by Scott Crader

THE COMPLETE COVERUP

A single tarp large enough to cover the entire opening is the key to protecting the existing structure (top). Carpenters pull the tarp back each day and complete one phase of the framing (middle). When evening — or rain — comes, the job is quickly and securely buttoned back up (bottom).

To protect pop-top remodels, tarps should roll on and off quickly and secure easily in a sudden downpour

In the five years since my company switched from production house framing to remodeling, framing additions has been our bread and butter. Most of our work has been upper-story additions: Since 1989, we've done more than 50. Often, we contract just to tear off the roof, and frame and sheathe the shell of the new upper story. Remodeling contractors in my area know they can call on us to get a new second story on a house in under two weeks (a typical job takes five to eight days).

Keeping a job like that dry is a prime concern. In the Seattle area, where we work, you can pretty much count on rain at least once during the time you've got the roof open. So we always have to be ready to cover things up fast. That's why we've got rain protection down to a systematic routine. So far, we've never had a problem resulting from rain.

A tarping system needs to be efficient so you can cover up quickly if the rain starts suddenly. It should also be simple, so you don't spend too much time uncovering and recovering the job every day. But most important, a tarp system must be effective and reliable. I recall one house where a guy tried to protect a large roof opening with a half-dozen 8x12-foot tarps, lapped at the corners. When it rained, water ran down to the seams and went right through. A case like that can result in a major liability claim against a contractor.

Our system is designed to cover the opening with a single tarp big enough to

shelter the entire job. We fasten the tarp only at the perimeter, and hold the inside area up with vertical supports we call "taut sticks," so that the rain will run downhill to the edge of the building. By fastening the tarp only at the edges, we make sure there will be no holes in the middle. That way we can continue to use the same tarp as we move from one phase of the job to the next, until the new roof is on.

Now that we've got our system down, it takes us only about 30 minutes to set up each job on the first day, and only 15 minutes to uncover and recover every day after that.

Materials

The day we start a job, we make sure that everything we need to keep it dry is on hand. Most of the cost of our system is for the tarp: We use the standard cross-woven polyvinyl tarps that everyone is familiar with. We pay anywhere from $50 for a little 20x30-foot tarp that will cover a small addition to $150 for a big 40x60-footer on big jobs.

We also need some scrap material for blocking and some padding for any blocks that will come in contact with the tarp. Most of that material comes from the site: Our demolition work provides the blocking and often some carpeting that we can use for padding. (I make a point of saving any pieces of carpet that are in decent condition — they're great for protecting floors during finish work.)

Beyond that, we just need to bring a handful of 2x4s (which we later use for framing) and a half-dozen sheets of plywood to put down temporarily in the attic space over the ceiling joists. The plywood gives us a place to walk and a place to set our vertical taut sticks.

Planning

While we're planning the demolition, we also plan how we're going to arrange the tarp. We usually work diagonally when we remove a roof: If we are taking off a rectangular section of the roof, as usual, we start at one corner of the rectangle and work along and up the roof until we reach the opposite corner.

So if we look at the house and decide that we are going to start our demolition on the left corner of the roof and work our way toward the right side, we set the tarp up to run from the right side and roll out toward the left.

Before we cut into the roof, we unfold the tarp on the ground parallel to the area it is going to have to cover, and roll it up toward the end we are going to fasten. Then we lift the roll into place on the roof, and secure the fastening end with blocks and nails. Now we're ready to start demolition: If a rain comes up, the tarp is all set to roll out.

Covering Up

Whether we're covering up because the day is over or because the rain is starting, the process is the same. First we roll the tarp out to cover the opening, then we fasten it down at the perimeter. Finally, we push the inside area of the tarp up tightly with the taut sticks.

Perimeter blocking. I've seen people fasten a tarp down by tying rope through the grommets at the edge. In my experience, that's not a safe method. If a wind gets under the tarp and starts to flap it up and down, those grommets can rip loose from the fabric. The rip can turn into a tear, and you can end up with your tarp in pieces, or flying over to the neighbor's house.

Our technique is to roll 2-foot blocks of 2x4 into the tarp and nail through block, tarp, and all, right into the framing or the existing roof. Gripping the blocks and tarp in your hand, it's easy to pull the tarp tight, and once the block is pinned to the framing, the tarp can't slip out or tear from the nail. With a block every 5 or 6 feet, any stress on the tarp is distributed over enough points that the tarp won't fail (see Figure 1).

Projecting ends. At the end of the roof, or anywhere we need to create an eaves to hold rain away from the building, we use a projecting end block. We slide a 3-foot section of 2x4 past the end of the roof and nail it to the framing, then nail a short block to the projecting piece with the tarp sandwiched between. With the surface area of both blocks holding the tarp, it doesn't rip.

We use just a couple of nails to hold the blocks together. Then when it's time to remove the tarp, we tap the block loose with a crowbar or a hammer and pry it up.

We usually nail the blocks onto the outside of the structure from ladders, but if ladder access is a problem, you can work from inside: Stand on a 6-foot stepladder, lean over the top plate, and reach under the tarp. Start at a corner and work your way along the wall until you come to a point where you can reach the wall with a ladder from outside the house. You only need one point along the wall where you can put up a ladder and finish the task.

We pull the tarp fairly tight as we fasten it down with the blocks, but you have to be careful — if you pull it too tight it may rip on a sharp edge. You can get it good and tight later when you push the vertical supports up under it.

Taut sticks. With the tarp securely fastened around the perimeter, we have to make it convex so that rain will run off it without puddling, and we have to make it tight so the wind can't flap it around. For this we use taut sticks made from stud or plate material (Figure 2). Either 2x6s or 2x4s will work, but 2x4s are easier to handle. We fasten a block to the end of a 2x4, and place a carpet scrap on top of the block.

Then we stand a second 2x4 alongside the first one, slide the 2x4s by one another until the padded block is pressed

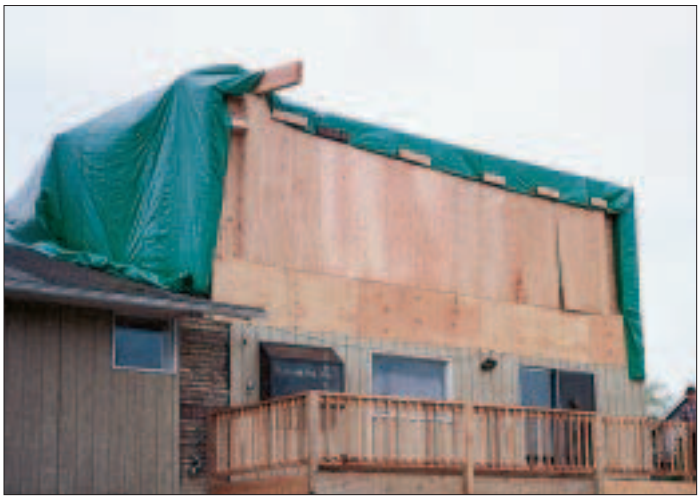

Figure 1. *To prevent the tarp from ripping, the author secures it to the building with nailed 2x4 blocks.*

Figure 2. *Long vertical supports, or "taut sticks," made of spliced-together 2x4s create a dry, roomy work space on rainy days.*

tight against the tarp, and spike the 2x4s together with two or three nails.

When we wrap the job up each night, we use diagonal braces we call "stay sticks" to hold the taut sticks securely in place. The tension of the tarp will hold the taut sticks in place temporarily — when we're working under the tarp, we leave the stay sticks off so we can move the taut sticks around if they happen to get in the way.

Working Under the Tarp

Each morning, if the weather permits, we roll the tarp back out of the way where it won't hinder the work. It's a matter of 15 minutes to remove the stay sticks, pull down the taut sticks and lay them aside, knock the perimeter blocks loose and pry them apart, and roll the tarp back.

We complete about one phase of construction a day — that is, it takes us about one day to frame a floor system, a wall system, or a roof system. On a typical 600- to 1,000-square-foot job, we have our work planned so we can roll the tarp back, knock out one phase of the framing, and reset the tarp over our new floor, walls, or roof in the evening.

Most of the time, our customers continue to live in the house while we're building their new upstairs, and we have a big incentive to get a roof over their heads quickly. So if it rains, we often don't wait for good weather — we just work under the tarp.

Framing the walls flat and standing them up is complicated under the tarp: The taut sticks tend to get in the way. But they're easy to move around, so they don't slow us down much.

We can even frame a floor system with the tarp in place: We put our taut sticks around the perimeter of the space where we're working, and run them up high enough to give 12 feet of headroom — enough room to work with joists.

Working Around Chimneys

When we have to set a tarp up over a chimney, we make a frame of double 2x4s, lapped at the corners, to sit on top of the bricks. We staple carpet to the top of the frame so it won't rip the tarp.

If the chimney is working and smoke or fumes might be a problem, we have to cut a hole in the tarp. To reinforce the tarp around this opening, we lay a square of plywood down over the tarp and nail it into the chimney frame, so the tarp is sandwiched between the plywood and the carpet padding over the frame. Then we cut out a chimney-sized hole through the plywood, tarp and all. When we roll back the tarp each day, we just leave the chimney-frame attached to the tarp, so that we can put it right back on top of the chimney at the end of the day.

Reusing Tarps

We buy a new tarp for each job, and we use it only for that one job. Occasionally a homeowner offers us an old tarp, but I won't start a job with an old tarp. After all, when I put a tarp over a hole in the roof, I have to stand good for what happens. I don't want the liability if that tarp lets water through.

Figure 3. *For efficiency, the author's crew works in two-person teams. Here, the lead man pulls the tarp tight and secures it while the support man passes him the nail gun and blocks as he needs them.*

When we cover up the job each day and tighten up the tarp, we check for small holes or tears. If we look up from under the tarp and see light coming through a pinhole, we get on a stepladder and patch the hole from the inside with duct tape. As long as the tarp is convex, the duct tape will shed water.

At the end of the job, sometimes we'll give the tarp to the homeowners — after all, they paid for it. But the tarps I keep I'm glad to have. We can use them for covering lumber, and they're great for ground cloths during demolition — it makes our cleanup a lot easier.

Using tarps for ground cloths wears them out fast. Usually we just roll the tarp up with the debris in it and throw the whole thing into the dumpster.

Tips for Efficiency

For tarping out, as for demolition, we find that it's most efficient to work in teams of two: one lead man and one support man (Figure 3). When working on the perimeter, the lead man will be on the ladder, and the support man will stand on the ladder below him or on another ladder next to him, and hold the blocks and the nail gun. The support man will hand the lead man the block, and the lead man will roll it up in the tarp and pull the tarp tight. Then the support man will hand him the nail gun, and he will shoot a couple of nails in it. Then he hands back the nail gun and they move on to the next block.

Ideally, the lead man never has to look back for the block or the nail gun — all he does is hold his hand back, while keeping his concentration on what's immediately in front of him (and on his own balance).

If you don't have a helper, and you're going to be up on the ladder by yourself, then you can prestart your nails in your blocks, and just go up there with a hammer and no nail gun to wrestle with, carrying two or three blocks in your nail bags. ■

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