WORKSHOP: "METAL HOUSES"



Summary: Participants turned metal ceiling tiles into house shapes and nailed them onto small pieces of board. The rough edges were filed, surfaces brushed and coloured with washes of acrylic paint. Embellishments were added with found objects and wood/metal scraps, and wall hangers were attached to the back.

Materials and Equipment:

backing wood board about 10"x10"

pre-cut metal ceiling tile in padded envelope

small nails

large nails for making pilot holes

hammer

file

pliers/cutters glue gun and glue

coated gloves

scrap cardboard for glue drips
2 D-ring picture hangers and screws

picture frame wire matching screw driver

tin snips

cardboard for table protection (use kit box)

scrub brush

Optional: found objects (not provided)

piece of blanket

sketch paper

pencil, eraser, sharpener

carbon paper masking tape

marker

acrylic paint assorted colours paint brushes assorted sizes plastic lids for palettes plastic container for water

t-shirt scraps to blot wet paint brushes

foam brush safety glasses

dust pan and brush (not provided)

optional: pop cans to cut up (not provided)

nail set tool

tiny scrap pieces of wood (not provided)

instructions/ideas sheet piece of scrap wood

Class Plan:

- 1. Optional: Plan your design on your wood board before starting.
 - a. Where will you place your house shape on your board, will it have extra pieces of metal for a door or chimney and will you paint the background and the metal house?



- 2. Optional: Paint the background of your board first with acrylic paints.
 - a. Apply 1-2 coats of sludge primer to your board first if you're planning to paint the whole board to help the paint stick to the wood.
 - b. Paint the background to look like a landscape. We painted it a mixture of light blue and white for sky first, then added clouds, green/black/olive coloured grass at the bottom, a grey oval for doorstep mat and a sun in the sky.



- c. Allow each step to dry, or work wet-on-wet to blend colours.
- 3. Safety:
 - a. Wear safety glasses and protective gloves for all activities handling the metal pieces, cutting and hammering them. The edges can be very sharp.



b. <u>Keep your fingers away from where you are cutting, particularly the hand that holds the metal.</u>

- 4. Setup your work space.
 - a. Work on the ground or on a sturdy table.
 - b. Cover your work surface with cardboard to protect it.
 - c. A layer of old blanket will help absorb some of the sound and impact of hammering on your table.



5. Tools: Tin snips of this kind provided come in sets of red, yellow and green. The yellow ones cut straight, the red ones angle left and the green ones angle right. Twist your wrist to send the cuts in the direction you want or turn your work around and cut from the other side if needed.



- a. To open the snips, hold the handles closed and rotate the latch down. Then release the handles. Always close them when putting them down.
- 6. If your metal house isn't precut for you, you can make a sketch on a piece of paper and trace it onto your metal to cut out. We are working with metal ceiling tiles and pop cans.



- a. If you prefer to work without a pattern just go straight to cutting out.
- b. Try making a long narrow oval with the bottom cut off for a door or two overlapping rectangles to make a chimney shape.
- 7. If your house shape isn't pre-cut for you cut a house shape out of sheet metal from a pop can or metal ceiling tile working on a protected surface or the ground.



8. Safely discard or store any extra pieces and off-cuts after cutting out your shapes. Keep them away from children and pets and be aware the pieces can be very sharp. Use a brush to sweep up tiny pieces.



9. File and trim any sharp edges on your metal house shape and pieces passing the file over all edges back and forth. Work with the file angled over the front and again over the back.



10. Gently brush the loose debris off of your metal house piece with a small brush or an old tooth brush. An old toothbrush works well for this. Don't use your fingers to brush the metal. Don't make it perfect.



- 11. Optional: Paint your metal house:
 - a. We wanted an aged translucent coating of paint so we didn't use any primer here.
 - b. We painted the roof with a few thin strokes of dark green, brown and black paint on the same brush but not pre-mixed together. The main house had a mixture of yellow, orange, and beige.



- c. The metal wasn't completely covered in paint, to let some of it show through for an aged effect.
- 12. Mark with a pencil where you will hammer nails to attach your house on the backing board. Four nails along the bottom edge of the roof works well because it is central. If your metal is corrugated (wavy), mark your holes in the depressions that contact the wood to avoid distortion.



13. Position your metal house over scrap wood and hammer pilot holes in your metal house using a large nail.



a. Only hammer the nail in just enough to make a hole then remove the nail by hand or with the forked end of the hammer. Repeat for each hole.



b. Large nails for pilot holes are shown on the left. Options for decorative nails are in the centre, and options for making door handles and what look like hinges are on the right.



- 14. Nail your metal house piece to your wood board using the pilot holes and smaller more decorative nails.
 - a. Nail a small decorative nail through each pilot hole in the metal into the backing wood board.
 - b. Optional: You can hold the small nail with a pair of pliers to keep your fingers out of the way.



c. Once your nail is started, use the nail set on top of each nail tapping it in the rest of the way.



15. Optional: Add extra metal cut outs over your house being sure to hammer pilot holes that lineup in both pieces of metal if you are layering them.



16. Embellishments can be added by painting, such as chimneys and windows.





17. Optional Idea: Cut up colourful pop cans to add to your house. Nature is very inspiring and can be used as a guide for creating things like flowers. Nails can also be used for decoration on their own, hammered directly into your backing board.





18. Add two D-ring picture hooks to the back with tiny screws, checking the wood thickness to make sure the screws won't go through to the front. Twist picture wire between the d-rings for hanging your picture.



19. If you feel comfortable please share your ideas and creations. We love photos!

Useful Information/Adaptions/Variations:

- Try working entirely with the thinner aluminum sheet metal from pop cans to make the hammering easier.
- Save metal off-cuts and use them to make tiny versions of other things like a boat or whatever you see in a shape. Attach them to tiny left over pieces of wood and create little scenes. Remember the edges can still be sharp, so don't use them as toys for children.





• Try making a collection of flowers instead of a house, using cut up colourful pop cans shaped in different ways.



• Cut out different shaped edge pieces from a metal ceiling tile and paint the ridges in dramatic colours, using several pieces fit together to make a unique house.



• If you prefer not to hammer, the metal can be attached to the backing board using hot glue. Roughen the back of your metal piece where it will be glued to increase adhesion and wear gloves while working. Hot glue heats metal. The metal does not stay attached as well this way but it works if you handle your finished work with care.

Trouble Shooting:

- If you have trouble holding the smaller nails while hammering, hold them with a pair of pliers instead.
- If your nails aren't hammered in enough you can use the nail set on top of the nail and hammer to tap it in further.
- If you have trouble getting the nails through the thicker metal, hammer a pilot hole with one of the larger nails first and remove the larger nail. This will save the smaller more decorative nails from getting bent. Hammer the decorative nails through the holes made by the larger nails.

