

## The Importance of Attic Ventilation

Often one of the most overlooked aspects to a home, is a properly ventilated attic space. Homeowners may strictly think of their attic space as an extra area to store overflow and/or unwanted household items. While, in fact the attic serves a much greater purpose. The attic is the primary factor in whether or not the roof will ventilate properly, and is used to regulate temperatures in all four seasons.

Attic ventilation depends on three equally important elements. Proper intake at the eaves, proper exhaust near the peak of the roof, and adequate attic insulation. All of these elements are equally important due to the fact that in order to achieve proper attic ventilation, you must have a **BALANCED SYSTEM** of intake and exhaust. Without a balanced system, a fury of problems can occur within the home.

In the summer, the hot sun beating down on the roof, without a continuous flow of fresh air coming in at the eaves, will result in the attic space drastically rising in temperature. This heat being trapped inside the attic space can make its way downward into the living space, causing uncomfortable living conditions. Air conditioning units will be forced to work harder than normal just to achieve the same level of comfort in the house, causing energy bills to rise. With a natural flow of fresh air coming in at the eaves, it will prevent heat in the attic from compounding on itself and at the same time move the hot air toward the exhaust at the peak, and therefore out of the attic space. This results in a more comfortable living environment and less expensive energy bills.

The Winter months are just as important as the Summer months for ensuring that the attic space is properly ventilated. Inadequate ventilation in the winter can result in the forming of ice dams. Ice dams occur when snow and ice melt at the top of the roof from attic heat loss. This melting of snow and ice will travel down the roof line and refreeze at the eaveline and begin to build up, forming a damn. When the frozen damn begins to melt, water can find its way under the shingles, down the roof deck, and makes its way through the walls or ceiling of the interior of the home. Proper ventilation allows for the necessary cold air coming from the eaves to mix with the hot air inside of the attic, that results from heating the house and all of the house hold daily duties, which slows down the snow melting and helps reduce ice dams from forming.

But how does a homeowner ensure that they have proper attic ventilation? This question can be an easy one to answer. Intake, Exhaust, and Insulation are the key factors to consider. Common forms of exhaust are Roof Vents, Power Vents, Turbine Vents, and Ridge Vents. It is important that a homeowner have only one form of exhaust vent on their home near the peak. Mixing different types of exhaust vents on the roof can cause a negative effect, as they begin to work against each other. A contractor must decide which type of exhaust vent works best for the home, and have it evenly spread throughout on their roof. Equally as important and exhaust vents are intake vents. A balanced system of attic ventilation depends on intake. You can **NEVER** have enough intake for your attic space. The more intake of natural fresh air the better. Common forms of intake are Soffit Vent and Edge Vent. Continuous intake is the ideal form of intake for the attic space. Every attic cavity should be constantly filled with natural fresh outside air through its intake to ensure that the attic temperature is kept at a reasonable temperature.

A good rule of thumb is that the attic temperature should be no more than 15-20 degrees different than the outside temperature. Any more than 20 degrees difference from the outside is a sign of inadequate attic ventilation. If you have any questions regarding your attic ventilation, there is no better expert to call than the experts at Lockhart Roofing.

