STEEL FRAMING: A Breakthrough in Framing Technology

A horrified Clayton Brunger watched as his beautiful new wood-framed home collapsed to the ground. He couldn’t believe that his new house had been reduced to sawdust because of termites. These little pests had eaten through the wooden frame of his house. If only poor Clayton had known about steel-framed houses, then his house would still be standing proud.

Steel framing is a relatively new method of framing to the residential market, but it has some people convinced that it is the next great advance in residential construction. Most people only use wooden frames for their houses. Since these people are usually reluctant to try new things, they don’t even bother to become informed about all the advantages steel framing has to offer. If you are one of these people, then this article is going to be very important to you.

Steel is one of the most important and widely used structural materials in the world, and has always been an ideal choice for those who demand strength and long life for their products. A steel-
framed house won’t rust, and the use of galvanized steel components protects your house from corrosion.

The opening scenario I told you about is a possibility with wood framing because it is vulnerable to insects, mold and rot. When termites get in the wood, they slowly destroy the wooden frame to the point where it can no longer support the weight of the structure. Another key point is that steel does not host allergens or other irritants; therefore, it does not require the application of insecticides or other hazardous chemicals.

Now you have a little introduction to the advantages of steel framing. The rest of this article will now tell you about the three main advantages that using steel framing provides you with: Steel framing is more cost efficient; steel framing is more weather resistant and steel framing is less of a waste pollutant.

Steel Framing Is More Cost Efficient

The cost of steel has been steady for the last 15 years and will continue to stay steady for many years to come. This can’t be said about the cost of lumber and the costs have risen dramatically over the past couple of years. (See the figures 1 and 2 on page 000.) The prices for wood will continue to rise because of increased land prices, sustainability, biodiversity and pest control issues. This point is very simple: Even though they are a renewable resource, we are running out of trees. This dwindling supply can mean only one thing to the prices—a dramatic increase.

Steel is very abundant, competitively priced and fully recyclable. This tells you that the price of steel will stay stable for a very long time to come. I know cost is a major issue with everyone, and you now should be interested in steel framing knowing that its costs are going to stay inexpensive. Also, steel framing is a great alternative framing process that will have to be used more now because of the decreasing supply of wood.

Steel Framing is Weather Resistant

Steel has a high ability to shed rain water
with today’s new corrosion-resistant alloy coatings. These zinc-aluminum alloy coatings have further extended the life span of steel-construction systems. Also, steel sheds snow quickly, thus reducing the stress on a roof during strong winters. Additionally, it won’t crack, split or break when struck by hail.

A myth about steel framing is that it is more dangerous in lightning storms, but this is entirely untrue. It actually offers better protection because the steel provides a path to the ground for the lightning. This greatly reduces the chance of explosions or secondary fires.

Also, steel framing has the highest earthquake resistance rating in all of today’s building designs. Another positive is that since all connections are made with screws, steel framing provides greater protection in seismic and high wind areas.

Obviously, steel will not burn, which makes it ideal for people who are going to frame in areas that are prone to wildfires. The steel frame is non-combustible and will not contribute fuel to a fire. This helps to prevent a fire from starting, and it will even prevent any fire that starts from spreading through the framing members. Also, steel’s fire resistance can help slow the spread of a fire within a building.

**Less of a Waste Pollutant**

Steel is 100 percent recyclable, and more than 500 million tons of steel scrap have been recycled during the last decade. This is more than any other material in the world. Another important fact to know is that all new steel is made using a minimum of 25 percent recycled steel. In comparison, lumber at the end of its useful life is burned, put in landfills or made into mulch or compost. This isn’t cost efficient because of nails stuck in the wooden boards, paints and even toxins.

The waste of a typical steel-framed house can fit in a normal-size trashcan, has scrap value and is readily accepted and purchased by scrap yards. Steel framing allows tremendous flexibility during design, construction and remodeling. It can easily adapt to any
of the many changing needs that the homeowner may want. Additions and renovations are easier because you can unscrew rather than rip walls apart.

I hope the advantages I talked about in this article made you aware of the fact that steel king is an efficient process that gives you a high-quality and long-lasting structure. This new advance in framing construction cannot be ignored. People that have always used wood framing need to evaluate the benefits of steel framing and make an educated decision about what is best for them and their houses. It is easy to obtain more information on steel framing, and please make sure to stay current on all new advances in this industry. New technologies in steel framing are rapidly being researched, and the information is always being exposed.

About the Author

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Sources


