



Maintaining the Home

Repairing Walls

Maintaining the Home:

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Popped nails, cracks and open holes are common damage to gypsum wallboard. All take away from a home's appearance and may allow dirt, insects or moisture to enter the house. With only a few tools and supplies you can repair even serious-looking wall damage.

Supplies and tools

Depending on the size of the problem, you may need the following items to make the repair:

- Patching compound
- Perforated tape
- Gypsum board scraps
- Gypsum board fasteners
- Putty knife
- Knife
- Hammer
- Screwdriver

Patching compounds may be in powdered or ready-mix form. Spackling compound in powdered form must be mixed with water to the right consistency. Powdered is cheaper than the ready-mix and is practical for major repairs. Ready-mixed spackling compound is easy and convenient to use and is ideal for small jobs. Patching plaster is the least expensive patching material. It is used to patch large holes and cracks. Patching plaster must be mixed with water to

the proper consistency. Patched areas should be primed before painting.

Popped nails

Nail popping takes place when wood studs holding the wallboard expand and contract under varying humidity conditions. The wallboard is forced through the finished surface nails holding the panels. Improper installation also may cause nails to pop.

To repair popped nails, reinforce weak areas with additional nails. Drive new fasteners about 1 1/2 inches above and below popped nails. Bring the panel into close contact with the stud by pushing with a free hand. Drive the nail head below the panel's surface until a "dimple" is formed in the heavy paper. The dimpled surface will hold the new patching material. Remove loose plaster from the dimpled areas then sand lightly. Fill the dimpled area with patching material and let it dry overnight. If shrinkage occurs in drying, reapply patching material. When the patch is completely dry, sand it lightly and apply paint.

Patching and filling cracks

Deep, wide cracks stay patched longer when reinforced with joint tape. Ordinary drywall perforated tape and patching compound may be used. Follow these steps:

- Sand the area about 6 inches on each side of the crack. Work patching material down into the crack.

- Center tape over the crack and press it down firmly with a wide spatula.
- Cover tape with a coat of patching material. Smooth it out well beyond tape edges so it is level with the wall.
- Allow the patch to dry overnight. Then apply another coat of patching material that extends 1 1/2 inches beyond the edges of the last coat. Smooth the edges and let the patch dry. Sand lightly before painting.

Narrow cracks also may be filled with patching material. Use a stiff brush or screwdriver to remove loose material from the crack. Make the crack wider at the bottom than at the top for a firmer bond. Dampen edges of the crack when using patching compound mixed with water. Fill deep cracks almost to the surface. Let dry; then add a thin finish coat.

Smooth it out on each side of the crack about 2 inches. Feather the edges of the surface.

Patching open holes

Open holes in gypsum board walls occur as the result of accidental damage or from structural openings, such as for light fixtures. Removing a light fixture or ramming a table corner into the wall leaves damage that should be repaired. Open holes take away from the appearance of the home and invite dirt and insects. One of the best ways to repair a large hole in a wall or ceiling of gypsum board is to make a plug from a scrap of the same material. Follow the steps below for good results.

- Mark a neat rectangle around the damaged area. Use a knife or keyhole saw to cut out the marked area.
- On a scrap of gypsum board lightly mark a “plug” the same shape and size as the rectangle. Do not cut.
- Mark another boundary around the plug 2

inches from the edge. Cut on this line through the gypsum board. This piece will be 4 inches wider and longer than the rectangular hole.

- With a sharp knife, score lines for the plug through the first layer of paper. (Do not cut the bottom layer of paper.)
- Peel off the 2-inch margin, leaving the bottom piece of paper intact. This margin holds the patch in place.
- Spread patching compound around both the opening and the edges of the hole.
- Press the patch firmly in place. Hold a few minutes until the patching material has set.

To prepare the patched area for painting:

- Apply patching compound to the entire area. Smooth the material out beyond the edges of the crack. Feather the edges so the patch is level with the surface of the wall panel.
- Remove excess patching compound and let the area dry.
- Reapply another coat of patching compound if shrinkage occurs.
- Sand or add texture to match the existing wall.
- Prime if necessary before painting.

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*This resource is one in a series on **Maintaining the Home** which include:*

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Make a Basic Toolkit for Simple Home Repairs
Selection and Use of Home Cleaning Products
Discovering the Secrets of Successful Storage

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