



Home Tips®



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Q & A

Metal Wall Studs?

I would like to do some remodeling in our house. A friend told me I should use metal studs. He claims they are cheaper and faster to put up than wood. If this is true, why aren't metal studs used more often in house construction?

Your friend is partly right. Steel and wood studs are about the same price. As for faster, that depends on whether you are used to building with steel studs or not.

The reason you do not see a lot of steel studs in residential construction is that contractors, like most people, do not change just for the sake of change. There is no incentive to use steel studs; in fact, contractors would incur a huge expense in retraining crews and buying tools.

Some advantages to steel studs:

1. They will not burn.
2. You never have to worry about warping, twisting, shrinking or nails popping out.
3. Steel studs are lighter than wood.
4. You can span a longer distance with steel studs.
5. Steel studs can be screwed together to make longer studs.

Some disadvantages are:

1. Steel studs are not as readily available as wood studs. You have to go to a drywall supply store to find them.
2. Since steel studs are shaped like a flat "U", standard size insulation will leave a gap between the studs. If you plan on insulating between them, you will have to place the studs closer than the common 16" or 24" on center spacing.
3. Steel studs will transfer noise more readily than wood.
4. Steel studs are harder to cut.

What Is Dry Rot?

I have a three-part question: What is dry rot, where is it likely to occur in a house and how do I prevent it?

The term "dry rot" is a misnomer. For wood to rot or decay, a moisture source must be available. The term probably originated from the fact that wood in the final stages of decay cracks and disintegrates to a powder and looks dry.

Wood decay is caused by a fungi that obtains their food from wood. If wood is kept in a damp condition for any

length of time, it becomes infected with a wood-decay fungi which bring about its decomposition. Microscopic threads called hyphae branch out within wood and cause decay. When conditions are suitable, fungi produce spores-bearing structures called fruiting bodies. The fruiting bodies of most decay fungi are mushroom or bracket shaped.

Where is decay most likely to occur? Anywhere wood can become wetted by moisture and not permitted to dry out for a period of time. On houses, this most commonly occurs where wood contacts soil, exterior millwork (trim and window frames) and wood embedded in concrete. Interior decay most often occurs where wood is wetted by plumbing leaks and condensation (often in basements and crawl spaces).

How to prevent decay? The most obvious method of prevention is to eliminate the moisture source. However, this is not always possible. Where wood is in ground contact or subject to frequent wetting, it should be pressure treated with a preservative, or be a species with high natural decay resistance, such as cedar or redwood. In the case of crawl spaces, adding a vapor barrier and increasing ventilation will help to lower the moisture on the framing. Be sure to open the air vents in the summer and close them in the colder months.

Crawl Space Insulation?

I want to insulate the crawl space under my house. I understand what materials I should use, but I would like to double check the how-to portion. Also, what should I do about air vents in the block sidewalls?

The crawl space under a house can be a source of cold floors, drafts and moisture if it is not properly weatherproofed. You can cut your heating cost by plugging the potential heat leaks.

Here are the how-to steps for insulating a crawl space:

1. To prevent moisture from damaging floor joist or insulation, lay a vapor barrier of 6-mil polyethylene film over the bare earth. If you need to use more than one piece of polyethylene film, make sure you lap the edges at least 6 inches. Secure the polyethylene film along the edges with stones or bricks. Do not be surprised if you see water accumulate underneath the film. This is showing you that a vapor barrier is needed and it is doing its job.
2. Fit fiberglass insulation between the floor joist. You can use either 3 1/2" R-11 or R-13 insulation or 6" R-19 insulation which should be kraft faced and comes precut for either 16" or 24" joist spacing. You can use precut wire hangers to hold the insulation in place. Be sure the vapor

