

Integrated Lesson Plan

Instructor: Joseph E. Krupka jr.

Program: Construction Technology

Unit: Carpentry

Lesson Title: Wall systems of residential structures.

Terminal Objective: Upon completion of this unit, the student will be able to layout and frame-up a scaled-down model of a wall with one door and one window.

Enabling Objectives:

- 1.) The students will identify the different components that make up a wall.
- 2.) The students will measure and cut pieces of balsa wood to size.
- 3.) The students will layout their wall system before assembly.
- 4.) The students will use super glue to assemble their wall components.

Related PA Academic Standards:

Reading, Writing, Speaking and Listening

- # 1.1.E.
- # 1.6.C.
- # 1.6.D.
- # 1.6.E.

Mathematics

- # 2.2.E.
- # 2.3.A.
- # 2.3.C.

Introduction:

- 1.) Relation to past-different techniques used to construct wall systems (balloon, plank, etc...)
- 2.) Motivation-building scaled-down walls (models) gives the student more of an understanding than pictures and diagrams.
- 3.) Objectives-State objectives from above.
- 4.) Method to accomplish-read information sheets, observe demonstrations, and complete assignments.
- 5.) Evaluation-wall systems will be graded on neatness and accuracy; students will also be tested on the material from the information sheets.

Body/Main Content:

- I. Terms & definitions
 - a.) cover information sheets
- II. Components of the wall layout
 - a.) studs
 - b.) corners & channels
 - c.) doors & windows
 - d.) top & sole plates
 - e.) jacks, trimmers, & cripples
 - f.) headers
- III. Cutting procedures
 - a.) within 1/32 " accuracy
 - b.) use the min miter box provided
 - c.) use the flush cut razor saw provided
- IV. Assembly procedures

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- a.) correct placement of the wall components
- b.) safe use of super glue

Summary:

- I. Review
 - a.) types of wall systems
 - b.) wall system terms & definitions

Materials Needed:

- 1.) Balsa wood strips (1/8" thick, _" wide, any length)
- 2.) Mini miter boxes
- 3.) Mini flush cut razor saws
- 4.) Super glue