



# AIRVENT UNIVERSITY LESSON PLAN

## June 2026 Lesson Plan

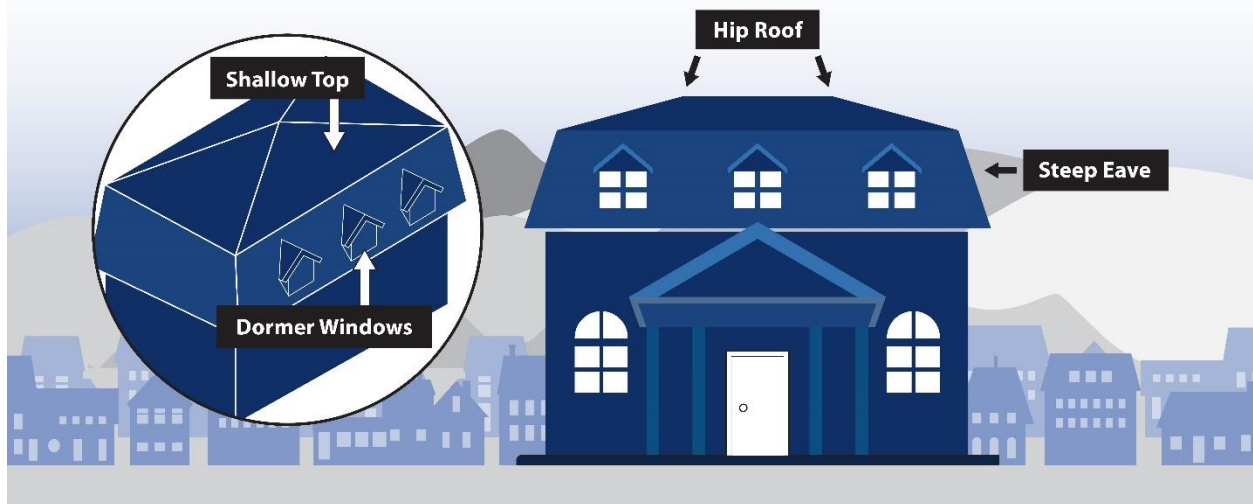
### Attic Ventilation for a Mansard Roof

In our survey of tricky roofs to ventilate, mansards made the list. A mansard roof is a four-sided gambrel-style (see previous Lesson Plans) hip roof that has two slopes on each of its sides. The lower slope often has dormer windows and is steeper than the upper slope. [Here are some tips we collected from roofing contractors who are addressing the attic ventilation for a mansard roof.](#)



## VENTING COMPLEX ROOFS

### Attic Ventilation for a Mansard Roof



- When dormers on the mansard roof are close together, contractors explained it's nearly impossible to obtain enough intake ventilation because there's not enough horizontal linear feet available on the roof. Contractors told us they double-up the intake wherever it's possible by installing intake vents in the overhang (such as soffit vents or rectangular undereave vents) and then also on the roof top (such as our 4-foot stick intake vent The Edge Vent). It's OK to combine different types of intake vents if they are kept low on the roof in the same wind pressure zone (that's 2 to 3 feet from the edge of the roof).
- Another point to keep in mind: If the total amount of intake ventilation is going to be less than ideal, make sure the total amount of exhaust ventilation does not exceed the intake. To perform properly, attic ventilation needs to be balanced with an equal amount of intake and an equal amount of exhaust.
- One of the big challenges with a mansard roof is at the point where the roof pitch changes from the steep eave area to the shallow top. This "elbow" must be open so that there is a path for the air to move from the intake vents under the steep slope through the break into the upper shallow slope.
- In situations where there isn't a path through the "elbow," can roof-top intake vents be installed at the "elbow" like our Edge Vent? Make sure it can be installed so the airflow openings on the vent are horizontal, and the vent can be properly installed to prevent weather intrusion.
- Here's another idea to consider: Are gable vents an option? If the roof line has gables or if the roof has gable vents designed into the peak of the roof – similar to dormers except in line with the ridge – consider using gable vents. It may be possible to vent the upper shallow slope portion through the gable vents and use the undereave vents to ventilate the smaller steep slope areas.

To test your knowledge about what you learned in the June 2026 Lesson Plan please take our short 5-question Pop Quiz.

