

Requirements - Table Saw Bevel Cuts

Inside Out Three or Six Staves

1. Adjustable sled riding miter slot.
2. Adjustable depth stop to ride opposite slot.
3. Table saw rip fence parallel to blade.
4. Gauge block with kerf cut at 60 degrees.
 - a. Same thickness as sled.
5. Digital magnetic blade gauge.
6. Saw throat insert that allows tilt.
7. Scrap flat board(s) with parallel sides

Steps:

1. Preparation

- a. Calculate key measures.
 - i. Board width plus 1" or more for clamping.
 - ii. Distance from fence to blade.
- b. Verify sufficient board width & prepare stock to uniform thickness.
- c. Set saw blade angle to 60 degrees using digital tool.
- d. Rip 1st side at angle.
- e. Set depth(width) stop.
 - i. Gauge block to indicate saw blade.
 - ii. Ensure parallel to blade using saw rip fence and scrap board with parallel edges.
 - iii. Stack boards edge to edge as necessary.
 - iv. Cinch stop.
- f. (optional) Use cutoff to enhance zero clearance saw plate.
 - i. Double stick tape.

2. Cut #1

- a. Clamp project wood to sled.
- b. Remove depth stop.
- c. Slow & steady to avoid burn marks.
- d. Allow saw to stop.

3. Cut #2

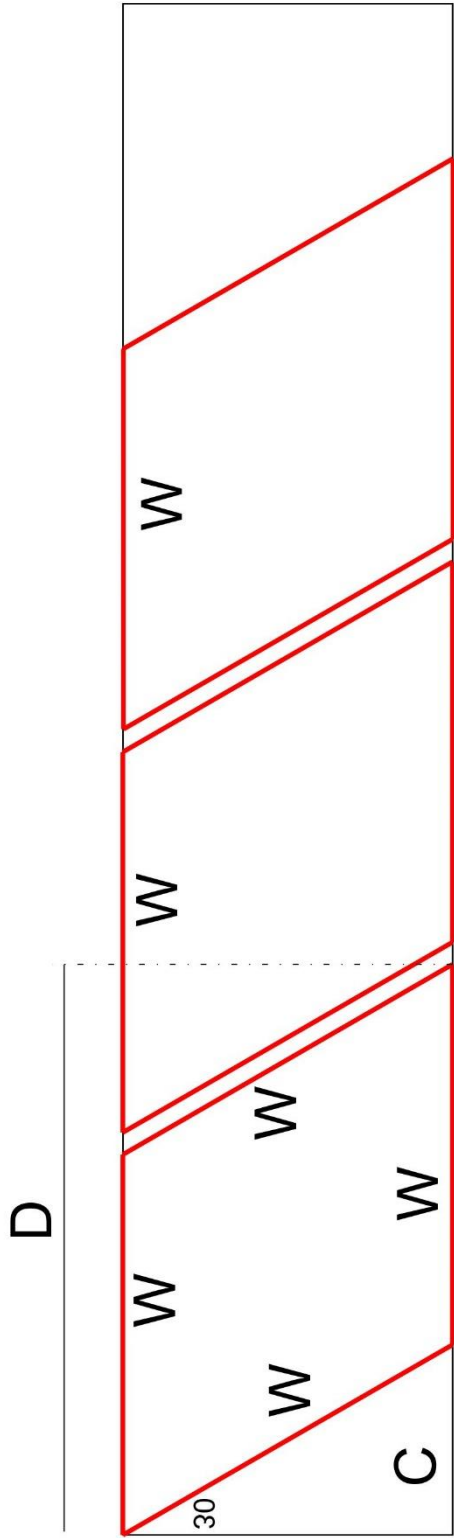
- a. Replace the depth stop without adjustment.
- b. Re-clamp project wood against depth stop.
- c. Remove depth stop.
- d. Slow & steady to avoid burn marks.
- e. Allow saw to stop.

4. Cut #3

- a. Replace the depth stop without adjustment.
- b. Re-clamp project wood against depth stop.
- c. Remove depth stop.
- d. Slow & steady to avoid burn marks.
- e. Allow saw to stop.

5. Continue three more times for a 6 stave project.

B



T=Thickness of board
 B=Width of board
 W=Side of parallelogram (rhombus)
D=Distance from depth stop to Cut
 C=Offcut Width

$C = \tan(30) * T$
 $C = T * .5774 =$ _____
 $W = T / \cos(30)$
 $W = 1.1547 * T =$ _____

$B = (1.1547 + 1.1547 + 1.1547 + .5774) * T$
 $B = 4.0415 * T$ plus 2 saw kerfs plus clamping margin

B = _____
 D = C + W or
 $D = 1.7321 * T$
 D = _____

Trigonometry Review
 $\text{adj/hyp} = \cos(30) = .8660$
 $\text{opp/adj} = \tan(30) = .5774$
 $\text{opp/hyp} = \sin(30) = .5$