

# I Think There's A Problem Here

## By George Porter

Did you ever have one of those little thoughts nagging around in the back of your mind while you're doing something that you've probably done a hundred times before? It's the little notion that you think there's something wrong here, but you just can't quite put your finger on it.

Well, that little thought boiled to the surface the other day when I was reviewing an installation manual for a manufacturer. I was doing the part where they described mating up one half of a double to the other and most of the companies treat this in pretty much the same fashion. They say you block and level one half of the home, the heavy half if you have a choice, and if the manual hasn't been looked at by anybody in the last ten years or so, it probably says you go get some greased boards and slide the house over. (At this point, I generally mention something about rolling and jacking equipment.) But, nevertheless, it basically says you get one half over there and then you raise the inside I-beam until the two floors are joined together and there is a gap in the roof. Most manuals then say you then lag-bolt the two halves together loosely, then you raise the outside I-beam until the floor and the raised half becomes level with the floor in the half that you had previously set.

Now here's the problem, what happens to the house between the outside I-beam and the marriage wall? If the floor remains straight across, then the inside I-beam will have to lift off of the inside blocks. But with all that weight, it can't. So it does one of two things. The home either sags a little to leave the I-beam sitting on the blocks and putting large force on the marriage wall, or the lag-bolts will rip out. If you don't think you're inducing some kind of stress into the home by doing this, next time try it just once without putting the lag-bolts in. The floor in the half you're jacking will drop below the floor of the one you have set when you raise the outside I-beam. So, if it stays put when you do this, and if you've put enough lag-bolts in it, it should, then the floor joists and decking and frame and outriggers on both halves of the home are put under a considerable strain. If you're still using a carpenter's level, instead of a water level, to set all the piers first, you'll probably never discover this strain and it will be trying to relieve itself over the life of the home.

As these floor joists and decking relax, creaks and separations will occur along the marriage line and in the floor of the home. Drywall may develop stress cracks and you'll need to make a couple of more service calls on this house because of "settling."

If you set all the piers under all four I-beams with a water level, raise the home, bring it over and set it down on those piers, the home should be extremely tight together, the floor should be level, and when you bolt those two halves together, there should be very little strain between them and the structure will not be trying to slightly change its shape as time goes on.

Think about this next time you're putting a double together. I think maybe you'll come to the same conclusion.