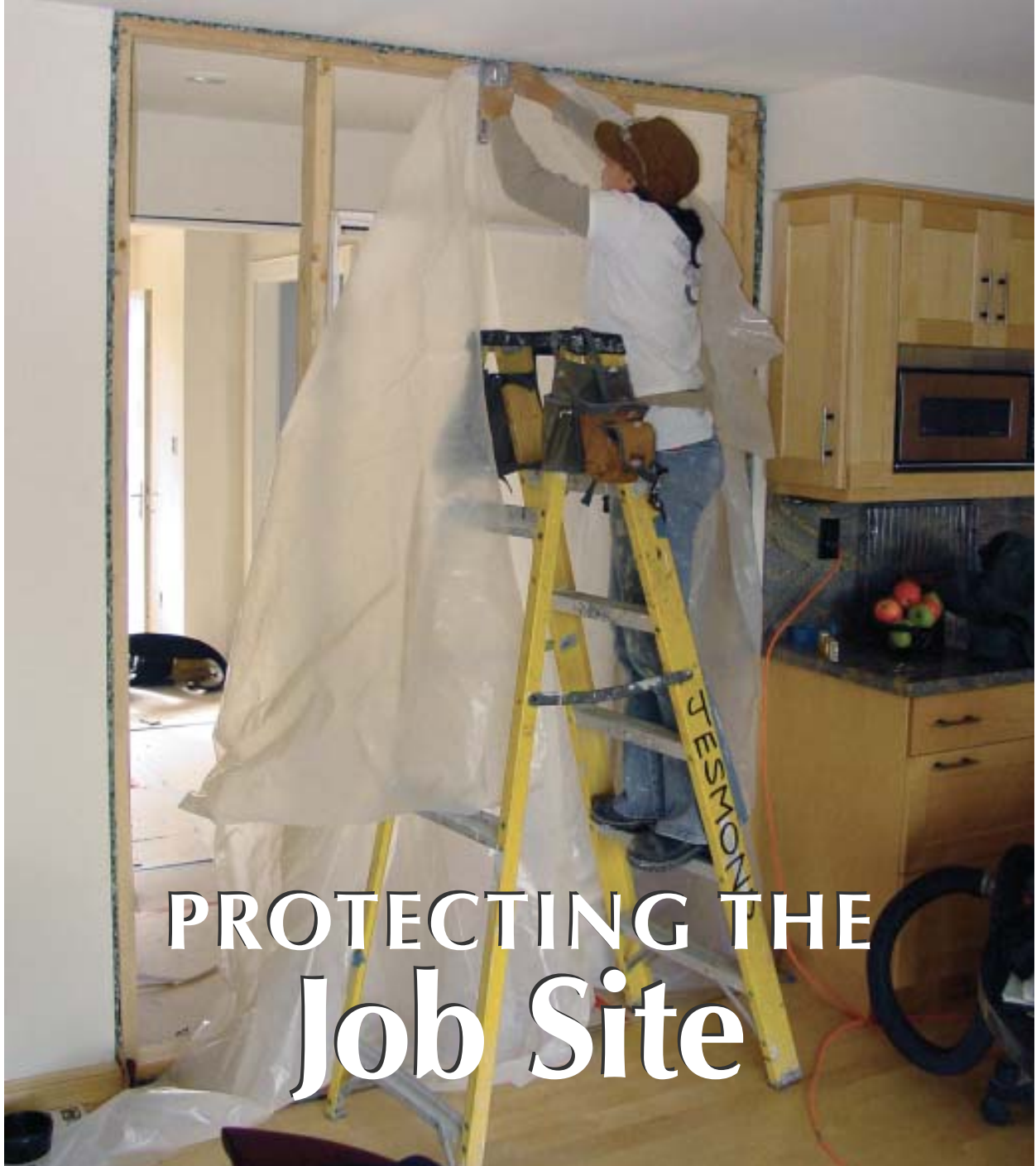




PROTECTING THE Job Site

This systematic approach
to protecting existing
finishes makes for an
efficient job site, happier
clients, and fewer callbacks

by Steve Price

My company specializes in remodeling kitchens and bathrooms. When homeowners remodel in stages over the years, these are the big, expensive projects that often get saved until last, so we spend a lot of time working in the middle of beautifully finished homes. To best cope with this, we use a systematic yet simple approach to job-site protection that relies on hardboard, sill seal, dimensional lumber, plastic sheeting, and other inexpensive, readily available materials. For some key applications, we also use a few proprietary products.

We usually spend a full day doing prep work before demolition begins. This is time well spent, because once it's complete, we and our subs can focus on the

Figure 1. The first step in protecting an existing floor is to lay out the rosin-paper border at the edges of the room. Making a sharp crease where the paper meets the wall allows it to sit flat and reduces the risk of tearing when the floor is swept and vacuumed.



Figure 2. Once the rosin-paper border has been fastened to the wall with blue tape, sheets of 1/4-inch hardboard are laid over the existing flooring and attached to the rosin paper with duct tape (above). Adjoining sheets can be either butted or overlapped. Butt joints are held together with a single layer of duct tape, overlapping joints with a double layer (right). The hardboard floor covering is left in place for the duration of the job; the rosin paper can be folded out of the way to attach new baseboard, then taped back in place to prevent damage to the new base (far right).

job instead of worrying about damaging our surroundings. Just as important, it shows the clients that we care about their home: I've learned the hard way that if a client sees you working without adequate protection in place, you'll be blamed for any damage that's eventually discovered, whether you had anything to do with it or not.

Floor Protection

The traditional practice of “protecting” finished floors from falling lumber, debris, and tools with a thin painter's drop cloth just isn't effective,

so we use 1/4-inch hardboard. This is duct-taped together at the seams and sealed at the edges with a border of rosin paper. In our area, hardboard runs about \$8 per sheet, and most sheets last us about four or five jobs.

Laying down the rosin paper. After thoroughly vacuuming the floor, we roll out a full-width sheet of rosin paper around the room, form a crease a few inches from the edge nearest the wall, then fasten the creased edge to the wall below the height of the existing baseboard with blue painter's tape (see Figure 1). This ensures that the wall above the base is not damaged by





Figure 3. The top and bottom plates of temporary dust partitions are padded with strips of sill seal or carpet padding (left). Padded end studs are wedged between the plates to force the assembly tightly into the opening (below). Plates and studs are fastened together with drywall screws driven into predrilled holes (inset). The temporary wall is held in place by friction alone — no fasteners are used to secure the framing to the finished surfaces.



the removal of the tape at a later date. The corners are a little tricky, but they can be folded so that they sit tight to the wall. Even though it would be easier, it's important not to tape the rosin paper to the finished floor, as it might peel off the floor finish when it's removed.

Hardboard and duct tape. Once the rosin paper is installed, we lay down the hardboard (Figure 2, previous page). We use full 4x8 sheets where we can, but where accessibility is tight, we gang-rip the sheets down to 4x4 or 2x8. The perimeter sheets are held about 2 inches away from walls and cabinetry. This lets us remove the old baseboard and install new base by folding back the rosin paper, temporarily taping it to the hardboard, and then reapplying it when we're done.

Over the rest of the floor, the majority of the sheets are butted together and joined with a single layer of duct tape. To avoid having to cut too many of the remaining sheets, we overlap where we can — these overlapped layers are joined with a double layer of tape, lapped about an inch. It's worth using good-quality duct tape, such as Nashua 333 — the cheap kind tends to come apart, making it hard to remove later. The whole floor can now be worked on safely and is easily cleaned.



Temporary Walls

We build temporary walls with access doors at any area along the work path that needs to be isolated from dust. Especially in homes with open plans, a temporary "room within a room" can serve as an ideal cutting space and a storage area for tools and materials. Also, even though it's difficult to prevent bored or curious homeowners from looking in on the progress of the job, making them pass through a temporary door to reach the work area at least reminds them that they're now in your space.

Pressure-fitted framing. The tempo-

rary walls consist of a frame of 2x4s with strips of sill seal or carpet padding stapled to them. The framing has to be cut accurately, because the finished wall is held in place by pressure only — we don't drive any fasteners all the way through the framing. This avoids the need to repair holes in the existing interior finishes later.

Once we've determined where the walls will go, we measure for the plates; the thickness of baseboards means that the bottom plate is typically 1½ inches shorter than the top plate (Figure 3). We also subtract 1 inch from the overall length of both plates to allow for the



Figure 4. Stick-on zipper doors (top) aren't very durable, but they're inexpensive and easy to install, so the author uses them for lightly traveled passages. The cords taped to the poly above the zippered flap are used to tie the door in the open position. A weatherstripped hollow-core door (above) is a better choice for heavily used openings between living space and work area.

thickness of the sill seal that will later be folded up at each end.

We ordinarily space the studs about 3 feet apart on-center. The exact spacing isn't important, but the length is: The floor-to-ceiling height often varies along the length of the wall, so we don't gang-cut the studs. Instead, we lay out the plates and take separate measurements for each, after stacking the top and bottom plates on top of each other.

Once the studs are cut to length, we staple a layer of sill seal to all the perimeter framing. To erect the wall, we position the top and bottom plates, tap the endmost studs into place between them, and toe-screw them to the plates with 2-inch screws. If the studs have been cut accurately, the frame is held firmly in place as we screw in the remaining studs.

Temporary doors. Stick-on zipper doors are easy to install (Figure 4). They're fine for areas that don't see a lot of traffic, but they don't stand up well to regular daily use. Frequently used openings get a regular hollow-core door instead.

We use 3-0 x 6-8 prehung doors equipped with foam weatherstripping, a strip of sill seal as a sweep, one self-

closing hinge, and a drop-down doorstop. The 3-0 width and doorstop make it easier to move large items in and out. The weatherstripping and sweep help keep the dust inside the work area, as does the uncut bottom plate. The self-closing hinge saves us having to check that the door is kept closed. If the client has small children, we use a door with key-lockable hardware and lock it when we leave for the day. We hang the key high on the wall next to the door, so the client can get into the space if need be.

Once the door is installed, the wall is finished with a layer of 6-mil clear plastic stapled across the entire wall, including the doorway. The plastic goes on the side of the wall that faces the living space because it looks neater to the client that way. The plastic is then cut out and taped to the inside of the jambs with white tape.

Walls, Windows, Doors, and Stairs

To protect walls and tall windows in the demo area, we have a few different options depending on the situation. We have experimented with covering wallpapers or delicate finishes with plastic sheeting alone to keep off dust,



Figure 5. To protect low windows in areas where an existing floor will be demolished, the baseboards are removed and a series of screws are driven into the wall just below the height of the eventual replacement base (left). The windows are then covered with sheets of hardboard that rest on the screws at the bottom and are taped to the wall along their upper edges (right).

but they can still get bumped or scratched. They're best protected by building a temporary wall right in front of them. The temporary walls also give us the option of leaning sheet goods up against them without damaging the wall behind.

Low windows. We've found that windows close to flooring that will be demolished are best protected with sheets of hardboard. After removing the baseboard, we install 2-inch screws into the wall just below the top of where the new base will eventually be, spaced two or three studs apart (Figure 5). The hardboard sits horizontally up on the screws and is taped to the wall with a small amount of blue tape, or pin nails. This doesn't interfere with removing the old floor, and the screw holes in the wall are concealed by the new baseboard.

Protective glazing. When tearing down ceilings, we cover any nearby windows that aren't going to be replaced with a layer of 1/4-inch acrylic glazing to protect them while still letting daylight into the room. If we're going to replace the casings, we attach the acrylic to the edges of the jambs with screws (Figure 6). If the casings are

going to stay, we blue-tape it to the outside edges of the casings. For really large windows, we'll also install a few trim head screws to help carry the weight of the acrylic.

Even though acrylic is fairly expensive (about \$100 for a 4x8 sheet), it lasts for years and is far cheaper than the cost of replacing glass in a window. We have several different sizes on hand that we tape together for big windows.

Multiple-paned windows and walls that aren't at risk of physical damage but

are prone to getting covered with paint or drywall mud are covered with a layer of 1-mil plastic. This is far simpler and faster than cleaning them later.

Doors and jambs. Whenever possible, existing doors that will be reused are removed from the work area and stored safely out of the way until the job is done. We also remove and store door and window screens. When it's impractical to remove an existing door, we protect it in place with hardboard or acrylic attached with blue tape. If our



Figure 6. Protective sheets of 1/4-inch plexiglass are fastened to door or window jambs with screws driven through slightly oversized predrilled holes in the plexiglass.



Figure 7. Proprietary jamb protectors wrap easily around openings and stay in place without fastenings.

only access is through an expensive entry door set, we sometimes replace the entry door with an inexpensive solid-core door for the duration of the project. The door should be a blank, so it can be customized to match the layout of the existing hinges and lockset.

The jambs of the doors we move materials through are protected with jamb protectors from Protective Products (800/789-6633, www.protectiveproducts.com). They are easily attached to the side and head jambs (Figure 7). These also work great on interior doorways, including those without attached casings. We protect door thresholds from scratches and dings with a layer of stucco tape or Pro-Tect Tape (800/545-0826, www.pro-protect.com), which we replace monthly.

Carpeted stairs are covered completely with a layer of sticky roll plastic from Pro-Tect, which is replaced once a month (Figure 8). Hardwood stair treads are protected with a product called Pro Tecta Top from Protective Products. This is a heavy sheet plastic with a foam backing that we cut to fit the depth of the tread, and tape to the risers with blue tape.

Fixtures, Cabinetry, and Appliances

As with existing doors, chandeliers and other hanging light fixtures directly in the work area are best removed. Even if you manage to avoid breaking them, they're sure to get dusty, and cleaning even a small chandelier is a time-consuming chore we prefer to avoid. After carefully removing the fixture, we hang it from the ceiling in the garage (Figure 9, next page). It is then draped loosely in plastic, which is taped to itself at bottom and top.

Bathtubs and shower pans are protected with Pro-Tect Liquid Mask, a water-based material that sets up to form a tough, rubbery coating. We apply it to the perimeter of the tub with a brush; more than one coat is usually required to build up an adequate thickness (Figure 10, next page).

Next, we cover the top of the tub with a sheet of $\frac{3}{4}$ -inch plywood that's the same width as the tub but $2\frac{1}{2}$ inches shorter than its length. Dimensioning the cover in this way leaves a gap of a little over an inch at each end; the plywood is allowed to overhang the apron enough to leave a



Figure 8. When protecting carpeted stairs with sticky roll plastic, it's important to cover the risers and full width of each tread, not just the portion that will get walked on (left). The landing above the steps will be covered with hardboard. The tread and nosing of hardwood stairs (right) are covered with Pro Tecta Top. The unprotected MDF risers will be painted later.

corresponding gap between its long edge and the wall. The edges of the plywood are then duct-taped to the Liquid Mask. When the tile sub is ready to install the wall tile, the Liquid Mask is peeled back enough to permit setting the tile without removing the plywood.

To protect nonremovable tub aprons, we cut another piece of $\frac{3}{4}$ -inch plywood to the same length as the top cover and about 3 inches shorter than the height of the apron. We place it against the apron and screw it from above, through the overhanging top cover. This covers the easily damaged apron almost completely, but because the plywood doesn't extend all the way to the floor, it's possible to install the finish floor without removing it.

Drawers, doors, and countertops. Cabinetry and countertops are subjected to all kinds of abuse during construction. Before installing cabinets, we remove all the doors, drawers, and end panels and store them out of harm's way. Most of the cabinetry we install uses easily removable European-style hinges, so this is a simple task. Newly installed cabinets with inset doors are checked for



Figure 9. Fragile light fixtures are removed from the work area and hung from the garage framing to keep them out of harm's way. A sheet of plastic draped over the framing and fixture and fastened with tape keeps them free of dust.

square and racking with the doors in place before they're stored away.

We bring lots of knock-down hard-plastic shelving racks to our jobs to organize tools and materials, and these are also ideal for storing doors and drawers. We use strips of packaging

material like corrugated cardboard and foam as spacers between doors and drawers, and the whole stack is covered with plastic sheeting (Figure 11, next page). The doors, drawers, and removable end panels remain safely in storage until the very end of the job, just prior



Figure 10. Two coats of Liquid Mask are brushed on to the perimeter of the tub (left), leaving a rubbery coating that prevents it from being scratched by the plywood cover. A plywood cover is duct-taped to the Liquid Mask (right).

Figure 11. Cabinet doors, drawers, and removable end panels are stacked on inexpensive plastic shelves that are easily knocked down for transport to the job site. Corrugated cardboard or sheets of foam between items prevent scratches, and a covering of poly provides dust protection.



Figure 12. Cabinets are protected with sheets of hardboard secured with duct tape. The bottom edges of the hardboard extend only to the top of the kickspace to permit finishing the floor with the hardboard still in place.

to installation of the knobs and pulls.

Nonremovable end panels are protected from abuse with a layer of 1/4-inch hardboard. This is cut to around 30 inches tall for a standard base cabinet and duct-taped to the counter subtop and the underside of the toe kick (Figure 12). Leaving the kickspace exposed makes it possible to finish the floor without removing the hardboard.

For protecting finished countertops during tile backsplash and finish electrical work, we use Pro Tecta Top, the front edge of which is folded over the edge of the countertop. We tape it to the back edge of the countertop with duct tape, starting about 1/2 inch from the finished wall, so it can stay in place during grouting and other work.

Pro Tecta Top is waterproof, so tile mud and grout wipe off it easily, and it can therefore be reused many times. Although it arrives in roll form, we've found that it's best to store the material flat — it can be difficult to get it to lie completely flat otherwise, even with tape. We've cut most of our pieces into short lengths so they don't take up much room in storage.

Appliances are among the most expensive finish items. They're easily scratched, and repairs are time consum-

ing and costly, so we try not to install them until the end of the project. When that isn't possible, we remove the doors from ranges, ovens, and fridges and store them away from the work area — which makes the appliances lighter and easier to handle. Once installed, sinks, cooktops, and ranges are covered with moving blankets and hardboard.

The Unveiling

We benefit greatly from the prep system we use, especially since it makes our job sites much easier to work in. We've also received a very positive response from our clients. During the project, the homeowners have usually only caught glimpses of their new floors, countertops, and cabinetry, because these items are covered up quickly after installation.

When the project is finished, we remove all the protection at once. This process (the "grand unveiling," as I call it) always gets an enthusiastic reaction, as the clients see their brand-new room complete for the first time, looking even better than they imagined. 

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