

Toolbox Safety Series
Safe Use of Power Nailers and Staplers



SESSION ONE
CHOOSING THE CORRECT TOOL FOR THE JOB



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SAFETY IS EVERYONE'S RESPONSIBILITY.

Tool users must

- choose the correct tool to perform the task
- read and understand the owner's manual
- work in a safe manner
- maintain tools according to the manufacturer's requirements.

Employers must ensure

- the employee uses the correct tool for the intended work task
- the tool is in good working condition
- the employee has read and understands the manufacturer's instructions and has been properly trained on the tool's use
- the employee uses the appropriate personal protective equipment (PPE).

Coworkers must

- alert others in their surroundings of potential hazards associated with tool use
- use appropriate PPE
- ensure that proper training for tool use has been conducted.

This Toolbox series provides both owners and users of nailers and staplers with some basic information on the safe use of their tools.

ANSI standard SNT-101, ISO standard 11148 Part 13, OSHA standards, manufacturer's instructions and recommendations, safety and construction practices, and recommendations were used to develop this Toolbox Safety Series.

CHOOSING THE CORRECT TOOL FOR THE JOB

This first session covers the concepts of choosing the correct tool type for performing the work.

Power fastening tools offered by ISANTA members consist of nailers, staplers, and specialty tools.

Types of tools

The first and most obvious reason to choose the correct tool is that different styles of tools drive different styles of fasteners. There are three basic categories of power fastening tools:

- nailers
- staplers
- specialty tools.

Tools designed to drive fasteners are based on a number of factors:

- fastener to be driven
 - type (nail, brad, staple, pin, etc.)
 - size (diameter and length)



- head styles for nails (round, offset round, clipped)
- crown widths for staples
- method of collation (paper, plastic, wire)
- material the fasteners are to be driven into (framing lumber, sheathing, trim, siding, shingles, concrete, metal, etc.)
- intended operator use (do-it-yourself, high-volume lower-placement precision, precision placement, etc.)
- trigger system¹
 - sequential actuation
 - contact actuation.

¹ See Session #6 of this Toolbox Safety Series for information on the operation of the various trigger systems.

Nailers as a broader category consist of the following:

Framing nailers (coil)	Framing nailers (stick)	Roofing nailers
		
Siding nailers	Finish nailers	Brad nailers
		

Staplers as a broader category consist of the following:

Heavy duty wire staplers	Fine wire staplers
	

Specialty tools

Palm nailers	Pallet nailers	Flooring staplers
		
Cap staplers	Corrugate fasteners	Ballistic pinners
		

Consider the following factors when choosing the correct tool for the job:

- fastener placement accuracy requirements
- speed of application
- type of fastener
- the work to be performed for the job at hand
- how the tool performs the required work
- how the trigger system influences the performance of the tool
- the safety requirements associated with the tool and trigger system
- having proper training and experience on the tool and trigger system.

Some jobs require a

- higher degree of accuracy for fastener placement at a slower installation speed
- lower degree of accuracy for fastener placement at a higher installation speed
- combination of the above.

The choice of trigger system is based on the application or work, the situation presented, user experience with the tool, and user level of training.

- Sequential actuation is recommended for
 - applications requiring a higher degree of fastener placement accuracy (lath work, finish trim, flooring, do-it-yourself projects, etc.)
 - certain types of fasteners being driven (brad, finish, nails, staples)
 - new or less-experienced users of power fastening tools (homeowners, new employees, individuals undergoing training in building trades, etc.).
- Contact actuation is recommended for
 - individuals who have extensive experience in the use of power fastening tools
 - applications where high-volume driving is required (roof sheathing, roof underlayment, building wrap, assembly line work [pallets, modular homes, etc.])
 - applications that require less precision in the placement of the fasteners.

Examples of choosing a tool

- Example: If a building design calls for the use of a 3" × 0.148" nail on wall framing, choose a framing nailer capable of operating properly with this size nail.
- Example: A heavy wire stapler designed for the attachment of sheathing to a wall would require a different type of stapler to close and secure corrugated cartons.
- Example: Although similar looking, designs for roofing nailers and siding nailers are different.
- Example: When installing shingles on a multi-unit apartment complex, an experienced and trained worker would most likely operate a higher speed roofing nailer with contact actuation.
- Example: A homeowner installing some interior trim would require a tool capable of accurately installing a fastener at a slower pace of operation using sequential actuation.

New users of power fastening tools are strongly encouraged to begin with tools equipped with sequential actuation. These users must

- understand the precise task to be performed
- understand how to select the proper tool for the task to be performed
- understand how the tool performs the required work
- understand how the trigger system influences the performance of the tool
- understand the safety requirements associated with the tool and trigger system
- have proper training and experience on a tool and trigger system before using other trigger systems.

Session 6 of this series covers the types of trigger systems.

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