

Poor Attic Ventilation Often The Cause of Roof Problems

Building experts report that a prime cause behind premature failure of residential roofs is lack of proper ventilation in the attic area.

Usually this type of ventilation is provided through louvered vent openings in the gabled area of the roof, or through a combination of eave and ridge vents.

Moisture Problems

Excessive moisture accumulation due to inadequate attic ventilation is often the culprit behind roof deterioration and attic mold growth. If moisture settles in the attic before air movement can guide that water vapor to the outside, condensation can occur on the underside of a roof deck.

As the condensed water vapor drips off the underside of the roof deck, it can soak insulation, making it a potential future problem for system performance. Left unchecked, this can lead to the rotting and warping of wood in the roof cavity, as well as peeling paint, cracking

plaster, and unhealthy air quality in the home's interior.

A common cause of moisture accumulation in the attic space also occurs during home remodeling. Ill-fitting or improperly installed kitchen and bathroom exhaust pipes and fixtures can allow moisture to leak directly into the roof cavity, rather than venting through the attic to the outdoors.

Homeowners may unknowingly hamper ventilation by closing gable vents during the winter months or placing items in the attic that block the flow of air through the vents.

Because venting is needed during both warm and cold weather seasons, be sure to keep every attic vent open and unobstructed at all times.

Heat Problems

Inadequate ventilation can also cause heat-related problems. In summer months, or in hot sunny climates, inadequate airflow in the attic cavity can cause

excessive heat build-up, leading the roof decking to quickly reach extremely high temperatures.

Within a few hours this heat buildup will not only permeate the attic space, but will penetrate into the home's living spaces.

In addition to decreased cooling efficiency and increased utility bills, sustained heat build-up can accelerate the aging of roof shingles.

What to Do

Homeowners who have noticed signs of inadequate attic ventilation should probably contact a professional roofing or ventilation contractor to evaluate the adequacy of their attic ventilation.

For additional information on proper roof ventilation, download a copy of ARMA Technical Bulletin 209 (Ventilation and Moisture Control for Residential Roofing, Free) from the ARMA Website at www.asphaltroofing.org.