

# ATTIC VENTING CALCULATIONS

## HOW MUCH VENTILATION DO ATTIC SPACES NEED? THE 1:300 RULE:

- For every 300 sq. ft. of enclosed attic floor space, 1 sq. ft. of attic ventilation is required.
- Half of the total NFA venting should be installed at the upper portion of the roof/attic (exhaust vents), and the other half at the lower portion of the roof/attic (intake vents).

ATTIC VENTILATION	NFA	EAVE VENTS	NFA
Roof Jacks 7" Diameter	0.21 sq. ft.	1 Hole	0.02 sq. ft.
Roof Jacks 8" Diameter	0.28 sq. ft.	3 Holes	0.07 sq. ft.
Roof Jacks 9" Diameter	0.35 sq. ft.	4 Holes	0.09 sq. ft.
Roof Jacks 12" Diameter	0.38 sq. ft.	3 x 23 eaves screens	0.38 sq. ft.
		5 x 23 eaves screens	0.69 sq. ft.
Gable Vent 12" x 12"	0.5 sq. ft.	4 x 16 soffit vents	0.15 sq. ft.
Gable Vent 12" x 18"	0.75 sq. ft.	6 x 16 soffit vents	0.27 sq. ft.
Gable Vent 12" x 24"	1.5 sq. ft.	8 x 16 soffit vents	0.38 sq. ft.

**RULE OF THUMB:** Half of the opening size = **NFA** (Most often, this will be within acceptable limits for gable vents)

**Net Free Area (NFA) sq. ft. equation:**

1. **(Length x Width) - 144** = Gross opening in sq. ft.
2. Gross opening in sq. ft. divided by the screen factor = NFA sq. ft.

### Screen Factor:

The screen factor accounts for the loss of ventilation due to any louvers or screen cloth restricting air flow.

### Example:

14 1/2" x 3" vent with a 1/8" mesh = .24 sq. ft. NFA

MESH	SCREEN FACTOR WITHOUT LOUVERS	SCREEN FACTOR WITH LOUVERS
1/4 or 1/2 mesh/inch	1.00	2.00
1/8 mesh/inch	1.25	2.25
1/16 mesh/inch	2.00	3.00