

Used Homes (?) Part I

By George Porter

For the next two months we are going to discuss “used homes.” The problem is that sometimes I don’t understand what I know about them. For instance everyone knows that every new home comes with some very specific instructions that are the law in all states that have laws. Because the HUD Code is a performance code, all homes are not the same. Different manufacturers have different ways of getting the job done. If you don’t follow the instructions correctly then at the very least the warranty is probably void and at the most, the home is severely weakened. They really are all a bit different and some are very different. I understand this and I hope you do too. What I don’t really understand is why, as soon as someone buys the home, they can all become the same. Most states allow you to use the original manual (if you can find it), an engineers sealed directions (used homes get a lot of this I am sure), or they have a generic code that you can follow. Lots of states have nothing, I can think of at least 15 right of the top of my head.

So... if you can put a home together with a generic code then why do we need all this manufacturer specific stuff when it is new? Some say we have to have the generic directions because if we don’t have the new installation instructions any more we have to have something and this is the best we can do. Well, all the car companies seem to always have the directions available for models up to 90 years old! Every spark plug or tire ever used on any car in the world is catalogued somewhere! Mostly because you need to know these things to make the cars work like they are supposed to. I am pretty sure we need to do the same thing with our homes somehow. Take Fleetwood for example; for years every Fleetwood home in the country used lag bolts in the roof, then they decided to use an engineered beam that is much lighter and just as strong, but you must not put a lag through it. The lag would weaken the top cord of the beam and cause a real structural problem. Fleetwood did not introduce this beam in every factory in the system, only some of them, the manual in the home will tell you what to do. When some of these homes “become” used homes, what does your state code say to do when you button up the home? You can’t find the original manual, what do you do?

The correct answer is to THINK! You look at the beams in the “multi” when it is apart. If it has the engineered beams then you do the strap thing like Fleetwood wanted, if it has the two by three or bigger beams then you can lag it. Another clue is to look for lag holes in the roof, which brings me to something else I don’t quite understand. How many times can you lag a roof before there is nothing left to lag to? If you have 41 lags in a 60-foot roof (@18”) then can you put the new lags back in the same holes? If not, how close can you put the new lags to where the old ones were? If so, do the holes left by the old lags weaken the beam? I certainly have opinions, but I officially don’t know, and I have never seen the question investigated or addressed by anyone anywhere.

It gets worse; I know of seven totally different ways manufacturers have invented to put their homes together. It would be silly to put lags in a Clayton when you have pre-drilled boltholes put there by the factory. If you put lags in a Skyline roof when you should have

picked up the roof panel and lagged it down at the big beam below the roof, you will not have anywhere near as strong a home connection.

Different wind zones and roof loads will also sometimes change the way the roof is interconnected. Generic codes will probably be fine for footings and anchoring. The four-foot opening on the sidewall rule applies to virtually all homes (except for one out west). But, the roof is a serious problem. Not only does it enable the home to meet its roof load requirements, it also makes it possible to maintain its rigidity in a storm. The roof connection, along with the floor and end walls in a multi-section is what makes the two pieces act as one. If they are not properly connected then the home can literally become unsafe. That proper way was the way the manufacturer said to do it, period. We need to know what that was to get it right.

Most of the states that have regulations addressing the interconnection of multi-section homes use the 1994 or the 1987 ANSI A225.1 Code, neither of which is being printed anymore. The '94 code says use # 10 x 4 inch screws 12 inches on-center, staggered intervals. OK, so we have a 4" screw going in a roof at a 45 degree angle. Ideally we would have 2 inches of wood around the screw in one side of the roof and two inches in the other half to connect the two sections. But you can't do that at 45 degrees and a little gap in the roof further reduces the screw in the wood. When you put a soil anchor into the ground at a 45-degree angle you need to have the anchor 1/3 longer so it will get to same depth as if it went straight in. I guess the same rule applies to wood screws, so.... if the penetration of the wood screw is reduced by 1/3 it becomes a little over 2.6 inches available for penetration or 1.3 inches per side (with no gap)! This isn't much to hold a house together with folks! Those using the '87 version are supposed to use lags and I think we have covered that.

The point is, we need some better guidance I think and here's why. The better we protect the consumer with used homes, the more new ones we will sell. When have you ever see damage to a home after a storm on the TV and the announcer says, "but this was a used home, not a new one." Did you know that according to the states I checked with, that up to 70% of ALL of the sales in this industry nationwide are used homes? If we can create a better market for used homes we are paving the way for the lenders to come back, because all of their collateral is "used." Give this some thought, more next month.