Toxic Mold


JIM GUNSHINAN

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Q. We just moved into a brand-new house in April, and paid more than twice what we paid for our last house. Our four-month-old house has had flooding underneath it. We attribute this directly to

- lack of gutters;
- pier construction technique (the house has a crawlspace with the floor supported on concrete blocks, or piers), resulting in only a single layer of protection against water (one layer of brick veneer); and
- an unusually high amount of rain this year, potentially raising the water table.

There is mold now growing in our garage, and water under the house after a rain (see photos). We notified the builder two months ago, and he has not done anything; he seems unwilling to take responsibility. We also told him that my wife, who is 37, is pregnant and due in January. Because of a past medical condition, it is a high-risk pregnancy. We had a water specialist come to the house, and he found water entering the house in the foundation where the 4-inch sewer line penetrates, as well as where the air conditioner cowling enters. He found that the property was not graded correctly, and that the ventilation under the house is inadequate.

What can I do to stop the water from coming under the house?

Flooded and Frustrated


STEVE WADDELL

The homeowners paid twice as much for this home as they did for their last one. But there are no gutters!


STEVE WADDELL

The lack of gutters, among other things, led to flooding in the home and mold growth on the walls in the garage.

A. Without actually visiting the house to see where this water is coming from, here is my general advice, based on what I see in the photos:

1. You definitely need gutters that direct the water away (I would say at least 6 ft away) from your foundation.

2. A French drain all around your house would be a good idea, too.

3. You need some way to get rid of all that standing water in the crawlspace. I suggest installing a sump pump.

4. Once you have eliminated the standing water, cover the dirt floor of the crawlspace with 6-mil (or thicker) poly. In your photos, it looks like there was some ground cover. But it needs to be better installed. You need to cover the ground to reduce the evaporation from the damp earth. (If long-term humidity problems persist, you need to seal the crawlspace by sealing all the seams where the poly overlaps, and sealing the edges of the poly to the mudsills.)

5. An additional issue is the presence of air conditioning ducts in your damp crawlspace. Even if you eliminate all the

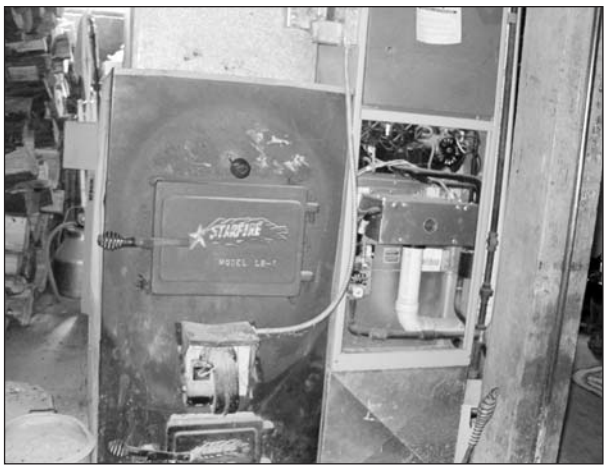
STEVE MADDELL

An unusual amount of rain, as well as thin brick veneer walls, resulted in this crawlspace being flooded.

standing water, the high humidity combined with cold A/C duct surfaces will lead to lots of condensation on your ducts and therefore to a very wet crawlspace. To minimize this, you need to have the outer black jacket of the duct insulation sealed to the duct at each end (you need to stop your moist crawlspace air from touching the cold inner liner of the duct). This should be done using mastic (or metal foil tape—but not normal cloth duct tape) and drawbands. If any metal duct collars are exposed in the crawlspace where the flexible duct ends, then these need to be insulated also. I think you should use a spray-on closed-cell foam air seal product for this.

6. Your builder should do all this—immediately!

What Were They Thinking?



JAMES PERRY

I am sending this picture and a diagram of a furnace our evaluator found in a client's home. It is a downflow 92% direct-vent furnace connected to a wood furnace, with a large hole and crack in the wood furnace. It is one of the stranger furnaces we have seen here in northeast Iowa.

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