

Grøn Timber Frame

# TS User's Guide

For Edge Based Layout Systems

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## Introduction

This manual provides instructions for using the GTF Timber Square (TS) when employing edge based layout systems.

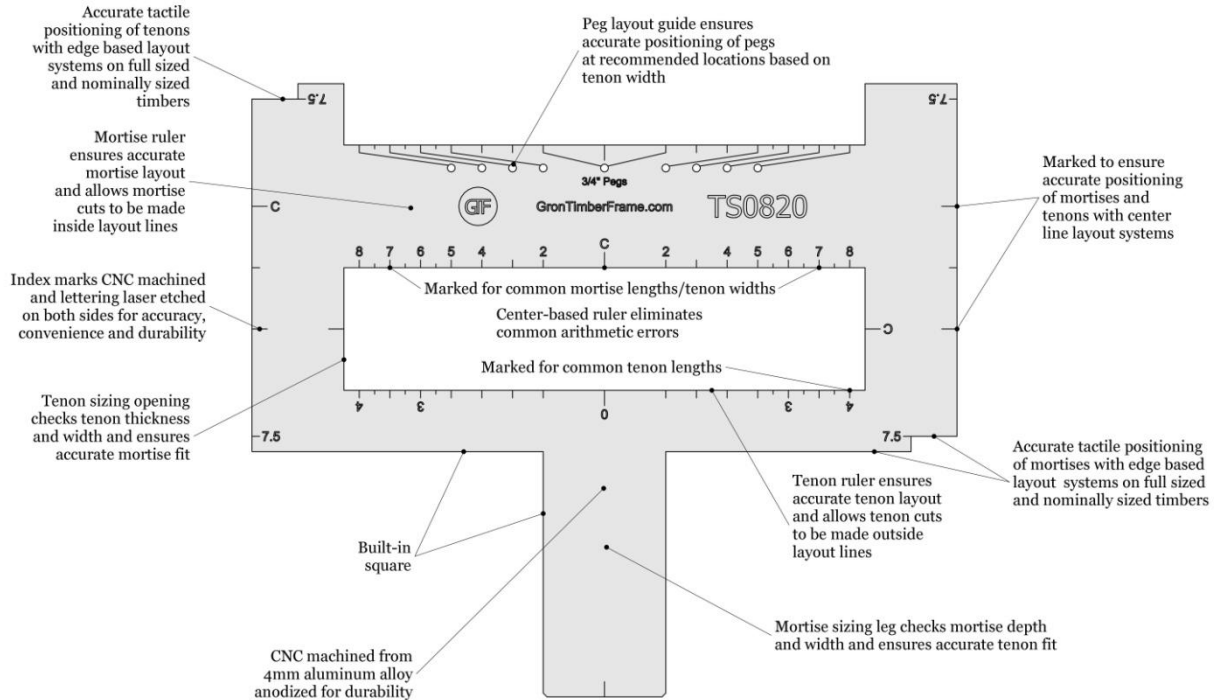
Although the illustrations show the TS0820 being used on 8x timbers, the same principles apply to using the TS0615 and TS1025 on 6x and 10x timbers, respectively.

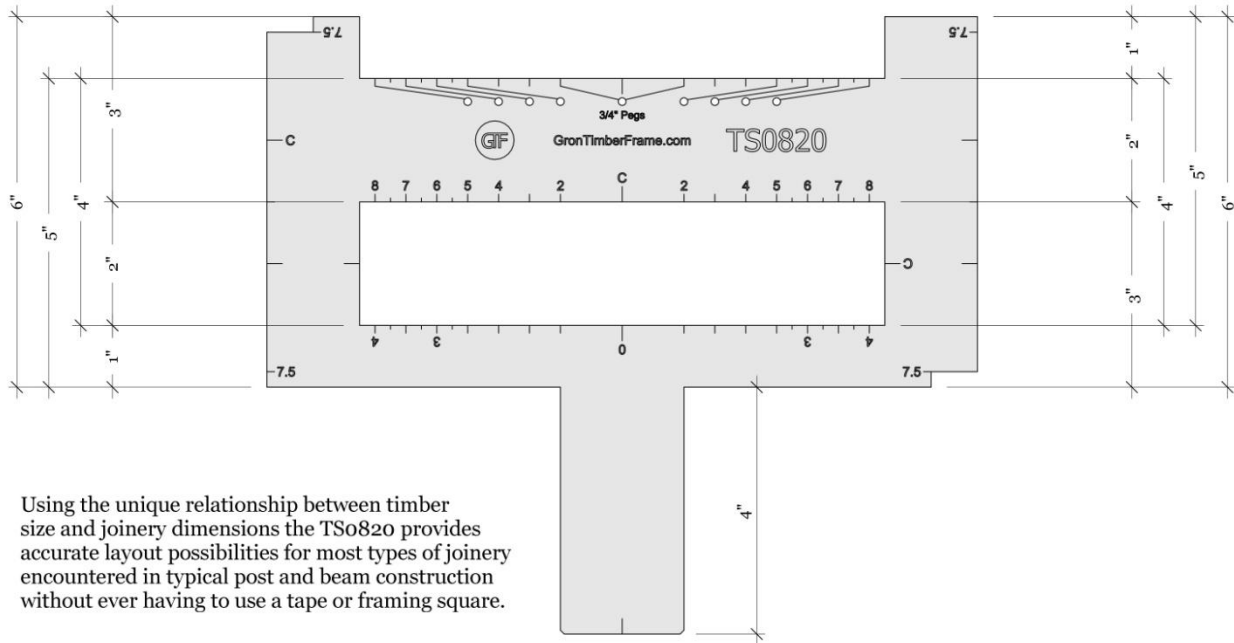
Also note that these instructions show just one way to use the TS series of tools. I am confident that the versatility of these tools will allow you to find your own way to use them that compliments your methods and experience and enhances the speed and accuracy of your work.

Best Regards,

Peter Gron

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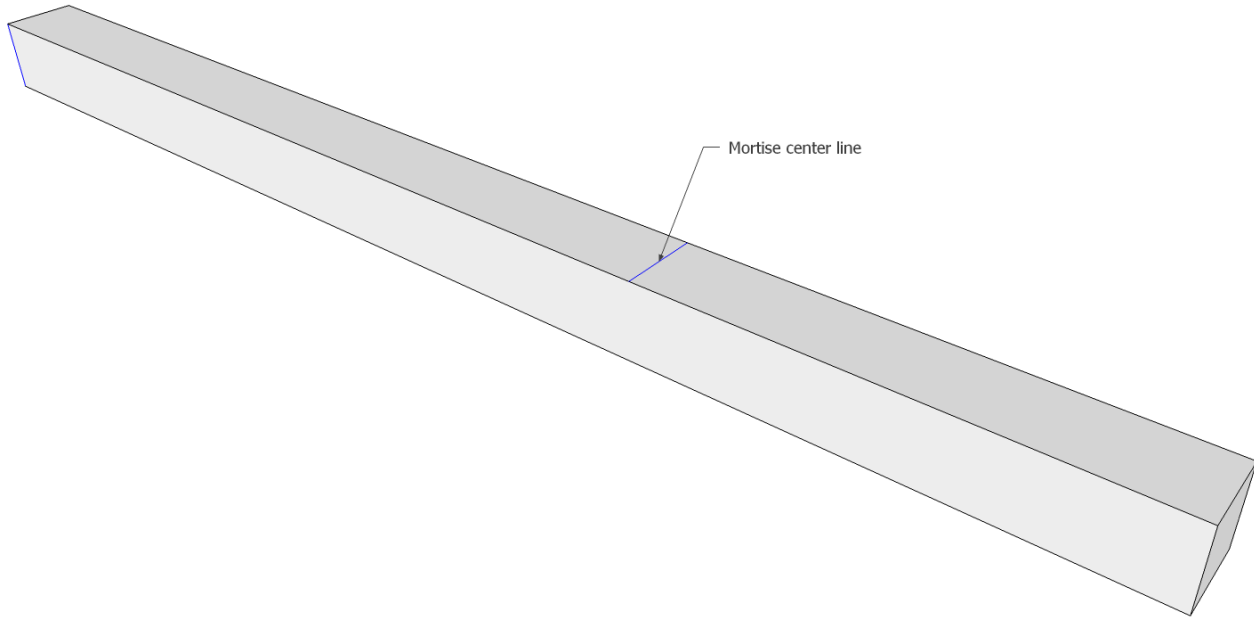
Using the unique relationship between timber size and joinery dimensions the TS0820 provides accurate layout possibilities for most types of joinery encountered in typical post and beam construction without ever having to use a tape or framing square.

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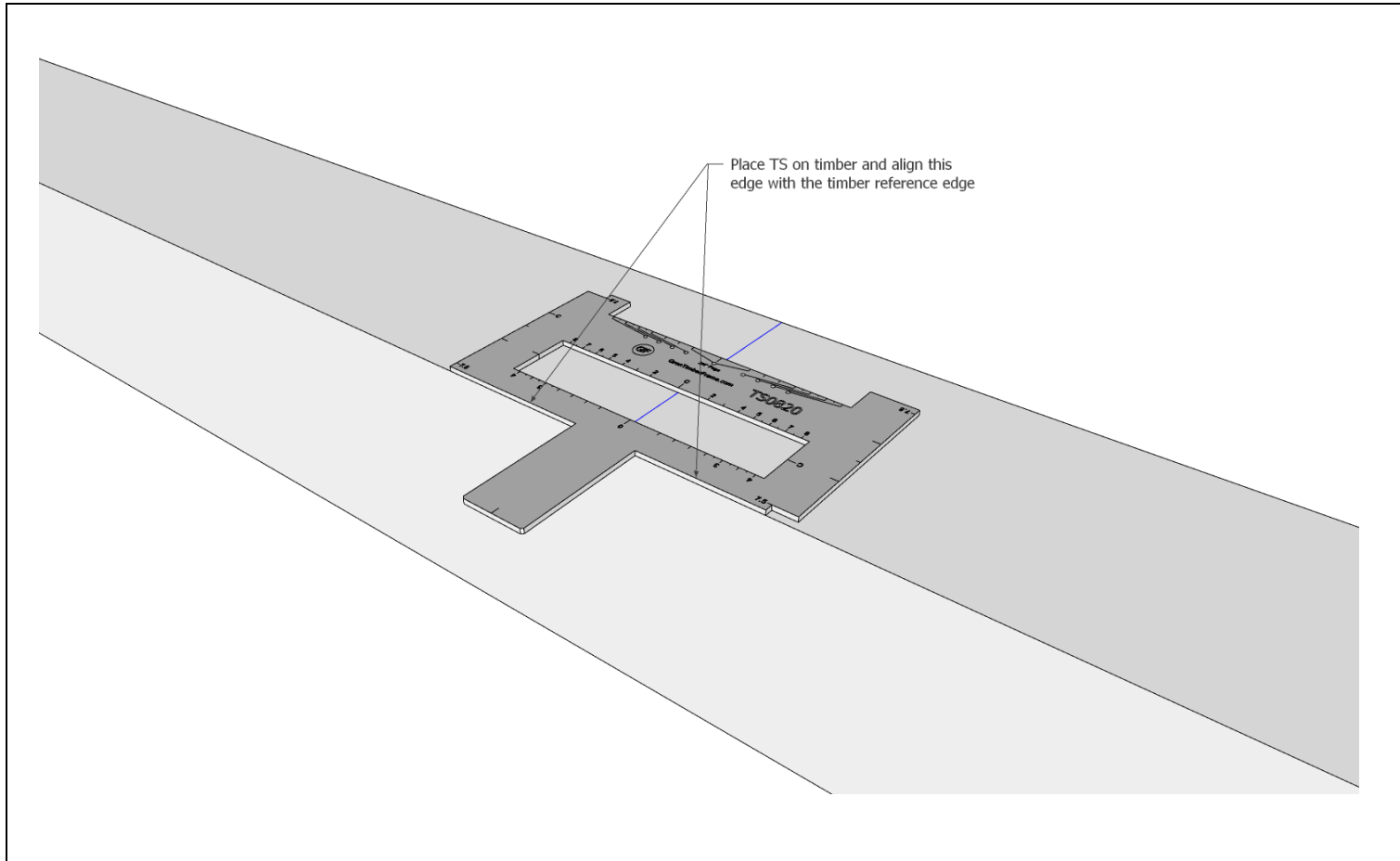
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**Mortise Layout**

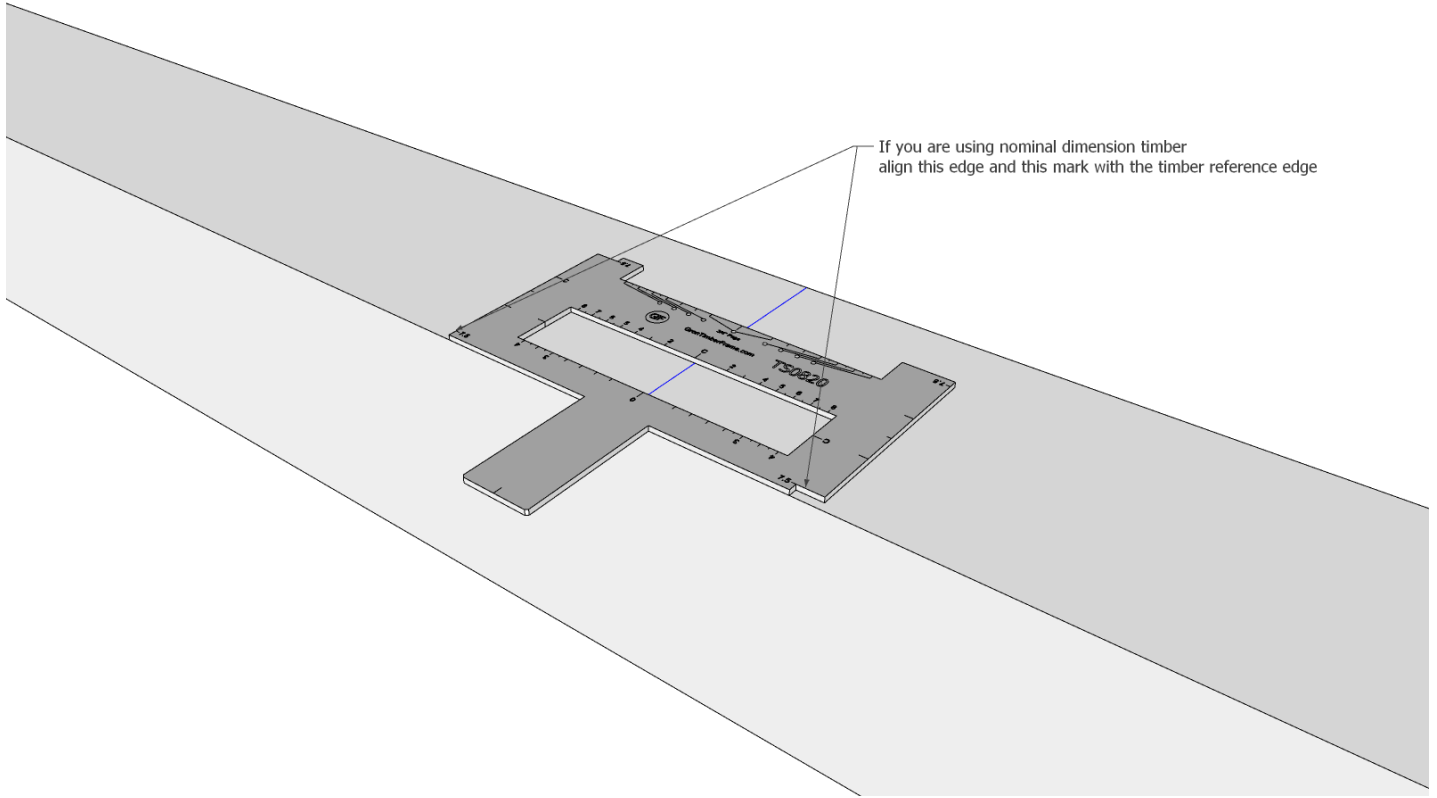
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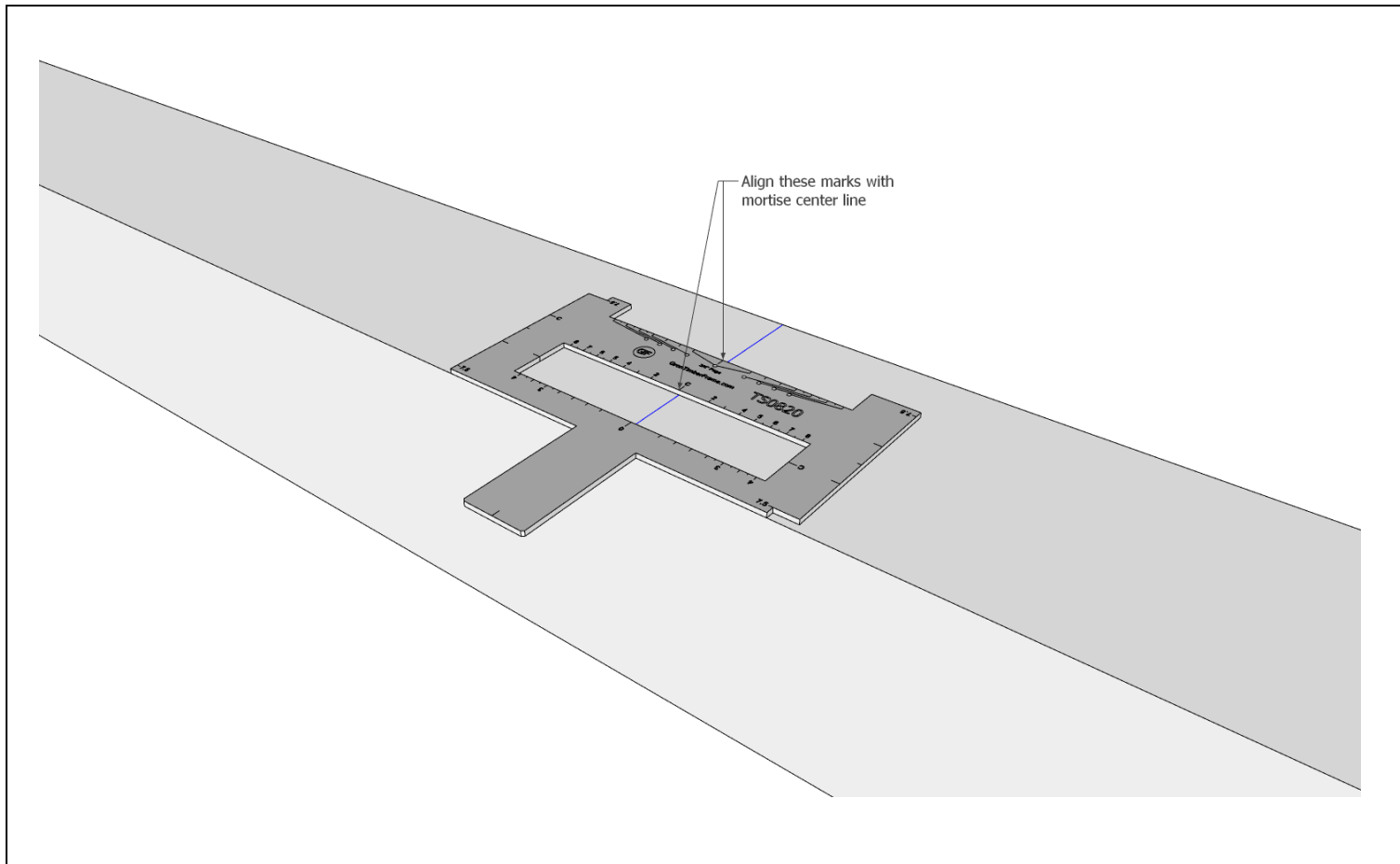


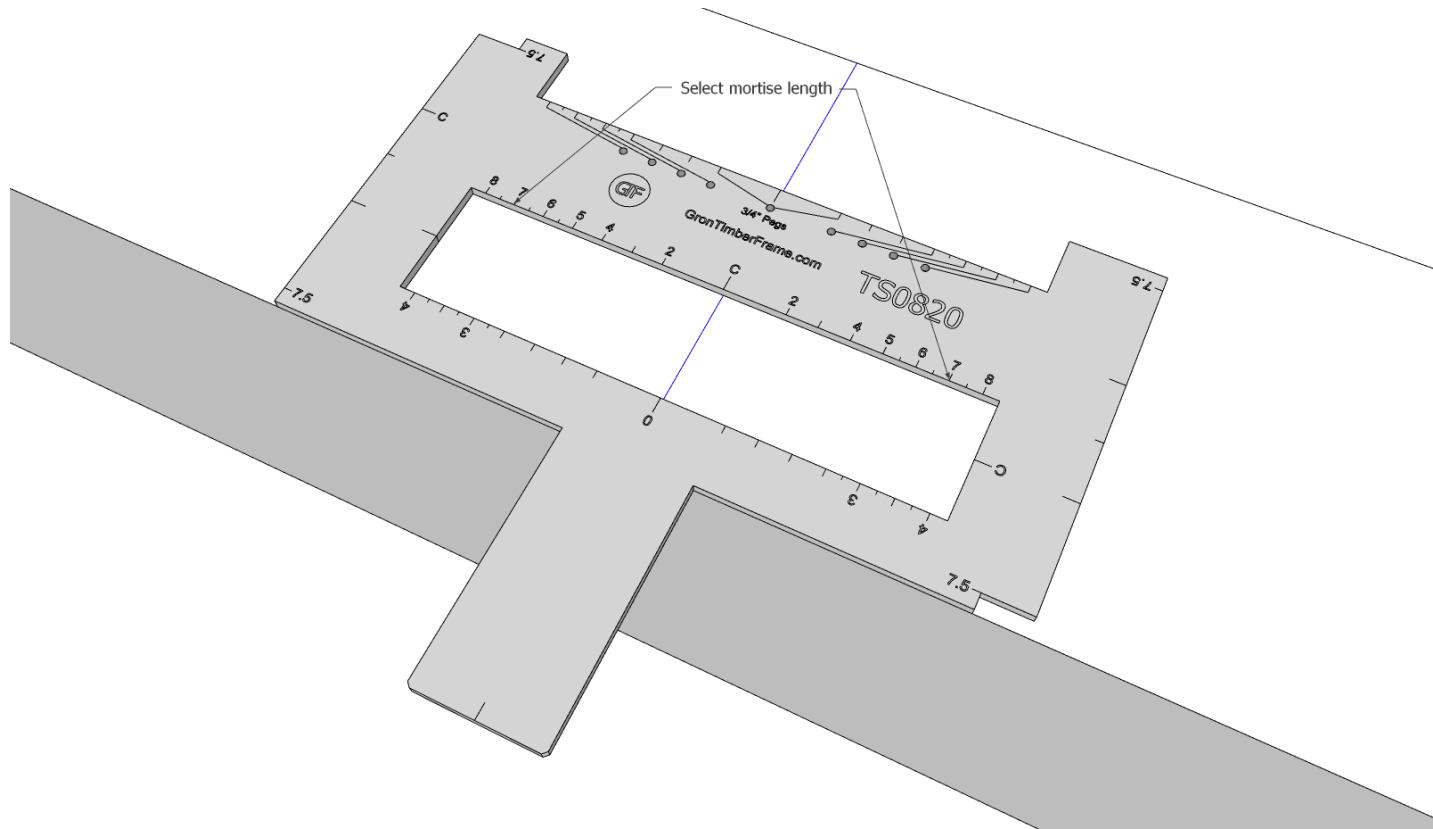
Mortise center line

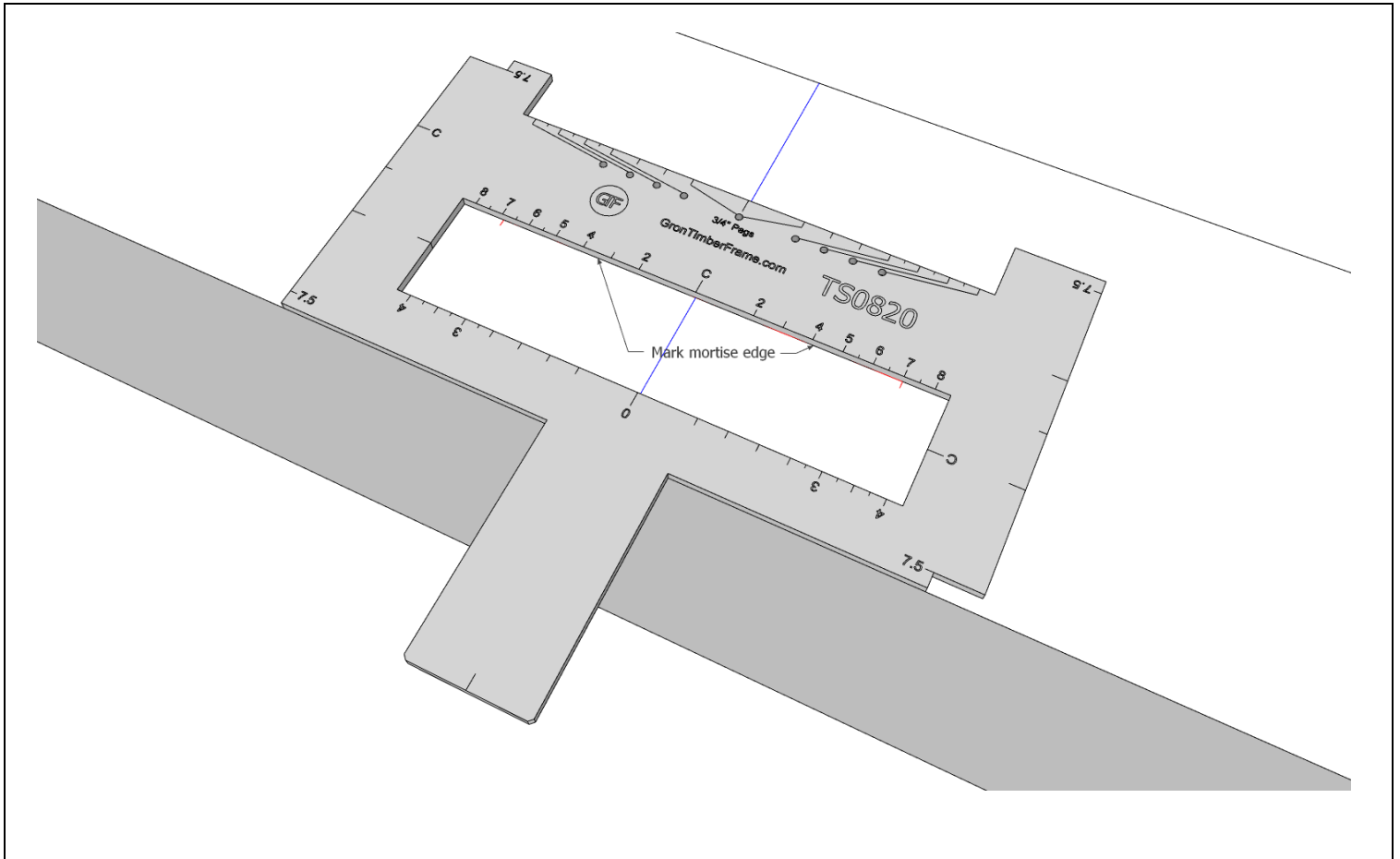


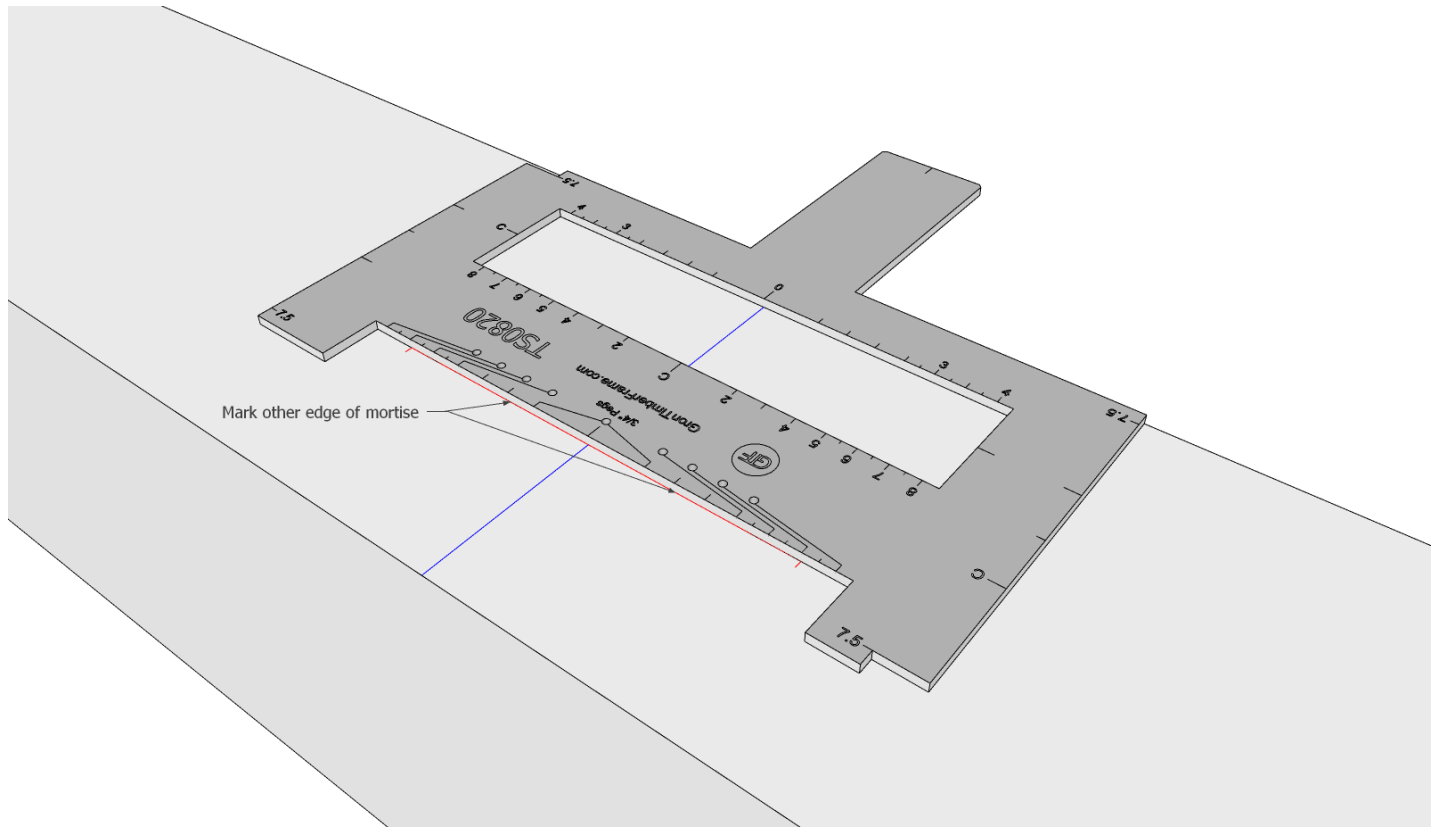


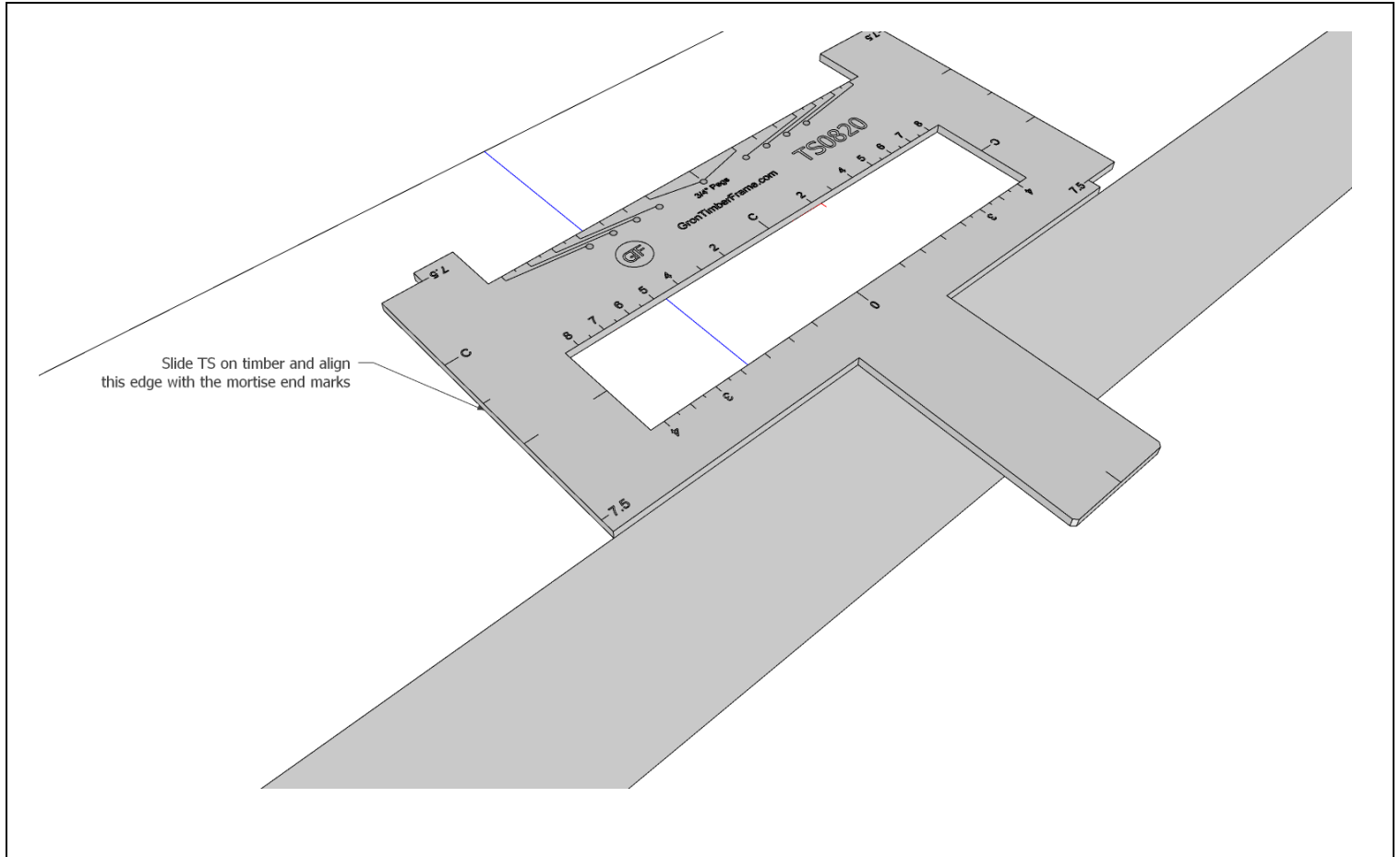


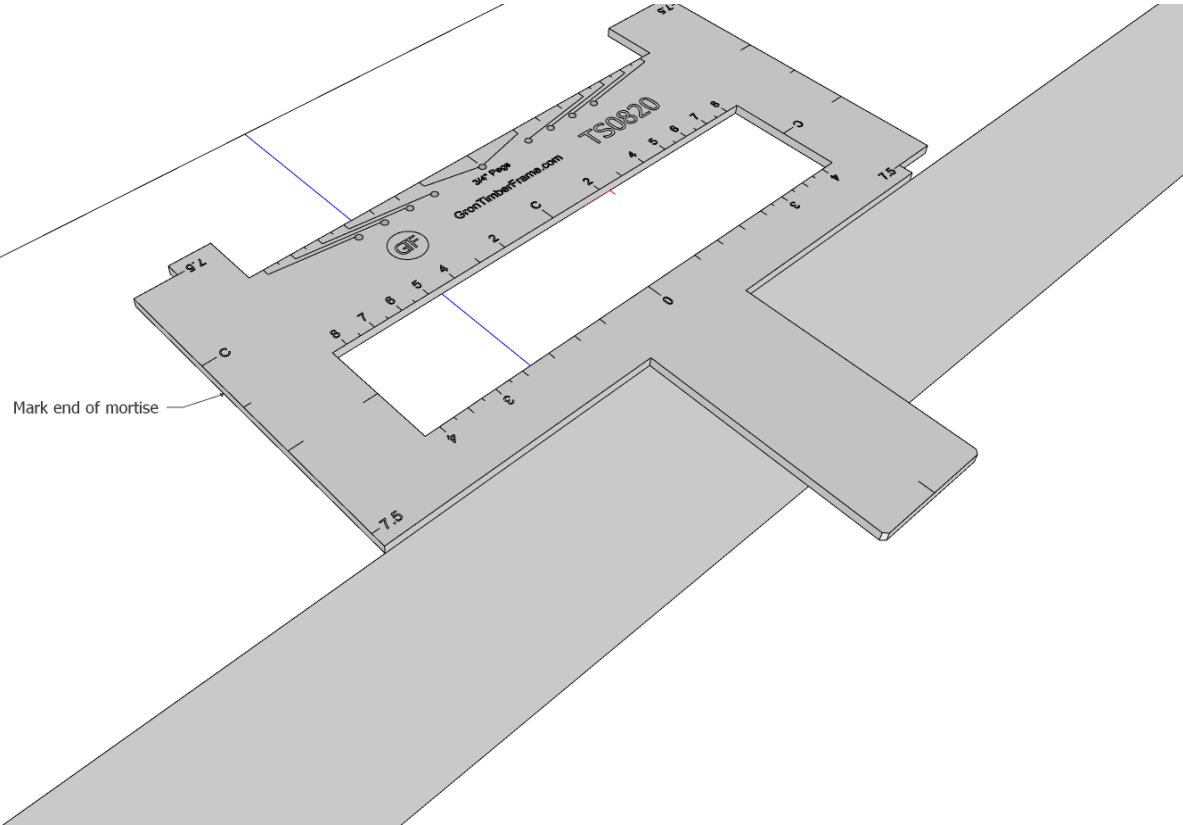


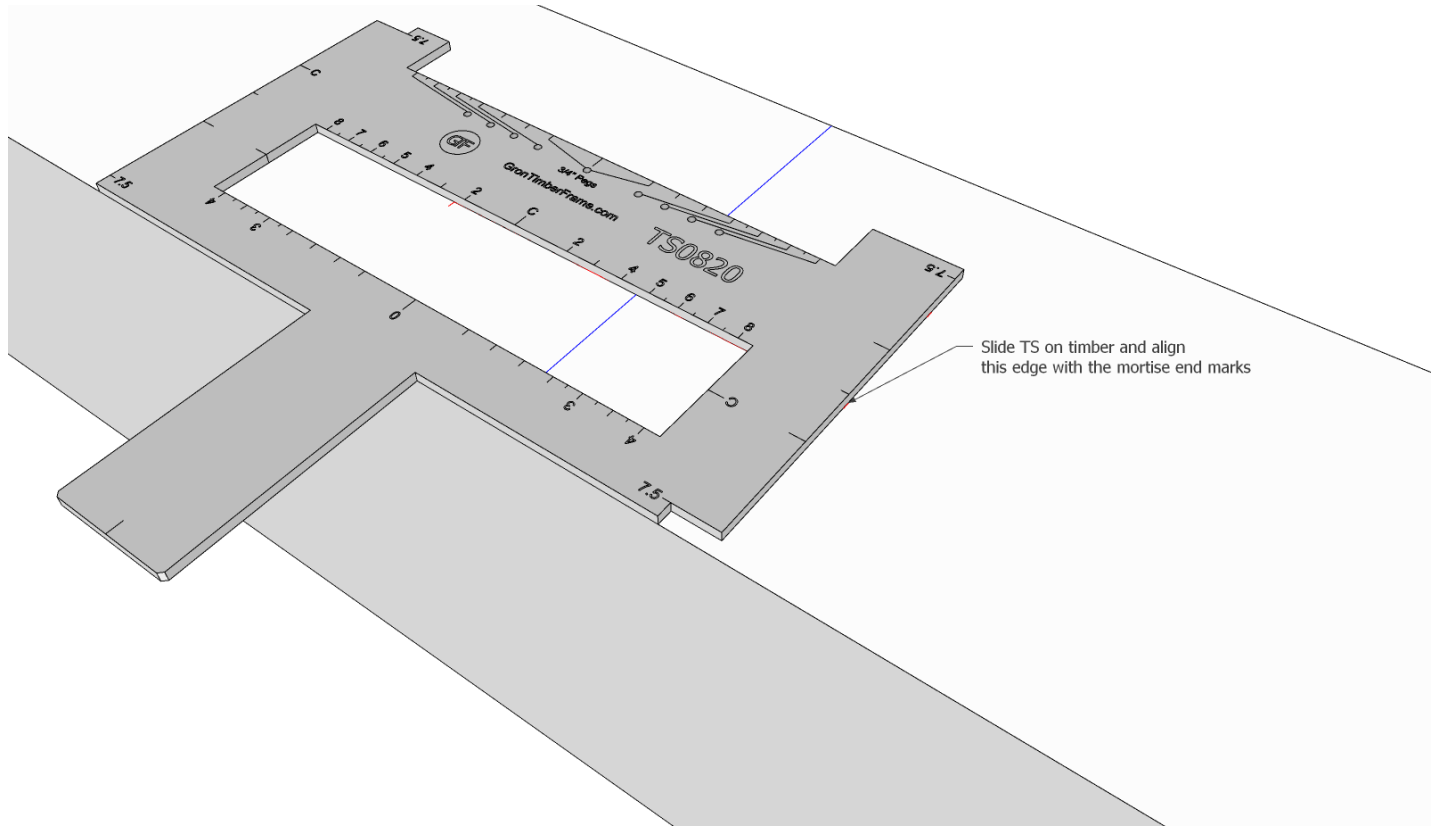




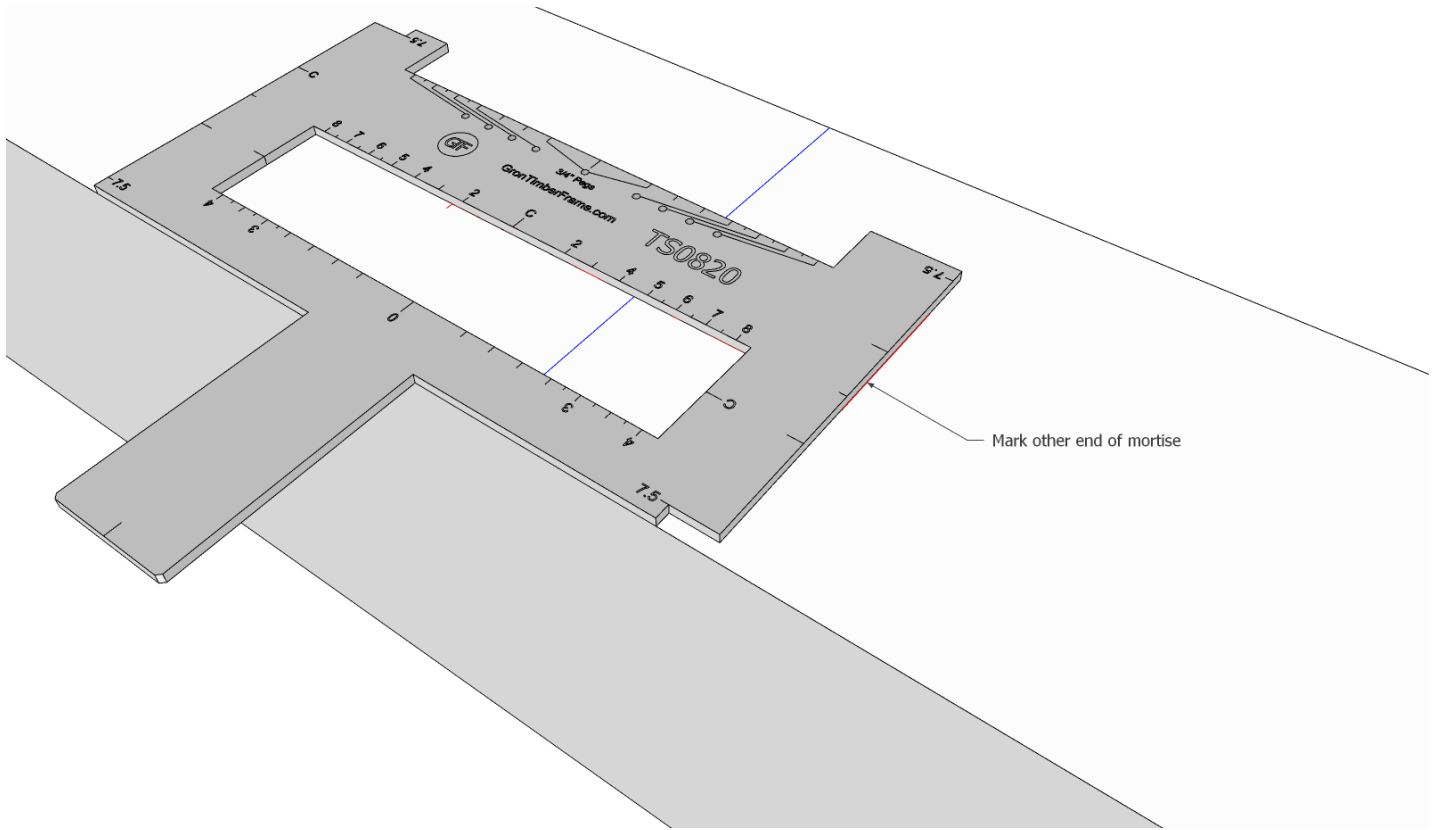


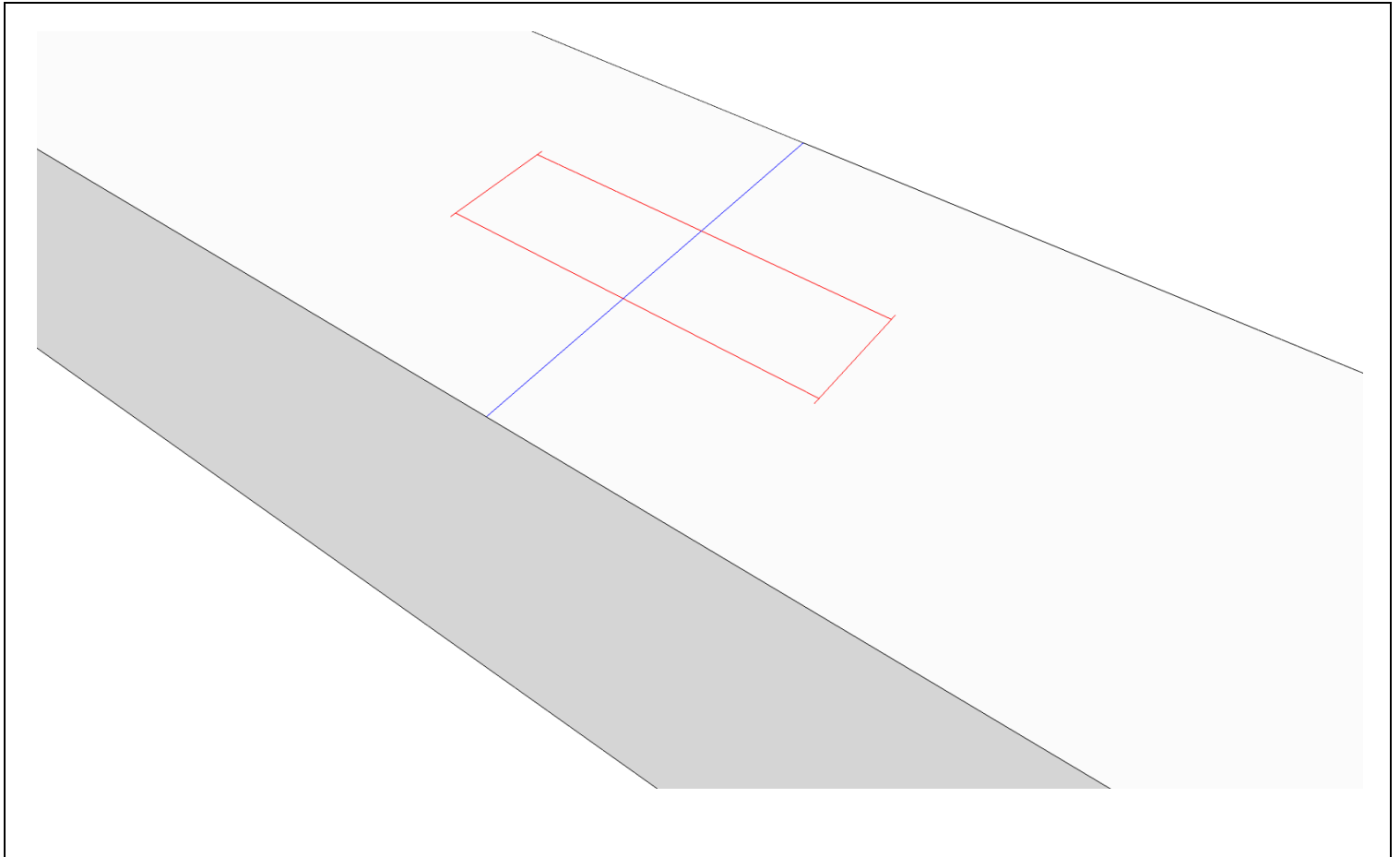


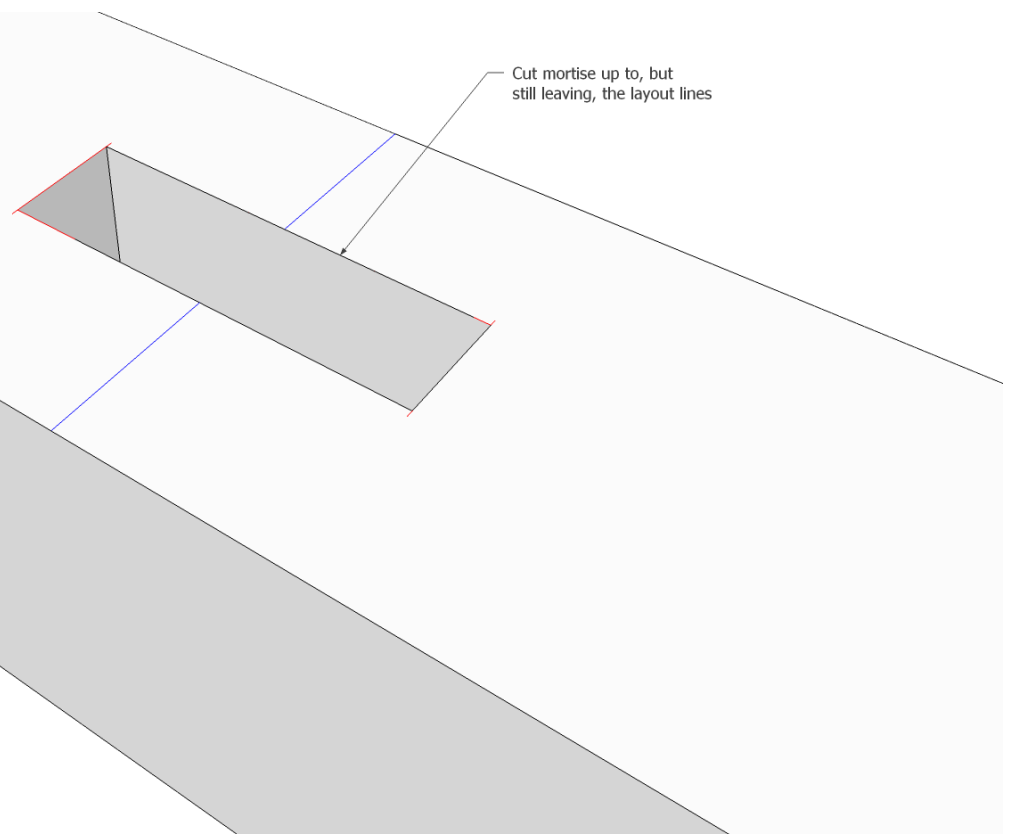












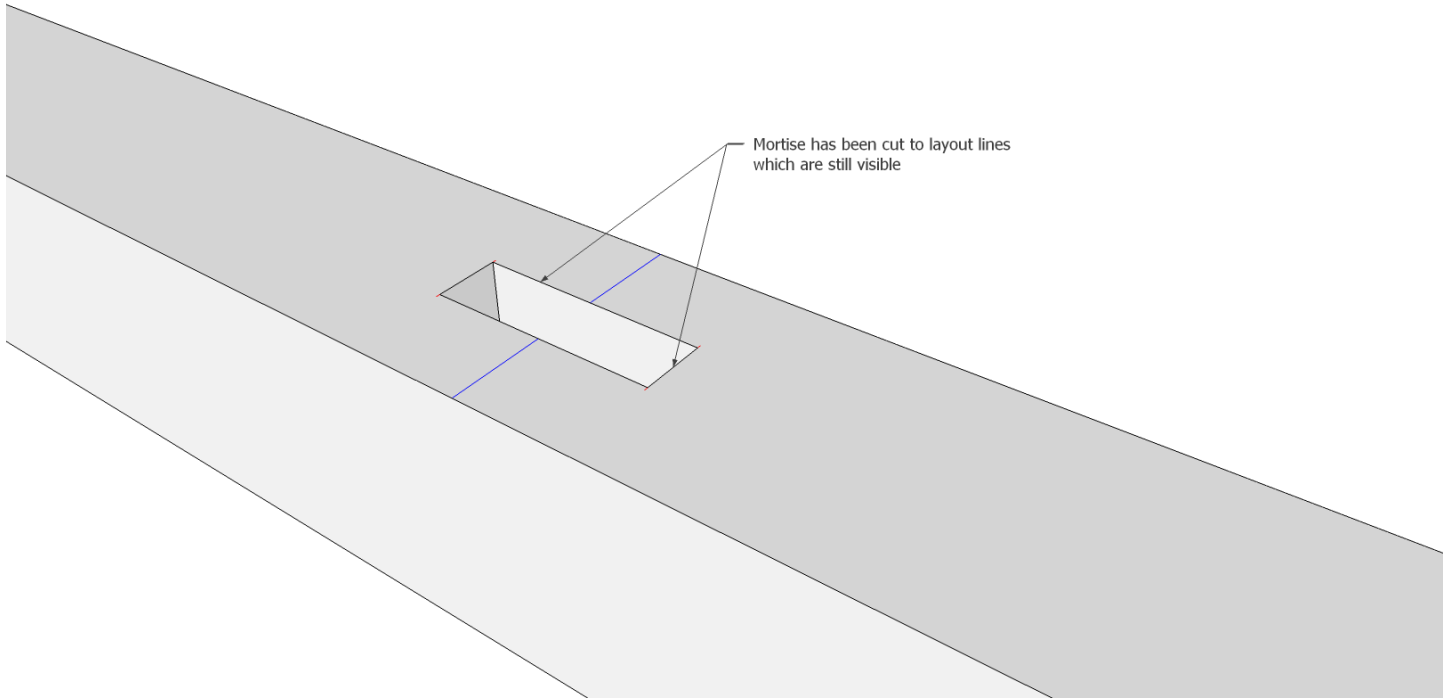
Cut mortise up to, but still leaving, the layout lines

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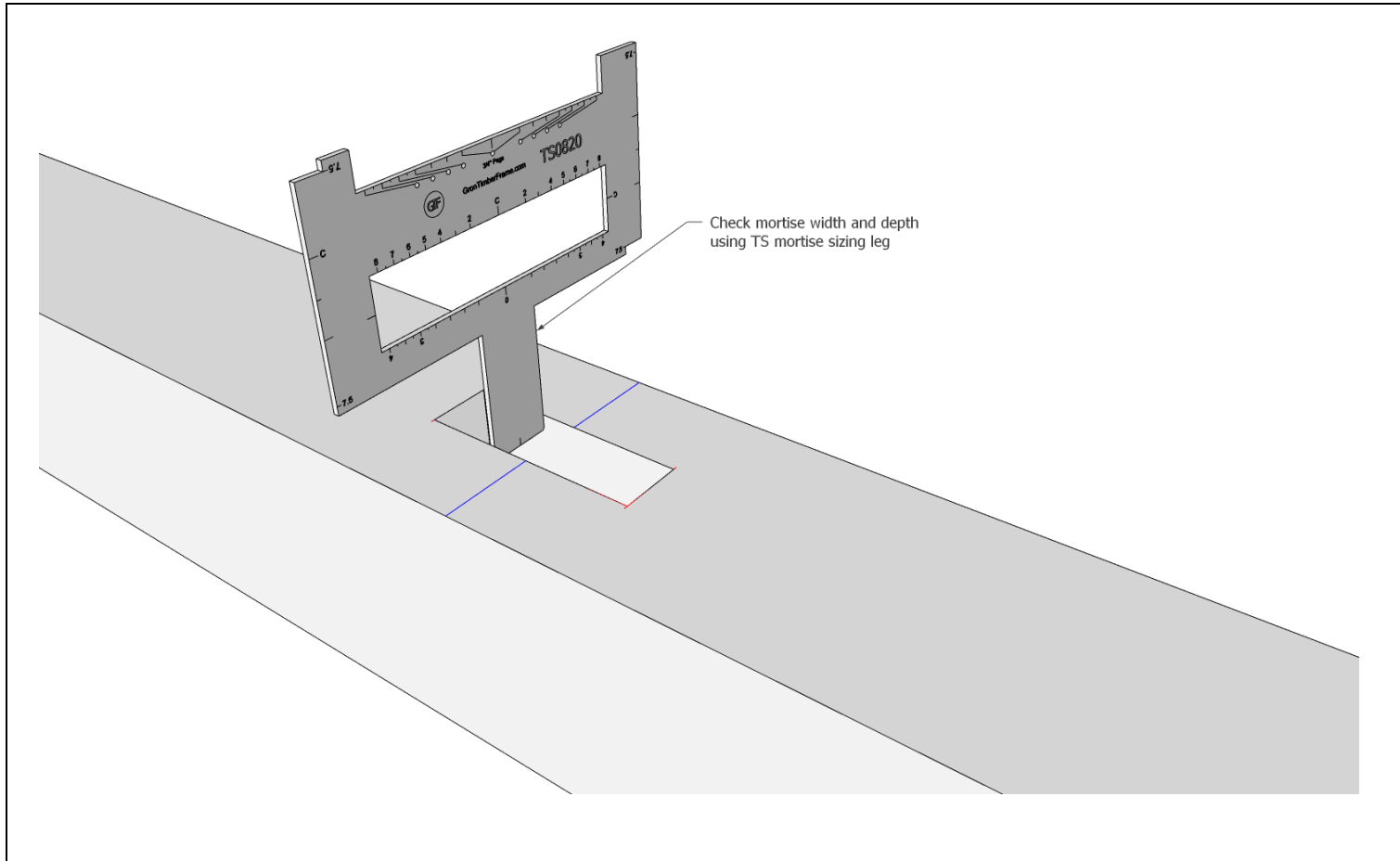
# TS User's Guide

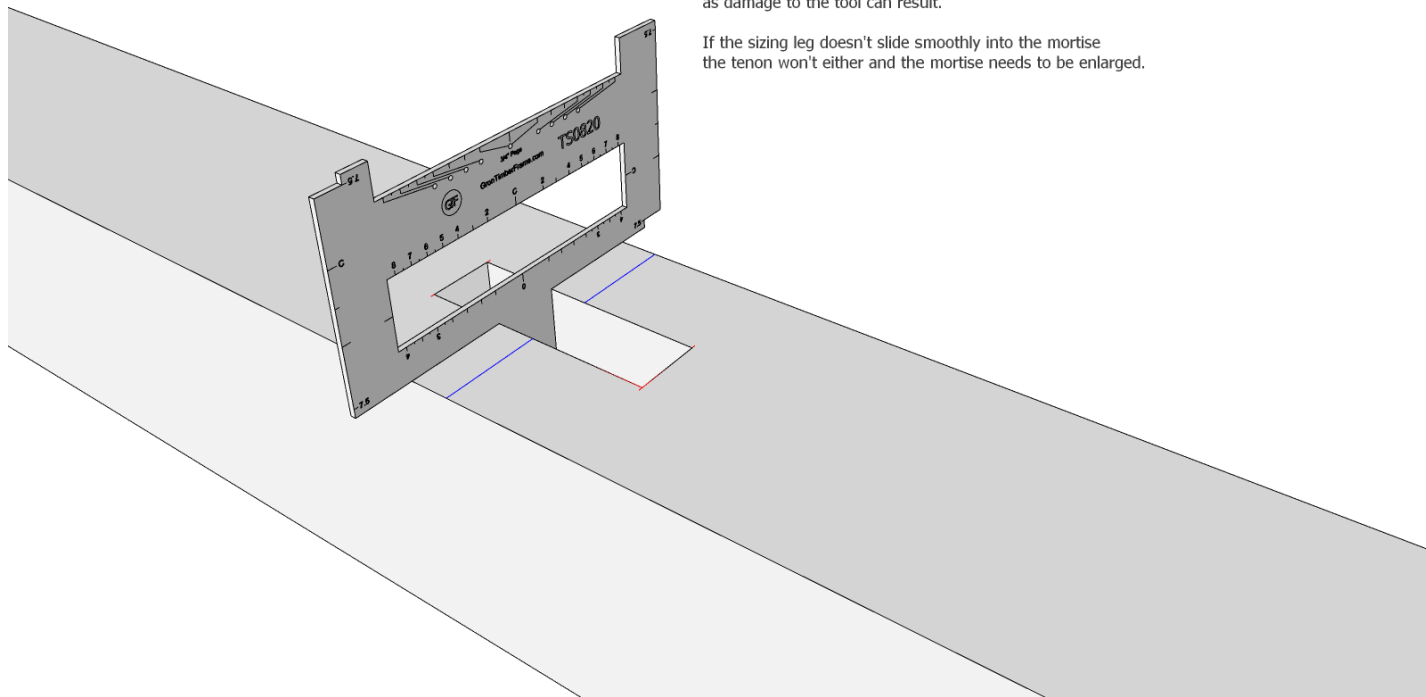
**Mortise Sizing**

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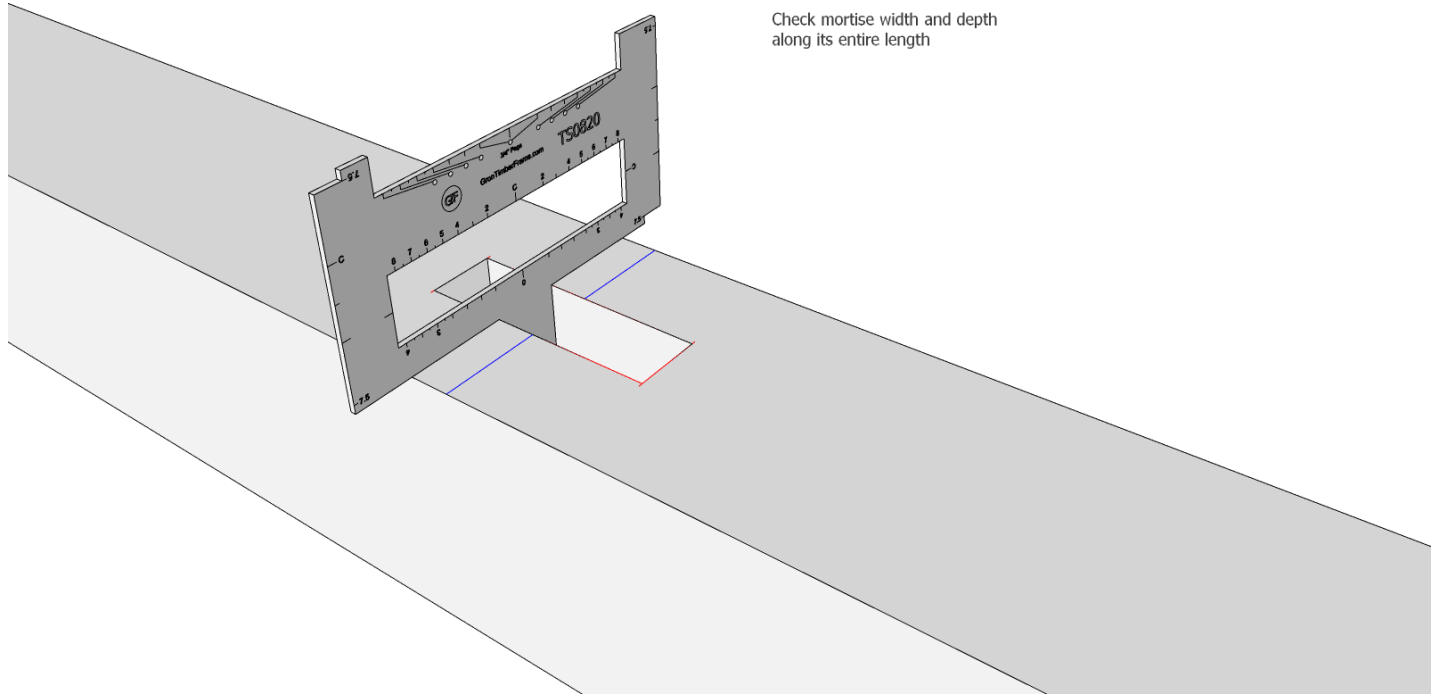
Mortise has been cut to layout lines  
which are still visible





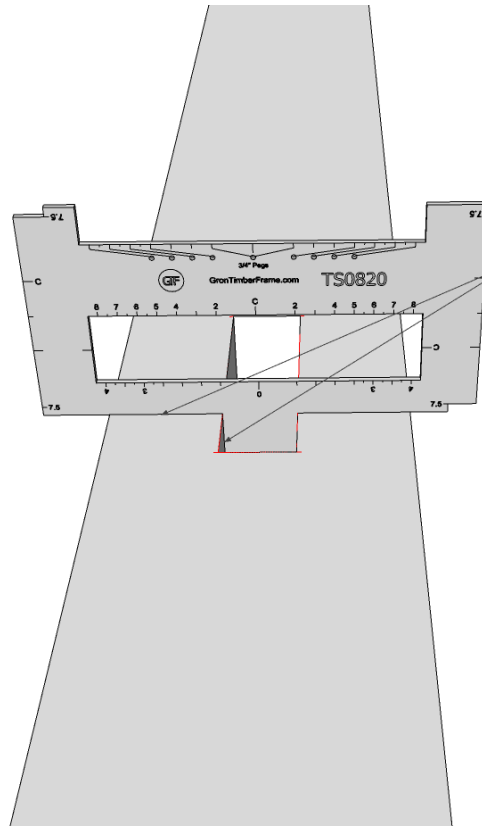
Be sure not to force the sizing leg into the mortise as damage to the tool can result.

If the sizing leg doesn't slide smoothly into the mortise the tenon won't either and the mortise needs to be enlarged.

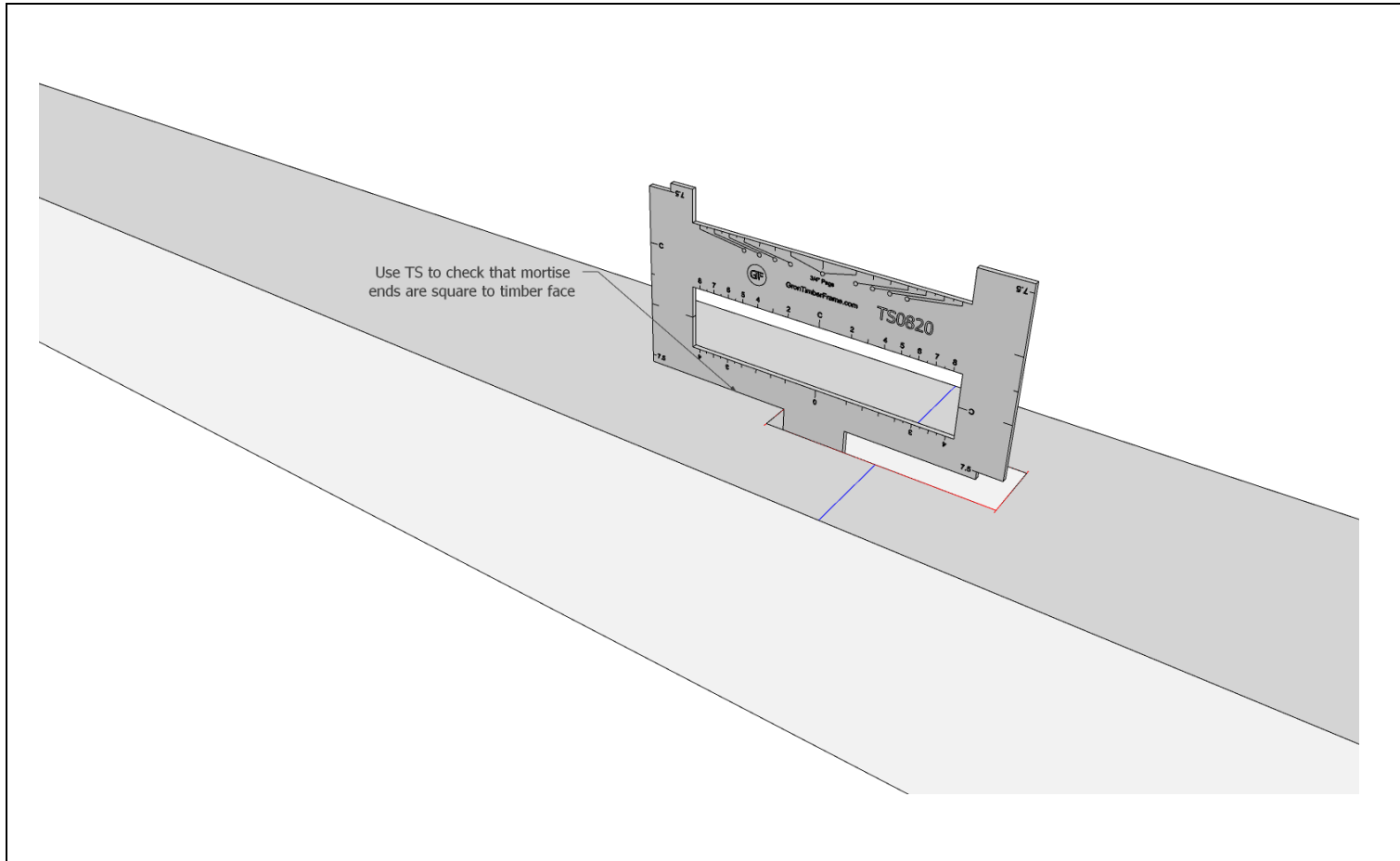


Check mortise width and depth  
along its entire length





Use TS to check that mortise edges are square to the timber face



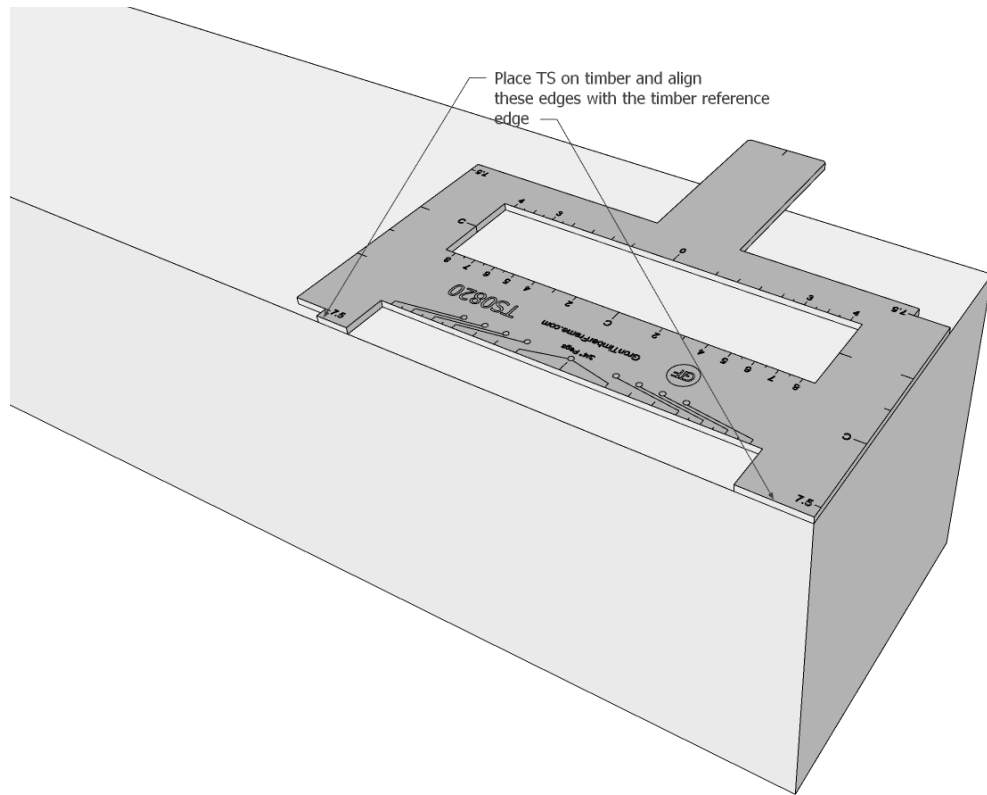


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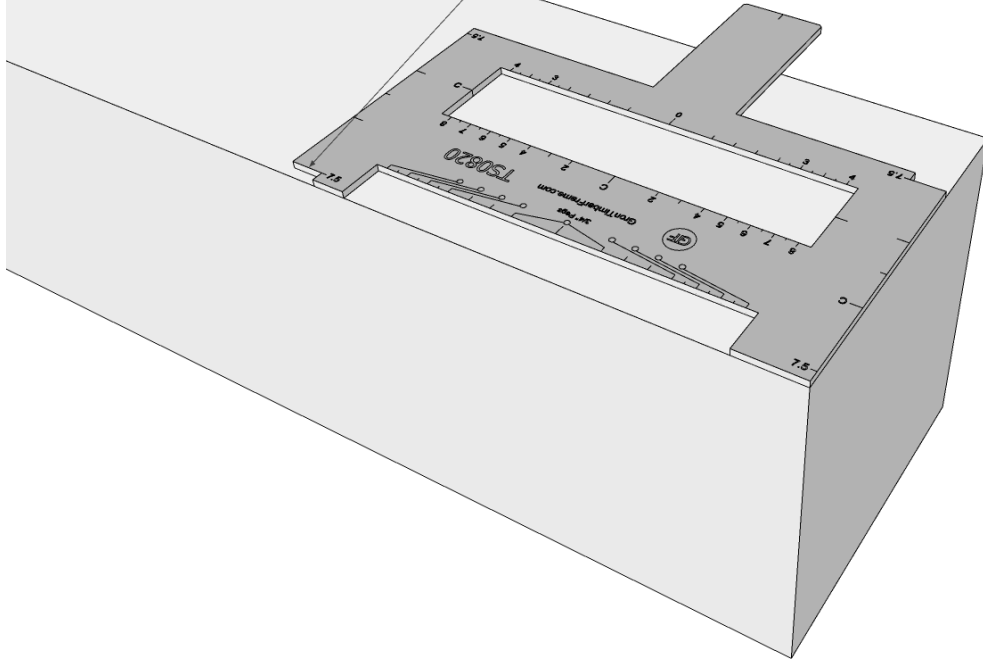
# TS User's Guide

**Tenon Layout**

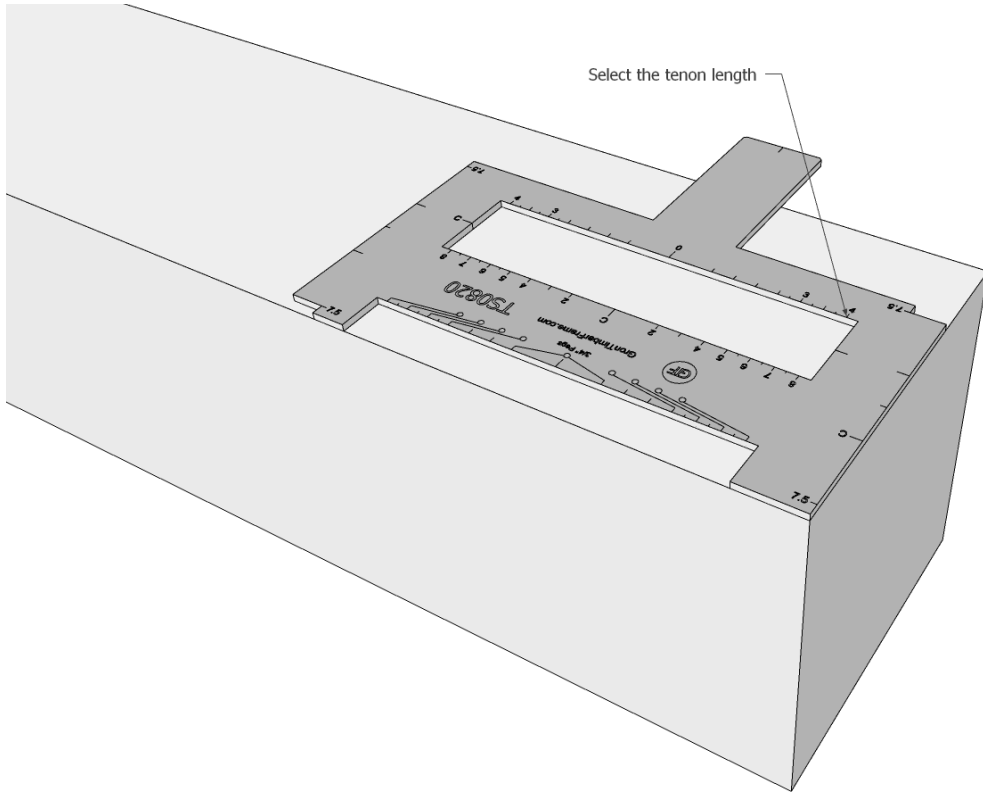
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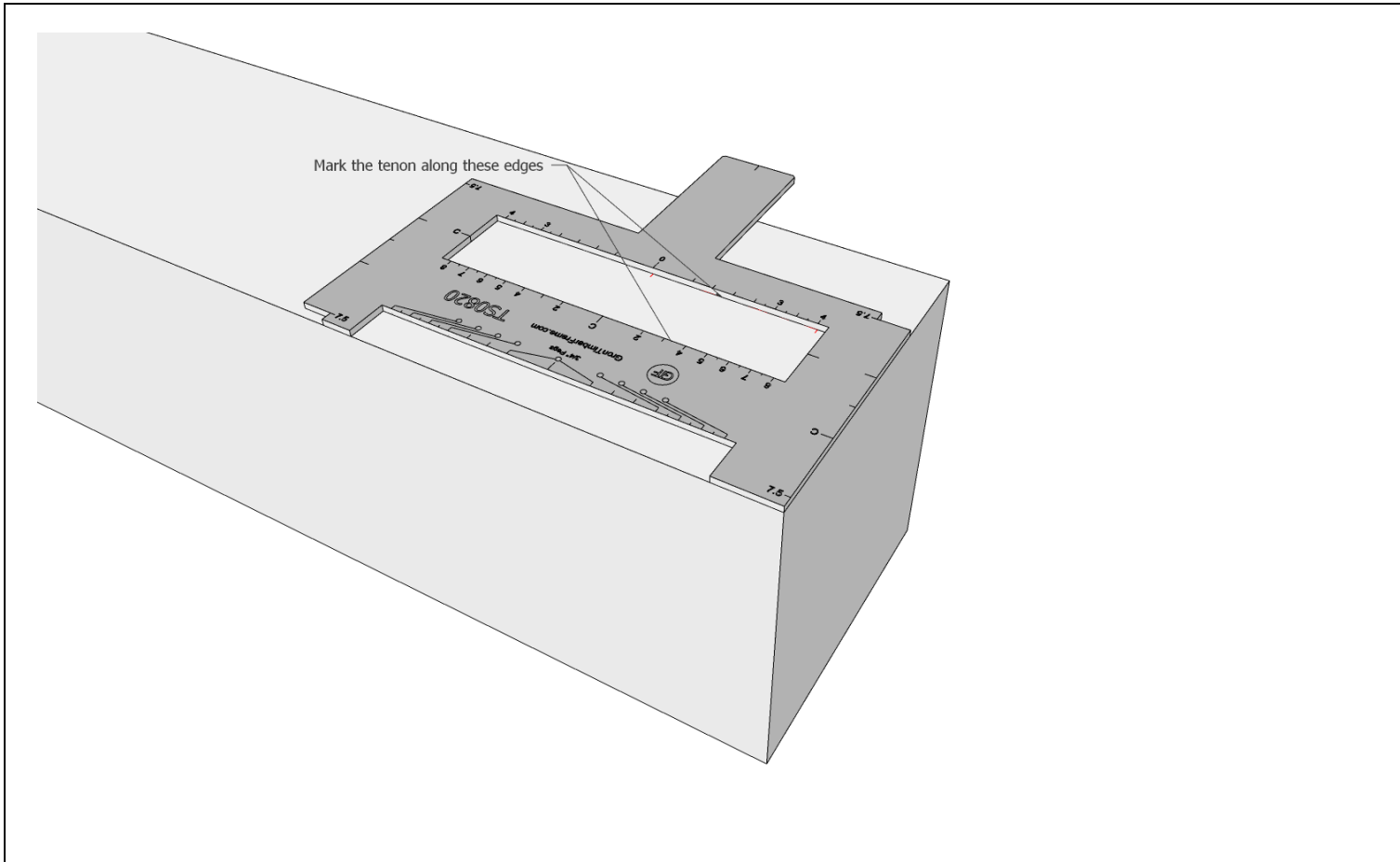


If you are using nominal dimension timbers align this edge and this mark with the timber reference edge

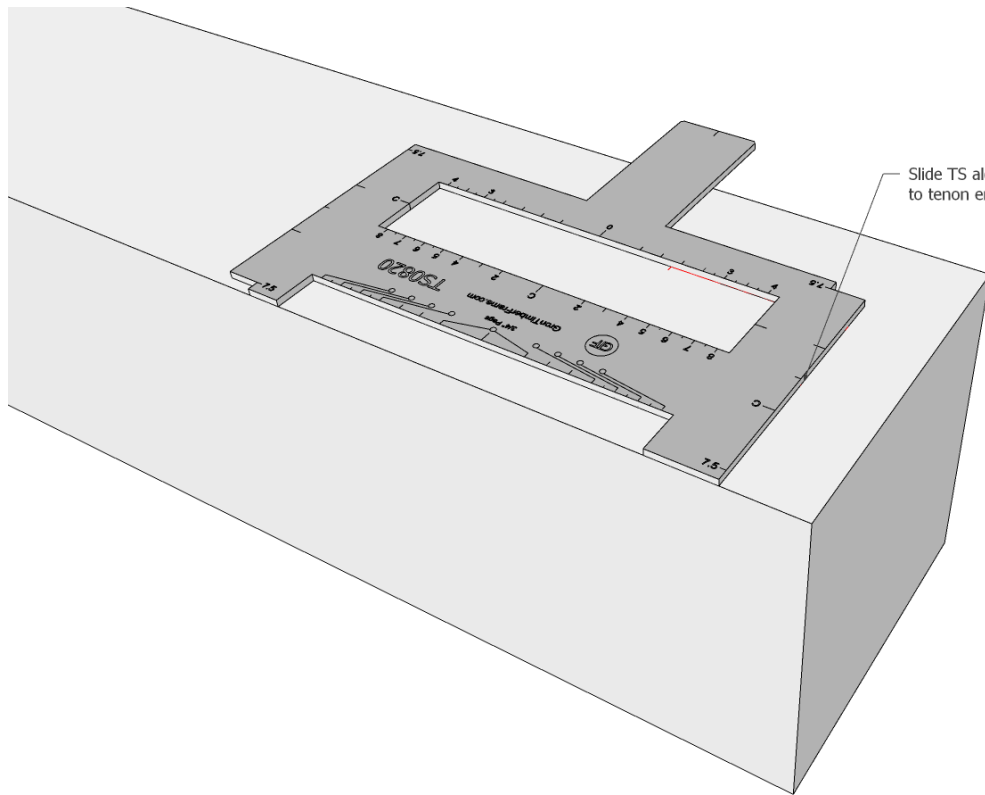


Select the tenon length

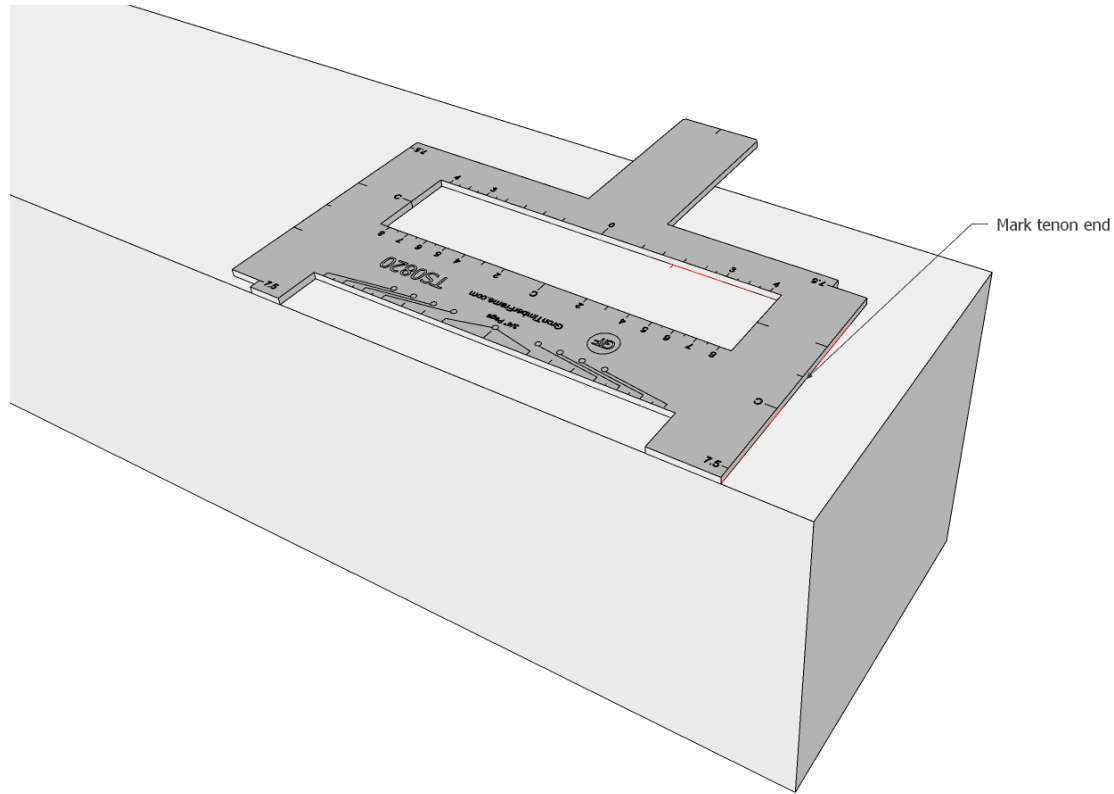


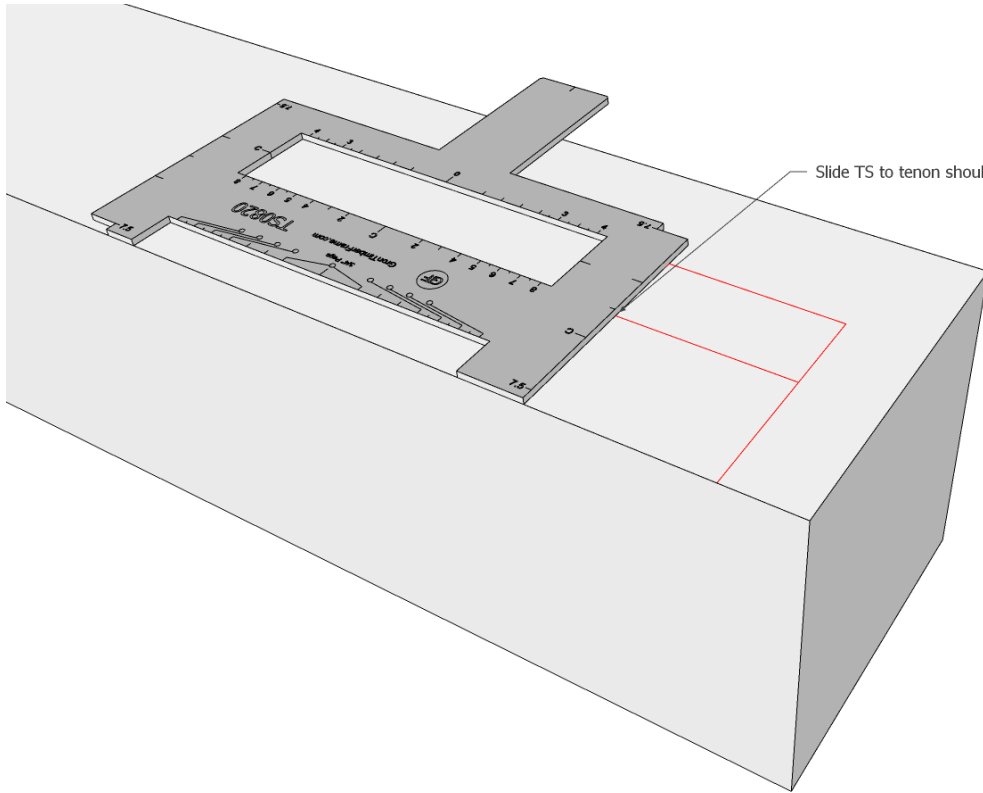




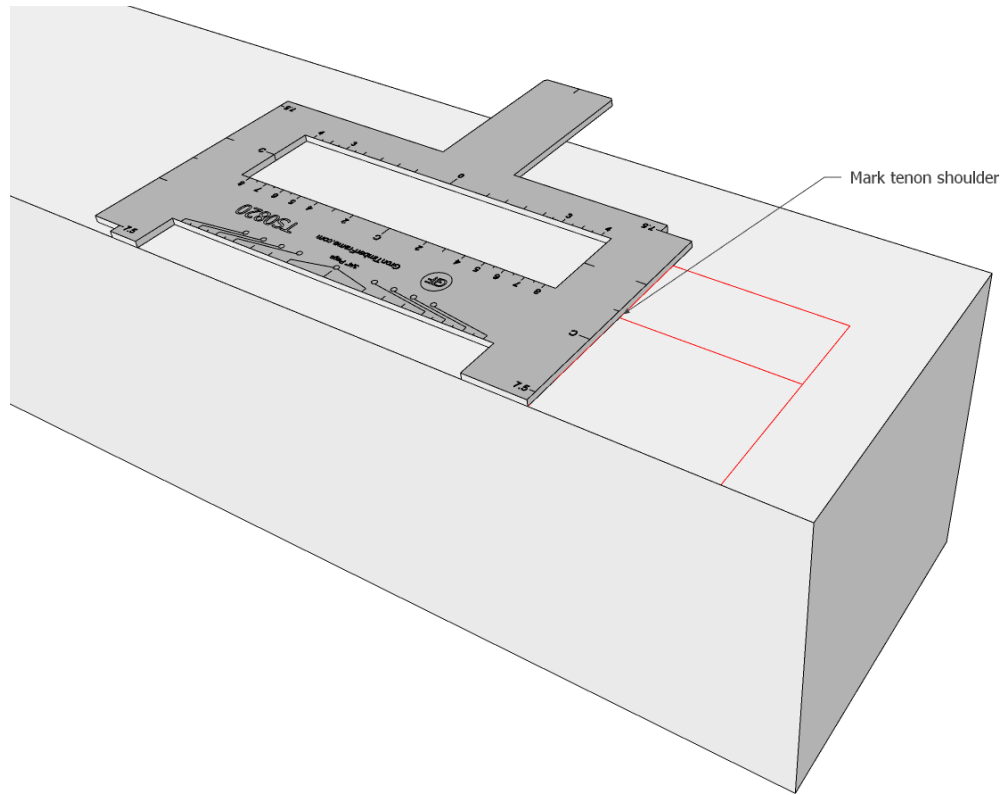


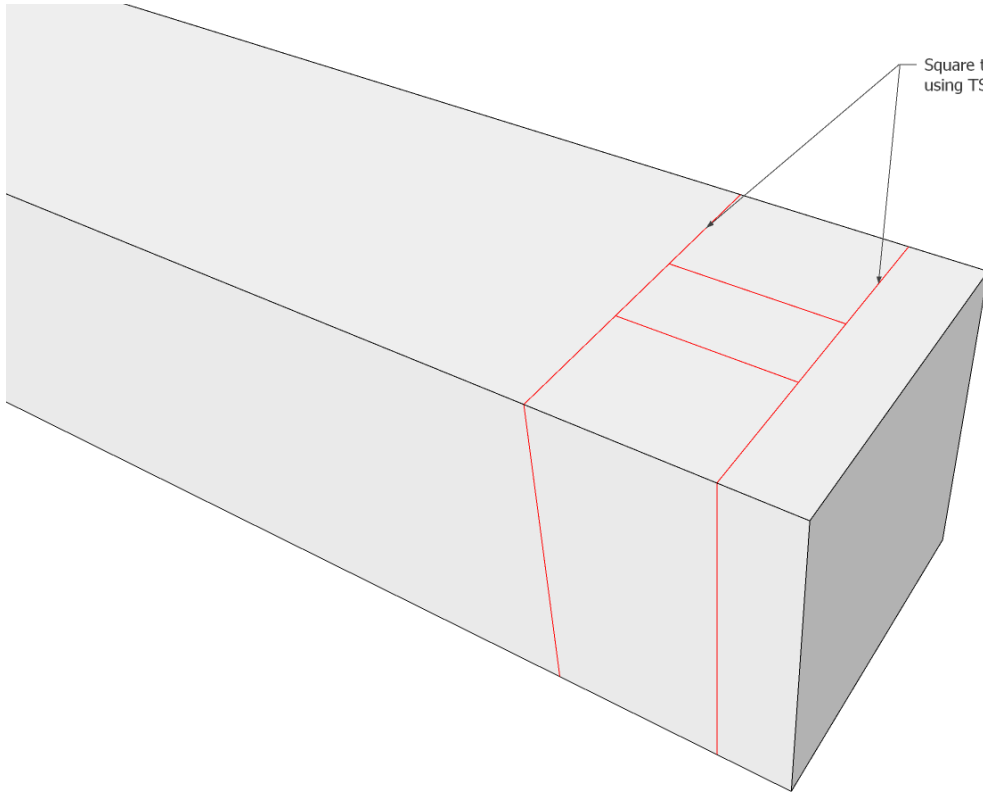
Slide TS along timber  
to tenon end mark



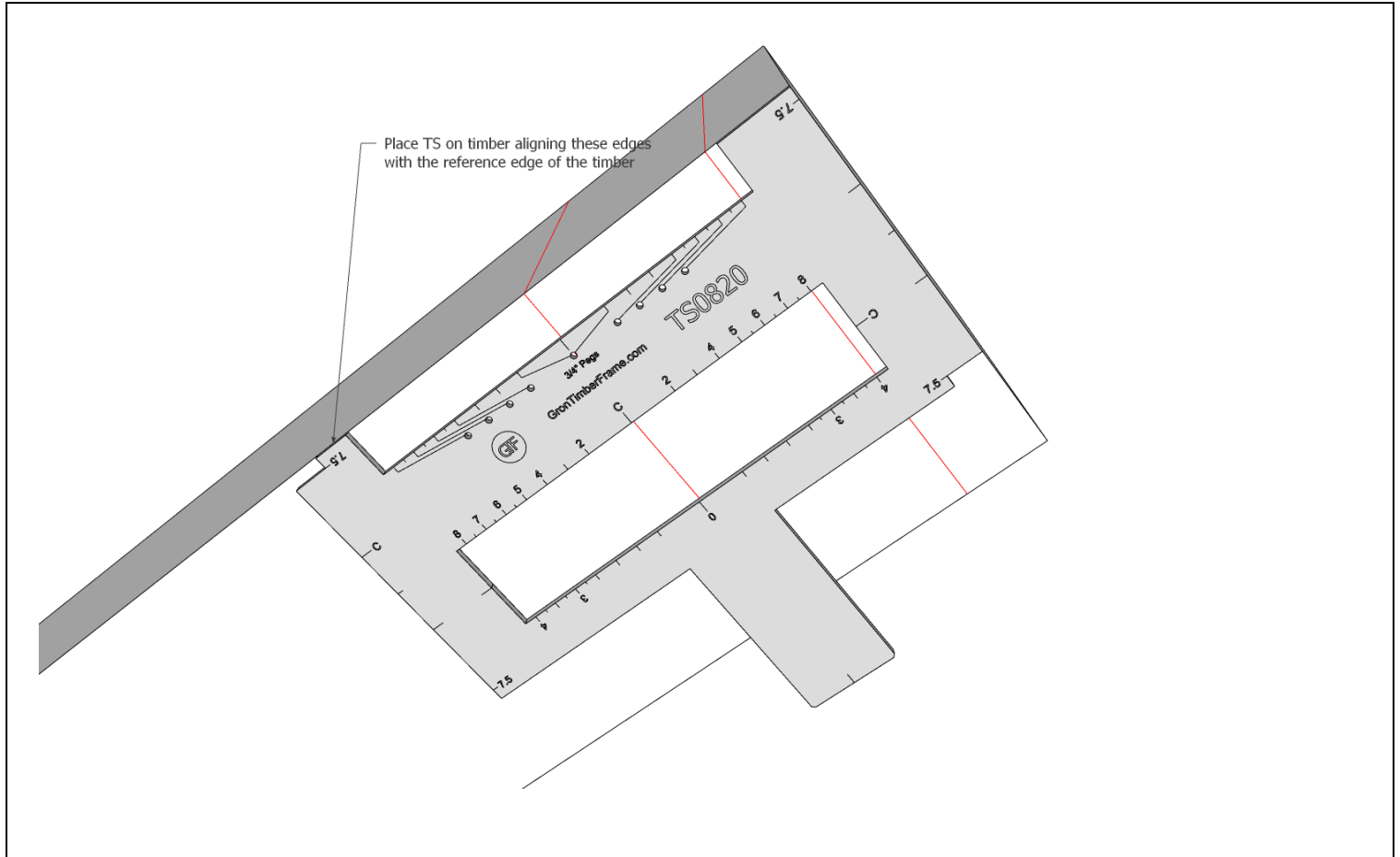


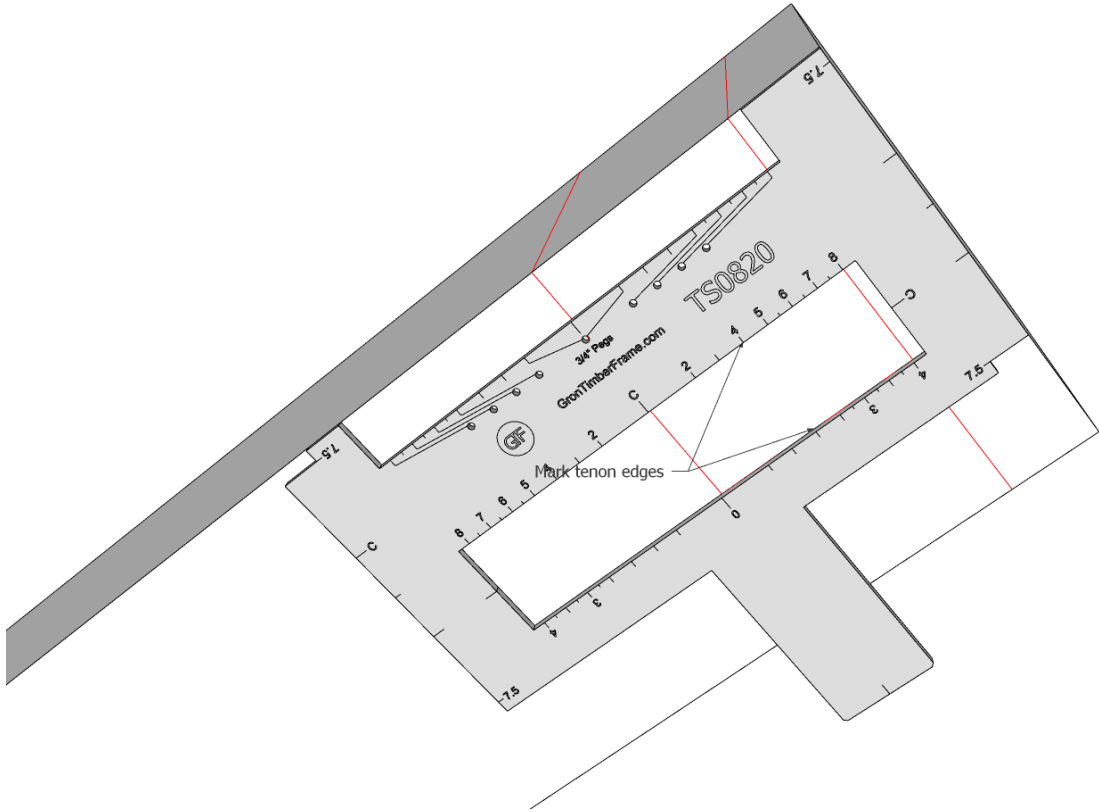
Slide TS to tenon shoulder mark

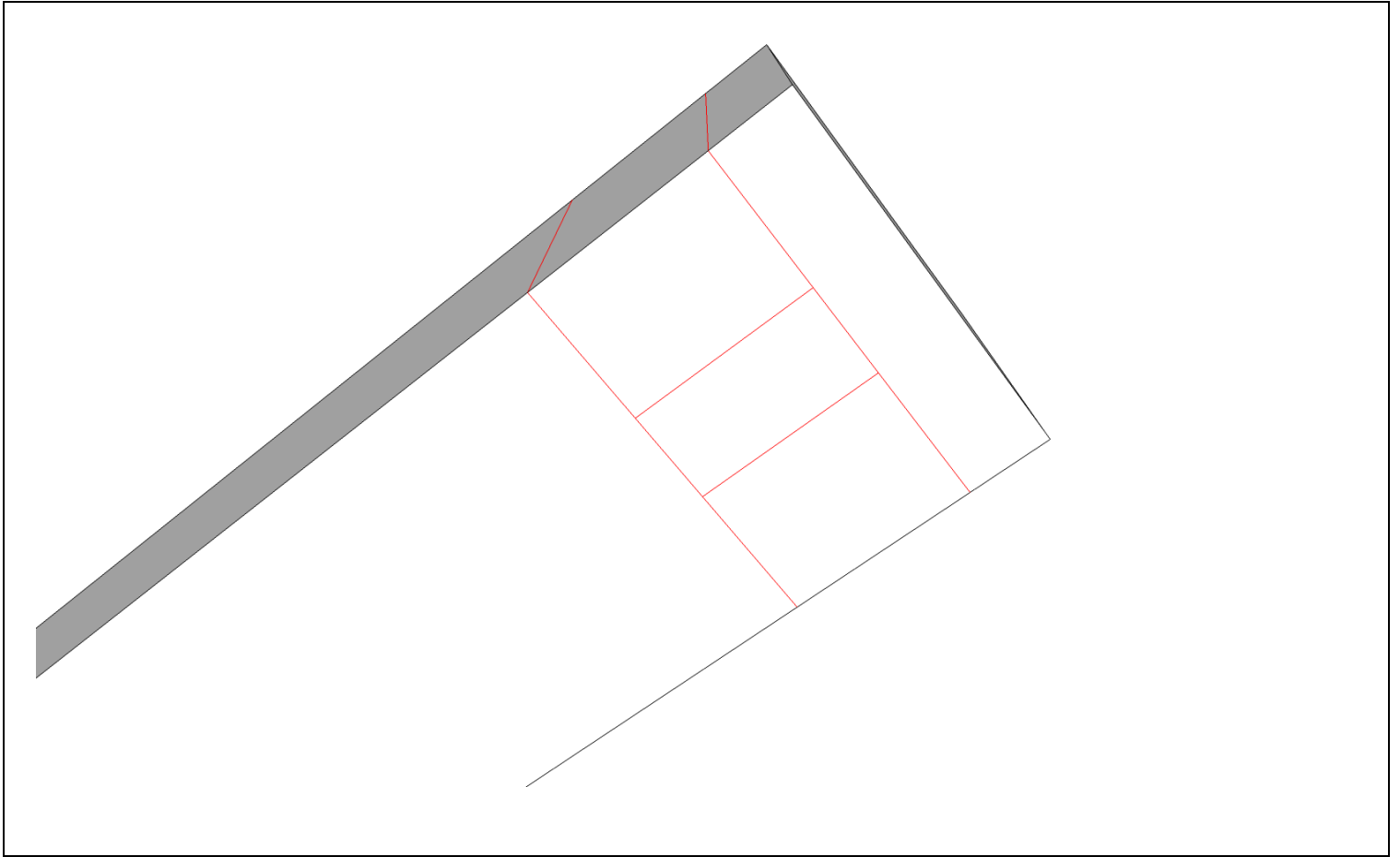




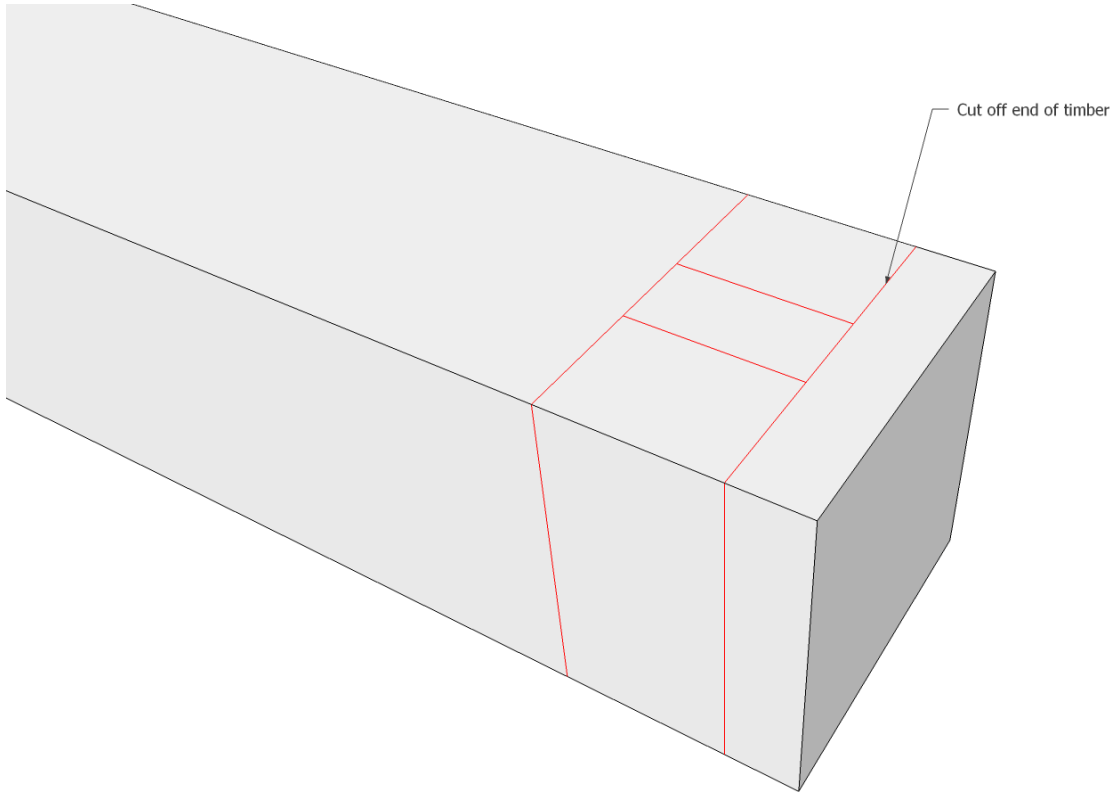
Square these lines around the timber using TS

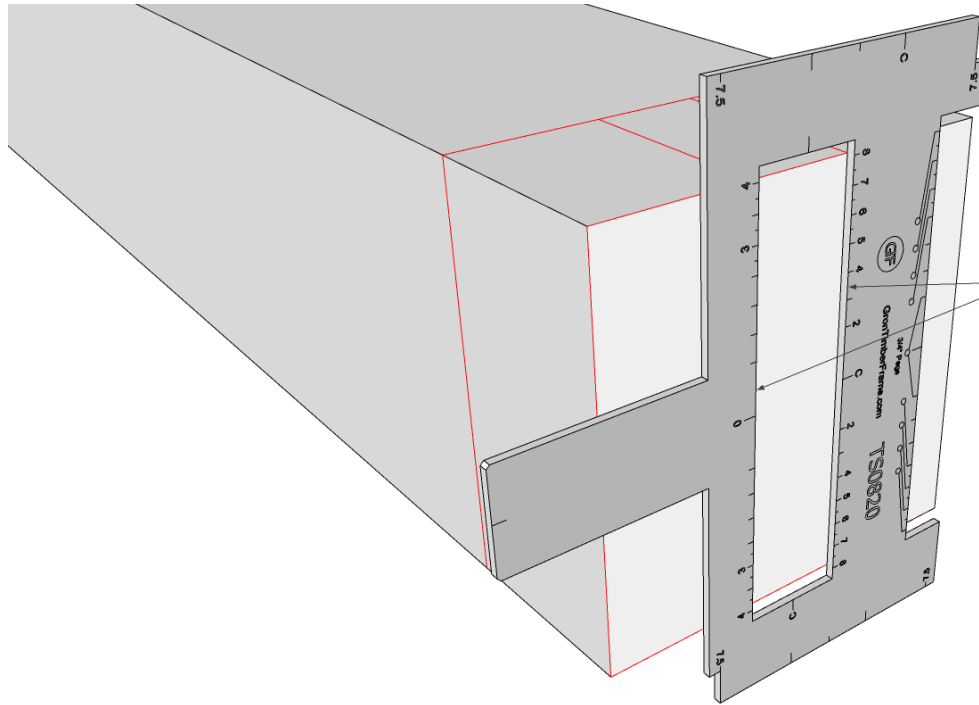




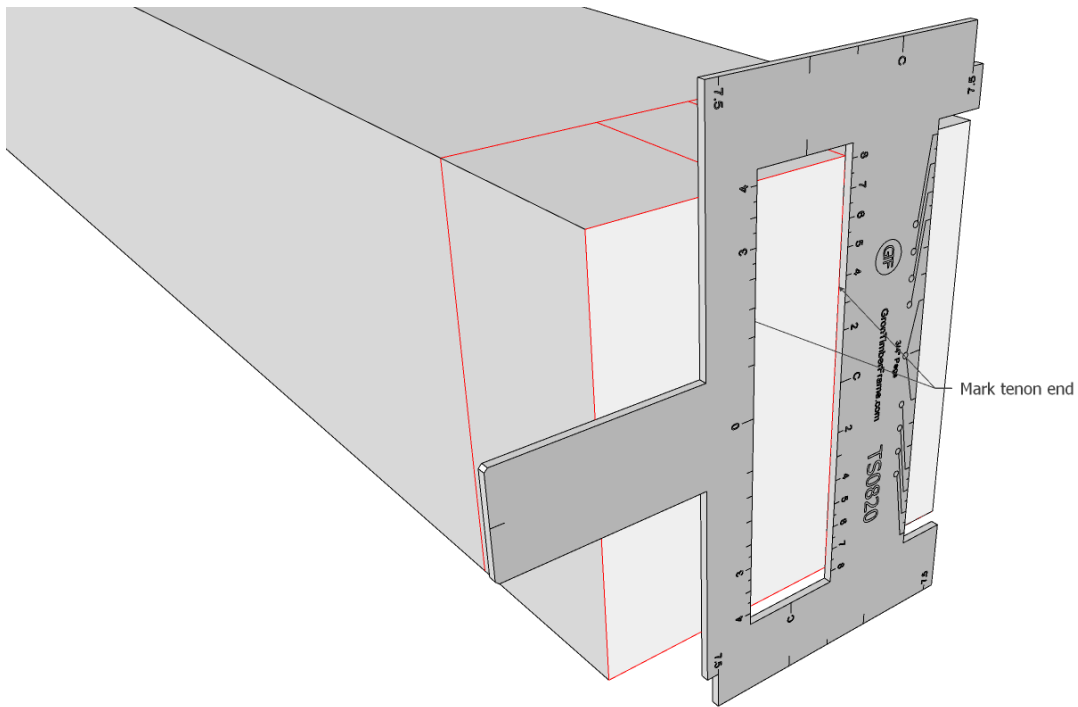


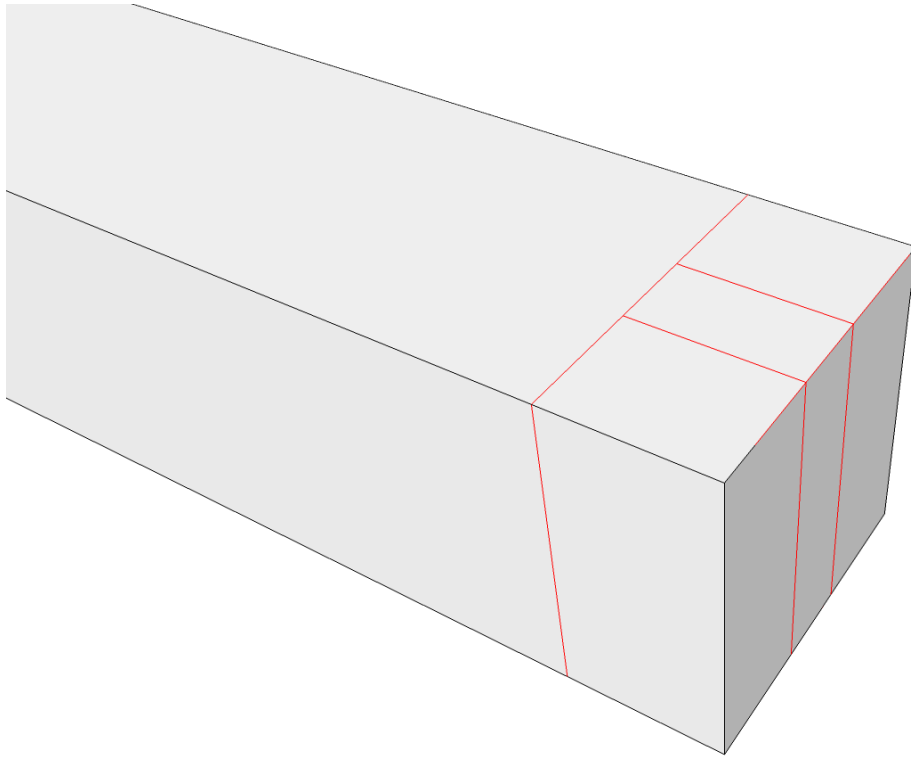


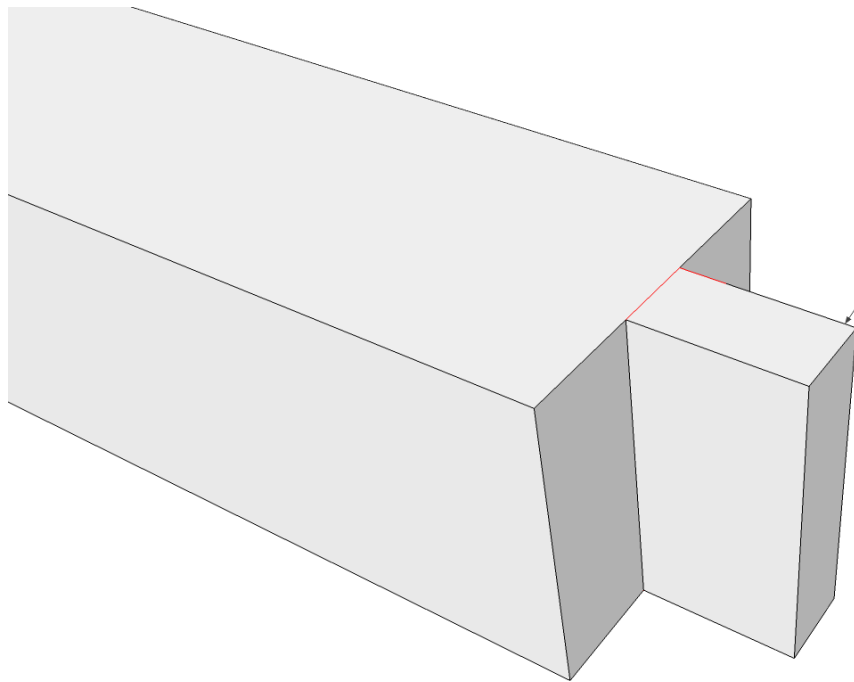




Place TS on timber and align these edges with the tenon edge lines top and bottom







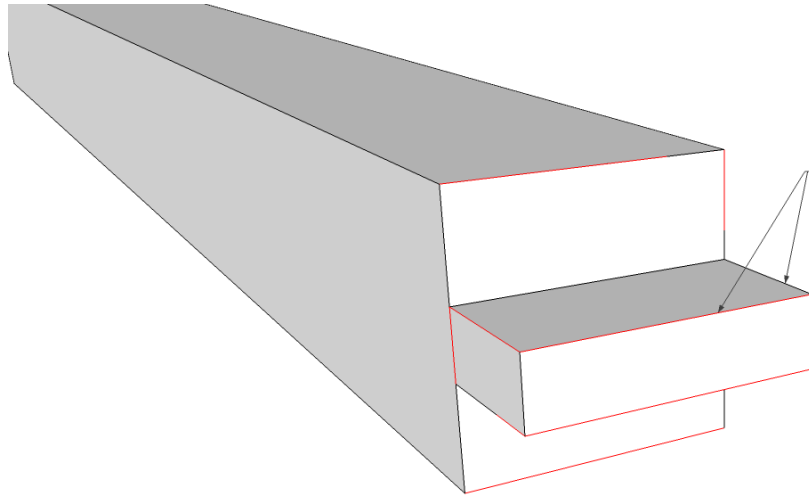
Cut tenon up to, but still leaving, the layout lines

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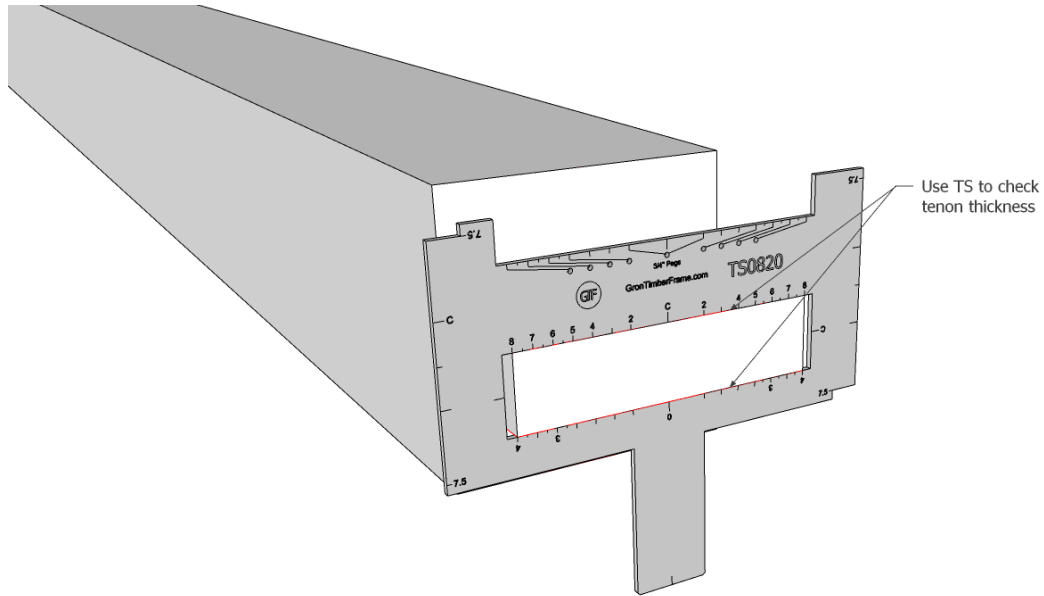
# TS User's Guide

**Tenon Sizing**

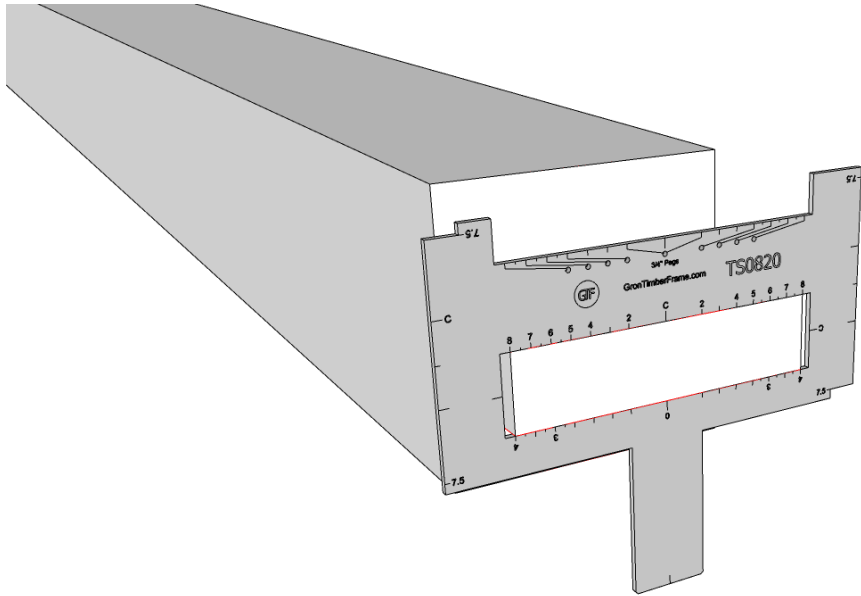
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Tenon has been cut to layout lines  
which are still visible



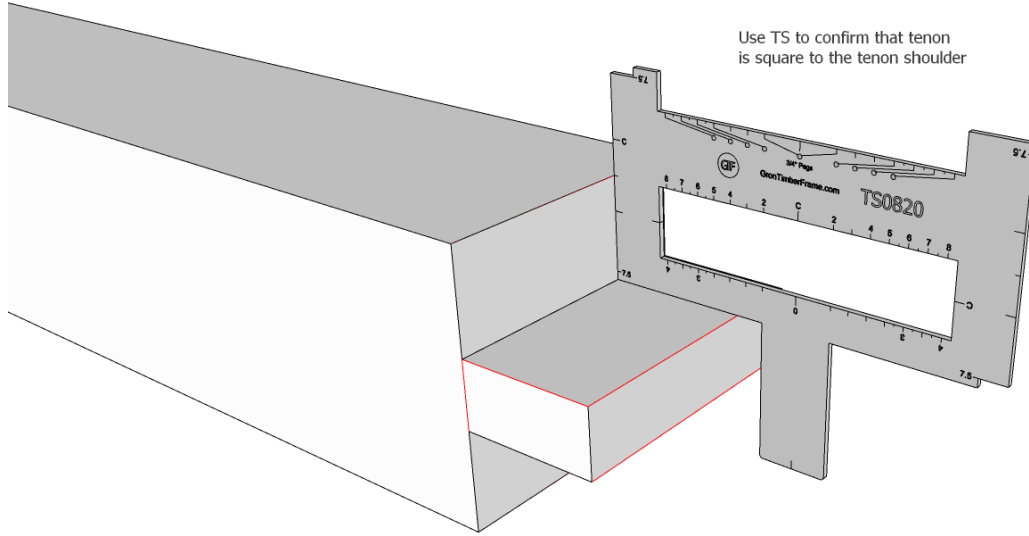


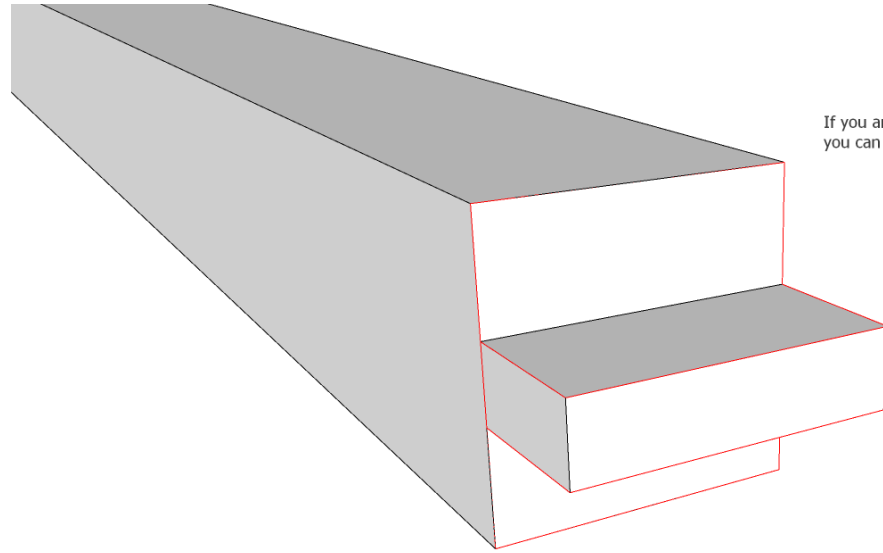


The TS sizing opening should slide freely along the tenon. Do not force as damage to the tool may result.

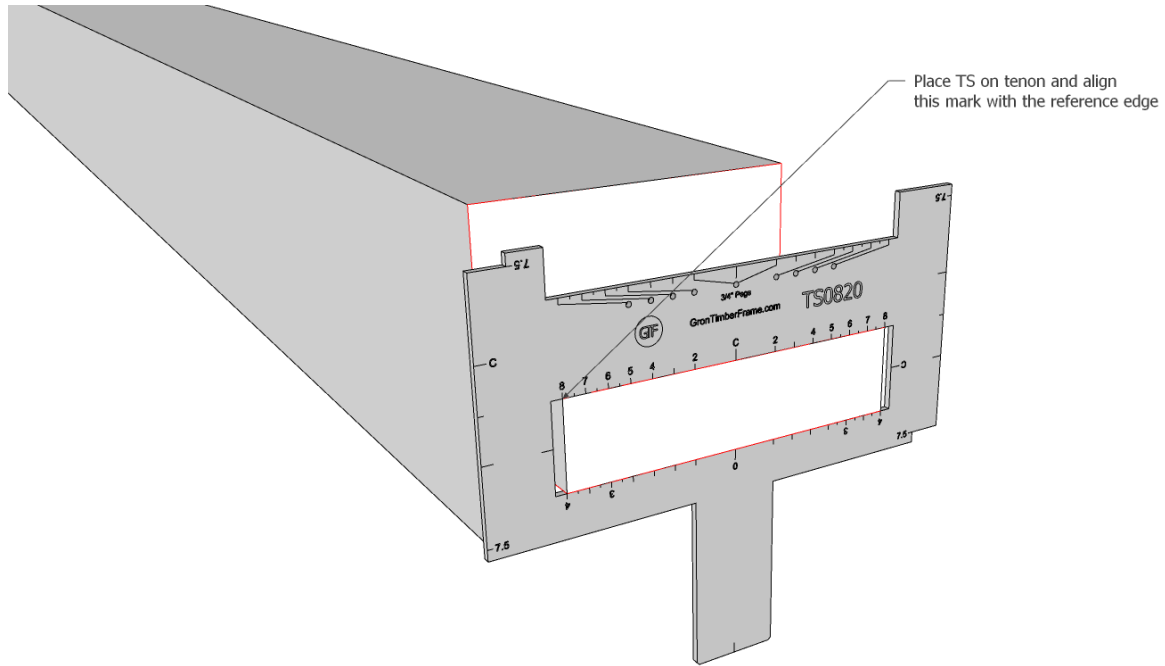
If the TS sizing opening does not slide freely along the tenon then the tenon will not fit the mortise and the tenon thickness should be reduced.

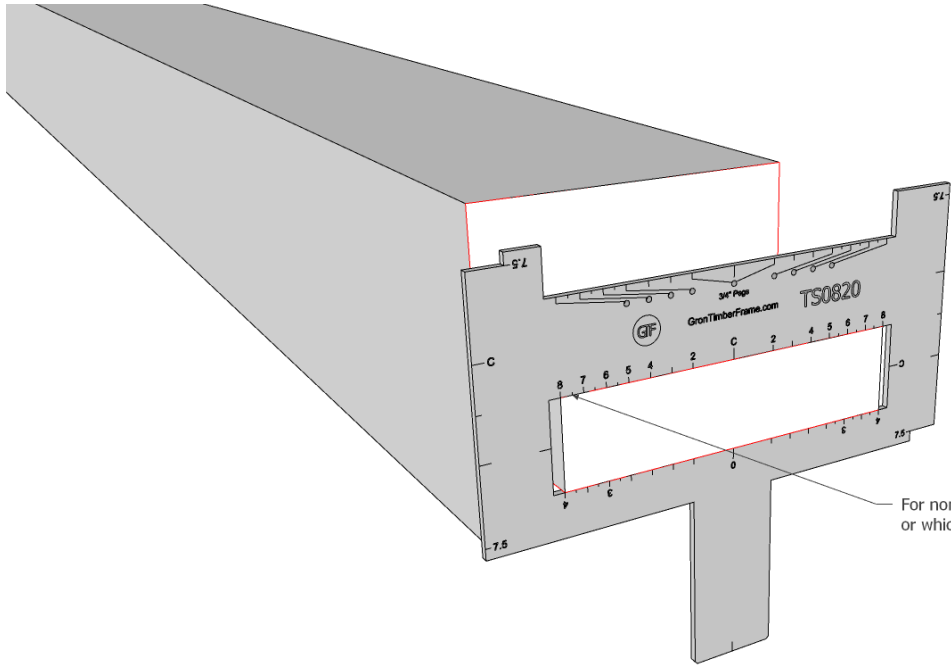
Use TS to confirm that tenon is square to the tenon shoulder



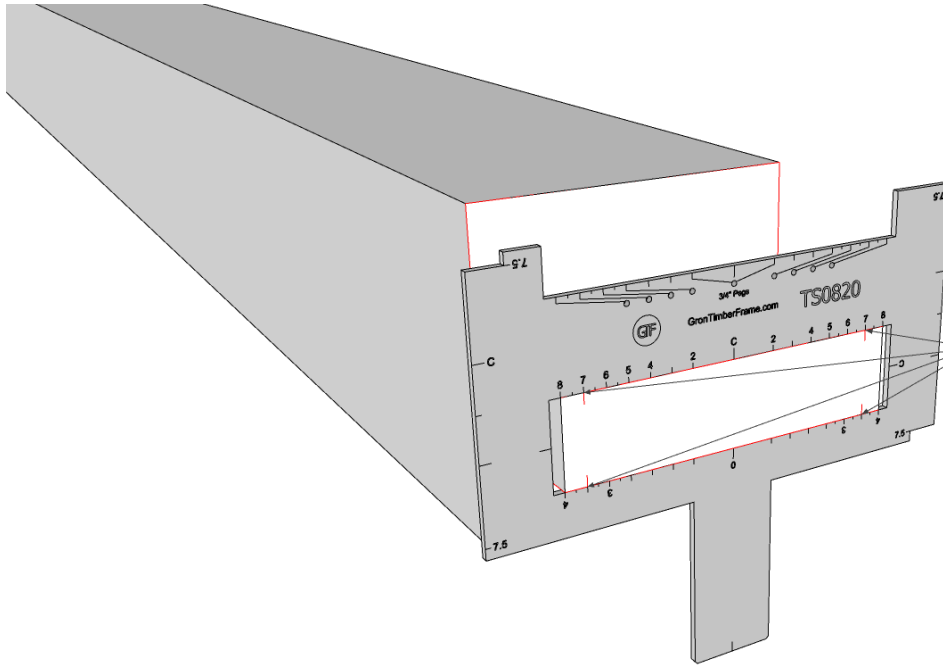


If you are cutting a shouldered tenon  
you can now layout the tenon shoulders

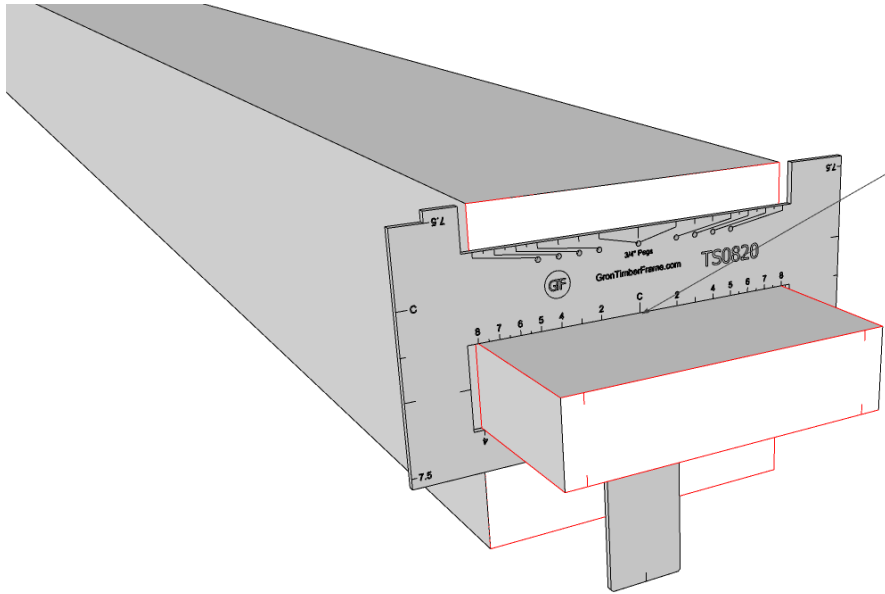




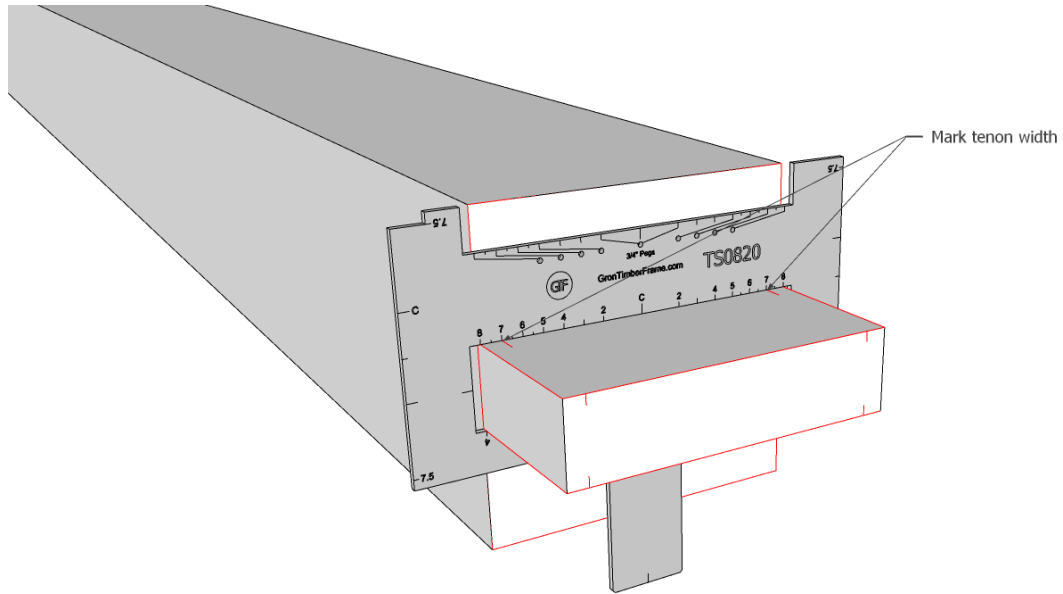
For nominal dimension timber use this mark or whichever mark is appropriate for the timber size



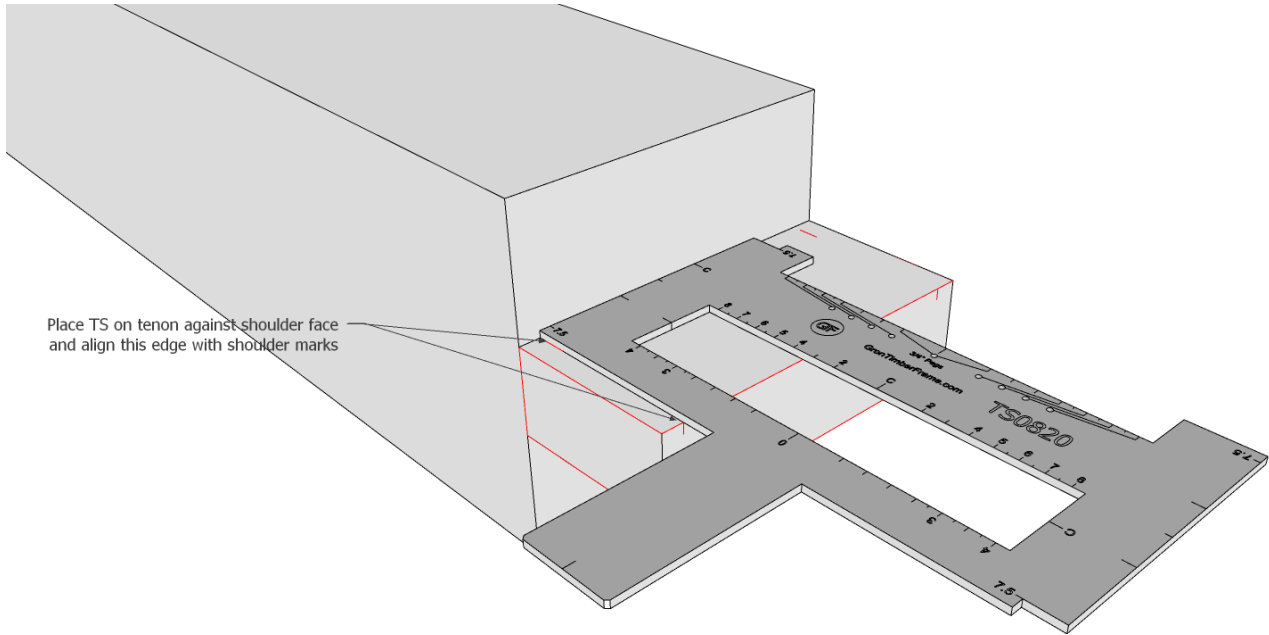
Select finished tenon width  
and mark on tenon end



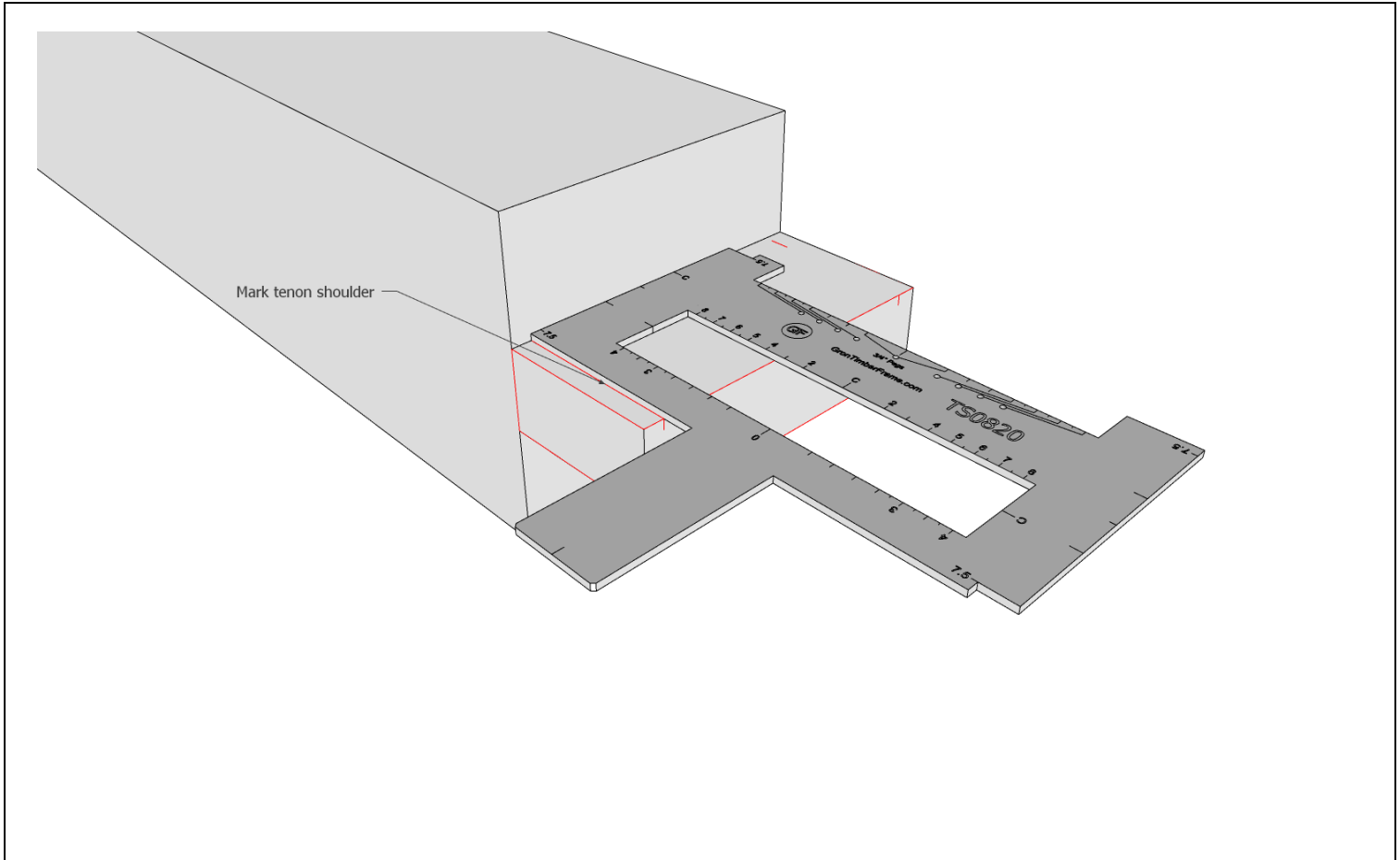
Slide MT2008 along tenon to shoulder face

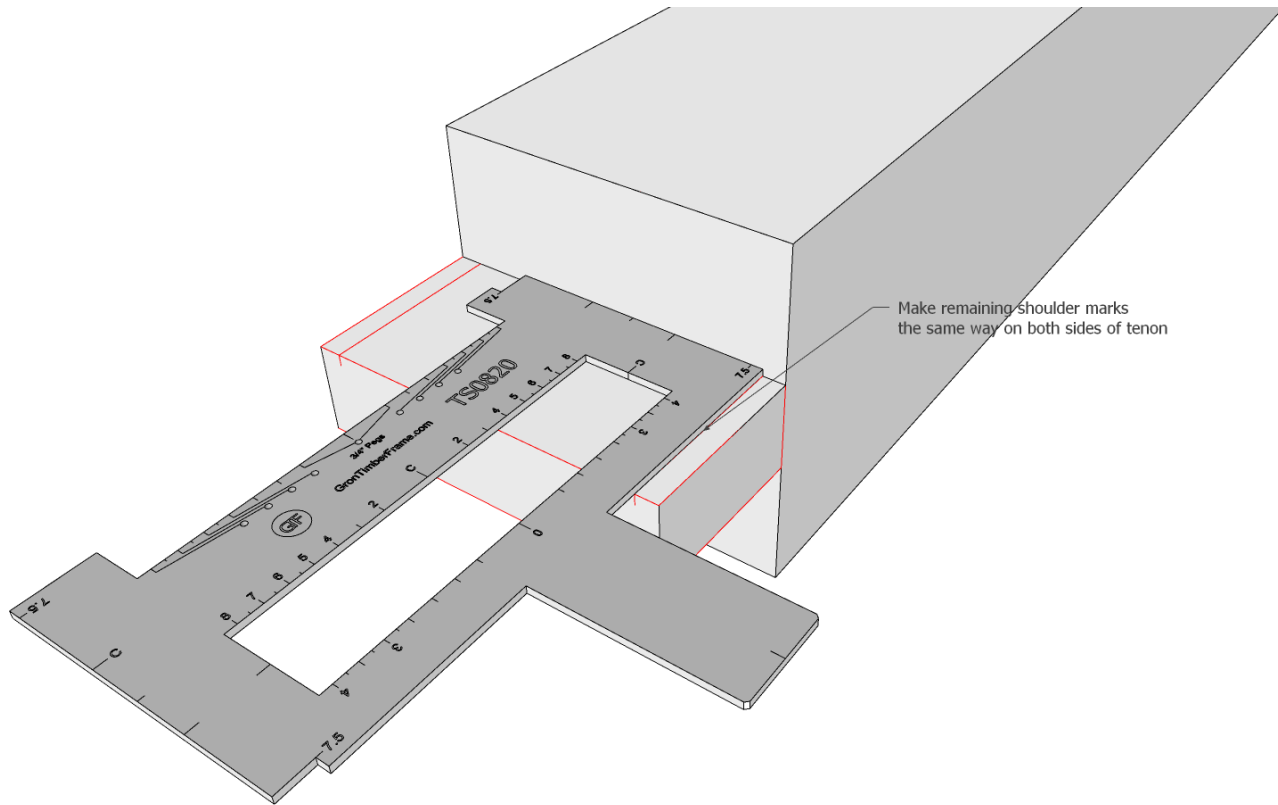


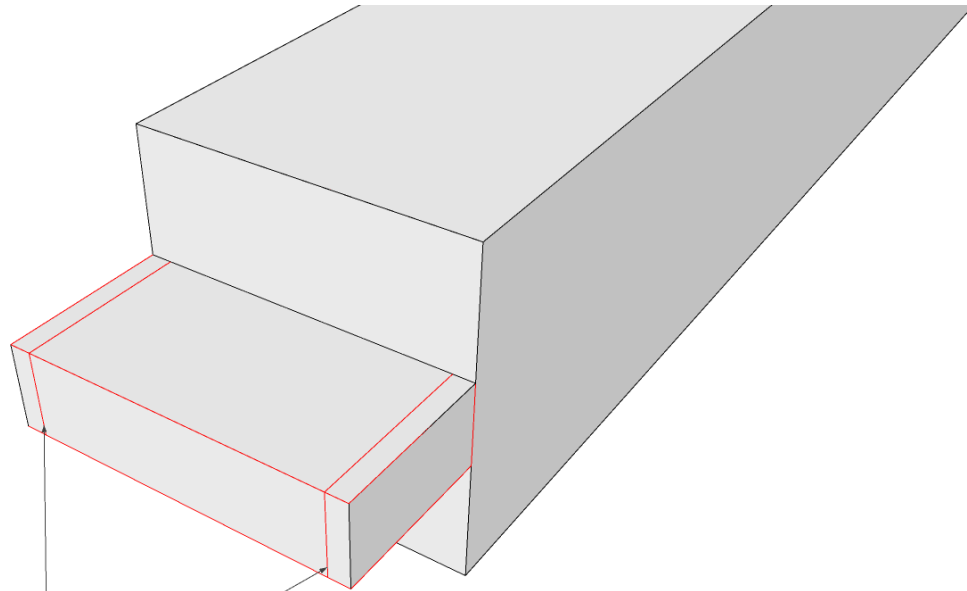




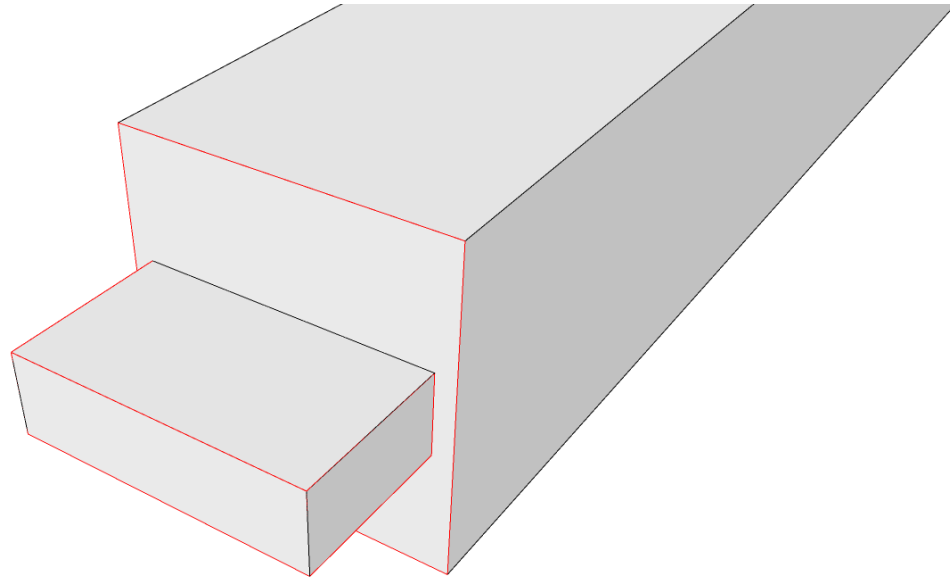
Place TS on tenon against shoulder face  
and align this edge with shoulder marks







Connect shoulder  
marks on end of tenon



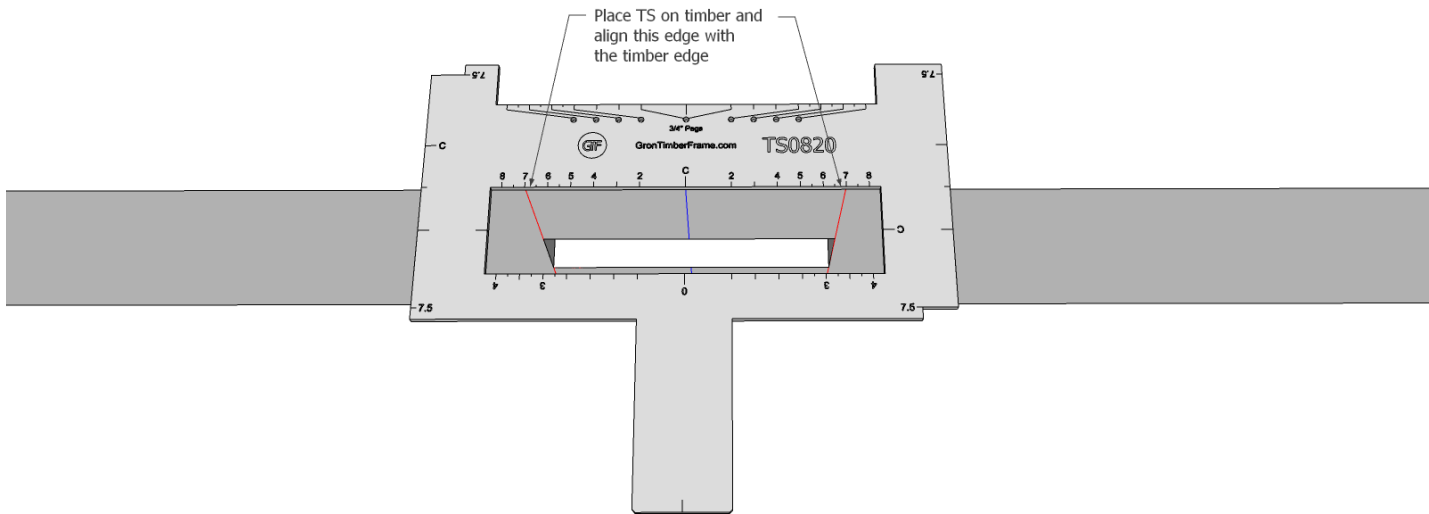
Cut tenon shoulders

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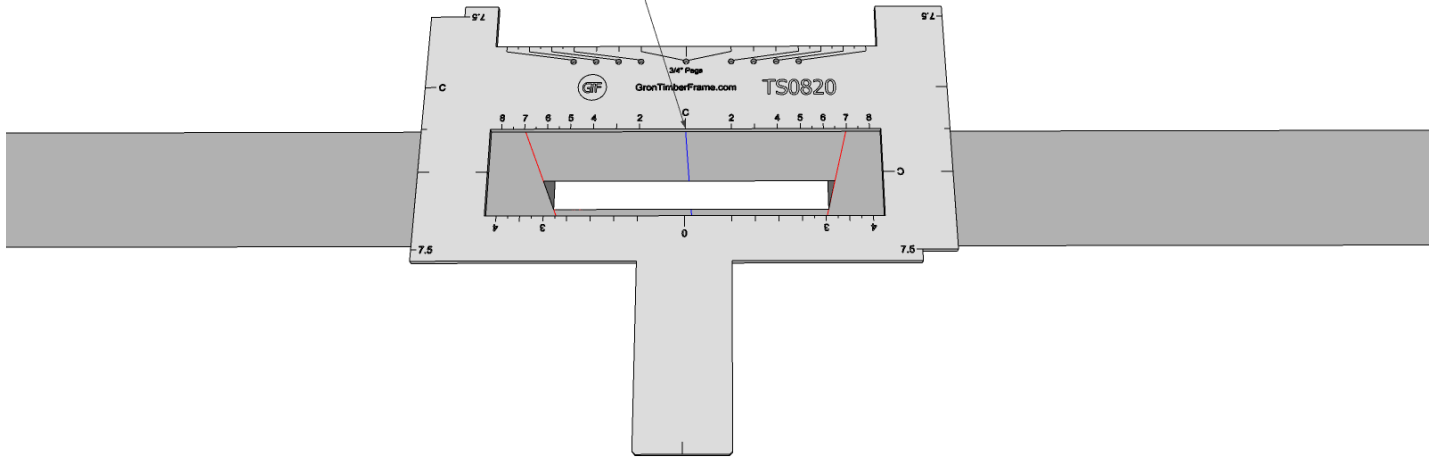
# TS User's Guide

**Peg Layout**

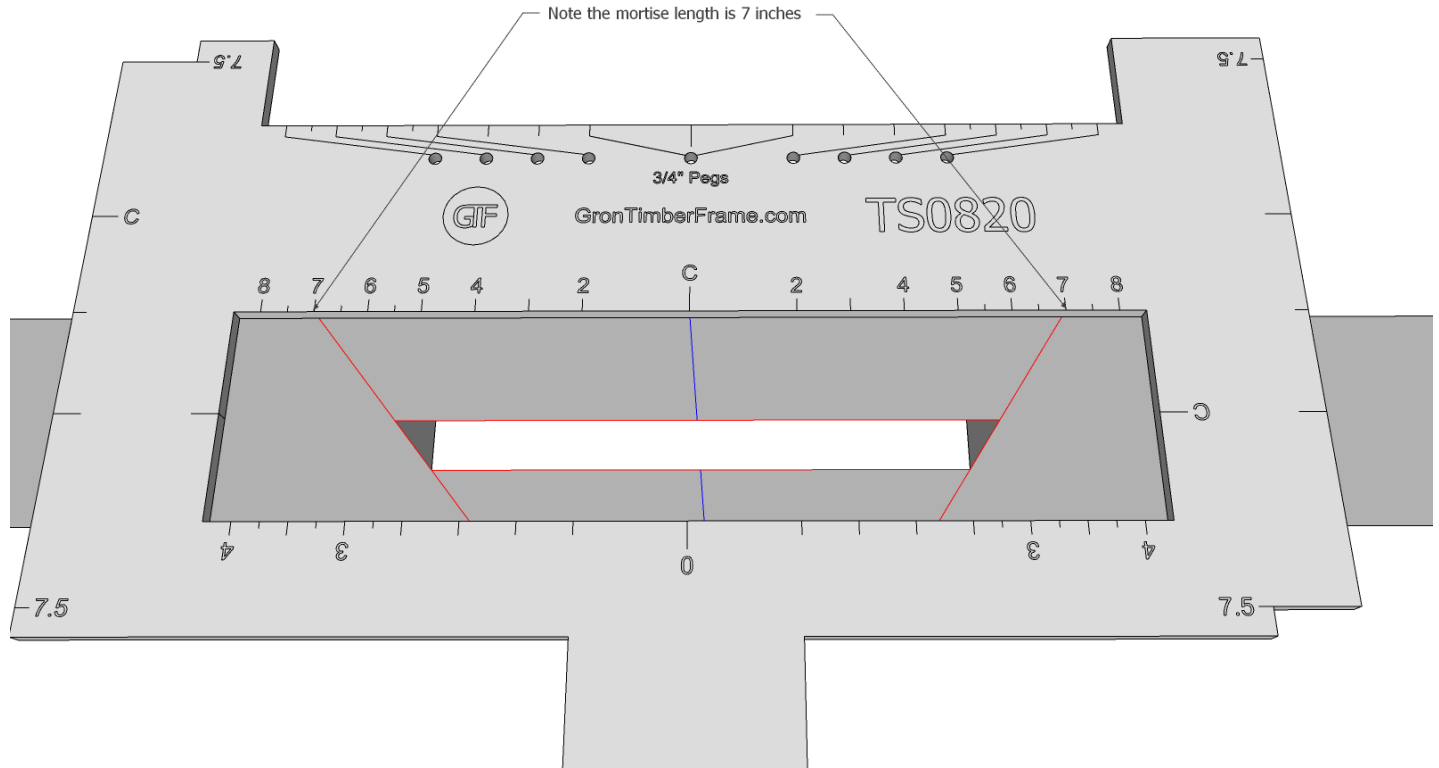
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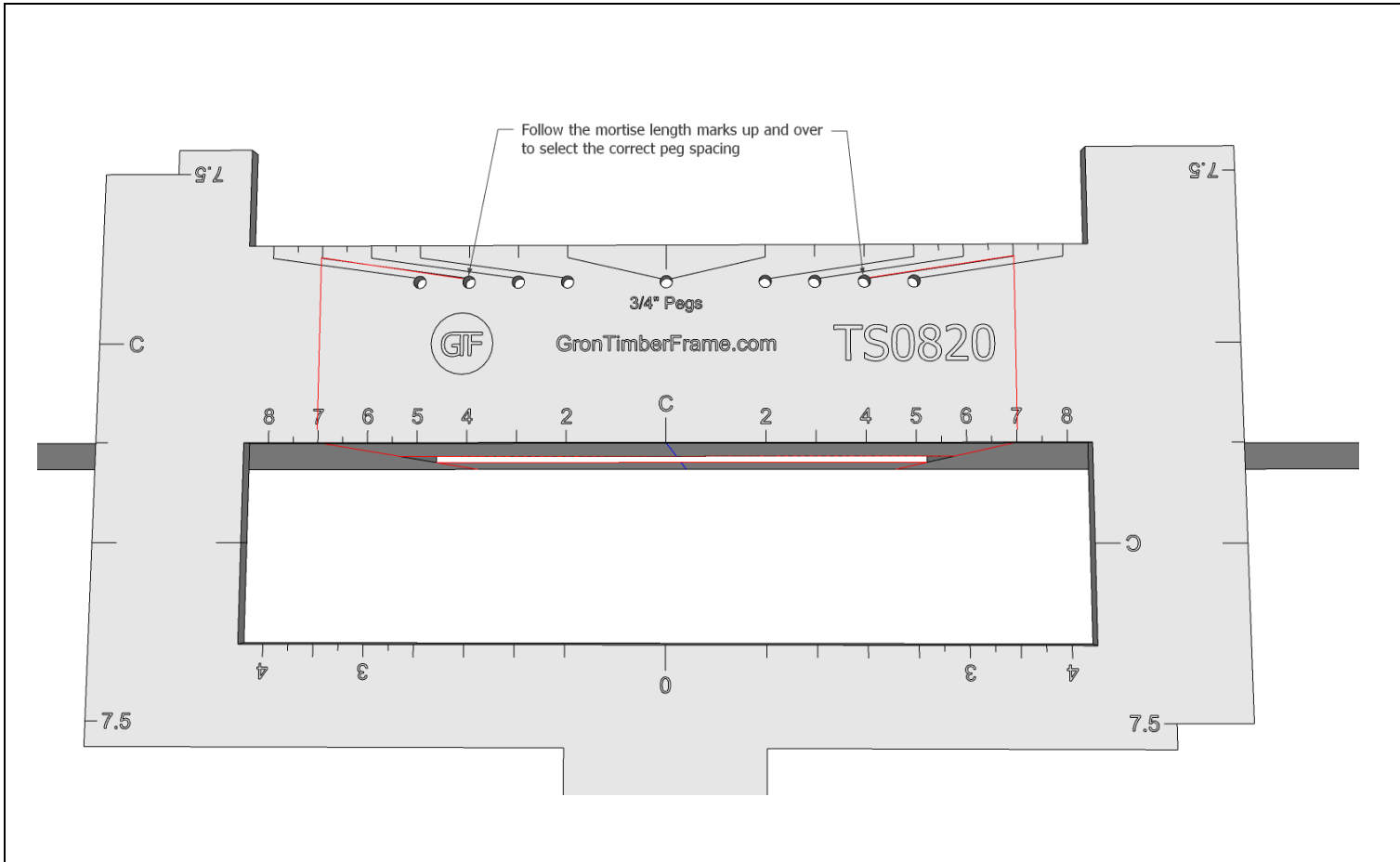


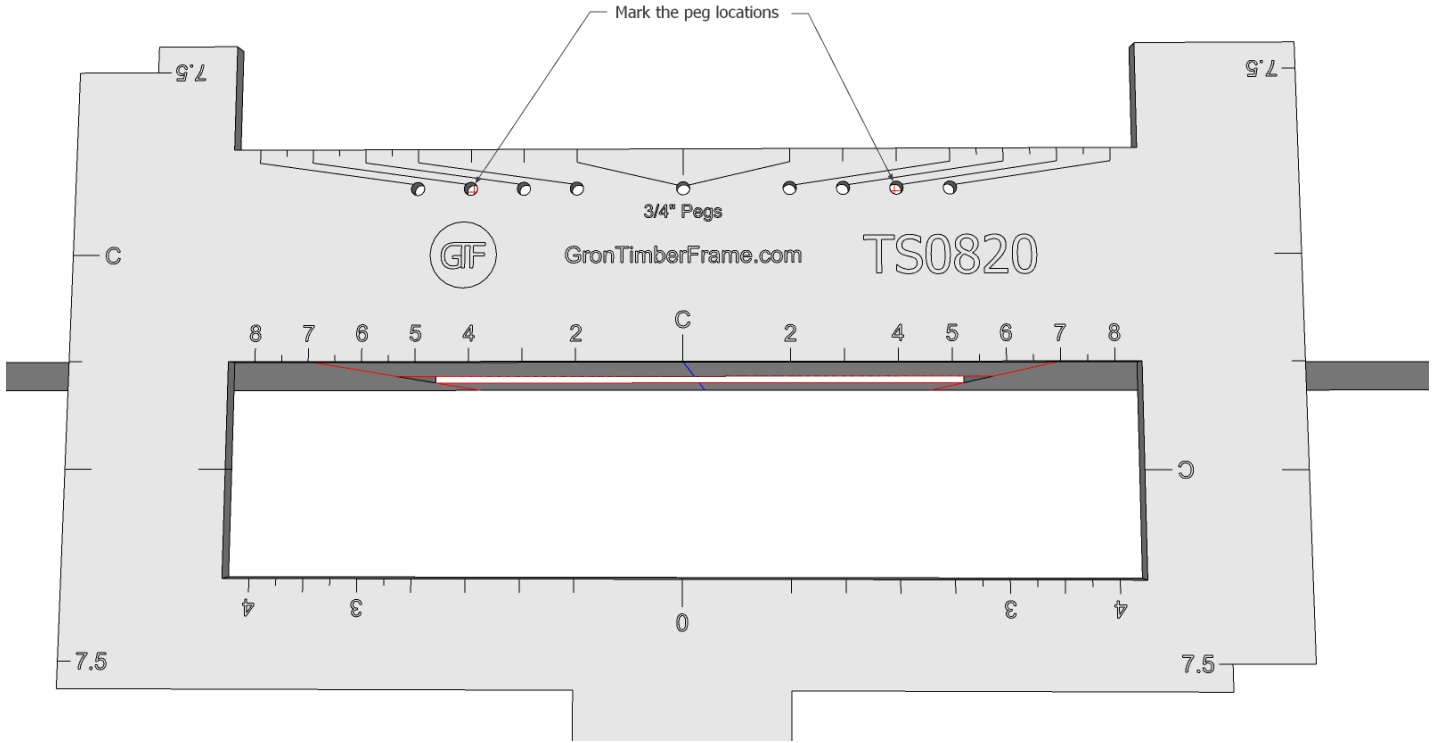
Align this mark with  
the mortise center line











Drill the peg holes

