



ROOF VENTILATION

2015 MINNESOTA RESIDENTIAL CODE

R806.2 Minimum vent area.

1. Ventilation requirements are one square foot of net free vent area (NFVA) per 150 square feet of attic area to be vented (1/150 rule).
2. Requirements change to one square foot of net free vent area per 300 square feet of attic area to be vented (1/300 rule) when **one or more** of the following are met:
 - a. The ventilation is balanced between the lower (eave) and upper (ridge) portion of the attic such that a minimum of 40% and no more than 50% of the required net free vent area is provided in the upper portion fo the attic,

AND/OR

- b. A Class I or II vapor retarder is included in the ceiling assembly (on the warm-in-winter side) in climate zone 6.

Example:

Find the area of the attic foot print. Width X Length = Square Feet

STEP 1

Calculate how much NFVA you need

$$\begin{array}{r} 1200 \text{ sq. ft.} \\ \div 300 \text{ sq. ft.} \\ = 4 \text{ sq. ft. NFVA} \end{array}$$

STEP 2

Convert that to inches

$$\begin{array}{r} 4 \text{ sq. ft. of NFVA} \\ \times 144 \text{ (in. per sq. ft.)} \\ = 576 \text{ sq. in. of NFVA} \end{array}$$

STEP 3

Divide it up between the soffit and the ridge

$$60\% \text{ of } 576 \text{ sq. in.} = 345.6 \text{ sq. in. (soffit vents)}$$

$$40\% \text{ of } 576 \text{ sq. in.} = 230.4 \text{ sq. in. (ridge vents)}$$

- NFVA – Net Free Ventilation Area

There are many types of vents out there. You will need to do the math to determine how many vents will be needed on the roof.

This handout is a written as a guide to common questions and concerns. It is not intended nor shall it be considered a complete set of requirements.