

Nail Guns for Joist Hangers

Fast and accurate, these pneumatic tools put framing connector nails right where they're needed

BY MIKE GUERTIN

With building codes more stringently addressing natural disasters, I see more metal connectors on my job sites. Until I bought a metal-connector nailer, I needed a lot of time and hammer-swinging to nail on all the code-required connectors.

These nailers are designed to orient and then precisely drive code-approved 1½-in. to 2½-in. 0.148-in. to 0.162-in. dia. full round-head nails through metal-connector holes. Some of the guns are set up to locate the hole by using the nail tip as the guide, while others use a probe

Do I really need a specialized nailer?

I've been known to position the nail guide of an ordinary framing nailer over holes in connectors and fire it off. I've also nailed my toe to a joist doing it. It's just not safe.

Metal-connector nailers are a specialized set of tools that drive 1½-in. to 2½-in. 0.148-in. to 0.162-in. dia. full round-head nails specifically designed for attaching metal

connectors. For me, they're worth it just in the time they save, never mind that I don't have to worry about getting another tetanus shot.

—M. G.

Hitachi NR65AK

(800) 448-2244 Price: \$399

Height	13 $\frac{1}{2}$ in.
Width	3 $\frac{1}{2}$ in.
Length	17 $\frac{1}{2}$ in.
Weight	6.2 lb.
Nail capacity	44

In tight locations, like nailing joist hangers beneath a sheathed floor, positioning the gun was a struggle. The lead nail is used to locate the hole. It's supported by a yoke at the nose that keeps the nails from breaking off the collation strip and forces the user to square the tip to the work (www.hitachi.com).



A retractable yoke supports the lead nail as it releases the safety.

tip. All nailers have restrictive sequential triggering, which means there's a specific order of operation to get the gun to work: aligning the nail, depressing the safety and then firing the gun with the trigger, which prevents bump- and double-firing. This precaution is essential on tools where exact positioning is more important than speed. To avoid jams and misfires, some adjustments must be made on some nailers when different-length nails are inserted into the magazines.

I looked at five metal-connector nailers and evaluated several features and functions of each tool: nail-loading system; adjustment for nail length; connector-hole pinpointing system; use in tight quarters; nail-drive depth; and tool weight. Here's what I found.

Hitachi NR65AK is an accurate lightweight

Hitachi uses a sliding plastic gate at the back of the magazine to accommodate different

nail lengths. The tool has two positions: a lower one for 1 $\frac{1}{2}$ -in. nails and an upper one for 2 $\frac{1}{2}$ -in. nails. The gate can't be readjusted until the magazine is emptied.

Once the gun is loaded, it's fairly easy to see the nail point and register it to a hole. In tight locations, though, I had to cock the nailer sideways, which lifted the nail point and safety off the work. Then, of course, it wouldn't fire. It's important not to push the tool forward after locating the nail point in a hole be-

Makita's AG125 looks cool and drives long nails

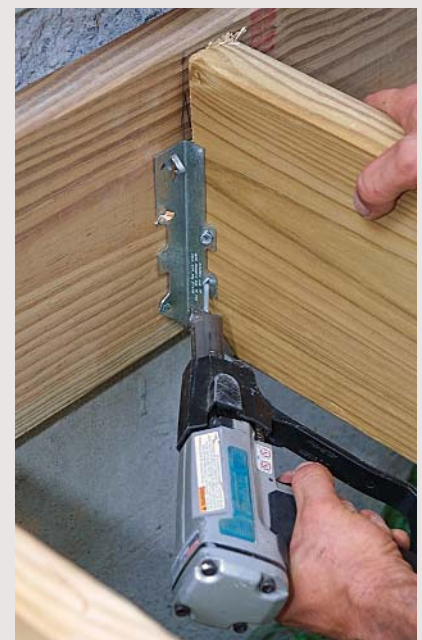
An alternative to any of these metal-connector nailers is a palm nailer or my new favorite toy, the Makita AG125 (\$319; 800-462-5482; www.makita.com). It's a multiblow pneumatic nailer like a palm nailer except it's shaped like a pistol.

The deep cylindrical nose holds spikes fairly straight while driving, and there's a thumbscrew to adjust depth drive. A magnet holds the nail in the driving chamber, and slight pressure forward activates the driver. You'll find plenty of uses for the AG125. It's part of my standard toolbox.

—M. G.



This ultralight gun will drive a 5-in. nail as fast as a framing hammer, without bending it. A simple dial adjustment sets the nail depth so that you don't have to regulate your compressor's psi.



Senco SN60MC

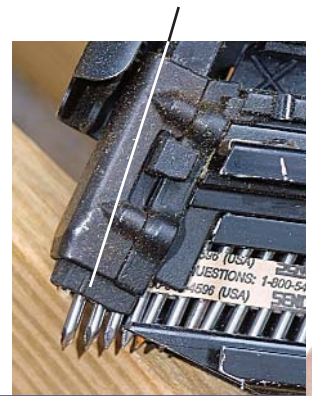
(800) 543-4596 Price: \$469

Height 12 $\frac{1}{8}$ in.
Width 4 $\frac{1}{8}$ in.
Length 14 in.
Weight 7.7 lb.
Nail capacity 30

Fragile collation strips combined with an orientation system that relies on the nail itself is a recipe for frustration and wasted time. In addition, it was hard to see the nail tip in tight locations, like under a sheathed floor, and misfires were a concern. Hand-nailing was faster than dealing with this system (www.senco.com).



An unsupported lead nail is an unreliable way to locate the hole.



cause doing so bends the nail from the collation strip, causing a misfire or jam. This was mostly the case in difficult-to-reach locations where my arm wasn't steady.

The NR65AK is the lightest of the bunch at only 6.2 lb. and is well balanced. The rear-loading magazine can hold 44 nails (two strips). The nailer consistently drove the nail so that the head just touched the metal connector without damaging it.

Senco SN60MC misses the mark

The magazine on this tool is shorter than the Hitachi or Paslode, making the tool look more compact. But the motor is roughly the same height, and the tool weighs in at almost 8 lb. The Senco magazine holds 30 nails. When nails are changed, the magazine has a three-position guide track at the rear that must be pulled out and reinserted into the proper nail-length slot. Numbers clearly marked on the side of the magazine identify the proper slot for each nail length.

At first, I was thrilled with the clear view of the nail points afforded by Senco's nose and safety design. As the nails slide down the magazine, the last four are left partially exposed at the nose, making it easy to orient the nail into the connector hole.

While the exposed nail points are easy to position in the holes, the nails have no support when the tool is depressed. I found it extremely difficult to push the tool square onto the work without sliding slightly forward

Paslode 5250/65S-PP

(800) 682-3428 Price: \$399

Height 13 $\frac{1}{8}$ in.
Width 4 $\frac{1}{8}$ in.
Length 19 $\frac{1}{8}$ in.
Weight 9 lb.
Nail capacity 44-48

Paslode uses a gold-colored titanium-coated probe to center fasteners into connector holes. It's easy to orient to connector holes in tight spots. Most people apply forward pressure when orienting the nose, and with the Paslode probe, the nails didn't break off the collation strip or jam (www.paslode.com).

The inside face of the probe is concave, accurately directing the nail into the hole.



At a glance, you can tell you're using the right fastener with Paslode's code-stamped heads. They're a heat-treated, ICBO #5179 code-recognized fastener that's compatible with most metal connectors.

Most versatile

Fifteen seconds turn this \$299 tool into a regular framing gun capable of driving 16d nails.



Bostitch N88RH-2MCN

(800) 556-6696 Price: \$299

Height 14¼ in.
Width 4¾ in.
Length 19¾ in.
Weight 7.9 lb.
Nail capacity 60

This gun converts from a framing nailer to a metal-connector nailer in seconds. The removable metal-connector tip has a spring-loaded cam to guide the nail and a small ⅜-in. probe to locate the connector hole. In addition, the switchable nail-guide nose made it easy to clear nail jams. Just remember to disconnect the air before doing so (www.stanleybostitch.com).



It's as simple as pressing this button to change the nailer from a metal connector to a framing gun.

A small ⅜-in. probe quickly locates the connector hole.

and breaking the first (and sometimes second) nail from the collation tape. I had to handle the Senco nail-collation strips as if they were fragile flower petals. Even a slightly crooked nail is driven cockeyed into a connector and has to be pulled out.

Senco designed the magazine to disengage quickly with the twist of a knob. Good thing, because if you choose this tool, you'll need this feature to clear the jams.

Paslode Positive Placement 5250/65S-PP is right on target

This full-size framing nailer weighs in at 9 lb. 5 oz., but this weight is the only major fault I can find with the Paslode system. The magazine holds 44 to 48 nails (two strips). Paslode's nail heads are stamped with a code to identify the nails' length and diameter so that you won't have to pull sample nails dur-

ing an inspection. Paslode is currently the only company that labels its nails. There's an Allen-screw depth-drive adjustment on the nose so that you don't overdrive the nails.

Switching between 1½-in. and 2½-in. nails can be a little complicated, but once you learn the system, it becomes second nature. After you remove the old nails, the locking knob on the left side of the nose has to be pulled out so that the shift lever (right side of nose) can be switched to the new nail length.

Paslode uses a titanium-coated probe to center fasteners into connector holes. It sticks out ¾ in., so it's easy to orient to connector holes in tight spots. I naturally apply forward pressure when orienting the nose and compressing the safety, as I think most people do. The tool hinges a little forward and back when moved, but when the tool is fired, the nail hits the hole every time. This nailer can be converted

to a framing gun, but you need to buy a kit and spend some time doing so.

Stanley-Bostitch N88RH-2MCN is two nailers for the price of one

This is the newest metal-connector nailer, and it has just about everything going for it. It does double duty as a metal connector and framing nailer right out of the box and takes less than 15 seconds to convert.

At 8 lb. 1 oz., the Bostitch is second heaviest to the Paslode; but I install metal connectors only for an hour here or there, so weight isn't a drawback.

The probe tip is almost as easy to index into hanger and tie-down holes as the Paslode; but with Bostitch's shorter probe, the sightline is reduced. I had trouble pinpointing the probe to connector holes when I had to tilt the nailer into position. When tilted, Bostitch left nail

Best production choice

With a 100-nail magazine, this gun is ideal for a framing crew that nails on tons of hangers.



Max CN-H601Z

(800) 223-4293 Price: \$800

Height	12 $\frac{1}{2}$ in.
Width	3 $\frac{3}{4}$ in.
Length	15 $\frac{1}{4}$ in.
Weight	6.6 lb.
Nail capacity	100

Large crews with dedicated connector-installation specialists will find Max the most promising; its 100-nail magazine and nail-grasping jaws put it in front of Hitachi and Senco. The jaws firmly grasp the nail shank, leaving about $\frac{3}{8}$ in. sticking out to be centered on a connector hole. (Although it's labeled CN-H601Z, the company refers to it as the CN601J.) (www.maxusacorp.com)

Jaws firmly grasp the nail, leaving about $\frac{3}{8}$ in. sticking out to be centered on a connector hole.



heads proud of the connector, and a hammer blow was needed to seat them.

The Hitachi, Senco, Max and Paslode tools are limited to 2 $\frac{1}{2}$ -in. nail length. But a lot of the connectors I use require 10d to 16d diagonally driven spikes. Bostitch is the only nailer that accepts the full range of nail sizes. Because it doesn't require a magazine adjustment to accept different length nails, it's important to be selective when grabbing nails for connector installation. Be sure to use the thicker shank (0.148-in. or 0.162-in. dia.) 1 $\frac{1}{2}$ -in. and 2 $\frac{1}{2}$ -in. nails for framing connectors and to avoid ordinary 4d, 6d and 8d framing nails that have thinner shanks.

Max CN-H601Z is a light, well-balanced tool

The Max nailer only looks awkward. It easily fits into tight spots and weighs only 6.6 lb.,

a lot lighter than the Bostitch. The only time that the safety got in the way was on the top hole of a joist hanger after subfloor sheathing had been laid.

Max is the only coil nailer of the bunch and holds 100 nails per load. A collar tab adjusts the tool for different-length nails. You must disconnect the air, twist the tab one-quarter turn, slide the collar up or down and lock it into place to make the change. A plastic spacer plate is used to support 1 $\frac{1}{2}$ -in. nails inside the basket. Be careful not to lose or break the spacer when you remove it to insert 2 $\frac{1}{2}$ -in. nails; there's no home for it elsewhere on the tool, so you'll have to set it aside and remember where you put it.

Max has the most sophisticated nail-orientation system of all the metal-connector nailers I tried out. After the driver sets a nail, the pusher piston advances a single nail from

the plastic collation strip into a pair of jaws at the nose. The nice thing about this nailer's jaws is that they ensure that each nail will be driven straight in, unlike the Hitachi and Senco chambers that allow the nails to drift. The safety-contact tip is small and doesn't interfere with the operator's line of sight, so it's easy to locate the hole with the protruding nail.

The nails are loaded as in a typical coil-nailer opening. The loading door opens the drive chamber, which would be helpful when clearing a jam (unlikely with the Max's nail-advancing system). □

Mike Guertin is a builder, remodeler and contributing editor for *Fine Homebuilding* from East Greenwich, Rhode Island. Photos by Roe A. Osborn, except where noted.