

## Interior Wall Guide: Paneling, Masonry And Sheet Rock

**I**F YOU ARE BUILDING a new home or remodeling the home you now live in, sooner or later you will have to select the interior wall covering.

Basically you have a choice among three types of walls: 1) sheet rock, 2) paneling, or 3) masonry. I will discuss each of these different types of walls and the options available to you so that your interior walls can have a distinctive and attractive appearance and still stay within a specific budget.

Sheet rock is currently the leading material being applied to interior walls. There are several reasons for this. First, it is relatively inexpensive, as a 4- by 8-foot sheet will cost approximately \$2. The total installed cost would be slightly higher since you have to tape and apply sheet rock compound to the edges (joints).

Then, too, sheet rock is not difficult to apply. The average handyman can hang sheet rock because it can be cut with a handsaw, razor blade knife, or pocket knife. Finally, sheet rock can be easily repaired with little if any signs of the repair showing.

There is one additional cost factor to sheet rock. Another surface coating must be applied as sheet rock is not a finished material.

The options for surface coatings include paint, paneling, and wallpaper.

In regard to paint, you can use either a water-thinned (commonly called latex) or a solvent-thinned (commonly called oil-based) paint. You have the choice of either a flat, semi-gloss, or high gloss, and wide selection of color. You can apply a sand-textured finish. You can also wallpaper or plaster over the paint at a later date if you so desire.

Even though the solvent-thinned paints are much improved, they are still

more difficult to apply than the latex paints.

Buy quality in paints. Sometimes you can purchase "bargain" paint that is not worth the effort of putting it on the wall. Basically, you need to read the label on the paint can and this will tell you the quality of the ingredients.

For better quality latex paint, at least 50 percent of the pigment binder should be latex solids. The main ingredient in the pigment should be titanium dioxide, the ingredient that provides covering up or hiding ability, with the ingredients specified by weight and *not* by volume.

Here are some tips for painting either an old wall or one newly constructed.

Latex paints can be applied over sheet rock or plaster walls once the walls are dry. But keep in mind that taped joints of sheet rock are basically a wet material and like a plastered wall should "cure" for about 2 weeks before the surface coating is applied.

Another precaution comes from the paint can label, and this gives the number of square feet one gallon will cover. If the label indicates that the gallon will cover 450 square feet, then do not exceed this. If you do, the result will be unsatisfactory. In fact, you might see weak spots in the paint film even though the guarantee states the paint will cover in one coat. For truly satisfactory results, apply two coats of latex paint.

For painting, you need two brushes: a 3-inch brush for trimming around doors and windows, and a 1-inch brush (tapered) for trimming around the baseboard.

A roller and roller cover are helpful. The roller should be the type to which a longer handle can be attached for use on either the ceiling or top portions of the wall. The roller cover selected should have a medium nap and be recommended for the paint used.

Some additional items you need to

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## GUIDE FOR SELECTING PAINT

	Aluminum paint	Casein	Cement base paint	Emulsion paint (including latex)	Enamel	Flat paint	Floor paint or enamel	Floor varnish	Interior varnish	Metal primer	Rubber base paint (not latex)	Sealer or undercoater	Semigloss paint	Shellac	Stain	Wax (emulsion)	Wax (liquid or paste)	Wood sealer
<b>Floors:</b>																		
Asphalt tile																	X•	
Concrete																X•	X•	
Linoleum							X						X			X	X	
Vinyl and rubber							X	X								X	X	
Wood							X•	X•									X	X
<b>Masonry:</b>																		
Old	X	X	X	X	X•	X•					X	X	X•					
New			X	X	X•	X•					X	X	X•					
<b>Metal:</b>																		
Heating ducts	X				X•	X•				X	X		X•					
Radiators	X				X•	X•				X	X		X•					
<b>Stairs:</b>																		
Treads							X	X							X	X		
Risers					X•	X•			X		X		X•	X	X			
<b>Walls and ceilings:</b>																		
Kitchen and bathroom				X	X•						X	X	X•					
Plaster		X		X	X•	X•					X	X	X•					
Wallboard		X		X	X•	X•					X	X	X•					
Wood paneling				X•	X•	X•			X									
Wood trim				X•	X•	X•			X		X	X	X•	X	X		X	X
<b>Windows:</b>																		
Aluminum	X				X•	X•				X	X		X•					
Steel	X				X•	X•				X	X		X•					
Wood sill					X•			X				X			X			

Black dot (X•) indicates that a primer or sealer may be necessary before the finishing coat (unless the surface has been previously finished).

have on hand when working with latex paints are a bucket and water for spot cleaning and final cleanup, a sponge or heavy cloth for cleaning the walls before painting, and several small cloths for spot cleaning.

Next, let's turn to wall paneling and the options you have in both selection and application.

You can apply paneling directly to framing materials of the house or you may apply it over the sheet rock.



*Top, rough-sawn, channel pattern western cedar wall paneling, repeated for cabinet front and doors. Family room formerly was basement storage area with unfinished concrete walls. Above, V-groove western red cedar boards applied diagonally on wall facing stone fireplace.*

Personally, I would recommend that most plywood, pressed wood, or hard-board paneling be applied over sheet rock because there is more strength

behind the panel. If it is applied directly to the framing member (the stud wall), you have over 14 inches of unsupported space behind the panel and this could cause problems. However, solid board paneling, which is generally more expensive, can effectively be applied directly to the stud wall without serious problems.

Most paneling used today is plywood or pressed wood. Plywood makes the best paneling for use in the home. Pressed wood paneling should be reserved for commercial use. However, this rule is not followed in many parts of the country.

All interior paneling comes in a variety of thicknesses, panel sizes, colors, textures, and prices. Generally the true plywood panel, if it is good quality, will cost more than pressed wood paneling. The price differential will range anywhere from \$3 to \$20 for a 4- by 8-foot sheet.

It is safe to assume that the higher the price you pay the better the quality will be.

Pressed wood and hardboard paneling can be used effectively in the home. These two types have more variety of color and texture. In either you can get a wood veneer, vinyl coating, vinyl clad, smooth finish, textured finish, or leather finish.

One major caution: what you see is not always what you get. The difference between true wood and wood-grained is that a simulated wood grain is photographically reproduced either directly on the panel or printed on paper or vinyl film laminated to the panel. Sometimes the panels are embossed to not only simulate the appearance of wood but to actually feel like wood.

Generally the more expensive paneling (either solid wood or true wood veneer) is used in dining areas, the study, or the home office. Hardboard or pressed wood paneling with the guaranteed washable finish would be used in kitchens, baths, or recreation rooms.

Tools required to apply most paneling are a handsaw or a portable power saw with a veneer blade, hammer, nail set, caulking gun, and several tubes of panel adhesive. With these tools almost anyone can apply paneling. One good trick for the hesitant handyman is to visit a construction site where a craftsman is putting up paneling and simply observe, pick up some of his techniques, and then go home and do it yourself.

Most major manufacturers of paneling have available the matching molding necessary to trim the corners and panel edges. Be sure to check with the supplier to insure these items are in stock prior to purchasing the paneling. Also get from the supplier the installation instructions for the particular paneling you have purchased so you can apply the paneling according to the manufacturer's recommendations, thereby satisfying the guarantee.

Masonry walls are becoming popular again. You see solid brick walls in homes, concrete block, and even some concrete walls either painted or covered with stucco. While a masonry wall can be quite distinctive and add to the

architectural design, consider these factors:

- While there are a number of different sizes to choose from in brick, remember that each brick weighs about 5 pounds and thus a brick wall adds greatly to the structural problems of the house.
- A concrete block wall will weigh about 8 pounds per block, and stucco will add 6 to 8 pounds of weight per square foot to the house. Native stone will vary in weight depending upon the type of stone used, but for a guideline consider it the same as concrete block.
- For the average person, laying concrete block or brick is no easy task. I would recommend employing a tradesman to lay brick or concrete block, or to plaster a wall. This could very likely be the best money you will spend in the building or remodeling process.

A wall covering you can apply yourself with little trouble is wallpaper. You will have to choose between paper, vinyls, foils, burlap, felt, grass cloth, cotton, linen, and silk. You will also need to determine how much paper you need, how you apply it, how to match the pattern (if at all), and tools and equipment required.

For the amount of wallpaper required simply measure the space you are going to paper, select the type of wallpaper you want, and then have the local supplier assist you in estimating how much paper you will need.

It is a good practice to purchase more paper than you will require to compensate for any errors in measuring or mistakes you might make in application. Generally the supplier will take back uncut rolls of paper, but it is difficult to get paper from the same "dye lot" if you have to reorder.

Paper hanging tools are inexpensive and easy to use.

The tools required are a gallon bucket to mix the paste in, a smooth 4- by 8-foot work surface, pasting brush, smoothing brush, trim knife, seam roller, sponge, and a 6- to 8-inch straight edge. The trim knife can be sharp

single-edge razor blades, the straight edge, a 6-inch-wide putty knife, and the sponge anything that would clean the surface of the paper once the job is finished.

Before I discuss the types of paper available, I would recommend you visit a home under construction, one where a professional paperhanger is working, and observe his technique. You can pick up some helpful hints on things to do and things to avoid, for your own job.

The most popular paper on the market today is vinyl. This is popular because most people can apply it with little difficulty. The edges are butted together and not lapped, it does not stretch, it is durable when handled wet, and extremely tough after it is applied, it is completely washable, and the patterns are endless.

One major concern is whether to purchase prepaste paper or mix your own paste. This depends largely on the amount of work you have to do.

Let's assume you are going to hang paper which requires you to mix your own paste. Depending upon the type of paper, either a wheat germ paste or a vinyl paste will do the job.

Each carton of paste that you purchase will have mixing instructions on the carton.

The advantage of prepaste paper is that you omit some intermediate steps in getting the paper on the walls, such as the requirement of mixing the right consistency of paste and the requirement of having a large smooth work surface. However, it may be less expensive if you mix your own paste for large areas.

If you use lightweight vinyls, either the prepaste or mix-your-own type would be equally satisfactory.

For the heavy vinyls, use a heavy vinyl paste.

Part of your decision on weight of the paper should be based on the surface the paper is being applied to. I recommend that you talk with your local supplier and follow his recommendations.

Buy from reputable firms since there will be some guarantee of quality.

For further reading:

U.S. Department of Agriculture, *Interior Painting in Homes and Around the Farm*, Home and Garden Bulletin No. 184, Superintendent of Documents, Washington, D.C. 20402—Price 10 cents.

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## Options Available In Air Conditioning, Heating a House

WE WISH TO control the climate within our living space for our comfort and well being. Comfort is attained by a body heat balance. That is, the combined energy losses by radiation, convection, and evaporation must balance the energy generated due to metabolism.

We try to adjust the energy lost by the body to agree with the energy generated by the body at that particular time. The amount lost depends in general upon the type and coverage of clothing, air temperature, air movement, and humidity; skin temperature and evaporation; and the temperature of the surroundings.

For the most part, surrounding temperatures mean the inside surface temperature of the walls, ceiling and floors. It is easy to tell that the windows are especially critical areas. When standing close to a window on a cold day, it is not only cold to touch, but unless one is heavily clothed, you feel a cold sensation as the body is radiating energy to the much colder window surface. Also a thin film of cold air is usually sliding down the inside surface of the window. This phenomenon is especially noticeable on the longer floor to ceiling windows and glass patio doors.

Many variations and options are available in designing a home and selecting a heating and cooling system