

Demolition Blades

The price you pay for these reciprocating-saw blades doesn't necessarily correspond to the performance you get

BY DAVID CROSBY

I'll never forget the amazement I felt when I went to work for a building company that supplied reciprocating-saw blades to its carpenters. All I had to do was write down my name, how many blades I took, and what job the blades were for. I'm not sure the novelty ever wore off.

Now, being self-employed, I am buying my own blades. With a price range from about \$2 to \$10 per blade, I'm looking for that sweet spot somewhere between price and value.

Not convinced that such a small price tag makes a difference to the bottom line? Consider this: If I plan to use one blade for a job and end up destroying four or five, that's pretty much my salary for the hour.

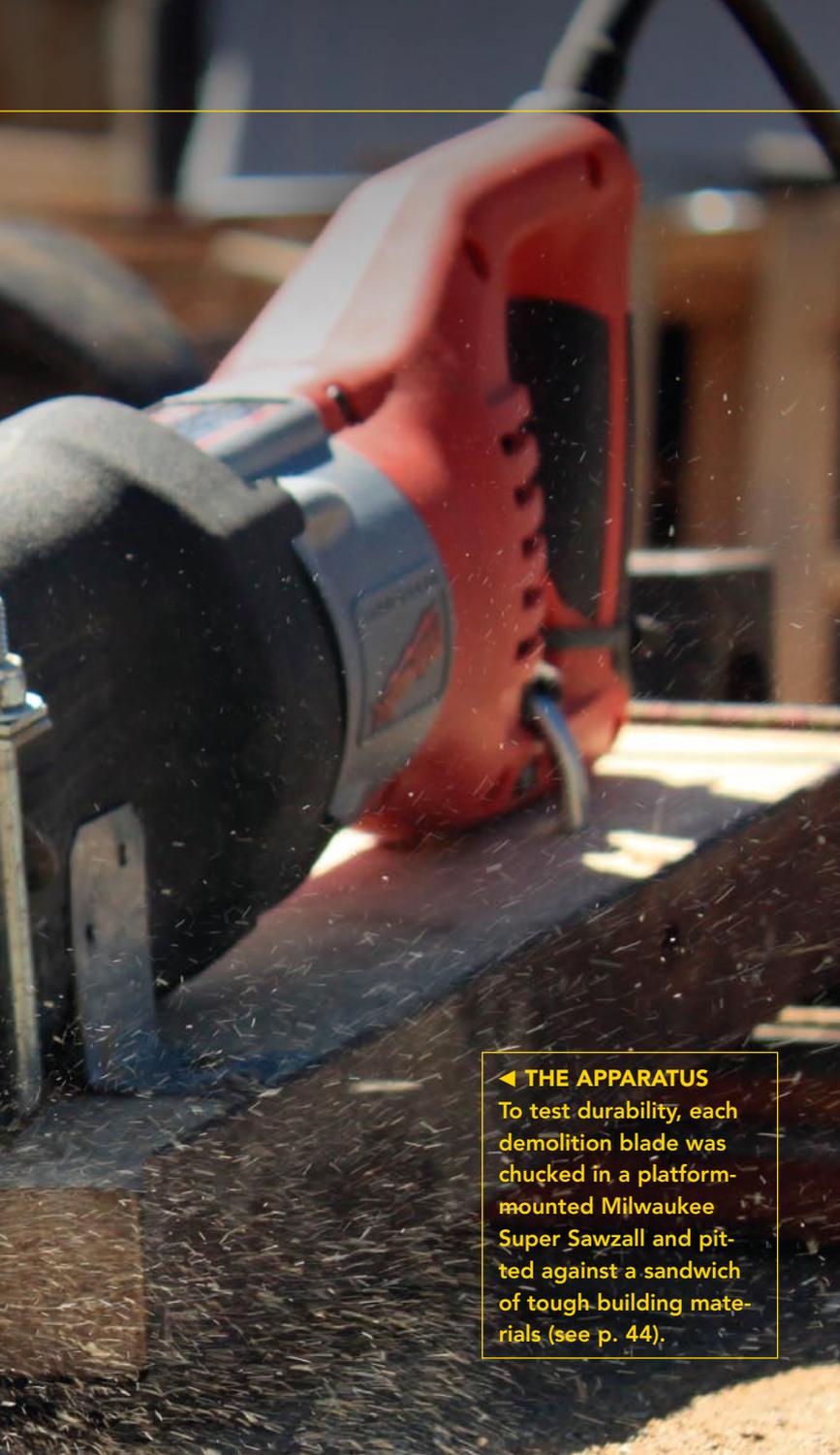
Choosing the best blade for the job makes sense, but a lot of the conflicting advertising claims don't. They can't all be the best, so is there

a difference? With that question in mind, I tortured 15 top-brand blades so that you wouldn't have to. And while I've got a good answer to the question "What is the best reciprocating-saw blade?" (more on that later), it's also important to ask, "Best for what?"

One blade to rule them all?

In residential construction, reciprocating-saw blades are used for cutting wood, wood with nails, plastics (PVC or ABS), light-gauge metal (steel studs, framing connectors, or conduit), and occasionally, heavier steel, like bolts and rebar.

Tool manufacturers have developed specific blades for all of these applications, and if used for the task printed on the blade, they all work reasonably well. The industry standard for fast, controllable



◀ **THE APPARATUS**
To test durability, each demolition blade was chucked in a platform-mounted Milwaukee Super Sawzall and pitted against a sandwich of tough building materials (see p. 44).

cuts with great durability in clean wood or plastic is the 6-tpi (teeth per inch) bimetal blade, typically about 0.035 in. thick.

For demolition and remodeling work, though, a single blade is expected to cut through all those materials. One minute you're in clean wood, the next you're in wood with nails, plastic, insulation, joist hangers, steel studs, or worst of all, asphalt roofing.

The 15 demolition blades tested here are heavier and thicker than the average reciprocating-saw blade, and they have a different profile and tooth configuration. Despite these blades' similarities, the testing revealed some rather dramatic differences in performance.

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THREE WAYS TO KILL A DEMOLITION BLADE

Sometimes a blade will cut until it just wears out, in which case you've gotten your money's worth. But for most demolition blades, life is nasty, brutish, and short. There are three things that will send a demolition blade to the Dumpster in a hurry.

HEAT

As with most metal-cutting tools, a reciprocating-saw blade's number-one enemy is heat. When the teeth on a blade overheat, the hardness and temper of the metal are compromised. In other words, the teeth lose the mechanical properties that make them tough or durable; they get softer. To defeat heat, a blade must be able to cut material efficiently while shedding sawdust and debris out of the kerf to keep things cool.



TOOTH DAMAGE

The number-two culprit in blade destruction is shock or impact to the cutting teeth. The teeth need to be sharp enough to cut quickly, yet durable enough to withstand the shock of hitting tough materials. This metallurgy problem has been effectively addressed by most major manufacturers, but tooth count still factors in. Bigger, more aggressive teeth aren't always the best answer. Some 3-tpi blades can cut at an amazing speed, but if you hit a nail, the teeth are toast. On the other hand, a finer 14-tpi blade may clog up with material and overheat (remember, heat is the number-one enemy).



BENDING

The third major cause of blade destruction is bending or breakage. Thin blades cost less and tend to cut faster in clean wood, but they aren't sturdy enough for demolition and remodeling work. In tough materials, thinner blades tend to wander in the cut, often leaving you with a bent blade. Once the blade is bent—even if you straighten it with pliers—breakage is not far off.



Make and model	Price per 9-in. blade	Teeth per inch	Durability		Flexibility	
			First cut, in seconds	Final cut, in seconds	Number of cuts	Number of bends
Ace 2198133	\$4.25*	6	0:18	0:39	6	8.5
AUTHOR'S BEST OVERALL CHOICE Bosch RDN9V	\$3.53	5/8	0:25	0:54	14	6.5
DeWalt DW4863	\$3.60	6	0:21	0:58	6	2
DeWalt Fire & Rescue DW4865	\$4.11	10	0:27	0:56	12	2
Freud Diablo DS0906CW	\$9	6	0:15	0:40	7	8
Hitachi 725350	\$4.72**	8/10	0:31	1:45	3	1
Irwin 372966	\$3.94	6	0:19	0:42	9	4
Kobalt	\$1.97	6	0:27	1:02	4	5.5
Lenox 966R	\$4.40	6	0:19	0:51	9	4
Lenox Gold 966G	\$9.18	6	0:46	3:01	2	2.5
Makita Demolisher 723055-A	\$3	6	1:09	2:44	16	1
Milwaukee Ax 5026	\$3.41	5/8	0:22	0:49	3	6.5
Milwaukee Wrecker 5706	\$3.37	8	0:27	1:06	3	7
Ridgid Rapid Demolition RD4609	\$4	4/6	0:08	0:20	12	10
Vermont American 30264	\$4.28**	5/8	0:19	0:54	6	3

Prices based on 5-pack except as noted:
*based on 1-pack **based on 3-pack



HOW WE TESTED DEMOLITION BLADES

For this review, I looked at 6-in. and 9-in. blades that manufacturers recommend for all-around demolition. (Most are also available in 12 in.) I designed my pseudoscientific job-site test to judge the blades on what I think are the most important criteria.

◀ DURABILITY

To simulate realistic but challenging cutting conditions, I came up with a sandwich of materials to approximate roof demolition, which

I have found to be extremely tough on blades. In this case, I cut through a 2x6 that was spiked through the end grain, with five framing nails and was surfaced with a metal mending plate, a layer of torch-down roofing, and a piece of OSB. To keep the testing fair, I devised what I now refer to as the Apparatus (photo left). I chucked each blade into a Milwaukee Super Sawzall, which was clamped to a hinged platform. I then weighted the setup until the downward pressure at the teeth of the blade—measured with a fishing scale—was 25 lb. For each blade, I timed the first cut as the benchmark, then made repetitive cuts until it took the blade about twice

the benchmark time to finish a cut. As a point of reference, I also ran an ordinary 0.035-in.-thick Lenox 6-in. 6-tpi blade (a superb choice for ordinary use) through the Apparatus. It broke in half on the second pass.

▶ FLEXIBILITY

To simulate the stress of making bent-blade cuts (cutting the nails out from under a wall plate, for instance), I clamped each blade in a vise such that the first tooth was even with the bottom of the vise jaws (right). I slowly bent the blade 90° to one side, then back in the other direction. I used a square tube to bend the blade to get a tight radius and then ran the test again with a winch bar to get a wider radius. The failure rate was the same regardless of blade length. The results in the chart reflect the bend during which the blade snapped. If it broke on the first bend, it got a "1." There weren't any blades here I'd say were too brittle to use; some were just much better than others. Also, the most durable blades in the bending test were not always the greatest cutters.





Ace 2198133

This blade is not a bad choice. It made quick cuts, finished in the middle of the pack for durability, and showed impressive resiliency in the bending test.

Bosch RDN9V

For all-around demolition in the widest variety of materials, nothing comes close to this blade. It strikes an excellent balance between durability and flexibility, and I found it to be especially ravenous when cutting metal. The icing on the cake is that this blade is more than \$1 cheaper than the average price of its competitors.

DeWalt DW4863

This is a very good all-around demolition blade with more than enough strength for the toughest tasks.

DeWalt Fire & Rescue DW4865

Suitable for rough service, this blade is an excellent choice for wood and mixed materials. It is especially impressive when cutting light metal.

Freud Diablo DS0906CW

This narrow blade cut surprisingly straight, and it also showed good flexibility in the bend test. This would be a great choice for starting cuts from a drilled hole.

Hitachi 725350

Although this is a good-quality blade, it's not well suited for the challenges of roof demolition.

Irwin 372966

Comparable in design to the Lenox 966R, and tied with it in both tests, this blade cut with consistent speed until suddenly failing. Based on current pricing, it's slightly less expensive than the Lenox.

Kobalt

While definitely better than a regular reciprocating blade, this model is not even close to the best demolition blades. With a narrower profile, it doesn't seem as steady as the heavier blades.

Lenox 966R

This blade tied with the Irwin in terms of performance, but it's slightly higher in cost. It's designed in the classic demo-style and is well suited for severe use.

Lenox Gold 966G

Everything about this thick, sturdy, titanium-tooth blade says top quality. It may be best for wood, though; the roofing material seemed to overheat it quickly.

Makita Demolisher 723055-A

It didn't cut quickly, but by the time this blade wore out, I felt like I was developing a personal relationship with it. It is unusually durable, although not my first choice for flex cuts.

Milwaukee Ax 5026

This is a burly, flexible blade that seems to work well as long as no asphalt is involved. It's a good choice if you have to bend the blade to get to the cut.

Milwaukee Wrecker 5706

Like the Ax, this blade is great for its intended purpose, which doesn't include roofing. It was a little slower-cutting—an excellent choice for bent-blade cuts.

Ridgid Rapid Demolition RD4609

If you feel the need for speed, this is your blade—"Rapid Demolition" is the understatement of the year. This blade also earned the top spot in the bending test. If the Bosch were not available, this would be my choice.

Vermont American 30264

Except for the paint job, this blade appears identical to the Bosch. Yet in most trials, it made consistently fewer cuts than the Bosch, which I have no way of explaining.