**Lesson Information**

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| Lesson: (2 of 4) Walls and Ceilings Length: 90 minutes  Unit: (2 of 4) Concrete and Framing  Course: Carpentry |

**Content Assumptions**

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| Prior to this class, students have taken construction math and construction drawing courses. |

**Essential Questions**

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| 1. How do the components of wall and ceiling frames form stable walls and ceilings? 2. How are different methods of/materials for wall and ceiling framing suited for different purposes? |

**Objectives Assessments**

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| After completing this lesson, students will be able to:   1. Demonstrate their knowledge of the terms and concepts associated with wall and ceiling framing. 2. Select the best materials/methods for a given construction project, and justify their reasoning. 3. Translate information found on construction drawings into quantities of building materials. | 1. Labeling diagram(s) — key 2. Short-answer essay — rubric 3. Materials estimate — checklist |

**Activities/Instruction**

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| **Show…** (45 minutes)  Using diagrams such as those linked in the Materials section, Instructor introduces students to the terms and concepts associated with wall and ceiling framing, as well as processes for laying out, cutting, and installing the components of wall and ceiling frames.  **…and Tell** (30 minutes)  Students label blank versions of the diagrams (such as those listed in the Materials section) and write short essays answering one of the following prompts:   1. Compare and contrast the use of wall-framing in masonry construction and carpentry construction. How could both be used in building a simple residence? 2. Compare and contrast the use of metal studs and wood studs in wall-framing; decide which is “better” for building a simple residence, and explain why.   **Construction Planning: Materials Estimate** (15 minutes)  Instructor distributes copies of the chosen construction plans and explains the task. Students are to estimate the amount of materials to be used in framing all walls and ceilings represented on the plans. |

**Materials**

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| For students:   * Plans for a simple residence   For Instructor:   * http://www.workspacetraining.com.au/timberplustoolbox/toolbox13\_05/unit7\_assembling\_wall\_frames/section1\_wall\_frame\_components/lesson2\_parts\_of\_a\_wall\_frame.htm * http://www.mcvicker.com/resguide/page010.htm#RACF * [SHORT-ANSWER ESSAY RUBRIC] * [FRAMING MATERIALS ESTIMATE CHECKLIST] |