Shed Building

Presenters:

Dick Piersma - Hilmar HS (<u>dpiersma@hilmar.k12.ca.us</u>) Mike Spiess - CSU Chico (<u>mspiess@csuchico.edu</u>) Rich Darrach – Las Plumas HS <u>rdarrach@ouhsd.org</u>

Agenda

Time	Presenter	Topic			
Thursday 1-5					
1:00-1:10	ALL	Introductions			
1:10-1:30	Dick	Overview of Project			
	Dick	Uses of sheds for teaching			
	Dick	What you should learn (Plan, Handout)			
	Mike	Review Materials (PT, Plywood ID), alternative materials (BOM)			
	Mike	Review Fasteners (drives)			
	Rich	Tool ID (handout)			
	Rich	Safety Miter Saw, Circular Saw, Nail Gun, Ladders			
2:00-2:30	Dick	Review Plan. Divide into 5 groups. Develop cut list. BOM			
2:30-4:00	Mike	Framing.			
		 Using a nail gun for framing. 			
		 Squaring the frame using corners and plywood. 			
		 Use of Simpson ties (floor and roof) 			
4:00-4:30	Rich	Cleanup			
4:30-5:00	ALL	Review progress, discuss issues, review techniques used			
Friday					
8:00-11:30 ALL Building – Cor		Building – Complete sections (flat)			
		 Using a jig for plywood overlap. 			
		Installing siding			
		 Layout of the angle using a chalk line 			
		Cutting with a circular saw			
		 Using a chalk line to mark nail lines 			
		 Nailing 6" on edge, 12" in "field". 			
		Installing the roofing			
		 Squaring the frame (temp brace) 			
		Installing with screws			
11:30-12:00	Mike	SLO Activity			
1:00-4:00	ALL	Assemble Sections / Build Door / Install Door			
4:00-4:30	Rich	Cleanup / Pack tools			
4:30-5:00	ALL	Review progress, discuss issues, review techniques used			

Shed Class Activities

Divide the class into work groups using the following questionnaire to spread out experience level.

1.	The proper tool to determine the angle of the plumb cut on a rafter is or							
2.	A green coated nail is commonly called a							
	Typically spacing for studs are or inches							
4.								
5.	Horizontal framing members used above windows and doors are called							
	The actual dimensions of a 2 x 4 are approximately by							
Divide	into Groups by score. Count off by 5s. Your group number is: Your section:							
	a "Cut List" the plan and create a cut list for section you will be building using the plan for your shed.							
Create a	Materials I bill of materials for your part using the plan. List only the framing materials. Use common ssume all materials are #2 or better fir (specify PT or not and cost \$.85/bf. Price out your ls.							
	t Learning Outcomes learning outcomes you might expect from the construction of the shed. Be specific.							
Cut L i Review	st the plans then develop a cut list for your part of the project using the form below.							
Materia	ls for:							

Qty	Size	Length	Description	Notes
2	2x4	75"	Fír	Trimmer

Bill of Materials

Qty	Size	Description	Cost	Amount	Use
2	2x4x16	#2-Btr Fúr	9.50	19.00	Front/Back Plates
			TOTAL		

SLOs			

Handouts

- 8 x 20 plans
- Construction guide

Resources

http://www.agedweb.org/sheds (downloadable plans and materials, see below)
http://www.agedweb.org/agMechanics Ag Mechanics curriculum and project plans

CATA Skills 2016

Garden/Storage Shed Resources Web Page

6' x 10' plan (HTML) Customizable to 6x8 or 6x12.

6'x10' plan (PDF)

4' x 8' plan (PDF)Shed Roof4' x 8' plan (PDF)Gable Roof

6'x10' plan (DWG) Editable plan. Shed PD Session.pptx

4' x 8' plan (DWG) Editable plan. Shed Roof

4' x 8' plan (DWG) Gable Roof

6' x 10' construction guide Includes plans, SLO's 6' x 8' Slide Show (PPT) Photos of construction

<u>6' x 8' sample budget</u> Excel

Glossary of Building Terms (PDF)

4' x 8' construction guide Shed Roof

Bill of Materials (PDF) 6x8, 6x10, and 6x12 use the 6x10 plans

8 x 20 Storage Building plan (PDF) 8 x 20 Storage Building plan (DWG)

8 x 20 Bill of Materials

<u>Cutting List Template</u> Excel
Bill of Materials Template Excel

PD session PowerPoint

Tool ID (PPT)

Materials / Fasteners ID (PPT)

Tool List for Shed Building

BOOKS (Links to Amazon.com)

How To Build My Shed Kindle Edition

Black & Decker The Complete Guide to Sheds

Building a Shed

Free CAD Products

Draftsight

Solid Edge

AutoCAD Light

DoubleCAD

AutoCAD Educational Versions