

18 inch by 24 inch Screener

Screeners come in all different sizes, from small (18 inches by 24 inches) to large (3 feet by 5 feet). The materials needed for different size screeners change, for example a small screener can be made from 1 inch thick by 6 or 8 inch wide pine lumber, while a larger screen can be made with 2 by 4's.

The idea is to have a screener that fits the amount of compost you make. This screen 18 X 24 inches works well with a small to moderate amount of compost.



Materials List:

- 1 pine board that is 1-inch thick by 6 or 8 inches wide by 8-feet long;
- 1 piece of 1-inch thick by 1-inch wide by 8-foot long pine board;
- A piece of half-inch mesh, cut 18-inches by 24-inches;
- 12 two-inch galvanized deck screws; and
- 24 one and five-eighths-inch galvanized deck screws, and
- Enough half inch staples to hold the screen mesh onto the wooden frame.

Note:

The screener illustrated in this document was made using a 1" by 8" by 8 foot pine board.

In addition, you'll need the following tools to build your screen:

- A circular saw / Table Saw / Cut-Off saw
- A hammer
- A crosscut saw / Hand saw
- A carpenters square
- A drill with a Phillips #2 screw driver bit
- A 1/8 inch drill bit and a countersink bit
- Wire cutters
- A staple gun with 1/2" staples
- Sandpaper
- A tape measure
- A marking pen, and
- Safety goggles

First, start by rolling out the mesh screen and measuring an 18-inch by 24-inch piece.

You can purchase 1/2 inch screen prezised at 24 inches so you only need to cut the screen the width you need.



Next, measure and mark both boards.

Note:

Your standard 1" by 8" board is actually $\frac{3}{4}$ " by $7\frac{1}{2}$ ".

I set the table saw at 1 inch and cut the board length wise, then set the saw at 6 inches and again cut the board length wise. So I now had a 6 inch wide piece and a 1 inch wide piece.



I then took both pieces and measured 24 inches and cut them on a cut-off saw. I again measured 24 inches and cut the boards again so I had 4 pieces of wood 24 inches in length, 2 at 6 inches wide and 2 at 1 inch wide.

In order for your screener to be 24" by 18" our next two cuts can not be 18 inches because that would make the outside size of our screener to be $19\frac{1}{2}$ inches wide, or $25\frac{1}{2}$ inches long. Remembering that our boards are not 1" thick, but only $\frac{3}{4}$ " thick, we have to adjust our cuts to ensure the 24" by 18" size of the screener.

The final two cuts will be 18 inches minus the thickness of the two boards ($1\frac{1}{2}$ "), so our cuts will be $16\frac{1}{2}$ inches.

You should now have 8 pieces of wood:

- 2 pieces – 6 inches wide by 24 inches long
- 2 pieces – 1 inch wide by 24 inches long
- 2 pieces – 6 inches wide by $16\frac{1}{2}$ inches long
- 2 pieces – 1 inch wide by $16\frac{1}{2}$ inches long

After all of the pieces of wood are cut to the proper length, pre-drill and counter-sink all of the holes for the screws so you don't split the wood.

Screw the pieces together using the 2 inch galvanized or coated screws.



When all the holes are pre-drilled, you can assemble the screen and attach the wire mesh using the ½ inch staples.



Once the wire mesh is stapled onto the frame of the screener you are ready to attach the 1 inch pieces of wood onto the bottom of the screener. These pieces of wood help keep the wire mesh secured to the screener and make sure the staple don't pull out when you're using it. {Don't forget to pre-drill your holes in the before screwing the 1 inch pieces onto the bottom of the screener}.

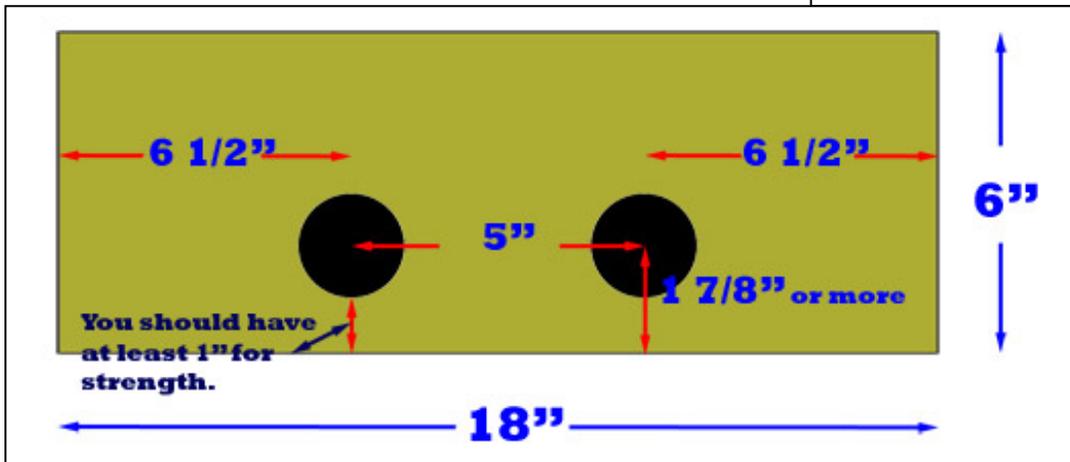
Screw the bottom pieces onto the frame using the 1 5/8" galvanized or coated screws.



Once you have your Compost Screener assembled you may want to make handles to help hold and shake the screener. The following directions are one way of making handles in your screener.

To make the following handles in the compost screener you will need a "Hole-saw and a Jig-saw". You should use a 1 5/8" hole saw or something close to that size so if you are wearing gloves while screening compost your gloved hands will go through the handles comfortably

On the ends of the compost screener measure and mark where you will drill your holes.



Using the hole saw drill almost completely through the board leaving just about a ¼ of an inch left to go. Now finish drilling the hole from the opposite side of the board. This will make a clean hole and will help eliminate a lot of sanding to clean up the rough edges.



Once both holes are drilled mark a straight line on the outside of the holes to mark what you are going to cut out with the jig saw.



Now that you have everything cut out you will just need to use a piece of sand paper to smooth the rough edges and you are ready to start screening your compost.

