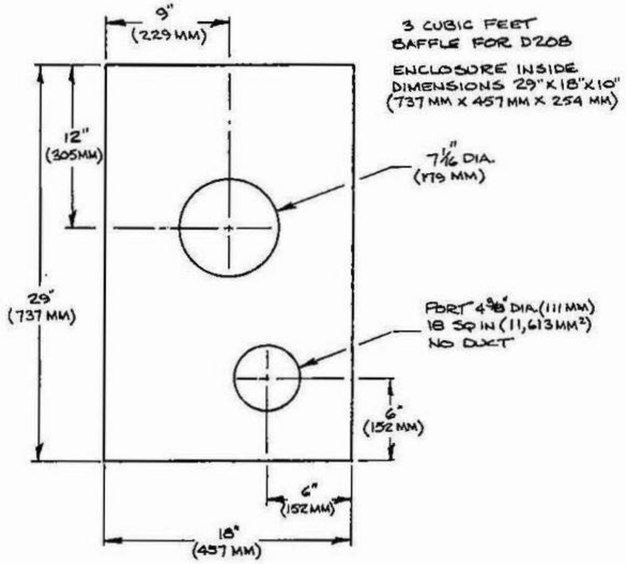
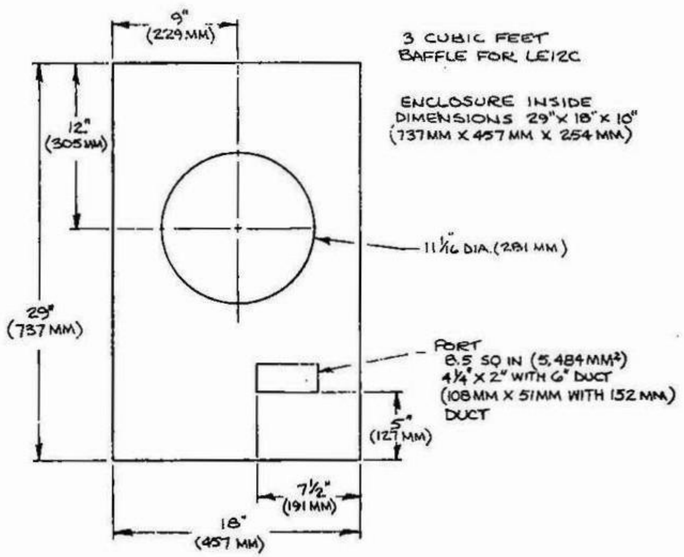


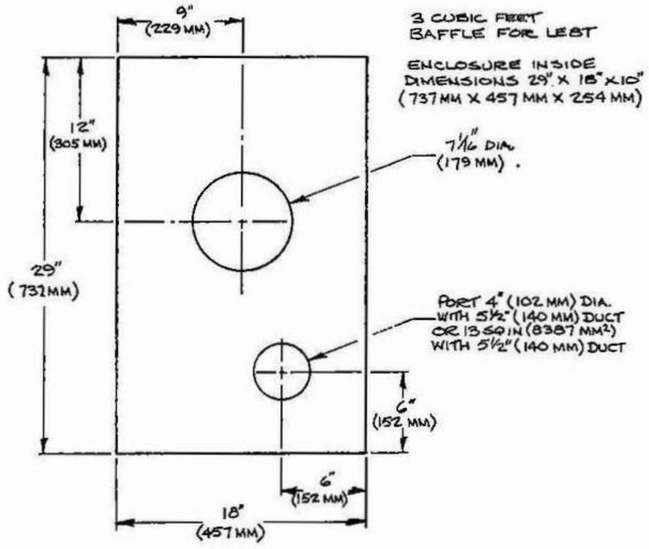
3 CUBIC FEET
BAFFLE FOR D208

ENCLOSURE INSIDE
DIMENSIONS 29" X 18" X 10"
(737 MM X 457 MM X 254 MM)



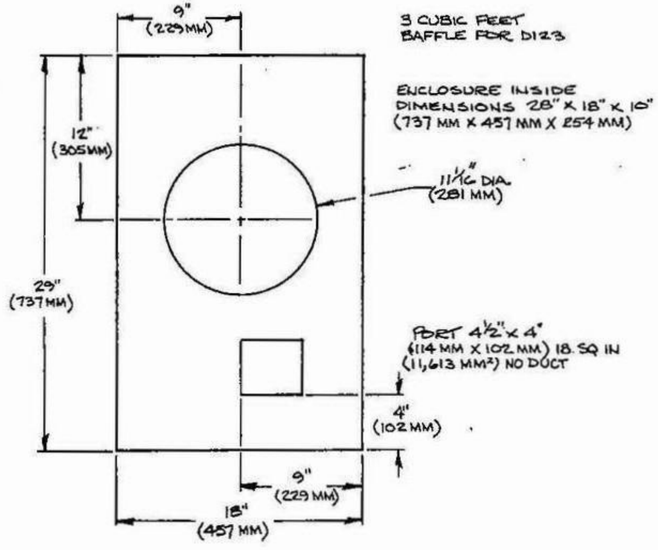
3 CUBIC FEET
BAFFLE FOR LE12C

ENCLOSURE INSIDE
DIMENSIONS 29" X 18" X 10"
(737MM X 457 MM X 254 MM)



3 CUBIC FEET
BAFFLE FOR LE8T

ENCLOSURE INSIDE
DIMENSIONS 29" X 18" X 10"
(737 MM X 457 MM X 254 MM)



3 CUBIC FEET
BAFFLE FOR D123

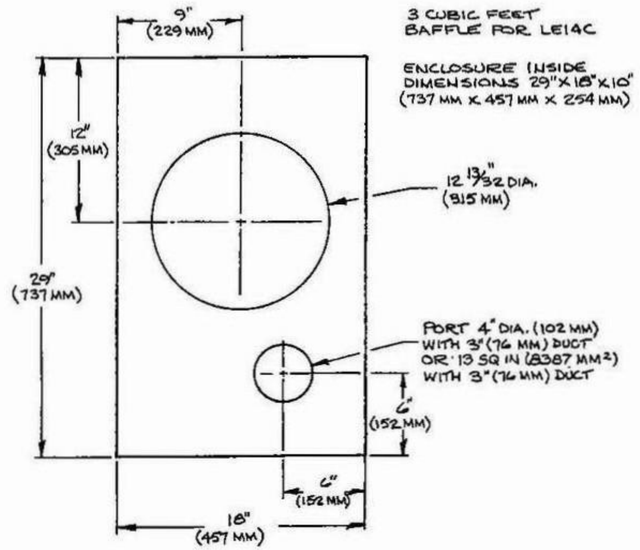
ENCLOSURE INSIDE
DIMENSIONS 28" X 18" X 10"
(737 MM X 457 MM X 254 MM)

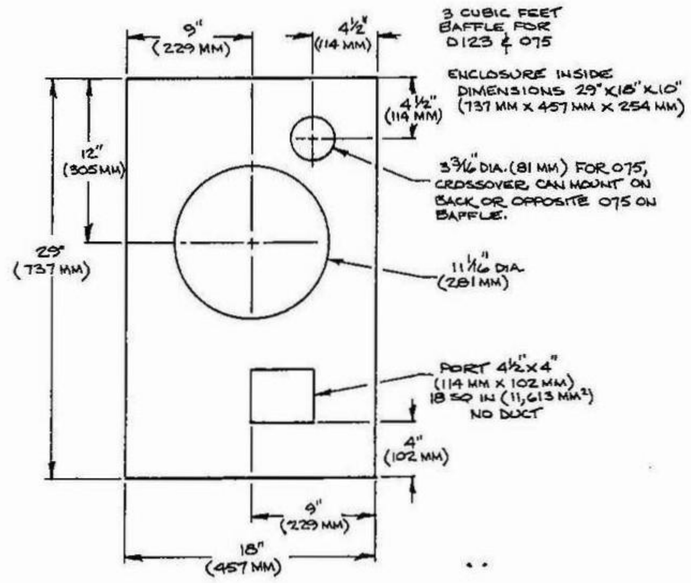
JBL JAMES B. LANSING, INC.
Northridge, California 91329

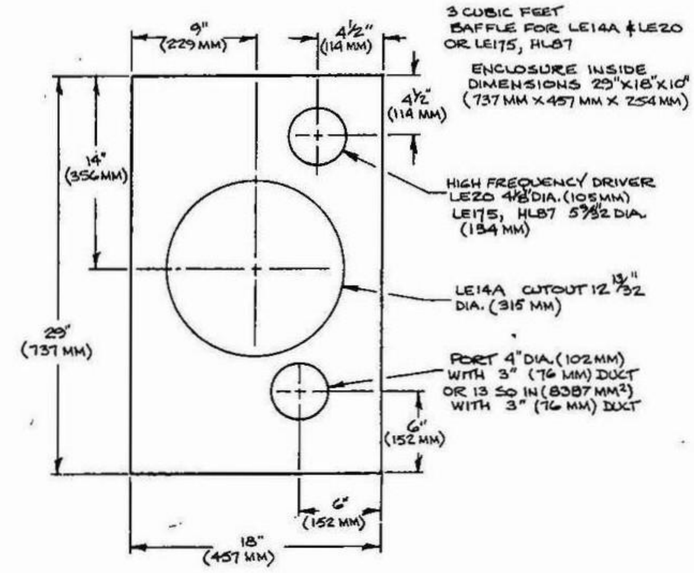
TITLE:
3 CUBIC FEET, BAFFLE BOARDS FOR
HOME HIGH FIDELITY LOUDSPEAKER SYSTEMS

SHEET 1 OF 2

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND MILLIMETERS







JBL JAMES B. LANSING, INC.
Northridge, California 91329

TITLE:
3 CUBIC FEET, BAFFLE BOARDS FOR
HOME HIGH FIDELITY LOUDSPEAKER SYSTEMS

SHEET 2 OF 2

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND MILLIMETERS

NOTES:—

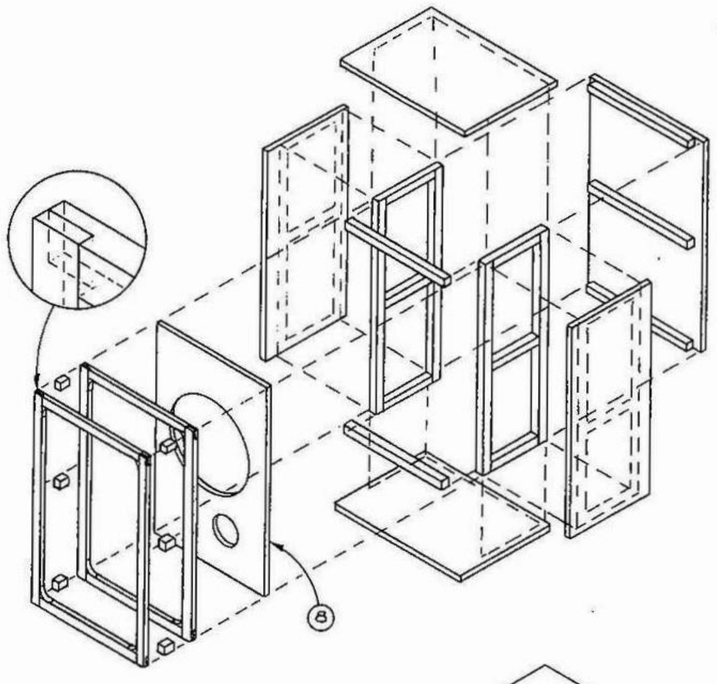
—ALL PARTS SHOULD BE GLUED AND SCREWED. SCREWS SHOULD BE APPROX. EVERY 5 INS.

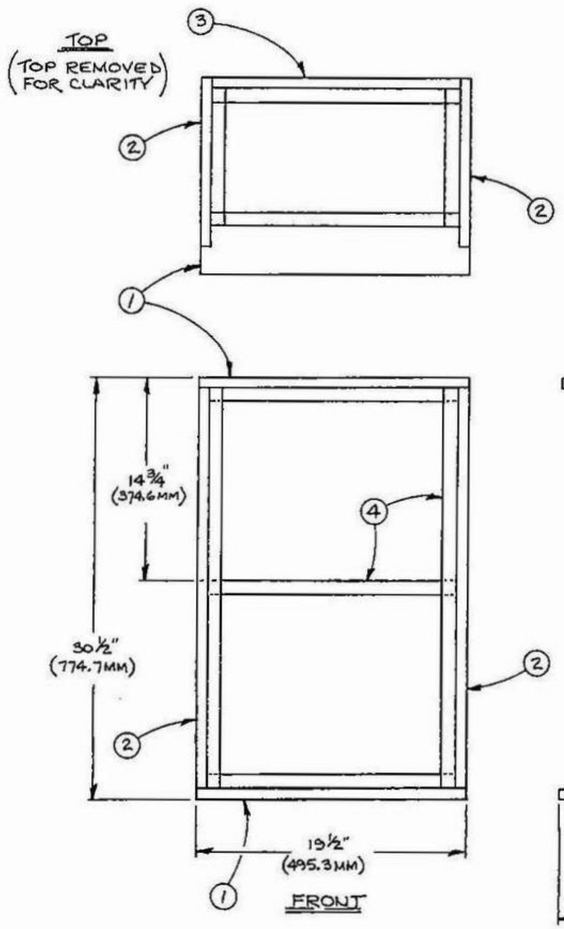
—A SOUND ABSORBING MATERIAL, SUCH AS FIBERGLASS SHOULD BE GLUED OR STAPLED SO THAT IT COVERS THE INSIDE OF THE ENCLOSURE. THE MATERIAL SHOULD BE APPROX. 1" THICK AND SHOULD NOT BLOCK ANY PORT OPENINGS.

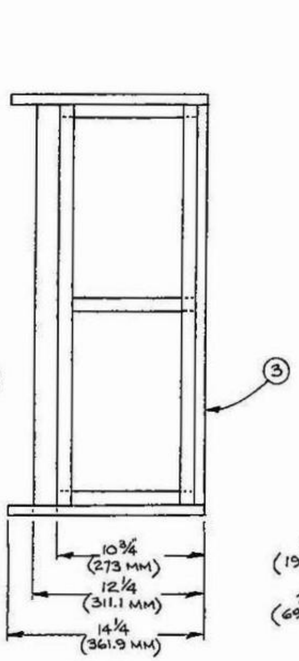
—BAFFLE WILL INSET IN FRONT. GLUE AND SCREW IN PLACE.

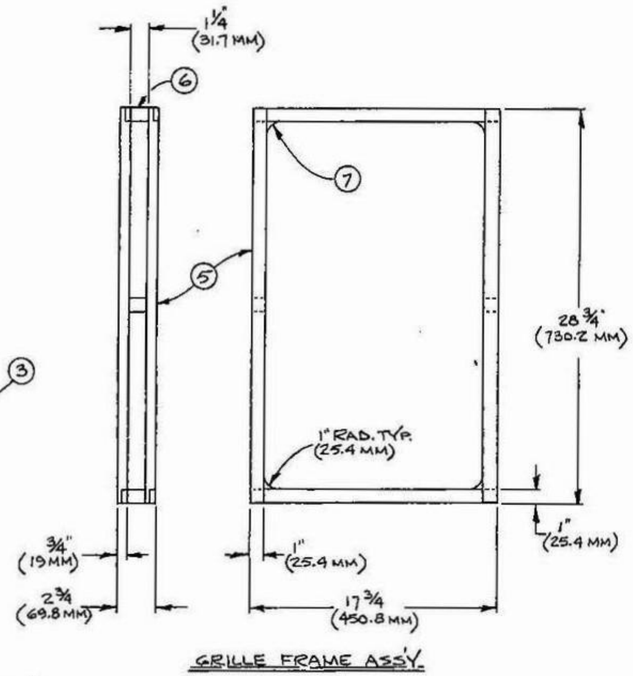
—ALL ENCLOSURE PARTS ARE CUT FROM ¾" (19.0MM) VOID-FREE PLYWOOD, OR HIGH DENSITY PARTICLE BOARD (CHIPBOARD).

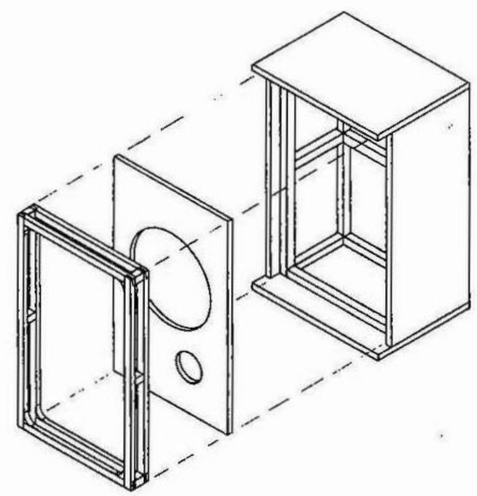
ITEM		SIZE
(1)	TOP & BOTTOM	19½" × 14¼" (495.3 × 361.9 MM)
(2)	SIDES	29" × 12¼" (736.6 × 311.1 MM)
(3)	BACK	29" × 18" (736.6 × 457.2 MM)
(4)	CLEATS	1" × 1" NET (25.4 × 25.4 MM) PINE THROUGHOUT
(5)	GRILLE FRAME	¾" × 1" (19 × 25.4 MM) PINE
(6)	GRILLE SPACERS	1" × 1¼" (25.4 × 31.7 MM) PINE
(7)	GUSSETS	¾" × 1" × 1" (19 × 25.4 × 25.4 MM) PINE
(8)	BAFFLE BOARD	¾" × 18" × 29 (19 × 457.2 × 736.6 MM)











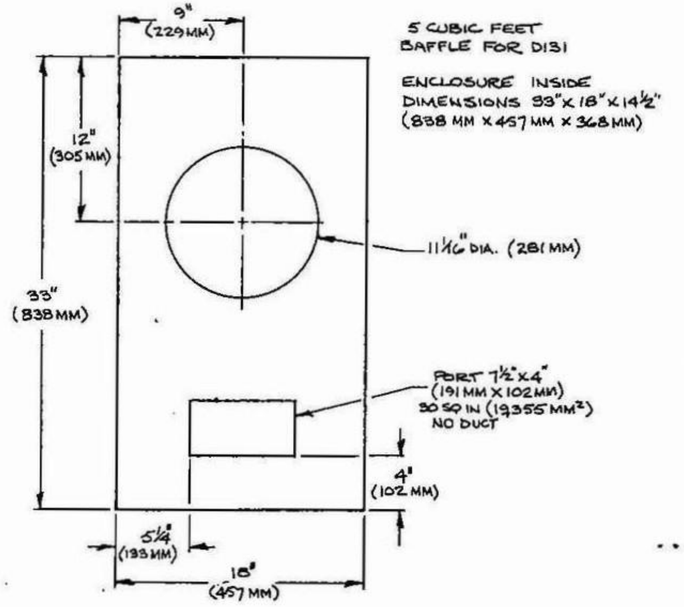
DRAWN:	PG
CHECK:	
DESIGN:	dsj
ENGINEER:	
APPROVED:	

JBL JAMES B. LANSING SOUND, INC.
Los Angeles, California 90039

TITLE:
3 CUBIC FEET, ENCLOSURE FOR
HOME HIGH FIDELITY LOUDSPEAKER SYSTEMS

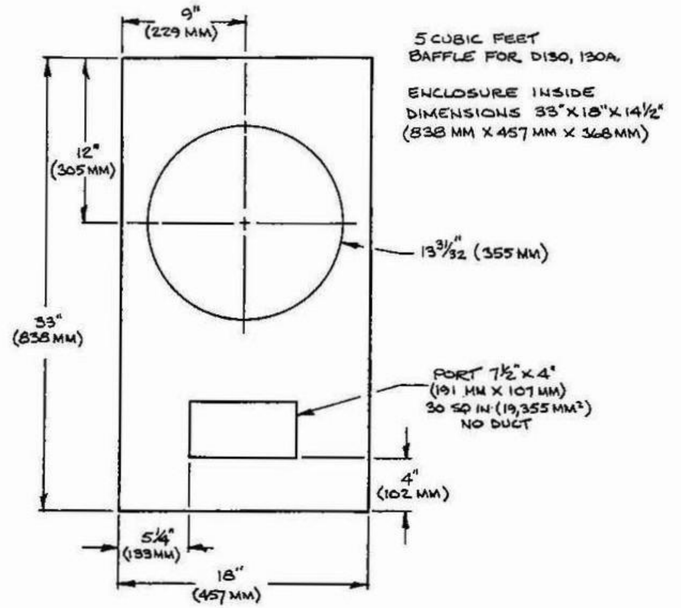
SHEET 1 OF 1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND MILLIMETERS



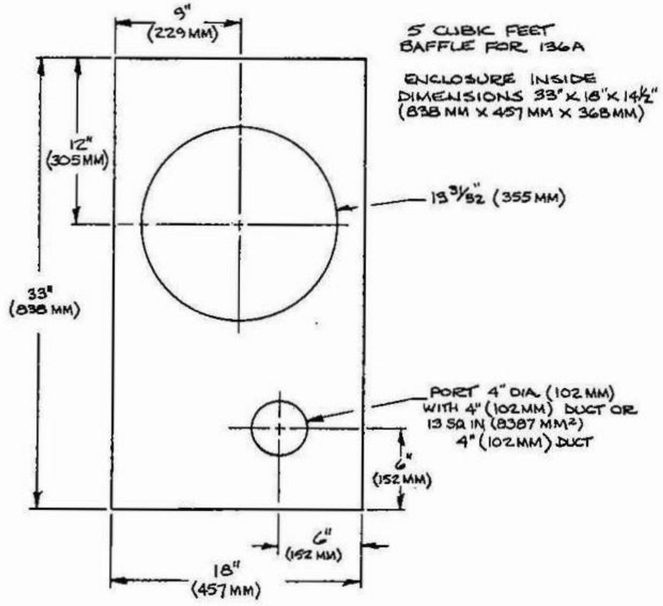
5 CUBIC FEET
BAFFLE FOR D131

ENCLOSURE INSIDE
DIMENSIONS 33"X 18"X 14½"
(838 MM X 457 MM X 368 MM)



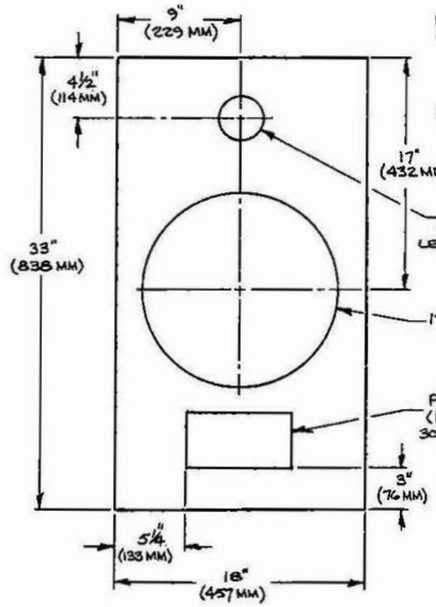
5 CUBIC FEET
BAFFLE FOR D130, 130A.

ENCLOSURE INSIDE
DIMENSIONS 33"X 18"X 14½"
(838 MM X 457 MM X 368 MM)



5 CUBIC FEET
BAFFLE FOR 136A

ENCLOSURE INSIDE
DIMENSIONS 33"X 18"X 14½"
(838 MM X 457 MM X 368 MM)



5 CUBIC FEET
BAFFLE FOR D130 & 075
OR 130A & LE175, HL87

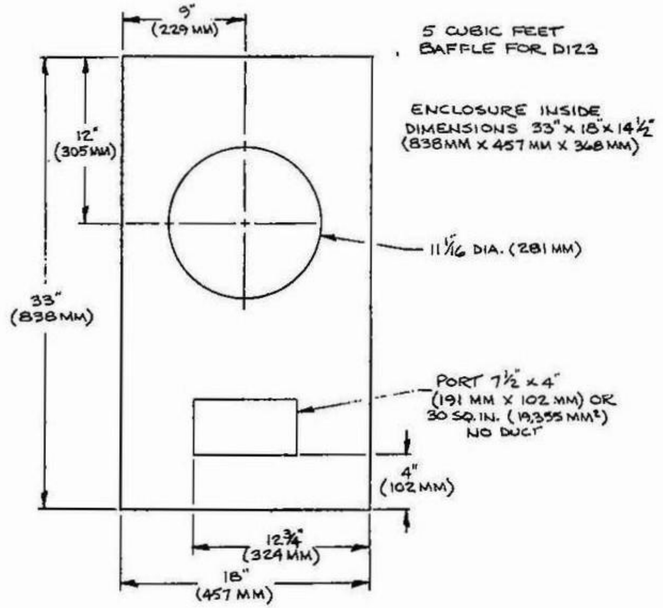
ENCLOSURE INSIDE
DIMENSIONS 33"X 18"X 14½"
(838 MM X 457 MM X 368 MM)

JBL JAMES B. LANSING, INC.
Northridge, California 91329

TITLE:
5 CUBIC FEET, BAFFLE BOARDS FOR
HOME HIGH FIDELITY LOUDSPEAKER SYSTEMS

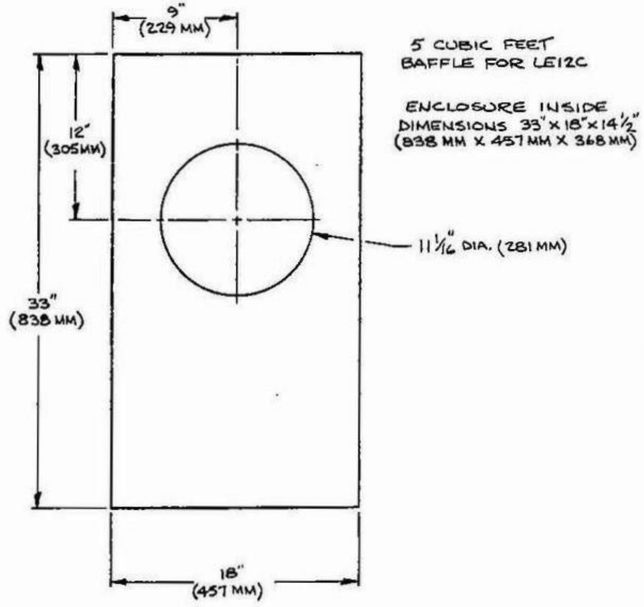
SHEET 1 OF 2

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND MILLIMETERS



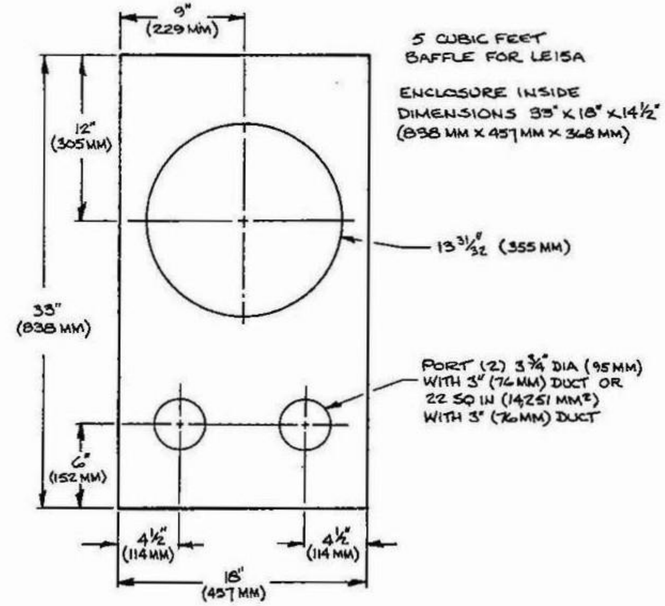
5 CUBIC FEET
BAFFLE FOR DI23

ENCLOSURE INSIDE
DIMENSIONS 33" x 18" x 14½"
(838 MM x 457 MM x 368 MM)



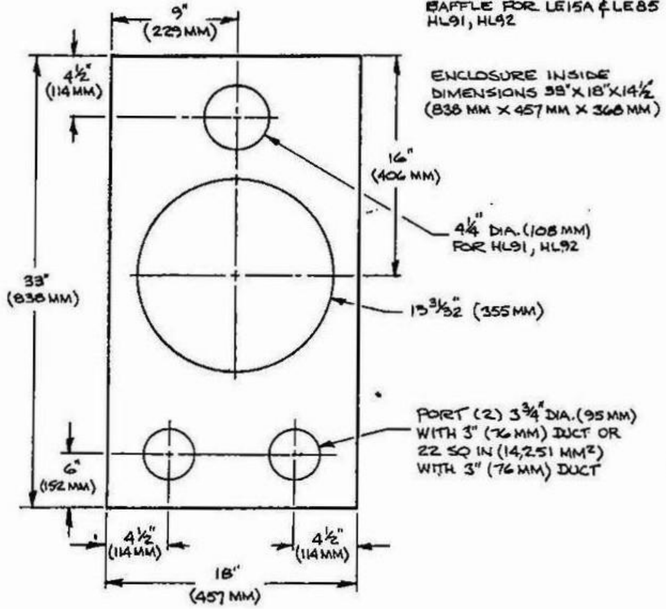
5 CUBIC FEET
BAFFLE FOR LE12C

ENCLOSURE INSIDE
DIMENSIONS 33" x 18" x 14½"
(838 MM x 457 MM x 368 MM)



5 CUBIC FEET
BAFFLE FOR LE15A

ENCLOSURE INSIDE
DIMENSIONS 33" x 18" x 14½"
(838 MM x 457 MM x 368 MM)



5 CUBIC FEET
BAFFLE FOR LE15A & LE85
HL91, HL92

ENCLOSURE INSIDE
DIMENSIONS 33" x 18" x 14½"
(838 MM x 457 MM x 368 MM)

JBL JAMES B. LANSING, INC.
Northridge, California 91329

TITLE: 5 CUBIC FEET, BAFFLE BOARDS FOR HOME HIGH FIDELITY LOUDSPEAKER SYSTEMS

SHEET 2 OF 2

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND MILLIMETERS

NOTES:—

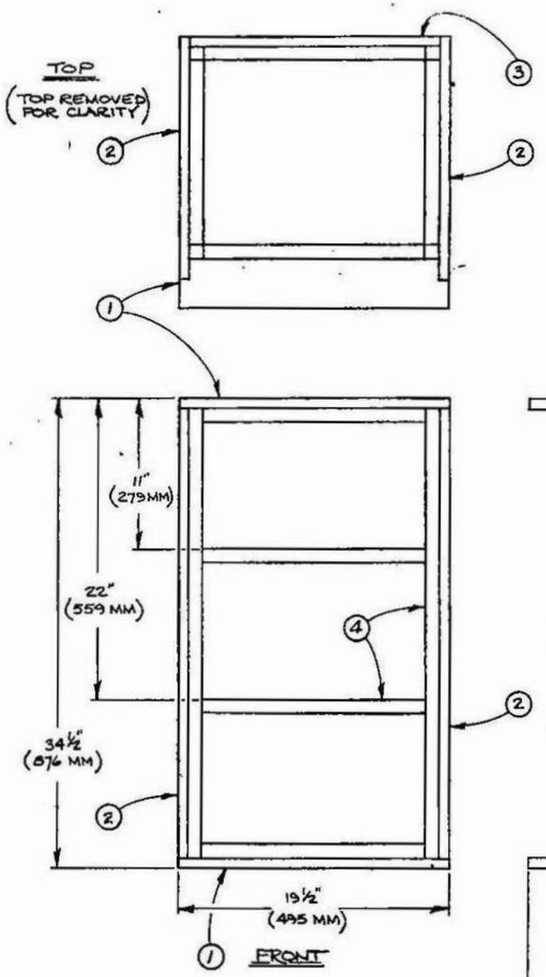
—ALL PARTS SHOULD BE GLUED AND SCREWED. SCREWS SHOULD BE APPROX. EVERY 5 INS. (127 MM)

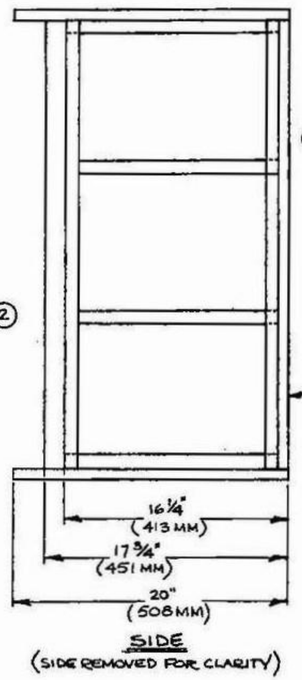
—A SOUND ABSORBING MATERIAL, SUCH AS FIBERGLASS SHOULD BE GLUED OR STAPLED SO THAT IT COVERS THE INSIDE OF THE ENCLOSURE. THE MATERIAL SHOULD BE APPROX. 1" (25 MM) THICK AND SHOULD NOT BLOCK ANY PORT OPENINGS.

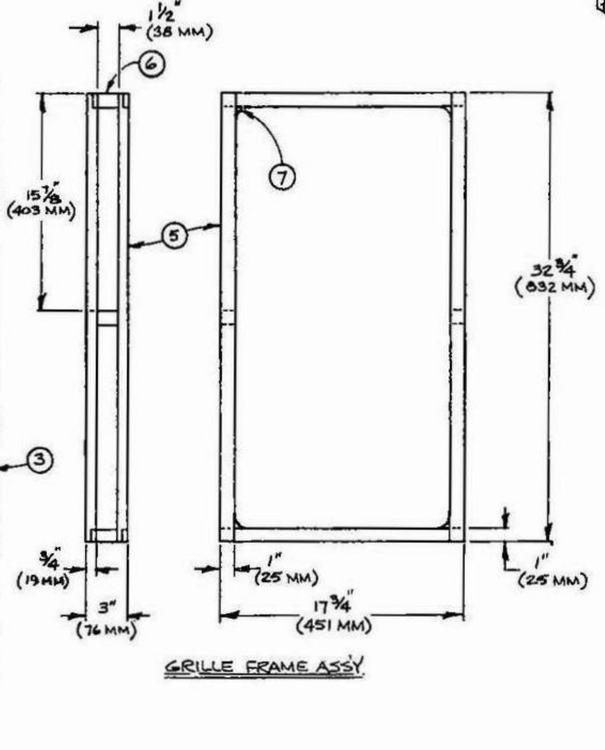
—BAFFLE WILL INSET IN FRONT. GLUE AND SCREW IN PLACE.

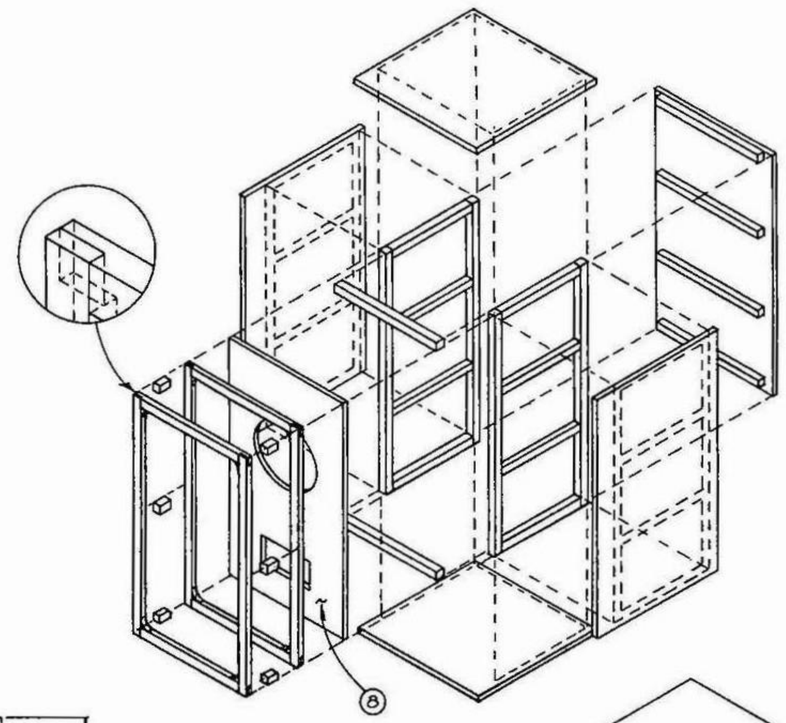
—ALL ENCLOSURE PARTS ARE CUT FROM ¾" (19 MM) VOID-FREE PLYWOOD, OR HIGH DENSITY PARTICLE BOARD (CHIPBOARD).

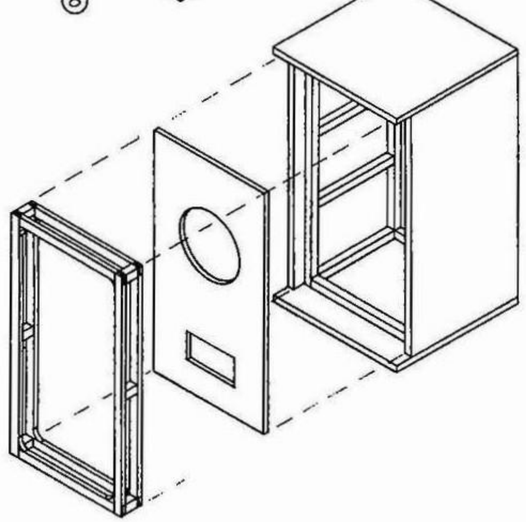
ITEM		SIZE
①	TOP & BOTTOM	19½" x 20" (495 x 508 MM)
②	SIDES	33" x 17¾" (838 x 450 MM)
③	BACK	33" x 18" (838 x 457 MM)
④	CLEATS	1" x 1" NET (25 x 25 MM) PINE
⑤	GRILLE FRAME	¾" x 1" (19 x 25 MM) PINE
⑥	GRILLE SPACERS	1" x 1½" (25 x 38 MM) PINE
⑦	GUSSETS	¾" x 1" x 1" (19 x 25 x 25 MM) PINE
⑧	BAFFLE BOARD	¾" x 18" x 33" (19 x 457 x 838 MM)









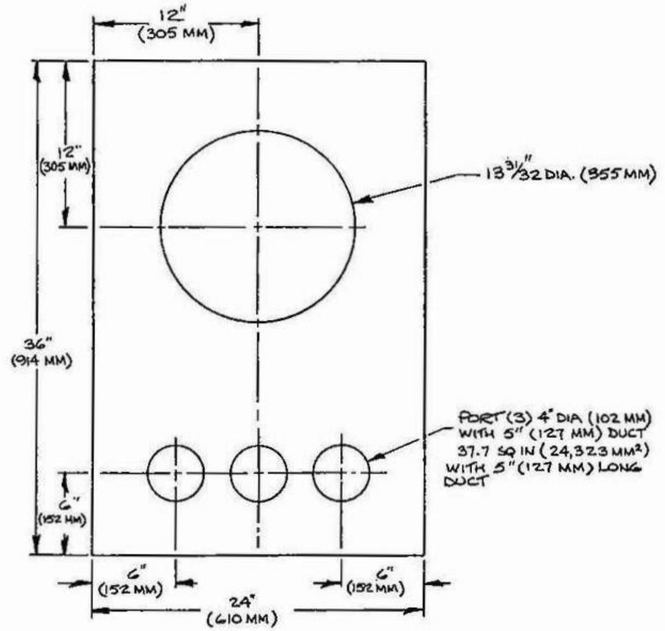


JBL JAMES B. LANSING, INC.
Northridge, California 91329

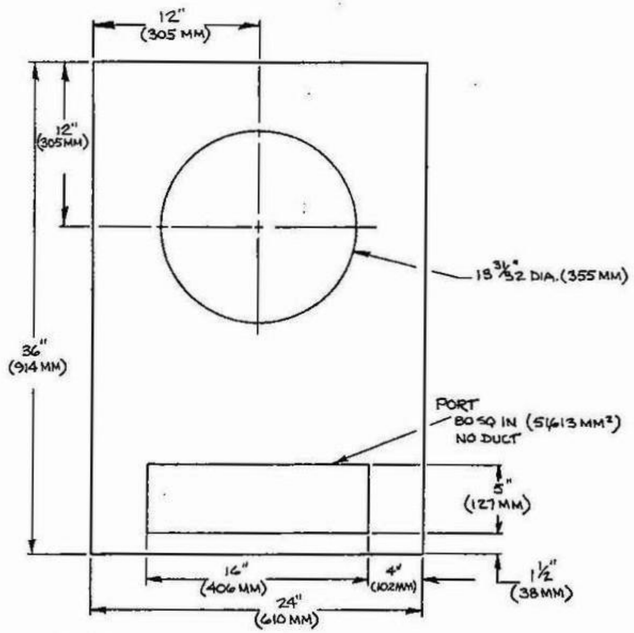
TITLE:
5 CUBIC FEET, ENCLOSURE FOR HOME HIGH FIDELITY LOUDSPEAKER SYSTEMS

SHEET 1 OF 1

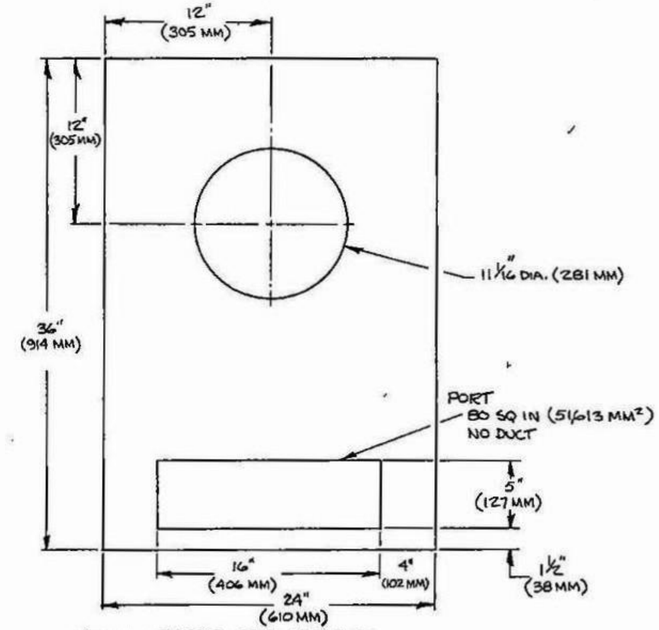
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND MILLIMETERS



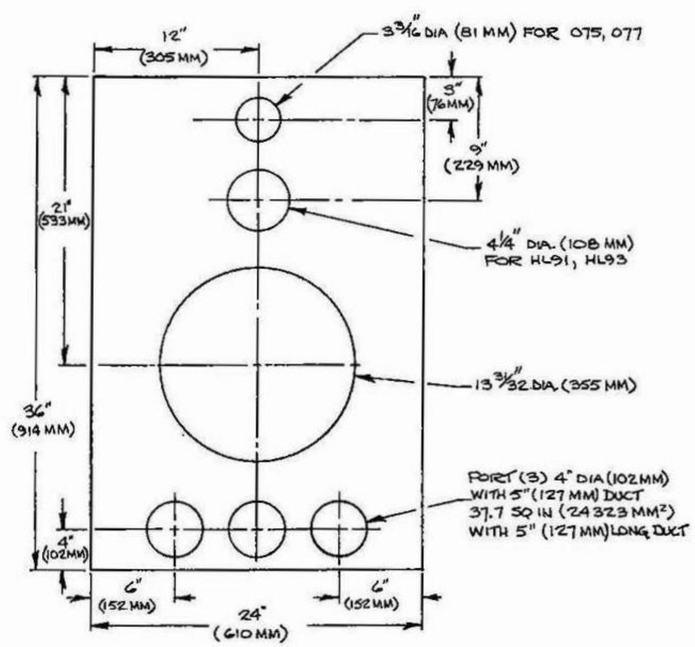
8 CUBIC FEET, BAFFLE FOR LE15A
ENCLOSURE INSIDE DIMENSIONS 36"X 24"X16"
(914 MM X 610 MM X 406 MM)



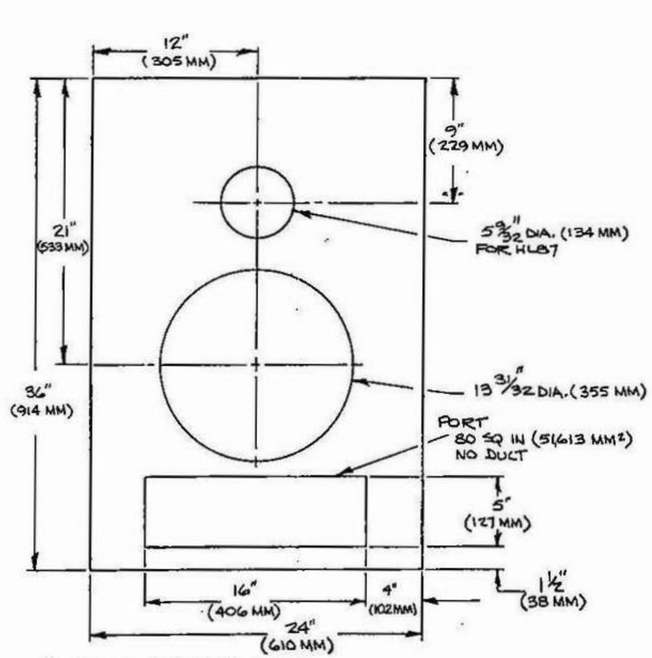
8 CUBIC FEET, BAFFLE FOR D130, 130A
ENCLOSURE INSIDE DIMENSIONS 36"X24"X16"
(914 MM X 610 MM X 406 MM)



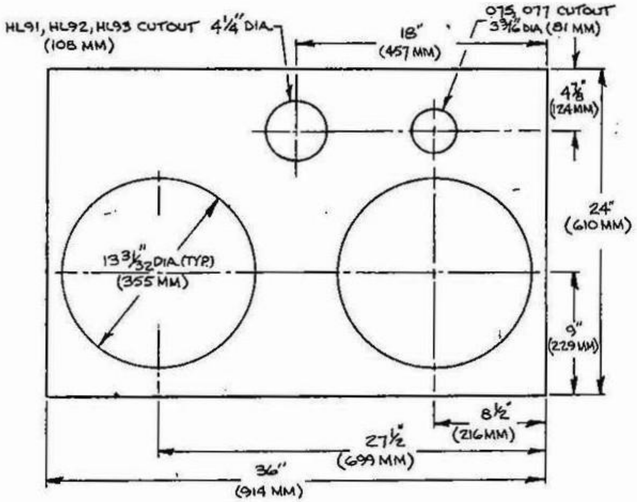
8 CUBIC FEET, BAFFLE FOR D131
ENCLOSURE INSIDE DIMENSIONS 36"X 24"X16"
(914 MM X 610 MM X 406 MM)



8 CUBIC FEET, BAFFLE FOR
LE15A & LE85, HL91, HL92; OR 375, HL93 & 075 OR 077.
ENCLOSURE INSIDE DIMENSIONS 36"X24"X16"
(914 MM X 610 MM X 406 MM)



8 CUBIC FEET, BAFFLE FOR
130A & LE175, HL87
ENCLOSURE INSIDE DIMENSIONS 36"X24"X16"
(914 MM X 610 MM X 406 MM)



8 CUBIC FEET, BAFFLE FOR LE15A, PR15 OR 136A, PR15C WITH
MIDRANGE & HIGH FREQUENCY COMPONENTS
ENCLOSURE INSIDE DIMENSIONS 36"X24"X16"
(914 MM X 610 MM X 406 MM)

JBL JAMES B. LANSING, INC.
Northridge, California 91329

TITLE:
8 CUBIC FEET, BAFFLE BOARDS FOR
HOME HIGH FIDELITY LOUDSPEAKER SYSTEMS

SHEET 1 OF 1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND MILLIMETERS

NOTES:—

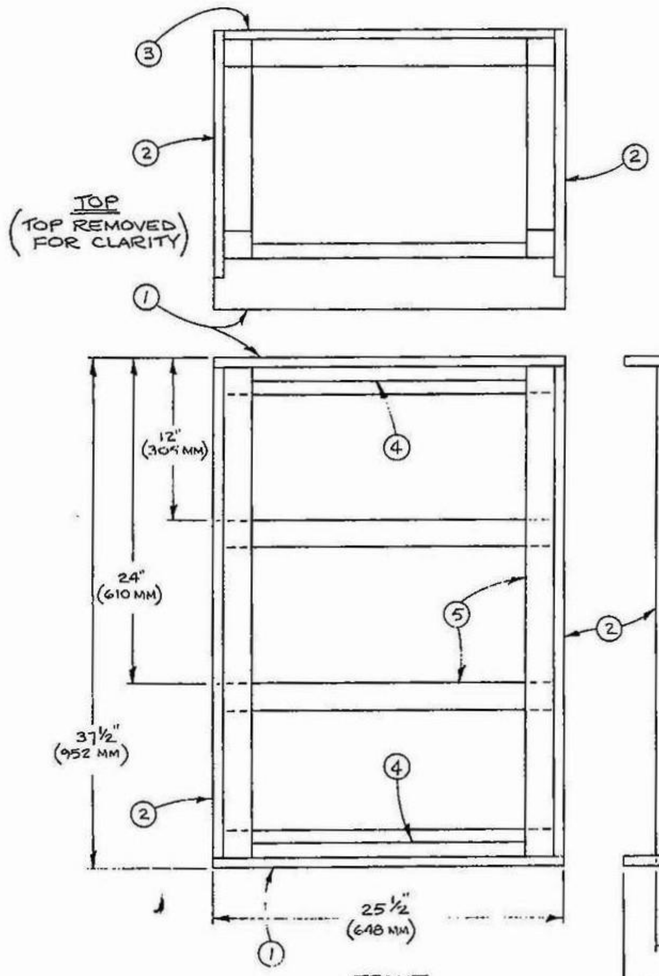
—ALL PARTS SHOULD BE GLUED AND SCREWED. SCREWS SHOULD BE APPROX. EVERY 5 INS. (127 MM)

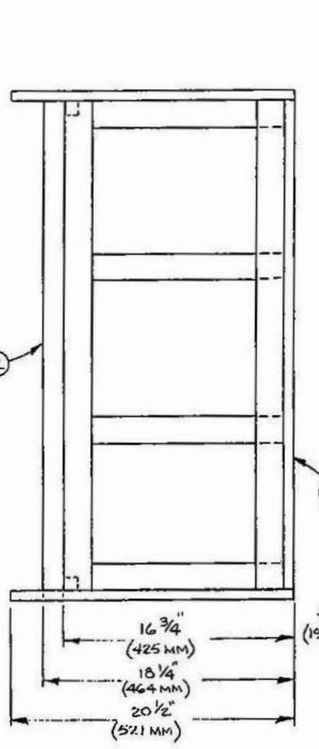
—A SOUND ABSORBING MATERIAL, SUCH AS FIBERGLASS SHOULD BE GLUED OR STAPLED SO THAT IT COVERS THE INSIDE OF THE ENCLOSURE. THE MATERIAL SHOULD BE APPROX. 1" (25 MM) THICK AND SHOULD NOT BLOCK ANY PORT OPENINGS.

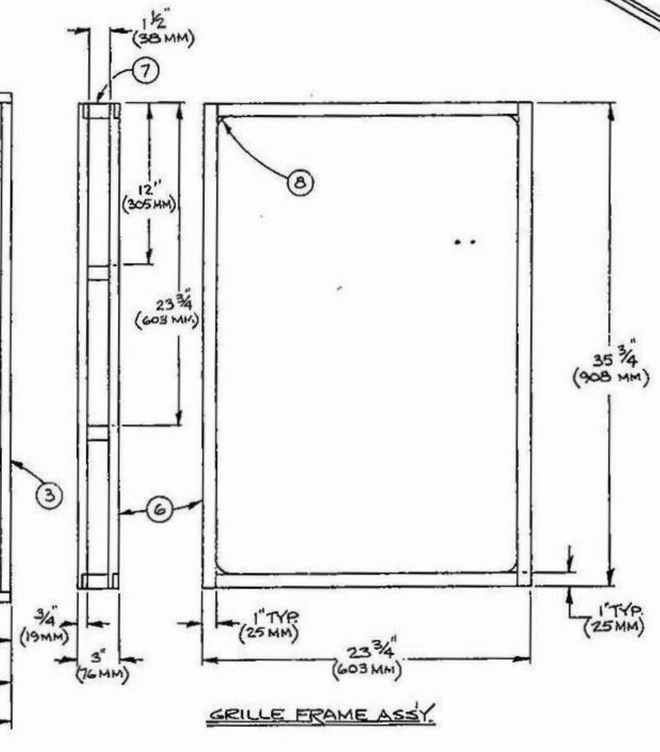
—BAFFLE WILL INSET IN FRONT. GLUE AND SCREW IN PLACE.

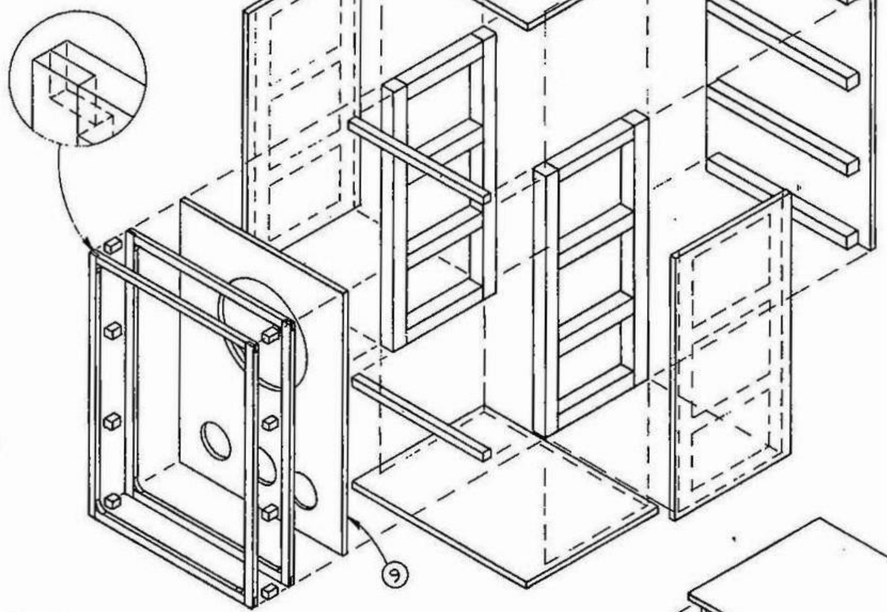
—ALL ENCLOSURE PARTS ARE CUT FROM ¾" (19 MM) VOID-FREE PLYWOOD, OR HIGH DENSITY PARTICLE BOARD (CHIPBOARD).

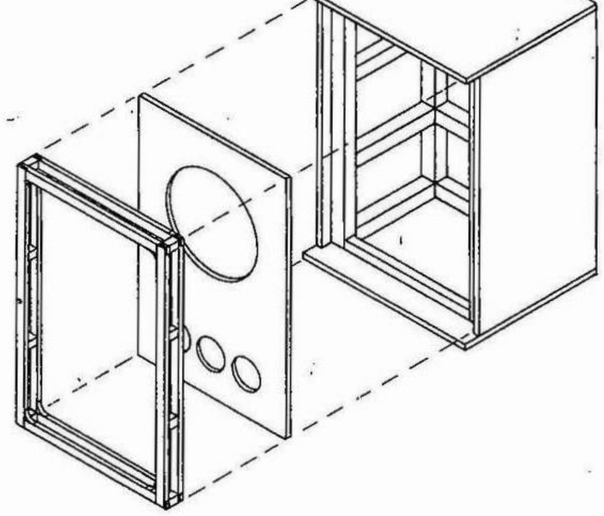
ITEM		SIZE
①	TOP & BOTTOM	25½" x 20½" (648 x 521 MM)
②	SIDES	36" x 18¼" (914 x 464 MM)
③	BACK	36" x 24" (914 x 610 MM)
④	CLEATS	1" X 1" NET (25 x 25 MM) PINE
⑤	CLEATS	2" x 2" (51 x 51 MM) PINE
⑥	GRILLE FRAME	¾" x 1" (19 x 25 MM) PINE
⑦	GRILLE SPACERS	1" x 1" (25 x 25 MM) PINE
⑧	GUSSETS	¾" x 1" x 1" (19 x 25 x 25 MM) PINE
⑨	BAFFLE BOARD	¾" x 24" x 36" (19 x 610 x 914 MM)











JBL JAMES B. LANSING, INC.
Northridge, California 91329

TITLE:
8 CUBIC FEET, ENCLOSURE FOR HOME HIGH FIDELITY LOUDSPEAKER SYSTEMS

SHEET 1 OF 1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND MILLIMETERS.

JBL Enclosure Porting Chart

Home Entertainment Loudspeakers

MODEL	INTERNAL VOLUME Litres / Cubic Feet	21-28 / 0.75-1.0	29-42 / 1.1-1.5	43-56 / 1.6-2.0	57-84 / 2.1-3.0	85-113 / 3.1-4.0	114-141 / 4.1-5.0	142-169 / 5.1-6.0	170-197 / 6.1-7.0	198-225 / 7.1-8.0	226-253 / 8.1-9.0	254-281 / 9.1-10.0	282-310 / 10.1-11.0	311-338 / 11.1-12.0
LE8T		Sealed Box	19 cm² / 80 mm duct / (3 in² / 3 in duct)	45 cm² / 110 mm duct / (7 in² / 4½ in duct)	84 cm² / 140 mm duct / (13 in² / 5½ in duct)	84 cm² / 80 mm duct / (13 in² / 3 in duct)								
D208				84 cm² / 90 mm duct / (13 in² / 3½ in duct)	168 cm² / 130 mm duct / (26 in² / 6 in duct)	168 cm² / 50 mm duct / (26 in² / 2 in duct)								
D123					84 cm² / 50 mm duct / (13 in² / 2 in duct)	168 cm² / 60 mm duct / (26 in² / 2½ in duct)	168 cm² / no duct / (26 in² / no duct)							
D130 130A							84 cm² / no duct / (13 in² / no duct)	258 cm² / 80 mm duct / (40 in² / 3 in duct)	323 cm² / 80 mm duct / (50 in² / 3 in duct)	323 cm² / 50 mm duct / (50 in² / 2 in duct)	516 cm² / 100 mm duct / (80 in² / 4 in duct)	516 cm² / 80 mm duct / (80 in² / 3 in duct)	613 cm² / 80 mm duct / (95 in² / 3 in duct)	742 cm² / 80 mm duct / (115 in² / 3 in duct)
LE10A			Sealed Box	45 cm² / 200 mm duct / (7 in² / 8 in duct)	45 cm² / 130 mm duct / (7 in² / 5 in duct)	84 cm² / 170 mm duct / (13 in² / 6½ in duct)								
124A				45 cm² / 200 mm duct / (7 in² / 8 in duct)	45 cm² / 130 mm duct / (7 in² / 5 in duct)									
LE14A				45 cm² / 200 mm duct / (7 in² / 8 in duct)	45 cm² / 130 mm duct / (7 in² / 5 in duct)	84 cm² / 170 mm duct / (13 in² / 6½ in duct)	84 cm² / 110 mm duct / (13 in² / 4½ in duct)							
LE15A							168 cm² / 180 mm duct / (26 in² / 7 in duct) / or PR15C (see note 6)	168 cm² / 130 mm duct / (26 in² / 5 in duct) / or PR15C (see note 6)	168 cm² / 80 mm duct / (26 in² / 3 in duct) / or PR15C (see note 6)	258 cm² / 130 mm duct / (40 in² / 5 in duct) / or PR15C (see note 6)				
136A						84 cm² / 170 mm duct / (13 in² / 6½ in duct) / or PR15C (see note 6)	84 cm² / 110 mm duct / (13 in² / 4½ in duct) / or PR15C (see note 6)	168 cm² / 200 mm duct / (26 in² / 8 in duct) / or PR15C (see note 6)						

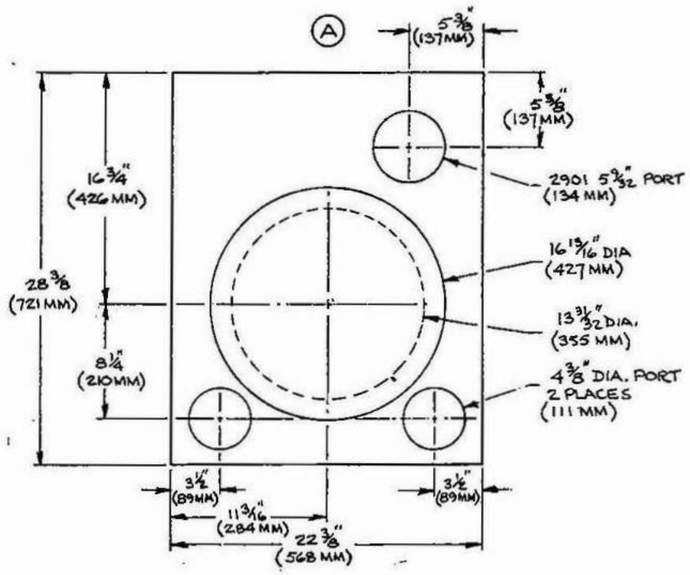
Notes

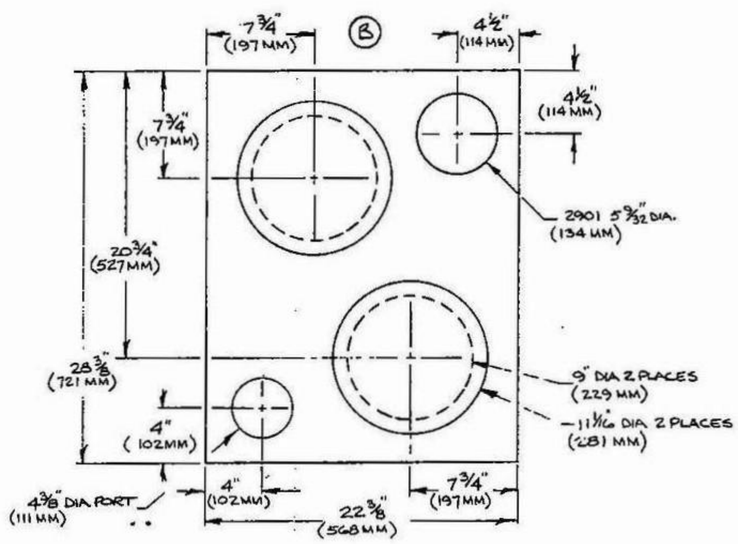
1. This chart contains porting recommendations for JBL full range, extended range and low frequency loudspeakers in a variety of enclosure volumes. Each represents the optimum for the mean of the volume range indicated, i.e., the dimensions given for an enclosure volume of 85 - 113 liters (3.1 - 4.0 cubic feet) actually would be optimum for an enclosure volume of 99 liters (3.5 cubic feet). The port dimensions for the enclosure drawings in the JBL Enclosure Construction Kit have been optimized for those specific enclosure volumes and configurations and, therefore, may not agree with the information in this chart.
2. Enclosure volume can be calculated by multiplying internal length x width x depth. If the measurements are taken in inches, divide by 1728 (the number of cubic inches in a cubic foot) to obtain internal volume in cubic feet.
3. Duct length is measured from the baffle surface to the end of the duct, and thus includes the thickness of the baffle panel.
4. Port area may be converted to diameter using the formula $A = \pi r^2$ The diameters given in the table below are inside dimensions. The baffle panel should be cut to accommodate the outside diameter of the tube used.

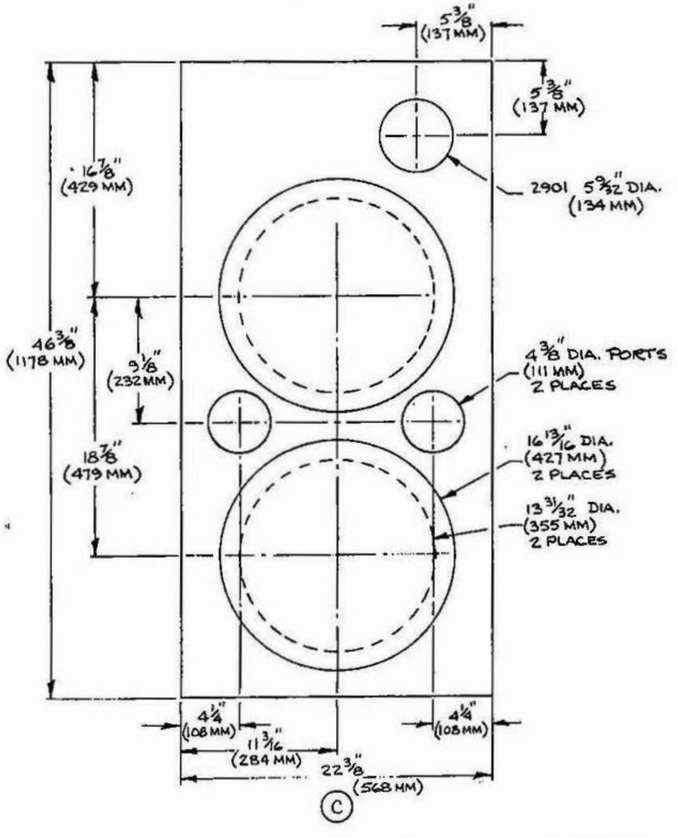
Port Area	Diameter	
Square Inches	Inches	Millimetres
3	2	50
7	3	80
10	3½	90
13	4	100
26	5¾	150
40	7⅛	180
50	8	200
80	10	260
95	11	280
115	12	310

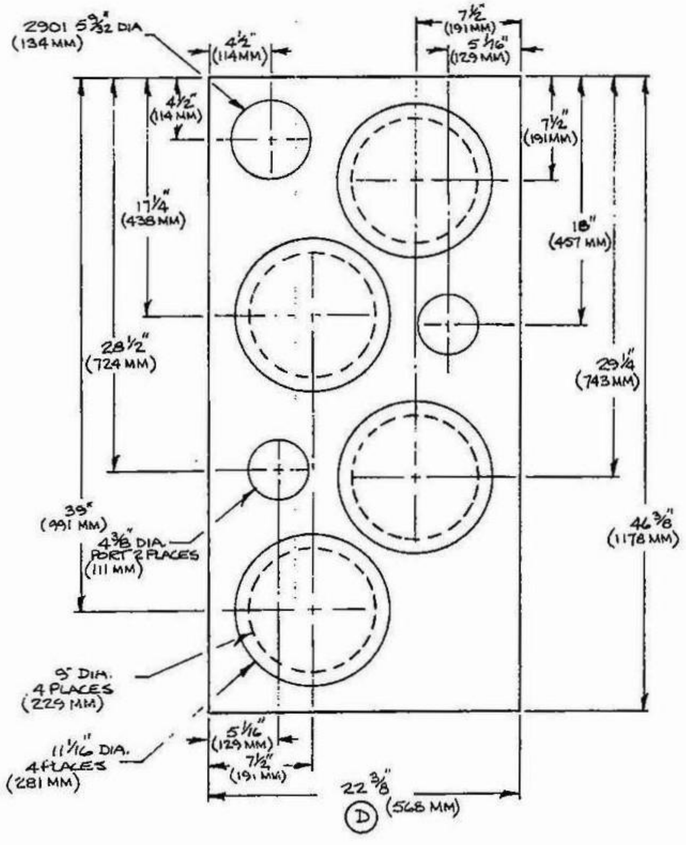
5. Multiple ports may be used, but the total area (not diameter) must equal the area specified. Divide the area by the number of ports to be used, then calculate diameter. Even though multiple ports are used, duct length for each should be as specified in the chart.
6. Refer to the literature enclosed with passive radiators for tuning instructions.

BAFFLE BOARDS FOR THE 3.75 CU. FT. MUSICAL INSTRUMENT ENCLOSURE









(A) BAFFLE FOR 3.75 CU. FT. ENCLOSURE

(1) K130 2 PORTS	4 3/8" DIA. X 5" LONG (111 MM X 127 MM)
(1) K140 2 PORTS	4 3/8" DIA X 2" LONG (111 MM X 51 MM)
(1) K145 2 PORTS	4 3/8" DIA. X 5" LONG (111 MM X 127 MM)
(1) K151 2 PORTS	4 3/8" DIA. X 7" LONG (111 MM X 178 MM)

(B) BAFFLE FOR 3.75 CU. FT ENCLOSURE

(2) K110 1 PORT	4 3/8" DIA. X 2" LONG (111 MM X 51 MM)
(2) K120 1 PORT	4 3/8" DIA. X 2" LONG (111 MM X 51 MM)

(C) BAFFLE FOR 5.75 CU. FT. ENCLOSURE

(2) K130 2 PORTS	4 3/8" DIA. X 5" LONG (111 MM X 127 MM)
(2) K140 2 PORTS	4 3/8" DIA. X 5" LONG (111 MM X 127 MM)
(2) K145 2 PORTS	4 3/8" DIA. (111 MM) NO DUCT
(2) K151 2 PORTS	4 3/8" DIA. X 7" LONG (111 MM X 178 MM)

(D) BAFFLE FOR 5.75 CU. FT. ENCLOSURE

(4) K110 2 PORTS	4 3/8" DIA. (111 MM) NO DUCT
(4) K120 2 PORTS	4 3/8" DIA. (111 MM) NO DUCT

NOTES:-

- ALL BOARDS ARE MADE FROM 3/4" (19 MM) VOID-FREE PLYWOOD OR HIGH DENSITY PARTICLE BOARD (CHIPBOARD)
- WHEN INSERTING BAFFLE BOARD INTO ENCLOSURE, USE 1 1/2" LONG FLATHEAD WOODSCREWS EVERY 5 INS. MAKE SURE BAFFLE IS SEALED TO ENCLOSURE WITH GLUE OR FOAM TAPE.
- BOARDS FOR 18", 15", 12", 10" SPEAKERS.
- IF THE 2901 UNIT IS NOT USED, HOLE MUST BE BLOCKED OR OMITTED.
- PORT TUBE IS STANDARD SIZE PVC OR ABS PLASTIC PLUMBING PIPE.

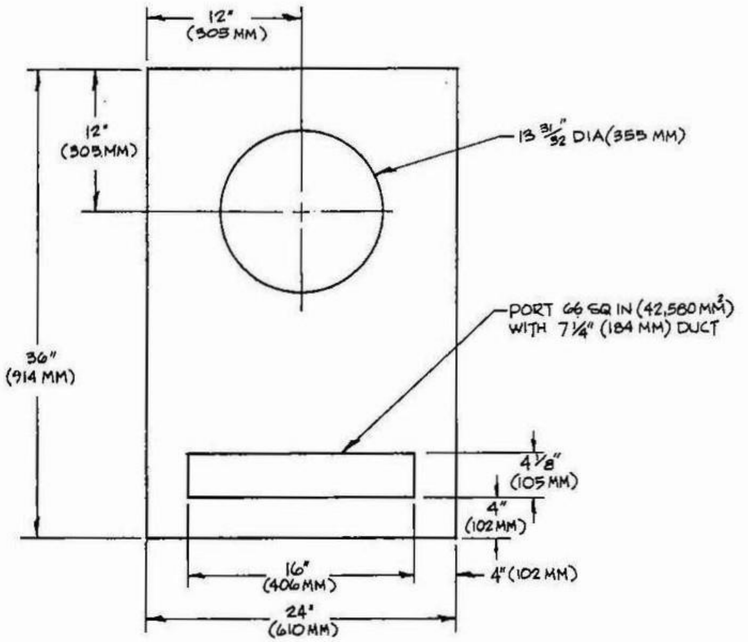
BAFFLE BOARDS FOR THE 5.75 CU. FT. MUSICAL INSTRUMENT ENCLOSURE

JBL JAMES B. LANSING, INC.
Northridge, California 91329

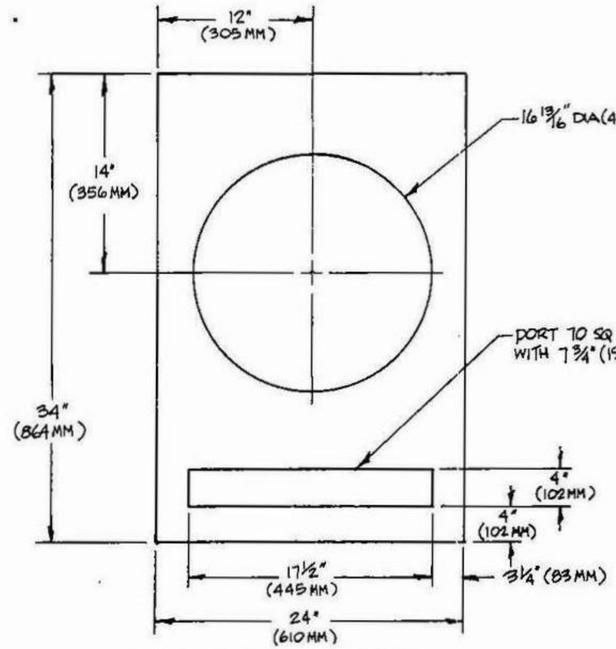
TITLE:
3.75 AND 5.75 CUBIC FEET, BAFFLE BOARDS FOR MUSICAL INSTRUMENT LOUDSPEAKER SYSTEMS

SHEET 1 OF 1

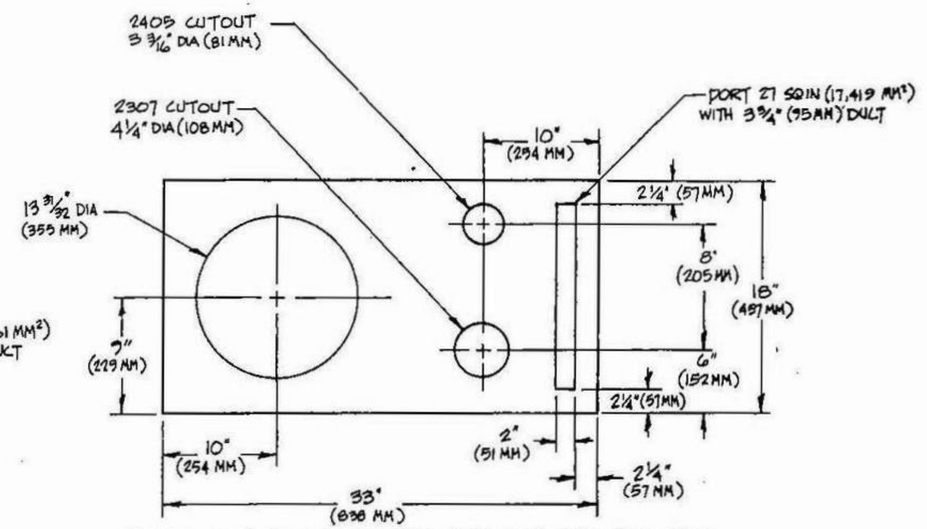
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND MILLIMETERS



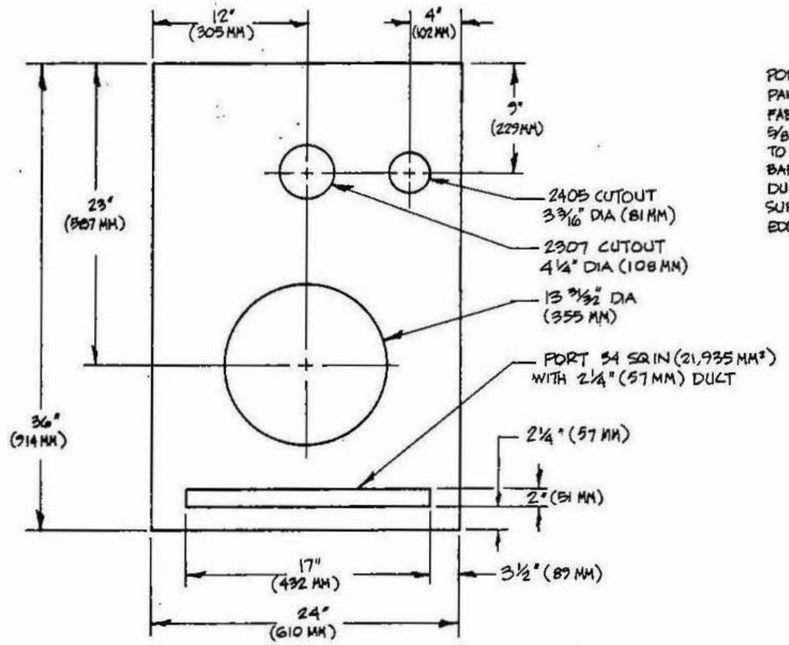
8 CUBIC FEET, BAFFLE FOR K145.
ENCLOSURE INSIDE DIMENSIONS 36" x 24" x 16"
(914 MM x 610 MM x 406 MM)



8 CUBIC FEET, BAFFLE FOR K151.
ENCLOSURE INSIDE DIMENSIONS 36" x 24" x 16"
(914 MM x 610 MM x 406 MM)

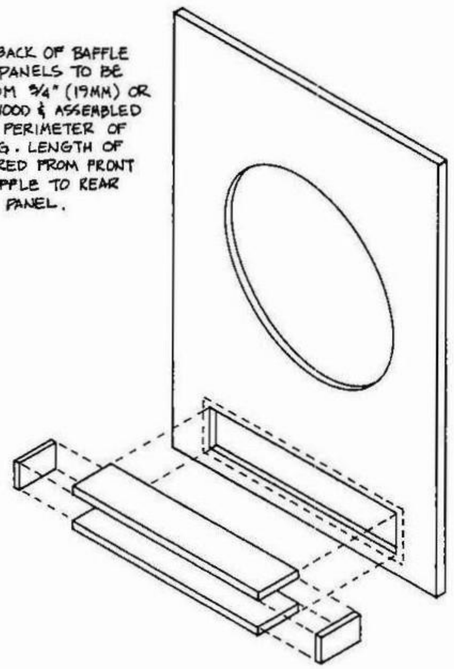


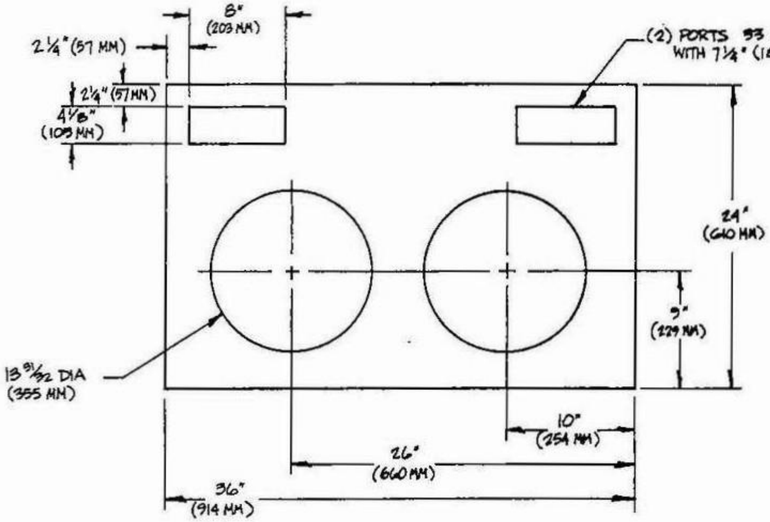
5 CUBIC FEET, BAFFLE FOR 2205, 2307, 2308, 2461, 2470, 2405.
ENCLOSURE INSIDE DIMENSIONS 33" x 18" x 14½"
(838 MM x 457 MM x 368 MM)



8 CUBIC FEET, BAFFLE FOR K145, 2307, 2308, 2461 OR 2470 & 2402 OR 2407
ENCLOSURE INSIDE DIMENSIONS 36" x 24" x 16"
(914 MM x 610 MM x 406 MM)

PORT DETAIL (BACK OF BAFFLE PANEL) - DUCT PANELS TO BE FABRICATED FROM ¾" (19MM) OR ⅝" (16 MM) PLYWOOD & ASSEMBLED TO ENCLOSURE PERIMETER OF BAFFLE OPENING. LENGTH OF DUCT IS MEASURED FROM FRONT SURFACE OF BAFFLE TO REAR EDGE OF DUCT PANEL.





8 CUBIC FEET, BAFFLE FOR (2) K145, (2) K140 OR (2) 2205.
ENCLOSURE INSIDE DIMENSIONS 36" x 24" x 16"
(914 MM x 610 MM x 406 MM)

JBL JAMES B. LANSING, INC.
Northridge, California 91329

TITLE BAFFLE PANELS FOR 8 AND 5 CUBIC FEET ENCLOSURES USING JBL MUSICAL INSTRUMENT AND PROFESSIONAL SERIES BASS DRIVERS.

SHEET 1 OF 1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND MILLIMETERS

NOTES:—

—ALL PARTS SHOULD BE GLUED AND SCREWED. SCREWS SHOULD BE APPROX. EVERY 5 INS. (127MM)

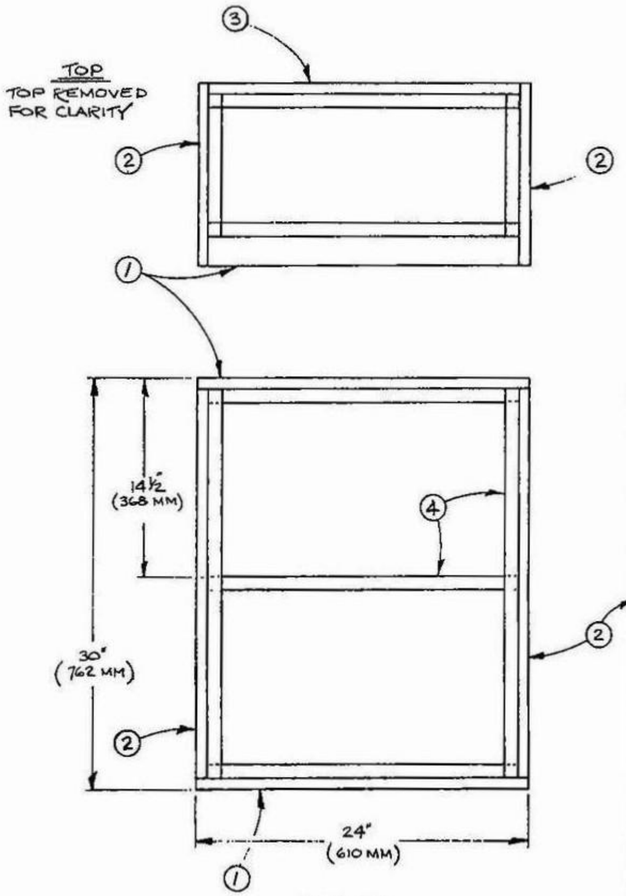
—A SOUND ABSORBING MATERIAL, SUCH AS FIBERGLASS SHOULD BE GLUED OR STAPLED SO THAT IT COVERS THE INSIDE OF THE ENCLOSURE. THE MATERIAL SHOULD BE APPROX 1" (25 MM) THICK AND SHOULD NOT BLOCK ANY PORT OPENINGS.

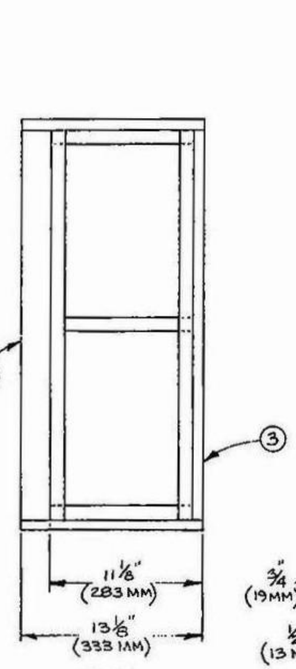
—BAFFLE WILL INSET IN FRONT. GLUE AND SCREW IN PLACE.

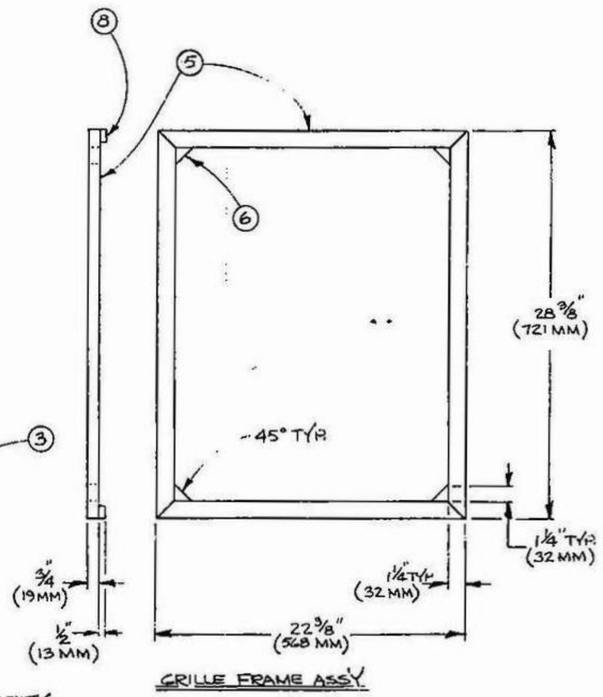
—ALL ENCLOSURE PARTS ARE CUT FROM ¾" (19 MM) VOID-FREE PLYWOOD, OR HIGH DENSITY PARTICLE BOARD (CHIPBOARD).

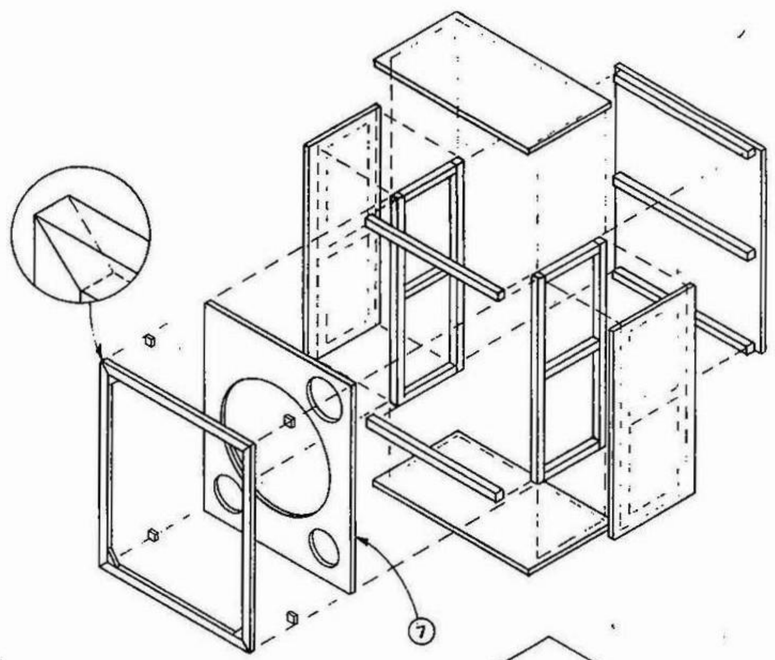
— SPACER TO BE INSTALLED ON GRILLE FRAME AFTER GRILLE CLOTH IS PUT ON.

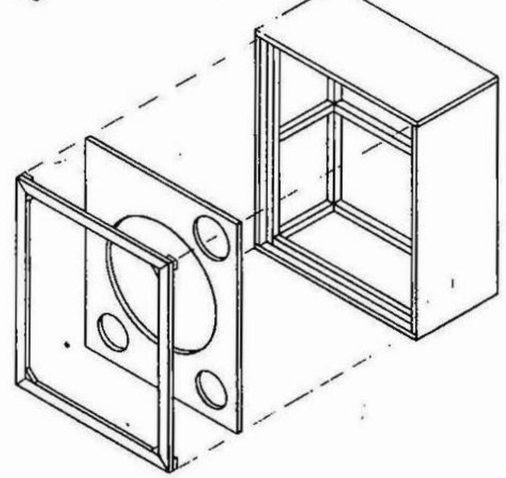
ITEM		SIZE
①	TOP & BOTTOM	24" X 13⅛" (610 X 333 MM)
②	SIDES	28½" X 13⅛" (724 X 333 MM)
③	BACK	28½" X 22½" (724 X 572 MM)
④	CLEATS	1"X1" NET (25 X 25 MM) PINE THROUGHOUT
⑤	GRILLE FRAME	1¼" X ¾" (32 X 19 MM) PINE
⑥	CORNERS	1¼" X 1¼" X ¾" (32 X 32 X 19 MM) PINE
⑦	BAFFLE BOARD	¾" X 28⅜" X 22⅜" (19 X 721 X 568 MM)
⑧	SPACER	½" X 1" X 1" (13 X 25 X 25 MM)











JBL JAMES B. LANSING, INC.
Northridge, California 91329

TITLE:
3.75 CUBIC FEET, ENCLOSURE FOR MUSICAL INSTRUMENT LOUDSPEAKER SYSTEMS

SHEET 1 OF 1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND MILLIMETERS

NOTES:—

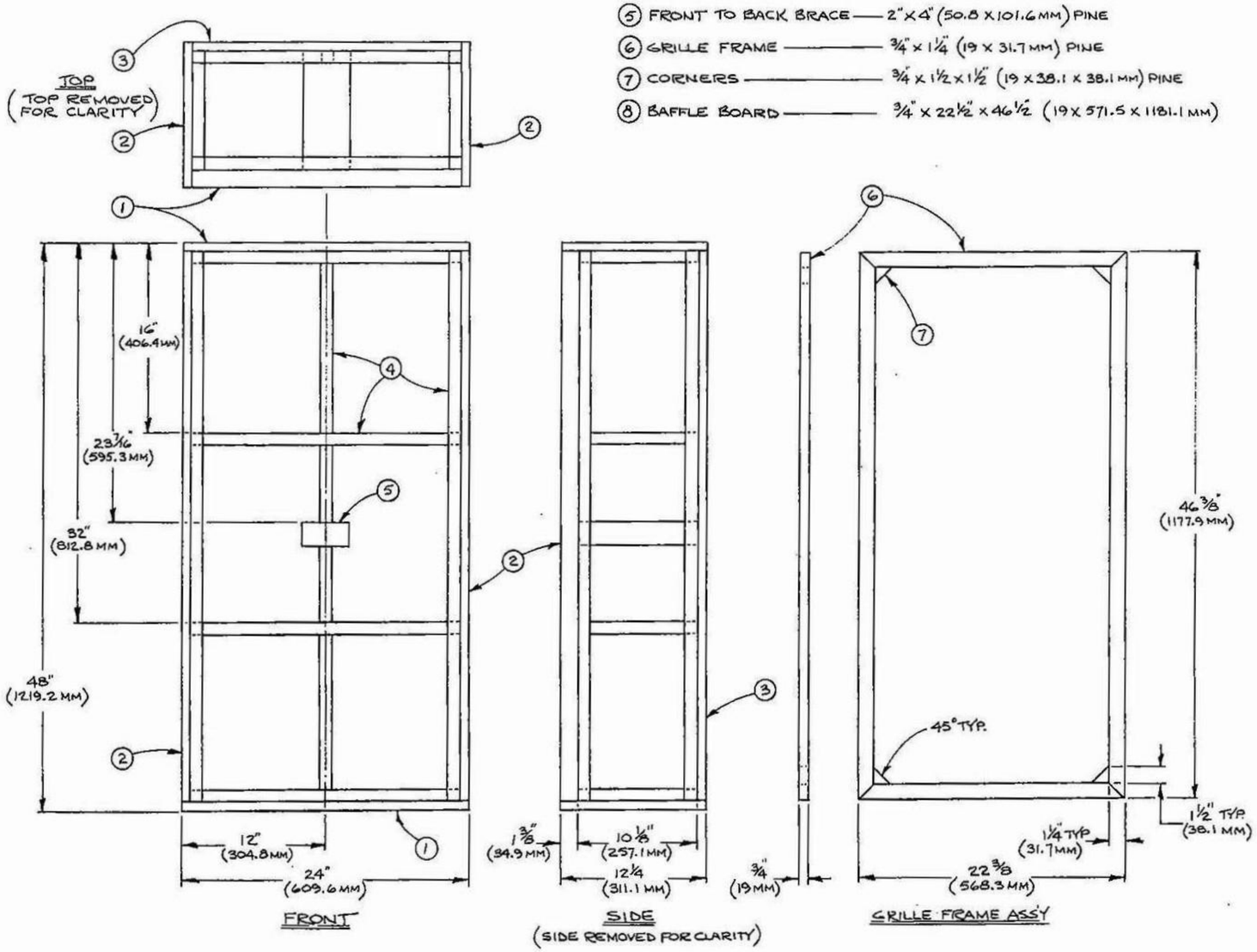
—ALL PARTS SHOULD BE GLUED AND SCREWED. SCREWS SHOULD BE APPROX. EVERY 5 INS.

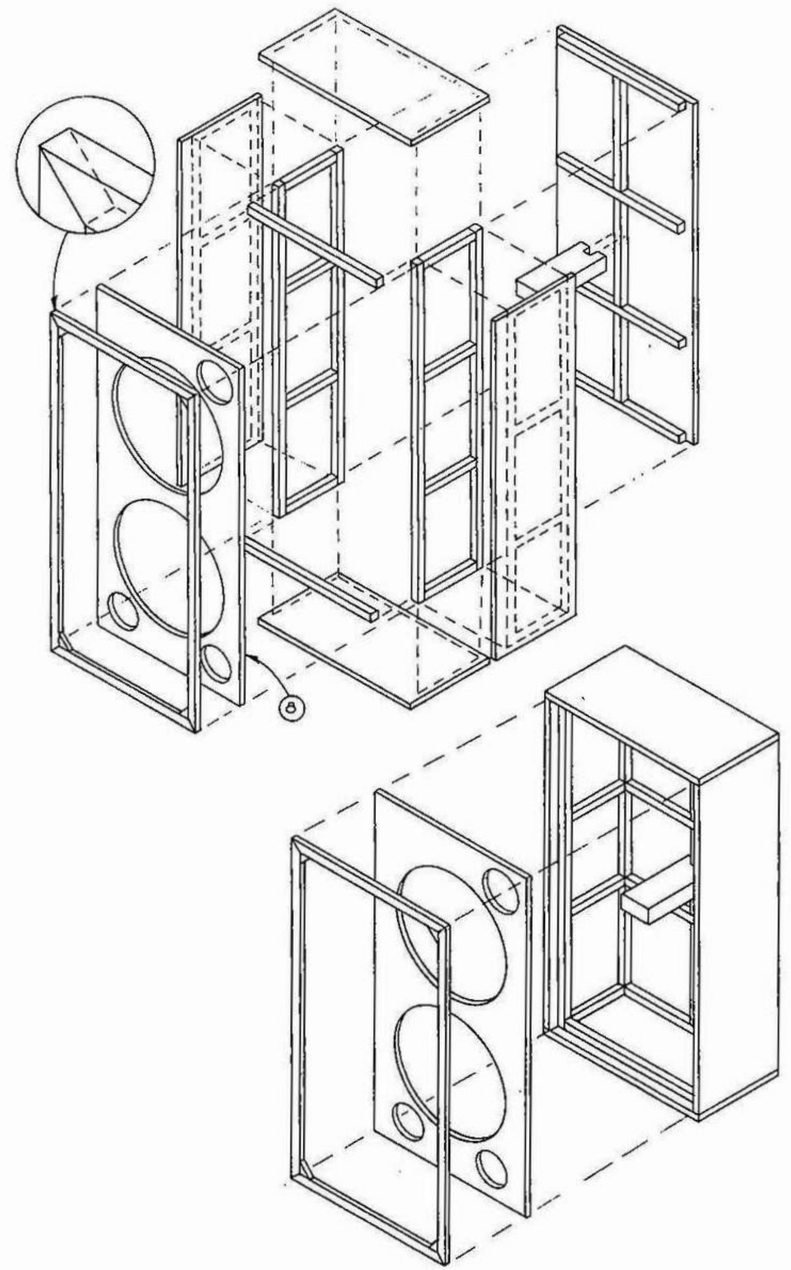
—A SOUND ABSORBING MATERIAL, SUCH AS FIBERGLASS SHOULD BE GLUED OR STAPLED SO THAT IT COVERS THE INSIDE OF THE ENCLOSURE. THE MATERIAL SHOULD BE APPROX. 1" THICK AND SHOULD NOT BLOCK ANY PORT OPENINGS.

—BAFFLE WILL INSET IN FRONT. GLUE AND SCREW IN PLACE.

—ALL ENCLOSURE PARTS ARE CUT FROM ¾ (19.0MM) VOID-FREE PLYWOOD, OR HIGH DENSITY PARTICLE BOARD (CHIPBOARD).

ITEM		SIZE
(1)	TOP & BOTTOM	24" x 12¼" (609.6 x 311.1MM)
(2)	SIDES	46½" x 12¼ (1181.1 x 311.1 MM)
(3)	BACK	46½" x 22½" (1181.1 X 571.5MM)
(4)	CLEATS	1"x1" NET (25.4 x 25.4 MM) PINE THROUGHOUT
(5)	FRONT TO BACK BRACE	2"x4" (50.8 x 101.6 MM) PINE
(6)	GRILLE FRAME	¾" x 1¼" (19 x 31.7 MM) PINE
(7)	CORNERS	¾" x 1½ x 1½" (19 x 38.1 x 38.1 MM) PINE
(8)	BAFFLE BOARD	¾" x 22½" x 46½" (19 x 571.5 x 1181.1 MM)





DRAWN:	DG
CHECK:	
DESIGN:	dsj
ENGINEER:	
APPROVED:	

JBL JAMES B. LANSING SOUND, INC.
Los Angeles, California 90039

TITLE: 5.75 CUBIC FEET, ENCLOSURE FOR MUSICAL INSTRUMENT LOUDSPEAKER SYSTEMS

SHEET 1 OF 1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND MILLIMETERS

JBL Enclosure Porting Chart

Musical Instrument Loudspeakers

MODEL	INTERNAL VOLUME Cubic Feet / Liters	3.0 - 3.5 / 84 - 99	3.6 - 4.0 / 100 - 113	4.1 - 4.5 / 114 - 128	4.6 - 5.0 / 129 - 141	5.1 - 5.5 / 142 - 155	5.6 - 6.0 / 156 - 169	6.1 - 6.5 / 170 - 185	6.6 - 7.0 / 186 - 197	7.1 - 7.5 / 198 - 212	7.6 - 8.0 / 213 - 225	8.1 - 8.5 / 226 - 240	8.6 - 9.0 / 241 - 253	9.1 - 9.5 / 254 - 269	9.6 - 10.0 / 270 - 281
K110		18 sq. in. / 103 cm²	20 sq. in. / 129 cm²	28 sq. in. / 181 cm²	36 sq. in. / 232 cm²										
K120		16 sq. in. / 103 cm²	20 sq. in. / 129 cm²	28 sq. in. / 181 cm²	36 sq. in. / 232 cm²	40 sq. in. / 258 cm²	45 sq. in. / 290 cm²								
K130		16 sq. in. / 103 cm²	20 sq. in. / 129 cm²	28 sq. in. / 181 cm²	36 sq. in. / 232 cm²	40 sq. in. / 258 cm²	45 sq. in. / 290 cm²	54 sq. in. / 348 cm²	58 sq. in. / 374 cm²	65 sq. in. / 419 cm²	72 sq. in. / 465 cm²				
K140		10 sq. in. / 65 cm²	18 sq. in. / 116 cm²	21 sq. in. / 135 cm²	24 sq. in. / 155 cm²	26 sq. in. / 168 cm²	28 sq. in. / 181 cm²	30 sq. in. / 194 cm²	32 sq. in. / 206 cm²	35 sq. in. / 226 cm²	38 sq. in. / 245 cm²				
K145		10 sq. in. / 65 cm²	18 sq. in. / 116 cm²	21 sq. in. / 135 cm²	24 sq. in. / 155 cm²	26 sq. in. / 168 cm²	28 sq. in. / 181 cm²	30 sq. in. / 194 cm²	32 sq. in. / 206 cm²	35 sq. in. / 226 cm²	38 sq. in. / 245 cm²				
K151		10 sq. in. / 65 cm²	18 sq. in. / 116 cm²	21 sq. in. / 135 cm²	24 sq. in. / 155 cm²	26 sq. in. / 168 cm²	28 sq. in. / 181 cm²	30 sq. in. / 194 cm²	32 sq. in. / 206 cm²	35 sq. in. / 226 cm²	38 sq. in. / 245 cm²	40 sq. in. / 258 cm²	42 sq. in. / 271 cm²	45 sq. in. / 290 cm²	50 sq. in. / 323 cm²

Notes

1. Porting information contained in this chart will provide the most uniform extended low frequency response. Some variation in port area may be necessary to obtain the particular sound you desire.
2. Enclosure volume can be calculated by multiplying internal length x width x depth. If the measurements are taken in inches, divide by 1728 (the number of cubic inches in a cubic foot) to obtain internal volume in cubic feet.
3. Port area may be converted to diameter using the formula $A = 0.25\ \pi\ D^2$. Multiple ports may be used, but the total area (not diameter) must equal the area specified. Divide the area by the number of ports to be used, then calculate diameter.
4. If two loudspeakers are used enclosure volume and port area should approximately double.

Wire Chart

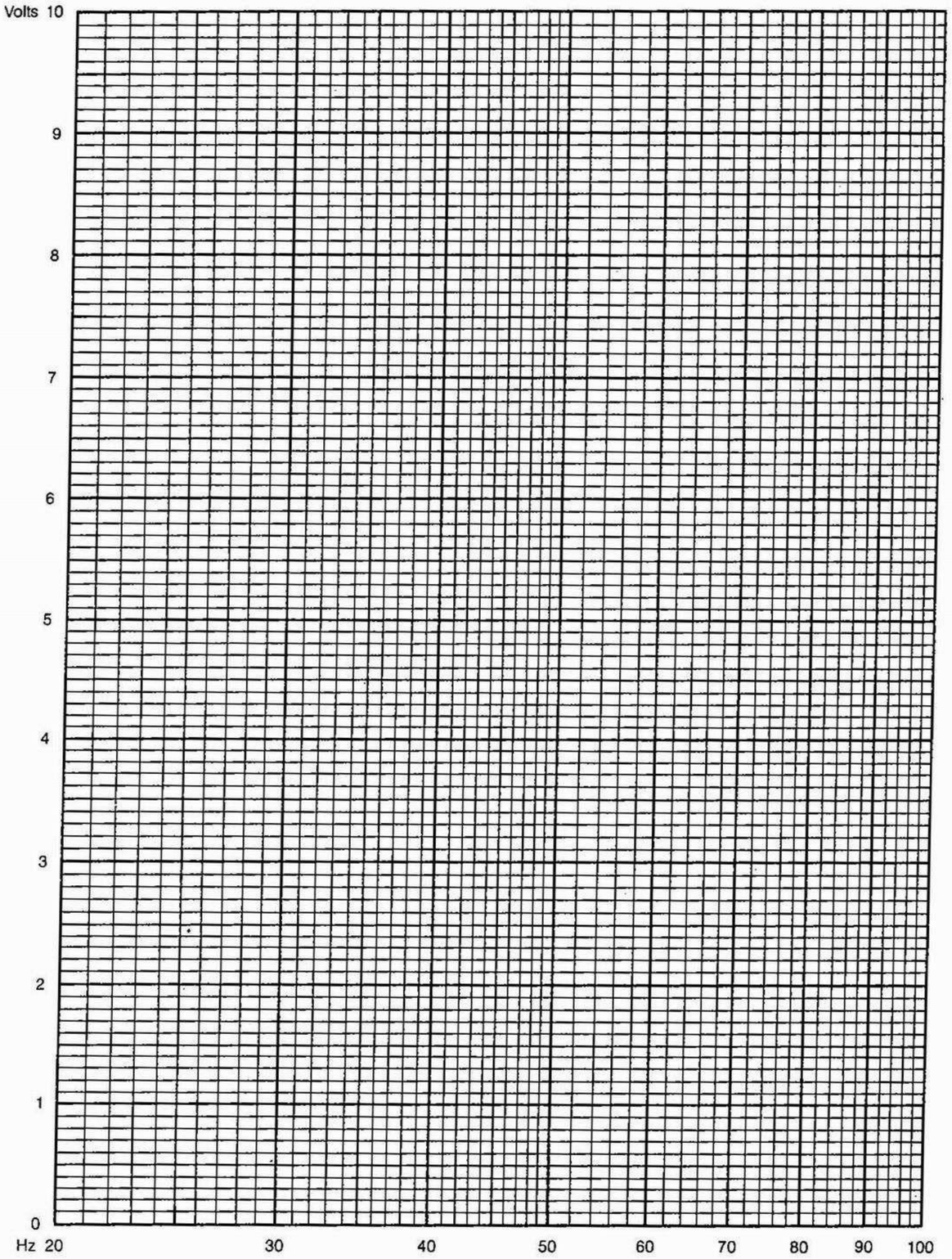
Home High Fidelity Loudspeaker Systems

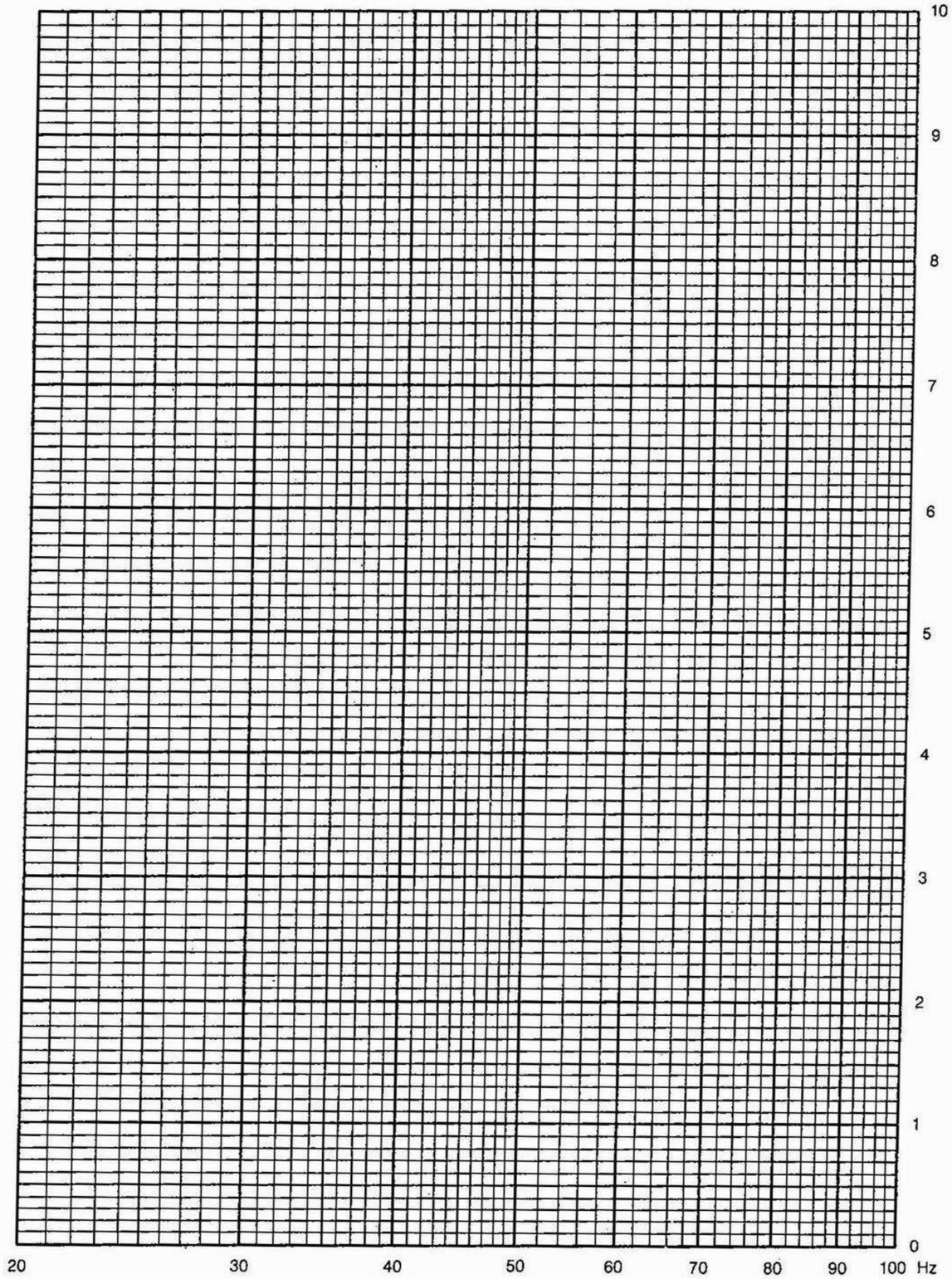
distance	impedance		
	4Ω	8Ω	16Ω
0-15 m (0-50 ft)	16 AWG	18 AWG	20 AWG
15-30 m (50-100 ft)	14 AWG	16 AWG	18 AWG
30-60 m (100-200 ft)	12 AWG	14 AWG	16 AWG

Musical Instrument Loudspeaker Systems

distance	impedance		
	4Ω	8Ω	16Ω
0-15 m (0-50 ft)	14 AWG	16 AWG	18 AWG
15-30 m (50-100 ft)	12 AWG	14 AWG	16 AWG
30-60 m (100-200 ft)	10 AWG	12 AWG	14 AWG

JBL Port Tuning Work Sheet





Recommended Tuning Frequency For JBL Loudspeakers

Model	Description	Enclosure Tuning Frequency
124A 136A	300-mm (12 in) low frequency 380-mm (15 in) low frequency	26 Hz
LE8T LE10A LE12C LE14A LE14C LE15A	200 mm (8 in) full range 250-mm (10 in) low frequency 300-mm (12 in) composite 360-mm (14 in) low frequency 360-mm (14 in) composite 380 mm (15 in) low frequency	32 Hz
D123 D131 D130 130A, 130B	300 mm (12 in) extended range 300-mm (12 in) extended range 380-mm (15 in) extended range 380-mm (15 in) low frequency	45 Hz
D208	200 mm (8 in) extended range	55 Hz

If system tuning is higher than recommended for the loudspeaker, cover a portion of the port or lengthen the duct if one is used. Conversely, if system tuning is lower than recommended, make the port larger or shorten the duct. When tuning a passive radiator, begin with fewer tuning weights than recommended for the enclosure volume. Add weights if system tuning is higher than recommended; remove weights if the system tuning is lower than desired. A passive radiator can be temporarily mounted "inside out" so the tuning weights are easily accessible. Additional washers used in conjunction with the weights supplied will aid in obtaining precise tuning.

Recommended Tuning Frequency For JBL Loudspeakers

Model	Description	Enclosure Tuning Frequency
124H 136H	300 mm (12 in) low frequency 380 mm (15 in) low frequency	26 Hz
LE8T-H LE10H LE14H LE15H	200 mm (8 in) full range 250 mm (10 in) low frequency 360 mm (14 in) low frequency 380 mm (15 in) low frequency	32 Hz
D130H 130H	380 mm (15 in) extended range 380 mm (15 in) low frequency	45 Hz
D208H	200 mm (8 in) extended range	55 Hz

If system tuning is higher than recommended for the loudspeaker, cover a portion of the port or lengthen the duct if one is used. Conversely, if system tuning is lower than recommended, make the port larger or shorten the duct. When tuning a passive radiator, begin with fewer tuning weights than recommended for the enclosure volume. Add weights if system tuning is higher than recommended; remove weights if the system tuning is lower than desired. A passive radiator can be temporarily mounted "inside out" so the tuning weights are easily accessible. Additional washers used in conjunction with the weights supplied will aid in obtaining precise tuning.

1975 JBL Transducer / Enclosure Porting Information

			enclosure volume (ft^3)																																						
			0.75	to	1.0	1.1	to	1.5	1.6	to	2.0	2.1	to	3.0	3.1	to	4.0	4.1	to	5.0	5.1	to	6.0	6.1	to	7.0	7.1	to	8.0	8.1	to	9.0	9.1	to	10.0	10.1	to	11.0	11.1	to	12.0
LE8T	8" full range	port area (in^2)		PR8			PR8			7			13			13																									
		duct length (in)								4.5			5.5			3.0																									
		Fb (Hz)							42	40	38	44	41	37	43	41	38																								
D208	8" extended range	port area (in^2)								13			26			26																									
		duct length (in)								3.5			5.0			2.0																									
		Fb (Hz)							58	55	52	60	55	50	60	57	53																								
LE10A	10" low frequency	port area (in^2)					PR10			7			13			13																									
		duct length (in)								4.5			5.5			3.0																									
		Fb (Hz)							42	40	38	44	41	37	43	41	38																								
LE12C	12" full range	port area (in^2)								3			7			10			13			13																			
		duct length (in)								4.0			6.0			5.0			5.0			3.5																			
		Fb (Hz)							31	29	27	33	31	28	34	32	30	33	32	30	33	32	30																		
D123	12" extended range	port area (in^2)											13			26			26																						
		duct length (in)											2.0			2.5			0.75																						
		Fb (Hz)										58	53	48	58	55	51	59	56	53																					
124A	12" low frequency	port area (in^2)											7			13			13																						
		duct length (in)											5.0			6.0			4.0																						
		Fb (Hz)										35	33	30	36	34	31	35	34	32																					
D131	12" extended range	port area (in^2)																	13			40			50			50			80			80			95			115	
D130	15" extended range	duct length (in)																	0.75			3.0			3.0			2.0			4.0			3.0			3.0			3.0	
130A	15" low frequency	Fb (Hz)																48	46	43	51	49	47	50	49	47	49	48	46	48	47	46	48	47	46	48	47	46	49	48	47
LE14C	14" full range	port area (in^2)								13			13			13			13			26																			
LE14A	14" low frequency	duct length (in)								7.5			5.5			3.0			2.5			5.0																			
		Fb (Hz)							46	44	41	44	41	37	43	41	38	39	38	36	39	38	36																		
LE15A	15" low frequency	port area (in^2)																	26			26			26			40			40			40			40			40	
		duct length (in)																	7.0			5.0			3.0			5.0			4.0			3.0			2.0			0.75	
		Fb (Hz)																39	37	35	39	38	36	40	39	37	39	38	36	38	37	36	38	37	36	38	38	37	40	40	39
136A	15" low frequency	port area (in^2)																	13			26			26			26													
		duct length (in)																	4.5			8.0			6.0			5.0													
		Fb (Hz)																34	33	31	34	33	31	34	33	31	33	32	31												

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			enclosure volume (ft^3)																																									
			0.75	to	1.0	1.1	to	1.5	1.6	to	2.0	2.1	to	3.0	3.0	3.1	to	4.0	4.1	to	5.0	5.0	5.1	to	6.0	6.1	to	7.0	7.1	to	8.0	8.0	8.1	to	9.0	9.1	to	10.0	10.1	to	11.0	11.1	to	12.0
LE8T	8" full range	port area (in^2)		sealed			3			7			13		13		13																											
		duct length (in)					3			4.5			5.5		5.5		3.0																											
		Fb (Hz)				41	38	35	42	40	38	44	41	37	37	43	41	38																										
D208	8" extended range	port area (in^2)								13			26				26																											
		duct length (in)								3.5			**6.0**				2.0																											
		Fb (Hz)							58	55	52	57	53	48		60	57	53																										
LE10A	10" low frequency	port area (in^2)					sealed			7			7				13																											
		duct length (in)								8.0			5.0				6.5																											
		Fb (Hz)							34	32	30	35	33	30		35	33	30																										
LE12C	12" full range	port area (in^2)													8.5							sealed																						
		duct length (in)													6																											
		Fb (Hz)													30																											
D123	12" extended range	port area (in^2)											13		18		26			26		30																						
		duct length (in)											2.0		0.75		2.5			0.75		0.75																						
		Fb (Hz)										58	53	48	62	58	55	51	59	56	53	55																						
124A	12" low frequency	port area (in^2)								7			7																															
		duct length (in)								8.0			5.0																															
		Fb (Hz)							34	32	30	35	33	30																														
D131	12" extended range	port area (in^2)																		13		30		40			50			50		80		80			80			95			115	
D130	15" extended range	duct length (in)																		0.75		0.75		3.0			3.0			2.0		0.75		4.0			3.0			3.0			3.0	
130A	15" low frequency	Fb (Hz)																	48	46	43	55	51	49	47	50	49	47	49	48	46	58	48	47	46	48	47	46	48	47	46	49	48	47
LE14C	14" full range	port area (in^2)								7			7		13		13			13																								
LE14A	14" low frequency	duct length (in)								8.0			5.0		3		6.5			4.5																								
		Fb (Hz)							34	32	30	35	33	30	44	35	33	30	34	33	31																							
LE15A	15" low frequency	port area (in^2)																		26		22		26			26			40		37.7												
		duct length (in)																		7.0		3		5.0			3.0			5.0		5												
		Fb (Hz)																	39	37	35	42	39	38	36	40	39	37	39	38	36	36												
136A	15" low frequency	port area (in^2)																		13		13		13			26																	
		duct length (in)																		6.5		4		4.5			8.0																	
		Fb (Hz)																	30	29	27	32	30	29	28	31	30	29																