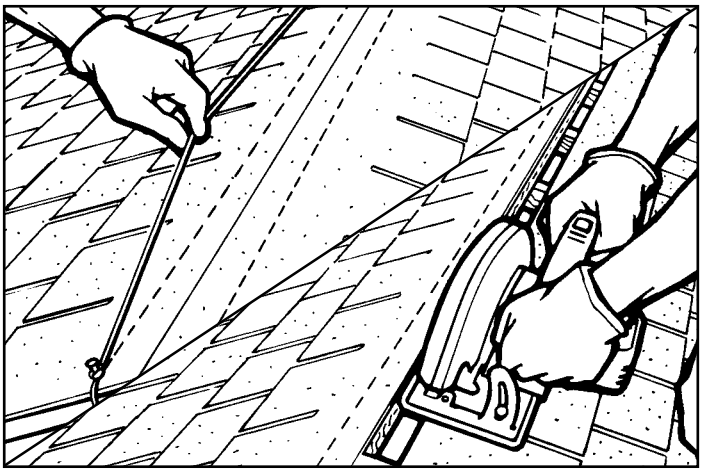
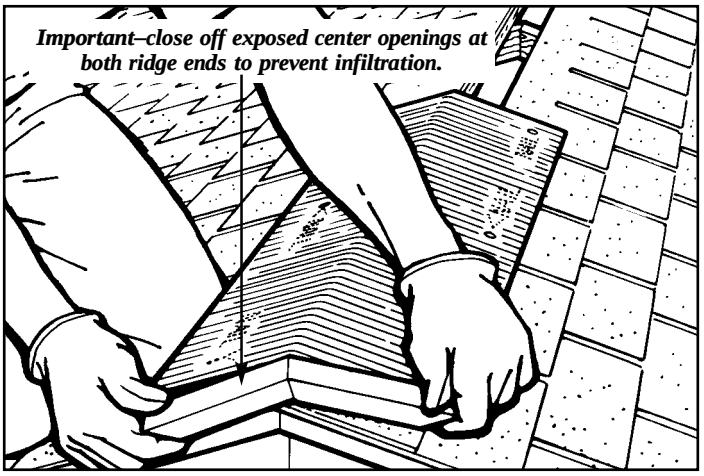
COR-A-VENT® Installation and Information Guide.

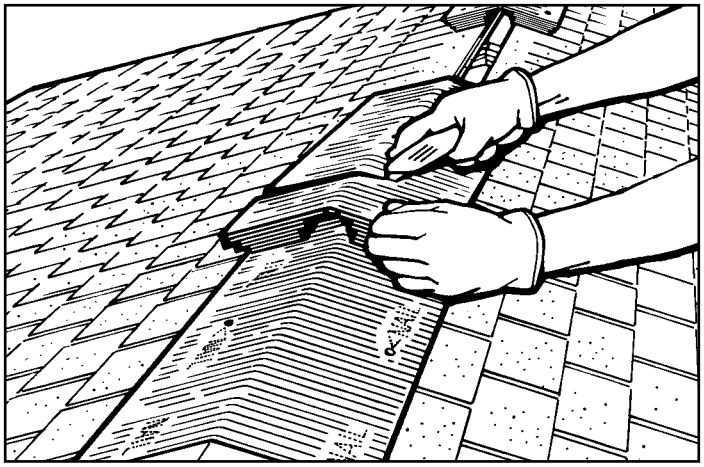
Easy Installation: ***One person can easily install the handy four-foot COR-A-VENT sections.*** All you need is a hammer, circular saw, chalk line, utility knife, tape measure and a caulking gun. Here's an installation overview for a standard pitch* gable roof application:



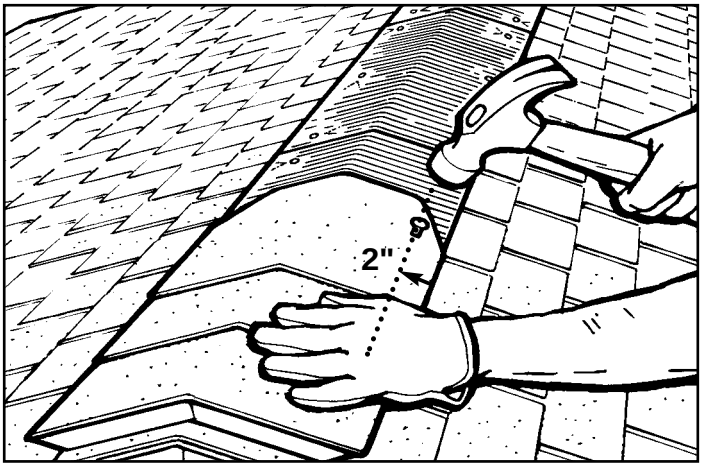
1. Measure a 3" slot, 1 1/2" each side of ridge centerline. This allows for a 2x ridge board or smaller. Snap chalk lines the entire length of the ridge. Cut slot with a circular saw and clean out debris. ***Set saw depth so as not to cut roof rafters***. Stop the slot 12" short of any ridge end, intersecting ridge or obstruction (such as a chimney).



2. Nail one shingle cap at each end of the ridge, as with conventional application. Slide end cap (E.C.-400) over exposed end on first and last sections of V-600. Center first vent piece on end of ridge and nail through end cap and vent, keeping end of vent 1/2" from end of roof. Continue to tack nail first vent piece. Place nails 1/2" from ends, and 2" up from edge, 3 nails to a side. Repeat this step for starter vent piece at the other end of the ridge. For V-300, use folded end cap technique (see other side).



3. Continue applying COR-A-VENT, ***working from ends to middle***. This technique helps remove any dips or sag in the ridge. Align center with previous pieces, making sure vent matches roof pitch before nailing. Continue nailing until entire ridge is covered. Use a utility knife to cut last piece to length. Caulk where bottom edge of end caps rest on roof.



4. Center shingle cap on vent and nail. Nail line for cap shingles is to be 2" – 2 1/2" up from edge. Continue nailing until all vent is covered with ridge caps. Be careful not to overdrive nail. Nail head should be flush with top of shingle, without indenting it. Pre-forming caps in cold weather helps avoid cracking.

Be sure to use fasteners long enough to penetrate vent *and* roof deck when nailing the vent and ridge cap on. Heavyweight, architectural and re-roof installations require a longer nail than the standard installation.**

In high wind areas, use a washer headed nail to prevent shingle cap "blow off". Or, apply a 1/4" to 3/8" bead of roof cement between the ridge caps, 3/4" up from the bottom edge of shingles parallel to ridge.

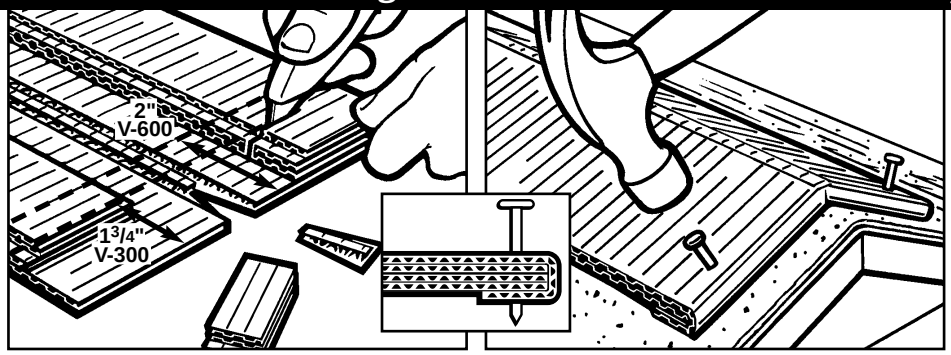
*Standard applications V-300 or V-600 – 3/12 - 16/12 pitch. For steeper pitch/wide ridge beam applications see back side.

**Nail requirements for standard vent and ridge cap installation: V-600 - 2 1/2" roofing nail, V-300 - 1 1/2" (with 3 tab shingles installed on *new construction* or after *complete roof tear off).*

Instructions – for making the COR-A-VENT Folded End Cap:

1. Turn vent piece (V-300 shown) over so routed slot is facing up. Use utility knife to cut out a "V" shaped notch in one end of vent.

2. Measure 1 3/4" from end of vent and make a parallel cut through bottom 3 layers. For V-600, measure 2" from end and cut through bottom 5 layers. Remove loose pieces. Be careful not to cut off top layer!!



3. Fold end flap under and secure with a roofing nail – 2" for V-300 or 2 1/2" for V-600. This allows for the nail to penetrate an extra layer of vent material.

4. Nail vent pieces to roof per instructions above. Be sure to caulk between bottom edge of vent and roof at both ends of the ridge.

Hip Installation Instructions

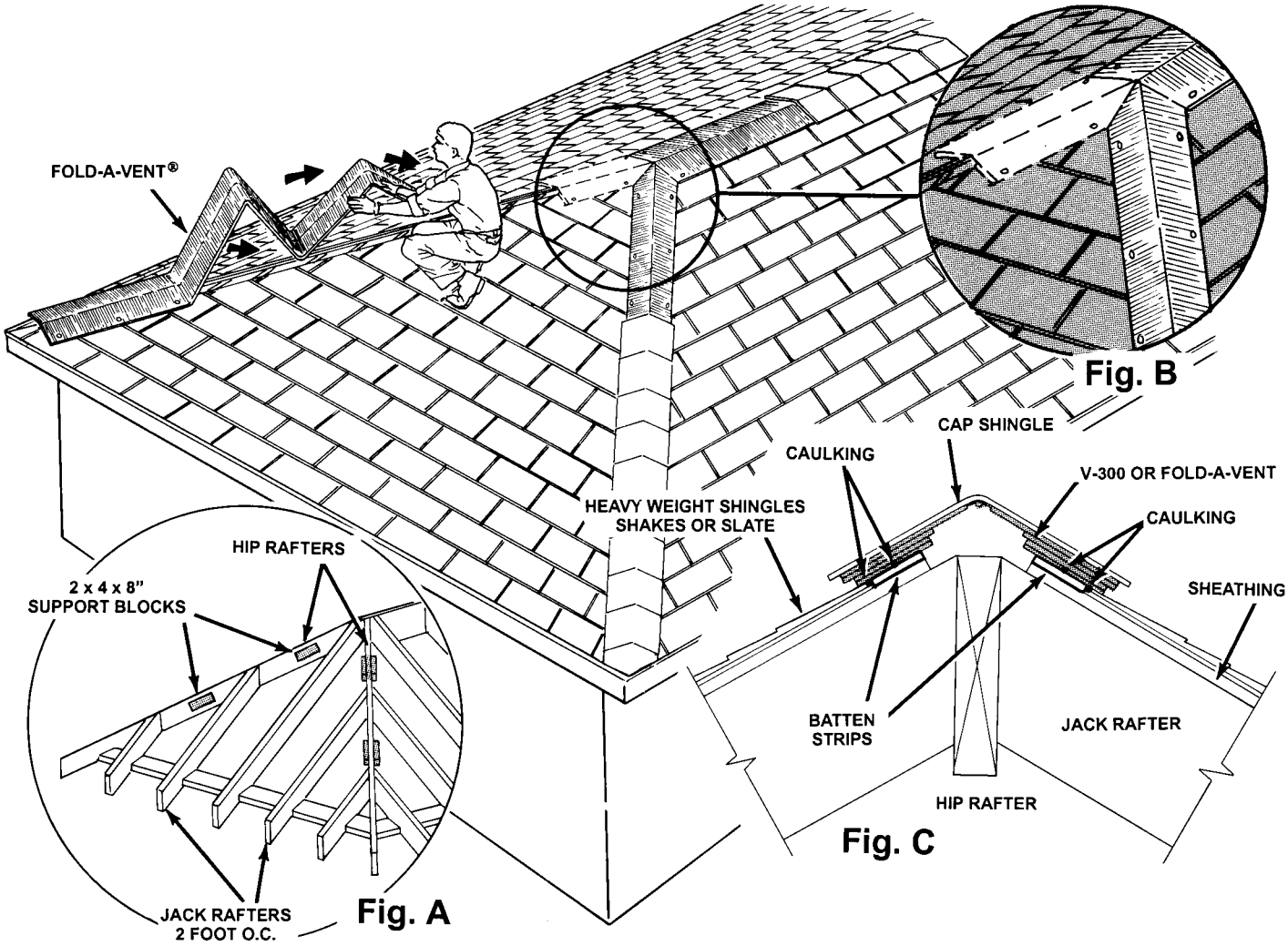
If the ridge length is too short for proper ventilation, COR-A-VENT® V-300 or Fold-A-Vent® may be installed in equal lengths on the upper ends of the hips. These instructions can be used for most shingle, shake or slate applications.

If jack rafters are 16" on center, cut the slot per our ridge installation instructions. If jack rafters are 24" on center, blocking may be needed to prevent the roof sheathing from sagging. Cut 2" x 4" blocks 8" long, and using 16 penny nails, nail blocks between jack rafters and flush with bottom of roof sheathing. Cut the slot as per our ridge installation instructions. The blocks will provide support for the roof sheathing. Nail roof sheathing to blocks with 8 penny nails See Fig. A below. **Note: When using blocking, allow for a loss of 25% in ventilation due to the blocks.**

The slot MUST NOT be cut any closer than 3 feet up from the outside wall of the building. This will prevent any ice build up from leaking back into the building. In areas that receive heavy snowfall, the slot should stop 6 feet up from the outside wall of the house. The V-300 or Fold-A-Vent may be run all the way down to end of the roof for appearance reasons, BUT DO NOT CUT A SLOT UNDER IT! See Fig. B below for detail on how to cut the vent where the hips and ridge come together. The vent can be cut with a utility knife. Caulk all joints with black silicon caulking. Also caulk end joints on the V-300 coming up the hip. Using the 20-foot Fold-A-Vent piece will eliminate most joints on the hip itself. (See main drawing below)

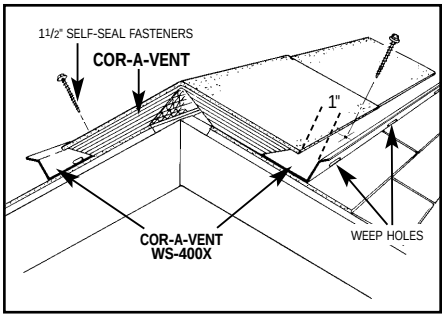
If 3 in 1 shingles are used, run a 3/8" bead of silicon based caulking down each side of the slot, centered on the nailing surface of the V-300 or Fold-A-Vent. This will insure that the vent is sealed down across the shingle courses and prevent water from leaking in under the vent.

If Heavy Weight Shingles, Shakes or Slate tiles are used, see Fig. C below for a detail on how to install a batten strip to provide a level surface for the V-300 or Fold-A-Vent to sit on. Batten strips need to be as thick as the thickest point of the roofing. There MUST NOT BE ANY GAPS UNDER THE VENT or water may leak in.



WS-400X

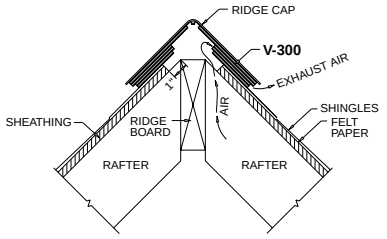
For *EXTRA* protection from rain and snow in high wind areas, install WS-400X weather shield. Easy to install and can be used with V-400, V-600 and V-300 ridge vents. Call our *Toll Free (800) number* for more information about WS-400X.



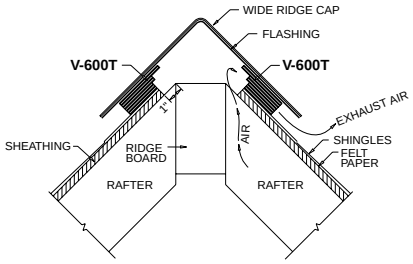
Alternate Installation Examples:

COR-A-VENT® continually develops and improves applications to meet the growing demands of architecture and new roofing materials. The specialized details on this page have been proven in thousands of real world installations. We don't experiment on your job. Call our technical dept. for advice on your special application. Or, send us a print and we'll "mark up" where and how to vent it. **COR-A-VENT *V-400 can be substituted for V-600 installation examples, except for steep pitch applications over 10/12 pitch.***

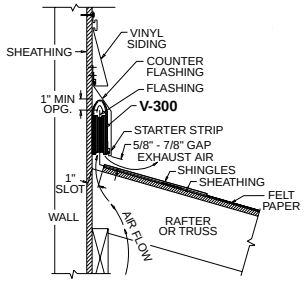
V-300/V-600 Steep Pitch Application
(Standard)



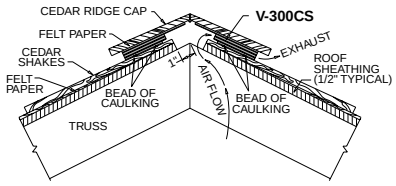
V-600T Wide Ridge Application



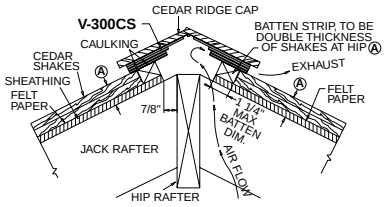
V-300 Clerestory Application



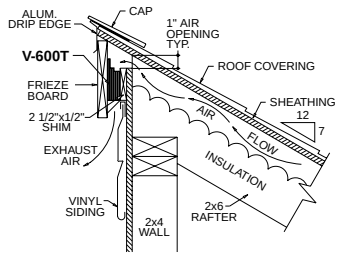
V-300CS/FAV 8 1/2" Ridge Application



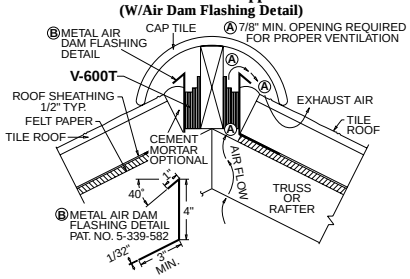
V-300CS/FAV 8 1/2" Hip Application – End View



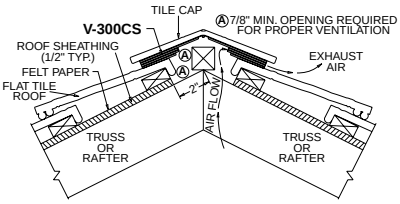
V-600T Modern Shed Application



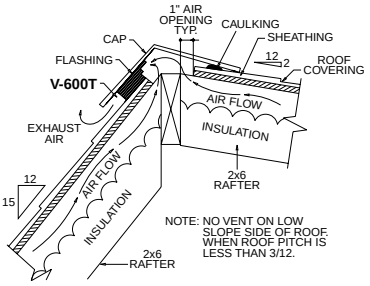
V-600T – "S" Tile Application
(W/Air Dam Flashing Detail)



V-300CS Flat Tile Application

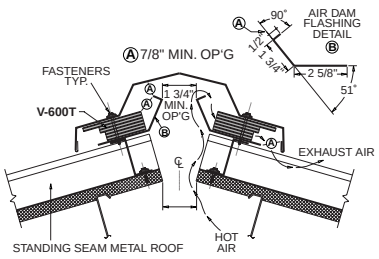


V-600T Unequal Pitch Application

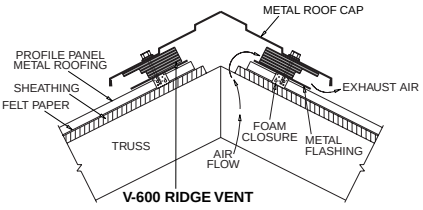


NOTE: NO VENT ON LOW SLOPE SIDE OF ROOF WHEN ROOF PITCH IS LESS THAN 3/12.

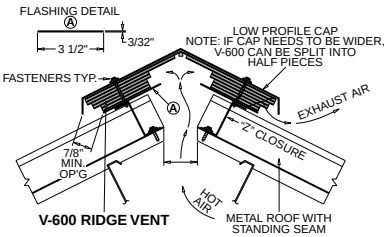
V-600T – Structural Metal Roof Application



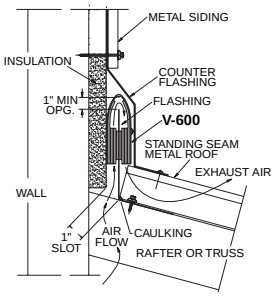
V-600T – Profile Metal Roof Application



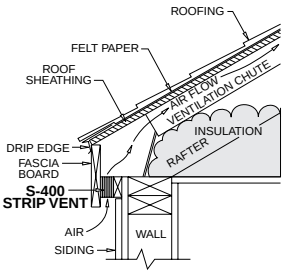
V-600 – Architectural Metal Roof Application



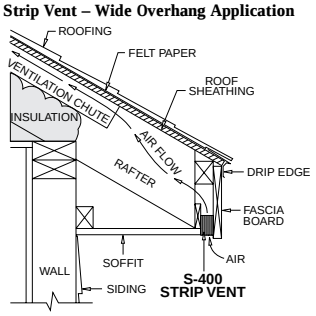
V-600 Standing Seam Application
Roof to Wall



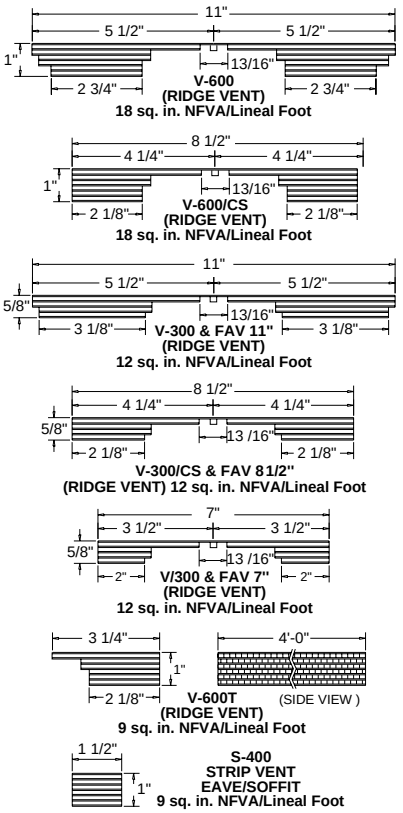
S-400 Strip Vent – Narrow Overhang Application



S-400 Strip Vent – Wide Overhang Application



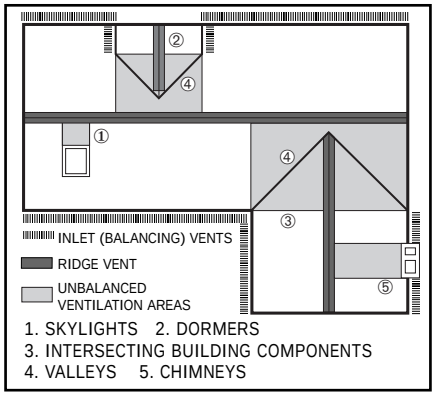
End Views (Typical)



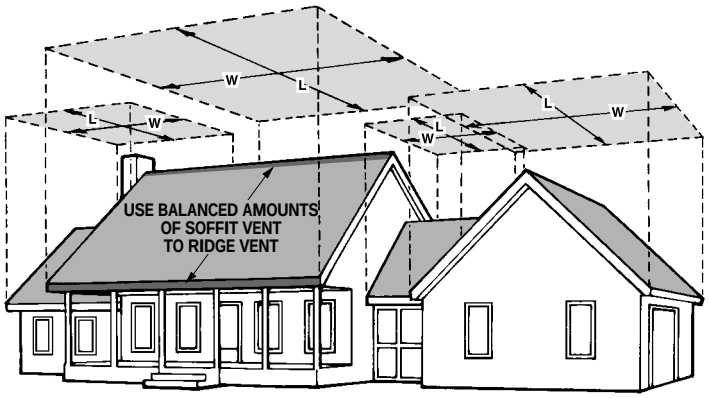
Balanced ventilation – The right proportion of venting.

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-400 & V-600 products have 18 sq. in NFVA per lineal foot. To balance this, you need 2 soffit/eave/intake vents of at least 9 sq. in. per lineal foot ($^1/_2$ of 18 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 of one of our V-300 products (available in 11, 8$^1/_2$ or 7" widths) on cathedral ceiling and hip roof applications. V-300 delivers 12 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.



Figuring Your Ventilation Needs:

V-600: Square footage of building footprint X .48 / 18 = Lineal Feet **V-600** needed

V-300: Square footage of building footprint X .48 / 12 = Lineal Feet **V-300** needed

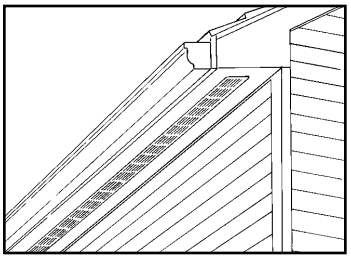
Example: 30' x 40' = 1200 Sq.F.
1200 x .48 = 576
576 ÷ 18 = 32 L.F. V-600 needed

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.

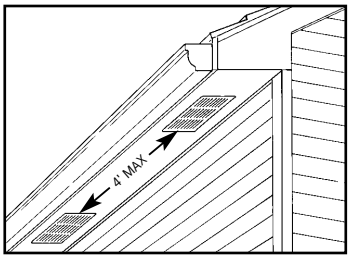
For the best appearance, install COR-A-VENT continuously the entire length of the ridge.

Typical continuous soffit vents

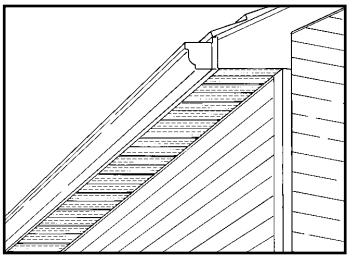
The following NFVA values are approximate, except for COR-A-VENT S-400 strip vent. Consult the vent manufacturer or distributor for actual values for specific products.



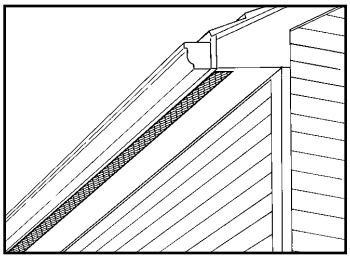
Continuous aluminum strip vent – 8-9 sq. in. NFVA per lineal foot.



8" x 16" under eave cornice vents with maximum spacing of 4' apart – gives 14 sq. in. NFVA per lineal foot.

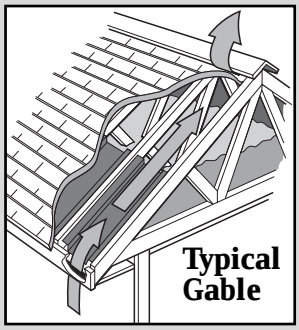


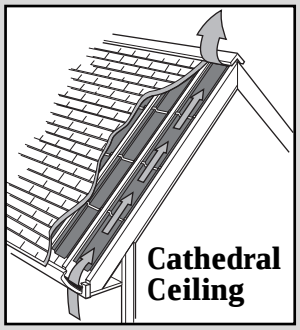
Continuous perforated panels – 1' wide overhang (typical) – gives 12-13 sq. in NFVA per lineal foot.

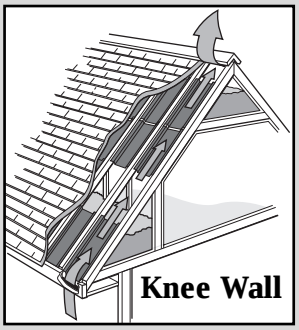


COR-A-VENT's S–400 Continuous Strip Vent - 9 sq. in NFVA per lineal foot.

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®
The Leader in Innovative Rooftop Ventilation®

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