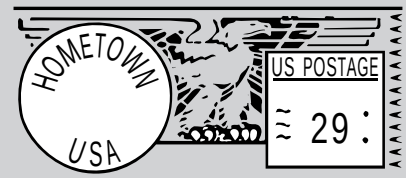
LETTERS



Stucco Question

To the Editor:

The article "Stucco Patches," by Steve Thomas (6/93), was very good. I've done my share of it, but the idea of using masking tape for caulking was a new one to me.

By the way, most stucco jobs in southern California more than about 20 years old were not done over sheathing of any kind. The frame was wrapped with wire and the building paper was laid over that. More recent work uses more sophisticated materials, and many new quality jobs are over plywood sheathing.

Stucco in California is surprisingly resistant to seismic activity. In a strong earthquake, chimneys will fall but the stucco will frequently show no significant damage.

What we do see commonly is the finish coat of stucco flaking off in patches. When that happens, the base coats of stucco will also disintegrate if it is not repaired promptly. I suspect much of this is caused by the homeowner shifting the soil level for landscaping and covering the lower edge of the stucco so that it gets wet and stays wet from lawn sprinklers. Or concrete walks and patios are poured up against the lower edge of the stucco, keeping the lower edge damp from ground water.

But some of this flaking occurs where there is several inches of separation of the bottom of the stucco to the ground or even higher up on the wall, and there is just no obvious explanation for this. Out here the soil is alkaline, so you can't blame it on acidity.

My question: Does anyone know the reason for this flaking off, and is there a reliable repair for it?

Robert Fleming
Santa Ana, Calif.

Steve Thomas responds:

While it's conjecture on my part, here are some possible reasons for the flaking problem:

When the brown coat was being floated, it may have been over-floated, resulting in a too smooth, glasslike surface. This prevents the bond between the finish and the brown coats from occurring.

Also, during the several days after the brown coat is applied, airborne dirt and dust can cling to the wall. This hard-to-spot contaminant can also act as a bond breaker between the two coats.

A third possiblity is that the stucco mix sat too long before being applied, with hydration taking place — a condition called "dead finish." Retempering the mud — adding water to make it workable — doesn't help, and poor bonding will result.

Whatever the cause, if only the finish coat is flaking, first remove the delaminated coat with a power washer (use the kind of power washer available at paint stores, not the "water blaster" type used for taking rust off of steel). Then refinish with fresh, viable mud. But as I said in the article, the wall will look patched.

GUEST EDITORIAL

Green Building vs. Green Hype

by Alex Wilson

Responding to consumers' concerns about the environment, more and more builders are choosing earth-friendly materials and technologies. Some of the choices are pretty obvious: using energy-efficient design so the building will use less fossil fuel over its lifetime, or avoiding insulation materials made with CFCs or HCFCs (which destroy the ozone layer). But some choices can be extremely complex.

Take wood, for example. We've used wood for framing, sheathing, and trimming our buildings for centuries. It's always been affordable, durable, easy to work with, and widely available. But all of a sudden building with wood is being questioned on environmental grounds.

For example, the steel and concrete industries have recently launched major campaigns promoting their products over wood. Steel framing was selected for NAHB's Resource Conservation House because of its high recycled content. The Portland Cement Association touts concrete as "The Natural Alternative" in a recent advertising campaign.

Now the vinyl industry is getting into the act, too. A recent press packet claims PVC (vinyl) to be "far more environmentally friendly than other materials that are totally dependent on petrochemical feedstocks (salt is the number one ingredient of PVC), or those products made from metal ores or wood."

Is wood really that bad? It certainly shouldn't be. Where wood is produced through sustainable forestry practices, it is one of the most environmentally attractive building materials around. After all, the primary energy input going into its production is the solar energy used to fuel photosynthesis. We should also look at the energy used during manufacturing — one of the biggest environmental impacts of most building materials. Studies have shown that a steel stud requires about eight times as much energy to produce as a wood stud. Cement production is also very energy intensive, accounting for about eight percent of total energy consumption worldwide.

The land required for production of materials is another environmental consideration. Here again, wood should come out ahead of most other materials, because if properly managed, timberlands can provide a rich ecosystem as well as recreational opportunities.

Other environmental considerations in deciding between wood and other materials include durability (here concrete may come out ahead), recyclability or potential for reuse (steel is more often recycled than wood or concrete, but wood can be salvaged and reused more easily), and waste generation during construction.

Wood provides just one example of how complex our environmental decision-making can be. Other key issues include energy efficiency, water efficiency, impacts on the building site, and construction wastes.

So how does one distinguish between a green builder and a conventional builder? It's a very fuzzy line indeed.

A green builder is one who thinks about the future and realizes that his building practices have an impact on what kind of world we leave our children and grandchildren. More important, a green builder is someone who then takes steps to reduce the environmental impact of those practices. Being a green builder is rarely an all-or-nothing proposition; it's more a path than an easy prescription.

The few simple suggestions below might help you start on that path and benefit from it in your business:

- Make your work energy efficient. Energy use is the number one environmental impact of most buildings.
- Start with small changes to your practices. There are lots of things that can be done at no cost and little extra effort. Then look at the more significant changes.
- Develop a healthy skepticism of environmental hype touted by companies and industry associations. Claims can be technically correct yet misleading.
- Pay attention to nonbiased environmental rating organizations, such as Scientific Certification Systems and Green Seal. Sources of certified wood products from well-managed forests will be available soon.
- Inform potential clients of your green building efforts in your marketing campaign. Surveys show that the vast majority of consumers consider themselves to be environmentalists.
- Stay informed. *JLC* and other publications are increasingly addressing the issue of environmental sustainability in building construction.

Alex Wilson is editor and publisher of Environmental Building News, a bimonthly newsletter on sustainable design and construction based in Brattleboro, Vt. A copy of EBN's Checklist for Environmentally Sustainable Design and Construction is available by sending a self-addressed stamped envelope to JLC-Checklist, RR 2, Box 146, Richmond, VT 05477.

Stainless Steel Nails Worth the Cost

To the Editor:

Your article "Troubleshooting Wood Siding" (6/93) discusses nails and the ugly results when nails rust. You recommend using a hot-dipped galvanized nail.

This will not always solve the problem. When used with cedar, redwood, or treated lumber, the acid or salt in the wood will react with the zinc on the nail to cause a dark stain as unattractive as a rust stain.

Only stainless steel nails will prevent this problem.

The additional cost of stainless steel will probably not deter a client who is willing to spend the money for cedar or redwood if the builder explains the advantages.

Ding Kalis
Air Nail Company
South Gate, Calif.

Ed note: Air Nail Company manufactures collated nails and staples for pneumatic nailers.

Garage Door Hazard Overlooked

To the Editor:

I enjoyed your article "Safer Garage Door Openers" (7/93), but was surprised that it ignored another potentially lethal hazard, namely the breaking of extension springs or their cables.

I know of three cases where springs failed. In the first, the homeowner found the rear window of his garage door broken, and the spring 25 feet out in his yard. In the second, the homeowner was aroused from sleep by a loud bang, and found a failed cable had released a spring, damaging his car. In the third, the homeowner was standing in his garage when the spring let go, narrowly missing his head.

A simple loop of cable around the outside of extension springs and then through the middle provides some safety protection, yet two different installers I've dealt with don't install such safety devices unless specifically asked.

John C. Becica
Ho-Ho-Kus, N.J.

Level Flip Flop

To the Editor:

I'm writing to correct an error that crept into the text of my article "A Hiring Test for Carpenters" (9/93) during editing. It's not a big deal, but since my article was about testing technical knowledge, the readers have a right to expect correct answers.

In the section titled "Using Tools," the article states that to check a level for accuracy you place it against a wall, read it, flip it end for end, and read it again. This is incorrect. Flipping end for end is what you do to check for level (i.e., the level is on a horizontal surface). When a level is against a vertical surface (i.e., checking for plumb) you check it by flipping it *edge for edge*. Unfortunately, there are carpenters out there who believe that flipping a level end for end on a vertical surface is a good way to check its calibration. It's not; all this tells you is that the vials on either end of your level *agree with each other*, not that they're reading true.

I have been using the same 4-foot Stanley level for 15 years. It has been rained on, dropped, and had the glass vial covers broken. The only reason I'm still using it is because I know which vials are true. The only way to know if a vial reads true is to know the proper way to check a level.

David Frane
Wakefield, Mass.

Tile Soup

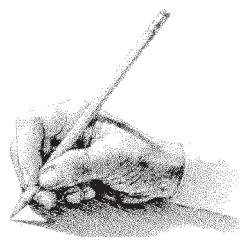
To the Editor:

I recently had the pleasure of repairing a bathtub tile wall. The 40-year-old tiles had fallen off the wall but were not broken. I searched for an environmentally sound solvent to remove the adhesive and grout from the old tiles, but found none.

I called my brother, who is a potter, and asked what would happen if I boiled the tiles. With a melting point of over 3,000°F, he said hot water would have no effect. However, the boiling water softened the adhesive until most of it fell off the tile backs, and the grout loosened to a point that a little scraping left all the tiles intact.

My only suggestion is not to use your best lobster kettle for the boiling, since some of the adhesive stained the kettle.

Marc Verzani
Tuesday Inc.
Watertown, Mass.



Keep 'em coming.... We welcome letters, but they must be signed and include the writer's address. *The Journal of Light Construction* reserves the right to edit for grammar, length, and clarity. Mail letters to *JLC*, RR#2, Box 146, Richmond, VT 05477.