

# Inspections

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## Considering under-slab duct repairs

**By Mike Charles  
CEO, Allergy Control**

What kind of problems can occur in our under slab air ducts? This can depend on how old your home is and what type of air ducts were installed.

Over the years, different materials were used under the concrete slabs for heating and air duct systems.

Some used cardboard tubing with concrete poured & packed around the tubing, this is very rare and I have only seen one case like this. Prefab concrete known as Transite was extremely popular in the 1950s-1960s.

Some systems used all metal which I think is the worst, but from the mid-70s to today PVC seems to be the best.

In all of these types of HVAC duct products we can find failure. Seams joints can separate during structural settlement.

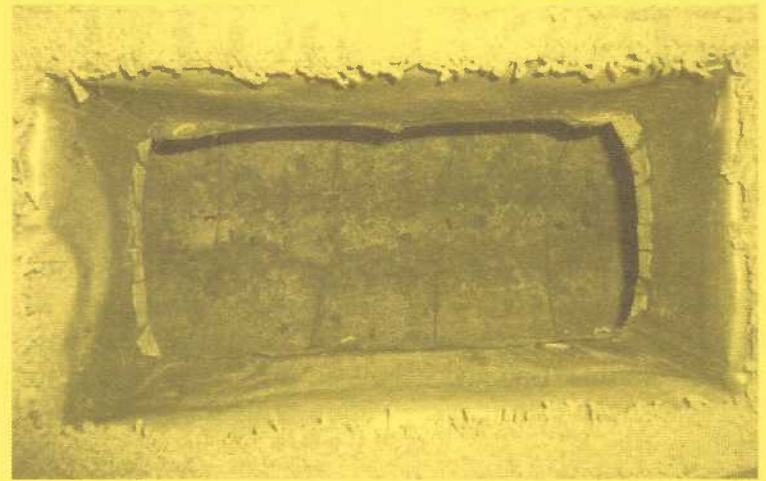
Metal components such as elbows, joints and tees can rust and leak in foundation fill sand.

That's because before the concrete pad is poured, the foundation is filled with sand around all of the sub flooring components, plumbing lines, sewer lines, air ducts, and electric lines sometimes. It can then enter the duct system through the house.

Allergy Control can insert an application hose using a camera to guide this device and coat the inside of these duct systems to seal off sand intrusion. The product is very thick and dries very hard but is elastic to create a seal between the sand and the failed duct part.

This product was originally designed to seal in mold and asbestos fibers inside air duct systems in older buildings and still is. But it also works well in most cases where sand intrusion is a problem.

Another issue that can arise is water intrusion. It sometimes finds a way into air ducts due to all of the connections made during the assembly procedure. Air ducts were never intended to be water tight like sewer lines.



The best way to eliminate water from your air duct system is manage your landscaping, make sure the grade around your home slopes away from your home, under slab water lines that have a very slow leak can build up water over time, and monitor your flower beds and sprinkler systems.

Sometimes French Drains or surface drains to move water away from your home are required. A good rule is not to allow ponding closer to the foundation than the height of your exterior walls (keep soil slope away from home for at least 10 feet where possible).

Water in ducts can lead to other problems; rust, mold, odors and bacteria buildup that can lead to health problems. If you have had water in your duct system it would be wise to have someone scope with a video camera to see if mold or water damage has occurred.

We would highly recommend using a company that can supply you a DVD copy of this inspection for future reference; this can become handy to be able to show several companies to get various quotes & opinions for any needed repairs.

*If you have any Under Slab Air Duct questions please feel free to contact us at Allergy Control, 405/641-4296, in business since 2006.*

