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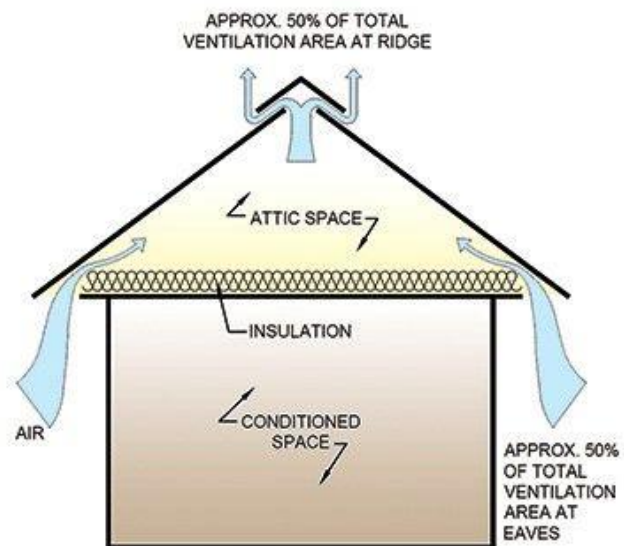
Air Flow Will Prevent Mould Growth

Let's talk about attic air flow. Airflow helps prevent mould. So how do you achieve airflow in your home and in your attic? The components include ridge vents, soffits, korovents (baffles/insulation stops) as well as the humidistat, the bathroom fan, the fan exhaust connections in the attic, and the roof stem vents.

These complete systems – if correct – will ensure your home is expelling warm moist air and your attic is breathing. This reduces humidity and in turn, prevents mould growth. Gable vents in attics, and other attic fans such as turbine vents (whirlygigs/whirlybirds), and the new popular solar-powered vents are unnecessary if the system is working correctly.

The attic is designed to function based on the correct components. Air movement in the attic needs to work without the assistance of an additional air removal system as listed above. Wind (air) enters through the korovents at the soffits and hits the sidewalls. The air is directed up the sheathing towards the peak of the roof. This pulls air from the middle of the attic, and it draws it up the sheathing. This is the normal air flow of the attic.

When gable vents in attics, and other attic fans such as turbine vents, and solar-powered vents are used and/or counted on, it pulls the air to the device and increases airflow in only that area. Fans and whirlybirds are not part of the correct building code. Therefore, in our professional opinion, adding this type of ventilation to your attic will disrupt the natural airflow system.



Ridge Vents

Attics with the very best airflow have ridge vents. A ridge vent runs along the top of the roof. This type of vent allows hot air out of the attic constantly. If your attic has a ridge vent, there is less reason to have additional, supplemental vents and fans installed.

The Soffits & Korovents (insulation stops/baffles)

Soffit openings at the sides of your attic are designed to work with natural air flow – letting air flow in and enter the attic. They are not designed for bathroom fan exhausts to expel out of. If your bathroom fan connections are running to your soffits, the airflow is taking the moist air back into the attic with it. Korovents are installed at the soffits in the attic to prevent insulation from blocking the natural airflow. Korovents allow the air to rise past the insulation and enter the attic and up the sheathing.

The Humidistat

A humidistat will automatically turn on the main bathroom fan when the humidity is high in your home and will run until it lowers. Rental units can be installed with a locked cover so they cannot be adjusted.

The Bathroom Fan

Today's new fans pull air from the entire home (not just the bathroom). We install high cfm fans that are extremely quiet. We can also install a fan with a built-in humidistat.

Fan Exhaust Connections (in the attic)

This is an essential part of the system. This part of the system has often been installed wrongly. Incorrectly installed fan exhausts allow moist air to vent into your attic. This is almost always the cause of mould growth in attics. The fan exhaust venting running from your bathroom fan in your attic should be running in the shortest path possible from the fan to the roof. This includes dryer and stove overhead fans if they are coming through the attic. The venting should be rigid metal – not slinky plastic. Ideally, the rigid metal pipe and the roof stem vent hole should be 6" although 4" will work. It needs to be insulated to ensure that no heat enters the attic area.

Roof Stem Vents

The fan exhaust connections, connect to a roof stem vent on your roof and expel moist air out of the home and attic. Fan exhaust connections should not be venting out of your soffits.

Insulation Levels

Although not part of the above systems, low insulation will contribute to mould growth in the attic and in the home on the ceilings. This happens particularly in the winter due to what is called a 'stacking effect'. The stacking effect is where the heat from the home transfers through to the ceiling and into the attic. A good amount of insulation in the attic absorbs the heat and prevents it from entering the attic. In turn, low insulation levels allow this hot air into the attic. The attic warms up the sheeting and creates condensation which provides the perfect environment for mould growth.

Remember that each time someone enters your attic, the insulation is compromised, and the R-value is reduced. Our technicians are aware of this and are extremely careful to not disrupt the insulation when working in an attic. If they are not topping up the insulation – they ensure the insulation is evenly spread and reset when finishing their work.

Our Crew's Credentials

- 17 years combined mould assessment, remediation & prevention experience
- 17 years combined experience assessing, repairing and upgrading attic & crawlspace ventilation systems
- Applied Microbial Remediation Technician certificate(s)
- Mold Recognition, Assessment & Control certificate
- Strategies for Mould Investigation & Sampling certificate(s)
- Fungal Data Interpretation certificate(s)
- 11 years combined insulation experience
- H.P.C.N. Insulation training qualification certificate(s)
- Water Damage Restoration certificate(s)
- Applied Structural Drying certificate
- Restorative Drying 201 certificate
- Level I Thermography certificate
- Odour Control Technician certificate
- Health & Safety Technician certificate