

Interior Painting

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A homeowner needs to have some knowledge of how to prepare surfaces properly for painting, and the types of paints from which he can select. It is easier for salesmen in paint departments to help customers who know what questions to ask. A knowledge of preparation needed and paint products is also useful when hiring a paint contractor.

Preparation of Surfaces to be Painted

Every type of surface has some characteristics that affect painting. The products mentioned herein are available in paint stores and will help solve preparation problems. Many of the problems commonly encountered, with some general recommendations, are listed below:

Previously Painted or Stained Surface

Dirt and dust must be removed by vacuuming or wiping.

Grease will prevent paint from sticking. Wash with an abrasive household cleaner or trisodium phosphate (3 tablespoons TSP to a gallon of warm water).

Wax used in polishes must be removed with mineral spirits (paint thinner), turpentine, or a wax remover.

Gloss must be dulled by sandpaper or a paint-softening product generally known as "liquid sandpaper." Actual sandpaper is recommended before the application of latex enamel.

"Popped" nails should be driven in with a nail set, puttied over, and primed.

Mildew spores must be removed. Wash with the following solution: $\frac{2}{3}$ cup trisodium phosphate, $\frac{1}{3}$ cup laundry detergent, 1 quart liquid chlorine bleach, and enough warm water to make one gallon. Wear rubber gloves. If mildew has penetrated the paint, use an abrasive household cleaner or denatured alcohol to remove the spores. Rinse and dry well before repainting. Some paints contain mildew-preventive chemicals, and others can be made mildew resistant by adding chemicals available from paint dealers. To correct mildew-forming conditions, removal of excess moisture from the house is important.

Stains that might leak through the fresh paint should be sealed off. White shellac is a good sealer. (Note: the white pigment in white shellac is needed, as clear shellac is slick.)

Cracks must be filled. Spackling compound, interior caulk, and other crack-filling materials are available. In plaster, if the crack is more than 1/16 of an inch wide,

undercut the crack to make an inverted "V" and squeeze in the patching material. After the crack filler is dry, it must be sanded smooth and primed. If dry spackling powder is mixed with the topcoat paint as the moistening agent, a primer is not needed.

Chipped paint sometimes can be sanded to a feather edge. If the paint is badly chipped or scarred, build up the depressions with enamel undercoater, using as many coats as needed and sanding in between.

Flat paint to be covered by a gloss or semi-gloss enamel should first be painted with an enamel undercoater. This will assure uniform gloss.

New Wood, Wallboard, or Plaster

Absorbent surfaces need to be sealed before some kinds of paint are used, both to save money from the absorption of more expensive topcoats and to prevent grain-raising in wood. Suitable primers are listed on the labels of paints. Fir plywood requires special attention to prevent grain raise. Factory-primed wood and hardboard are ready for the finish coats of paint.

Knots and resin spots should be removed with turpentine and then a good knot-sealer applied before the primer coat. The knot-sealer seals in the oily extractives and prevents staining and cracking of the paint.

Open pores of some wood (like Philippine mahogany) and some particle board need to be filled before being painted. If a very smooth surface is desired, use a paste wood filler or two coats of enamel undercoater. An unusually porous surface requires both a filler and a sanding sealer. Polyurethane paints require special fillers.

New plaster has free lime that must be completely cured before covering with paints that are thinned by turpentine or mineral spirits. Water-thinned latex paints are alkali resistant and can be used after a week or more of curing.

Rough surface of wood requires sanding for most interior finishing. If the surface is very rough, use grit size 240A or 280A of silicon carbide abrasive finishing paper (or similar coarseness in another type of finishing paper). Next, use grit size 360A. If wood is not rough, use only grit size 320. Use a sanding block, and smooth just before applying the first coat of paint, because moisture in the air will raise hair whiskers of the wood if 10 to 12 hours elapse before painting. Sand in the same direction as the grain of the wood. After sanding, wipe the surface with a dry cloth, then use a "tack rag" (buy at paint store) or wipe with a cloth dampened with mineral spirits (paint thinner).



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Types of Paint and Recommended Uses

Oils and resins in paint bind the pigment particles together. Solvents and thinners control the consistency of the paint. Driers make the paint dry faster. Other ingredients may be added to paint to control mildew or kill insects (be sure this is not used where children or animals could lick the paint). Paint used on toys, furniture, or interior surfaces which young children might chew should be free of lead, antimony, arsenic, cadmium, mercury, selenium, and soluble barium.

Generally speaking, there is rarely one "best" paint for any particular surface. Factors to be considered include: The condition of the surface, the method of application, the curing conditions, the service expected by the user, the initial cost, and the retention of appearance and durability.

The entire coating system of primer and finish coats must be considered as a unit. A primer should be selected both for the surface to be covered and the finish coat to follow. Labels on cans usually give specific recommendations.

Most manufacturers have inexpensive lines as well as high quality paints. This can be confusing to consumers who shop by the name of the paint manufacturer alone. Since the labor of applying paint may cost four or five times as much as the paint itself, good quality paint can save money in the long run.

Interior Wall Primer-Sealers

Latex primer-sealer is recommended for use on dry wall or plaster. It does not raise fibers on the dry-wall surface. Quick drying, excellent alkali resistance. May be topcoated with either latex or alkyd flat paint or enamel. Water-thinned.

Alkyd primer is suitable for all interior surfaces except paper-covered wallboard (dry wall) and surfaces containing active alkali (fresh plaster). Solvent-thinned.

Oil primer is similar to alkyd but slower drying.

Alkali-resistant primer is based on butadiene-styrene or on chlorinated rubber and often requires a special thinner. This primer may be a little more difficult to apply than others, but it is valuable on alkaline surfaces such as damp or partly cured plaster or masonry.

Interior Wood Primers

Enamel undercoaters are characterized by low gloss and rather hard, tight films which prevent the penetration of enamel coats applied over them, giving an even gloss. Available both as water-thinned and solvent-thinned.

Clear wood sealer can be used under clear finishes or under paint.

Wood fillers (paste or liquid) are used to fill pores of open-grain wood such as oak or mahogany. Fillers containing stearates should not be used under urethane finishes.

Interior Finish Coats

Gloss enamel (usually alkyd). Good gloss retention, resistance to yellowing and alkaline cleaners. Solvent-thinned. Provides a hard-wearing surface.

Floor enamel and paint should be chosen for surface on which applied. Alkyd enamel cannot be used on fresh concrete. Epoxy or urethane enamels come in one- or two-package forms. The one-package materials are similar to alkyd floor enamel but have somewhat better abrasion resistance. The two-package materials have good adhesion and good abrasion resistance, but require great care in surface preparation. Latex floor paint has fairly good abrasion resistance and can be used on damp surfaces.

Semi-gloss enamel comes in two general types: alkyd (solvent-thinned) and latex (water-thinned). Alkyd semi-gloss is used on woodwork and walls that require frequent washing. The gloss may drop rapidly the first few days after painting, but it will stabilize. Latex-base enamel has a low satin gloss and dries quickly. Washability is said to be good after a four-week curing period. A nylon brush or synthetic roller cover is recommended (a bristle brush will be ruined if used). The drying time is fairly rapid and care must be used to avoid brush marks or roller lap marks.

Flat finishes are either alkyd (solvent-thinned) or latex (water-thinned). Alkyd paints should be used only under conditions of good ventilation. Latex paints are quick drying, easy to touch up, odorless. Clean-up is easy. However, once latex has dried in brushes or on rollers, it is difficult to remove (lacquer thinner helps remove dried latex paint from brushes). Ease of application may cause the painter to spread the paint too thin. Also, even a high quality product may fail to form a proper film and show poor washability if applied over a very porous surface, or when the temperature is too high or very low. On acoustical tile, thin either latex or alkyd paint to prevent plugging up the holes, or buy a special acoustical-surface paint.

Choosing a Paint Contractor

Bids from two or three contractors are useful, provided the contractors are bidding on the same basis. The preparation work expected and the brand of paint should be specified when requesting bids.

Before the contractor starts to work, he should provide a signed proposal, estimate, or contract that includes the following items:

- ✓ A specific price for the job.
- ✓ A listing of each area of the home to be painted.
- ✓ A listing of the types and brands of paints to be used.
- ✓ A statement of the number of coats of paint to be applied to each surface, plus spot priming if needed.
- ✓ A statement of when the job will be completed (with allowance made for unpredictable weather).
- ✓ A statement that the contractor will use drop cloths and other measures to protect the premises, both indoors and outside, and that he will leave the premises in good order when finished.
- ✓ A statement that the contractor has Workmen's Compensation and Employer's Liability and Property Damage Insurance. (If the contractor is not properly insured, the homeowner could be held liable for accidents occurring on his property.)