



COOPERATIVE EXTENSION SERVICE

Departments of
Human Environment and Design
Agricultural Engineering
Urban Planning and Landscape Architecture

MICHIGAN STATE UNIVERSITY

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Repairing & Replacing Screens

Replacing a damaged section or an entire screen can be done with tools usually found around the home.

Several different materials are available for screen, including aluminum or plastic which are nearly permanent against weather. Galvanized iron screen was used in the past but this material will rust over time and should be replaced before it discolors the window frame and wall.

Screen fabric comes in different widths, so choose the width that will cover your frame with the least waste.

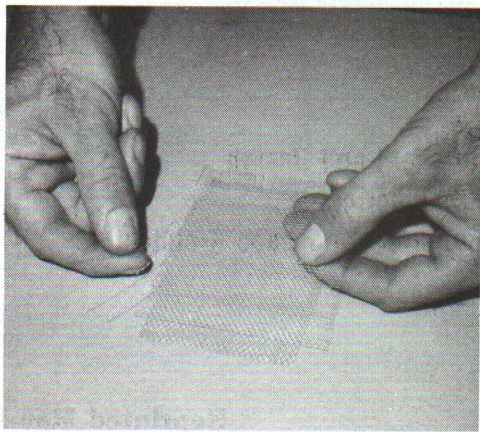
Repairing Holes — *to keep out insects, follow these steps:*



Method 1.

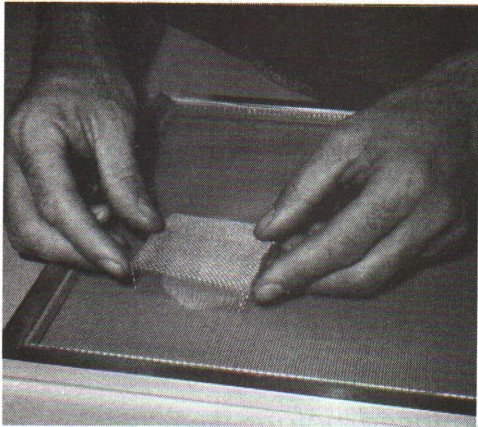
- Step 1. Cut a patch from screen which will cover the hole at least 1" on all sides.
- Step 2. Ravel a long piece of screen wire or several pieces and lace it through the patch and screen.

By Leslie A. Mack, Extension Specialist, Agricultural Engineering and James S. Boyd, former Extension Specialist, Agricultural Engineering and Human Environment and Design Depts. Photos by Howard Doss.



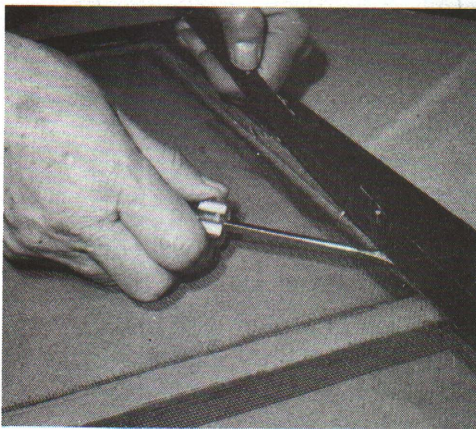
Method 2.

- Step 1. Cut a patch large enough to cover the hole with about 1 to 1½" around all sides and ravel all sides of the patch about ½".

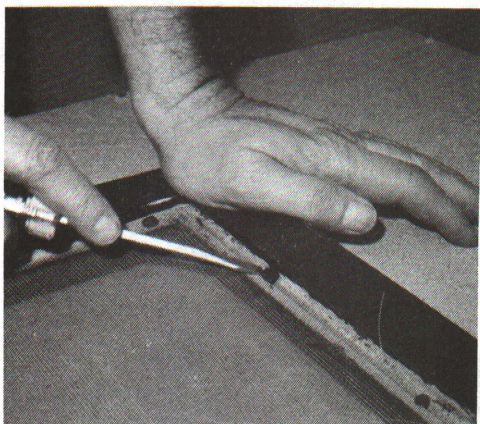


- Step 2. Bend the ends of the wire 90° to the patch and push them through the screen covering the hole. Bend over the wires projecting through on the back side to hold the patch.

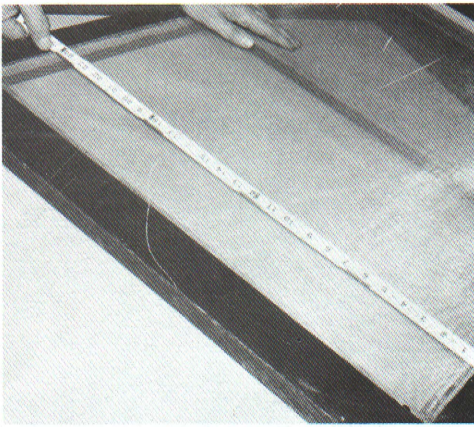
Replacing Screen on a Wooden Frame



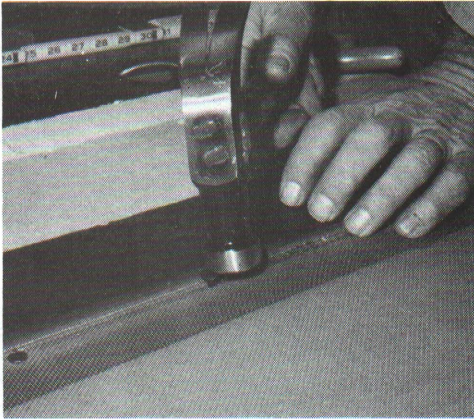
- Step 1. Remove wood strips covering the edge of the screen. Be careful not to break them. Pry up with a screwdriver close to the nails to prevent cracking the strip.



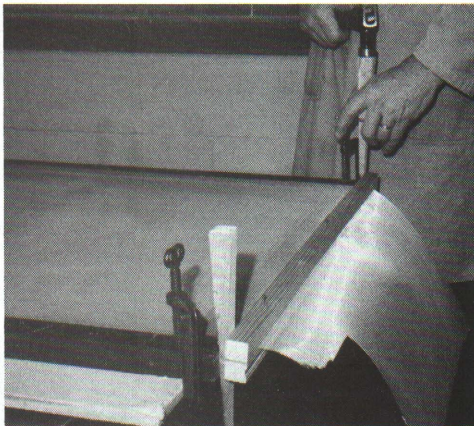
- Step 2. Remove the old screen material by taking out the tacks or staples.



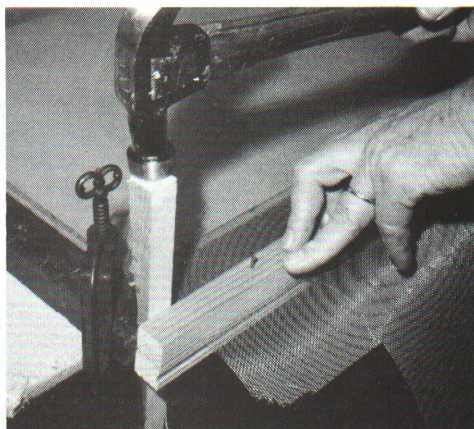
- Step 3. Cut the new screen to the width between the shoulders on the frame and 5 to 6" longer than the frame.



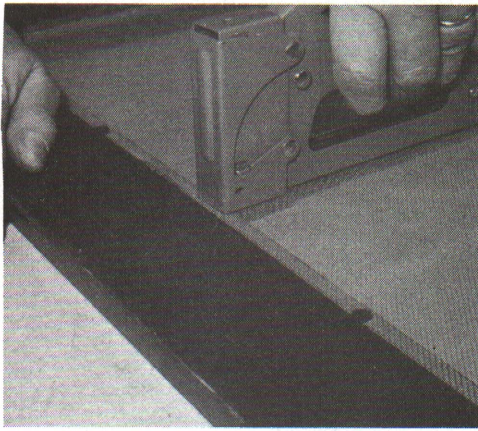
- Step 4. Attach the new screen fabric at one end with regular 1/2" carpet tacks. A stapler works well, also.



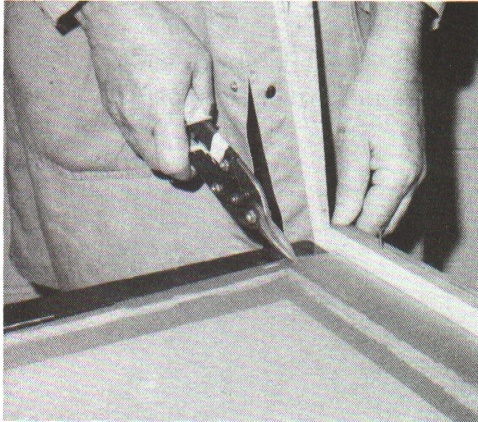
- Step 5. Stretch the screen over the frame so it extends beyond the frame at the opposite end. Stretch it tight. One way is to nail two 1" x 1" strips to each side of the screen and to the workbench or large piece of plywood. Be sure the frame is snugged up to the 1" x 1" with the loose end of the screen extending over the end of the frame. Another procedure is to clamp the frame to a board or table as shown.



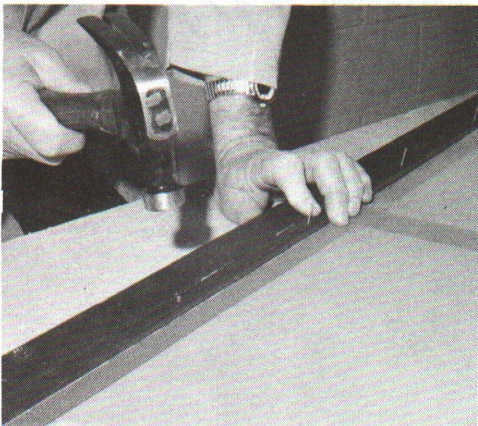
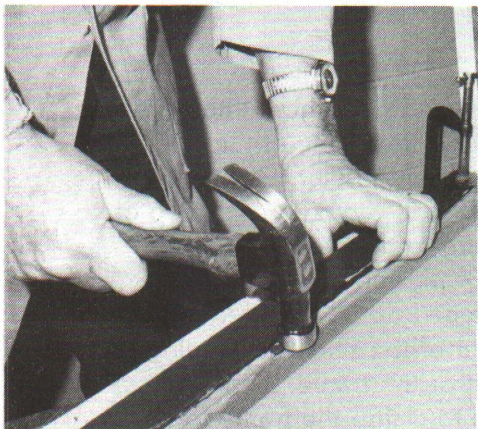
- Step 6. Drive a wedge between the frame and the 1" x 1" on both sides of the frame so it tightens the fabric over the frame.



Step 7. Nail or staple the screen fabric on all four sides of each panel about every 4" to 6". Work from center to each end to prevent a bulge from developing.



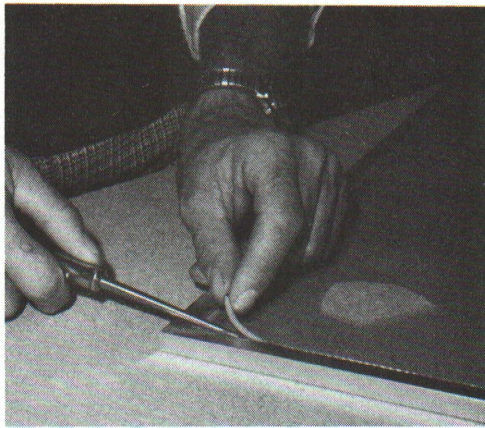
Step 8. Cut off the excess screen with a knife, household shears, or tin snips. A razor blade will also work for plastic. Nail the loose end.



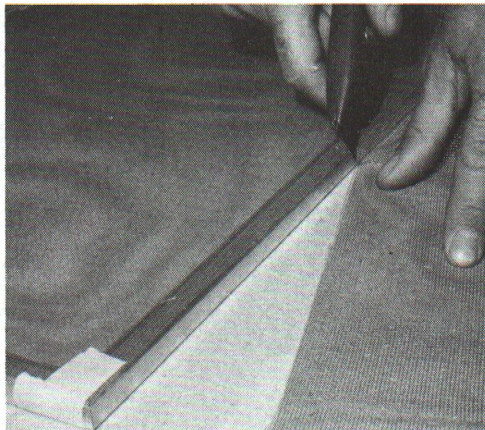
Step 9. Replace the wood strips around each panel. If they were broken when removed, you may have to buy new ones. Paint the entire frame.

Keep screen frames painted. When the paint peels off, moisture gets into the wood. This can cause the frame to swell and will eventually cause the frame to rot.

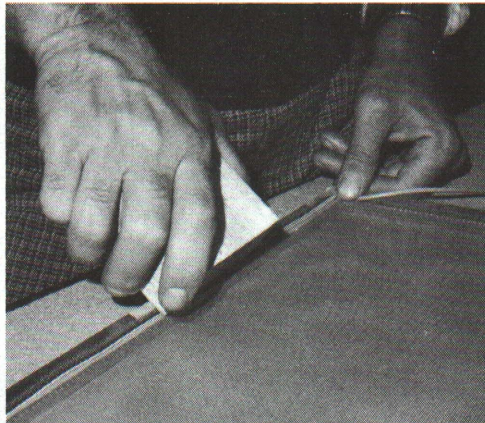
Replacing Screen on Aluminum Frames — using regular household tools:



Step 1. Remove the aluminum or plastic retainer strip from around the frame (that holds the screen fabric). Be careful not to tear the plastic or break the aluminum strip. An ice pick or other sharp pointed object works well to remove either type of retainer.

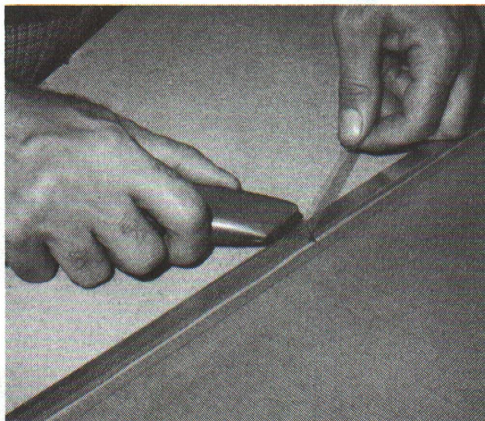


Step 2. Use the torn screening as a pattern to cut the new screening. Cut the screen at least $\frac{1}{2}$ " wider than the pattern to be sure there is enough to hold when you put the retainer strip back. Cutting the screen even with the outside of the frame is a good size. Plastic screening is usually used with aluminum frames.



Step 3. Spread the screening over the frame and press the retainer strip into the groove. Temporarily fastening the screen with masking tape keeps it in place.

You may need a hammer to force the retainer strip into the groove. Do not strike the metal strip directly with the hammer, but use a wood block about 3 to 4" long between the hammer and the strip. If a plastic strip is used, it can be forced into the groove by hand pressure on a wood block 3 to 4" long.

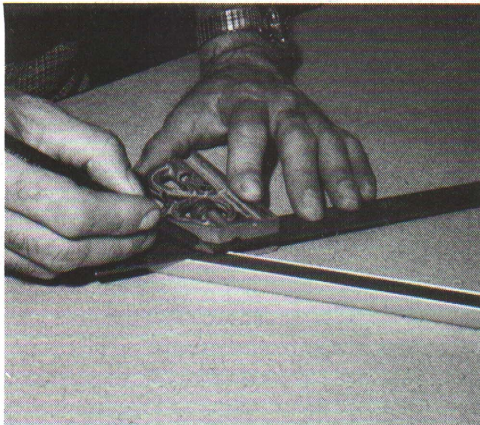


Step 4. Trim off excess screening with a kitchen scissors, knife or razor blade.

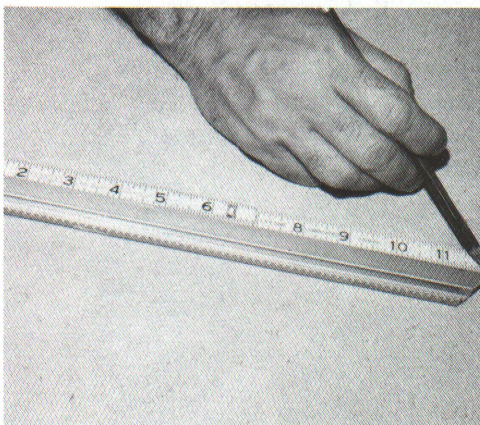
Making an Aluminum Frame

Do you have a metal screen damaged beyond repair or windows, especially in older houses, that are odd size? You may want to make a replacement screen.

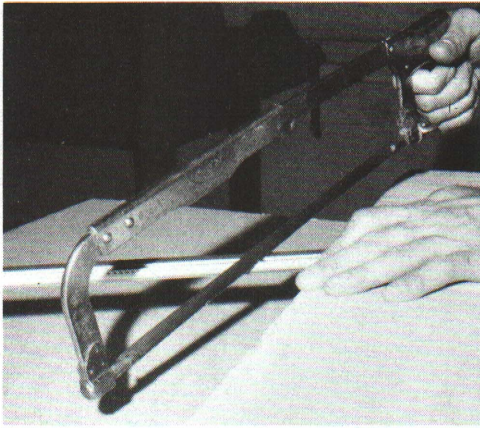
Materials to make a replacement or odd-sized screen can be purchased at many building material or hardware stores. The framing material usually comes in lengths of 6', so first measure the opening into which the frame must fit. Buy enough material to make the four sides. In addition, buy a package of four corner braces. Then, proceed as follows:



Step 1. Mark off a 45° angle near one end of the material.



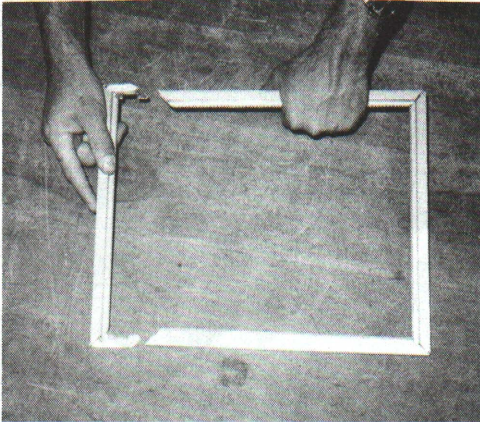
Step 2. Mark off a distance equal to one side of the opening, being sure to mark on the long side as shown.



Step 3. Cut another 45° angle so the piece looks like the side of a picture frame.



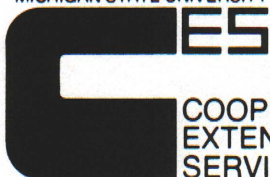
Step 4. Insert a corner brace into each end of one of the pieces and attach two more sides so you have a "U" shape.



Step 5. Insert the remaining 2 corner braces into the last side and attach to the frame.

Step 6. Install the screen fabric as described in the section on repairing metal screens.

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