

NaO Note II RS optional cabinet construction.

This document describes an optional cabinet construction for the NaO Note II RS. This version of the cabinet eliminates the separate woofer enclosure and the protrusion of the woofer box at the rear of the speakers. The profile of the speaker is that of the side panels.

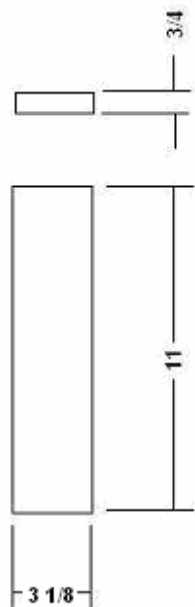
There are no changes to the side panels or the main baffle and these cabinet parts should be constructed in accordance with the original plan set.

The advantage of the optional construction is that the finished cabinet is a single piece with all joints glued together with the exception of the rear woofer access panel. The result is that the cabinet is sturdier and free from potential rattles. The down side of this new construction is that if the woofer baffles are cut for the SLS it is difficult to enlarge the woofer cut outs for the XLS or XXLS woofer should it be desired to update the speaker to these woofers at a later date.

If you chose to build this option cabinet please do not cut the panels for the woofer enclosure as described in the original plan set. New panels, as described below, must be fabricated.

New panels:

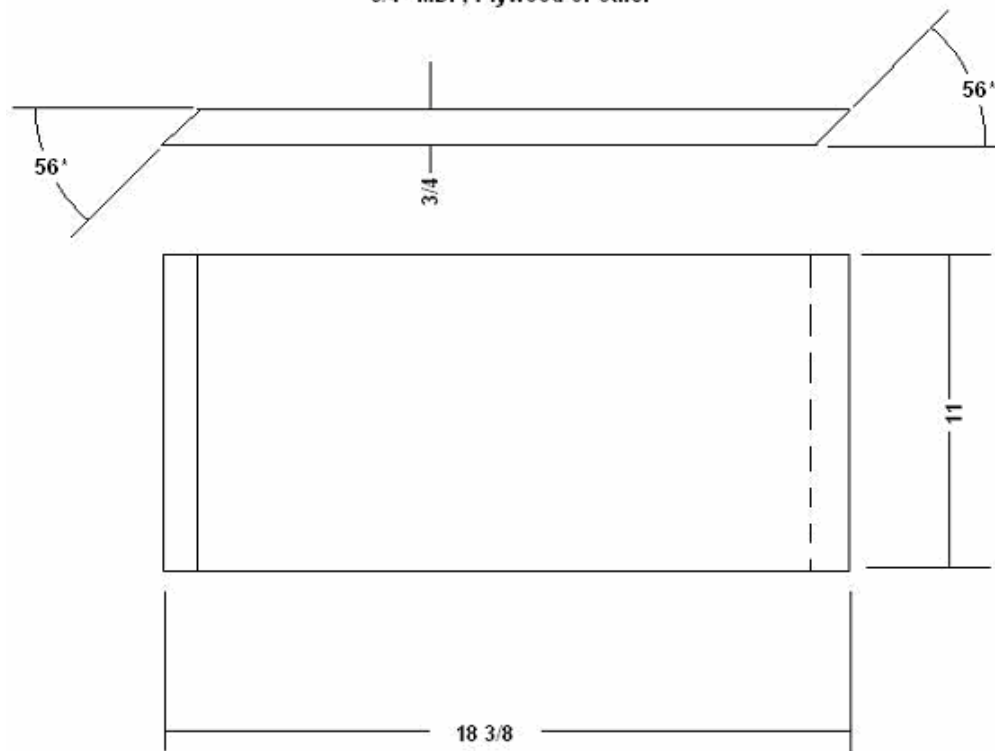
PART A
Woofer top panel
3/4" MDF, plywood or hard wood.



PART B

Woofer chamber access panel

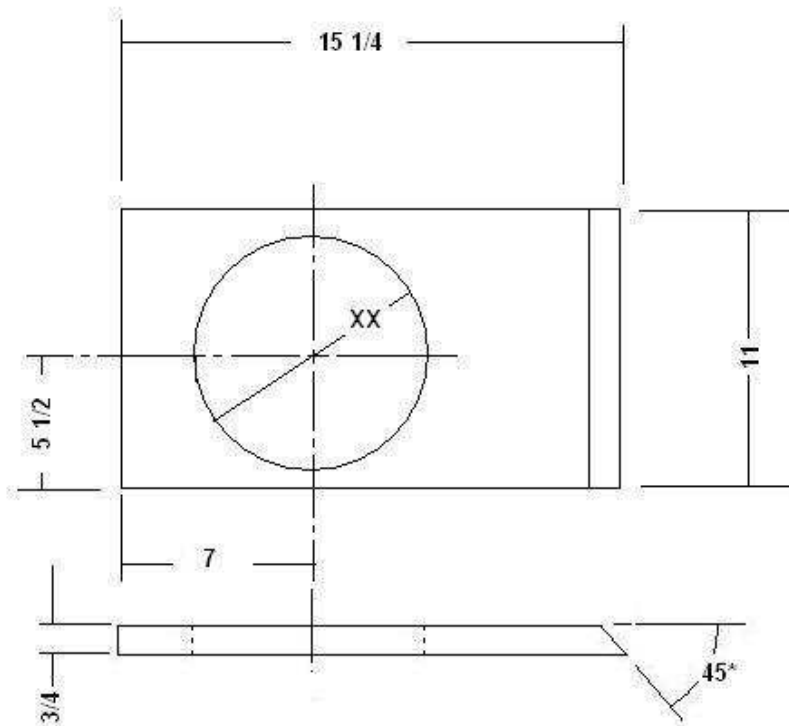
3/4" MDF, Plywood or other



PART C

Upper woofer baffle

3/4" MDF or plywood



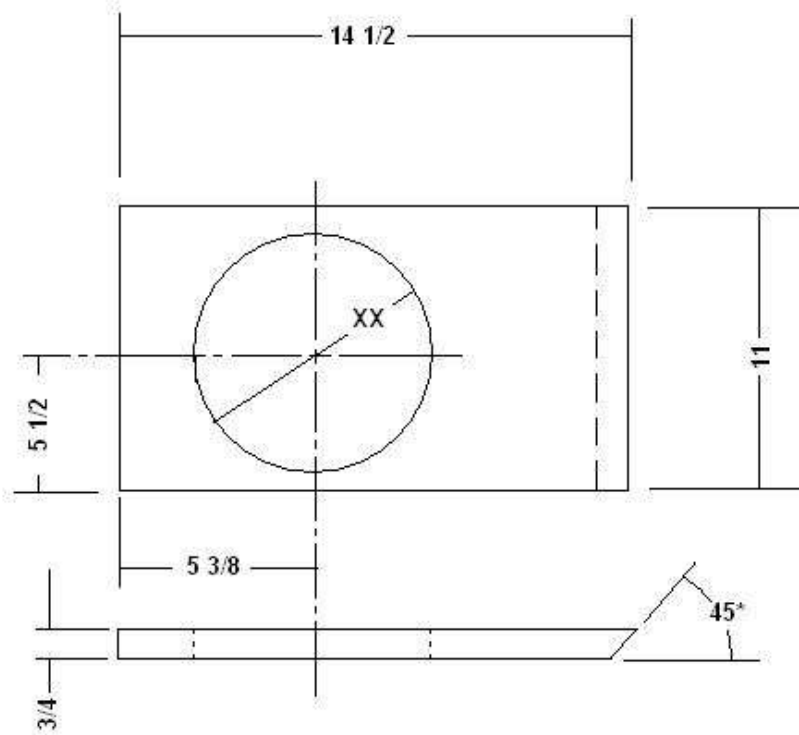
XX = 9" dia for SLS woofer

**XX = 9 $\frac{1}{2}$ for XLS or XXLS
woofer**

PART D

Lower woofer baffle

3/4" MDF or plywood



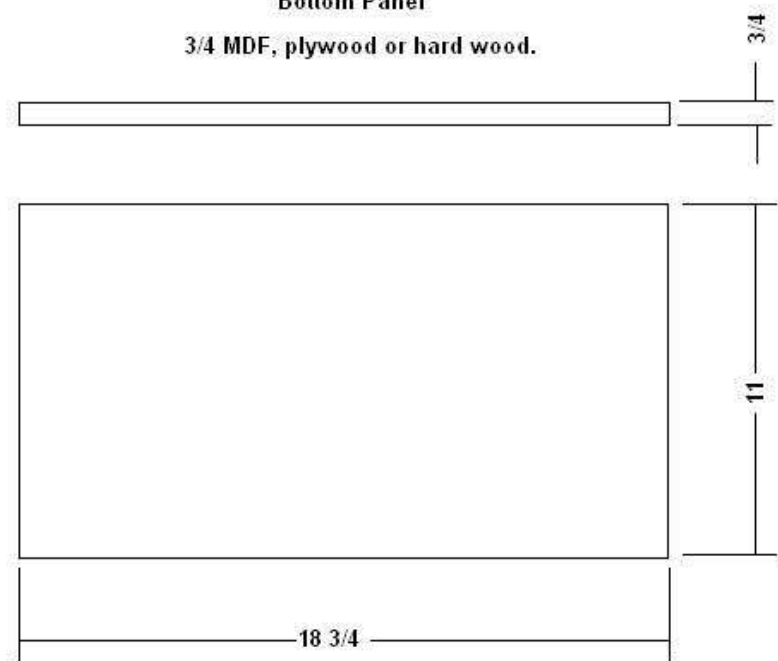
XX = 9" dia for SLS woofer

**XX = 9 1/2" for XLS or XXLS
woofer**

PART E

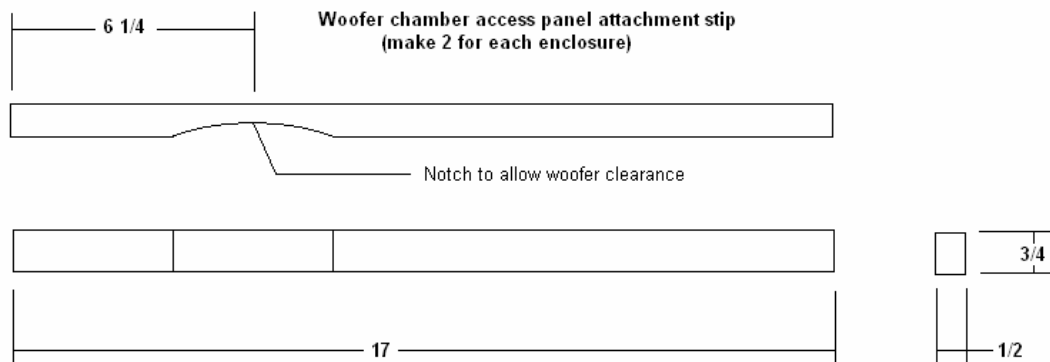
Bottom Panel

3/4" MDF, plywood or hard wood.



Part F

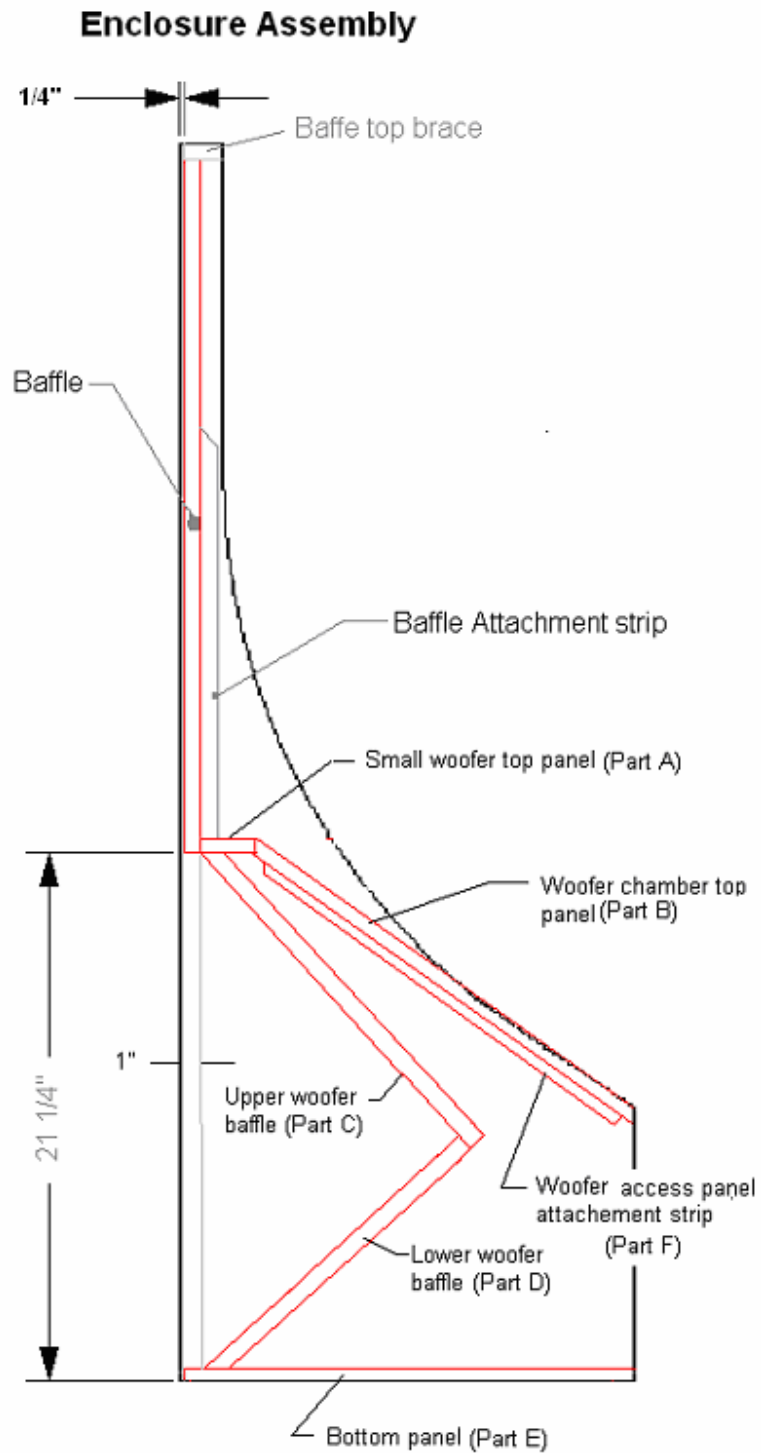
**Woofer chamber access panel attachment stip
(make 2 for each enclosure)**



Weather stripping used to seal woofer access panel (Home Depot)



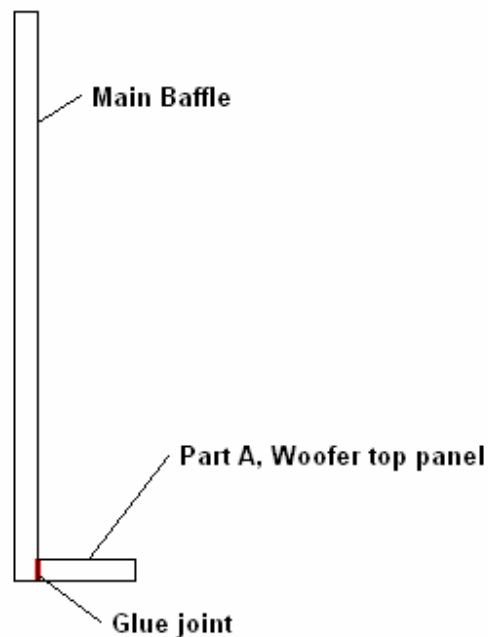
Cabinet Assembly:



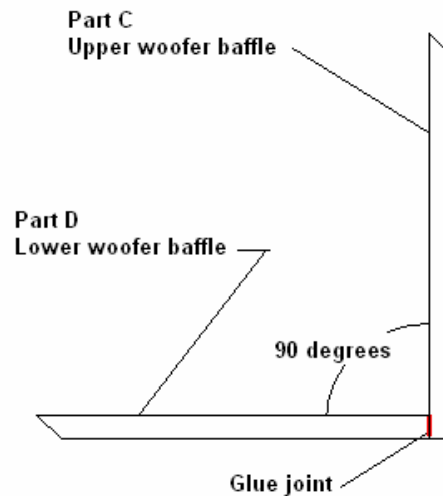
Assembly Instructions:

Note that the attachment strips for the midrange/tweeter described in the original plan can be replaced with 1/4" quarter round molding since they will be glued in place. The use of molding gives a more finished look.

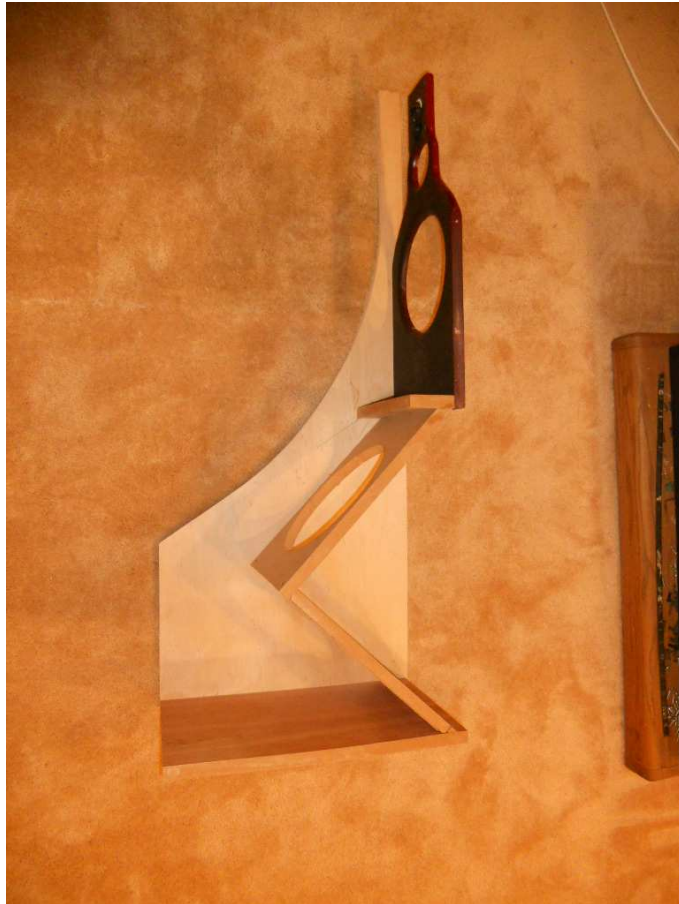
- 1) Locate the main midrange/tweeter baffle and the smaller woofer top panel (Part A). Part A should be glued to the back side of the main baffle so that the bottom of Part A is flush with the bottom edge of the main baffle. See figure below. Set aside until the glue has set.



- 2) Locate the Part C, upper woofer baffle and Part D, lower woofer baffle and glue them together as shown below. Please note that the lower baffle butts against the upper baffle. Make sure the panels are orientated correctly and that they are at 90 degrees. Set aside until the glue has set.



- 3) Locate one side panel and lay it on a flat surface. The enclosure will be built up on this side panel.
- 4) Locate Part E, Bottom panel, and glue it to side panel. The bottom of Part E should be flush with the bottom edge of the side panel and the rear edge of Part E should be flush with the **rear edge** of the side panel. Make sure the bottom panel is at 90 degrees to the side panel.
- 5) Locate the woofer baffle assembly of Parts C and D. Glue this assembly to the side panel and to the bottom panel. Make sure the woofer baffle assembly is set back 1" from the front edge of the side panel as shown in the assembly drawing. Set aside until the glue sets.
- 6) Locate the assembly of the main baffle and Part A. Glue this assembly to the side panel and to the edge of the upper woofer baffle. The main baffle should be position $\frac{3}{16}$ " to $\frac{1}{4}$ " back from the front edge of the side panel as shown in the Enclosure Assemble drawing, above. The completed unit should appear as shown below.



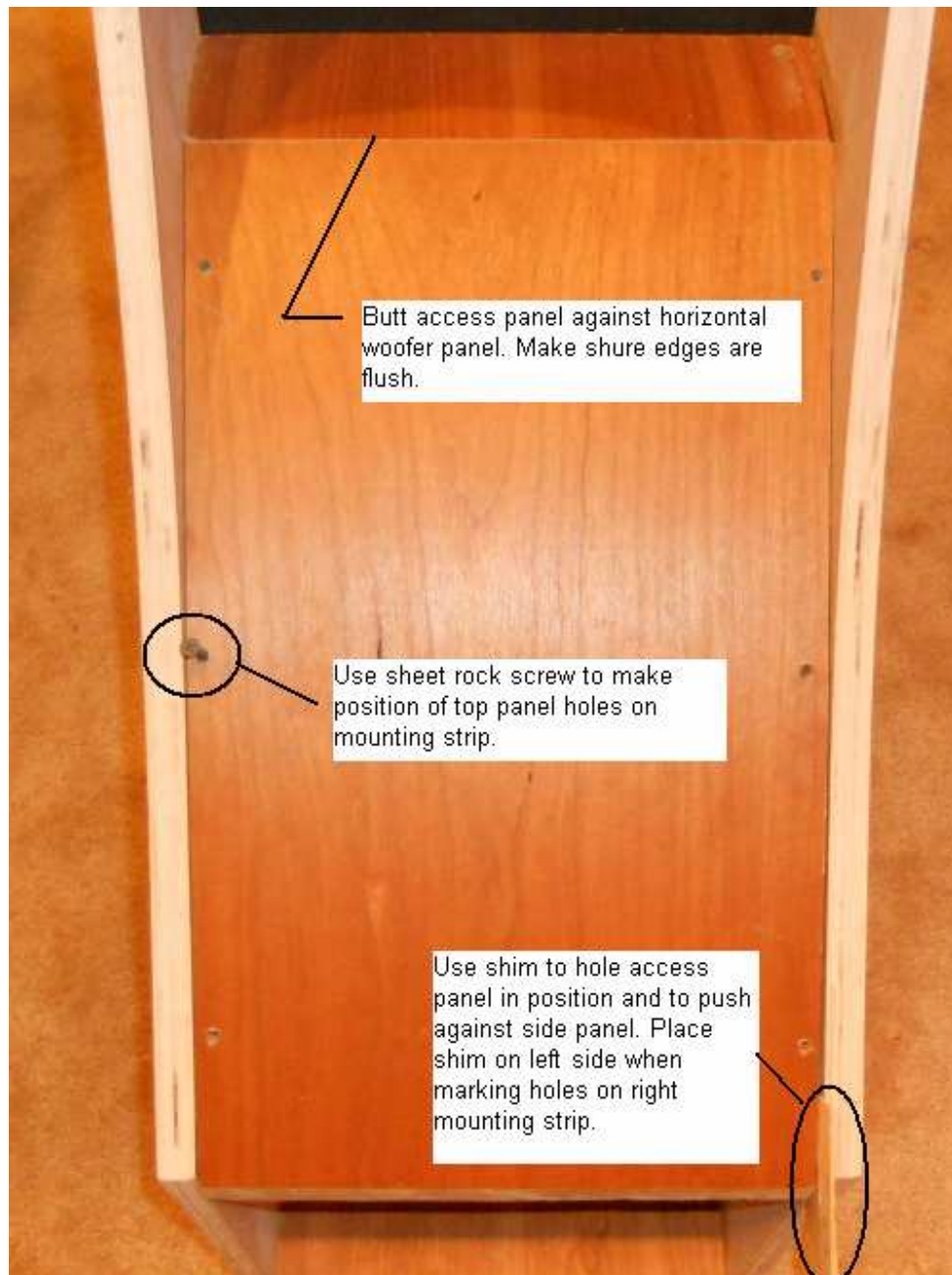
- 7) Once the glue has set apply glue to the exposed edges of the bottom panel, the woofer baffles, the main baffle and the woofer top panel. Carefully position the other side panel and clamp until the glue sets.
- 8) After the glue sets removed the clamps and glue the baffle attachment strips in place at the joint between the main baffle and the side panels. These are used to add strength to the joint.
- 9) Locate the Baffle Top Brace and glue to the side panels and top of the baffle. Make sure it is level.
- 10) Locate the mounting strips for the Woofer access panel and glue to the inside of the side panels as shown in the picture below. The mount strips should be position so that the top of the access panel will be slightly below the edge of the side panel at the rear to account for the thickness of the weather stripping used to seal the enclosure. Allow glue to dry.



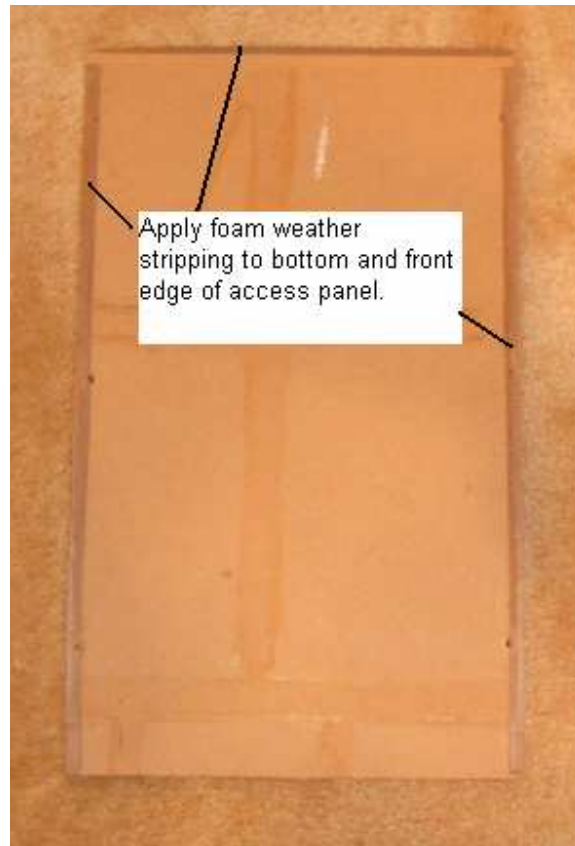
- 11) Drill six $\frac{3}{16}$ " diameter holes, as shown below, in the woofer access panel. 2" from the top edge, 2" from the bottom edge and $\frac{1}{2}$ way in between. These holes should be $\frac{1}{4}$ " in from the edge of the panel.



- 12) Place the access panel on the enclosure such that the front edge butts against the short horizontal panel of the woofer enclosure, as shown below, and use a sheet rock screw to mark the position of the access panel holes on the mounting strips. A shim is used to hold the access panel in place while marking the holes. The shim should be placed between the access panel edge and the side panel on the opposite side of the holes to be marked. Move shim to other side before making the holes for that side. See figure below.



- 13) After the holes are marked, remove the access panel and drill 1/16" pilot holes in the mounting strips to prevent splitting when the screws are installed. It may not be possible to drill the pilot hole in the front most position.
- 14) Apply the foam weather stripping to the bottom and front edges of the access panel.



- 15) Do not install the access panel at this time.
- 16) Paint or finish the enclosure as you choose.
- 17) Install the bottom woofer first, then the upper woofer. Once the woofers are installed the access panel can be secured to the enclosure using 1 5/8" sheetrock screws. Do not over tighten the screws. See figure below.



Install the access panel.



18) The remaining driver and connections can now be made in accordance with the original plan set.