104 Properly measure, layout and install suspended and tile ceilings. 1104

1105 Properly measure, layout and install interior doors. 1105

1106 Properly measure, layout and install a door, trim, casings and hardware. 1106

1107 Properly measure, layout and install window trim, casings and hardware. 1107

1108 Properly measure, layout and install baseboard and molding. 1108

1109 Properly measure, layout and install hardwood, tile and block flooring. 1109

1110 Properly measure, layout and install an interior set of stairs. 1110

Estimation 1200

1201 Demonstrate knowledge of how to estimate bricks and blocks needed to complete a given task. 1201

1202 Correctly estimate the amount of concrete needed to complete a given task. 1202

1203 Correctly estimate the cost and amount of materials to finish an exterior wall. 1203

1204 Correctly estimate the cost and amount of materials to finish an interior wall. 1204

1205 Correctly estimate the cost and amount of materials to construct a floor. 1205

1206 Correctly estimate the cost and amount of materials to construct a roof. 1206

1207 Correctly estimate the cost and amount of materials to install siding for a house. 1207