

Hip Ridge® Vent Passes Miami-Dade County's Wind-Driven Rain Test



The Hip Ridge Vent **passed** the Miami-Dade County wind-driven rain test in **winds up to 110 MPH** – allowing *insignificant water infiltration*. By passing this stringent water leakage test, the Hip Ridge Vent is the only diagonally installed ridge vent on the market tested as it will be installed on a hip roof. This test confirms that the Hip Ridge Vent provides satisfactory weather protection as an exhaust vent on today's increasingly popular cut-up roofs with limited or no horizontal ridges.

TEST BACKGROUND & SET-UP

The test was conducted by **Architectural Testing** in accordance with TAS 100(A)-95 – a specific Miami-Dade County procedure to measure wind-driven rain resistance. The test allows a limited amount of water infiltration through the vent, and is accepted in the roofing industry as the standard for “pass/fail” in evaluating an attic vent's performance in protecting a home from water infiltration during a severe rain storm.

- Wind-driven rain hit Hip Ridge Vent at 35, 70, 90 and 110 MPH using a gas engine-powered 7-foot diameter wind generator with calibrated water spray system that produced 4.3 gallons per minute.
- The vent was tested with the wind coming from three directions: at a 45° angle, parallel to the vent (0°), and perpendicular to the vent (90°).
- Hip Ridge Vent was tested on both a **3/12 roof pitch** and a **12/12 roof pitch**.
- **No caulking was used nor needed** under the external baffle of the vent where it meets the architectural shingles.

TEST RESULTS

The Hip Ridge Vent passed the test across the board: on two different roof pitches, at all wind speeds, while facing over 1,200 gallons of wind-driven rain from all directions.

MIAMI-DADE COUNTY
APPROVED

HIP RIDGE VENT WIND-DRIVEN RAIN TEST RESULTS

Wind speed from 35 to 110 MPH

	3/12 roof pitch	12/12 roof pitch
Wind at 45° angle to vent	PASS	PASS
Wind parallel to vent	PASS	PASS
Wind perpendicular to vent	PASS	PASS

Bottom Line: Passed

The Hip Ridge Vent withstood over 1,200 gallons of water in wind speeds up to 110 MPH to pass the Miami-Dade County wind-driven rain test.¹



*A wind generator with calibrated water spray system was used to subject Hip Ridge Vent to over 1,200 gallons of wind-driven rain at 35, 70, 90 and 110 MPH. The vent was tested on both a 3/12 and a 12/12 roof pitch. **Hip Ridge Vent passed all the tests.***

¹ Visit www.airvent.com to read the complete third-party test report. You can also view a short video on our web or YouTube in which the Hip Ridge Vent is undergoing the Miami-Dade County testing.

Hip Ridge[®] vent SHINGLE-OVER HIP VENT

INSTALLATION INSTRUCTIONS: PAY SPECIAL ATTENTION TO SLOT CUTS

The successful results of this Miami-Dade County wind-driven rain test highlight the importance of following Air Vent's installation instructions that accompany the product and can also be found online. Please pay special attention to the slot cut requirements which are unlike the slot cuts for horizontally installed ridge vents. For your convenience the Hip Ridge Vent slot cut guidelines are included below.

CAUTION: The method of cutting hip ridge slots is significantly different than cutting peak ridge slots.

Step 1: Starting at either the midpoint of the roof or the calculated start of the necessary vent run, mark 8" up for the beginning of the lowermost (bottom) slot.

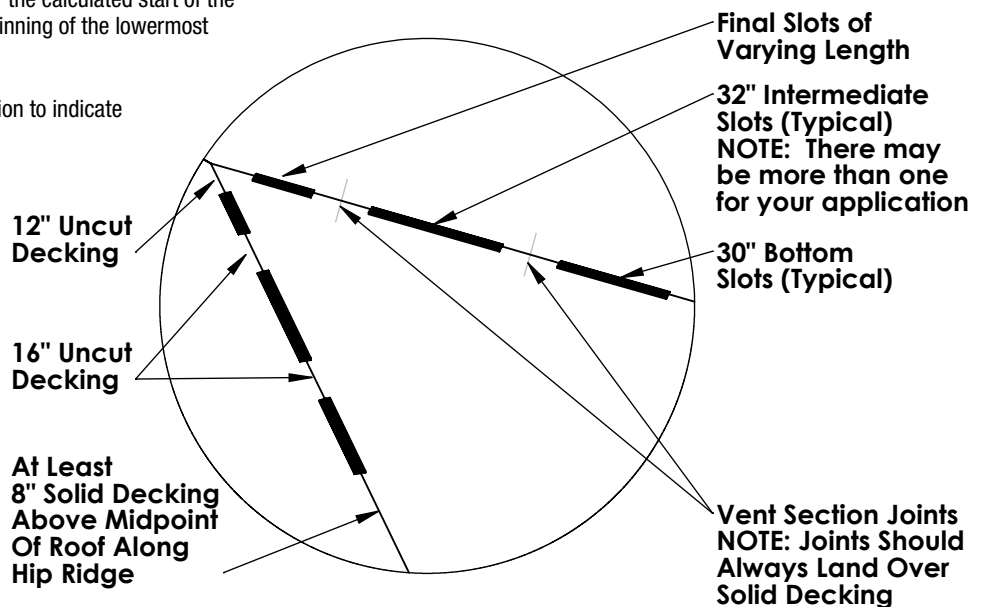
Step 2: Mark 12" from the peak/hip ridge intersection to indicate where slots will stop.

Step 3: Cut the first slot 30" long, beginning at the mark made in **Step 1**.

Step 4: From the end of the 30" long slot made in **Step 3**, mark the beginning of the first 32" long intermediate slot, leaving 16" of solid decking between the 30" long lowermost (bottom) slot and the first 32" intermediate slot. See the diagram to the side for details.

Step 5: If necessary, cut subsequent 32" intermediate slots, leaving 16" of solid decking between them.

Step 6: The final slot will be cut 16" away from the highest intermediate slot and 12" away from the peak/hip ridge intersection previously marked. If these measurements overlap, do not cut away any decking. This final slot may be very short, but should always accommodate 16" of decking from the intermediate slot and 12" of decking away from the peak/hip ridge intersection.



NEVER CUT SLOTS AT OR BELOW THE MIDPOINT OF THE HIP RIDGE

WILL THE HIP RIDGE VENT CAUSE SHORT-CIRCUITING?

Since the Hip Ridge Vent will be installed on multiple roof diagonals (hips), it's reasonable to question whether or not the vent will ingest air or short-circuit. The Hip Ridge Vent can be exposed to wind in ways that peak (horizontally positioned) ridge vents are not, in that the wind will not simply be blowing across the vent but also on top of the vent. With this taking place, positive (high) air pressure generated can cause air to go into vents that face the wind and exit vents that do not face the wind. Air Vent has designed the Hip Ridge Vent with weather protection features to reduce the possibility of weather infiltration should wind pressure allow air to enter the vent. Passing this Miami-Dade County wind-driven rain test is proof.



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