

## Ridgid R4121 Dual-Bevel Miter Saw

by Dorian Gluckman

The Ridgid R4121 dual-bevel miter saw has the most unusual configuration I've ever seen: The motor is mounted above the saw arm and connects to a 90-degree gearbox, which spins a small belt that turns the blade arbor. This arrangement — with the motor out of the way — provides greater cutting capacity against the fence.

Extra capacity is always a plus — but I was curious to see if there were any drawbacks to the unique design.

### Setup

As soon as I received the saw, I checked the accuracy of the fence and miter detents. Everything was absolutely dead-on. That's a big plus for me because it saves setup time and bodes well for the quality of the assembly.

Installing the 12-inch blade was easy with the on-board tools.

### Features

The R4121 is about the same size as other 12-inch saws I've used and — at 46 pounds — weighs roughly the same as my DeWalt 716. Thanks to a well-placed handle, it's relatively easy to move.

The tool has an easy-to-read stainless-steel overlay miter scale and an adjustable puck-style laser

that lets you line up your work without starting the motor. Cheat-sheet stickers on the base provide angle and bevel settings for cutting crown on the flat — a nice touch. The lower fence is a single piece of aluminum with sliding upper sections on both sides of the blade. Another clever perk is an erasable writing surface for marking repetitive cuts.

As with any 12-inch miter saw, dust collection is so-so: The bag captures about 30 percent of the dust and the rest blows onto the floor. Attaching a vacuum helps.

Ridgid includes no side extensions with the saw and doesn't offer them as an option. The table surface is set at exactly 3½ inches high, so you can put a 2x4 on edge for additional support. The work-piece clamp is stable and easy to use.

Previous Ridgid saws had full-width triggers (for all fingers) and a palm safety — an unwieldy arrangement, to my mind. But the new saw has a handle with a soft surface, no safety, and a two-finger trigger. It's a much more comfortable fit for my medium-sized hand.

### Capacity

The saw's bevel capacity is 48 degrees left and right. The bevel lock is a paddle-shaped lever that's easy to reach from the front. I prefer this design to front-mounted bevel locks and their complex mechanisms, but the lever doesn't work very well: It flexes considerably, and the travel is short and jumpy. Bevel detents — at zero, 33.9, and 45 degrees on each side — are engaged and disengaged with a spring-loaded pin.

The maximum miter angle is 50 degrees left and right. The miter lock is a wide paddle — similar to the one on the Ridgid 12-inch slider — with a thumb-wheel in the middle for engaging the miter detents. To release from a detent, you turn the thumb-wheel; to re-engage, you turn it back.



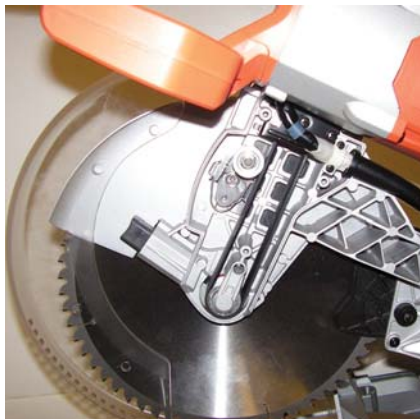
### Ridgid R4121 Specs

**Motor:** 15 amps  
**Blade diameter:** 12 inches  
**Weight:** 46 pounds

### Cutting Capacities

**Baseboard against fence:** 6 inches  
**Crown in position:** 7½ inches  
**90-degree crosscut:** 2x10  
**45-degree miter:** 2x6  
**45-degree bevel:** 2x10

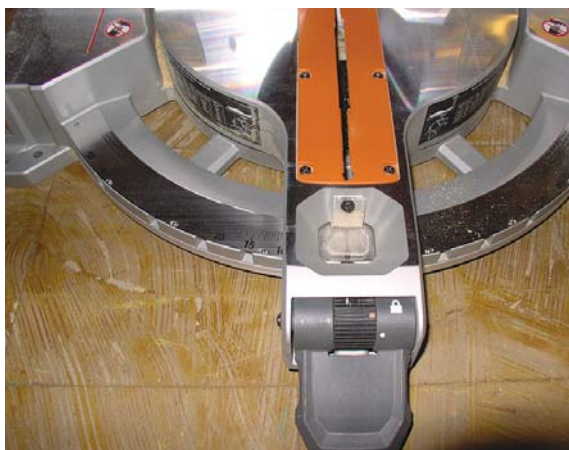
## Toolbox | Ridgid R4121 Dual-Bevel Miter Saw



With its motor mounted on the saw arm, the R4121 transfers power to the blade with a 90-degree gearbox and a small belt. A removable cover gives access to the belt and spring-loaded tensioner.



Miter settings are laser-etched onto a high-contrast stainless-steel plate. On the fence is an erasable writing surface for marking repetitive cuts; on the base, a pair of tables for cutting crown on the flat.



Miter and bevel settings are adjusted with large paddles. The miter lock has a thumb-wheel for engaging and overriding detents. The author found both miter and bevel settings to be accurate right out of the box.

I found the design a little cumbersome; I prefer the more conventional trigger-type release with a separate override.

The R4121 can crosscut a 2x10 at 90 degrees and put a 45-degree miter on a 2x6. Vertical capacity against the fence is a bit over 6 inches, but the saw can cut 7½-inch baseboard with a 1¼-inch-thick subfence. It can cut crown of up to 7½ inches in position.

### Testing

A Ridgid 60-tooth ATB thin-kerf blade comes with the tool. My dial indicator pegged blade run-out — measured one inch from the teeth to avoid the expansion slots — at about 0.010 inch. Not bad, but if I were building furniture or high-grade trim I'd buy a better blade, because thin-kerf blades like this one

have a tendency to deflect when cutting hardwood.

When I first began cutting, I noticed that the motor makes a high-pitched yowl as it slows, and — despite Ridgid's claim that the saw has a blade brake — the blade takes a good two seconds to stop. These conditions didn't bother me too much; I attributed them to the complexity of the drive train.

Another quirk, however, *was* a problem: The laser line moves! As I lowered the arm to cut, the laser line shifted about ⅛ inch to the left, then slightly back. Since I was sure there was something wrong with the laser, I asked the manufacturer for a replacement. The second laser was accurate right out of the box, but the beam still moved, though a bit less. Eventually I discovered

that the laser was projecting two beams — one direct and one mirrored off the blade — and both were wrong.

I've had several puck-style lasers, and this was the first one to lose its calibration during use. We ended up just ignoring it.

### Conclusion

Despite this flaw, I consider the R4121 as good as any other 12-inch dual-bevel miter saw on the market. After many, many cuts in all kinds of material, I've found that it provides smooth and effortless cuts day in and day out. And its extra capacity against the fence is icing on the cake.

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*Dorian Gluckman is a builder and remodeler in Birmingham, Mich.*

**Hop to It.** I bought a set of *Bunny Planes* shortly after they were introduced, and now I use them constantly. The tiny rabbeting planes are great for fine-tuning scarf joints, smoothing hand-rail transitions, and taking on tasks too small for conventional-sized models. In addition to the two planes — one with a flat sole and one with a  $\frac{3}{4}$ -inch-radius sole — the \$155 kit contains straight and radius blades from  $\frac{1}{4}$  to 2 inches and a formed leather holster.

**Collins Tool**, 888/838-8988, [www.collinstool.com](http://www.collinstool.com).



**Wide Track.** When conditions make it too difficult to move material through a stationary planer — the stuff is too heavy or space is too limited — consider using a wide power plane like Makita's *1806B*. Powered by an 11-amp motor, the machine's two-blade cutter spins at 30,000 cuts per minute and can make a pass  $6\frac{3}{4}$  inches wide. The tool features a long sole plate for stability and a graduated adjustment knob for consistent stock removal. It costs \$550.

**Makita**, 800/462-5482, [www.makita.com](http://www.makita.com).



**Bantam Weight.** Although few tools are more useful to a finish carpenter than a low-angle block plane, carrying one around all day can get tiring. Lee Valley has a solution: At 14 ounces, the company's  $5\frac{1}{2}$ -inch-by- $1\frac{3}{4}$ -inch *Veritas Apron Plane* does everything the bigger planes do — without the weight penalty. It comes with three blades: a 25-degree O1, a 25-degree A2, and — for knots and highly figured grain — a 38-degree toothed version. Prices start at \$83.

**Lee Valley**, 800/267-8735, [www.leevalley.com](http://www.leevalley.com).





**Reach Higher — Legally.** It's common for contractors to make their own telehandler work platforms, but the practice is frowned on by insurance companies and often earns citations or warnings from OSHA inspectors. You can avoid that risk by using O'Reilly Industries' OSHA-compliant *Work Platforms*. Available in widths from 4 to 16 feet, the baskets have steel-mesh or plywood floors and full-perimeter safety rails. A 4-foot tool tray (\$295) is optional. Prices start at \$1,235.

**O'Reilly Industries**, 763/476-5000, [www.telehandlerattachments.com](http://www.telehandlerattachments.com).



**Need a Lift?** A monster telehandler can be handy when space permits, but bigger isn't always better — especially when you're working on tight lots. The five compact models in Gehl's *CT Series* are plenty big for most residential projects. All feature three-mode steering, auxiliary hydraulics, and quick-change attachments. Capacities range from 5,000 to 7,000 pounds and lift heights from 16 to 22½ feet. Prices begin at about \$55,000.

**Gehl**, 262/334-9461, [www.gehl.com](http://www.gehl.com).



**Portable Tower Crane.** Working on a site too steep for wheeled machines? Check out the *Igo MA13* tower crane, which erects itself and occupies less than 12 square feet of space. It can lift nearly 4,000 pounds when the reach is 22 feet or less, and almost 900 pounds at its maximum radius (72 feet) and hook height (68 feet). You can rent one for about \$2,500 per month.

**Maniotowoc Crane Group**, 920/684-6621, [www.maniotowoccrane.com](http://www.maniotowoccrane.com).