

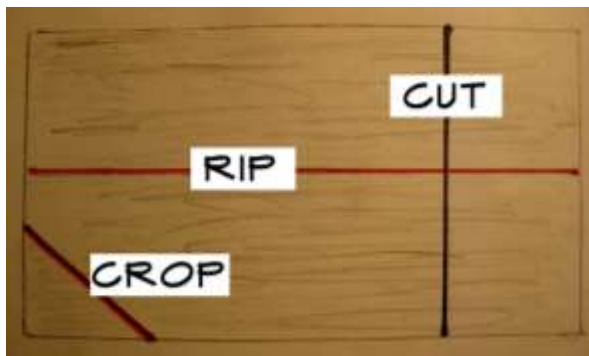
SAW CUTS

I have been doing carpenter work for 55 years; ever since I was 7 years old I have been honing my skills as a carpenter, and I am not finished.

I have done carpenter work all over the world, met thousands of carpenters, mostly good people. At the moment I am in Iraq, working for the Army Corp of Engineers, headed for Afghanistan in July.

A rougher bunch of people you will never meet than construction people. I have heard, over my 55 years of construction, some of the weirdest names called out for saw cuts. These, in this article, are the ones that 99% of the carpenters use.

A supervisor told me a while back to cut **rabbits** in the side panels of a cabinet for the shelves to fit in, he meant **dados** or **grooves**. This is what I'm talking about; you need to know your saw cut callouts.



This represents a 4x8 sheet of plywood/OSB. The long/lengthwise red line is a **rip**, with the grain. The black line is a **cut**, across the grain. The angled red line is a **crop cut**, like, for instance, a filler piece for osb going into a valley rafter.



This is a **dado/groove rip**, with the grain. If I had drawn it going across the grain of the 1x4 it would have been a **dado cut**.



This is looking down on the top of a 1x4 and this double 50° miter (these new miter saws make 50° cuts and I use them) is called a **scarf cut**, used mainly when you join two pieces of base together on a wall.



This is a **rabbit**, the corner is sawn off or taken off with a router and creates a rabbit joint. If you make a 3/8x3/8 rabbit on two 1x4's and join them you have made a **shiplap** joint. That is why some tradesmen call this a shiplap cut. Read this article with an open mind, like I said, this are the callouts of cuts that 99% of the journeyman carpenters I have worked with call them. This shiplap/rabbit is a prime example. I have heard it called many names, **haunch** for one. We'll get to that one later.



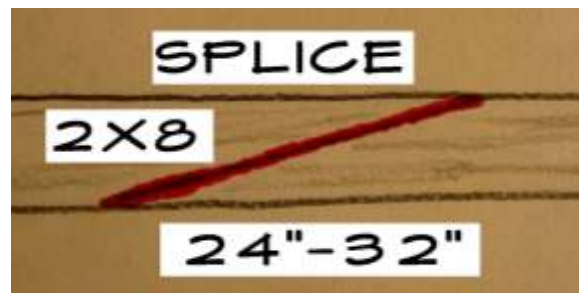
These red lines are **relief cuts**, to keep your saw from binding when making a curved cut. I have seen many band saw blades break when these relief cuts were not used.



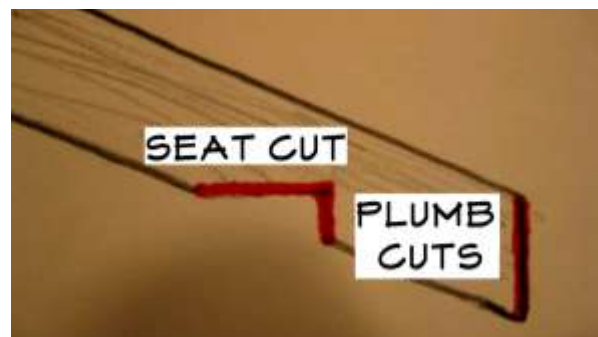
The 1x4 on the right has a **tongue** cut in it. 1x4 on the left has a **notch** or more commonly known as a **groove** cut in it, for a T&G joint.



This is a piece of casing. Casing is square on the back corner. If you make an **undercut** or **back cut** on the bottom as the red line shows, it becomes base board. You do this so that the front of the base will fit tight to the vinyl or wood floor. This undercut also makes it a lot easier to profile your base to fit tile or a hump in your floor.

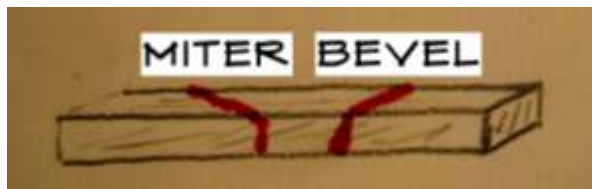


This is a splice joint. You make two **seat** cuts 24"-32" long and join two 2x8's for making a long valley/hip rafter or for a ridge. Nail and screw them together then install a jack stud under the joint for support. Hard to find a 28' 2x8. **Making seat cuts (long angled cuts)** is when a lot of carpenters cut themselves.



This shows a **birdsmouth cut** to fit on the cap plate of an outside wall, the **level cut** is a **seat cut** and the **vertical cut** is a **plumb cut**, as is the cut on the tail, a **plumb cut** tail of a rafter.

This may be getting confusing for some of you cub carpenters but after you make a few of these cuts you will learn them. Then, you may not be a carpenter yet, but you can talk and act like one. Have patience. We were all cub carpenters. Some will intimidate you, I won't.



The angled cut at the left red line is a **miter cut**. The **square cut** with a slight bevel on it is a bevel cut, simple cuts used for many different joints. Any cut or rip that is not square is a **miter cut**. A combination of a miter cut and a bevel cut is called a **compound miter**. Read and learn what an **offset miter joint** is in the book "50 years as a Carpenter". Interesting joint.



This is a **marriage cut** (verb) of two boards you are going to glue together and the edges do not fit. You tack a 1x2 underneath at each end with the two boards tight together, then slowly run your circular saw down through the crack between the two boards and this creates a **marriage joint**. The two edges, if properly cut, will join perfectly together. This is a lot faster than jointing the board's edges. It also makes a tighter fit.

You can also tack a 1x4 on top for a guide. Measure from you outside base of your saw to the center of the blade. Then tack the 1x4 the same distance from the center of the **rip** (adjective). Sometimes you have to saw it twice to get a good **marriage joint**.



A timber framer could tell you of a dozen more joints. This is only one. These two 4x12's have a symmetric **haunch cut** in each of them, creating a shiplap or **haunch joint**, lap joint, shiplap joint, overlay joint, double rabbit joint and probably many others I haven't heard.

Timber framers are in a class all to their selves, quite a bunch of carpenters, absolutely some of the best craftsmen I have ever seen. Right up there with stair builders.

A **plunge cut** is where you lower your circular saw base and lock it, then set the saw on the material, start the saw, unlock and slowly lower the saw blade into the material. Very dangerous cut, but all carpenters use it. Just be careful. The saw will come at you when you the blade touches the material, you have to be in control of the saw. I clamp the front of the base, with my left hand, to the material, lower the running saw, then **stop the saw** and clamp it at the depth I want.

On any saw cut, stay in control; if the saw gets control, you're in trouble.

As you probably noticed, I didn't try to impress you with my drawings. I wrote this article to show you the correct way to call out saw cuts. I'll be corrected with emails, but I don't mind. These are what, I and tens of thousands of other carpenters, call them.

As you probably noticed through this article, like when I showed you a **marriage cut**, we were actually ripping a joint to be glued.

Everything you do with a circular saw is cutting (verb) but when you tell someone to cut you a piece of wood, cut is an adjective. You are telling them the direction of the procedure. Carpenters know this, they know a cut is across the grain and a rip is with the grain.

We call the cut off 2x that we install in a wall frame under the header a trimmer, some call it a jack stud, filler stud and other names. That's OK. Call it whatever as long as you install a couple or four on every door and window. I have seen a few houses that had no trimmers, they framed it to the door size and forgot about the jambs and did not add the two inches we add when we frame a door opening for a prehung door. That is why rock cracks. I wrote about 12 pages in the Carpenter Book about the importance of framing an opening correctly.

You can take this article with a grain of salt or you can study and learn the terms used on most jobsites.

When you get to a jobsite, and you don't know a cut, you will wish you had studied and learned this lesson.

Get some scrap and make these cuts, it's the only way you will learn and remember.

If you have any questions, email me, and I will help if I can.

Emailing me and trying to get a 62 year old carpenter to change his mind about the name of a cut is going to be like trying to teach a mule to tap dance.

Bob Johnston, carpenter
www.carpenterbooks.com