

# Air Guns for Steel Framing

by Peter Young and Clayton DeKorne

Ever since a dramatic spike in lumber prices several years ago, more and more home builders and remodeling contractors have been taking a closer look at framing with steel. While still only a remote possibility for most residential jobbers, interest remains high. *JLC* editors constantly field inquiries from readers about working with steel, and among the most frequently asked questions are those concerning how to efficiently fasten sheathing, foam insulation, and drywall to steel studs.

The conventional way to secure sheathing and drywall to steel, of course, is with a screw gun. But for most contractors, this means higher labor costs. However, several innovative air guns have come on the market that promise to save time. These guns are aimed at commercial contractors, so the two nailers we've covered here probably won't be tools that a residential contractor will rush out to buy tomorrow morning. However, if steel framing registers at all in your building future, it's worth looking at what commercial contractors have learned, and where these new technologies are headed.

## Exterior Sheathing Guns

ET&F Fastening Systems makes two coil pneumatic nailers for attaching sheathing to structural steel framing (14-16 gauge) and nonbearing steel framing (20-25 gauge). The company claims that its lightweight pneumatic nailers can accomplish this at speeds five to eight times faster than using screws. The lighter-duty PanelFast Model 500 has the power to drive fasteners into 20-gauge steel framing. The

PanelFast Model 510 has the power to drive nails into 14-gauge steel and uses nails with large  $\frac{5}{16}$ -inch-diameter heads, which provide impressive wind-load holding strength.

Both models can be used to fasten exterior gypsum board, Dens-glass, concrete board, wood siding and sheathing, fiber-cement siding, vinyl siding, and rigid foam insulation to steel framing. To accommodate different sheathing and framing combinations, the PanelFast tools have a depth of drive that can be easily adjusted using a fingertip control. This adjustment regulates the length of the driver blade from a high-nail position to a  $\frac{1}{8}$ -inch countersink position. Although the depth-of-drive adjustment alone prevents overdriving nails, the air pressure on the compressor can also be varied from 80 psi to 120 psi. No exact air usage information is available, but the manufacturer claims that two nailers can be used on a typical wheelbarrow-type compressor without running into problems.



ET&F pneumatic coil nailer

The 510 uses the same basic "engine" design as the 500, but has a larger-diameter cylinder and piston. Both tools require special fasteners made with 60 carbon steel that is heat treated to Rockwell C52. With these nails, both PanelFast systems meet ICBO code recommendations. Test results provided by the manufacturer suggest that negative wind shear holding strengths provided by the 510 nailer are virtually the same as screws.

These PanelFast nailers hold a 250-nail coil. The magazine can hold either  $1\frac{1}{2}$ - or 2-inch nails. ET&F's nails are treated with a corrosion-resistant coating called AeroFast 1000, which withstands 1,000 hours of salt spray. This provides ten times the corrosion resistance of conventional zinc electroplated fasteners. Manufacturer tests also show that the anti-corrosive coating holds up well on impact with steel framing. Tests on the coating left on nail points protruding through the steel framing after penetration achieved a 910-hour resistance to salt spray. PanelFast  $1\frac{1}{2}$ -inch nails retail at \$60 per 1,000; the 2-inch nails cost about \$73 per 1,000. Both nail types come in cases of 36 coils with 250 nails per coil.

Weighing in at  $5\frac{1}{2}$  pounds and measuring  $10\frac{1}{2} \times 11 \times 4\frac{1}{2}$  inches, these guns are light and compact. The tools retail for about \$700, which is a few hundred more than most wood nailers. With this added cost, plus the higher cost for spe-

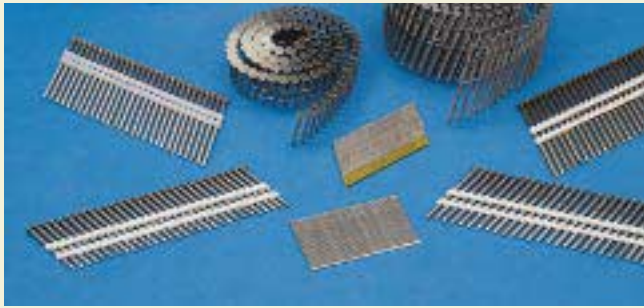


Max TD440 pneumatic drywall gun

# TOOLBITS

## Collated Siding and Decking Nails

Looking for good galvanized and stainless-steel gun nails? Maze Nails offers a full selection of 2- to 3<sup>1</sup>/<sub>2</sub>-inch-long double-hot-dipped galvanized nails to fit full-round-head, 20-degree stick nailers. These nails — available with smooth, ring, and spiral shanks — have



been dipped in molten zinc, then dipped a second time to increase the thickness of the protective coating and to fill in any pin holes and imperfections in the first layer. Maze has also introduced a line of spiral- and ring-shank Type 304 stainless-steel nails in 20-degree collations. For more information, contact Maze Nails, 100 Church St., Peru, IL 61354; 800/435-5949; [www.mazenails.com](http://www.mazenails.com).

Swan Secure makes a full line of collated stainless-steel nails in full-round-head 20- to 22-degree sticks (plastic collation), round-head wire-collated coils, and even

stainless finish nails. Stick nails are available in 6d to 12d sizes. Coil nails are available for decking (8d and 10d), roofing (1 to 1<sup>3</sup>/<sub>4</sub> inches long), and siding (5d to 8d). Finish nails for both 15-gauge angled nailers and 16-gauge straight nailers come in 4d to 8d sizes. For more information, contact Swan Secure Products, 7525 Perryman Ct., Baltimore, MD 21226; 800/966-2801; [www.swansecure.com](http://www.swansecure.com).

## Surgical Demolition

Most flat bars and nail pullers wreak havoc on wood trim and walls. However, Takagi offers a couple of new pry bars with an extremely thin, wide, and sharp blade that gives you scalpel-like precision for remodeling demolition. Made of a tough chromium carbon steel, the SharkGrip Prybar comes in 8- and 10-inch models. The other end of these pry bars has a Japanese-style nail puller with sharpened tines that can grip anywhere on the nail shank. For more information, contact Takagi Tools, 337-A Figueroa St., Wilmington, CA 90744; 800/795-5729

## Trim Nail Punch

Malco's Trim Nail Punch is made to hold those maddening little 1<sup>1</sup>/<sub>4</sub>-inch aluminum nails used for coil trim stock. This simple punch makes it easier to get into the corners around soffit, fascia, and other recesses without marring or denting the trim stock — or your fingers. For more information, contact Malco Products, P.O. Box 400, Annandale, MN 55302; 320/274-8246.

cialty nails, it's clear that these tools only make sense for contractors who encounter steel framing more than a few times a year.

## Pneumatic Drywall Gun

Max Co. recently introduced the TD440 "Turbo Driver" — a unique air gun that drives collated screws. While this gun operates much like a conventional nailer, the driver blade actually has a Phillips-head tip. When you pull the trigger, the Turbo Driver's main air cylinder pushes the screw through the drywall. But when the screw meets the resistance of the steel stud, a second air cylinder engages an air motor that spins the screw, threading it into the stud. No pressure is needed on the gun. A precise depth-of-drive dial provides precise and instant adjustment.

The TD440 weighs in at about 4<sup>1</sup>/<sub>2</sub>

pounds, and measures 10<sup>1</sup>/<sub>4</sub>x5<sup>1</sup>/<sub>8</sub>x12<sup>1</sup>/<sub>8</sub> inches. Its compact body and straight front end make it easy to fit into corners. The magazine holds coils of 100 screws in two sizes: 1<sup>1</sup>/<sub>4</sub>-inch for 1/2-inch drywall and 1<sup>5</sup>/<sub>8</sub>-inch for 5/8-inch drywall. These special fasteners will cost about \$50 per 1,000 — considerably more than bulk drywall screws.

At this time, the TD440 has only been used in Japan, where nailing drywall is an accepted practice. Max has begun field testing the TD440 in the U.S. According to Max, the TD440 has been used on about 200 large commercial jobs in the U.S. Max is currently building an inventory of the guns and fasteners and expects to make the tool available in July.

Establishing a market for this technology will be an uphill battle for Max. The tool retails for about \$900. This price,

combined with drywallers' inexperience with air systems, means you won't see a lot of these tools on job sites any time soon. However, the labor savings that's possible will no doubt be attractive to many, especially if the U.S. construction industry continues to suffer a decline in skilled labor.



## Sources of Supply

### ET&F Fastening Systems

29019 Solon Rd.  
Solon, OH 44139  
800/248-2376

### Max Co.

585 Commercial Ave.  
Garden City, NY 11530  
516/222-2184