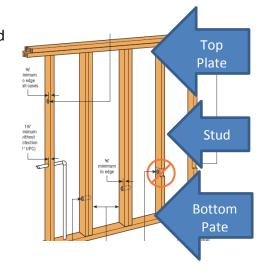
### Stud Guard Training Flyer

One of the types of products we sell is stud guards. Working in our industry it's important we all have at least a basic understanding of what a stud guard is and what it is used for. This flyer will serve to cover just that.



# What is a stud guard?

A stud guard is a metal plate used in construction of a home. These are used to protect things like pipes and wires that are running through the wooden studs behind the wall of a home. Although the words "stud guard" may be used when referencing all the protective plates we sell, they are technically only the plates used to protect the vertical studs behind a wall. Metal shields are also used on the top and bottom plates of wall as well. All of the major building codes feature regulations on when a protective plate is required. Because of this, it is important customers know when they are required.



# Types of Protective Plates:

There are a few different types of protective plates that are used. Below is a brief overview of some of the more common. These can be used to protect, reinforce, or both.

**Shield Plate:** Used for protection only to protect pipe or wiring at the top and bottom plates of walls. They are 16 gauge steel and are 5"x8". This is also called a BOCA plate. These can be self-nailing which means they have small sharp points that act as a fastener when hammered against the board. (Item 186787)

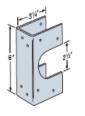


**Repair Strap:** Used for reinforcement of the top and bottom plates when a notch has been cut into it. They are 16 gauge steel and can be 1-1/2" by a variety of sizes. They can be 1-1/2" by a variety of lengths. This can also be called an FHA plate. The 1-1/2"x18" is item 023192.

**Stud Shoe:** Used for both reinforcement and protection of the vertical stud and the piping or wiring running through it. If a stud is bored or a notch is cut out for piping to be run through a stud shoe should be used to protect the pipe and reinforce the stud. These are 16 gauge steel and can be wide enough for one, two, or three board wide studs. (Items 121090, 121091, and 121092 respectively.)







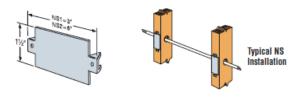




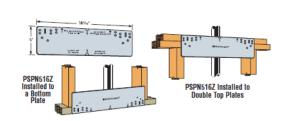
Typical SS3 Installation

#### Stud Guard Training Flyer

**Nail Stop:** Used for protection only of wiring or piping ran through the stud. They are 16 gauge steel and can be 1-1/2"x3 or 1-1/2"x6. The main one we sell is the 1-1/2"x6 (Item: 011663). These can also be self-nailing. This is a stud guard.



**Repair and Shield Plate:** Used for both reinforcement of the top and bottom plates that have been cut or drilled and protection of the piping or wiring running through them. They are 16 gauge steel and can be 5"x16.



\*Striker Plates are used in flexible gas line application and serve the same purpose. To learn more about them you can read the <u>Counterstrike Training Flyer</u> or the <u>Counterstrike Follow Up Training Flyer</u>.

This concludes the main portion of the flyer. A brief overview of some of the codes is listed on the next page for those that would like to learn more.

# **Next Steps and Couple Questions:**

The first step is to talk about this with your team. Talk about the different applications these would be used.

TRUE or FALSE: All metal plates discussed are used for both protection and reinforcement.

TRUE or FALSE: A repair strap and a BOCA plate are the same thing.

Below is a product cheat sheet Rick W put together.



#### Stud Guard Training Flyer

## When to use them protective plates:

When talking about code and requirements it is helpful to split them into the rules on top and bottom plates and the rules on the studs. This section will serve as a brief overview of some of the codes. This section is only intended to cover some and does not cover all codes.

### Plumbing:

#### **Top and Bottom Plates:**

- Top Plate Load Bearing Wall: When more than 50% of the width of the top plate is removed and piping is closer than 1-1/2" from the edge of the top plate a protection plate is required.
- Top Plate Non-Load Bearing Wall: When piping is closer than 1-1/2" from the each of that plate a protection plate that extends 2" below the framing of the top plate.
- Bottom Plate: When piping is closer than 1-1/2" from the edge of the bottom plate a protection plate that extends 2" above the framing of the top plate.
- Whenever a plate is cut a structural repair plate must be used that is 1-1/2" that nails on each side of the cut.

#### **Stud Protection:**

- Stud Protection: When piping is closer than 1-1/2" from the edge of a stud a protection plate is required.
- Stud Repair: When notching or drilling exceeds guidelines outlined in the code, a suitable stud shoe should be installed.
- Bored holes should not be located in the same cross section of a cut or a notch in stud.
- Load Bearing Walls: If a stud is notched to a greater depth than 25% of the width a structural repair plate must be used.
- Non-Load Baring Walls: If a stud is notched to a greater depth than 40% of the width a structural repair plate must be used.

#### **HVAC**:

### Top and Bottom Plates:

- Top Plate Load Bearing Wall: When more than 50% of the width of the top plate is removed a structural repair plate must be used and fastened on both sides by nail. (IRC)
- Top Plate Side by Side Duct Work: Whenever the top or bottom plates are cut

#### Electrical:

• When a hole is closer than 1-1/4" to the edge of a board a protective steel plate must be used.