

Installing a Papier-Mache Floor

By Dan Phillips

Economy, durability and design immediately present themselves as prime considerations in any floor covering. A papier-mache floor accomplishes all of these things in about the same amount of time alternatives could be installed—sometimes more quickly. They can be as formal or as rustic as one chooses, last for years, and are easily repairable.

Paper is glued to the floor, and then at least two coats of polyurethane are applied to the top. The paper used needs to be single-ply (not cardboard), reasonably porous (not plasticized), and can be any of a number of papers: art papers from art supply stores, paper sacks, soup-can labels, programs from the opera, merchandise packaging, magazine photographs, or even fabric. The glue used is widely available. The polyurethane used can be of any sheen (from flat to gloss), and whatever brand the local lumberyard recommends for floors.

A papier-mache floor must be glued to a smooth, porous surface that will accept the glue, which is “Elmer’s Glue.” This glue will work on raw, cured concrete, bare wood or a plywood floor. If you have removed a floor covering, and mastic or previous adhesive is still evident, do a test spot before committing yourself to the entire floor. A papier-mache floor typically will not work over tile, vinyl, or other surface that is not porous (unless you identify an adhesive that will adhere to a non-porous surface).

1. Identify the paper to be used for your floor, and sketch out the design you would like. Some possibilities are mentioned below.
2. Clean the floor. Make sure all dust, dirt, wax, and other material are removed from the surface as much as possible.
3. “Float” seams. If there are seams between sections of plywood or planks or if there are any cracks in the concrete, fill these with a quick-set cement (see below for sources), smoothed and feathered into unbroken areas of the plywood, plank, or concrete. Follow the directions on the container. Do not count on the paper hiding seams. A broad knife, trowel, or a piece of stiff plastic will work. Let this material dry completely.
4. Buy a gallon of glue (approximately \$12), and pour a small amount into a bucket. Thin this by about 25-50%. The amount of water necessary will vary depending on the porosity of the paper. Mix. Immerse pieces of the paper of choice in the mixture, and let it soak perhaps five to ten minutes. **Carefully** lift the paper from the mixture (it is now quite fragile), and place it in an inconspicuous spot on the floor for your pilot study. Smooth it out with your hands, a sponge, or a brayer (a rubber roller), being careful to push bubbles of

adhesive to the edge of each piece of paper. Let it dry overnight and ponder whether you like it. If you like it, continue until the floor is completely covered. Repeat with more pieces of paper, either overlapping, or butting the sections on the floor, depending on your design. Again, let it dry overnight.

5. After sanding lightly apply two coats of polyurethane, following directions on the manufacturer's label.

Sources

- *Elmer's Glue*: This is available at any lumberyard or hardware store. Simply ask for Elmer's Glue, or water-based white glue.
- *Quickset cement*: This is available at any lumberyard or hardware store as a quickset patching cement.
- *Paper*: The local print shop always has a "throw-away bin" filled with exotic papers in a variety of colors. Grocery stores have paper bags. Magazines abound. Paper is so plentiful in our society that your imagination will be paralyzed if you think about it too much.
- *Polyurethane*: The local lumberyard, paint store, or hardware store can be expected to carry this product.

Possibilities march out of sight. Grocery sacks torn on the bias and overlapped yield a pleasant, textured, Kraft-colored floor with the possibility of subtle designs. Randomly torn sections of paper sacks, spaced slightly apart on a concrete floor yield a "flagstone" look-alike, with the concrete that is revealed between pieces of paper simulating grout. Papers can be matched to the variety of themes in a house—the pantry can have food-labels glued to the floor, or a teenager's bedroom can have posters of the latest heartthrob. An office floor can use computer paper, theatre programs or envelopes. A dining room can use art paper for the center, with a different-colored border following the contours of the edge of the room.

When it comes time for a repair to a ding in your floor, remove the damaged section, sand lightly with sandpaper, glue on a new piece of the target paper, and then apply a coat of polyurethane.

Problems to be anticipated

1. If there is no moisture barrier beneath your slab, or beneath the sub floor, moisture can eventually sabotage the best of papier-mache floors.
2. The exact dilution of the glue will depend on the paper you intend to use. It is important to do a little pilot project, and give yourself a learning curve.
3. If there is the possibility of movement in your floor, it could eventually create a split in the paper coating. Be certain that the surface is as solid as possible.

4. The thicker the paper the more the resin must penetrate the paper during soaking—otherwise the paper will indent slightly once it is completed and the floor will fail. Once again a pilot project will yield some answers.