

COLUMN FOR NOVEMBER 12, 2005.
HEADLINE; LONG TERM HOME TIPS

Q; I have been reading your column for a number of years and you answer our questions, now I have one for you. Give your readership you top recommendations when building a new home or addition if you were going to stay in for a number of years.

A: I get this question repeatedly and after some thought, here goes! My suggestions are not high tech and are available to anyone contemplating a new home or major addition. I will start with the foundation. Foundations have evolved from wood laid on the ground, to stone, and then hand poured concrete to concrete blocks. Over the past few years machine poured concrete foundations have become popular. A few years ago two gentlemen in Cobourg Ontario developed the insulated concrete foam interlocking block system or Blue Max, as it was known. Today there are a number of companies manufacturing these ICF foundations along with a number of trained foundation installers. This is not a system for amateurs and the manufacturers are usually very strict about their installation. There are no National Regulations on these systems at present; this will change when the National Building Code introduces its upgrade shortly. This type of foundation is excellent if it is properly installed. You prepare the footing as required by the manufacturer; most have engineered specifications to follow. These “blocks” are then built not unlike a conventional concrete block wall, they are piled one on top of another in a coursed fashion. The hollow blocks have a metal web or frame inside them and they are linked together. Concrete is then poured into these blocks under very strict controls, mainly to reduce air and control the flow of the concrete. When done you end up with an insulated basement that is very strong, unbelievably quiet and warm. I have been in homes where the entire structure right to the roof plates were done like this and the home was like walking into a tomb, quiet and warm. The system has been around long enough to merit a real close look for any basement being contemplated.

While we are still in the basement, radiant in floor heating gets my next gold star. These installations have been around long enough and the bugs worked out to recommend them. There was a major issue with the plastic piping in Colorado a few years ago. GE took a real hit on their pipe out there. If a basement is warm it is amazing how warm a home feels. You can do the basement floor and still have a forced air heating and air conditioning system for the balance of the home. A properly sized hot water heater can supply this type of installation. The heating contractor installs loops of oxygen-impermeable tubing over an insulated base. Then a layer of special concrete is poured over this carefully laid tubing. It is all connected to a main collector called a manifold and can be separately controlled.

My next top pick is metal roofing. If you take a drive into the downtown core of many older cities and pay attention to the heritage buildings you will be surprised how many have their original metal-shingled roof coverings still in use. Some years ago we got onto composition asphalt shingles and it became the roof covering of choice, in large part due to cost and the availability of colours. Metal Roofing tried a come back a few years ago with red and orange coloured roofing. This failed miserably as the method of applying the finish colour was not stable enough to handle the UV rays of the sun. I know of a couple of homes where their orange roofs are now a blushing pink! The advent of powder coating and epoxy finishes has now taken metal roofing to another level. The introduction of screws with a neoprene washer instead of the lead head nails means the installation is more secure and the problem of the nails working loose in the metal is practically gone if the screws are installed correctly. For new construction you can skip the plywood decking and install strapping instead, a cost saving. If the trusses are properly installed, hurricane ties used and proper blocking then this is a great roof covering. Here again this is a job for the pros to install. Most companies offer a 50-year warranty and I would expect the majority of these metal roof coverings to last well past that figure. There are also a large number of colours available today, colours that should stand the test of the climate and sun.

My last suggestion is one where a little planning can go a long way to saving a few bucks on your heating costs. When you are looking at where your new home will sit, give some consideration to Passive Solar in its design. My own home faces north/south. The south wall, running nearly 60 feet long is approximately 40% glass while the north side is less than 15% glass. The west wall is void of any openings and the east wall only has a door to the three-season sunroom. When the roof overhangs were calculated we took into consideration the position of the home and they are different on the south side to the north side. Our windows are all low-e Argon to retain the heat. The north entrance has a covered area and has two doors, the main insulated door and a storm door while the south entrance is one French door. Our kitchen and dining room area has a stone composition tile to help retain the solar heat coming through the full height windows in the dining room. If you are building a home, take time to sit down with your architect and discuss the possibilities of passive solar in your new home. You will be amazed how much warmer and brighter those winter days will be. There you have it, my top four picks, all readily available today and should make a dramatic difference in the comfort and longevity of your new home or addition.

Now the answer to last week's question. The answer was C) hardpan is a firm compacted soil. Now this week's question. What is blue-stain? Is it A) a discoloration in lumber caused by a fungus. B) A chemical used in brick mortar to stabilize it during the cold weather. C) An additive used in white wash to soften the tone before application.

The answer in next week's column.

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