Great Guns! Powder-Actuated Tools are Dangerous

WHAT'S AT STAKE?

Powder-actuated tools are a fast way to fasten wood or other materials to concrete. Used incorrectly, they are also a quick way to an injury. Also known as explosive-actuated, stud drivers or stud guns, powder-actuated tools are used in the construction industry and by weekend builders.

WHAT'S THE DANGER?

Powder-actuated tools have the same hazards as a firearm because they use a powder charge to fire a fastener into concrete, steel, wood or other material. They've been the cause of numerous deaths and injuries.

Example

A 22-year-old carpenter's apprentice was killed when he was struck in the head by a nail fired from a powder-actuated nail gun. The nail gun operator fired the gun while attempting to anchor a plywood concrete form. The nail passed through the hollow form and traveled 27 feet before striking the victim.

HOW TO PROTECT YOURSELF

Before you use a powder-actuated tool, get the training you need from the supplier or another qualified source. Safety precautions to keep in mind are:

- Always check to see if a powder-actuated tool is loaded when you pick it up.
- Inspect and test the (unloaded) tool before each shift as recommended by the manufacturer. Make certain there are no defects and that all safety devices work correctly. Use the correct shield, guard or attachment for the gun.
- Keep the tool correctly cleaned, lubricated and maintained on a regular basis.
- Do not carry fasteners or other metal objects in the same container as the powder loads.
- Load the tool only when ready to use and never leave a loaded tool unattended.
- Never, ever point the tool at anybody.
- Be certain to keep hands clear of the barrel end.
- Never operate them in an explosive or flammable atmosphere.
- Use only the correct fasteners for the tool and for the target material. Never use substitutes such as common nails.
- Never fire into a 'spalled? (chipped or splintered) area of the material.

- Do not shoot into hardened or brittle material such as cast iron, facing brick, glazed tile, hardened steel or rock. These can shatter or cause the fastener to ricochet.
- Do not fire into a material that is thin or can be penetrated easily unless it is properly backed with a barrier of concrete or steel.
- If the tool misfires, wait at least 30 seconds before trying to fire it again. If it still will not fire, wait another 30 seconds so that the faulty cartridge is less likely to explode. Then carefully remove the load. The bad cartridge should be put in water. Do not toss an unfired powder load into the trash.

It’s also important to wear approved personal protective equipment (PPE). Depending on the job, you’ll need a hardhat, impact-resistant safety goggles, gloves and hearing protection and possibly other PPE, such as a respirator.

FINAL WORD

A powder-actuated tool is just like a loaded gun. Anyone who operates one of these tools must be specially trained in their safe use, and must understand and respect their potential deadly force.