



# AIRVENT UNIVERSITY LESSON PLAN

## Spring 2025 Lesson Plan

### Net Free Area (NFA) Calculator Tool for Vents without Motors

If you've ever looked up attic ventilation, you've probably come across the term **Net Free Area (NFA)**. *It's the amount of unobstructed area through which air can enter or exit a vent.* Our attics need a specific amount intake airflow and exhaust airflow to help fight heat, moisture and ice dams. The amount of airflow an attic needs is based on the attic's size (square footage). Once you know the attic's size, you select the most suitable intake and exhaust vents based on the vent's NFA. The all-important NFA number will tell you the quantity of vents needed for the project.

But figuring out how much ventilation you need doesn't have to be complicated.

## NFA Calculator

Quickly determine the Net Free Area (NFA) needed for balanced attic ventilation using AirVent Ventilation Products



The screenshot shows the AirVent NFA Calculator interface. At the top is the AirVent logo with the tagline "WE KNOW AIR FLOW". Below the logo is a text input field labeled "Attic Size (in square feet) ? \*" with the value "2,000" entered and a unit selector "sq. ...". Below this is a question "What kind of ventilation are you installing? \*" with two radio button options: "Ridge Vent" (which is selected) and "Static Vents".

**The new AirVent NFA Calculator** makes it easy. You enter your attic size in square feet, and it instantly tells you the total amount of ventilation required. Then it breaks that down into **how much intake and exhaust you need** so you can plan the right balance with the right products.

### Why it's better than guessing:

- Covers current AirVent product options—including Ridge Vents, Box Vents, Wind Turbines and more
- Calculates ventilation requirements in seconds
- Easy to use in the field, in the office, or on your phone
- Helps promote energy efficiency and better roof performance

#### Ventilation Required

Total Ventilation NFA needed: **960**  
*Please Balance Exhaust and Intake*

#### Ridge Vents:

##### **4' Stick Shinglevent II - Pieces Required**

For Roof Pitch up to 6/12: **16**  
Roof Pitch up to 7/12 to 10/12: **16**  
Roof Pitch up 11/12 & Up: **18**

##### **30 Foot Shinglevent Roll - Rolls Required**

For Roof Pitch up to 6/12: **3**  
Roof Pitch up to 7/12 to 10/12: **4**  
Roof Pitch up 11/12 & Up: **4**

### What about roof pitch and attic volume?

Although building code does not factor in the pitch of the roof or the volume of an attic, our NFA Calculator does. You'll see 3 different roof pitch ranges to choose from once you submit the attic size and select the vent desired.

Try it here:

[gibraltarbuildingproducts.com/nfa-calculator](https://gibraltarbuildingproducts.com/nfa-calculator)

And don't worry, this is just the beginning. We're already working on a version for power fans and foundation ventilation, too.

To test your knowledge about what you learned in the Spring 2025 Lesson Plan please take our short 5-question Pop Quiz.

