
RESIDENTIAL TEAR-OFFS

by Paul Spring



Cleashy Mfg. Co.

Tricks of the strippers' trade: Using a steel shingle ripper to pry against the skip sheathing, these wood shakes can literally be rolled across the roof, pulled along by their felt interlayer.

Special tools and techniques can make removal go faster and cleaner

Stripping old roofing is few people's idea of a good time. But it doesn't have to be inefficient and unprofitable. In fact, if you've ever had a strong suspicion that there must be a better way than brute force applied to a shovel and hammer claw, you're right.

In search of that better way, we talked to roofing contractors across the country to find out more about the tools and methods they use for tear-offs. We heard testimonials for everything from roof saws to potato forks, and techniques that ranged from ramped scaffolding to "Look out below!" The answers we got were as diverse as the roofers we interviewed. Here's a complete sampler.

Setting up in the Suburbs

Probably the most important question asked about a tear-off is "How close can you get the truck?" On residential jobs with attached garages, the driveway typically leads to decent roof access and a short heave from the overhang. That's convenient.

But if you can't get a truck or a dumpster close enough to the house, you may be faced with what is not very fondly

referred to as a "pack-in job." "Although it doesn't leave the best impression with the customer, the best you can do," counsels Mike Lawler of A.R.C. Roof Corp., Oakland, Cal., "is spread out 6-mil plastic and just dump the stuff over the edge." But he cautions never to use black plastic, "it heats up so fast in the sun it will fry any landscaping it covers."

Once the trash has reached terra firma, most contractors load into wheelbarrows by hand or with scoops (big volume shovels), and wheel it to a dumpster on the street. A dumpster has several advantages over a stake-bed truck in this case — it is usually outfitted with an end door so you can wheel in the first dozen loads, and its sides are relatively low when a ramp does become necessary.

Steep-pitched roofs, which are often two-stories high, also pose problems. Although some roofers take the "board-up-the-windows-and-let-'er-rip" approach, doing it right requires some kind of scaffold. Most convenient for both the tear-off crew and the roofers that will follow is a scaffold that has plywood barriers to stop falling debris,

solid planking for wheelbarrow access, and a ramp own to the truck or dumpster.

The Range on Neatness

The standard routine on lower pitches is to drape 6-mil poly sheeting or canvas tarps from the roof's edge down to the ground. More cautious contractors prefer the solid protection of plywood leaned against the house, particularly if there are windows nearby.

There are two camps when it comes to laying down poly or tarps to keep the small stuff out of the bushes. Forty-year veteran Lloyd Hitchins, an Urbana, Ill., roofing contractor asserts that "it's easier to use a magnet than to use tarps," referring to a magnetic sweeper that looks all the world like an old-fashioned push mower without blades (see Figure 1). But Jack Anderson of Danville, Illinois's Big Ten Steel claims that spreading plastic out over the bushes and around the dumpster makes cleanup easier after the big stuff is pulled out with a rake and a manure fork.

A few roofers even assemble chutes on one- or two-story jobs. Wayne Cain,

a Champaign, Illinois roofer, thinks it's worth the trouble because of the time he saves on cleanup. "Keep the chute low in the truck to keep debris out of the yard," he advises. But his cross-town competitor, brother Ed Cain, disagrees. "Chutes are a waste of time for residential work." Ed says he doesn't like to do anything twice, so he doesn't miss when he throws debris off the road.

Oakland-based Flagler Roofing takes this all one step further. For most of their more than four decades, Flagler tear-off crews have bagged the debris up on the roof, and then thrown the full sacks down into the waiting truck. No fuss, no muss. They are currently using everything from bulk dog food bags made of plastic to 100-pound coffee bean sacks obtained from a bayside roasting company.

Tools of the Trade

Despite the enormous variety of tear-off tools, they can really attempt to do only one thing: Get underneath the roofing material and pry up. And if they can grab some of the nails on the way, so much the better.



Figure 1. A magnetic sweeper is simply a strong bar magnet – 18 to 36 inches wide – on wheels. Midwestern and eastern roofers swear by them for site nail cleanup.

Most of the tools for pitched, residential roofs are hand tools – some rather long and heavy (see Figure 2). Built-up roofs, on the other hand, attract big machinery because of their flat nature and generally larger scale.

Although a number of distributors sell by catalogue, you really need to heft these tools to judge them. A large roofing supplier will carry a selection of the ones popular in your area. Once you've had the chance to look at the tool, many of them can be ordered with different handle styles (D-handle, T-handle, and straight) and handle materials (steel, fiberglass, or wood).

Maybe the most confusing thing about these tools is the overlapping in



Figure 2. Instruments of torture for aging roofs, none of these tear-off tools is expensive. The long handled tools from left-to-right are a spud-bar, a heavy duty shingle remover with tines and scraper blade, two tear off spades (one serrated with a welded step, the other plain), a nail bar, and a less expensive shingle remover. The hand tools in the foreground include two prybars and a slate ripper.

names – one roofer's shingle spud is another roofer's nail bar. Nonetheless, here's an idea of what's out there:

- **Carpenter's flat bar.** For prying, lifting, and occasional nail pulling. \$5 to \$7.
- **Offset ripping bar.** Another carpenter's tool with the same purpose. About \$9.
- **Slate ripper.** Used to reach in and hook nails up under slates without breaking them. Can also be used with wood shingles and shakes. About \$25.
- **Shingle ripper.** This long, curved, steel flat bar is used to peel up courses of wood roofing. \$36.
- **Hand spudder.** A small hammer-like tool with short, curved steel blades designed to chop and scrape built-up roofing. About \$9.
- **Spading fork.** The same flat-tined D-handle tool you use in the garden. Works well with composition shingles, but tines do have to be straightened occasionally. About \$15.

- **Tear-off spades.** These look like ordinary planting spades (D-handle or straight handle) except they can be purchased with serrations to help with nails, or a welded step underneath to use as a fulcrum. Effective and inexpensive at about \$15.
- **Shingle removers.** These tools have a vaguely shovel-like blade with an angled front and mean serrations. Some have replaceable blades; all different handy styles. Between \$25 and \$50.
- **Heavy-duty shingle removers.** These heavier versions often have two D-handles (one is mid-handle) and interchangeable serrated or scraper blades. Under \$75.
- **Spud bar or scraper.** The basic built-up roofing tool. A heavy, flat scraper (typically 3_ or 7 inches wide) bolted to a long, steel handle. Blades are easily replaced. About \$25. Also comes in impact and a hot new pneumatic version at much higher prices.
- **Nail bar.** These are also called nail spuds, shingle bars, or tined bars. Designed to pick up roofing nails as well as shingles of all types with their comb-like steel teeth and wedge-like body. Same widths as spud bar. Between \$25 and \$50.
- **Wheeled tear-off bar** (see Figure 3). This is a wide blade (tined or flat) mounted on wheels and fitted with handlebars. It's jammed underneath built-up roofing or shingles and then levered up. About \$175.
- **Power equipment.** Gasoline-driven roof cutters, rotary planers, scratchers, motorized spud bars, etc. These are the big bucks and big capability machines for removing expanses of built-up roofing.

- **Trash chute.** Although you can make your own from SonoTube or sheer metal, these 4-foot sections of polyethylene chute are indestructible and won't come apart unpredictably. Thirty inches in diameter, they hook together with chain and some will lay flat in storage. About \$90 per section.
- **Magnetic sweeper.** This bar magnet on wheels comes in 18-, 24-, and 36-inch sizes and is used to clean up job sites and roofing yards. Used more in the East and Midwest than the West, they sell for \$100 to \$150.

No Right Way

Despite the variety of tools and well-thought-out logistics, tearing off roofing relies more on strength and endurance than technique. Here are some roofing materials are removed by the roofers we talked with.

Composition shingles can be pried up with any of the tear-off spades, shingle



Figure 3. This wheeled tear-off bar can be used to remove shingles or built-up roofing. While it can't compete with the gas and pneumatic machines used to strip big commercial roofs, it has lots of advantages over a hand spud bar and costs less than \$200.

removers, or nail bars. Like all roofing, you should follow a few courses at a time parallel to the ridge with the spade or bar aimed at the nailing line. Removing a few feet of shingles at the rakes first means you'll have less debris scattered in the bushes when you're done and added to safety.

Wood shingles are relatively easy to tear-off and come with their own packaging. Using a pry bar or slate or shingle ripper, two to three courses are loosened and then rolled up in their felt interlayer (see lead photo). Unless the roof is very old, you can coax this bundle along, rolling and building it like a snowball.

Wood shingles get the most complaints. They are narrow and brittle, but can't be rolled like shakes. They are also typically laid over spaced (or skip) sheathing. Tearing them off dumps a good deal of debris down into the attic on top of the insulation. Because it is flammable, it has to be removed. Although it is typically picked out by hand, some contractors, like Oakland's High Tech Roofing, clean up carefully around batt insulation with a commercial vacuum.

Slate and tile are typically worth preserving unless they are in very bad shape. Tile is often replaced after the roof deck is hot-mopped, and surviving slate can be reused as well.

Build-up roofs have to be cut and then peeled with stud bars or heavier equipment. Although all of these tools rely on backs and arms, a wheeled tear-off bar will give you a little wider swath and some leverage. It's easy to see why roofing contractors who do a lot of kettle work own power cutters and removers.

Getting the old roofing down to the eaves is done every way imaginable. Orndorff and Spaid crews in Beltsville, Md., walk the stuff down if the pitch is 5:12 or less. Oakland's State Roofing will use a wheelbarrow up to a 2:12 or 3:12 pitch, according to production manager Jack White, but they like two-man canvas slings on intermediate pitches. 10x10-foot canvas tarps with handles are custom-made for them.

Once the old roofing has been torn off, there are still a lot of nails to be dealt with. A lot of these get bent over or driven, but it's important to remember to pull them at exposed overhangs so they don't peek through the sheathing below.

Nails on the ground are another story. Several eastern and midwestern roofers

we spoke with use a magnetic sweeper at the job site; western roofers typically don't. Some carefully sweep up, others were less concerned. One put it this way, "We don't take any special precautions with nails. I mean, if the client gets a flat tire, we fix it."

The last responsibility in tearing off a roof is taking the debris to the dump. Most roofers complain about rising landfill prices, but say they are able to pass these costs along to their customers and don't see much they can do about it. Flagler Roofing was again the exception. They have searched out and found someone who needs dense fill, and they regularly bring their tile tear-offs to this property.

Rooftop Safety

Working on a roof is risky; it becomes riskier when it's strewn with debris and studded with half-driven nails. But most precautions are really just common sense.

Loose roofing should be carried to a collection area on the roof or thrown off immediately. As areas of the roof are cleaned, nails should be pulled or driven in so there are clear areas for traffic. Debris shouldn't be allowed to accumulate on scaffolding either. The number of workers on the roof should be kept reasonable, and they should be given dust masks to wear.

Asbestos is another hazard sometimes present on roofs. It can be in the form of brittle asbestos-cement shingles, asphalt-impregnated felts, or crumbly non-impregnated felts. But there is still a lot of disagreement about the friability of these sources (whether the asbestos can crumble and escape) and their hazards to roofers and residents. One useful guideline is that there should be "no visible emissions" from a roof tear-off where asbestos is suspected.

Because the laws and guidelines all seem to be interpreted differently by the various regulation agencies (EPA, NIOSH, OSHA, not to mention state and local involvement), there is no one recommended way to proceed. However, covering your own liability and your employees' health are at the top of the list.

Some roofers will recommend asbestos-abatement contractors rather than do the tear-off themselves if their estimator suspects the roof has some asbestos. Others feel that the risks aren't that great and proceed with the tear-off.

A.R.C. Roof Corp., also a licensed asbestos-removal contractor, takes precautions to protect themselves and their workers. Even when a client has not opted for the full asbestos abatement procedure upon being informed of asbestos in the roof, workers are required to wear sealed clothing and approved masks, and some air monitoring is done.

Falling is another life-threatening risk that needs particular attention on steep pitches. The safety devices are standard – chicken ladders, toe boards and scaffolding – but they have to be installed carefully and used wisely. Firms like D&S Roofing in Worcester, Massachusetts put their people in safety lines on any roof over 16 feet, a practice that brings smiles to the faces of OSHA inspectors.

But awareness about safety comes in many forms, and some of them are deeply rooted in the trades. As one Maryland foreman put, "The biggest safety precaution I take in a tear-off is to make sure that the boys are sober." ■

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