



“The Building System for the 21st Century”

STEEL VS. WOOD

Fear of change and/or close-mindedness can add to the cost of a steel-framed home. Developers will say “you steel guys always come around when the price of lumber is high.”

The funny thing is that, if you compare material costs, steel is less expensive than wood. The real fear is that there aren’t enough framers who know how to do production steel framing – this is true, but the “learning curve” is not long, if you want to learn.

The framer says “it will take longer to frame up.” But this statement is made from inexperience and maybe too much sawdust on the brain (close-mindedness).

Since steel is lighter, you can move material around easier. Also, because steel is stronger, less pieces are needed, nail guns can still keep you speeding through the floor and roof sheathing, and using one or two design/engineering features of steel you can save more labor and material – which wood cannot accomplish. Panelizing (pre-built walls) is another means that some are developing to increase efficiency and cut costs.

The electrician claims to the developer that wiring a steel house is more expensive because he has to buy grommets to run wires through and use screws on the plug/switch box installation. But he doesn’t have to drill holes, because steel has “punch-outs” to run wires, and he can actually take less time to wire a house than in wood. Again, I believe the issue to be a brief time for some “learning curve”.

The plumber will admit to others that it takes less time to plumb a steel house, but tells the developer there won’t be a price increase, so both are pleased.

Drywall has been applied with screws for years and doesn’t require any learning curve – the extra cost is the price of the screws. Better yet is the latest technology of the nail gun for drywall – a speedy new tool for structural steel. Either way you look at it, nails have a propensity for pulling out of wood, as it is warping away from the drywall.

Stucco is the one legitimate extra cost, because it typically includes foam insulation and screwing on the lath. But again, innovation brings technological advancements with a nail gun for the lath and yet another time savings of measurable value.

Yes, each of these trades needs to go through a little “learning curve” to gain some proficiencies of the latest tools, products and faster methods of installation. But this is easy to do if you have an open mind and a little drive to help advancing technology.

Training is available through community colleges like Orange Coast and Fullerton, as well as from contractors who are already realizing steel's value, building associations, suppliers and manufacturers. Architects and engineers also need to consider some training regarding the benefits of good design and dollar savings available with using steel.

Lumber associations are also fearful and fighting to keep market share by telling you they care about the spotted owl, that they plant 10 trees for every one they cut, etc. But, along with their volatile prices is the pathetic quality of lumber.

In spite of all the hoopla of steel vs. wood, it is a fact that steel is stronger for earthquakes and hurricanes, it is spotted owl friendly, safer in a lightning storm, it is non-combustible, it won't warp or rot, and it can't be eaten by termites.

As a final note of benefit, some builders sell their steel homes for a premium over the same wood plan: not because they cost more, but because steel is the preferred framing material, and it can bring larger profit to the bottom line.

Source: Randy Smith, Fasteel Systems
Metal Home Digest 11-12/96