

Using Google Sketchup™ for Timber Frame Design

Pre-Conference Workshop TFG 2007 Eastern Conference, Montebello

I. Introduction

- A. *Quick Demo with joinery and shop drawings (teaser)*
- B. *Workshop Overview*
- C. *About Google Sketchup*

II. Using Sketchup

- A. *Moving Around in the 3D world*
- B. *Drawing from scratch*
- C. *Groups and components*
- D. *Placing objects*
- E. *Inference Engine*

III. Example: Modeling a timber frame without joinery

- A. *Construction lines and reference points*
- B. *Bent I (Posts and principal rafters, etc.)*
- C. *Replicate bents*
- D. *Connect the bents (girts and purlins)*
- E. *Dimensions, titles, etc.*

IV. Scenes and animations (time permitting)

Lunch

V. Modeling a timber frame with joinery

- A. *Installing the TF Rubies*
- B. *Component Libraries*
 - 1. Timbers
 - 2. Joints
- C. *Creating Timbers*

D. *Creating Joints*

- 1. Cutting Face
- 2. Pegs
- 3. Splines

VI. Creating Shop Drawings

- A. *Using the TF Ruby*
 - 1. Options
- B. *Editing the shop drawings*
 - 1. Dimensions

VII. Materials List

- A. *Named and unnamed timbers*
- B. *Controlling length calcs*

VIII. Advanced Topics (time permitting)

- A. *Compound Joinery*
 - 1. Valley Rafters
 - 2. Valley Joinery