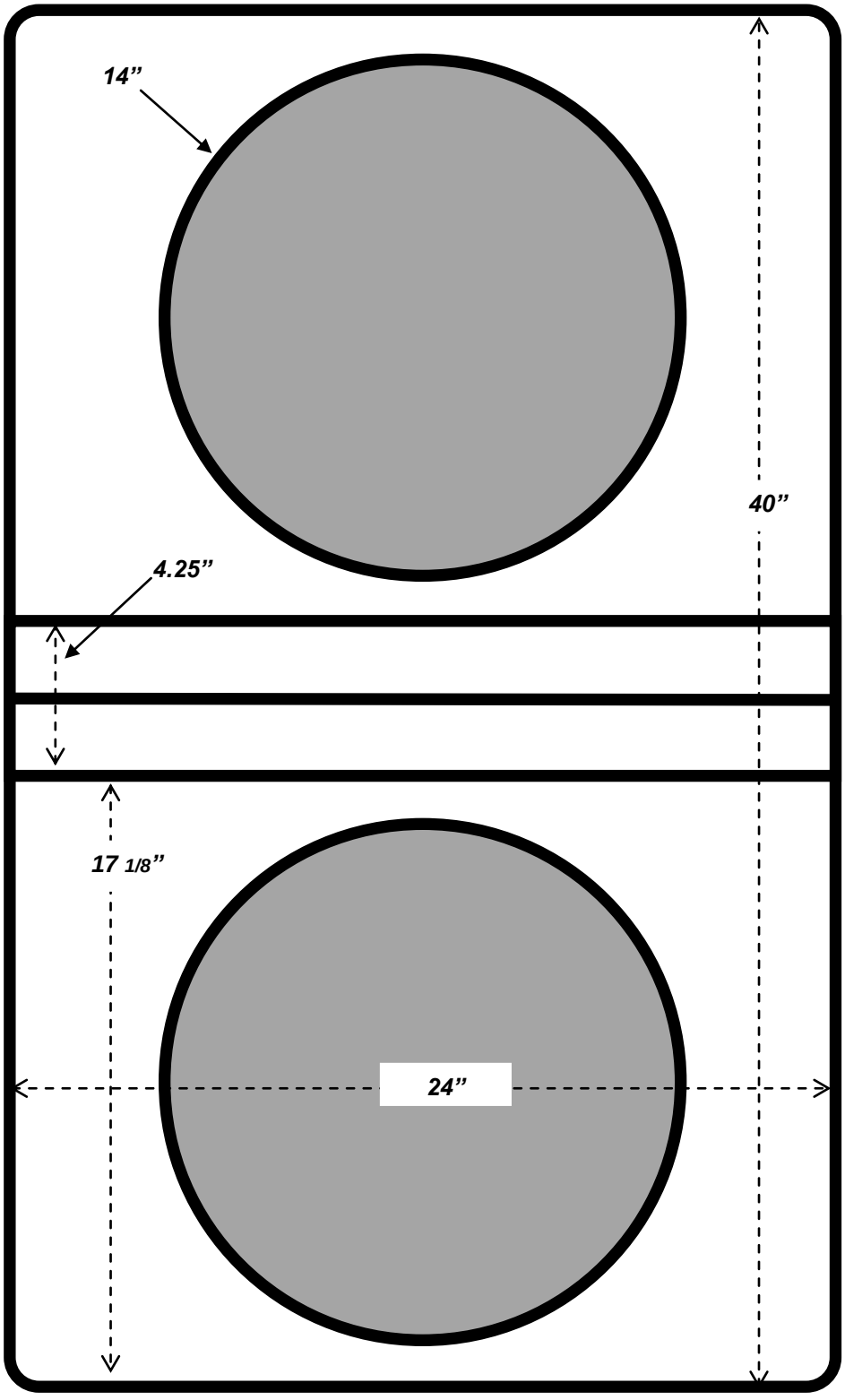
Sunn 200S 2x15 Bass Cab Reproduction

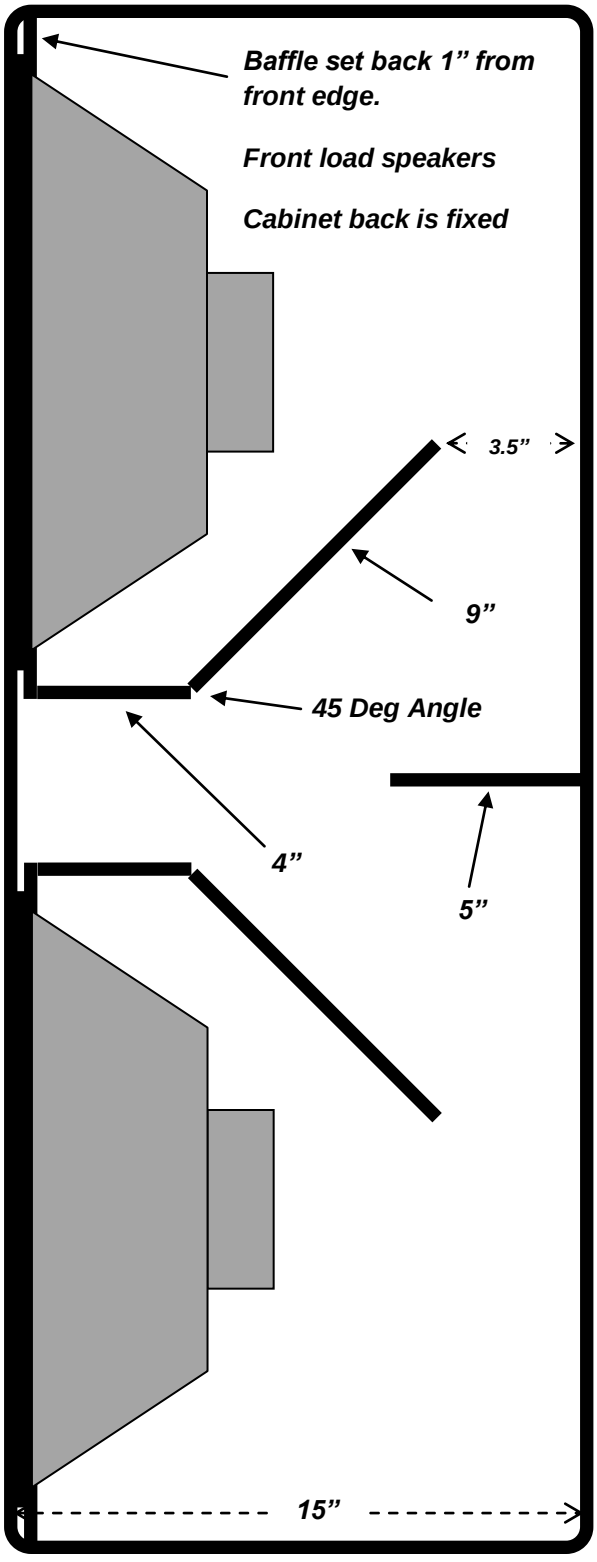
This design is intended to reproduce a Sunn 200s 2x15 folded horn bass cabinet, upgraded with additional handles, wheels and skid rails for easier handling.

Speakers are 15" Eminence Legend CB158 wired in parallel to achieve 4 ohm impedance. The back has two 1x¾ UHMW polyethylene skid rails on the back plus a polycarbonate kick plate at the bottom, not shown on the drawing below for clarity. Damping material is stapled to the interior sides of the enclosure.

Material is void free ¾" A-B exterior plywood. Adhesive is PL Premium moisture cured polyurethane.

Exterior coating is Herculiner truck bed liner rubberized polyurethane.





Parts List (from www.partsexpress.com)

	Item	Qty.	Price	Total	Remove
	**Penn-Elcom F1686 Rubber Cabinet Foot 1.57" Dia. x 0.61" H** Part Number: 260-770 **In Stock**	8	$0.98	$7.84	☐
	**Penn-Elcom W2001 2" Recessed Caster Pair** Part Number: 262-282 **In Stock**	1	$21.32	$21.32	☐
	**Eminence Legend CB15 15" Bass Guitar Speaker** Part Number: 290-497 **In Stock**	2	$119.97	$239.94	☐
	**Dayton Audio MH110 Right Angle Steel Bar Handle** Part Number: 262-820 **In Stock**	2	$8.63	$17.26	☐
	**Dayton Audio MH111 Steel Bar Handle** Part Number: 262-821 **In Stock**	4	$5.80	$23.20	☐
	**Peavey 1/4" Panel Mount Phone Jack for 3/4" Panel Thickness** Part Number: 248-8572 **In Stock**	1	$5.58	$5.58	☐
	**Penn-Elcom C1835/50K Wrap-Around Cabinet Corner** Part Number: 269-224 **In Stock**	8	$0.48	$3.84	☐

Specification

Nominal Basket Diameter	15", 381mm
Nominal Impedance*	8 ohms
Power Rating**	
Watts	300W
Music Program	600W
Resonance	34Hz
Usable Frequency Range***	47Hz-3kHz
Sensitivity	98
Magnet Weight	80 oz
Gap Height	0.375", 9.53mm
Voice Coil Diameter	2.5", 63.5mm

Thiele & Small Parameters

Resonant Frequency (fs)	34Hz
DC Resistance (Re)	6.15
Coil Inductance (Le)	0.33mH
Mechanical Q (Qms)	5.9
Electromagnetic Q (Qes)	0.36
Total Q (Qts)	0.34
Compliance Equivalent Volume (Vas)	336 ltr/11.9 cu. ft.
Peak Diaphragm Displacement Volume (Vd)	411cc
Mechanical Compliance of Suspension (Cms)	0.31mm/N
BL Product (BL)	16.0 T-M
Diaphragm Mass inc. Airload (Mms)	70 grams
Efficiency Bandwidth Product (EBP)	95
Maximum Linear Excursion (Xmax)	4.8mm
Surface Area of Cone (Sd)	856.3cm^2
Maximum Mechanical Limit (Xlim)	9.5mm

Mounting Information

Recommended Enclosure Volume	
Sealed	54-65 ltr/1.9-2.3 cu. ft.
Vented	54-159 ltr/1.9-5.6 cu. ft.
Overall Diameter	15.21", 386.4mm
Baffle Hole Diameter	14.0", 355.3mm
Front Sealing Gasket	Fitted as Standard
Rear Sealing Gasket	Fitted as Standard
Mounting Holes Diameter	0.28", 7.1mm
Mounting Holes B.C.D.	14.56", 369.9mm
Depth	6.5", 165mm
Net Weight	17.3 lbs, 7.9 kg
Shipping Weight	19.4 lbs, 8.8 kg

Materials of Construction

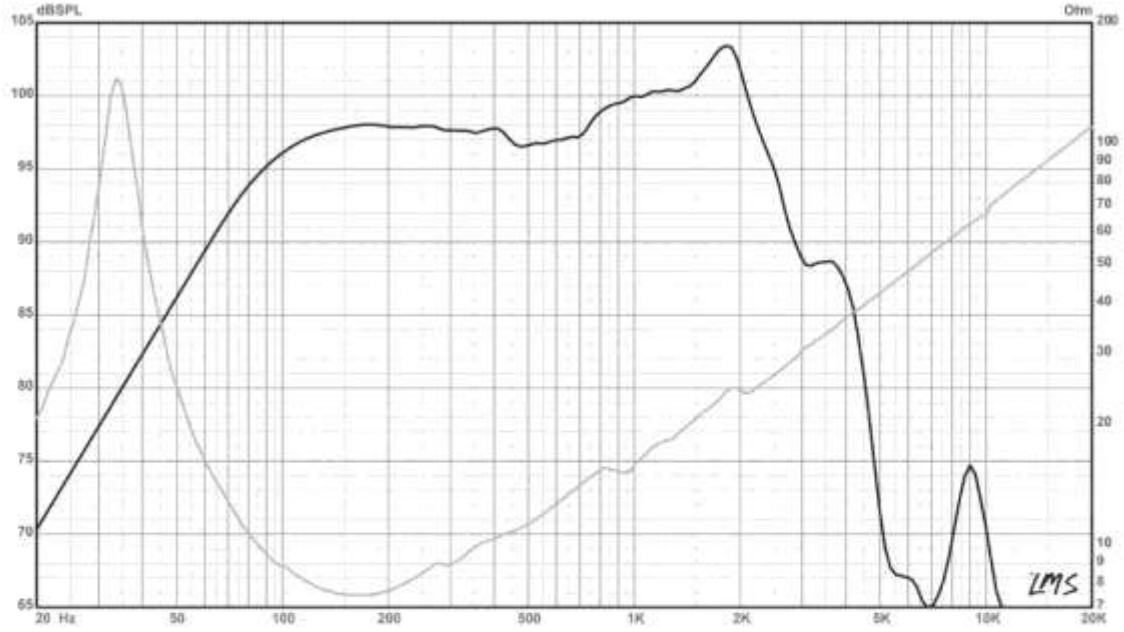
Coil Construction	Copper
Coil	Polyimide
Magnet Composition	Ferrite
Core Details	Vented And Extended
Basket Materials	Die-Cast Aluminum
Cone Composition	Paper
Cone Edge Composition	Cloth
Dust Cap Composition	Solid Composition Paper

EMINENCE®

The Art and Science of Sound

LEGEND CB15

Recommended for professional bass guitar applications in a sealed or vented enclosure.

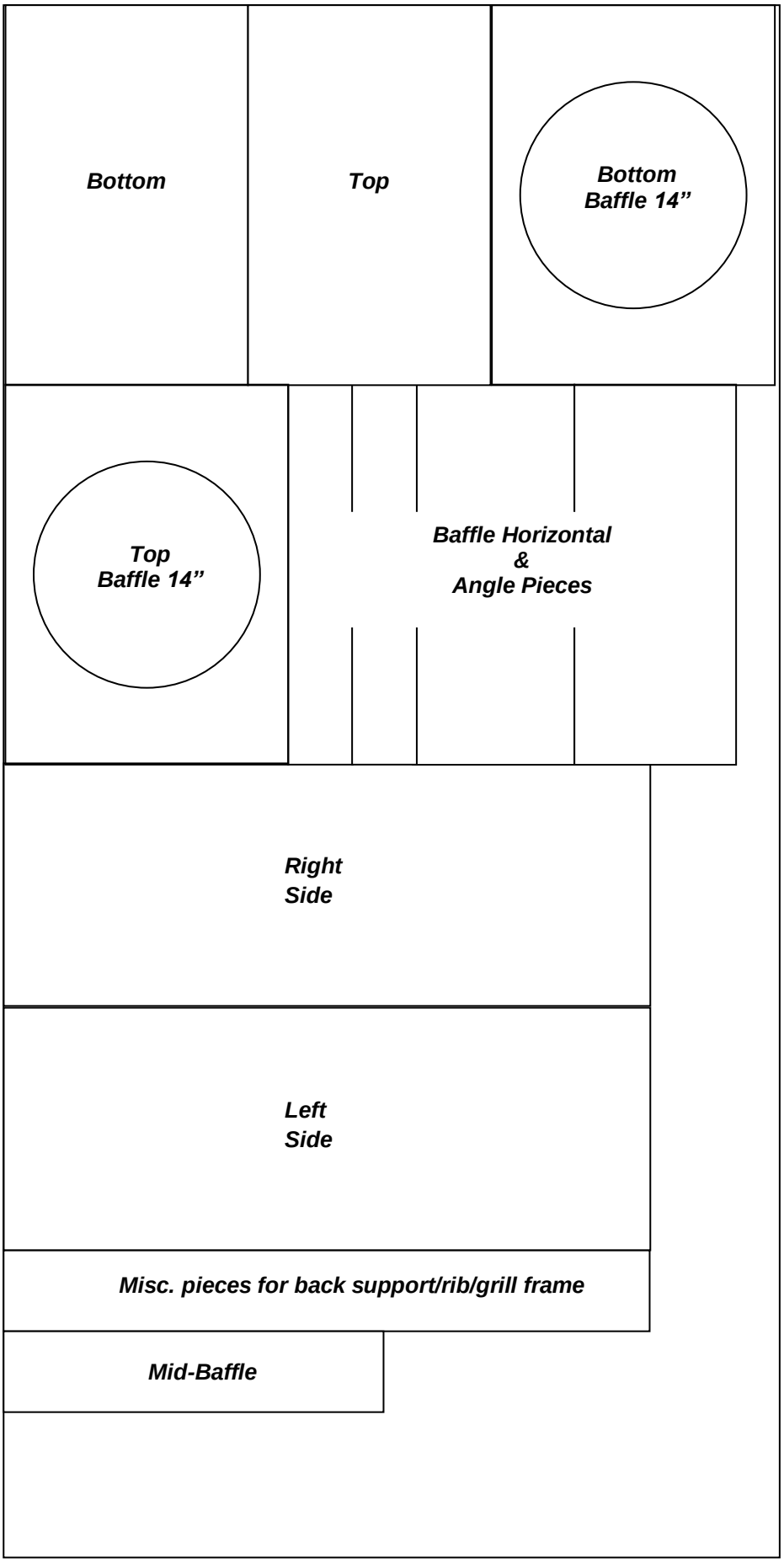


* Please inquire about alternative impedances.

** Multiple units exceed published rating evaluated under EIA 426A noise source and test standard while in a free-air, nontemperature-controlled environment.

*** The average output across the usable frequency range when applying 1W/1m into the nominal impedance. Ie: 2.83 V/8 ohms, 4 V/16 ohms.

Eminence response curves are measured under the following conditions: All speakers are tested at 1W/1m using a variety of test set-ups for the appropriate impedance | LMS using 0.25" supplied microphone (software calibrated) mounted 1m from wall/baffle | 2 ft. X 2 ft. baffle is built into the wall with the speaker mounted flush against a steel r ing f or mi nimumdiaction | Hafler P1500 Trans-Nova amplifier | 2700 cu.ft. chamber with fiberglass on all six surfaces (three with custom-made wedges)


Bottom
Top
Bottom
Baffle 14”
Top
Baffle 14”
Baffle Horizontal
&
Angle Pieces
Right
Side
Left
Side
Misc. pieces for back support/rib/grill frame
Mid-Baffle

Back

P. C. Fithian
April 2011