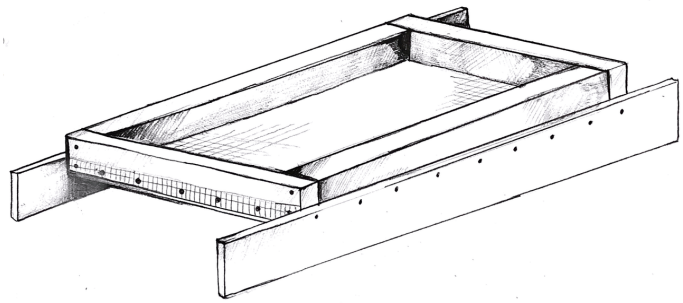




# Compost Sifter

19.5" x 28.5"



## OBJECTIVE

Construct a sifter for compost application

**TIME:** 3 hrs. **DIFFICULTY:** Medium **CATEGORY:** Carpentry

### TOOLS

Drill, pilot drill bits (3/32")  
Screw tips to match screws  
Hammer  
Combination square  
Clamp 3', (2) 6" clamps (optional), corner clamps  
Sandpaper 150 grit and sanding block  
Tin Snips  
Hand Saw  
Saw Horses and/or table  
Pencil, Gloves, Goggles, First Aid Kit

### MATERIALS - HARDWARE

Common Pine Lumber: Hardware:  
(1) pc 1"x4"x 8' (14) pcs - 1" lath screws  
(1) pc 2"x 4"x 8' (35) pcs - 1 5/8" deck screws  
(1) pc 1"x2"x (8) pcs - 3" deck screws  
(1) pc - 30" x 21 1/4" hardware cloth (1) pc - 30" x 21 1/4" hardware cloth  
Linseed oil + brush (optional) Choose either 1/4" or 1/8" gauge hardware cloth

### PREP WORK

#### Cut List

Frame: Hardware Cloth Wooden Support  
(2) pcs - 2"x4"x25 1/2" (2) pieces - 1" x2" x 25 1/2"  
(2) pcs - 2"x4"x19 1/4" (2) pieces - 1" x2" x 19 1/4"  
Handles: (1 5/8" screws) Hardware Cloth Screen:  
(2) pcs - 1"x4"x40" 30 1/2" x 21 1/4" - cut nibs off

#### How To

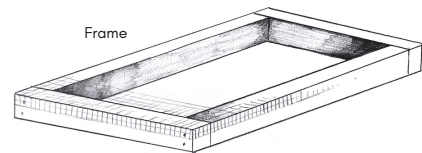
**Frame:** Assemble the frame, join the 2"x4"x25 1/2" and 2"x4"x19 1/4" pieces, with the longer pieces nested inside of the shorter ones.

Pre-drill two holes in each corner to avoid splitting the wood.  
Use the 3" deck screws to secure all four corners.

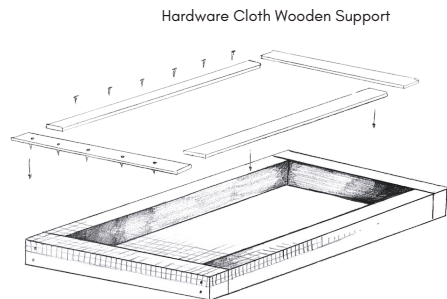
**Hardware Cloth Support:** Cut the hardware cloth to size and place over the 2"x4" frame leaving at least a half inch overhang.  
Place the 1"x2" hardware cloth wooden support pieces over the hardware cloth. Clamp, pre-drill, and set 1 5/8" screws every 5".

**Hardware Cloth:** Cut the hardware cloth to size, fold the cloth over the sides of the frame (leaving a 1" allowance) making cuts at the corner so that the cloth lays flat. Use a hammer to bring the cloth flush with the wood. Pre-drill holes for the lath screws at equidistant intervals on the short sides, then drill the lath screws in.

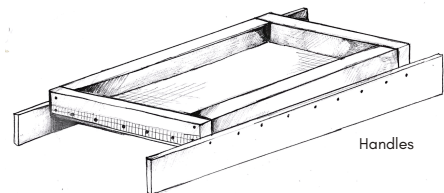
**Handles:** Measure an 2" from the top of the 2"x4" frame and place the 1"x4" boards here. Attach handles to either side using 1 5/8" screws in two rows. See image below for screwing pattern.



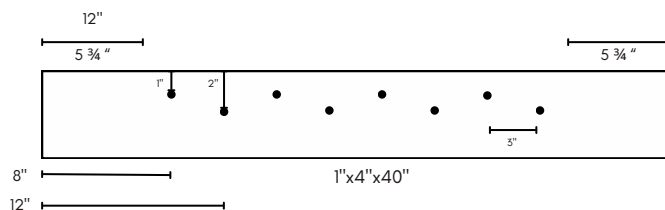
Frame



Hardware Cloth Wooden Support



Handles



## Sifter fits easily over a 27 gallon plastic bin or wheelbarrow

### CONSTRUCTION TIPS

- Hardware cloth comes in different sizes. The following are suggestions for mesh size selection:
  - ½" sifted compost to apply on a tree bed
  - ¼" to apply on a garden bed
  - ⅜" can be used for seed-starting
  - ⅛" primo (the finest!) for seed starting
- Wear gloves when cutting the mesh. Trim off hardware cloth nibs so the cloth won't catch on your clothes or cut you while sifting.
- Purchase deck screws that are meant for outdoor use, these are corrosion-resistant and will last longer.
- Adjustments can be made to the measurements to change the sifter size.

### SIFTING TIPS

- How to use the sifter - use a garden trowel or small shovel to mound a few inches of material over the screen and move the trowel back and forth not pressing too hard to get the finer compost through the mesh
- This sifter fits easily on a (27 gal.) plastic utility bin so that the sifted compost can be covered and saved for later use.
- Don't overfill the screen with compost as this makes it hard for it to pass through the sifter.
- This activity is fun for 2-3 ppl at a time!
- You can also screen over a wheelbarrow.
- Use compost that is "mature". Usually, a backyard compost device takes about a year for the decomposition level to become mature and ready to sift.
- When is it ready? The particle size of the material should be relatively fine; without recognizable ingredients such as leaves or food scraps. You may see avocado pits and skins but if you identify an orange skin, this is a sign it is just not ready yet! Compost maturity test: take a cup of your compost and put it into a zip-lock plastic bag for 48 hours. When you open the baggie, if it smells like ammonia, then it is not ready. If it smells like a forest floor it is ready to go. When you are ready to sift, dry out the compost - spread the compost out so that it is ½" deep on flat surface out of the rain, a week before sifting. Wet compost clogs up the screen.
- Sift what you will use but if you are not going to use the compost right away, leaving it unsifted (with carbon ingredients that have not broken down) is more beneficial as it will continue to get cycle nutrients and become a richer soil amendment, up until 5 years of age.
- The wood chunks and large pieces that don't pass through the sifter, called "overs", can be used over again in the beginning stages of composting. Same goes for worms and insects, place them back into unfinished compost.
- Contamination (plastic, wrappers, rubber bands, produce stickers, etc.) should be put in either landfill or recycled/reused.

### COMPOST APPLICATION - RULE OF THUMB

- If your soil is used for annual flower and vegetable plants and is in poor condition, i.e. it is sandy, grey in color, and does not clump together, apply ¼" of compost and work it into the soil in the spring, then the summer, and then again in the fall. Repeat again the next year(s) until the right tilth is achieved.
- If your soil is used to grow annual veggies, has a good amount of organic matter and is "friable" add ⅛" of compost in the spring or fall either placing it on top or working it into the soil. Veggies draw out nutrients and nitrogen levels need to be replenished annually.
- Perennial and tree beds - apply a ⅛" of compost over the top of the soil around the base of the plant. You can ¼" sifted compost or you do not need to sift it at all! This is a compost "mulch" that helps retain moisture, provides nutrients, and keeps the weeds down.

### SIFTER REPAIR TIPS

- This wooden sifter can last up to 10 years, storing it inside a shed extends the life of the sifter.
- If the hardware cloth deteriorates cut another piece of hardware cloth to replace the damaged cloth, and pilot new screw holes.
- Coating the frame with boiled linseed oil mixed with a touch of turpentine (to thin) on an annual basis will extend the life of your sifter.