

by Craig Lord

Working Safely With Air Nailers

**To avoid an injury —
and possibly a lawsuit —
set a strong safety policy
and don't bend the rules**

We started using air nailers in our company about five years ago. Looking back, this change probably had a greater effect on our productivity than any other. Air nailers enable even the lowest skilled worker to become a high-speed money-maker. We no longer have to spend hours training recruits on the art of speed nailing — no more purple thumbs, hammer marks, or split boards.

At first it seemed like a capitalist dream: The tool helped our employees to work faster and more cost-effectively. But this holds true only if you don't fail to overlook one very important issue — safety. The combination of the lowest-skilled worker and a powerful air nailer is potentially very dangerous.

If you've been around the business for any length of time, you've probably heard more than a few horror stories. Just last week, I heard of a framer who ended up in the emergency room with a piece of 2x4 nailed to his arm. A rigorous safety program is a must for any contractor who opts to use these tools.

A Legal Liability

As a contractor, one of the issues that concerns me most is the liability I might have if an employee is injured. New regulations recently adopted by the American National Standards Institute (ANSI) state that "the employer or tool owner is responsible for the safety of the operator and all other workers on the job site." While



CAROLYN BATES

Safety glasses are a must with air nailers. To emphasize the importance of this rule, the author's safety policy states that any employee caught without safety glasses when using an air tool will be fired on the spot.

Safety Rules for Air Nailers

These rules are the core of our safety program. Most of them rely on simple common sense, but we state them clearly to our employees so they'll take them seriously. While they're all important, we emphasize the first six, because these correct dangerous practices our workers have learned on other jobs.

Always wear safety glasses. This is the most important rule, and any employee caught without safety glasses when using air tools is fired on the spot. It's that serious!

Do not hold the trigger down unless you're purposefully firing the tool. Too often, workers will hold the trigger while climbing around staging or descending a ladder. In these situations, the safety mechanism on the nose of the tool can be easily bumped, automatically firing.

Keep people out of the range of fire. On a busy work site, it's often hard to enforce this rule. But it's extremely important for the operator to be aware of other workers on site. They are just as vulnerable as the operator to being hit by a ricochet or flying shrapnel. An air tool should never be fired if another worker is directly in front of the tool, or close by on either side.

Never point the tool at anyone. Treat the tool like a firearm and you won't be sorry.

Disconnect the air hose before clearing a jam or making adjustments. When a nail jams, the impulse is to immediately reach for the nose of the gun to solve the problem and keep moving. We deliberately discourage this production mind-set.

Never assume the tool is empty. Everyone tends to relax the rules when they pick up an empty gun. But you've got to stay awake. Often you can't see the last two or three nails in the magazine. Once again, remember that this tool should be treated like a firearm.

Do not fire the tool unless the nose is firmly pressed against a work piece. When a tool goes down, there is a tendency to improvise, and go with the tool as it is. But if the safety mechanism on the nose ever breaks, we immediately retire the tool for service. This is one breakdown you don't want to make do with, especially because workers are in the habit of using a tool with a functioning safety mechanism.

Use only compressed air to power the tool, not bottled gas. This is obvious, but you'd be surprised what some people think of when the compressor is down.

Keep your free hand safely out of the way of the tool. Be careful when trying to hold two pieces of wood together when nailing. This is especially important when nailing an outside miter, because one hand is likely to be on the other side of the board in the line of fire.

Do not operate the tool around flammables. Air nailers make a lot of sparks. Try a few shots in low light and you'll be surprised.

Use the correct air pressure for the tool, and never exceed 220 psi. This last rule isn't often a problem, because most portable compressors don't operate at such high pressure. But if you're in a shop with a large system, pay attention to the regulators.

— C.L.



Do not hold the trigger down unless you're purposefully firing the tool. This is especially important when descending a ladder. If the safety mechanism on the nose of the gun is bumped, the tool can fire automatically.

this is not a law, it is a standard that could be applied in a court of law. Thankfully, a strong dose of common sense, coupled with some basic procedures, can make your job site safer.

Start With the Manual

How many tool manuals do you own that you haven't read? Not reading the manual is standard practice (or should I say *non-practice*?) in the trades. But do not make that mistake with an air tool. We require all our employees who pick up air tools to review the manual carefully. The manual gives important information — clear recommendations for the exact air pressure at which a nailer should be run, for example. Too high a pressure can not only damage the tool, but it can lead to double firing.

Tool demo. Another good way to introduce the air nailer to your company is to have a demonstration either by the air tool salesman or by someone in the company who is very familiar with the tool. Go over all the aspects of the tool: start-up, nailing techniques, maintenance, and safety rules. Make sure each employee gets a turn on the tool, and watch how each one performs. Correct bad practices immediately, before they become bad habits. For instance, an employee may keep his finger on or near the trigger while carrying the tool. This is one of the worst safety violations, because the nailer can easily fire accidentally.



Air nailers make short work of production nailing tasks, such as nailing off floor sheathing. But these tools are also very dangerous in untrained hands, and can increase your risk of liability.

Company Policy

After instruction, the next step is to implement a clearly stated policy that addresses the everyday use of air nailers. The core of our policy is a list of safety rules (see "Safety Rules for Air Nailers," at left). Most of the rules rely on common sense. They are very similar to the rules you should follow when handling a firearm, and we encourage our employees to make this connection in their minds. Our policy also includes standard nailing procedures that we teach to our employees and require them to follow on site (see "Tips for Nailing," at right).

The safety rules must be enforced, though; otherwise you leave yourself open for a lawsuit. As much as an employee may not want to, he will be in court to sue you and your business if he's injured or maimed by an air nailer.

One of the hardest rules we've had to enforce has been wearing safety glasses. Workers in the trades hate to wear safety glasses, so we have had to come down harder on this rule than any other. I make it clear to all employees that they must wear proper safety glasses while operating a nailer or they will be fired on the spot. While this penalty may seem severe, I use it to convince employees how serious I am.

We ask our employees to supply their own glasses. They should be encouraged to take care of the glasses and replace them when necessary. Too

often the complaint about glasses is "I can't see with them on. They're so scratched." A good pair of safety glasses costs about \$7. A tool operator must be made to understand that his eyes are worth more than that.

Somewhere on the glasses you should find a "Z87" ANSI rating. This indicates that the glasses meet a minimum performance specification for impact resistance. Ordinary glasses or sunglasses without this rating can shatter if struck by a flying nail. The glasses must also have side shields. This is important because ricochets and shrapnel are common when using air tools.

Our air-tool policy has been successful because we constantly remind our employees of it. And we lead by example, making sure all our foremen follow and enforce the safety rules. Because they're on the job continuously, the foremen are in the best position to influence the other workers.

Air nailers are a double-edged sword. On the one hand, they are time-saving money-makers. On the other hand, air tools are very dangerous and represent a potential liability risk. Fortunately, a good safety program — including instructions, demonstration, and a workable policy of ironclad rules — is simple to implement. It doesn't take much, so why sell yourself short? ■

Craig Lord is a general contractor in Moorestown, N.J.

Tips for Nailing

As a part of our safety policy, we teach our employees proper nailing techniques. By constantly reminding our employees to follow these four procedures, we instill work habits that might eliminate a serious injury.

- Nail from top to bottom when nailing wall sheathing in a vertical position. This way you're moving with the weight of the tool rather than fighting it.
- Nail from the eaves to the ridge when nailing off roof sheathing. It's too easy to back off the edge of the roof once you get in the rhythm of popping off a lot of sheathing nails.
- Move forward, not backward, when nailing horizontal areas.
- Secure the hose when working on scaffolding (a piece of Romex wire works well). Otherwise, if you set the tool down on the planks, it can be dragged off the scaffolding by the weight of the hose, or other workers might pull the tool down on themselves.

— C.L.



GARY CARLSON

When nailing roof sheathing, nail up the roof, not down. It's too easy to back off the edge of a roof once you get in the rhythm of firing a lot of sheathing nails.