Torture Test

Fiber-Cement Sawblades

We cut through the contenders to find the longest-lasting,

It's hardly surprising that fiber-cement siding is popular. The material is fire resistant, distasteful to bugs, and extremely durable. But let's face it: Fiber cement is a drag to cut with a circular saw. There's that whining racket that comes from milling a cement-based product, and the resulting cloud of silica dust is a health hazard. You can ease the process and save some money by using the right blade. There are swarms of 7¼-in. fiber-cement blades on the market and just as many promises of superior performance. How do you decide which blade to buy? Clearly, you need someone gullible enough to test a boatload of blades on miles of siding to find out. That's where I come in. I dulled 21 commonly available fiber-cement blades and ripped through nearly 12,000 lin. ft. of Hardie Plank HZ5 siding to size up the competition.

When you shop for fiber-cement blades, don't be confused by the wide variety of tooth counts, gullet styles, tip types, and price points. Most blades share some common characteristics: deep gullets for clearing away sawn material, a small number of teeth (a mere four is common), and cutting tips hardened with polycrystalline diamond material. A handful of blades still feature the traditional carbide tips that are the norm in woodcutting, but they fared poorly when faced with a fiber-cement product that's more earth than tree. Prices are scattered all over the map, and neither the most expensive nor the least expensive blades could match the value of the mid-priced options.

Torturing the blades

We designed this review to answer the questions we all have about any sawblade. How well does it cut? How much does it cost? Will it last long enough to justify its price tag? The simple question of cost was probably the hardest to deal with. The time I spent researching websites and visiting stores only reinforced the maxim that you have

Photos: this page, Patricia Steed; facing page, Andy Beasley

HOW WE TESTED

Consistent cutting force

A wheeled sled drawn by a cable carried a circular saw across three stacked pieces of siding. Outside, pulleys on a 15-ft.-tall gibbet enabled the downward fall of a sand-loaded bucket to pull the saw through the cuts with consistent force.

PROTECT YOUR LUNGS
Inhaling the silica-laden dust produced by cutting fiber-cement siding increases the risk of lung cancer and can cause silicosis, an incurable and debilitating lung condition. Smoking amplifies these risks. Recommended safety steps include cutting outdoors, wearing a NIOSH-approved N-95 dust mask or respirator, and/or using a dedicated fiber-cement saw and a vacuum. For this test, we used a Makita 5057KB fiber-cement saw connected to a Makita vacuum.

most cost-effective blades

BY ANDY BEASLEY

to shop around to get the best deal. The prices I've listed represent the lower reaches of each blade's price range.

I evaluated each blade's best possible cut by making an out-of-the-package crosscut of a single fiber-cement plank. I carefully examined the freshly sawn edges for smoothness, saw marks, and chipping before rating each cut. Given that the planks are designed to cover a house and not to craft fine furniture, all 21 blades performed adequately or better.

In the phase of testing that my editors at *Fine Homebuilding* warned "might be a little dusty," I ran the blades through a standardized endurance challenge to determine how much fiber cement they could cut before becoming noticeably dull. I stacked three 12-ft.-long HardiePlanks (15⁄16-in. total thickness) on a long table and used a uniform falling weight with a cable-and-pulley system to pull a circular saw through repetitive rips of the stacked material. Using three stacked pieces accelerated the test and seemed a reasonable simulation of a job-site context of ganged cuts and 1-in.-thick fiber-cement trim boards. I timed each blade's first rip to establish a baseline, then repeated the process until the blade required an additional 50% of its baseline time to finish a cut. I considered the blade dull at this point and recorded the total number of cuts it had made. I multiplied the total rips by 36 (the combined length of the three 12-ft. planks) to get the total number of lineal feet each blade cut before becoming dull.

Finally, I addressed the question of cost-effectiveness by dividing the cost of a blade by the number of lineal feet it managed to cut. Expressed as price per cut foot, this measurement rates the actual bang for the buck you can expect from each of the 21 blades. □

Andy Beasley is a passionate tool tester in Colorado Springs, Colo. Photos by Rodney Diaz, except where noted.

FROM WORST TO FIRST

HOW WELL 21 FIBER-CEMENT BLADES LASTED

While all the blades performed adequately out of the box, the true test was how much they cut. We ranked the blades based on their price per cut foot. In a few instances, a lower-ranked blade cut more lineal feet than the blade ahead of it, but that's a misleading statistic when you consider the price of the blade.

21

Tenryu
BP-18524

TEETH 24/carbide
PRICE $23
INITIAL CUT Fair
COMPLETE CUTS 0
TOTAL LINEAL FT. 6
PRICE PER CUT FT. $3.83

To be fair, this blade was labeled with a reminder that it was designed for cutting single planks, so I wasn't surprised when it scarcely ripped 2 ft. into my stack of three planks. However, it seemed to struggle even during the single-sheet crosscut test, so I'm not confident it will excel in any circumstance.

20

Oldham
725FC04

TEETH 4/unspecified (probably carbide)
PRICE $21
INITIAL CUT Fair
COMPLETE CUTS 0
TOTAL LINEAL FT. 6
PRICE PER CUT FT. $3.50

I specifically asked for this blade because of my prior positive experience with Oldham's woodworking products. However, reputations don't cut fiber cement. The blade's cutting quality was merely adequate, and it was unable to progress beyond a couple of feet into the stack of three planks.

19

Makita
A-90451

TEETH 28/carbide
PRICE $46
INITIAL CUT Excellent
COMPLETE CUTS 0
TOTAL LINEAL FT. 15
PRICE PER CUT FT. $3.07

Despite its carbide teeth, this blade gave an impressive performance during the crosscut test. It cut almost silently and finished in first place of all 21 blades. When faced with a stack of three planks, however, it was unable to make much headway.

18

Irwin
1794385

TEETH 6/carbide
PRICE $34
INITIAL CUT Fair
COMPLETE CUTS 0
TOTAL LINEAL FT. 12
PRICE PER CUT FT. $2.83

Although capable of cutting a single sheet, Irwin's Marathon blade was unable to advance beyond 4 ft. against the stack of three planks. I was surprised by the wide range of prices I found for this blade. I wouldn't shop around for the best deal, though, because this carbide-tipped offering isn't a good choice for heavy-duty work.

11

Gila
PCD7250T6-P

TEETH 6/diamond
PRICE $68
INITIAL CUT Good
COMPLETE CUTS 20
TOTAL LINEAL FT. 720
PRICE PER CUT FT. 9¢

Another solid competitor from Gila, this blade finished a whisker behind its four-tooth brother. Perhaps more than any other blade I shopped for, the Gila products showed the widest variation in pricing. Gila's website offered the lowest prices I found anywhere.

10

Hitachi
18008

TEETH 4/diamond
PRICE $35
INITIAL CUT Fair
COMPLETE CUTS 12
TOTAL LINEAL FT. 432
PRICE PER CUT FT. 8¢

Although fairly cost-effective, this blade finished just under the median during the endurance test, and its cutting quality was merely adequate.

9

Malco
FCCB7

TEETH 4/diamond
PRICE $50
INITIAL CUT Fair
COMPLETE CUTS 17
TOTAL LINEAL FT. 612
PRICE PER CUT FT. 8¢

This solid, no-frills contender cut adequately and turned in good endurance numbers, but its sticker price is too high to make it a great value.

8

Grip-Rite
GRFC7144T

TEETH 4/diamond
PRICE $41
INITIAL CUT Fair
COMPLETE CUTS 16
TOTAL LINEAL FT. 576
PRICE PER CUT FT. 7¢

This solid, middle-of-the-pack blade turned in respectable numbers for endurance, cutting quality, and cost-effectiveness.

7

Gila
PCD7250T4-P

TEETH 4/diamond
PRICE $55
INITIAL CUT Good
COMPLETE CUTS 21
TOTAL LINEAL FT. 756
PRICE PER CUT FT. 7¢

Like its two Gila siblings, this reasonably priced blade was an above-average performer. It cut cleanly and tied for sixth in overall endurance.

6

Oshlun
SBH-072504

TEETH 4/diamond
PRICE $33
INITIAL CUT Excellent
COMPLETE CUTS 15
TOTAL LINEAL FT. 540
PRICE PER CUT FT. 6¢

This low-priced blade left an above-average edge in the cutting-quality test. It also lasted long enough to make it one of the better values in the field.

Photo top left: Patricia Steed

17

DeWalt

DW3193

TEETH 6/diamond
PRICE $37
INITIAL CUT Fair
COMPLETE CUTS 0
TOTAL LINEAL FT. 18
PRICE PER CUT FT. $2.06

I was surprised that this blade didn't perform better. It cut reasonably well in the single-sheet crosscut test but was unable to progress more than 6 ft. when faced with the stack of three planks.

16

Task

T22426

TEETH 4/diamond
PRICE $53
INITIAL CUT Fair
COMPLETE CUTS 5
TOTAL LINEAL FT. 180
PRICE PER CUT FT. 29¢

This blade cut adequately in the crosscut test and managed to cover some ground in the endurance segment, but its numbers weren't good enough to offset its high price.

15

Grip-Rite

GRFC7146CT

TEETH 6/carbide
PRICE $14
INITIAL CUT Good
COMPLETE CUTS 2
TOTAL LINEAL FT. 72
PRICE PER CUT FT. 19¢

This blade's performance illustrates two important points. First, a low price doesn't mean a blade is a cost-effective purchase. Second, when compared with that of its diamond-tipped brother, this blade's short life span highlights the disadvantage of using carbide tools on fiber cement.

14

Makita

721263-A

TEETH 4/diamond
PRICE $76
INITIAL CUT Fair
COMPLETE CUTS 14
TOTAL LINEAL FT. 504
PRICE PER CUT FT. 15¢

Although it cut more slowly than most of its competitors, this blade covered a decent distance before it finally dulled. Its high price removes it from the cost-effectiveness discussion.

13

Irwin

4935473

TEETH 4/diamond
PRICE $48
INITIAL CUT Good
COMPLETE CUTS 9
TOTAL LINEAL FT. 324
PRICE PER CUT FT. 15¢

This blade cut cleanly and showed adequate endurance, but it can't compete with similarly priced blades that lasted longer.

12

Gila

PCD7250T8-P

TEETH 8/diamond
PRICE $91
INITIAL CUT Excellent
COMPLETE CUTS 24
TOTAL LINEAL FT. 864
PRICE PER CUT FT. 11¢

All three Gila blades finished the endurance test in a clump, with this one cutting more siding than its siblings. It showed excellent cutting quality, but its higher price tag made it the least economical of the three.

5

Original

00087

TEETH 4/diamond
PRICE $35
INITIAL CUT Good
COMPLETE CUTS 21
TOTAL LINEAL FT. 756
PRICE PER CUT FT. 5¢

An above-average blade at a good price, the Original finished solidly among the second-tier competitors. It left a smooth edge during the cutting-quality test, and its combination of endurance and price placed it among the most cost-effective blades.

4

CMT

236.004.07

TEETH 4/diamond
PRICE $49
INITIAL CUT Good
COMPLETE CUTS 27
TOTAL LINEAL FT. 972
PRICE PER CUT FT. 5¢

This top-tier blade ranked fourth in overall endurance and second only to the Diablo in cutting speed. It left a smooth edge in the crosscut test and rated among the best in value.

3

Bosch

CB704FC

TEETH 4/diamond
PRICE $42
INITIAL CUT Good
COMPLETE CUTS 29
TOTAL LINEAL FT. 1044
PRICE PER CUT FT. 4¢

This excellent blade was one of only three to crack the 1000-ft. barrier in the endurance test. Given its reasonable price and good cutting quality, the Bosch finished near the top of the cost-effectiveness competition as well.

2

Tenryu

BP-18505

TEETH 5/diamond
PRICE $53
INITIAL CUT Excellent
COMPLETE CUTS 41
TOTAL LINEAL FT. 1476
PRICE PER CUT FT. 4¢

This excellent blade finished as the runner-up in almost every category. It was second-best in the endurance, cost-effectiveness, and quality-of-cut tests. Before it began to show signs of wear, it was astonishingly quiet. Buy this one if the Diablo is out of stock.

1

Diablo

D0704DH

TEETH 4/diamond
PRICE $47
INITIAL CUT Good
COMPLETE CUTS 47
TOTAL LINEAL FT. 1692
PRICE PER CUT FT. 3¢

As the hours dragged by and the dust piled up, I grew to loathe this blade's tenacity. It was the clear winner in the endurance test, turned in the fastest cutting times, cut smoothly, and was the most cost-effective choice among all the competitors. It is also the blade recommended by James Hardie.