

SECTION 07723

RIDGE, SOFFIT AND SIDING VENTS

**** NOTE TO SPECIFIER ** Cor-A-Vent; high-density polypropylene ridge and soffit vents.**

This section is based on products manufactured by Cor-A-Vent, Inc., which is located at the following address:

P.O. Box 428

Mishawaka, IN 46546-0428

Attn: Technical Support Dept.

Tel: (800) 837-8368

Fax: 800-645-6162

Continuous ridge and soffit vents provide balanced ventilation of attic spaces without the use of motors or their consumption of energy, or the maintenance associated with moving parts. Made of durable corrosion-free high-density polypropylene, Cor-A-Vent profiles are suitable for all common roofing materials and conditions.

PART 1 GENERAL

1.1 SECTION INCLUDES

**** NOTE TO SPECIFIER ** Delete items below not required for project.**

- A. Ridge vents.
- B. Soffit vents.
- C. Hip vents.
- D. Siding vents.

1.2 RELATED SECTIONS

**** NOTE TO SPECIFIER ** Delete any sections below not relevant to this project; add others as required.**

- A. Section 06100 - Rough Carpentry.
- B. Section 07310 - Shingles.
- C. Section 07320 - Roof Tiles.
- D. Section 07410 - Metal Roof and Wall Panels.
- E. Section 07457 – Cementitious Panels.

1.3 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's catalog data, standard details, and installation instructions.
- C. Samples: 2 inch (50 mm) long samples of each profile required.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Store products indoors and protect from construction traffic and damage.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Manufacturer: Provide vents fabricated by Cor-A-Vent, Inc.; P.O. Box 428; Mishawaka, IN 46546-0428. ASD. Tel: (800) 837-8368. Fax: (800) 645-6162.
- B. Substitutions will not be acceptable.

2.2 MATERIALS

- A. Ridge Vents - General: Manufactured of corrosion-free, extruded, high-density polypropylene. Ridge Vents with an "E" in name have enhanced snow screen. Roof-2-Wall Vents have an Active Weather Foil.

**** NOTE TO SPECIFIER **** Ventilation requirements for attics are generally based on the national Building Codes. They call for a ratio of 1:300, i.e. 1 square foot of ventilation for every 300 square feet of attic area, with 50 percent of the ventilating area at the eaves and 50 percent at the ridge. Note: Interpretation of these codes may vary. For exact information consult your local building code or building official. In a straight gable roof application, a continuous V-600 series vent with continuous strip vents at both soffits provides 40 square inches of ventilation per linear foot, which is capable of adequately venting an attic up to 75 feet wide at a ratio of 1:300. However, buildings 40 feet or wider may require additional soffit venting, depending on local code requirements. On installations of this size contact the Cor-A-Vent Technical Support Department. Ridge/Soffit vent systems should not be used in conjunction with other roof top vents or gable end vents. Delete all products below that are not required. If more than one style of ridge vent is required, insert an identifying name so the contractor will know which type is to be used where.

- B. Ridge Vents: Cor-A-Vent V-600-11 and V-600E-11 Ridge Vent.
 - 1. Net free area: 20 sq in per lin ft (42336 sq mm/m).
 - 2. Color: Black.
 - 3. Dimensions: 11 inches (279 mm) wide by 48 inches (1220 mm) long by 1 inch (25 mm) high.
- C. Ridge Vents: Cor-A-Vent V-600-8 ½ and V-600E-8 ½ Ridge Vent.
 - 1. Net free area: 20 sq in per lin ft (42336 sq mm/m).
 - 2. Color: Black.
 - 3. Dimensions: 8-1/2 inches (216 mm) wide by 48 inches (1220 mm) long by 1 inch (25 mm) high.
- D. Ridge Vents: Cor-A-Vent V-600/T & V-600/TE Ridge Vent.
 - 1. Net free area: 20 sq in per lin ft (42336 sq mm/m).
 - 2. Color: Black.
 - 3. Dimensions: 3-1/2 inches (89 mm) wide by 48 inches (1220 mm) long by 1 inch (25 mm) high.
- E. Ridge Vents: Cor-A-Vent V-300-11 & V-300-11E Ridge Vent.
 - 1. Net free area: 13.5 sq in per lin ft (28577 sq mm/m).
 - 2. Color: Black.
 - 3. 1. Dimensions: 11 inches (279 mm) wide by 48 inches (1200 mm) long by 5/8 inch (16 mm) high.
- F. Ridge Vents: Cor-A-Vent V-300-8-1/2 & V-300E-8-1/2 Ridge Vent.
 - 1. Net free area: 13.5 sq in per lin ft (28577 sq mm/m).
 - 2. Color: Black.
 - 3. Dimensions: 8-1/2 inches (216 mm) wide by 48 inches (1220 mm) long by 5/8 inch (16 mm) high.

**** NOTE TO SPECIFIER **** Soffit vents must always be used with ridge vents to provide balanced attic ventilation and to prevent rain infiltration under severe weather conditions.

- G. Ridge Vents: Cor-A-Vent V-300-7 & V-300E-7Ridge Vent.
 - 1. Net free area: 13.5 sq in per lin ft (28577 sq mm/m).

2. Color: Black.
 3. Dimensions: 7 inches (178 mm) wide by 48 inches (1220 mm) long by 5/8 inch (16 mm) high.
- H. Ridge Vents: Cor-A-Vent Fold-A-Vent-11 & Fold-A-VentE-11 Ridge Vent.
1. Net free area: 13.5 sq in per lin ft (28577 sq mm/m).
 2. Color: Black.
 3. Dimensions: 11 inches (279 mm) wide by 240 inches (6096 mm) long by 5/8 inch (16 mm) high.
- I. Ridge Vents: Cor-A-Vent Fold-A-Vent-8 ½ & Fold-A-VentE-8-1/2 Ridge Vent.
1. Net free area: 13.5 sq in per lin ft (28577 sq mm/m).
 2. Color: Black.
 3. Dimensions: 8-1/2 inches (216 mm) wide by 240 inches (6096 mm) long by 5/8 inch (16 mm) high.

**** NOTE TO SPECIFIER ** Soffit vents must always be used with ridge vents to provide balanced attic ventilation and to prevent rain infiltration under severe weather conditions.**

- J. Ridge Vents: Cor-A-Vent Fold-A-Vent-7 Ridge Vent.
1. Net free area: 13.5 sq in per lin ft (28577 sq mm/m).
 2. Color: Black.
 3. Dimensions: 7 inches (178 mm) wide by 240 inches (6096 mm) long by 5/8 inch (16 mm) high.
- K. Ridge Vents: Cor-A-Vent Roof-2-Wall Vent.
1. Net free area: 8.5 sq in per lin ft (17994 sq mm/m).
 2. Color: Black.
 3. Dimensions: 5.12 inches (128 mm) wide by 48 inches (1220 mm) long by 13/16 inch (20 mm) high
- L. Ridge Vents: Cor-A-Vent Revolution-11 Ridge Vent
1. Net Free Vent Area: 12 sq in per lin ft (25394 sq mm/m).
 2. Dimensions: 11 inches (279mm) wide by 240 inches (6096mm) long by 5/8 inch (16mm) high.
 3. Color: Black
- M. Ridge Vents: Cor-A-Vent Revolution-9 Ridge Vent.
1. Net Free Vent Area: 12 sq in per lin ft (25394 sq mm/m).
 2. Dimensions: 9 inches (229mm) wide by 240 inches (6096mm) long by 5/8 inch (16mm) high.
 3. Color: Black.
- N. Soffit Vents - General: Manufactured of corrosion-free, extruded, high-density polypropylene.
- O. Soffit Vents: Cor-A-Vent S-400 Strip Vent.
1. Net free area: 10 sq in per lin ft (21168 sq mm/m).
 2. Dimensions: 1 inch (25 mm) wide by 48 inches (1220 mm) long by 1 1/2 inch (38 mm) high.

**** NOTE TO SPECIFIER ** Delete 1 of the following 2 paragraphs.**

3. Color: Black.
 4. Color: White.
- P. Soffit Vents: Cor-A-Vent PS-400 Strip Vent.
1. Net free area: 10 sq in per lin ft (21168 sq mm/m).
 2. Dimensions: 1 inch (25 mm) wide by 48 inches (1220 mm) long by 3/4 inch (19 mm) high.
 3. Color: Black.

**** NOTE TO SPECIFIER ** Delete 1 of the following 2 paragraphs.**

4. Color: White.

Q. Soffit Vents: Cor-A-Vent RS-400 Raft-A-Vent.

1. Net free area: 10 sq in per lin ft (21168 sq mm/m).
2. Dimensions: 1 inch (25 mm) high by 22.5 inches (570 mm) long by 1-1/2 inch (38 mm) wide.
3. Color: Black.
4. Color: White.

**** NOTE TO SPECIFIER ** Delete 1 of the following 2 paragraphs.**

R. Soffit Vents: IN-Vent (Rooftop Inlet Vent).

1. Net free area: 6.75 sq in per lin ft (14289 sq mm/m).
2. Dimensions: 11 inches (279 mm) wide by 48 inches (1220 mm) long by 1 inch (25 mm) high
3. Color: Black.

S. Siding Vents: SV-3.

1. Net free area: 5 sq in per lin ft (10585 sq mm/m).
2. Dimensions: 7/16 inches (10.5mm) wide by 48 inches (1220 mm) long by 3 inch (75 mm) high.
3. Color: Black.

T. U. Siding Vents: SV-5.

1. Net free area: 8.75 sq in per lin ft (17994 sq mm/m).
2. Dimensions: 3/4 inches (18.75mm) wide by 48 inches (1220 mm) long by 3 inch (75 mm) high.
3. Color: Black.

U. Siding Vents: SS-112 Sturdi Strips.

1. Dimensions: 3/8 inches (9.65mm) depth by 1-1/2 inches (38 mm) wide by 48 inches (1220) long.
2. Color: Black.

V. Siding Starter Strip: ST-30 Sturdi Starter.

1. Dimensions: 5/16 inches (7.87mm) wide by 1 1/4 inches (31.75 mm) tall by 48 inches (1220) long.
2. Color: Black.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that framing, sheathing, and shingles are secured and ready to receive vents.
- B. Verify that there is a 1 inch (25 mm) wide clear air space between sheathing and each side of ridge board or, if trusses are used, a 1-1/2 inches (40 mm) wide continuous clear air space centered on ridge.

3.2 INSTALLATION

A. General:

**** NOTE TO SPECIFIER ** Vents should ordinarily be installed at each of the following locations. Edit as necessary to describe project conditions.**

1. Install ridge vents along entire length of roof ridges.
2. Install soffit vents along entire length of soffits.
3. Install Roof-2-Wall vent along entire length of intersection of vertical walls.

**** NOTE TO SPECIFIER ** Vents along hips are used only when the ridge vents would not provide adequate venting. Delete the following paragraph if hip vents are unnecessary.**

4. Install V-300(E), Fold-A-Vent (E), V-600E on hips to provide proper ventilation.

B. Ridge Vents:

1. Fit end cap onto one end of the first and last piece of ridge vent.
2. Lay a bead of calking on the underside of the end cap, press the piece and cap into position, and nail through the end cap, the ridge vent, and into the roof sheathing.
3. Use roofing nails that are long enough to penetrate ridge vent and through roof sheathing.
4. Drive the nails down flush so that the vent and end cap are held down firmly.
5. Do not indent by over driving.
6. Butt each successive piece up snugly, checking for straight alignment.
7. Use 2 nails in each end and 1 at each side at center, pulling up slightly when nailing second side to ensure that the vent is nailed at the same pitch as the roof.
8. If roof shingles are the heavy dimensional type, a bead of sealant must be applied on top of the shingles to provide weather seal between the shingles and vent.

C. Cap Shingles:

1. Place the first cap shingle with approximately 1/2-inch (40 mm) overhang over the end cap and at each side of the ridge vent.
2. Nail down through the shingle, the ridge vent, and through the roof sheathing.
3. Nails must be long enough to penetrate the roof sheathing. In high wind areas, washer-head nails may be used to provide additional holding for the shingle caps.
4. Do not fasten ridge vents with staples.
5. Preform shingle caps in cold weather to avoid cracking or humping up over the ridge.
6. Apply cap shingles with 1 nail each side, up approximately 2-1/2 inches (60 mm) from the overhanging edge.
7. Drive nails flush; do not indent.

**** NOTE TO SPECIFIER ** Delete the following paragraph if project does not have a steep pitch or a wide ridge beam.**

D. Steep Pitch and Wide Ridge Beam Applications:

1. Cut ridge vents into 2 half pieces lengthwise.
2. Nail half pieces over shingles on either side of the ridge slot.
3. Fasten metal flashing over ridge vent.
4. Cut oversize shingle ridge caps or lap 12 inch (305 mm) long shingles, and install as specified.

**** NOTE TO SPECIFIER ** Delete the following paragraph if hip vents are not required.**

E. Hips: Install ridge vent as needed on hips to provide proper ventilation. If vent must be run down entire length of hip, do not cut slot within 3 feet (1 m) of the building line.

1. Rafters at 24 inches (610 mm) on centers: Install 8 inches (200 mm) long 2x4 (50 x 100 mm) wood blocking nailed or screwed into hip rafter between each rafter to support roof sheathing. Nail sheathing to blocking.

**** NOTE TO SPECIFIER ** Allow 25 percent loss when computing ventilation at hips when blocking is used.**

2. Apply a continuous bead of sealant to roof shingles immediately prior to placing hip vent to form a seal between roof shingles and bottom of hip vent.
3. Vents may be continued down hip without slot to maintain uniform appearance.

**** NOTE TO SPECIFIER ** Delete the following paragraph if no clerestory or shed roofs are required.**

F. Roof to Wall: Install continuous Roof-2-Wall vents full length of intersections of roof with vertical walls in accordance with drawings.

**** NOTE TO SPECIFIER ** Delete the following paragraph if cedar shakes are not used.**

G. Cedar Shakes:

1. Select shakes of uniform thickness to provide an even surface for the vent to rest on.
2. Lay a bead of sealant on top of and between edges of shakes to provide weather seal

- between shakes and vent.
3. Install wet sheet on top of vent and cap with shakes. Use nails of sufficient length to penetrate sheathing.

**** NOTE TO SPECIFIER ** Delete the following paragraph if metal roofs are not used on the project. Contact Cor-A-Vent for application guide #10 for more information on metal roof applications.**

- H. Metal Roofing: Install ridge and soffit vents as specified by manufacturer and in accordance with drawings.

**** NOTE TO SPECIFIER ** Delete the following paragraph if tile roofs are not used on the project. Contact Cor-A-Vent for application guide #9 for more information on tile roof applications.**

- I. Tile Roofs: Install ridge and soffit vents as specified by manufacturer and in accordance with drawings.

**** NOTE TO SPECIFIER ** Delete the following paragraph if Weathershield flashing is not required by imbalanced venting conditions.**

- J. Flashings: Install specified flashings where indicated on the drawings.

3.3 SOFFIT VENTS

- A. Install continuous vents full length of soffits, unless otherwise indicated.
- B. Ensure that adequate blocking or barriers are installed to prevent insulation from impeding air flow.

3.4 SIDING VENTS

- A. Nail SV-3 or SV-5 in a continuous band along the wall at the level where the siding will start. A continuous band of SV-3 or SV-5 may also be nailed at the top of the wall where the siding ends if full ventilation behind the siding is desired. SV-3 and SV-5 may also be used above and below windows and above doors to provide drainage/ventilation in these areas as well.
- B. If SS-112 Sturdi Strips are being used with the SV-3 they should be nailed to the wall either at 16 inches (406 mm) OC or 24 inches (610 mm) OC, depending on the stud layout of the wall and alongside all windows and doors. Note the SS-112 are a spacer and are not designed to hold the weight of the siding, the siding must be fastened through the SS-112 Sturdi Strips into structural material behind them. Typically when the SV-5 is being used a 3/4 inch (19 mm) thick furring strip is used instead of the SS-112 Sturdi Strips, but they can be doubled up and used if desired. The fastener for the siding must be long enough to go through both layers and attach to structural material behind them.
- C. The ST-30 Sturdi Starter is used instead of ripping a piece of siding to place behind the bottom of the first row. The ST-30 will provide the same angle as the ripped siding to the first row of siding.

3.5 ADJUST AND CLEAN

- A. Remove any scrap from the site, and leave in a neat and clean condition.

END OF SECTION