



**Schuylkill Technology Center
Unit Plan**

WALL CONSTRUCTION

Course Title: Carpentry	CIP Code: 46.0201	Grade/Level: 10 th -11 th Level 2
Instructor: Mr. Phil Kintzel		Timeline: (# of school days) School Days
Objectives: Identify and describe the function of each part of the wall frame. Determine the length of exterior wall studs. Describe four different types of walls used in residential framing. Determine the rough opening width and height for windows and doors. Lay out the wall plates for partition intersections, openings, and OC studs. Describe several methods of framing corner and partition intersections. Assemble and construct a wall section. Erect and temporarily brace a wall section plumb and straight. Describe the function of and install blocking and backing. Apply wall sheathing. Lay out, cut, and install ceiling joists. Identify and describe the components of non-structural steel wall framing. Install a steel door buck. Estimate the materials needed for walls and ceiling framing.		
PA Core Standards: (List <u>ALL</u> standards you will address during this unit.) Math: CC.2.1.HS.F.1 Apply and extend the properties of exponents to solve problems with rational exponents. A1.1.1.1.1, A1.1.1.1.2, A1.1.1.3.1, A2.1.2.1.1, A2.1.2.1.2, A2.1.2.1.3, A2.1.2.1.4 CC.2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. A1.1.1.1.1, A1.1.1.1.2, A1.1.1.3.1 CC.2.1.HS.F.3 Interpret the structure of expressions to represent a quantity in terms of its context. A1.1.1.5.1, A1.1.1.5.2, A1.1.1.5.3, A2.1.2.2.1, A2.1.2.2.2		
POS Duty/Task Numbers: (List <u>ALL</u> Tasks you will teach and assess during this unit.) 800 FRAMING - WALL CONSTRUCTION 801 Determine fastening methods and properly install fasteners in wall construction. 802 Properly measure, layout and construct a wall. 803 Properly select and install various types of insulation.		

- 804 Properly measure, layout and construct door openings.
- 805 Properly measure, layout and construct window openings.
- 806 Properly measure, layout and construct solid headers.
- 807 Properly measure, layout and install sheathing.
- 808 Properly plumb, align and brace walls.
- 809 Demonstrate knowledge of steel framing properly install metal studs.

Instructional Procedures and Strategies: (Include all learning guides, strategies (MAX and other), procedures, etc. that will be used during this unit.)

Learning Guides:

800-1 Wall Construction

Theory in the classroom

Stump the Teacher (MAX)

Demonstrations by the instructor

Guided Practice

Resources: (List all equipment and supplies necessary to complete the unit)

Appropriate Module

Pencil

Notebook Paper

Textbook (Basic Principles for Construction)

Carpenter Shop or Job Site

Appropriate Job-Sheets Packet

Performance Assessment Packet

Portable Power Tools

2x4x8'

2x4x12'

16d nails

Differentiation/Accommodations:

Students who are in need of accommodations will receive the following:

- Presentation accommodations

- Setting accommodations

- Response accommodations

- Timing/Scheduling accommodations

Assessments: (Formative and Summative)

Both graded and non-graded job assignments relating to the mastery of the POS tasks

KWL literacy assignments

Written unit test

Performance assessments to rate the students' competency of the POS tasks