

We have made a lot of workbenches and chop saw stands over the years. When you add these extensions to a **LEVEL-it®** with a chop saw mounted to it you will have both an excellent chop saw stand as well as an amazing workbench.



These extensions are made using torsion box construction. They are extremely strong yet easy and inexpensive to make. Additionally there is enough of a lip around the tops of these extensions that you can clamp all sorts of items to them. This makes for a very strong and versatile bench that's almost 6 feet long. The extensions we use in our own shop are between 9" - 9¾" wide.

The chop saw is a relatively new tool and already quite ubiquitous. It is one of the safer power saws. As of 2011 many chop saws are reasonably priced and there are a great many brands and options to choose from. In our own shop we have come to see that our chop saw based workbenches are very often the "go-to" benches for many tasks. It is also interesting to note that the chop saw and both of the two extensions each bolt onto the **LEVEL-it®** top with just two bolts. They are easy and quick to take on and off a **LEVEL-it®**.



Each extension bolts on to the **LEVEL-it®** top with two bolts. Here is an extension already bolted on to a **LEVEL-it®** top wherein you can see how almost half of its length is not attached to the **LEVEL-it®** top. This is why we use the torsion box construction — it is very strong and rigid even when only attached at one end as is the case here. The torsion box construction consists of a frame or web sandwiched between two boards or panels. The lower or “base” board that is directly bolted to the **LEVEL-it®** top should be no more than twice the length of the distance between the end of the mounting plate and the end of the **LEVEL-it®** top (see photo above) and should be at least $\frac{3}{4}$ ” thick X $6\frac{1}{2}$ ” - 7” wide.



Starting with the lower or “base” board which will be bolted directly to the **LEVEL-it®** top: hold the board with one end flush against the mounting plate (that the chop saw is mounted to) already bolted to the **LEVEL-it®** top. Pencil two marks on the edge of the board to indicate where two Tee-Nuts will be located so that the extension can be bolted to the **LEVEL-it®** top. The marks will be transferred to the center of the board in the next step. You can read ahead to see how this will all work out.



Using a 6-inch rafter angle square or a combination square transfer the marks to the center of the lower or “base” board as shown here.



Drill two pilot holes which are the proper size for the Tee-Nuts you will be using. We recommend $\frac{5}{16}$ ” Tee-Nuts. $\frac{5}{16}$ ” is the bolt diameter for which the slots in the **LEVEL-it**® top are designed. Go ahead and bolt this lower or “base” board securely to the **LEVEL-it**® top as shown here.



With the lower or “base” board still bolted to the **LEVEL-it**® top, lay the upper board on top of it as shown in this photo. Use a combination square as shown to measure the distance from the surface of the chop saw table to the upper board laying on top of the lower or “base” board. This measurement is the width of the boards that will be used to make the frame or web pieces.

We are using $\frac{7}{16}$ ” oriented strand board for this top. You can use any $\frac{1}{2}$ ” or thicker board for yours. We make our upper boards between 9 - 9 $\frac{3}{4}$ ” wide and about an inch or two longer than our lower or “base” boards.



A table saw is the best tool to rip some boards to the proper width to make frame or web pieces. Rip the boards to the proper width as determined by the measurement in the previous step.



You'll be making two extensions, one for each side. The photo above shows the frame or web pieces cut for one extension. How much lumber you need depends on the size of your own extensions. That depends on the size of your chop saw.



The frame or web should be nailed or screwed together. You may use glue or not.



We use screws to fasten the lower or “base” board and the upper board to the frame or web. It makes it easier to take it apart later if we need to replace the upper board due to wear and/or abuse. This photo shows the underside of the lower or “base” board with all the fasteners in place. You can also see the two Tee-Nuts by which this extension is attached to the **LEVEL-it**® top with two bolts.



After you have fastened the lower or “base” board and the upper board to the frame or web you can attach your new extension to the **LEVEL-it**® top with two bolts. It should look about like this. Then make the other extension the same way you made the first one and attach it to the **LEVEL-it**® top on the other side of the chop saw in the same manner.



The photo above shows a 6-inch rafter angle square clamped to the edge of the upper board of the extension with a bar clamp. This makes an effective, adjustable stop for repetitive cuts with the chop saw.

The photo at right shows a board clamped to the upper board of the extension using a bar clamp at one end and the chop saw's clamp at the other end. In this instance we're using a pull saw to make a rip cut. This is also a good way to hand cut tenons or dovetails.

These are only two of many uses for this chop saw stand / workbench.

What do you do with yours?

