

# Protecting a house during Construction

A scratched door, a chipped tub, or a broken window can sour a project in a heartbeat

BY GARY GILBERG

**T**he freshly built oak staircase had become the lunchroom for the carpenters and painters. At that point in the job, it was the best seat in the house, and the general consensus held that a few sandwich crumbs wouldn't hurt the unvarnished wood. But then somebody kicked over a bottle of Gatorade; every drop spilled, staining the stair treads a lurid red.

Not all examples of construction damage are so dramatic. Often, it's as simple as a carpenter walking through a nearly finished house with his hammer swinging from his tool belt and putting a 6-in. gouge across a door panel. As a construction-project manager, I've seen lots of these incidents and have even caused a few myself. Some accidents are unavoidable, but the majority are caused by sloppy work habits and carelessness. To minimize these mistakes, I've worked with my crews and subcontractors (sidebar facing page) to develop easy ways to protect our work until the owners move in. Although my focus is new construction, the same techniques apply to remodeling, where in addition to new work, you might need to protect parts of the house you're not working on.

## Windows and doors are prime targets for abuse

During the framing phase of construction, fragile items such as windows begin to arrive. First, we remove the screens and store them in a plywood box built by the apprentice carpenters (photo right). Windows are stacked carefully in rows along one wall of the garage; the last in each row is covered with a

sheet of plywood. If the roof is still open, the windows are covered with plastic and plywood. Once the windows are installed, we staple plastic on the inside of the window framing to protect them from dry-wall splatter, paint overspray, and interior humidity.

After the doors are hung, we pull each door off its hinges and stack it out of harm's way, protected by a sheet of fiberboard (photo left, p. 94) or hardboard. We often hang a hollow-core flush door as a temporary substitute for exterior doors. In areas prone to damage, wooden door jambs are covered with cardboard or plywood (photo right, p. 94). I purchase 4x8 sheets of heavy-duty cardboard from a local plywood-supply company.

French doors and large windows are marked with a large X taped onto the glass to alert everyone that the opening is obstructed with glass. When sanding door and window frames, we tape over the ad-



**Site-built boxes protect screens.** When the windows arrive on site, the screens are removed for safekeeping in plywood boxes built by the apprentices.

**Extra layers of coverage for the stairs.** One of any home's highest-traffic areas, the staircase's treads and risers should be insulated with hardboard that's taped down and sealed against dirt. Railings shrouded with moving blankets won't suffer dings and scrapes.



## Tough love for subcontractors keeps the job site free of debris

The most effective technique for preventing damage is simple: Keep a clean and orderly job site. A job site cluttered with debris encourages sloppiness that greatly increases the chance for accidents. I provide brooms, dust pans, garbage cans, a tank vacuum, and a Dumpster for every job. My crew and subs are expected to clean up their workspace at the end of each workday. A daily cleanup clause is included in each subcontractor's contract.

I often use neon Post-it notes to remind everyone to be careful of floor or wall finishes. I alert each sub to the finished work of other trades so that they will know where they have to be extra-careful.

The day before each subcontractor arrives on the job, I clear and clean their work zone. At the first job-site walk-through, they are reminded to leave the work site as they found it: clean and organized. If a sub leaves a mess, I provide a reminder of the daily cleanup clause. For two-time offenders, we sweep up the mess and leave the debris pile in their work zone. The next day, they must clear out the previous day's pile before they are allowed to return to work. Job-site materials left scattered about are collected and put away, and the sub must ask me to return the supplies. These problems seldom recur.

WET  
PAINT



## As the finish work begins,

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**Putting the doors under wraps.** After the doors are hung, they are removed, stacked away from high-traffic areas, and protected with moving blankets and fiberboard.



**Protect doorways that are in the way.** To keep door jambs free of nicks and dings, the author likes to wrap interior doorways with cardboard and blue tape. Exterior door jambs (and exposed beams) are armored with plywood.

jacent glass to prevent sandpaper from scratching the edge of the glass panels. When we're welding or cutting steel, all nearby surfaces including glass are protected. On one job, I was cutting angle iron next to a French door and sending hot slag spinning off the blade and onto the door's glass and wooden frame several feet away. I didn't realize my mistake until weeks later when the painter showed me the pitted glass and burn marks. That lesson cost me more than \$1,000.

### Protect the furnace from dust

When we're ready to fire up the furnace, we remove the plywood covers from the floor vents and replace them with plastic floor register screens (Rutland Corp.; "Sources of Supply," p. 96). These screens keep debris out of the ductwork but allow heat to escape.

Drywall dust can damage the internal-combustion chambers of a forced-air furnace or boiler. Having once had to replace a dust-clogged boiler, I now turn off the boiler or



furnace and cover it with plastic whenever the drywall crew is working in the mechanical room. To prevent dust from entering the forced-air unit through the cold-air return, I build a small frame of scrap 2x2, then stretch panty hose over the frame and cover the cold-air plenum with this custom filter (photos left). I vacuum the filter when it becomes clogged with dust.

### Keeping the finish work pristine

As the finish work begins, I provide drop cloths, cardboard, plastic, moving pads, tape, fiberboard, hardboard, and plywood to my crews to protect their work. As temporary protection, I often use rosin paper to cover finished surfaces. If it tears, I replace it promptly. I buy only the gray type; when wet, red rosin paper bleeds and can stain the surface it was designed to protect. I also save any cardboard I can reuse from my window, door, plumbing, and appliance deliveries.

**A new use for panty hose.** To prevent dust and dirt from getting sucked into the heating system's cold-air intake, the author covers a frame of scrap 2x with panty hose and tapes it into place.



While working above a fiberglass shower stall, I once dropped a piece of trim that pierced the tub floor like a javelin. I repeat that story to all my crews to remind them always to use protection when they are working over any fragile surfaces. Fiberglass tubs and shower stalls are covered with cardboard and 3/4-in. plywood cut to size.

Cast-iron tubs can be covered with moving pads taped into position, then covered with plywood. We've recently tried a paint-on product called Scratch Protection ("Sources of Supply," p. 96). Before applying this latex coating, I tape over the drain and the overflow fittings, and along the tub edges. I then brush or spray on the Scratch Protection. It dries into a thick, rubbery skin that can be peeled off easily or recoated as needed. Standing water can dissolve the latex, so if my tilesetter is floating mortar walls above the tub, I add a second layer of 15-lb. felt on the bottom of the tub and sponge out the floor at the end of the day.

After kitchens and baths are installed, we cover cabinets with rosin paper, countertops with moving blankets, and bottom cabinets with fiberboard (photos below). We use 3M long-mask blue tape when the tape will be left in position for extended periods of time. It's easier to peel off and leaves less residue than conventional masking tape, as long as you avoid prolonged sun exposure.

### **Wood floors and carpets are made to be walked on, but need protection**

As carpeting is installed, it is covered with 24-in.- or 36-in.-wide strips of self-adhesive polyethylene runners. Be aware that natural-fiber car-

## **CLEANING PRODUCTS**

### **JUST IN CASE YOU MAKE A MISTAKE**

Accidents happen. To clean up spills, I start with the least-invasive product available, generally mild soap and water. If that doesn't work, I increase cleaner strength gradually until the stain is removed. I once saw someone melt a plastic Moen kitchen faucet by using acetone to remove a spot, so when I use solvents such as denatured alcohol, acetone, lacquer thinner, or methyl

ethyl ketone, I always test them in an inconspicuous spot first. Testing also should apply to abrasive pads and cleansers; they can scratch plastic, fiberglass, and some metals.

For difficult carpet stains, I use Folex carpet-spot remover ("Sources of Supply," p. 90) or a similar product. Failing that, I hire a professional steam-cleaning crew to clean the carpets.



**Cabinet shields are lightweight and effective.** Once the kitchen cabinets are installed, a sheet of fiberboard makes an easy way to protect the faces. The sheet is screwed to blocks that hang on the counter's edge. Moving blankets cover the counters; cabinetry is masked off for a lacquer touch-up.





#### SOURCES OF SUPPLY

##### Carpet spot removers

Folex Co.  
619-670-5588  
www.folexcompany.com

##### Long-mask blue tape

3M Corp.  
888-368-2583  
www.3m.com  
Available at local hardware stores

##### Pro-vent floor register screens

Rutland Corp.  
866-782-8862  
www.pro-vent.com

##### Scratch-protection paint, tape, carpet runner, nonslip wood-flooring felt, shoe booties, etc.

Protect Associates  
800-545-0826  
www.pro-tect.com

Protective Products  
800-789-6633  
www.protectiveproducts.com

pets (wool, for instance) will show a slight discoloration on those areas not covered by the polyethylene runner because the sun's ultraviolet rays are blocked by the runner. Fortunately, this minor blemish has always disappeared when the carpet under the plastic has been exposed to the sun for a few days.

Heavy-traffic rooms and hallways are covered with a layer of 6-mil plastic. Wood flooring is covered with a 32-in.-wide runner of nonslip felt pad. Wooden stairs are covered with ¼-in. hardboard that is taped in place (photo p. 93). If the crew is using heavy tools for an extended amount of time over a wood or tile floor, I may even cover the entire floor area with ¼-in. hardboard.

I once installed a prefinished wood floor in a kitchen and loosely set down several pieces of ¼-in. hardboard over the floor to protect it. Two months later, I pulled up the hardboard and discovered that several nails, cabinet screws, and a large accumulation of sand from the tilesetter had gotten under the hardboard and been ground into the floor. I had to refinish the entire kitchen floor. To prevent debris infiltration under the hardboard, I now tape it down with blue mask-

## Never enough protection?

During a renovation, it's easier to cover everything. In this house, the floors are covered with hardboard; plastic taped across openings keeps dust migration to a minimum. Moving blankets and cardboard protect finishes.



ing tape along the edges and heavy-duty duct tape between the sheets of hardboard.

We vacuum as often as needed. To reduce the risk of floor damage, tile and interior masonry work is scheduled before finish flooring is installed. The mortar is mixed outside, and we put down a runner of rosin paper for the masons to walk on; we sweep it clean or replace it as needed. We also make sure to cover all thresholds.

Wooden baseboards can be problematic, especially during carpet installations. The back side of many modern carpets is extremely coarse mesh, which can scratch the baseboards as the carpet is unrolled, stretched, and tucked in place. If we have a particularly expensive or delicate baseboard profile, we cover the base with phenolic backer; I buy 4x8 sheets of this inexpensive plastic material from a laminate-supply house, then rip it into thin strips on my tablesaw, and tape the material in place. □

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