

# Modified Mini Marty Subwoofer Build – Lyle Beckman

External cabinet dimensions (inches) – 41.5 H x 24 W x 23.5 D

MDF Thickness – 0.75 inch

The screenshot shows an Excel spreadsheet titled "Box Volume-Slot Port with cutlist file1.106-Lyle - Excel". The spreadsheet contains the following data:

Parameter	Value
Wall Thickness	0.75
External Box Height	41.5
External Box Width	24
External Box Depth	23.5
Port Height	2.75 X 21.00
Port Length	45
Bracing Width	1.5
Driver Volume	0.25

Volume Calculations:

- 11.102 Gross Internal Volume
- 0.250 Driver Volume
- 1.850 Volume of Port Assembly
- 0.204 Bracing Volume
- 8.797 Net Volume**

The 3D diagram labels the following dimensions: BOX DEPTH, BOX WIDTH, BOX HEIGHT, and PORT. A "PARTS LIST" table is provided:

Part	Quantity	Length	Width
a Top/Bottom	(2 Pieces)	22.50	by 23.50
b Sides	(2 Pieces)	23.50	by 41.50
c Back	(1 Piece)	22.50	by 40.00
d Baffle	(2 Pieces)	22.50	by 36.50
e Port Bottom	(1 Piece)	22.50	by 20.00
f Port Back	(1 Piece)	22.50	by 21.50
g Bottom Rails	(2 Pieces)	2.75	by 20.00
h Back Rails	(2 Pieces)	2.75	by 25.00
i Brace, depth 1	(2 Pieces)	1.50	by 21.25
j Brace, depth 2	(2 Pieces)	1.50	by 17.75
k Brace, width	(4 Pieces)	1.50	by 22.50
l Brace, height 1	(2 Pieces)	1.50	by 36.50
m Brace, height 2	(2 Pieces)	1.50	by 36.50

Export Results To **1 Preliminary Cutlist.txt**

3D models are shown for "Braces, height", "Braces, width and depth", and "Port rails".

Volume – 8.79 cuft

Vents – 2.75 inch x 7.0 inch

Length – 47.9 – 2.75 (one port height) = 45.15 – use 45 exact (inches)

WinISD – Green line is Std Mini Marty Sub with 19 Hz tune

Red line is Lyle modified Mini Marty Sub with 18.5 Hz tune

Port Air velocity – max 20.3 m/s at 15.3 Hz

