F-A-Q: Wall Prep

1. Why is wall prep important?

It was John Cox, founder of the American School of Paperhanging Arts, who said "you never do exactly the right amount of prep. It's either too much or too little." More than ever, professional paperhangers need to do TOO MUCH prep and cannot afford TOO LITTLE. Wall prep for wallpaper has never been easy. But recently, it's become more difficult.

2. Why is it more difficult?

The most recent problem is that born-yesterday wallpaper companies on the internet release new products without adequate testing or guidelines. Therefore more caution for wall prep and installation is needed. Other problems seem to be economics-based: highly skilled, well-paid paint crews are less evident than they once were, and formulations for prep products have changed, while other problems are due to wallpaper having a lower profile in the culture. Several generations have grown up without wallpaper. These last few problems have a common result: more and more walls are being prepared for wallpaper by people who don't understand how a papered wall differs from a painted wall. Meanwhile, old problems have not gone away. Previous layers of paint are only as good as their weakest link. Skim coatings of hot mud or joint compound and walls painted with so-called builder's flat are extremely porous. These must be sealed.

3. You're depressing me. Why don't we take these one by one? Why should prep for a painted wall be different than prep for a papered wall?

Let's start with expansion and contraction. Paper expands from 1 to 2% after being pasted and contracts while drying. Our testing shows that most pasted papers, if they were simply left to dry without installing them on a wall, would contract as much as a half-inch. Let me say that again. Our testing has shown us that most pasted papers, were they not anchored to the wall, would contract as much as a half-inch. With pulling power like that, it's no wonder that many paint films can't take the strain. The result: popped or compromised seams. So, while a cheap paint might give a nice white finish to a painted wall, the same paint might cause a disaster if wallpaper is put over it.

4. How can you test a wall?

First, run a sponge over the wall. If it darkens, it's porous and should be sealed. Some builder's flat paints have such low amounts of binder that you can wash them off the wall without much trouble. If the paint film doesn't darken but instead lightens, it's probably an acrylic topcoat that's sensitive to moisture. Usually, these dry out OK and are reasonably stable. Another test is to cut a good-sized "X" into the wall with a razor blade. Use some pressure to penetrate the paint film with the blade without cutting into the sheetrock or plaster underneath. Put a piece of blue tape over the "X," press down, and pull. A weak paint film will often come off with the tape.

5. If I need to prime, what should I use?

Let's draw a distinction here: a.) very porous surfaces, and b.) all other painted surfaces.

a.) very porous surfaces: For many years, an alkyd (oil) based primer was specified for sealing very porous wall surfaces. This is still the gold standard. Many substitutes for oil-based primers are sold, but, in our opinion, water-based primers do not penetrate as much, dry as hard, and seal as well as oil-based primers. A popular solution among professional paperhangers for these concerns is to use a masonry-

type sealer for very porous surfaces. These are water-based, readily available, and do a reasonably good job of sealing raw sheetrock, drywall damage, skim coats, and suspect paint. Some brand names are "Drawtite" from Scotch, "Gardz" from Zinsser, and "RX35" from Romans. A good-quality acrylic primer such as Ben. Moore "Fresh Start" (046, NO23) is another popular choice. 046 and NO23 can seal many porous surfaces such as raw sheetrock effectively, but neither of these primers are specified for wallcoverings, so caution is advised. They should be gone over with a wallcovering primer.

b.) all other painted surfaces: For many years, a prepcoat (acrylic wallpaper primer) was specified for sound oil, latex, or acrylic wall paint, and this is still a good rule. It's also true that good quality latex or acrylic paints might already have the strength to hold wallcoverings in place. A typical situation is a bathroom that has been painted with good-quality primer and two topcoats of a water-based eggshell enamel. This type of surface might not need a wallcovering primer. The problem: you won't know if the paint film is adequate for wallpaper until after a failure occurs. For this reason it's a good practice to always put some type of wallcovering primer on the walls. Like we said above, it's impossible to do exactly the right amount of wall prep. You either do too much, or not enough. A coat of acrylic wallcovering primer is cheap insurance for an installation that might easily cost thousands of dollars.

6. What are the most common wall prep problems?

The top three dangers are: 1. painting procedures did not include dusting or vacuuming the walls during prep; 2. lesser quality primers and paints may have been used for prep; and 3. previous layers might contain a loose layer of paint that may be pulled up by the contraction of liner or finish paper. Let's look at each:

- 6.1. painting procedures did not include dusting or vacuuming the walls during prep. This one is a killer because you will never know it's a problem until it's too late. All you can do is communicate with the prep crew about the right methods and hope that someone's listening.
- 6.2. lesser quality primers and paints might have been used for prep. This too, is usually out of our control. It's one of the reasons that some professional paperhangers insist on applying the last coat of wallcovering primer.
- 6.3. previous layers might contain a loose layer of paint that may be pulled up by the contraction of liner or finish paper. Once again, there's little we can do, If a weak paint film is suspected, this is a good place for a lining paper. The liner can be a sacrificial layer which tests the paint film to see how good it is. Better to have a ruptured seam on liner which can be repaired than on a finish paper, which would be disastrous.
- 7. Hold on, you said that all papers contract a lot. Which lining paper pulls the most?

All of our liners pull a lot, including our acid free. And all of this contraction is normal. It happens because our liners are real paper, but that's not the point. The point is, prepare the surface properly.

8. OK, suppose I use an alkyd primer on a porous surface, am I home free?

Yes and no. The walls will be sealed. But, concerns about VOCs (volatile organic compounds) have changed alkyd formulas. And the use of quick-dry primers (probably for economic reasons) has upset the playing field as well. Alkyd primers and even shellac-based primers can seal the wall, but after they dry, these should be coated with an acrylic wallcovering primer to ensure adhesion.