

PARODI ON PAPERHANGING

by Jim Parodi



Bubble, Bubble, Toil and Trouble

Prevent blisters whenever you can. When you can't, the patient may need surgery.

The universe is governed by invisible laws. People who discover these unseen forces throughout the ages sometimes get their names tacked onto the law.

Take Mr. Murphy. He gave us Murphy's Law: *Anything that can go wrong eventually will go wrong.* There's also Parodi's Law: *It is a big mistake to eat in a restaurant that pretends it is in another location.* Only a nimrod would sit at the New Orleans Grille in Schenectady, N.Y., expecting Big Easiness.

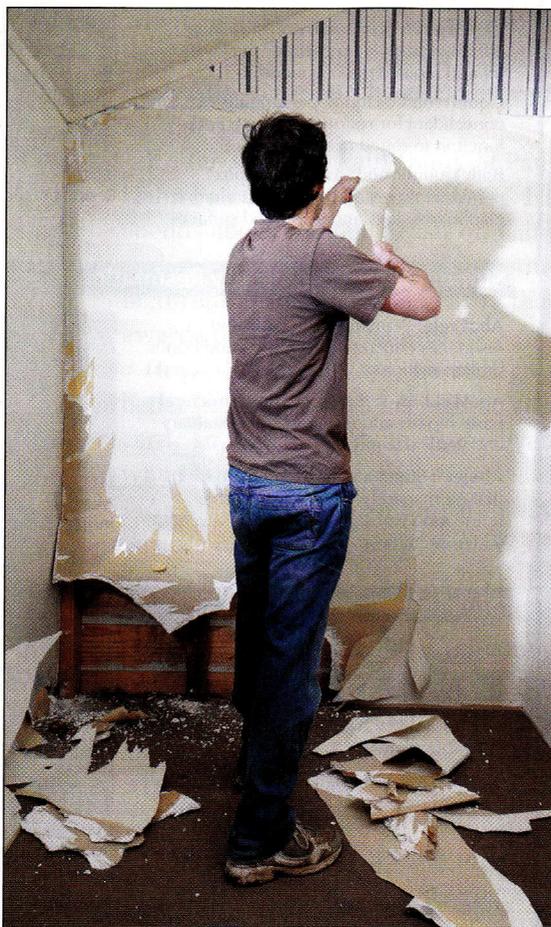
And then there's Parodi's Other Law: *Water is the root of all evil in paperhanging.* Got shrinking seams or popping seams? H₂O. Curling at the edges? *Agua.* Rewetting and softening of primer? *Wet* is in rewetting.

OK, maybe this law is not all inclusive. Sometimes, evil in paperhanging is caused by plumbers who, say, turn off the water when you are using clay-based adhesive—but we'll ignore that for now. What I would really like to talk about in this column is the evil of “water-based bubbles.”

Shedding light on air

How many times have you been finishing up a job and the customer

comes in to announce, “You have an air bubble over there?” Even though experience tells you that the bubble will dry out, you get out your



flashgun

Improper removal of fabric-backed wallcovering can loosen the Sheetrock below and lead to bubbling in the new installation.

smoother anyway and nab it. That's because you also know that, occasionally, there is a rogue bubble that does not dry out. Why do you suppose that is?

The first thing to consider is whether the bubble is indeed filled with air. A genuine air bubble does

not appear after a material has been smoothed down or flattened. The bubble is usually there because bad lighting caused the paperhanger to miss it during hanging.

I used to get air bubbles all the time, because I thought that using a brighter-than-the-midday-sun double halogen lamp on a tripod stand was the key to catching my mistakes. Wrong. These stands often have to be set up in the center of the room, and the perpendicular angle of light that hits the wall actually hides defects.

Nowadays, I use a cheapo clip lamp placed on the floor right up against the base board to cast harsh, unflattering light on each piece that I hang. It is rare now for me to miss a true “air bubble.”

Water woes

But there remains the problem of bubbles caused by material expansion, not air, and that is where water comes in. Here, water in the paste makes its way into the material backing and causes fibers to swell. With enough swelling, the force of expansion overcomes the force of adhesion, and the material warps, creating a bubble.

Since nature abhors a vacuum, the pocket of gas created by this action is mostly composed of water vapor—especially when the material is a vapor barrier type and the wall is well sealed. As the water dissipates during the drying process, the bubbles start to disappear. When there is no more water, there is no more water vapor, and the bubbled-

up area collapses, laying flat again.

Usually, the problem of water expansion can be overcome by lengthening the booking time. This gives the material a chance to “pre-expand” before being flattened (and it makes the paste tackier). Even longer booking time, however, will not prevent all water vapor bubbling.

And this where it gets a little more complicated. Other factors come into play. For instance, the material may be pre-pasted with a low-tack, slimy adhesive that lacks the tack to hold down the areas of expansion. Or the paste chosen for an unpasted material is wrong, due to its inability to quickly and effectively penetrate the fibers of the backing material for pre-expansion before smoothing. (For more on this, check out “The Gel Factor,” *PWC* July-August 2007.)

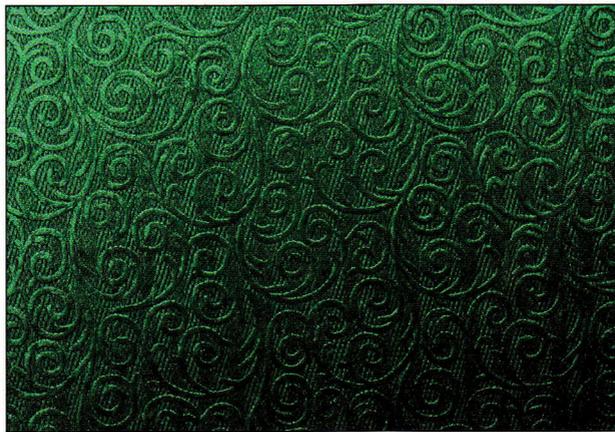
When paste makes waste

Several years ago, there was a good deal of paperhanger commiseration online about insane bubbling with a particular prepasted material made in Canada. I got my hands on the offending material and saw that the paperhangers were absolutely correct: The stuff was rife with bubbles when the instructions were followed.

Those instructions called for water dipping, and that dipping produced a high volume of slimy paste. Yet when I ignored the instructions and used a very fast-penetrating, high-tack, clay-based adhesive, the material did not bubble.

Another time, I had bubbling with commercial 54-inch vinyl, because I

used an unfamiliar brand of adhesive delivered to the job site. A quick change to a fast-penetrating clear ad-



Photography by ryasick

Traditional bubble-removal surgery may not work with foils and some Mylars.

hesive, and *voila!* No bubbles! So before losing your cool about expansion bubbling, check off the main culprits: insufficient book time, too much paste (meaning too much water), a low-tack adhesive, or one that takes an hour or two to fully penetrate backing fibers.

Other culprits

Sometimes, the reasons for bubbling are not so obvious. One very annoying cause is Sheetrock facing that was loosened during removal of a previous wallcovering. This is almost always the case with fabric-backed material that was pulled off improperly. (Note: Pull DOWN to the floor, not OUT toward the puller when removing.)

The water in the paste expands the loose areas of drywall paper, and the bubble cannot be smoothed down. Frequently, you can catch these bubbles if the wall is primed with a water-based primer before hanging. If they are discovered shortly after application, however, the wallpaper sheet must be re-

moved, the bubble slit, and the sheet re-hung.

Other rare cases involve primer that did not fully penetrate the patching compound, then dried too quickly and simply sat on top of the patch until water in the paste loosened the area. More rare are gas bubbles caused by improperly mixed “hot mud” compounds.

Sneaky bubbles

Aside from typical bubbleblers like vinyl-coated paper and paperbacked vinyl, it is good to keep in mind that all wallpaper materials can bubble. Ironically, the ones that we don’t usually associate with expansion can be the worst, because the bubbling is unexpected and the problem sneaks up on you.

Nonwoven materials, for example, are advertised as being dimensionally stable (non-expanding), but from the very first nonwoven I ever hung, there was a bubble here and there.

Commercial Types I, II and III fabric-backed vinyl can also bubble. This is especially annoying at sites where the normal lighting hasn’t yet been installed and there is little illumination away from the windows. Worse, the large scale of commercial jobs means that the bubbles aren’t discovered for some days—and by then, have dried in.

This is why it is especially important to use a clip lamp in these settings, no matter how long an extension cord you need. If, for some reason, you don’t have light—like when the electricians turn off the

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main power and then go for lunch—use the good old “sounding” method to locate bubbles until the power returns. Tell everyone to shush, and rub your fingertips over the wall-covering, listening for slight changes in sound that signal a bubble.

When all else fails

And what does one do with bubbles that didn't go away, for whatever reason? I reach first for the *hohlenpoker*, my own humble invention (<http://www.parodipalace.com/hohlenpoker/index.htm>).

First, roll the *hohlenpoker* over the offending bubble to invisibly perforate the material, then use a spray bottle to mist the area. A drop or two of dish detergent in the water will reduce the surface tension so the liquid flows better through to the wall. Pray that the area in question

has enough dried paste to be reactivated with the moisture. It is best to let it all soak for at least 15 minutes before attempting to smooth it down. A heat gun set on low will also help.

With the possible exception of plain silver Mylar or foil, almost any bubble can be finessed using this method.

Syringe surgery

Old-timers like my dad used a hypodermic needle. I don't hear too much about this method nowadays, because rumor has it that it is illegal to possess drug paraphernalia in some areas. Check with your local authorities on this. Otherwise, a cursory look online shows all sorts of hypodermic needles (including nice-looking antique ones on e-Bay). Fill the barrel with water, and pin-

prick a few areas of the dried bubble as you inject water to reactivate the paste.

If you must go for the crude method of slitting the bubble and trying to get new paste in there, pay special attention to the bubble's position on the wall. If the bubble is above eye level, slit the top of it with the blade angled toward the ceiling. If the bubble appears more toward the floor, slit the bottom with the blade angled toward the floor. Angling the slit helps hide the surgery.

If you do have a hypodermic needle, you can unscrew the needle and inject thinned paste without much difficulty. I keep a very thin one-inch-wide spackling knife in the toolbox for this operation. You can also cut your own thinner applicators from HVAC-grade sheet aluminum. I slit the bubble as described above, dip the knife in a full-strength tacky clear, and then slip the knife in behind the paper once or twice. I manipulate the paste in there, squeezing it around with a finger, and then smooth it out, oozing paste from the top or bottom of the bubble.

During any type of surgery on the paper, you will always be aided by the use of warmth. Set the heat gun or hair dryer on low.

Once the bubbles are fixed, you can get back to pondering other universal laws like: “*Checks in the mail are not subject to the normal space-time continuum*” and “*The number of friends you have on Facebook is inversely proportional to the number of friends you have in real life.*”

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Jim Parodi

A do-it-yourself *hohlenpoker*—a Parodi original—can be your best ally when repairing bubbles.