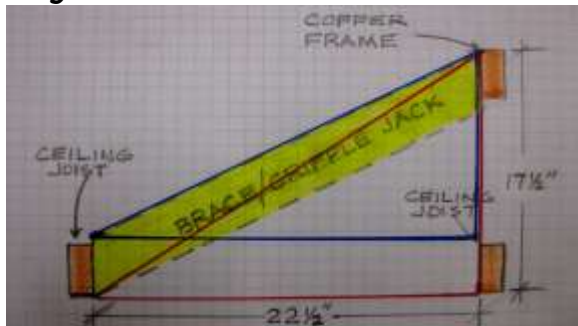


Bridging

If you have read the book I wrote you know how I try my best to stay out of these regional framing terms and the arguments that follow.



As you can see in the picture above I wrote brace/cripple jack on it. A cripple jack rafter is a rafter that touches neither the ridge nor the top plate, but a lot of you would call this a coffer brace, bridging or a cripple jack and that is perfectly OK with me as it has all the characteristics of a cripple jack. The only difference this brace will not have sheathing stapled to it, still OK. I, myself, call this bridging or a brace and we usually lay bridging down to install it but this one needs to be stood up to straighten the 2x.

Here is the scenario: You have a green carpenter 20' up in a roof frame and he needs a brace to straighten a coffer frame member or a hundred other reasons you might need a double mitered 2x brace in a roof frame.

He says the rise is 17½ and the run is 22½. If he can tell you the

rise and run you have yourself a potential carpenter.

This member can be calculated, it is a long and tedious calculation to get it exact. The red triangle in the drawing is easy to calculate the angle using the shift/r-p method but the red triangle angles are not the angles of this brace. The blue triangle gives you the exact angles of the brace and the run/rake point of the blue triangle is unknown, but it can be calculated. Thing is, it doesn't have to be perfect.



This is what I do. I have a plywood assembly table and I mark 17½" rise and a 22½" run, lay a 2x4 on the points, mark and cut the ends. Takes about a half a minute and the brace is on its way up to the potential carpenter. I know most of you could cut this brace before reading this article but there are a lot of young carpenters that can't.

You can use this plywood method of marking for a lot of different parts of a frame. It's like when I showed you how to segment a circle with a stringline.

Bob Johnston, carpenter

www.carpenterbooks.com

