

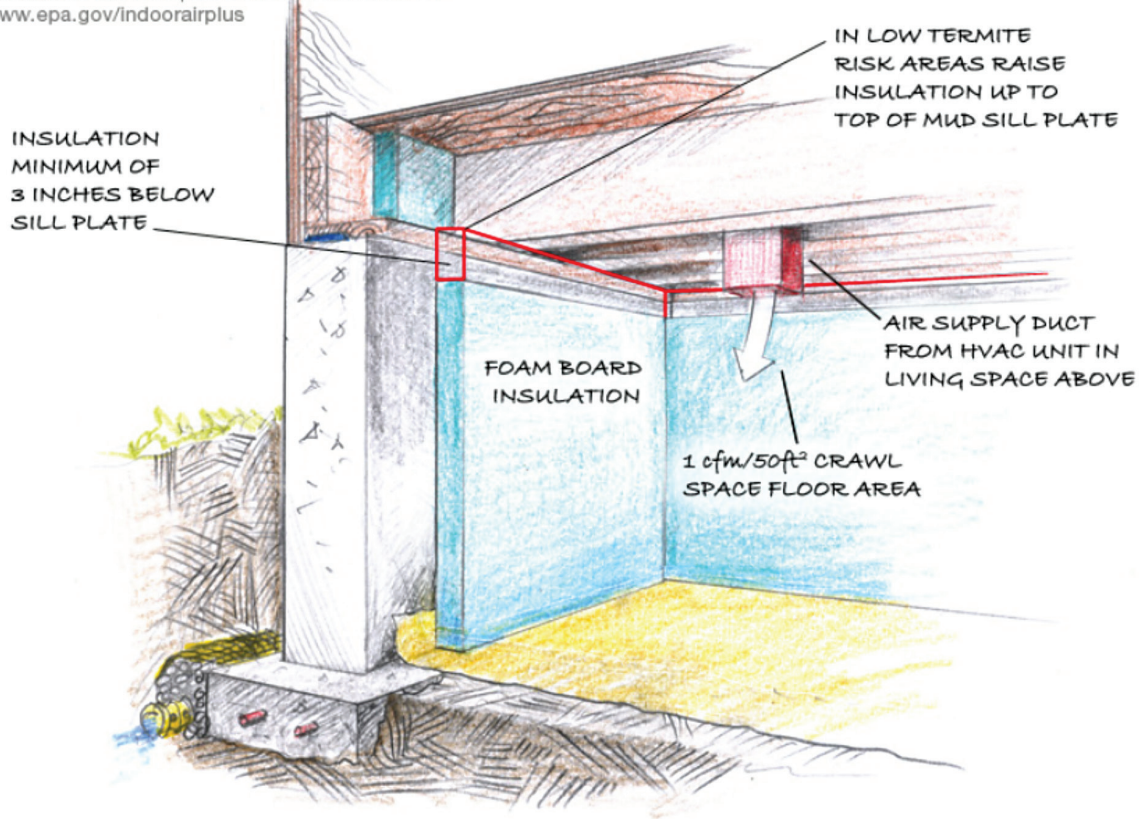
TIM,
we will be building a new home this year but have a concern about crawl spaces. Our previous home had some crawl space issues that led to mold growth and always smelled musty. Our HVAC technician said all of that musty contaminated air was being sucked into our HVAC unit and distributed throughout our home. What can we do to avoid these conditions and have healthy indoor air in our next home?

The crawl space is not an area where many homeowners dare to venture. It is often dark, damp and cold—uninviting, to say the least. Unfortunately, this seldom-visited underbelly of the home can reduce the indoor air quality of the living areas above, causing moisture-related problems to the structure of the home and increase utility costs.

Crawls spaces may appear to serve little purpose, but in truth they have a few very important functions. Essentially, a crawl space is used in place of a basement to save cost. The crawl space elevates the home off the ground (as opposed to a slab), which is a necessity given wet

damp soil conditions. Additionally, in our region the crawl space can smoothly join uneven terrain to the level home platform making irregular terrain conditions seemingly disappear. The crawl space also houses the plumbing and ductwork of a home and grants access to repair or service those systems. They may not be transformable into a game room or den, but clearly the crawl space adds significant benefit to the home.

Unfortunately, a poorly built crawl space can also be quietly undermining the integrity of the home and life within it. The crawl space—like many unfinished basements—tends to be quite humid.



CONDITIONED AIR SUPPLY TO SEALED CRAWL SPACE

The excessive moisture in a crawl space poses a number of threats to the home. It provides an environment for mold to thrive—mold that can make its way up into the rest of the home. The moisture can also attract wood-boring insects that destroy the wood sub-structure. The presence of insects may also draw rodents and other pests into the crawl space.

In addition, the crawl space can also significantly increase energy costs. Many crawl spaces have built-in ventilation to allow airflow—a code-enforced de-

sign originally intended to mitigate the moisture maladies mentioned above. However, the latest studies on crawl space ventilation indicate that, in climates like ours, ventilation is actually contributing to moisture and humidity in the crawl space. Furthermore, ventilation allows winter cold to have free passage under the home, which can result in higher heating bills.

Fortunately, many advances have been made in the science of crawl space design and construction in recent years. When

properly executed, these new designs produce safe, dry, healthy, durable crawl space conditions. In addition to creating these healthy conditions, the new closed/conditioned crawl spaces are more energy efficient than their out dated brethren.

Finding a well-trained building professional is critical to the success of any building project. Fortunately, with a professional builder well-versed in building science at your side, you and your family can enjoy a safe, healthy, durable home for many years to come. **BG**



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