Side Panels

The first section of the Cajon Drum to be cut is the side panels. For these, they should be cut at 18" tall by 11 1/2" wide. The wood used to build this Cajon drum is Baltic Birch Plywood that is 1/2" thick.

Top & Bottom

The second pieces to be cut out are the top and bottom. The dimensions for this section of the Cajon are **12" wide by 11 1/2" deep.** Keep in mind that the finished product will contain a depth of 12", so the original frame must be sized to be 11 1/2" deep and the remaining 1/2" will be added once the back panel is added!

Internal Support

It is important that your drum is sturdy enough to support your complete body weight. To achieve this peace of mind, we will install **2 - 3/4" x 18" tall** square dowels on the inside of each side panel. One of the main reasons I build this model with 18" tall side panels is so that I can use the 3/4" x 36" tall dowels from the hardware store and simply cut them directly in the middle. It is the most cost effective means of internal support and makes it much easier when measuring how to cut the dowel.

Framing the Body

Once you have successfully installed the dowels to the inside of the side panels, it is time to frame the body of the drum! When I was learning how to build a Cajon drum for the first time, this step was quite tricky, but here's how I frame the drum now. You simply lay the bottom piece on your work station, put some wood glue on the corners, stand the two side panels on it, place wood glue on the top of the dowel rods, then place the top piece on! Once this has been done, you can just either clamp the frame or, if you don't have the luxury of an extensive collection of clamps, you can use the $6.99 Husky ratchet straps. At this point, you can adjust the pieces to be nice a square, and then drill screws into all four corners on the top and bottom pieces into the dowel rods.

Back Plate & Sound Hole

Creating the sound hole or "Bass Port" or "Kick Port" or whatever you kids are calling them these days, is extremely tedious and requires a bit of proficiency with a jigsaw. There are other ways of cutting the sound hole out, but I personally believe it is easiest to just do it with a jigsaw. Typically, I place the sound hole either directly in the center of the back plate or just slightly above the center. It is worth noting that the sound that is produced can be determined by where this hole is placed. It is, theoretically, the only place on the drum where sound can escape. So if the hole is placed towards the center or slightly below, the bass tones will be released more prominently, and if the hole is near the top, the snare tones will be released more prominently. Please don't ask me why this happens, as I do not know much about acoustics or science....but I've personally hand built about 100 Cajon drums and this is just an observation I have made with the sound quality!

Anyways, the back plate, for this model, is cut at a dimension of 12" wide by 18" tall. The sound hole is cut typically with a 4 ½” - 5” diameter.

Snare Mechanism

The snare mechanism for a Cajon Box Drum can be installed several different ways. Some people choose to use Guitar Strings, which I have tried before and they did provide a nice 'buzz' sound, but I prefer to use snare wires. With Snare wires, you can accomplish a more distinct sounding difference between the snare and bass tones. To use these, you get a set of Snare wires (I use 14" 30 strand), and you cut them in half. Once they are cut in half, you attach them to a piece of quarter round trim, or a dowel with a 45 degree angle so that they are angled out, causing them to be pressed firm against the back side of the Tapa.

Attaching the Snare Wires

There isn't much explaining to do here, just make sure that when you do this, the snare wires are angled outside of the drum that way when the Tapa is installed, they are pressed against it firm.

The Tapa

For the Tapa, I am using Baltic Birch plywood that is 1/8" thick. The Tapa needs to be a thin piece of wood to allow it to give a little when it is struck and provide full tones. I attach the Tapa by putting a small amount of wood glue around the corners and across the top to make sure that it is fully adhered to the drum, and then use 10 screws to secure it down, 4 on the left side, 4 on the right side, 1 in the center on the top, and 1 in the center of the bottom. You can glue the Tapa to the drum or use screws and use no glue, both will alter the sound of the drum. For this one, though, I am using both. I have found that using both wood glue and screws on the Tapa produces better sound quality.