

C-Note Bookshelf Speaker Kit

Thank you for purchasing the C-Note bookshelf speaker kit. This speaker kit was precision cut using CNC machinery for the best possible fit and finish. With a little time and patience, your finished product will provide years of enjoyment. Please follow the following instructions for the best possible results.

The C-note kit is available as a complete kit with knock-down enclosures ([part # 300-7140](#)) or a components only kit ([part # 300-7141](#)) if you would like to build your own enclosure. If you purchased the components only version of the C-Note you can find detailed drawing of the enclosure at the end of this manual and you can begin these instructions on step # 7.

Suggested tools and consumables:

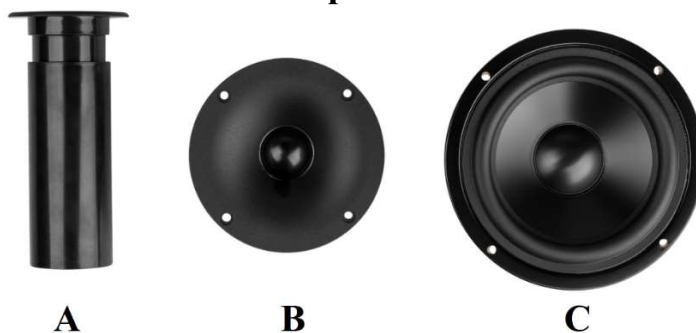
Drill	Rag or paper towels
5/64" drill bit	Solder
Wood clamps (you can never have too many of these)	Soldering iron
Sanding block and/or electric finishing sander	Hot glue gun
Wood glue	Binding post/terminal cup
Speaker or hook-up wire	Polyurethane glue (Gorilla Glue)
0.11" female disconnect terminal	Cyanoacrylate Adhesive (super glue)
0.205" female disconnect terminal	#6 x 3/4" Pan head wood screws

Package contents:

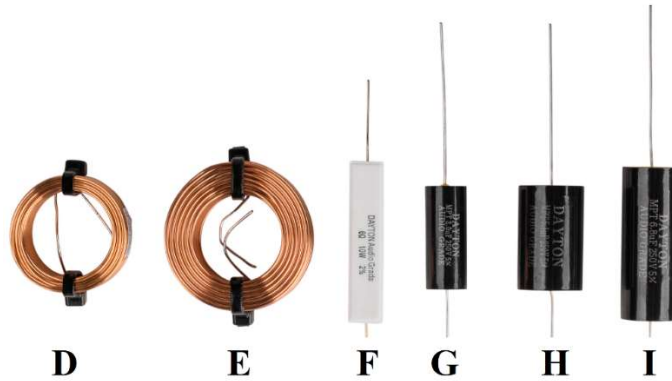
First, empty the contents of the package and review parts to ensure everything has been included and is in good condition. If any parts are missing or damaged please contact our customer service department at 1-800-338-0531.

Note: Crossover components may be substituted with parts of equal or higher quality depending on stock.

Components:



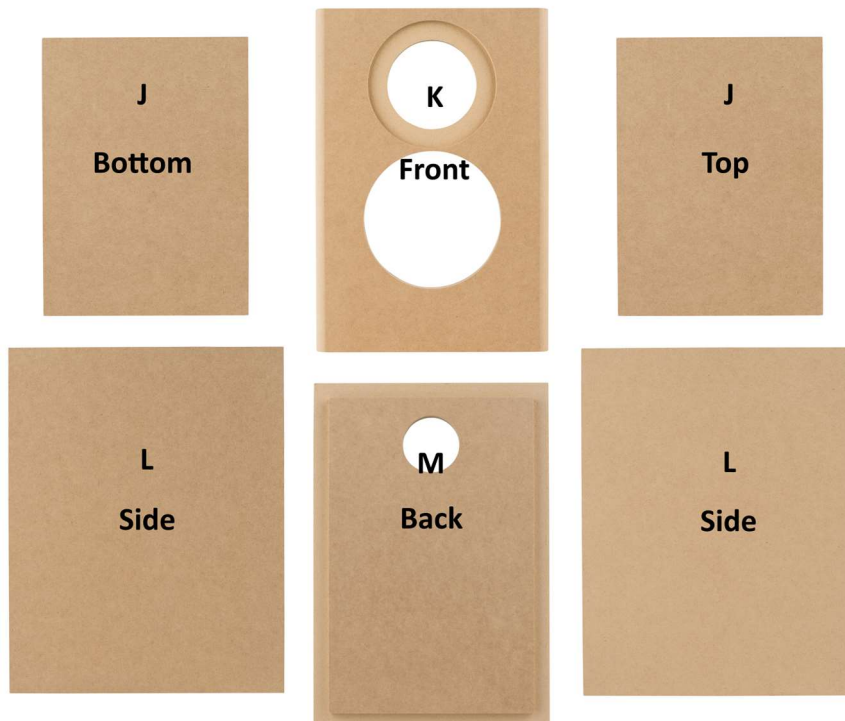
- A) 1-3/8" ID Adjustable Port Tube
- B) Dayton Audio ND25FW-4 1" Soft Dome Neodymium Tweeter with Waveguide
- C) Dayton Audio DSA135-8 5" Designer Series Aluminum Cone Woofer



- D)** 2 x 0.25 mH air core inductor
- E)** 2 x 1.40 mH air core inductor
- F)** 2 x 6 ohm resistor
- G)** 4 x 2.0 μ F capacitor
- H)** 2 x 5.1 μ F capacitor
- I)** 2 x 6.8 μ F capacitor

Enclosures:

Note: If you purchased the Components Only version of the C-note then the enclosure is not included. You can begin following these instruction on step 7. A detailed drawing of the enclosure is included at the end of this manual.



- J)** 4 x Top/Bottom
- K)** 2 x Front Baffle
- L)** 4 x Sides
- M)** 2 x Back

Other Parts:



N



O



P

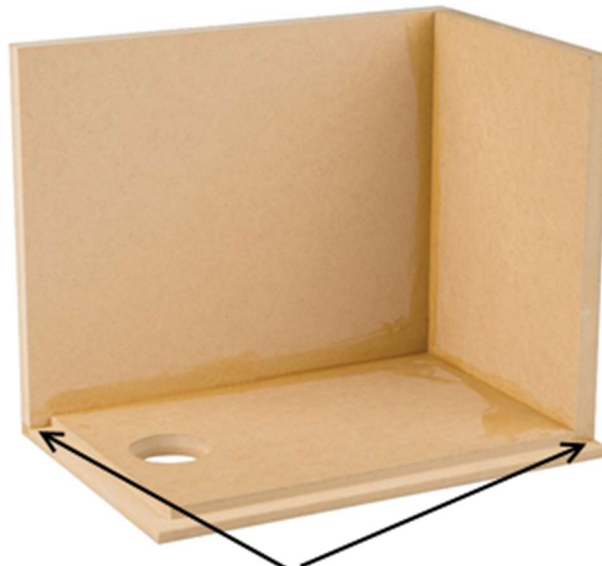
N) 6 feet 16 AWG 2-conductor Power Speaker Wire (Red/Black)

O) 25 x #6 x 3/4" Pan Head Deep Thread Black Screws

P) 2 x Binding Post Pair (actual binding posts may vary depending on stock)

Enclosure Assembly:

- 1) First, take the back panel and lay out and drill holes required for the **Binding Posts (P)** included in your kit.
- 2) Next, set the enclosure parts out on a flat level surface and ensure that all pieces are free of dust and debris.
- 3) With the **Back Panel (M)** lying flat, glue all mating surfaces of the **Bottom Panel (J)** and one **Side Panel (L)** and secure them to the back panel with clamps so that even pressure is applied to all glued surfaces. Using a damp rag or paper towel wipe away any glue squeeze-out on the outside of the enclosure and inside the rabbeted edge (excess glue on the inside is fine). Allow to dry according to the glue manufacturer's recommendations and remove clamps.



Wipe away any excess glue from rabbeted edge

- 4) Next, glue all mating surfaces of the **Top Panel (J)** and the other **Side Panel (L)** and secure them in place with clamps so that even pressure is applied to all glued surfaces. Using a damp rag or paper towel wipe away any glue squeeze-out on the outside of the enclosure (excess glue on the inside is fine). Allow to dry according to the glue manufacturer's recommendations and remove clamps.

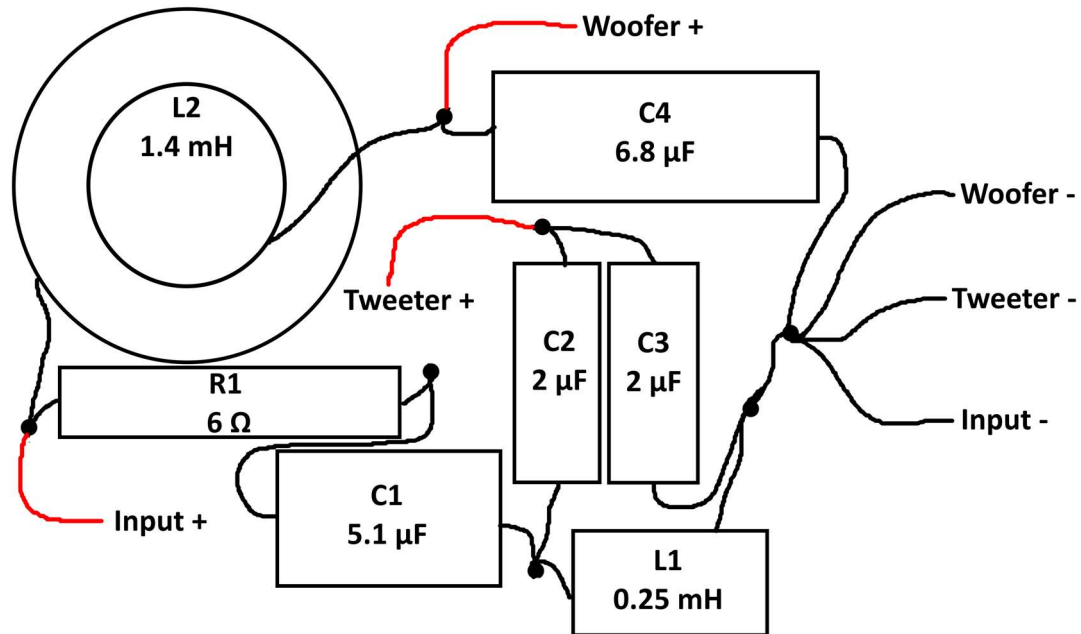


- 5) Finally, apply a thin layer of glue to the front edge of the enclosure. Set the **Front Baffle (K)** in place on the glued edge. While ensuring all edges are even and square, position clamps to apply even pressure to all glued surfaces. Wipe away any glue squeeze-out on the outside of the enclosure. At this time double check that all edges are even and square (this cannot be adjusted once the glue is dry). Allow to dry according to the glue manufacturer's recommendations and remove clamps.



- 6) Sand and finish enclosure to your liking. See our web page for examples.

Crossover assembly:



Point-to-point wiring diagram

- 7) Arrange the components as illustrated in the point-to-point wiring diagram above so the leads can be connected together as shown. Take careful note of the component type and the value of the component. (The crossover schematic is provided at the end of this assembly guide.) If you would like, the crossover can be mounted to a 3" x 5" board to make handling it a little easier.
- 8) Connect the leads of the components as shown in the diagram by twisting them together or creating interlocking "hooks" with the leads. Double check your layout to ensure all components are in the proper location and connections are correct.
- 9) With a hot soldering iron, apply solder to the connections between components. Heat the junction evenly and verify that the solder flows into the connection rather than forming a "blob" on the surface (cold joint).
- 10) Cut two lengths of **2-Conductor Speaker Wire (N)** approximately 10"-16" in length, then solder them at the outputs of the crossover network as labeled "woofer" and "tweeter" in the schematic so that the marked polarity of the wire matches the driver polarity shown in the schematic. Label each wire "woofer" or "tweeter" corresponding to the schematic.

- 11) Finally, cut one length of **2-Conductor Speaker Wire (N)** approximately 6"-10" in length. Solder this wire to the "input" connections of the crossover network as shown in the schematic so that the marked polarity of the wire matches the input polarity in the schematic. Label the length of wire "Input".

Note: You may find it easier to solder all the negative (-) connections at once. This connection may require a lot of heat, so take your time and be patient when making this connection.

Final Assembly:



- 12) Insert crossover through woofer hole and glue crossover to the bottom of the enclosure (polyurethane glue, high temperature hot glue gun, or epoxy is recommended). Ensure all crossover components are securely held in place to prevent rattles.
- 13) Port installation is simple. Slide the adjustable end of the **1-3/8" ID Adjustable Port Tube (A)** onto the flanged end and glue in place at the desired length using any glue that is acceptable for use on plastic (super glue, plastic cement, hot glue, etc...). Insert the assembled port into the enclosure and screw into place using 4 x **#6 x 3/4" Pan Head Screws (O)**. The recommended port length is 7". The length can be adjusted to your taste, a shorter port will result in slightly less bottom end with a tighter punch.
- 14) Install the **Binding Posts (P)**, and connect the input wires from the crossover while observing polarity (positive = red, negative = black)

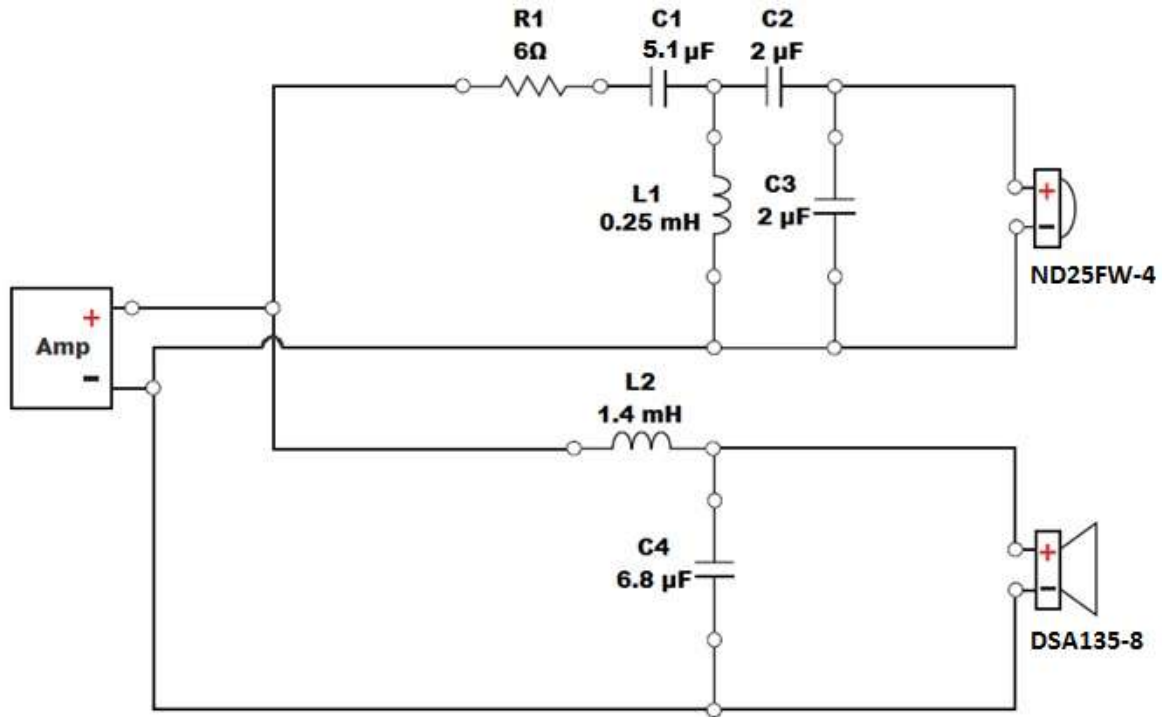
- 15) Connect tweeter wires to the terminals on the **ND25FW-4 1" Soft Dome Neodymium Tweeter (B)** while observing polarity (positive = wide terminal, negative = narrow terminal) and set tweeter in place. Using a screwdriver, secure tweeter with 4 x **#6 x 3/4" Pan Head Screws (O)** just until tight being careful not to strip out the holes (a power drill is not recommended).
- 16) Connect woofer wires to the terminals on the **DSA135-8 5" Designer Series Aluminum Cone Woofer (C)** while observing polarity and set woofer in place. Using a screwdriver, secure woofer with **#6 x 3/4" Pan Head Screws (O)** just until tight being careful not to strip out the holes (a power drill is not recommended).
- 17) You are now ready to enjoy your finished C-Note speakers.



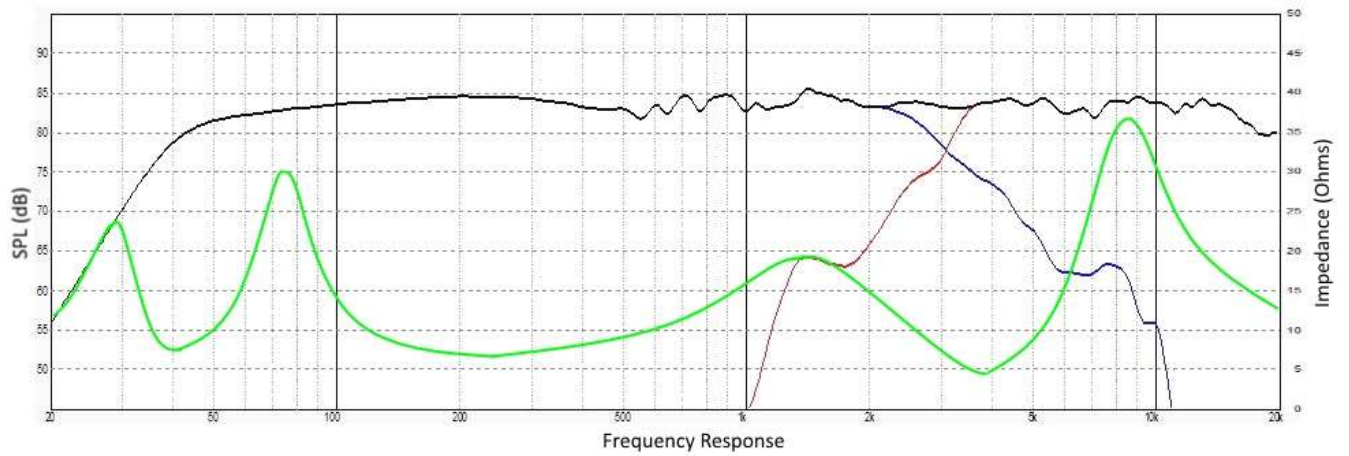
Additional parts used:

095-282	0.205" (16-14 gauge) Female Disconnect 50 Pcs
095-286	0.110" (16-14 gauge) Female Disconnect 50 Pcs

C-Note Crossover Schematic:

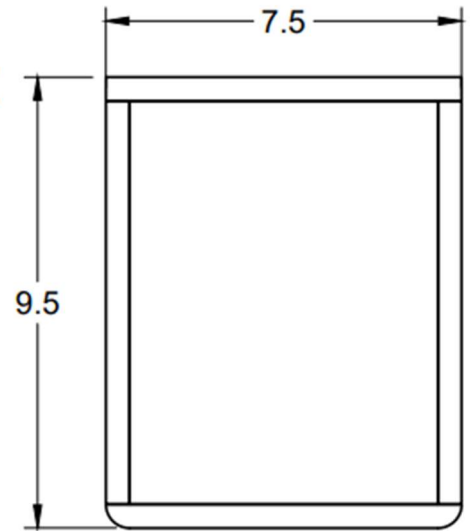
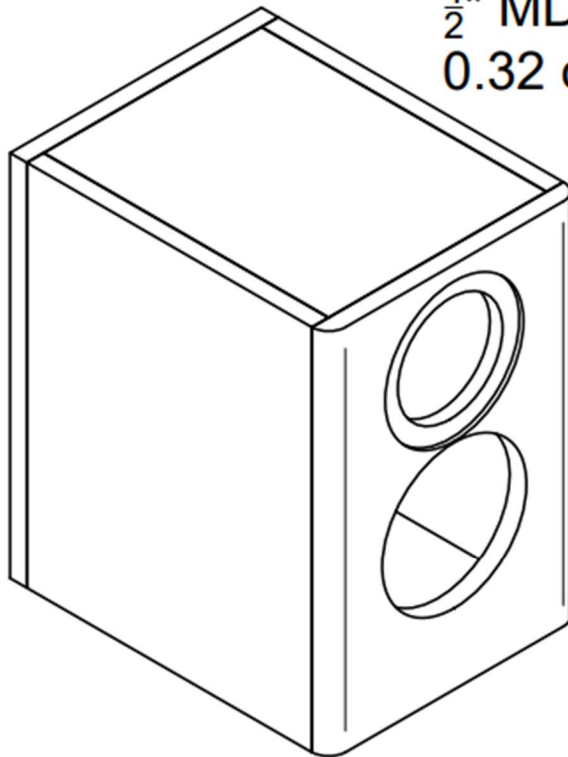


Measured Frequency Response with Impedance:

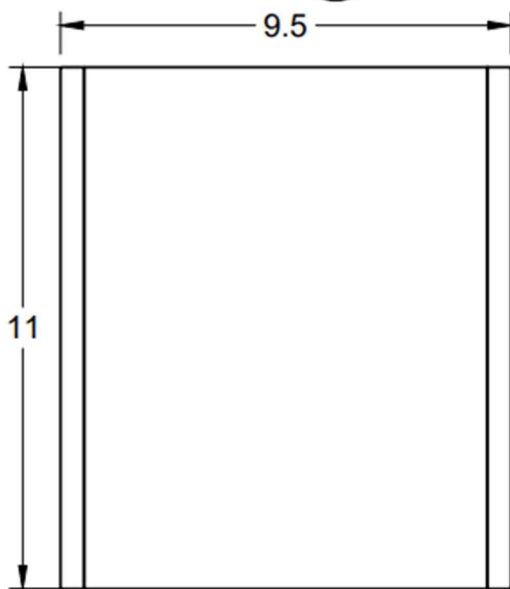


Detailed Enclosure Drawing:

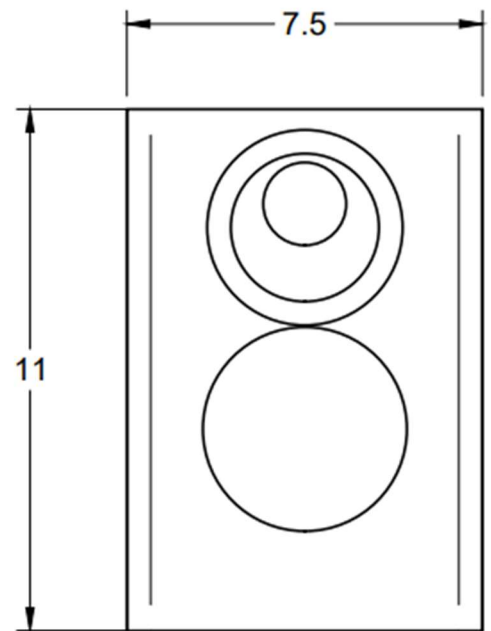
$\frac{1}{2}$ " MDF
0.32 cubic feet



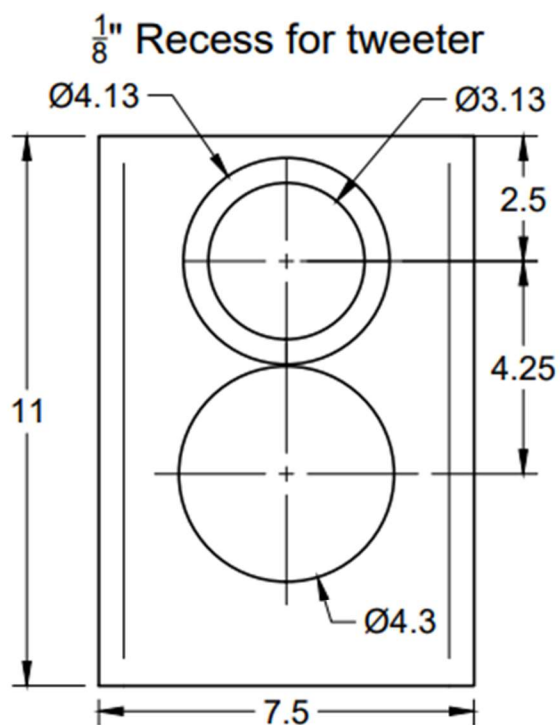
Top/Bottom



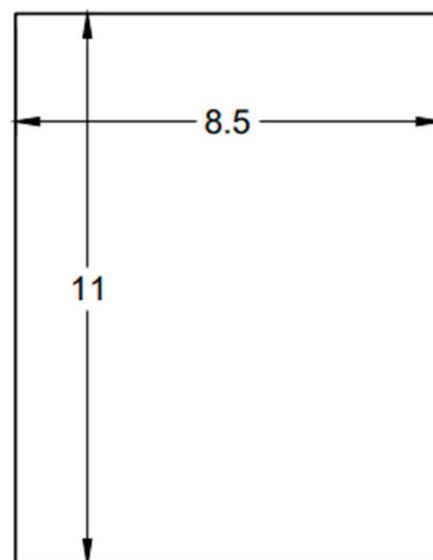
Left/Right



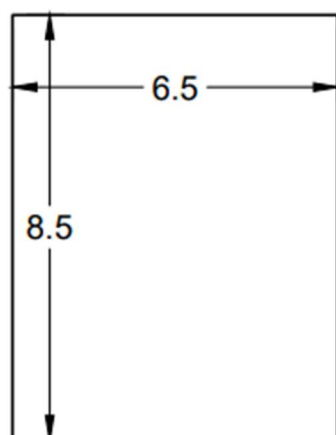
Front



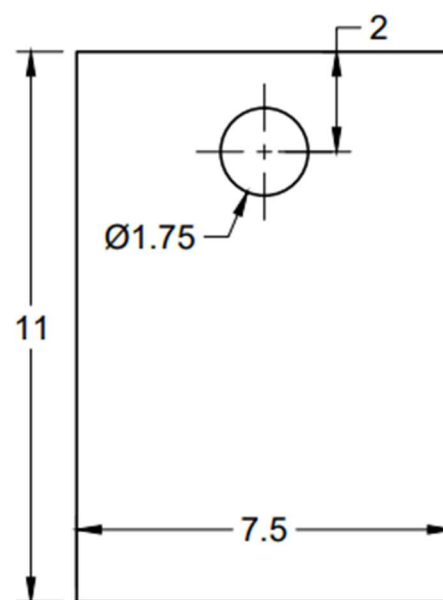
1 x Baffle



2 x Side



2 x Top/Bottom



1 x Back