

# COR-A-VENT<sup>®</sup>

## Soffit Vents... a breath of fresh air



HOT/MOIST  
ATTIC EXHAUST  
AIR

V-600E

S-400 Strip Vent: The original, continuous soffit venting solution is still the best choice for venting overhangs and eaves – and once architects find out about it, they spec it on every job! With 10 sq. inches NFVA per foot, S-400 provides superior intake ventilation for any detail – from zero overhang to open rafter tails.

S-400  
STRIP VENT

COOL  
EXTERIOR  
AIR

**COR-A-VENT<sup>®</sup>**  
A Trusted Name in Attic Ventilation Since 1976<sup>®</sup>

# How to Design & Build a Balanced



## Simple Solutions for all Your Eave Venting Details

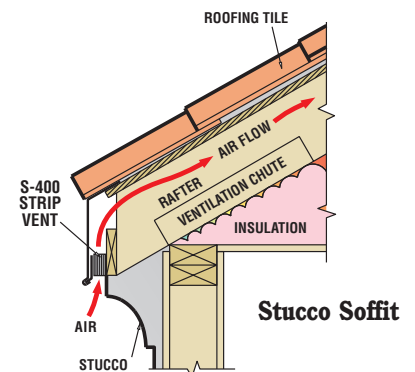
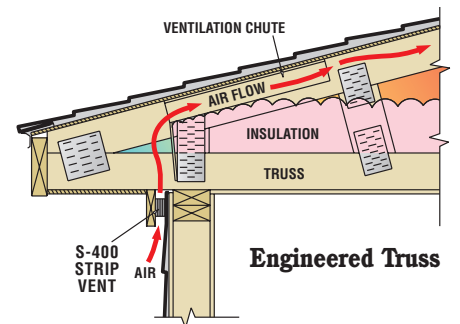
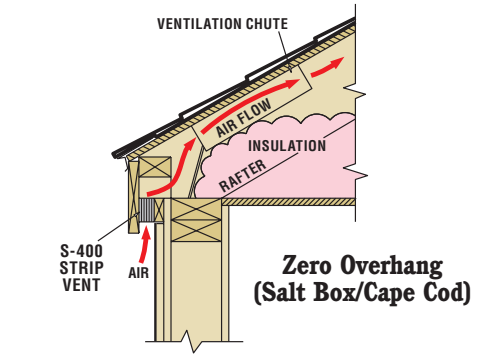
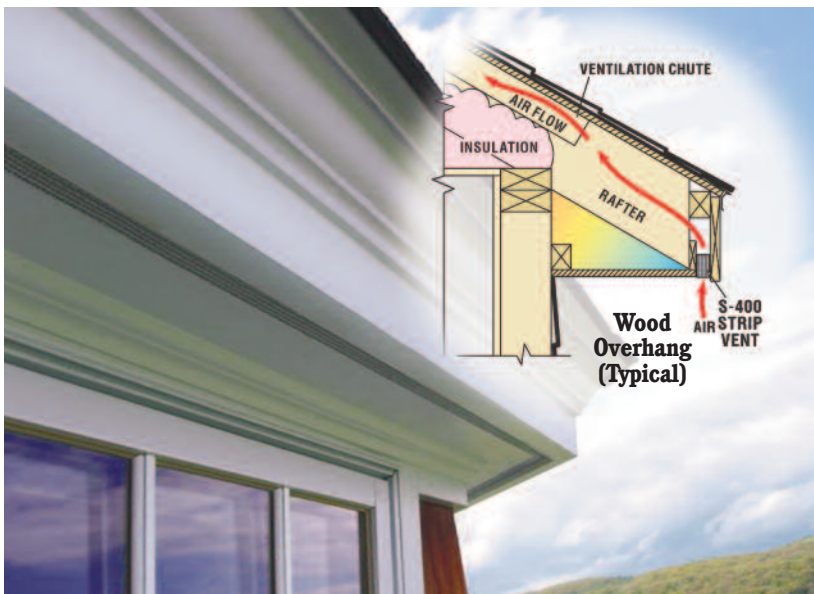
*The science of a good ridge and soffit vent system depends upon the equalization or “balance” of its two components – the soffit/eave (intake) air and the ridge (exhaust) air. This principle of good venting practice works well with most traditional roof designs.*

However, many contemporary house and roof designs are limited in how well they can be naturally ventilated. This is a result of restriction in the amount of, or placement of critical intake ventilation. In the interest of modern architecture and good ventilation practices, COR-A-VENT has developed various unique soffit venting applications using our S-400 Strip Vent.

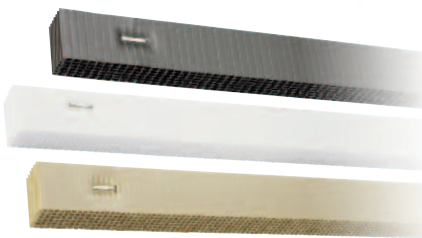
All ridge vents, work best with soffit/eave (intake) vents. For top performance, place the intake vents low on the structure, typically at the overhangs.

With new construction or when re-roofing, all other attic exhaust vents such as gable-end, roof, or turbine vents should either be blocked off or removed.

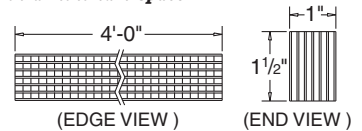
The stack effect (rising warmer air) is enhanced and thus maximum updraft (ventilation) is obtained when no other opening(s) can distort the air pattern between the intake and the exhaust vents.



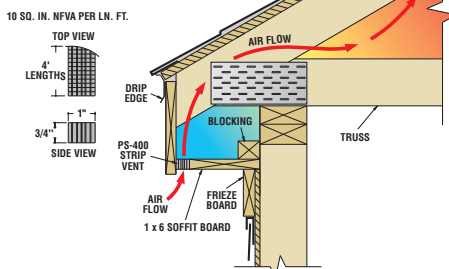
# Ridge & Soffit Ventilation System



- There really are as many ways to install S-400 Strip Vent as there are eave construction details
- 1" x 1 1/2" x 4' cross section gives you maximum soffit/eave ventilation in a minimum space
- 10 sq. in. NFVA per lineal foot
- S-400 fits narrow spaces where other vents can't, like zero overhangs
- The durable 4' PP sections are available in black, white or tan
- Self-cleaning - vertical flute orientation doesn't show the dirt
- Crush resistant so you can install with a power nail gun
- Pair up S-400 with any of COR-A-VENT'S ridge vent products for an unbeatable system
- Can be installed in multiple layers for additional ventilation

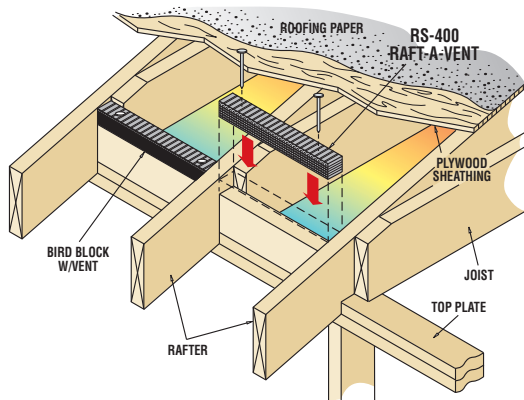


## PS-400 Strip Vent



Another new soffit product from COR-A-VENT is the **PS-400 Strip Vent**, a 3/4" wide continuous strip that's perfect for 1x soffit panels. Like the original **Strip Vent**, **PS-400** is available in either black or white and provides 10 sq. in. Net Free Vent Area per lineal foot. Pre-attach **PS-400** to the 1x for quick installation.

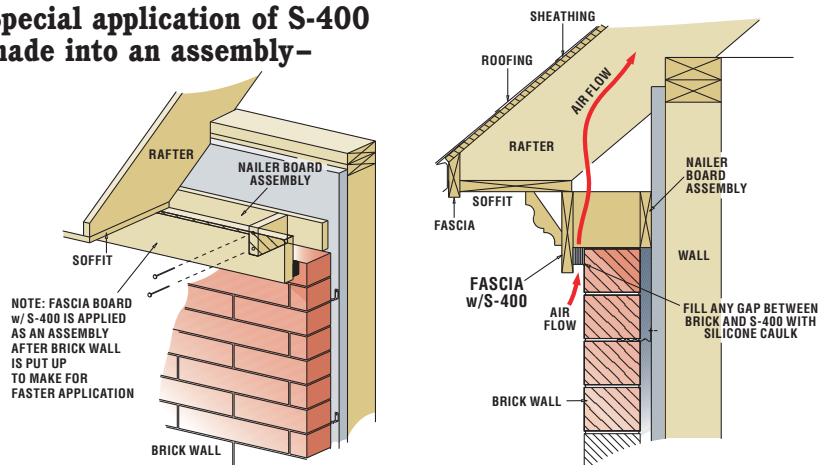
## RS-400 Raft-A-Vent



## COR-A-VENT S-400TAN Strip Vent w/Overhang Soffit Application



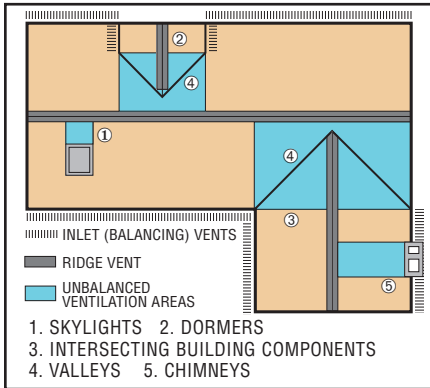
## Special application of S-400 made into an assembly-



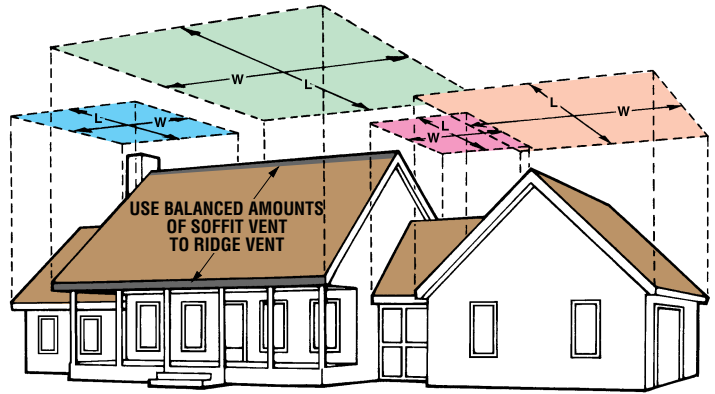
# Balanced ventilation – The right proportion of venting.

COR-A-VENT® has promoted and taught **balanced ventilation** from the day we started. It's a concept all vent manufactures readily endorse. Unfortunately, that information doesn't always end up in the hands of the person designing the building or installing the vents. Balanced venting helps insure the performance you expect from ridge venting – uniform, increased airflow through the roof cavity without weather infiltration.

**Balanced venting:** An equal or greater amount of vent opening (sq. in. net free vent area/NFVA) in the soffit (intake) than at the ridge. For example, our V-300 products have 13.5 sq. in NFVA per lineal foot. To balance this, you need 2 soffit/eave/intake vents of at least 6.75 sq. in. per lineal foot (1/2 of 13.5 in each overhang).



**Balanced venting:** Continuous soffit vents are recommended, especially for venting cathedral ceilings. Wherever there is ridge



vent above, there should be soffit/eave/intake vents on the structure below. Also, COR-A-VENT **strongly recommends** using one of our V-300 products (available in 11, 8½ or 7" widths) on cathedral ceiling and hip roof applications. V-300 delivers 13.5 sq. in. net free vent area. The volume of space to be vented in cathedrals is smaller. Therefore a lower profile (5/8") vent is called for to further reduce the chance for infiltration. **When installing a ridge vent system, all other vent openings (except soffits) must be closed off.**

## Figuring Your Ventilation Needs:

V-400E: Square footage of building footprint X .48 = Lineal Feet V-600E needed  
20

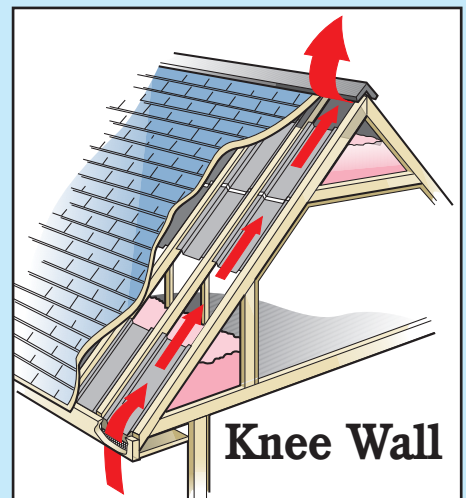
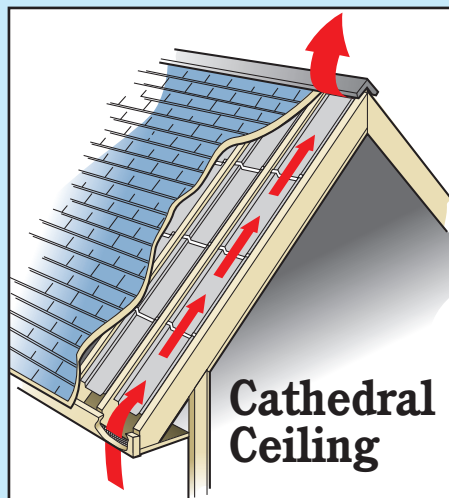
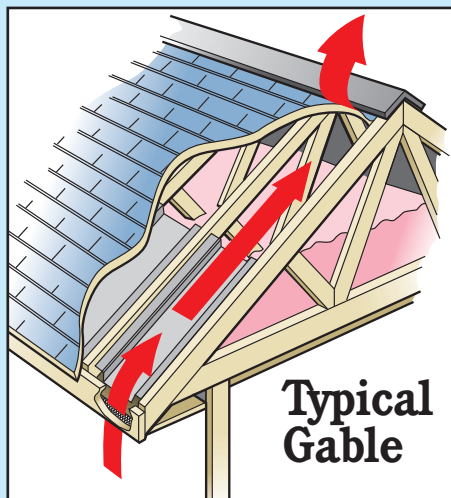
V-300: Square footage of building footprint X .48 = Lineal Feet V-300 needed  
13.5

**Example:** 25' x 50' = 1250 Sq.F.  
1250 x .48 = 600  
600 ÷ 17 = 35 L.F. V-400E needed

The above formulas will give the amount of COR-A-VENT ridge vent needed for a 1/150 vent ratio, provided an equal or greater amount of soffit venting is used. For a 1/300 ratio, (building code minimum) use half the amount of ridge vent. *Note: Code interpretation may vary. Consult your local building dept.*

*For the best appearance and performance install COR-A-VENT ridge and soffit vents continuously at the ridge and in the soffits.*

## Typical Vent Chute Applications



Maintaining an unrestricted air passageway between the soffit and ridge is crucial to the performance of the vent system, and must not be blocked or restricted. COR-A-VENT recommends a minimum 2" air space between the roof sheathing and vent chute or insulation

**Note:** Should you need any assistance in designing your ventilation system, fax or mail a sketch and information to our technical services department. COR-A-VENT will respond with recommendations for your particular building design.



**COR-A-VENT, INC.**

P.O. Box 428 • Mishawaka, IN 46546-0428  
Phone: (800) 837-8368 Fax: (800) 645-6162  
info@cor-a-vent.com • www.cor-a-vent.com

This material may be duplicated only for the purposes of specifying COR-A-VENT products. No permission is given to duplicate or otherwise copy this material for any other purpose without the express written permission of COR-A-VENT, Inc.

COR-A-VENT products meet or exceed all nationally recognized building codes for ventilation. COR-A-VENT products are covered under the following patents: 5,054,254; 5,328,407; 5,339,582; 5,439,417; 5,542,882; 5,603,657; 5,704,834; 5,803,805; 5,839,059; 5,921,863; 6,039,646; 6,213,868; 6,558,251B2; 6,589,113; 6,598,356; D465,839 – additional patents pending.

© 2006 COR-A-VENT, Inc. Made in the USA. S-400 Application Brochure 04/14