

PLYWOOD CALLOUTS

Callouts of cuts can save you a lot of time and money or they can cost you time and money, usually they cost you time and money.

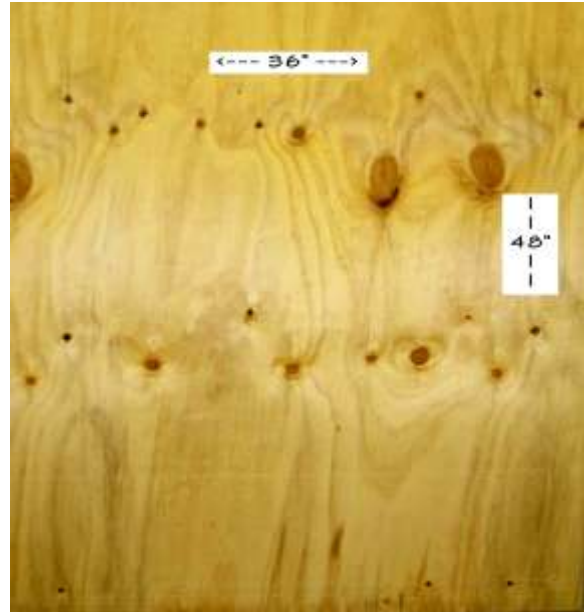
Today's carpenters are a different breed than when I was 20 years old, 43 years ago. Back then you learned the callouts. The men I worked with didn't tolerate the "I don't have to learn your callouts" attitude that some carpenters have today. Today just about all the callouts for construction have gone by the wayside.

It's like the article I wrote "Crop Cuts". I had several framing contractors email me and tell me that article saved them a lot of material, labor and made their roof safe to walk on. Usually about half the triangular pieces cut to fill the decking spaces on an osb valley or hip deck are stapled on with the slick side up instead of the rough side up and a little dew or rain makes the smooth sided pieces like a greased floor. A lot of people have fallen off of roofs because the osb was installed slick side up.

This plywood callout article is about obtaining maximum structural strength of the material you are using.

If you asked 100 carpenters, including me, what are the measurements of a sheet of plywood; most would say 48x96". If you ask the same

bunch of carpenters to cut you a 36x48" piece of plywood they would more than likely cut you the piece in the following picture. The grain of the plywood is running with the 48" callout, the 36" is the width.



Now if you gave me the measurements 48x36" I would cut you the piece of plywood below. I don't know what the other 99 carpenters would do.



The **second number** in plywood cut callouts is the grain direction number (**axis**); it's the direction of the grain, strength, 36" is the grain direction in the callout 48x36" above, and it has been to me for over 40 years.

If you inform all of your crew of this callout it will stop the confusion and arguments that happen when someone doesn't know how to call out a cut, same as the crop cuts.

I gave the letters **WHL** in the Carpenters Book, **W**idth, **H**eight and **L**ength and explained it, extensively.

If you and your helper have a stack of $\frac{3}{4}$ " plywood you are working with, I and you will see no need going around all day saying " $\frac{3}{4}$ plywood" we will just use the **w** and the **l** which are width and length.

Most of the carpenters that I have worked with always think the second number in a plywood callout is the largest or longest measurement in the callout and that is exactly why they get confused and some can even confuse me.

For instance, I am on a roof and I call-out a cut 32x12. What I need is a piece of plywood cut off and the grain is running with the 12. Most would rip you a 12" piece and cut it off to 32", I know, I have had it happen hundreds of times. The 12x32 would probably work and I usually staple it on but it is absolutely not what I called out. Most carpenters argue with me about this and say that I am too particular or too choosy. They're probably right.

The second number, **l**, in a plywood callout is also the axis (strength) of the plywood sheet. Almost all sheet stock has an

axis, sheetrock has an axis. Most say it doesn't matter, but the manufacturers say different, so do I.

If you stand up $\frac{1}{2}$ " rock on a wall (and some actually do this) and then tape, bed, texture and paint this stood up rock it will bow in between the studs about $\frac{1}{8}$ ", leaving you a wavy wall. One reason is, the axis is wrong; the other reason is that when you do all the procedures in taping, bedding, texturing, priming and painting, the 32 square feet of rock has absorbed almost a quart of water.

The axis is wrong and $\frac{1}{2}$ " rock should be laid down. You can stand up $\frac{5}{8}$ " and it will be fine, because of the fiberglass impregnated into it. I do it all the time.

If you install plywood flooring to the floor joist with the grain running in the same direction as the joist you are going to have a wavy floor and it will be soft or a spring feel to it when you step in the middle of the joist. **Install it perpendicular to the joist and you have maximum strength.**

Some carpenters believe osb does not have an axis, they are wrong. The old wafer board we had years ago did not have an axis but this new osb they are making definitely has an axis. The wafered pieces of wood you see in osb are not scrap, they are manufactured.

Like I said in the Carpenter Book "if you install T111 (grooved plywood) onto studs without proper backing you are going to have a wavy wall in less than a week".

For those who don't believe this I would like for you to cut a piece of $\frac{3}{4}$ plywood 26x26 and lay it on two 2x4's 24" on center with the grain running with the 2x's, then step in the center of the plywood.

Now lay the plywood on the 2x's with the grain perpendicular to the two 2x's and step in the center.

If you don't feel a difference, I nor anyone else can help you, you are on your own.

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