

HOW TO

Use the right TOOLS for Steel Framing



Steel Framing Alliance™

Steel. The Better Builder.



WHY STEEL?

With straight walls, square corners, no nail pops or drywall cracks, steel framing offers strong solutions to problems builders are facing all over the US and Canada. Because steel has the highest strength to weight ratio of any building material, it is by nature a superior construction material. It doesn't rot,

warp, split, crack or creep. It doesn't expand or contract with moisture content. It doesn't burn or fuel a fire. It is impervious to termites and other wood-eating pests. And historically steel prices have remained flat; with stable material prices, the framer can hold his quote for the framing package, and be assured the quality of the materials used is consistently high.

GETTING STARTED WITH STEEL Take these easy first steps:

1. DO SOME HOMEWORK:

The National Training Curriculum for Residential Cold-Formed Steel Framing and Steel-Frame House Construction by Craftsman are great places to start and available on the Steel Framing Alliance website.

2. START SMART:

Try incorporating cold-formed steel framing one application at a time. Start with the interior partition walls and then the floors. This will give you and your crew the opportunity to get the feel for framing with steel. Details are now available for connecting steel to steel, steel to wood and insulated concrete forms (ICFs) to steel.

3. SURF THE ULTIMATE SITE:

Visit www.steel framingalliance.com and view the list of steel framing manufacturers, and pre-engineered systems suppliers to get an idea of what material suppliers may be in your area. Talk with your local building material supply dealer; they may be interested in working with you to order the material you need and stock cold-formed steel in the future.

4. INVEST IN THE RIGHT TOOLS:

You can launch your future in steel construction for as little as \$400.00! A commercial grade versa-clutch screwgun (0-2500 rpm variable speed and reversible – not a drill), a swivel head shear, a four-foot magnetic level, and chalk line are all you need to start.

5. ASK THE QUESTIONS:

There is a wealth of information available from the Alliance and its members. We are the resource for those who want to succeed! Become a part of the TEAM. Visit www.steel framingalliance.com or call 202.785.2022 today.

GET THE RIGHT TOOLS:

Contrary to popular belief, persons wanting to add steel framing to their repertoire of skills can outfit their tool belt for under \$400.00. A seasoned steel framer and member of the Steel Framing Alliance remarks that anyone serious about steel framing can accomplish the task with as few as four important tools:

1. GOOD ELECTRIC SCREWGUN (not a drill)
2. GOOD PAIR OF ELECTRIC SHEARS
3. MAGNETIC LEVEL
4. CHALK LINE

Use the right **TOOLS** for Steel Framing

As steel framing has grown, major tool manufacturers like DeWalt, ET&F, Makita, Aerosmith, Bosch, Hitachi, and Paslode have designed additional tools to make the tasks associated with steel framing less labor intensive through the use of cordless and pneumatic technologies. Having the RIGHT tools to start your venture into steel framing will mean the success of your experience and your willingness to expand your horizons beyond the most basic tasks.



Screwgun



Chalk Line



Chalk



Level



Shears

1. SCREWGUN:

The most critical tool to any successful steel framing project is an adjustable clutch screwgun. It is the primary tool on the jobsite, and will be used for steel to steel connections throughout the construction project. Unlike the electric drill that you may already have, a screwgun runs at variable speeds and the correct rpm to get the job done for steel.

What Kind:

Steel framers use an industrial grade screwgun, 5 to 6 amps, with a 0-2,500 rpm. Anything faster, such as a drywall screwgun running at 4000 rpm, will burn the screws before they penetrate the steel. The motor runs continuously while you feed, or feather, the screw onto the bit tip. By applying pressure through your arm, to the screw mounted on the bit tip, the screw will begin to spin. How you hold the screwgun, the pressure that you apply to the screw, and speed of the screwgun are key elements in driving screws successfully.

How to Use It:

In the picture you will note that the gun is designed to be gripped at the top end of the handle. You can use your third or fourth finger as trigger fingers. Start the screw spinning slowly to enable the drill point of the screw to penetrate the steel. Once the drill point is through the layers of steel you can increase the speed of the gun until the screw is properly seated.



Experts Know:

A practice known as "camming out" occurs after a certain torque is applied to the screw and the screw stops spinning. This function is preset by the operator of the gun. With a little practice a novice steel framer should develop a sense of ease and speed in a short time.

2. SHEAR:

Another valuable tool on any steel framed jobsite is an electric shear. Designed for cutting sheet metal it gets the job done on steel studs up to 68-mil (14 gauge) and leaves a smooth edge. Steel framers find the portability of the shear a plus for making field cuts on both studs and joists even though clearing the tight radii of the flanges may be a struggle.



3. LEVEL & CHALK LINE:

To complete starter tool kit we need a four foot magnetic level, and a chalk line. Both items are readily available at most if not all building material supply stores. Irwin Industrial Tool Company has designed black chalk specifically for use on steel framing material.

START-UP COST:

So let's look at the retail prices:

• Electric adjustable screwgun.....	\$ 180
• Electric shears.....	\$ 190
• 4' magnetic level, chalk line and chalk.....	\$ 20
Total Tool Investment.....	\$ 390

4. ADD C-CLAMPS:

Add to the list a set of locking C-clamps to hold the layers of steel together as you fasten and your total cost is well below the \$400.00 mark. It's an inexpensive investment for your future in framing – with steel.



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Join the Steel Framing Alliance.

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or Visit steelframingalliance.com