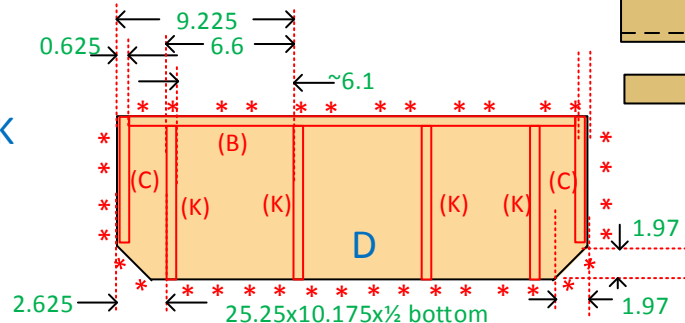
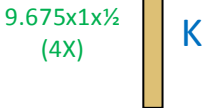
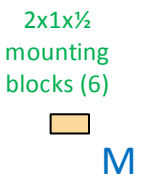
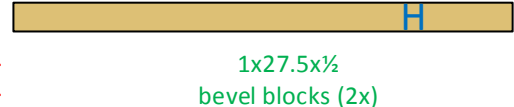
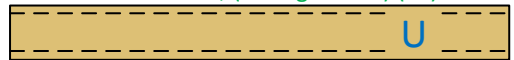
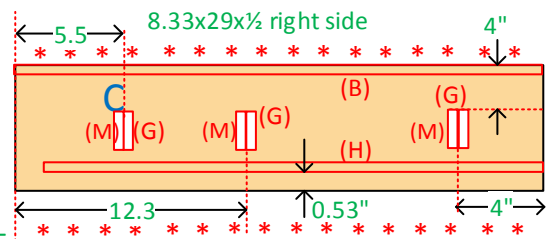
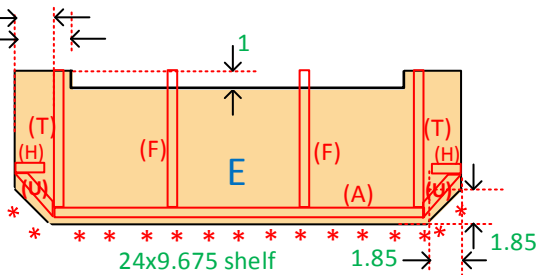
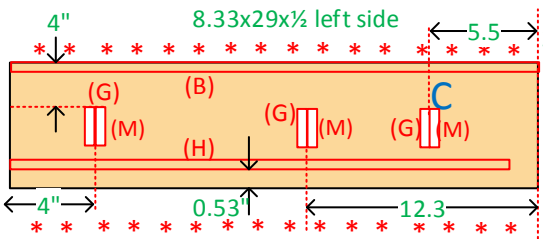
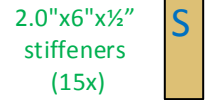
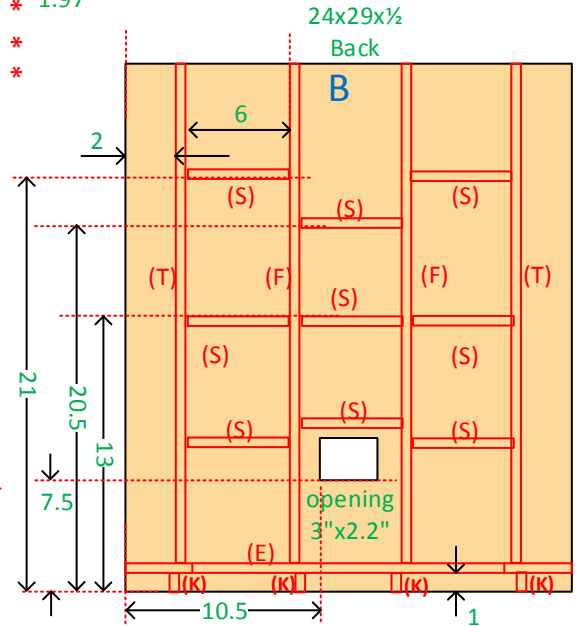
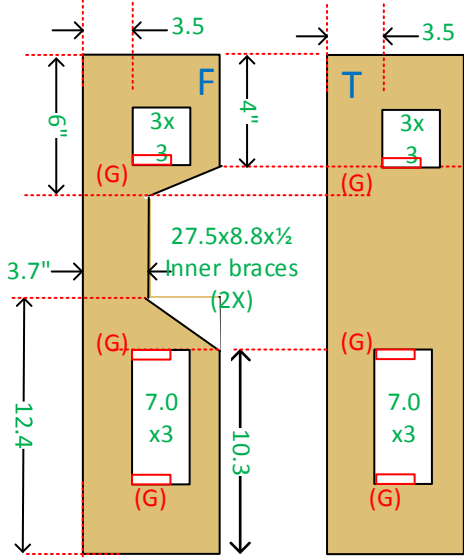
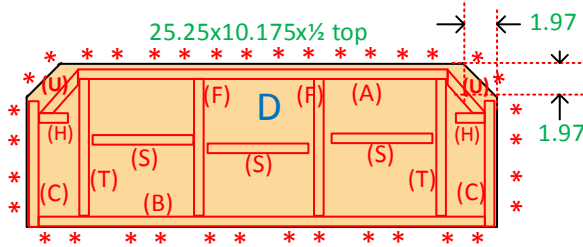
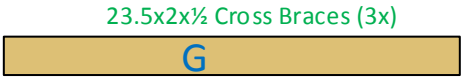
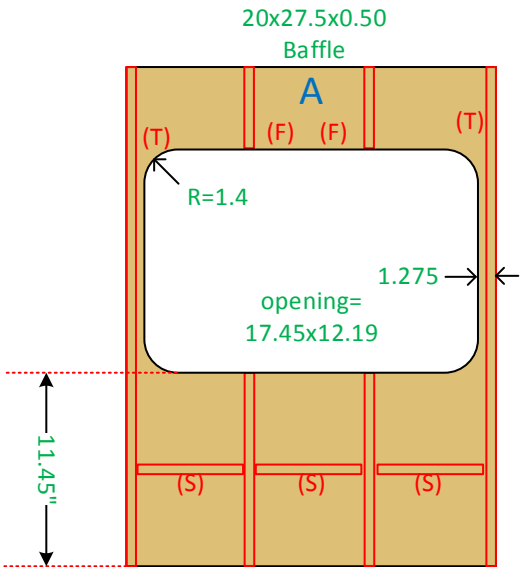
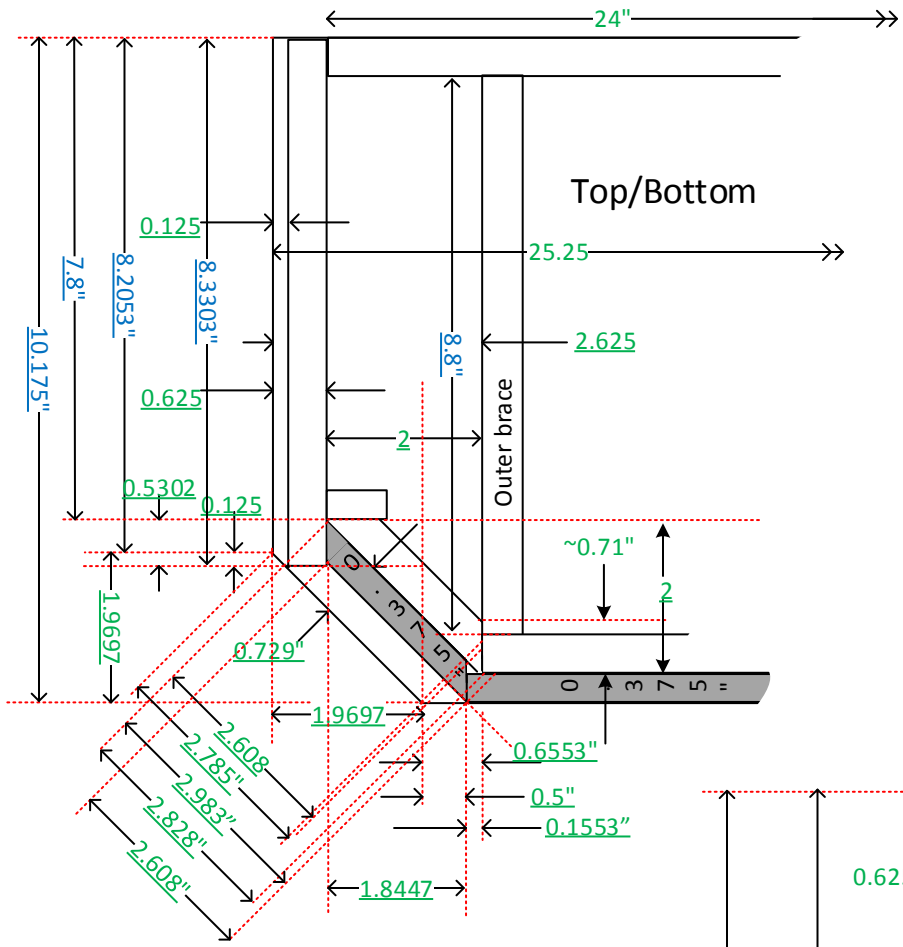


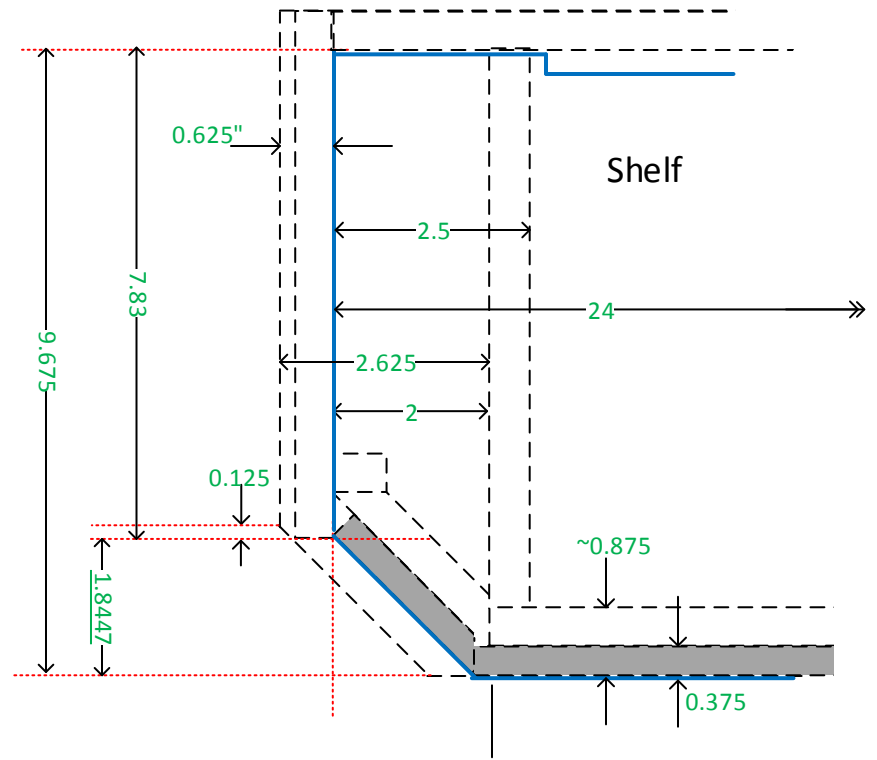
ALL DIMENSIONS IN INCHES

Apply wood veneer tape at edges marked with *

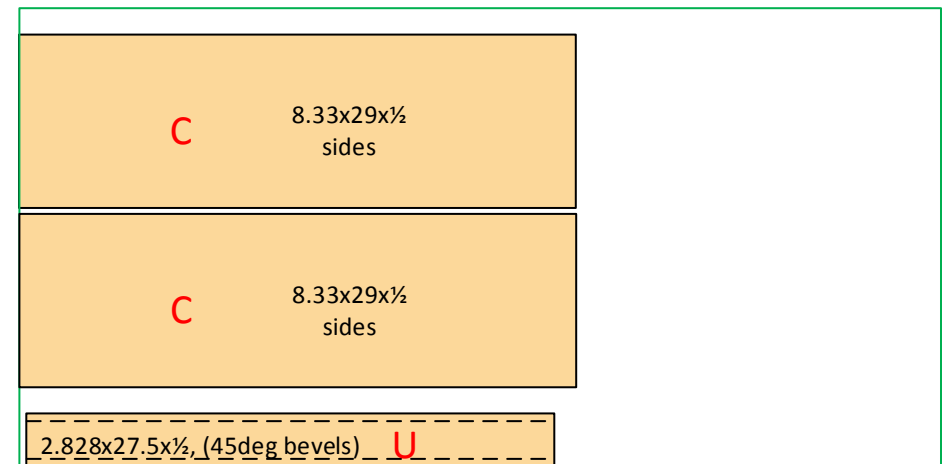
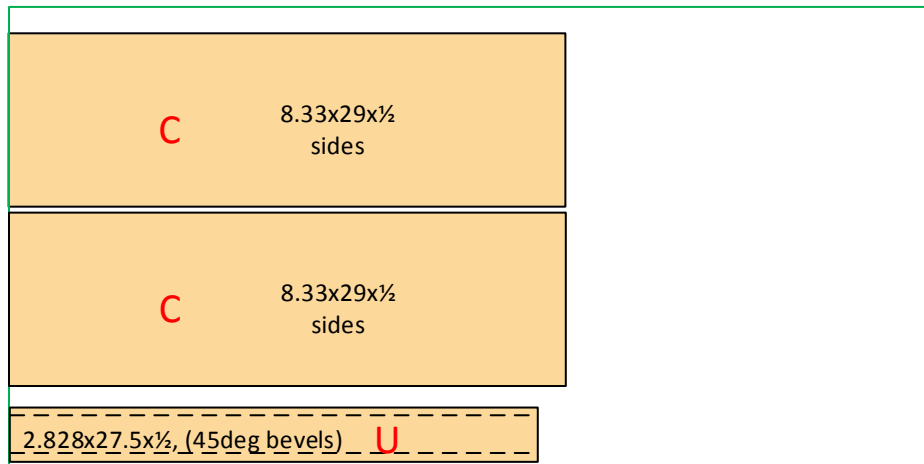
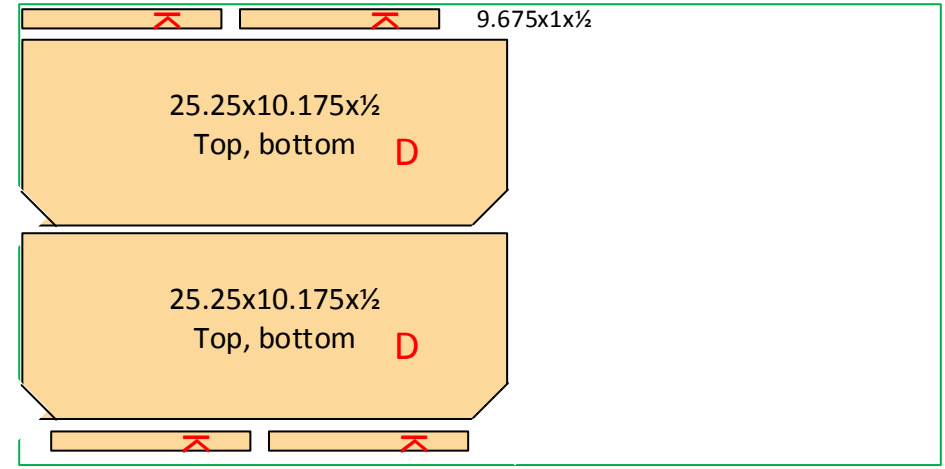
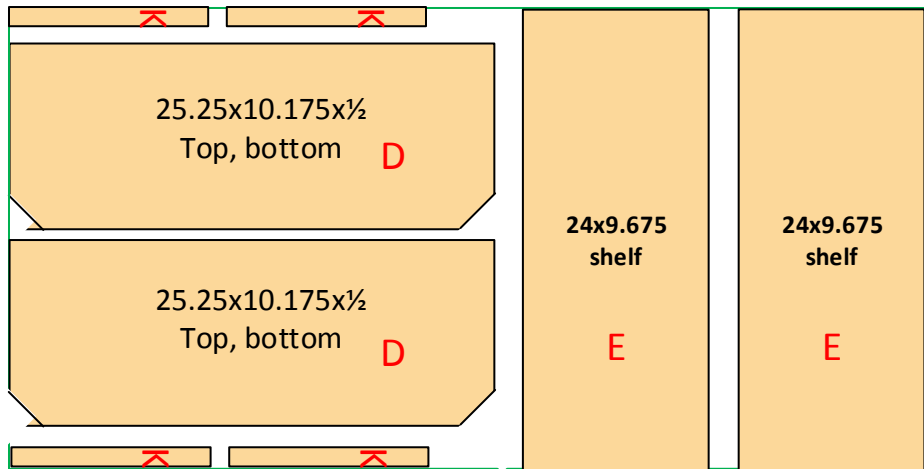
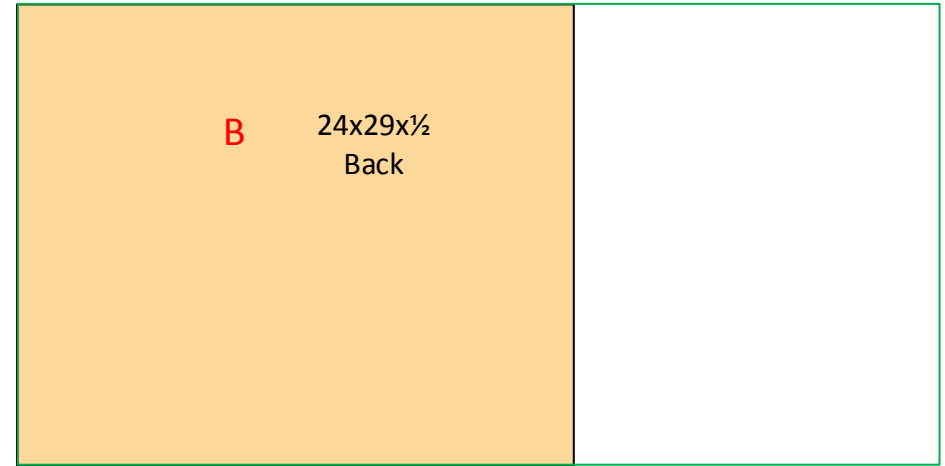
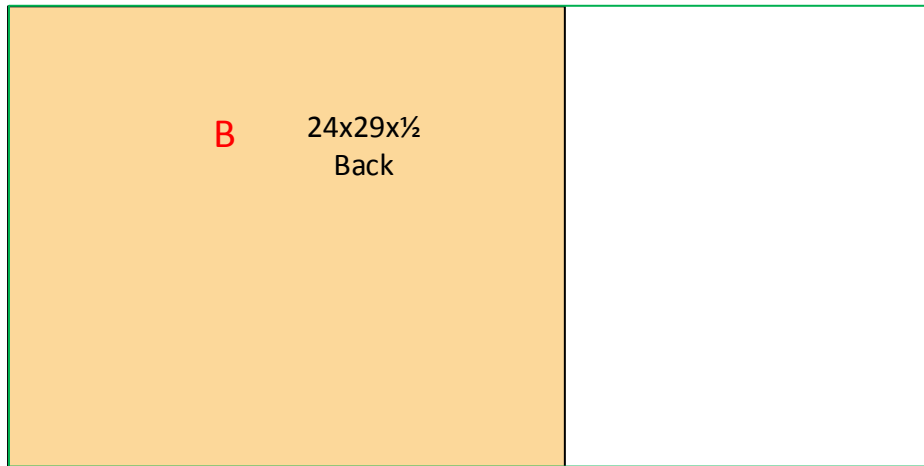




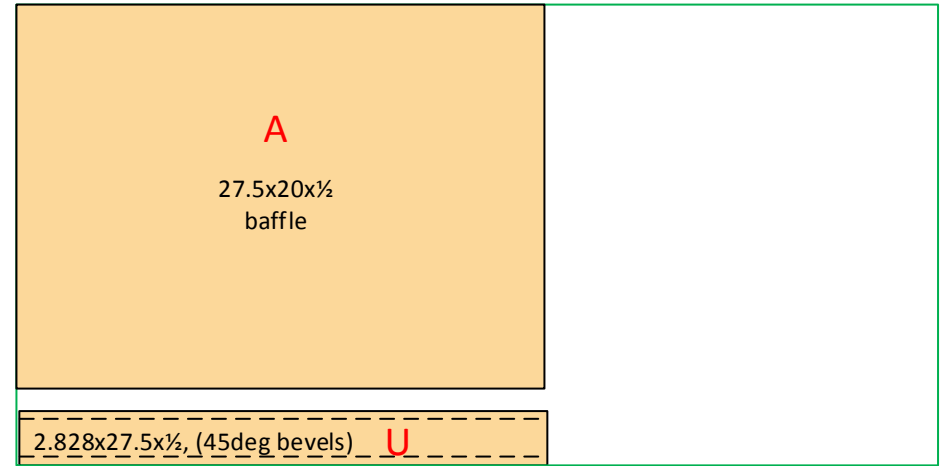
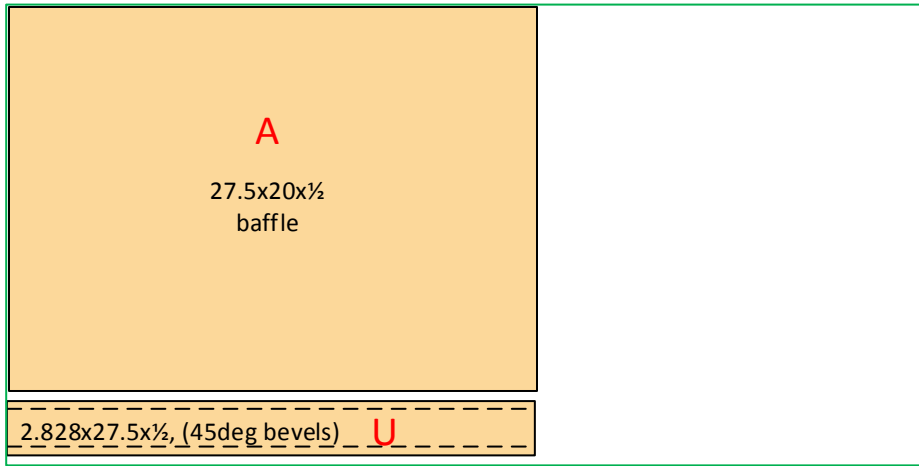
(for calculation and Assembly Reference)



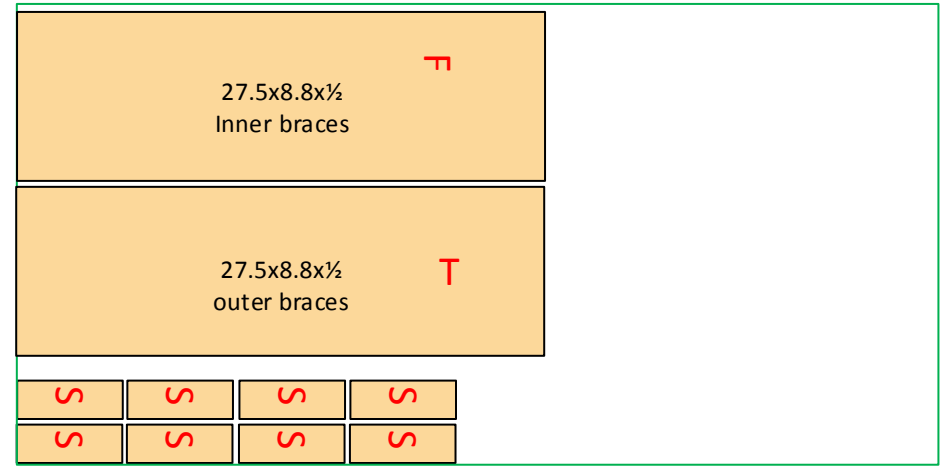
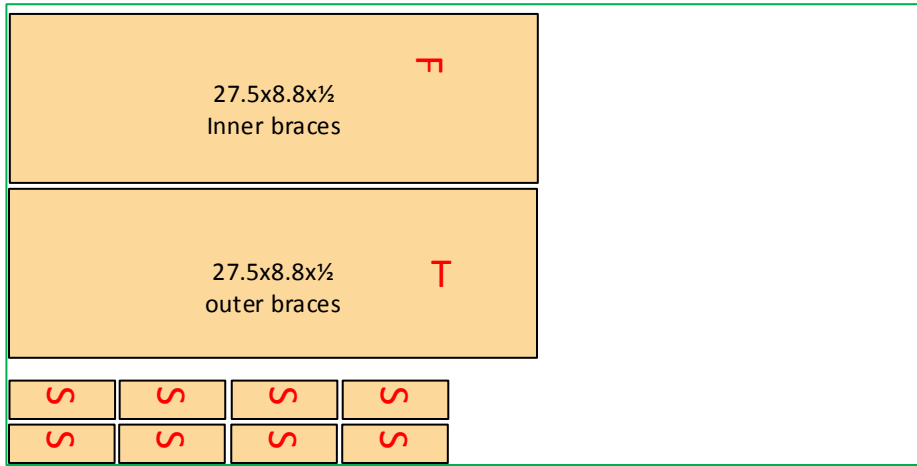
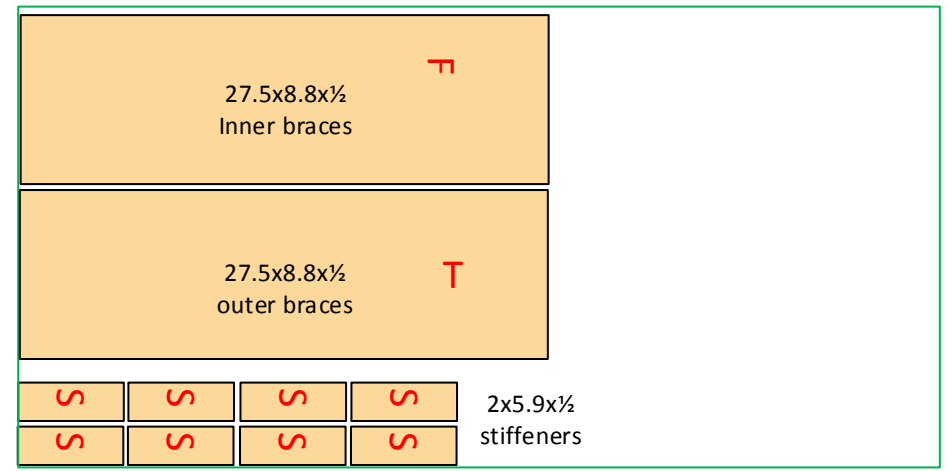
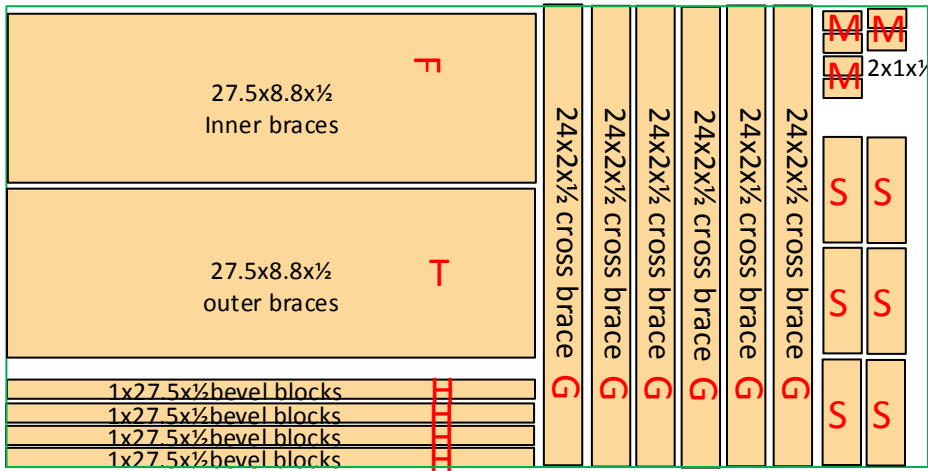
1/2" dress ply cutting plan (from 4'x2' quarter sheets). Shown for two speakers.



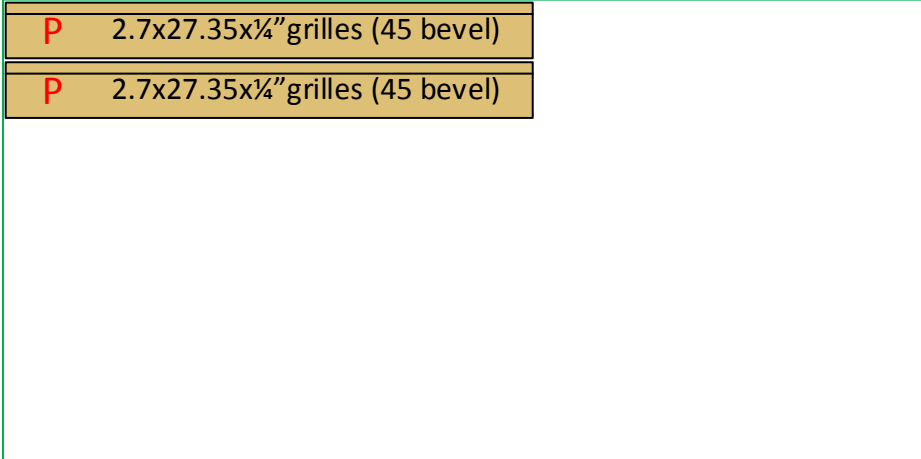
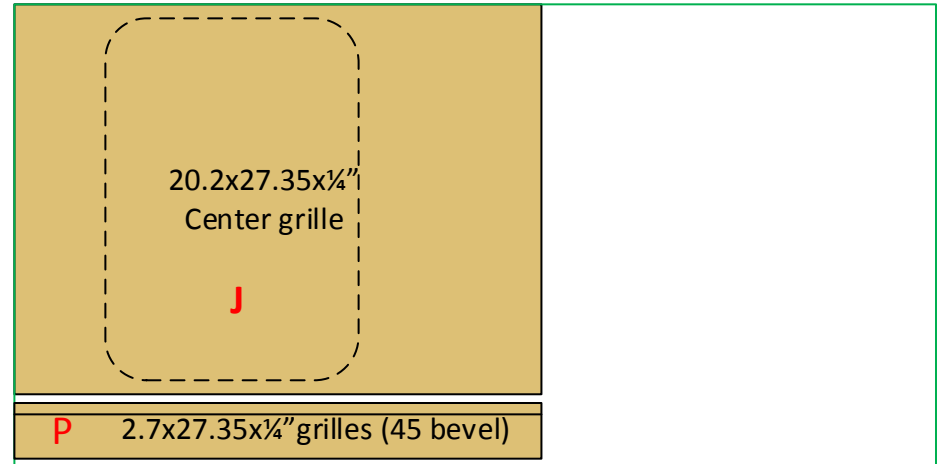
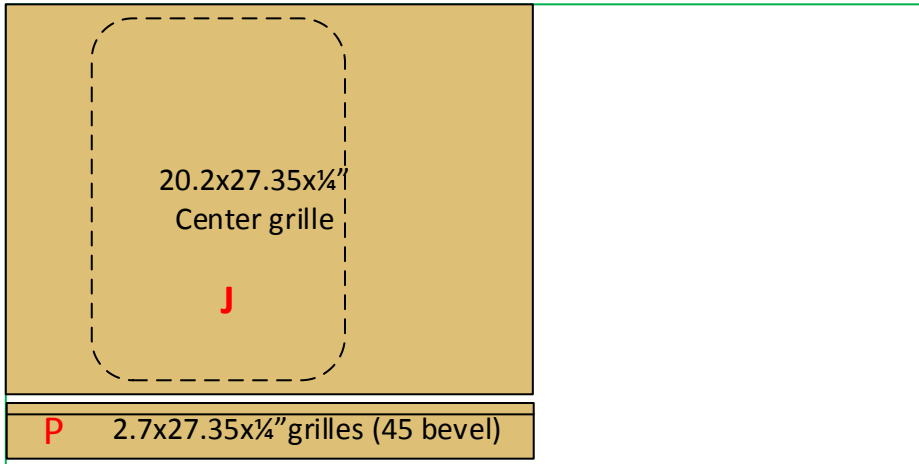
1/2" dress ply cutting plan (from 4'x2' quarter sheets). Shown for two speakers.



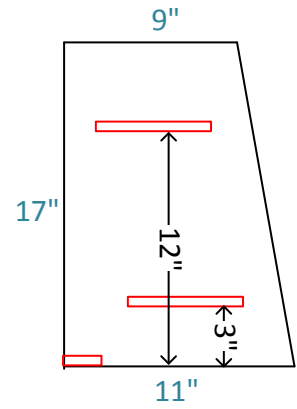
1/2" MDF or ply cutting plan (from 4'x2' quarter sheets). Shown for two speakers.



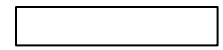
¼" ply cutting plan (from 4'x2' quarter sheets). Shown for two speakers.



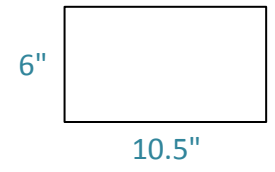
Cut opening in center grilles after tracing around printed waveguide, centered 10.1" from sides and 17.47" from bottom edge



Sides (2 per speaker)



Bottom brace (1 per speaker)



Shelves
(2 per speaker)



Shelf glue blocks
(4 per speaker)

Stands: Use $\frac{3}{4}$ " or $\frac{1}{2}$ " plywood,
veneer tape on exposed edges

Woofer magnet: $3.6''D \times 1.3''H = 13.23\text{cuin}$
Woofer cone: $5.4''D, 1.4''D, 1.0''H = 10.13\text{cuin}$

Woofers (2): 46.72cuin total

Mid magnet: $3.4''D \times 1.1''H = 10\text{cuin}$
Mid back: $5.5''D, 3.2''D, 1.1''H = 16.7\text{cuin}$

Mids (2): 53.4cuin total

CD: $4.7''D \times 1.9''H = 33\text{cuin}$

Horn: Mouth is $15.5'' \times 9.5''$; Throat is $2'' \times 1.5''$; Height is 6.5"

Horn Vol: 371.31cuin

Total Driver Set: 505 cubic inches

Box dims: $24'' \times 8.8'' \times 29'' = 6124\text{cuin}$

Minus Driver set: -505cuin

Minus corners: $0.5(2 \times 2) \times 29 \times 2 = -116\text{cuin}$

Minus vertical braces: $(27.5 \times 8.8 \times 0.5) \times 4 = -484\text{cuin}$

Minus stiffeners: $(2 \times 5.5 \times 0.5) \times 12 = -66\text{cuin}$

Minus crossover: -50cuin

Total Eff Cabinet Volume: 4903cuin = 2.8cubic feet

WinISD Beta predicts f_3 of 39Hz with box tuned to 46Hz

Ports are: Qty 3 of (6.1x1)

WinISD Beta says port lengths should be 5.56inches. Add ~20% for front compression --- length = 6.7"

BUT: the basic length is 8.675" already! (7.23" to WinISD... what does that do?) --> Box tunes to ~42Hz, **f_3 of about 37Hz → good**