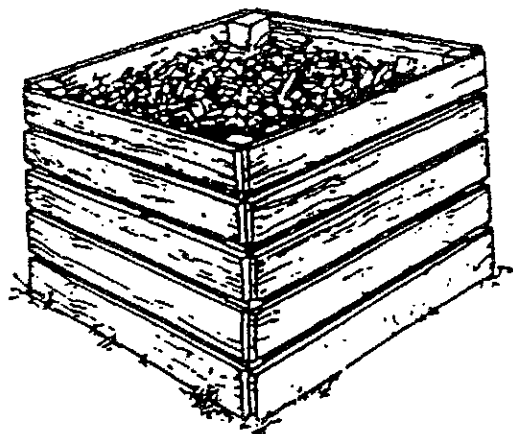


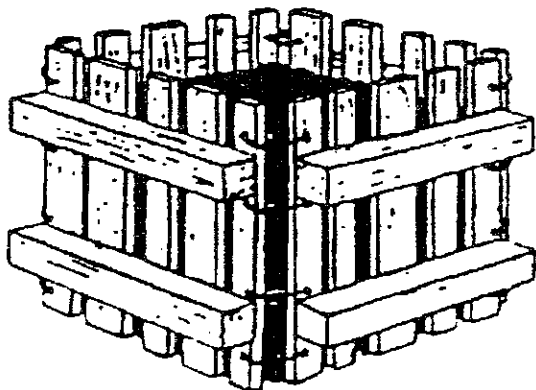
Single Wooden Unit

Choose a 3' x 3' square site for your compost bin. Use a sledgehammer to pound the four posts (2x4) into the ground three feet apart, at the corners of the square. Nail 1 x 6 wood to the posts, leaving two inches between boards.

One side can be left open to allow for easy access if you wish. A second unit would allow the compost to mature in one box while you add materials to the first box.



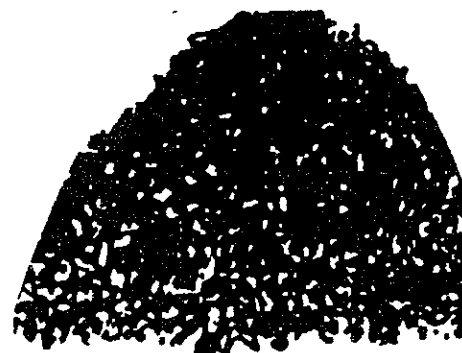
Wooden Pallet Unit



One easy way to build a simple and effective compost bin is to use four wooden shipping pallets and tie them together. Many retail outlets will allow you to reclaim the discarded pallets for use at home. After placing the four pallets upright to form your square bin, tie the four corners with rope, wire, or chain. You can use a fifth as a floor inside your bin to increase airflow and stability.

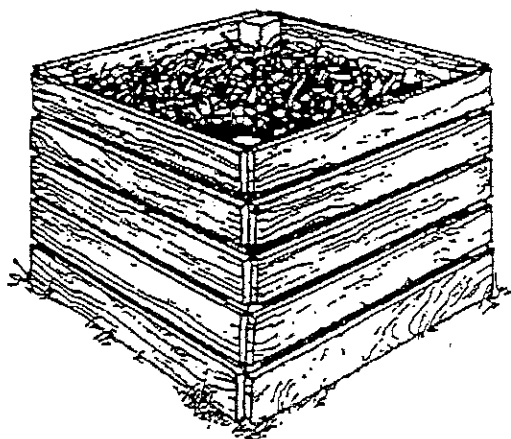
Compost Pile

No construction necessary. Find a sheltered spot in your backyard to begin your pile. That's it. Just keep in mind that items such as paper towels and napkins can blow around without a containment unit.



WOODEN-PALLET HOLDING UNIT

A holding unit can be built inexpensively using wooden pallets, or ~~pressure-treated~~ lumber may be used to make a nicer looking bin. The costs will vary, depending on whether new lumber or pallets are used. Used pallets are often available from manufacturers and landfills.



Materials

- four wooden pallets (Five pallets if you want a bottom in the container), sized to make a four-sided container at least 3 feet x 3 feet x 3 feet
- nails
- baling wire
or
- two eight-foot lengths of 2 x 4 ~~pressure-treated~~ lumber
- five 12-foot lengths of 1 x 6 ~~pressure-treated~~ lumber
- galvanized 8d nails (1 pound)

Tools

- saw
- sledge hammer
- claw hammer
- work gloves

Building a Holding Unit Using Wooden Pallets

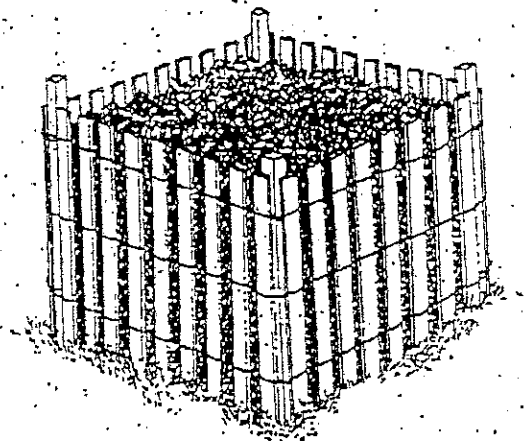
1. Nail or wire four pallets together to make a four-sided bin at least 3 feet x 3 feet x 3 feet. The bin is then ready to use.
2. A fifth pallet can be used as a base, to allow more air to get into the pile and to increase the stability of the bin.

Building a Holding Unit Using Lumber

1. Saw the 8-foot lengths of 2 x 4 ~~pressure-treated~~ lumber into four pieces, each 4 feet long, to be used as corner posts.
2. Choose a 3-foot-square site for your compost bin. Use the sledge hammer to pound the four posts into the ground 3 feet apart, at the corners of the square.
3. Saw each of the five 12-foot boards into four 3-foot pieces. Allowing five boards to a side and, starting at the bottom, nail the boards to the posts to make a four-sided container. Leave 2 inches between the boards to allow air to get into the pile.
4. If you wish to decrease your composting time, build a second holding unit so that the wastes in one can mature while you add wastes to the other.

SNOW-FENCE HOLDING UNIT

A snow-fence holding unit is simple to make. It works best with four posts pounded into the ground for support.



Building a Snow-Fence Holding Unit

1. Choose a 3-foot-square site for your holding unit, and pound the four wooden or metal posts into the ground 3 feet apart, at the corners of the square.
2. Cut the heavy wire into lengths for ties. Attach the snow fence to the outside of the posts with the wire ties, using pliers.
3. Attach the ends of the snow fence together in the same way, forming a 3-foot-square enclosure.

Materials

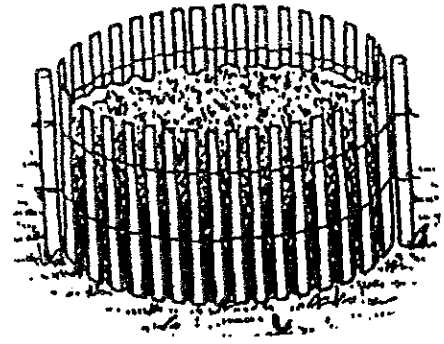
- four wooden or metal posts, 4-5 feet long (Use pressure-treated lumber for the wooden posts.)
- heavy wire for ties
- a 13-foot length of snow fencing, at least 3 feet tall (a 16-foot length with optional top)

Tools

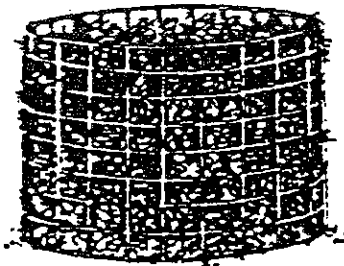
- heavy-duty wire or tin snips
- pliers
- sledge hammer
- work gloves

Snow Fence Bin

Wood or plastic snow fence (or chicken wire) can be used to make a composter that is cheap and very easy to set up. If you want to turn the pile, you can remove the fence, set it up beside the first pile, and turn the compost into the newly set up bin. Simply make a circle out of the fence and tie it with metal wire to a couple of posts.



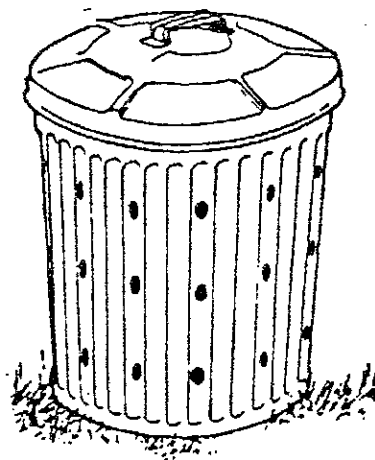
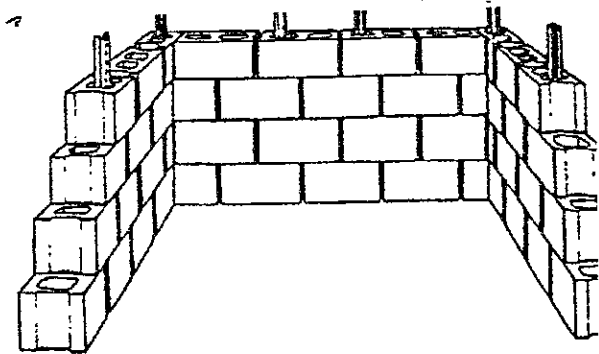
Wire-Mesh or Hardware Cloth Unit



Tie 3-4 ft of wire mesh or hardware cloth into a circle and attach the ends with wire ties using pliers. Space wood or metal posts around the inside, hold tight against the wire and pound them firmly into the ground to provide support.

Cement Block Bin

Cement blocks or bricks may be used to build a composter. It is easy to set up and can be constructed with two sections to facilitate the turning of the pile from one section to the next.

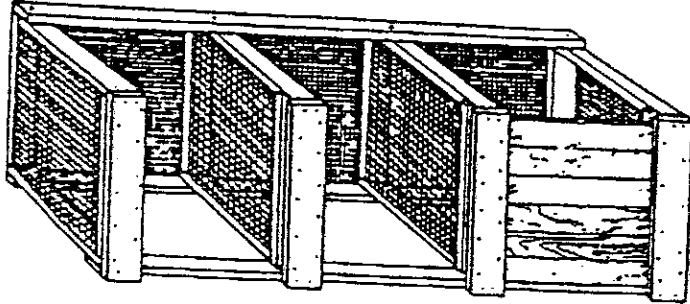


Drum/Can

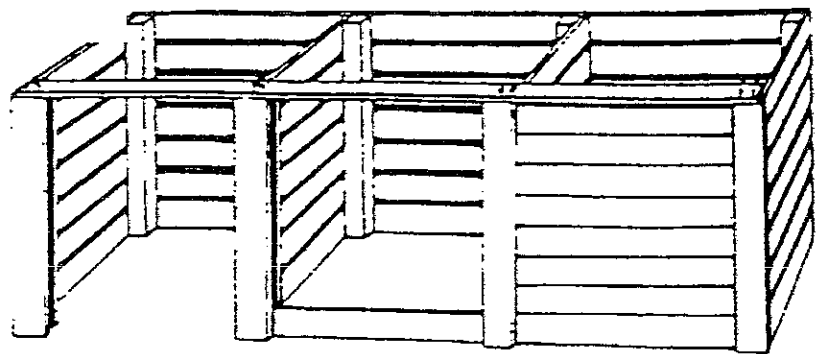
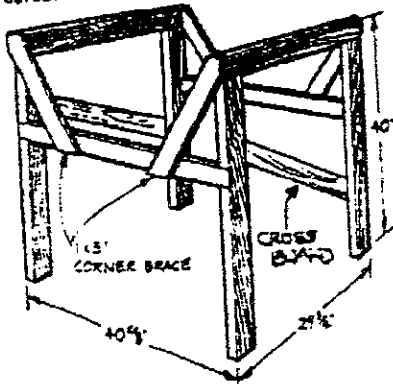
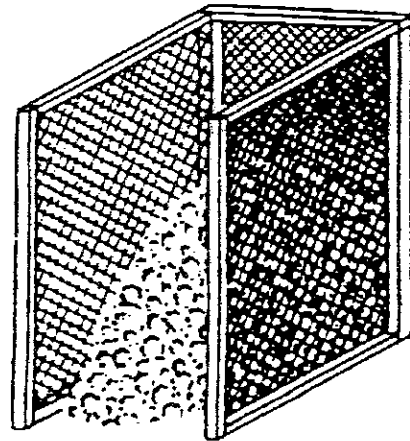
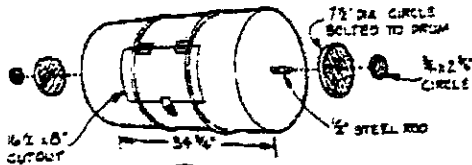
A plastic or metal drum may be used as a composter. It requires very little space in your backyard and is cheap and easy to set up.

Remove the bottom of the can and puncture holes throughout. You may raise the can off the ground for additional ventilation.

Plans for more detailed backyard composter units pictured below are available upon request. Please contact the Resource Recovery Fund Waste Reduction Centre Hotline at 1-800-665-LESS (5377) if you would like a copy of these plans.



Three unit wire bin

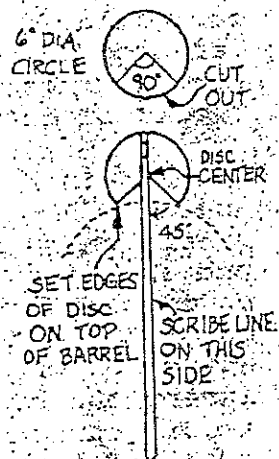


ROTATING BARREL COMPOSTER

If your composting operation is small and you neither relish nor have the time for turning materials, then you'll find this composteur suited to your needs. The barrel is rotated several times whenever new materials are added. It is constructed with a minimum of hand-powered tools, and is not difficult or time-consuming to build. It will cost about \$60 to build providing you use a second-hand barrel.

MATERIALS

- 1 - 45-gallon drum, use 'food grade' drum only (composter)
- 4 - 40 x 2 x 4" (frame uprights)
- 2 - 29 3/4 x 2 x 4" (frame horizontals)
- 2 - 40 5/8 x 1 x 3" (cross braces) white pine
- 4 - 23 3/4 x 1 x 3" (corner braces) white pine
- 2 - 27 x 2 x 4" (cross boards) white pine
- 2 - 7 1/2" dia. x 3/4" (bearings) white pine or plywood
- 2 - 2 3/4" dia. x 3/4" (bearings) white pine or plywood
- 2 - 1 1/2 x 2" hinges
- 1 - small hasp
- 1 - 1/2 x 40 1/2" steel rod
- 8 - 1/4 x 1 1/4" stove bolts
- 12 - 1/4 x 1" stove bolts
- 28 - 1 1/2" #10 wood screws
- wood glue
- approximately 1 pint of flat black paint



CONSTRUCTION

1. Obtain a good 45-gallon drum that has not contained any toxic chemicals. Ask for a 'food grade' barrel. If metal, it must be unpainted on the inside and de-rusted (use a metal brush). Add a protective coating inside using a natural metal primer. A plastic drum can also be used.
2. Drill a 1/2" hole in the exact centre of both ends of the barrel to accommodate the 1/2" steel rod. (See illustration above for how to make a simple tool to locate centres.) Hold the rounded end of the gauge anywhere along the circumference and scribe a line on the approximate centre. Move the gauge 90 degrees and scribe another line. The intersection of these lines will be the exact centre.
3. Next scribe the lines for the opening in the barrel making sure to round the corners slightly. Drill a 1/4" hole somewhere along one of the lines to start the saber saw. If your barrel has ribs, as most do, you will have to cut a 1" vee notch on each rib to facilitate opening the door. Attach the hinges and the hasp to the barrel and lid using 1 x 1/4" stove bolts.

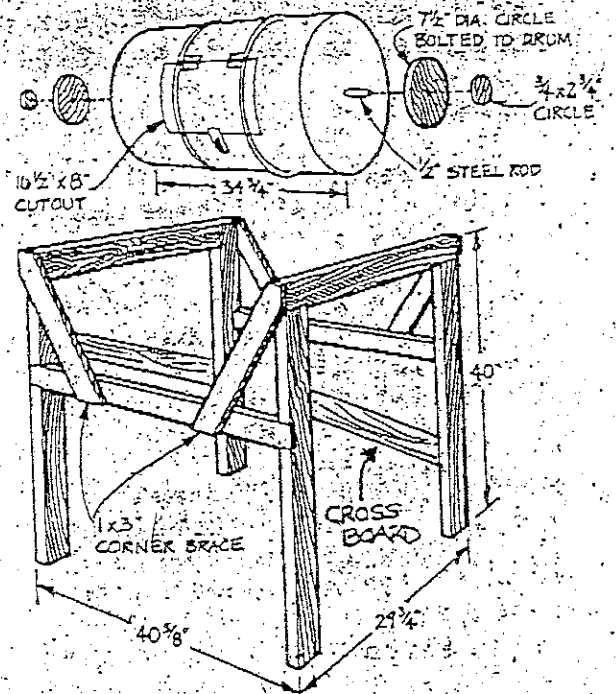
4. From 3/4" white pine, cut two circles 7 1/2" in diameter and two circles 2 3/4" in diameter. Drill a 1/2" hole in the centre of each and apply glue to the 2 3/4" circles. Glue the 2 3/4" circles to the 7 1/2" circles. This can be done easily if the circles are temporarily slipped over the 1/2" steel rod and clamped. After the glue has dried, remove the disks, insert the rod through the barrel and assemble as shown in the illustration, using four 1 1/4 x 1/4" stove bolts in each.

5. To build the support frame, cut the 2-by-4's to length and, using a corner lap joint, assemble with two 1 1/2" #10 wood screws in each joint. The uprights will also have to be dadoed 23 inches from the bottom to accept a 1 x 3" board. To make a corner lap joint, simply remove one-half the thickness of the stock to a length comparable to the width of the stock, on both ends of all pieces.

6. Half-inch holes to accommodate the rod will have to be drilled in the exact centre of the top horizontal pieces before assembling the top portion of the support frame. Slip the 1/2" steel rod with barrel attached, through these holes and insert the cross members into the dadoed uprights. Fasten with 1 1/2" #10 wood screws. Next cut the 1 x 3 x 23 1/4" piece at 45-degree angles at both ends, and attach with 1 1/2" #10 wood screws across corners as shown in the illustration.

7. For extra support, use 2 x 4 x 27" cross boards on each side. Cut them to an angle as the upper end is at 14 1/2" and lower end at 29" from the top of the 2 x 4 frame horizontals.

8. Drill several rows of 1/4" holes along the bottom of the barrel exactly underneath the door opening to eliminate excess moisture. Paint the outside of the unit a flat black colour.



This design information is from The Rodale Guide to Composting.

It is being distributed as part of COMPOST ONTARIO, a project run by the Recycling Council of Ontario with funding from Barclay Recycling Inc. and the Ontario Ministry of the Environment.

October 1990

FOUR-TIER STACKED TURNING UNIT

A four-tier stacked turning unit can be inexpensively constructed to compost large amounts of yard, garden, and kitchen wastes. This unit allows for easy turning of the compost material to aerate the pile due to the stackable frames which can be relocated with ease.

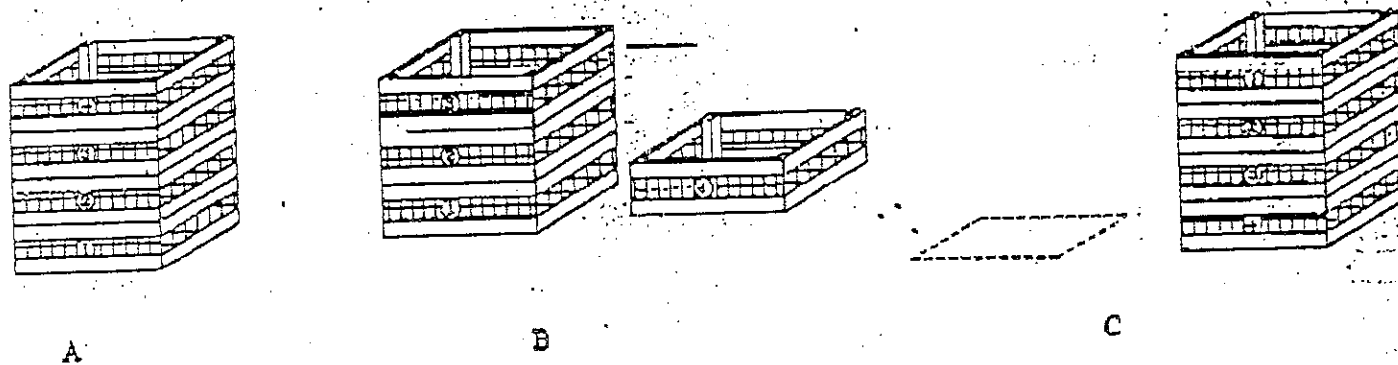


Figure 1: Four-Tier Stacked Turning Unit

A: Unit in original location

B: Re-stacking the unit to turn the compost

C: Compost has been turned, unit is in new location

Building a Four-Tier Stacked Turning Unit

1. Cut eight 3-foot pieces of 1-inch x 3-inch wooden strapping for each stackable section. Thus, for four stackable sections, thirty-two 1-inch x 3-inch strapping cut into 3-foot-lengths are required.
2. Cut a 5-inch by 3-foot piece of hardware cloth. Staple the cloth between two 3-foot-length-pieces of 1-inch x 3-inch wood such that 1/2-inch of the cloth is stapled to the back of each of the two boards with the distance between the boards being 4-inches. The two boards and the mesh form the wall pieces and should be 9-inches in height. Repeat, building three more walls.

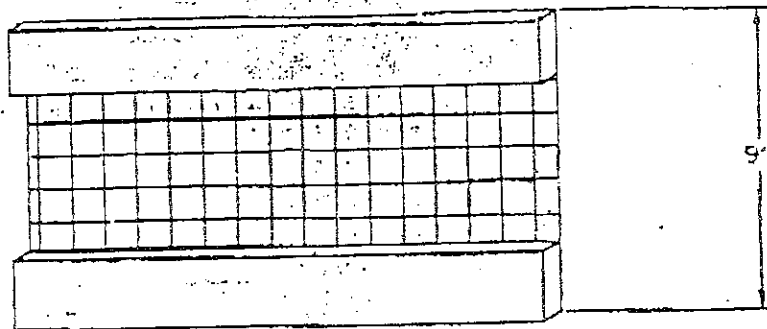


Figure 2: Wall of a stackable section

3. Cut sixteen 9-inch-length-pieces of 2-inch x 2-inch lumber. Each stackable section requires four 9-inch pieces of 2-inch x 2-inch lumber. These are the corner posts for each stackable section.
4. Nail the 9-inch wall pieces from step 2 to the 9-inch corner posts such that it is offset by 1/2 -inch; pilot holes may be required (See Figure 4). This will result in a stackable section that is 3-feet 1-inch x 3-feet 1-inch x 9-inches in height. The offset corner posts will lock the frames in place.

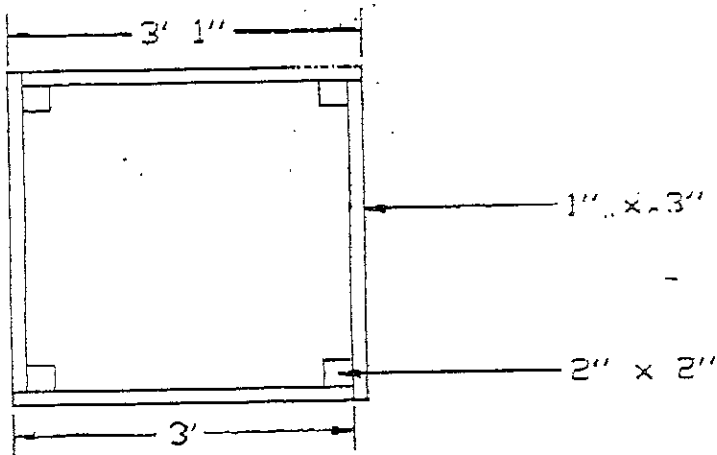


Figure 3: Overhead view of a stackable section

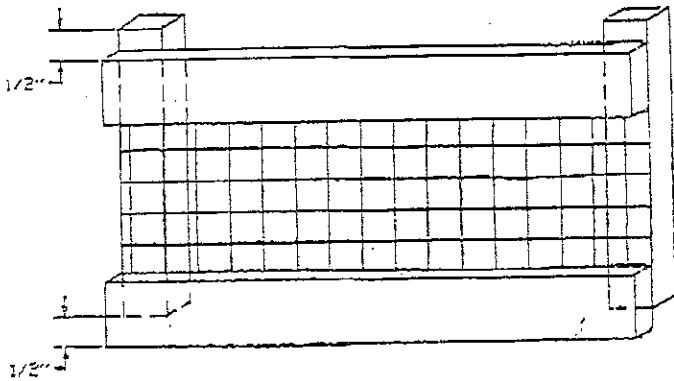


Figure 4: Corner post offset

Materials

- eight 1-inch x 3-inch x 12-foot wooden strapping
- one 2-inch x 2-inch x 12-foot board
- 3-feet x 8-feet of 1/2 inch square galvanized hardware cloth
- 75-80 1¹/₂ inch galvanized nails
- staples

Tools

- saw
- hammer
- wire cutters
- carpenter's square
- stapler
- drill
- pencil
- tape measure