

HOMEOWNER'S INSURANCE ALERT!



Attic Airflow is a Roof's "Insurance Policy"

Covering Attic Ventilation Upgrades Protects the Client's Property

Proper attic ventilation helps a residential roof meet its life expectancy because it helps to fight summertime heat buildup, wintertime moisture buildup and ice dams in snow regions. Additionally, the full terms of the shingle warranty are tied to proper attic ventilation and building code clearly specifies proper attic ventilation. And yet, during our best practices in residential attic ventilation seminars for roofing professionals across North America increasingly we're hearing, *"Homeowner's Insurance refuses to pay the cost for the attic ventilation and so the homeowner is asking us to skip it; which means the brand-new roof will not have proper attic ventilation."*

That's a potentially costly domino effect insurance companies can put an end to by including attic ventilation with every replacement roof claim.

The Roof is at Risk

Attic ventilation is a balanced system of intake vents (placed in the eaves/soffit or low on the roof) and exhaust vents (placed at or near the roof peak). There's a reason balanced attic ventilation is specified in the International Residential Building Code – it helps the roof's performance and longevity. Following is an extract from the current IRC, which is reviewed for updates and released every 3 years:



SECTION R806 ROOF VENTILATION

R806.1 Ventilation required.

Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters shall have cross ventilation for each separate space by ventilating openings protected against the entrance of rain or snow....

R806.2 Minimum vent area.

The minimum net free ventilating area shall be $\frac{1}{150}$ of the area of the vented space.

Exception: The minimum net free ventilation area shall be $\frac{1}{300}$ of the vented space provided both of the following conditions are met:

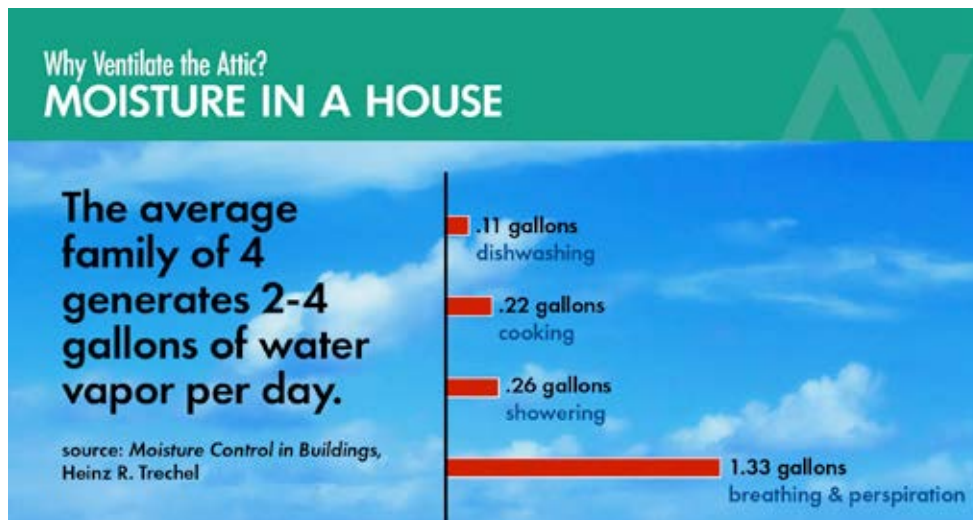
1. In Climate Zones 6, 7 and 8, a Class I or II vapor retarder is installed on the warm-in-winter side of the ceiling.
2. Not less than 40 percent and not more than 50 percent of the required ventilating area is provided by ventilators located in the upper portion of the attic or rafter space. Upper ventilators shall be located not more than 3 feet (914 mm) below the ridge or highest point of the space, measured vertically. The balance of the required ventilation provided shall be located in the bottom one-third of the *attic* space. Where the location of wall or roof framing members conflicts with the installation of upper ventilators, installation more than 3 feet (914 mm) below the ridge or highest point of the space shall be permitted.

In our poll of residential roofing contractors across North America, 77% of the homes today have improper attic ventilation, including not enough or incorrect ventilation. Quality-conscious roofing contractors will likely bring this up during the attic and roof inspection when a roof has been affected by a storm and an insurance claim is in progress. Not including the costs to either add proper attic ventilation for the new roof (if proper attic ventilation is not already in place) or upgrade the existing attic ventilation to meet current code puts the roof at risk with Mother Nature daily.

In the warmer months, heat is the concern. As the sun bakes on the roof, the heat radiates into the attic. If it's not properly vented out of the attic, it transfers into the living space. That increases the burden on the air conditioning system, any indoor cooling fans and the refrigerator. That increases utility bills. Meanwhile, up on the roof, the brand-new shingles are exposed to elevated temperatures that could reduce their service life. "Shingles that are installed on unvented roof assemblies operate at slightly higher temperatures, roughly 2-3 degrees Fahrenheit warmer than shingles on vented assemblies. This can reduce their service life by roughly 10 percent," said Joseph Lstiburek of Building Science Corporation in a *Fine Homebuilding* article titled "A Crash Course in Roof Venting."

In the colder months, moisture is the concern. The average family of four generates 2-4 gallons of water vapor daily through cooking, cleaning, showering, breathing, perspiration, indoor plants, hanging wet clothes indoors and storing firewood inside. Here's a compelling graph highlighting the quantity of moisture that we show audiences during our seminars (see next page). During the winter, that moisture seeks a cooler, dryer place – the attic. If it's not vented properly out of the attic it could condense as frost or water droplets and drip onto the attic insulation (reducing its effectiveness). In time mold, mildew and poor indoor air quality can result.

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In cold climates, attic ventilation is also part of a multi-step fight against ice dams (along with attic insulation and water-protective underlayment underneath shingles). When snow accumulates on the roof it's important for it to melt as evenly as possible. That can happen if the roof deck temperature is as even as possible. And that only happens if the attic has a balanced flow of air from low (eaves/soffits) to high (at or near the peak) flushing out any heat buildup from inside the attic. Otherwise, the roof can develop hot and cold spots. That causes the snow to melt where it's warmest (high on the roof) and then potentially refreeze when it reaches colder spots (low on the roof). Any additional snow melt that runs down the roof into the refrozen area hits the "ice dam" and can back up under the shingles. From there the water can cause problems to the roof deck, the attic and the interior of the house.

The Shingle Warranty is at Risk

The *full terms* of the warranty for the new roof are tied directly to proper, balanced attic ventilation. It's spelled out in the shingle warranty. Proper, balanced attic ventilation includes intake vents (in the soffit/eaves or low on the roof) and exhaust vents (at or near the peak of the roof). The official representing organization of asphalt shingle manufacturers, ARMA, highlights this in its technical bulletin for residential roofing: the roof needs balanced attic ventilation. Therefore, the brand-new roof being purchased and installed for thousands of dollars is incomplete without proper, balanced attic ventilation.

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Insurance Companies Could Save Money, Too!

Paying for proper attic ventilation during an insurance claim could save the insurance companies money in the future. That's how **Sabrina Johnson**, president, **KDCO Home Improvement Inc.**, Akron, OH, sees it.

"Proper attic ventilation will decrease the expedited dry out of the shingles. Therefore, during hail and wind storms as the age of the roof increases, the roof will be much more pliable and able to sustain hail without fracturing the mating," says Johnson. "This will help the insurance companies keep the costs of buying new roofs due to prematurely dried roofs to a minimum."

Johnson also says balanced attic ventilation can help slow the spread of a house fire because the airflow reduces the heat inside the attic that can exasperate a fire. "This not only helps the homeowner possibly make a quicker exit, but it also will slow the fire," says Johnson. "Insurance companies may be able to reduce the cost of the claim because less damage was ignited and spread due to this proper attic ventilation."

What Should be Covered?

During the lively Q & A portion of our best practices in residential attic ventilation seminars, roofing contractors voice their frustration with the following responses from insurance companies.

- ***“We’ll only cover the cost for the attic ventilation that was already in place at the time of the damage.”*** If the vents in place were insufficient for the size of the attic on the old roof, they’ll remain insufficient for the new roof. Why continue the problematic cycle? Some homeowners are protected from this mistake with the wording of their insurance policy that includes bringing the roof up to current code standards. But why would insurance companies turn their eyes the other way for all other homeowner policy holders, especially if the roofing contractor has explained that the new roof is lacking balanced attic ventilation? Why would insurance companies knowingly pay for a subpar roof? A new roof needs intake vents and exhaust vents based on its attic square footage (length x width, floor of the attic). There are online calculating tools to help with determining the correct quantity of vents needed.
- ***“Reuse the existing attic vents from the old roof.”*** Managing costs is certainly important and no one wants to needlessly pay for anything. But saving dollars by salvaging old attic vents for a new roof does not add up. First, the manufacturer of the attic ventilation does not want its products installed, removed and reinstalled. It’s a recipe for a future leak; not to mention damage during the process. Second, ARMA states, “When reroofing, replace ventilation devices within the field of the roof (e.g., static vents, ridge vents),” in its technical bulletin *Attic Ventilation Best Practices for Steep Slope Asphalt Shingle Roof Systems*. Bottom line: new roof = new vents.

A replacement roof costs thousands of dollars, but will be subpar without proper attic ventilation – which is only about 1-3% of the total roof cost.

Insurance is Supposed to Protect

Homeowners purchase insurance to protect their investment. Insurance companies are in business to provide that protection. A new roof knowingly paid for and installed without proper, balanced attic ventilation is an investment at risk for the homeowner and property protection that does not provide complete peace of mind. The insurance industry should cover the cost of attic ventilation when paying for storm-damaged roofs knowingly lacking balanced attic ventilation.

“In the end, roofing contractors and insurance companies really have the same objective – satisfied customers and clients with the best possible products and services for the right price,” says **Bryan Epley**, senior director of business development and sales, **Gen 3 Roofing**, Centennial, CO.”

5 Reasons Insurance Should Cover Attic Ventilation Costs

1. It helps the roof meet its life expectancy.
2. The full terms of the shingle warranty are tied to proper attic ventilation.
3. Building code specifies proper attic ventilation.
4. The quantity of vents already in place is glaringly insufficient.
5. A replacement roof costs thousands of dollars, but will be subpar without proper attic ventilation – which is only about 1-3% of the total roof cost.

Paul Scelsi is marketing communications manager at Air Vent Inc., and leader of its *Attic Ventilation: Ask the Expert™* seminars. He’s also chairman of the Asphalt Roofing Manufacturers Association Ventilation Task Force. For more information, visit airvent.com.



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AVI033 – 12/19



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