

### Lesson #3: Nailer Types

#### Objectives

##### Students will be able to...

- Identify the different nailer types and which nailer to use depending on the project.

#### Common Core Standards

LS 11-12.6  
RSIT 11-12.2  
RLST 11-12.2  
Health and Safety 6.0, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6  
Responsibility and Flexibility 7.7  
Technical Knowledge and Skills 10.0, 10.2  
Demonstration and Application 11.1  
Cabinetmaking and Wood Products Pathway A 4.1  
Residential and Commercial Construction Pathway D2.1, D3.1

#### Materials

Nailer Types Notes  
YouTube video <https://www.youtube.com/watch?v=NbMTWWDI3KfA>

#### Lesson Sequence

- Watch the *YouTube video* <https://www.youtube.com/watch?v=NbMTWWDI3KfA> and answer any questions students may have. (20 minutes)
- Review the *Nailer Type Notes* as a class. Highlight important information. Answer any questions students may have. (20 minutes)
- Have students fill out an exit ticket that includes three things they learned about nailer types today.

#### Assessment

Use exit ticket data to show student understanding of content taught today.

**Accommodations/Modifications**

Check for Understanding

Highlight Important Information for Students Ahead Of Time As Needed

One on One Support

## Nailer Types



**Framing Nailers:** Used to fasten dimensional lumber members of a house together. For this reason, these nailers drive rather large nails, usually in the 2 <sup>3</sup>/<sub>8</sub>" (8 d) to 3 <sup>1</sup>/<sub>2</sub>" (16 d) range. Framing nailer nails come in two varieties: clipped head, and full-round head. It is important to know that *only* full-round head framing nails are allowed by the California State Building Code (CBC).



**Finish Nailers:** Use for trim work, interior molding, baseboards, paneling and smaller crowns. These can shoot nails from 1 <sup>1</sup>/<sub>4</sub> (3d) to 2 <sup>1</sup>/<sub>2</sub> (8d) inches in length. Although they can shoot a longer nail than an 18g nailer they also leave a bigger hole.



**Brad Nailers:** Typically used alongside finish nailers, where an even smaller nail known as a "brad" is needed. Brads can run from <sup>5</sup>/<sub>8</sub> to 2 <sup>1</sup>/<sub>2</sub> inches in length with an 18 ga. shank thickness. Brads are great for fastening thin materials (like the mitered corner of moldings) to be fastened with lowered risk of splitting. Used for small trim, interior molding, baseboards, paneling, crafts and come cabinetry.



**Pin Nailers (Micro-Pinner):** Drives tiny 23 ga. headless pins. Pins can vary in length from <sup>1</sup>/<sub>2</sub> inch to 1 inch and are used primarily by furniture industry and model-makers due to the fact that the pins "disappear" once driven. This means they do not require putty or other fillers to be hidden. Use for furniture building, small moldings and holding pieces while the glue dries.



**Positive Placement/Strap Nailers:** These are some of the newest nailers on the market. Metal hardware/connectors have become the norm in residential construction over the past 25 or so years. For safety reasons, up until recently the only way to install this hardware was by hand nailing them. As we have already discussed, this is a very time consuming process. Positive placement guns allow carpenters to align the barrel of the nailer directly over the fastener hole in the hardware.



**Palm Nailers:** Unlike the other nailers and staplers in this list, the palm nailer is unique in that it is the only tool that does not have a trigger to pull. The palm-nailer's trigger is automatic. You simply place it over the head of the nail you want to drive, and push. When pressure is placed on the drive pin the tool fires in rapid succession, driving the nail with a series of blows (like a hammer). The palm nailer is also unique in that it drives hand nails, not gun-nails. This means that a palm-nailer can drive any nail that fits in its barrel. Due to its incredibly compact size (it fits in the palm of your hand) it is a favorite of carpenters everywhere for driving nails in tight places.



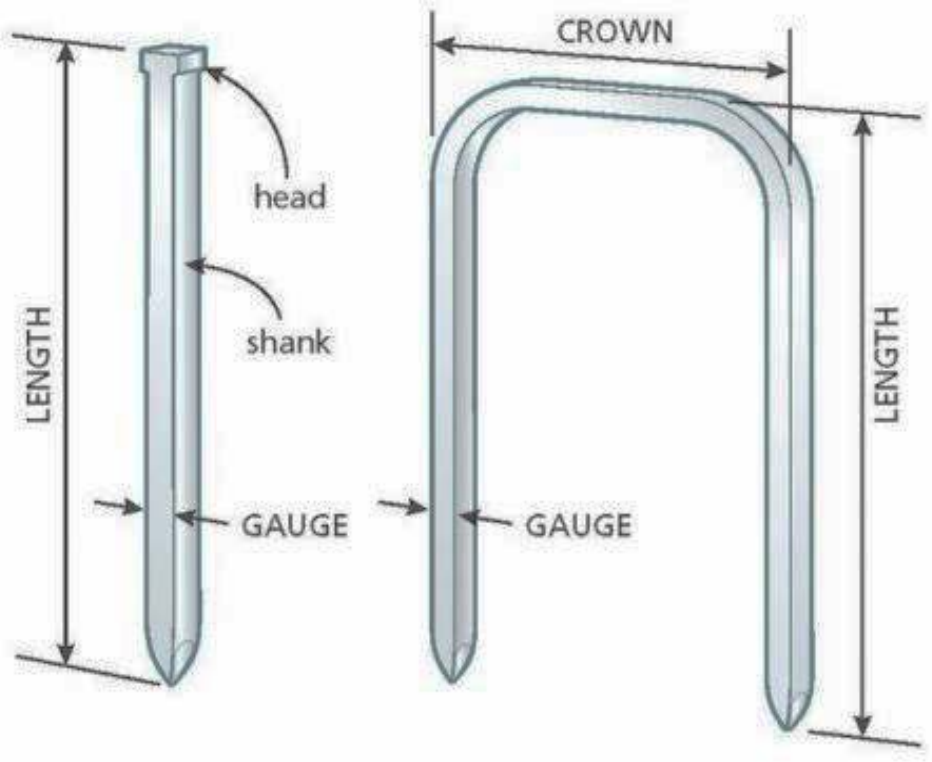
**Roofing Nailer/Stapler:** Roofing nailers are typically "coil guns" using a coil of nails instead of sticks for increased capacity, and thus fewer reloads. Nails range typically from 7/8" to 2 1/8" in length. Roofing staplers shoot 1" crown staples, fed from a stick type magazine. In high wind areas, as well as many municipalities, roofing staplers are not allowed due to their inferior holding power compared to nails.



**Finish Stapler:** Known as "narrow crown" staplers, they are great for fastening thin materials to thicker ones; ideal for attaching 1/8" to 1/4" material to the back of a cabinet carcass.



**Timber Nailer:** The beast of nailers. These monsters drive 4" to 6 1/4" fasteners. Interestingly, nails that are longer than 6" are usually referred to as spikes in the construction industry. This tool could technically be called a spiker! Used to fasten the large posts, beams, and other members of timber-frame construction.



**NAIL HEAD TYPES**

