

Timber Frame Class

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Timber Frame Basics

Plans

Layout

Cutting

Raising

Class Options

5 Day - Small Structure, 6-8 Students layout, cut, and raise a small timber frame

2 ½ Day - Introduction to Timber Frame - Sawhorse Project

Custom Project - Community or Build Your Own Approach

Timber Frame Workshop Agenda – 5 Day

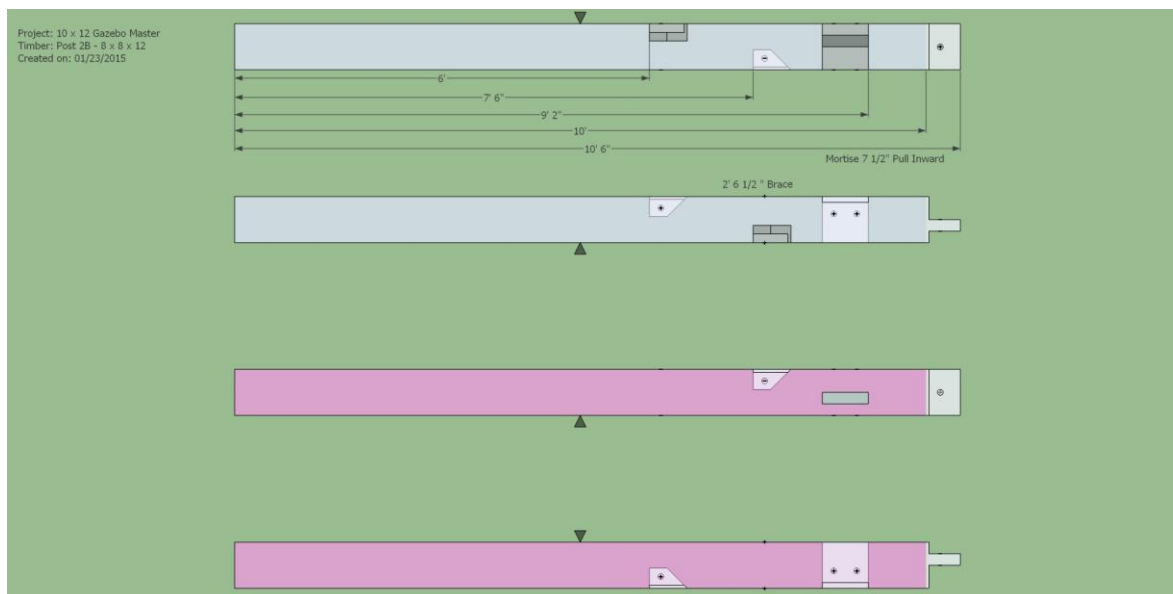
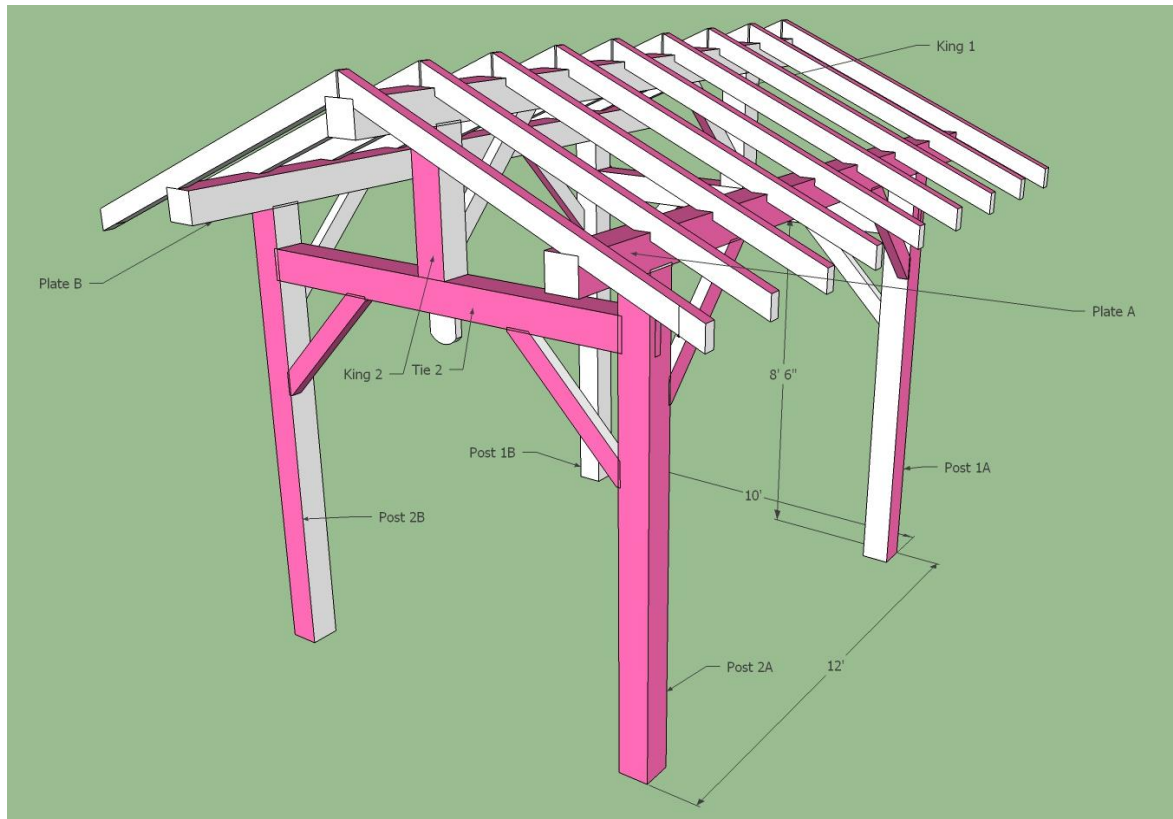
Day	Activity	Discuss Topics
1	Timber Layout	<ul style="list-style-type: none"> • TF Terms • Tools (Hand & Power) • Square Rule Layout • Timber List
2	Timber Cutting	<ul style="list-style-type: none"> • Layout & Shop Standards • Sharpening (Chisel and Auger Bit) • Measuring and Checking Techniques
3	Timber Cutting	<ul style="list-style-type: none"> • Making Pegs • Drawboring • Shaving Horse
4	Knee Brace Layout/Cutting	<ul style="list-style-type: none"> • Raising & Rigging • TF Design • TF Beam Loading (FF Beam Calculator) • Google Sketchup & TF Rubies
5	Fit Frame/ Raise Frame	<ul style="list-style-type: none"> • Reference Document Review

Highlighted items are required of each student. If you have additional tooling available, please bring them.

Hand Tools	Safety Equipment
<ul style="list-style-type: none"> • 1 ½" Framing Chisel • 2" Framing Chisel • Corner Chisel • Mallet • Framing Squares • Combination Square • Speed Square • Box Cutter and Blades • Hand Saw (Standard) • Pull Saw • Pencils • Outside Calipers • 1", 1 ½", and 2" Auger Bit(s) • "Big Al" Borneman Layout Tool • Measuring Tape • Boring Machine 	<ul style="list-style-type: none"> • Gloves • Eye Protection • Leather Shoes • Dust Mask
	Power Tools
	<ul style="list-style-type: none"> • Skill Saw • Drill • Router & Bits • Planer • Chain Mortiser

Timber Frame Plan

Class will use "Square Rule" Timber Framing methods. Plans & shop drawings used in the class were developed using Google Sketchup and Clark Bremer's Timber Frame Extensions. Sketchup Timber frame extensions allow the user to automatically cut mortises, produce shop drawings, and generate timber lists.



10' X 12' Timber Frame

Students will layout, cut, and raise a small Timber Framed structure. The number of students enrolled will determine how much of the frame can be raised.



Workshop/Shed Constructed from 6" x 6" Aspen

Cutting the Frame

The class covers all techniques needed to build a small frame, including mortise, tenon, and knee brace layout and cutting.



Drilling a Peg Hole



Layout Tools



Test Fitting & Marking Peg Hole



Plates Ready for Installation



Cleaning and Staining Timbers



Pegging

Raising the Frame

Basic rigging practices will be discussed and demonstrated.



Assorted Rigging



Installing a Lifting Shear



Standing Up the Bents



Bents are Braced



Installing the Plate



Framing in the Windows

Timber Frame Class



Drilling Mortises with a Boring Machine



Working on Timber Layout



Cutting a Knee Brace



Post (tenon, mortise, and housing)



Timbers Stacked; Ready for Test Fit Up



Knee Brace



10" x 10" White Pine Timber Frame Structure