

# CONFUSION: POWER ATTIC VENTILATORS ARE NOT RECOMMENDED FOR WINTER USE. WHY?

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The main reason for not recommending power vents in the attic is that the attic is usually not well sealed, and the power vent, in sucking air out of the attic, creates a negative pressure in the attic. This negative pressure sucks warm air and humidity through the ceiling leaks into the attic, creating more moisture than ever before. The fan may not be able to vent off this larger quantity of frost, and may create a bigger problem than it set out to solve. (Power vents work in most parts of the United States because the moisture doesn't turn to frost, or at least the frost doesn't stay frozen very long.) Another reason for not using a system with a motor either in the attic or in the house (with an exhaust duct going through the attic) is that this exhaust duct is under considerable positive pressure from the inside and will blow moisture through any leaking points into the attic. Literature from the Prairie provinces discourages people from putting anything through the ceiling into the attic: the less holes, the less leaks. So, if your attic is extremely well sealed you could safely use a power attic ventilator, and it would effectively dry out your attic. But if your attic is that well sealed in the first place, you probably don't have a big enough humidity problem to warrant anything more than ordinary gravity ventilation. If you already have a power vent installed, you should turn it off when it is below freezing in the attic. A humidistat control, popular in the United States, is useless as an attic with a moisture problem in a northern climate is almost always at 80% relative humidity because it is so cold. A more valid device for our climate would be a zero degree (Celsius of course) shut off switch. The fan could then operate whenever it was warm enough to do some good and would shut itself off as soon as freezing attic temperatures threatened to start collecting frost.

**Keywords:**

Moisture, Attic, Ventilation, Roof