

Sometimes I Don't Understand All I Know About This Business

By George Porter

What we're going to talk about today is basement and crawl space sets of HUD code homes. I recently had the occasion to have a conversation with a chief engineer of a major manufacturer and I was able to ask him some questions about homes that I really didn't understand.

For instance, if you take an ordinary HUD code home and set it on blocks, many manuals say that those blocks can only be 8 to 10' apart, depending on the size of the chassis or frame. If they are any further apart than that, the warranty is void, bad things will happen to the home and probably the person who made this mistake also. If the span is too great, the I-beam will sag in-between the span, thereby causing problems with the floor, walls, roof, etc.

However, on the other hand, if you were to put this home on a crawl space and the entire structure was supported by steel H-beams running the width of the home, the plans you will probably get from the factory will say these beams can sometimes be up to 14' apart. My question for the engineer was, how come when its supported by blocks it can only be maybe 8', but if it's supported by steel H-beams, it can be 12 or 14'. How does what it is sitting on make any difference to the frame of the home? He explained to me that the perimeter foundation around the home that holds the steel H-beams support a tremendous amount of weight at the perimeter and therefore, the frame does not have the stress on it that it would have if it did not have this support.

Well, this made wonderful sense to me, except for one thing. Most people I know that do a crawl space set simply put some 4" blocks on their edge to complete the foundation between the course that the steel H-beams are on and the bottom of the home. They almost never touch the home and the gap is generally filled with insulation or styrofoam or something else. In other words, it isn't supporting anything, plus the outriggers are generally in the way of a full size block that could be placed there, so even when it is touching, it's only being supported by a 4" solid block on its edge. If that's the way you set your homes when they are on steel, then maybe you should give your factory a call and ask them if that's the way they intended for this to be. And if it's not, ask them if they have any suggestions about what you are supposed to do.

Now I'm not advocating that you and the factory get in some kind of a shouting contest and give each other a hard time. What I am saying is that you'd better find out what it is you're supposed to do and how you're supposed to do it and get it done. You might also ask the factory how you're supposed to support the ridge beam support column along the marriage wall of the home if it isn't directly above one of those H-beams. If you've been a good and faithful reader, you will remember that the ridge beam support column is a special point along the marriage wall that supports the roof area over the top of large, open rooms and it must be supported directly beneath the 2x3's that are nailed or screwed together on each end of the big opening. If it is not, bad things will happen. If you don't happen to have one of those big H-beams underneath it, what are you supposed to do?

Many installers have invented lots of ways of addressing this problem and I would suggest to you the one most appropriate to answer this problem is the factory. Ask them what to do. Tell them to put it in writing, if it isn't already in the manual or the special sheets for crawl space/basement installations, and you do exactly what they say. The less home-brewed installation problem curing that installers do, the better off installers are going to be. Also the better off factories are going to be, because it is probably the only way they'll ever get to know there is a problem.