TROUBLESHOOTING YOUR RADON MITIGATION SYSTEM

Sump Test Point

This is the typical two piece sump cover that is a standard with Radon Systems. Although this cover is more expensive, it has a visual window which is required by Ohio Radon Mitigation Standard effective January 1, 2013. In addition, a pipe with a cap is installed which allows for periodic testing of the sump pump by manually tripping the float or adding water to the sump basin to test the sump operation. Radon Systems is the only mitigation contractor currently using this sump closure system and is a benefit to the homeowner. The cover is sealed with a clear silicone caulk and allows for easy removal and resealing of the cover by the homeowner or plumber. Should it be necessary to service or replace the sump pump, it can be easily removed by either the homeowner or a plumber without the risk of voiding the radon system warranty. Simply reseal the cover with a silicone sealant (any color) and the pressure should return to where it was before the cover was removed. Water pulsating in the sump crock means that the sump pump is not working. Maybe the sump pump has burned out or the power supply has been interrupted not allowing the sump pump to function. Upon completion of our radon mitigation system, our technicians thoroughly check the sump pump for operation and the sump is plugged in. Our completion check list requires a homeowner's signature demonstrating the sump is operating correctly and plugged into the outlet.

If there is currently a pedestal sump pump in the sump pit or a water back- up system, it might be necessary to use a hi-rise cover. A rubber coupling is installed between the radon vent pipe and sump cover to facilitate easy removal of the radon vent pipe.

The U-tube manometer is an indicator of the static pressure in the radon vent pipe only. Although some unknowing people may say that it is also measuring radon, there is no correlation between the static pressure and the radon level. Home inspectors routinely say, " there is no enough pressure on the U-tube monometer so call the installer for service," unless that Home Inspector is also a licensed Radon Specialist, and familiar with the radon mitigation system design, he is unqualified to make this statement. All systems have different indicated pressure and may not be possible to increase the static pressure if the radon mitigation system is moving extreme amounts of air. Excessive air could be caused by, size or number crawl spaces, air leaks that cannot be sealed, long pipe runs with fittings, drain tile draining to daylight or downspouting connected to drain tile, the clear tube from the U-tube manometer going into the radon vent pipe has been crimped, bent or removed. Always do a radon test regardless of the pressure indicated.

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Electric Switch

The system on/off switch is located beside the fan in an exterior system. The radon fan should be running at all times and turning it off will effect the fan warrant. The switch is for servicing the radon fan and mitigation system. The switch can be accidentally turned off. Many realtors or homeowner turn off the radon fan during an open house to eliminate noise associated with the radon fan. Many times, the fan is not turned back on. This practice is discouraged and will indicate no pressure on the U-tube manometer. In addition to the radon fan switch, the circuit breaker in the electric panel could have been tripped turning off the radon fan. Since the amperage in a radon fan is so low, normally a dedicated circuit is not required unless the radon fan If the rated electricity requirements of a radon mitigation system exceeds 50% of the circuit capacity into which it will be connected, or if the total connected load on the circuit (including the radon fan) exceeds 80% of the circuit's rated capacity, a separate, dedicated circuit shall be installed to power the radon fan. Radon Systems is not a licensed electrician, therefore all radon mitigation systems installed by Radon Systems is wire by a State Licensed Electrician to code.

Green Check Valve

If water is noticed on the top of the radon sump cover, it could possible be coming from the check valve. Many check valves already leak and drip into the sump crock. Servicing the check valve is not a part of the radon mitigation scope of work therefore, is not the responsibility of Radon Systems to check, service or replace the check valve due to liability concerns. If a check valve is leaking, Radon Systems can provide a new check valve for an additional cost agreed to by the homeowner before installation.

The radon fan is a mechanical device that is designed to operate continuously. Like most things mechanical, it is going to make some noise. The radon fans are very quiet however the air moving through the radon system is very turbulant therefore, it is normal to a hear high velocity air noise moving through the radon vent pipe. Also, depending on the amount of air moved and the fan model, the fan could vibrate against the siding or other structural components of the building and transfer to the interior. To stop the vibration, it is common to place rubber backer-rod between the radon vent pipe and the house providing a cushion from the noise. If you should hear a grinding noise in the radon fan, that means the bearings within the fan are drying up. Although the fan is noisy, it will still operate normally. The grinding noise will get progressively louder until it becomes necessary to replace the radon fan. All radon fans from all fan manufactures come with a five year guarantee from the installation date. Typically a radon fan will last from 6-10 years.

This is not a normal condition. When outside temperatures fall well below freezing condensation can become so extreme that water can drip from a loose fitting or the rubber coupling that connects the radon fan to the radon vent pipe. The movement of warmer air through the radon vent pipe should keep this from happening.