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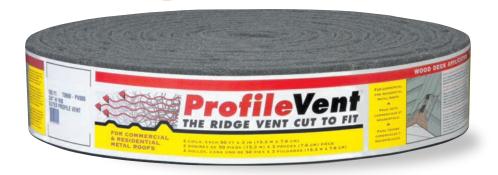
V F N T I I A T I O N

SYSTEM FOR

COMMERCIAL

AND RESIDENTIAL

METAL ROOFS



PATENTED

Volume

17

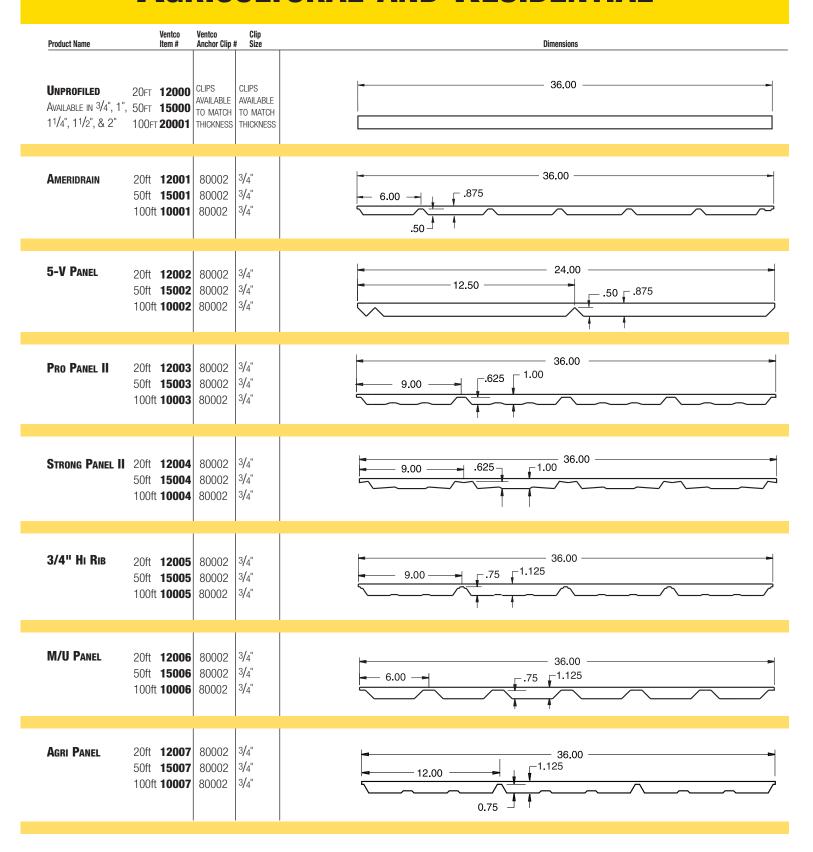
PANEL PROFILES

Most profiles are available in the following sizes:

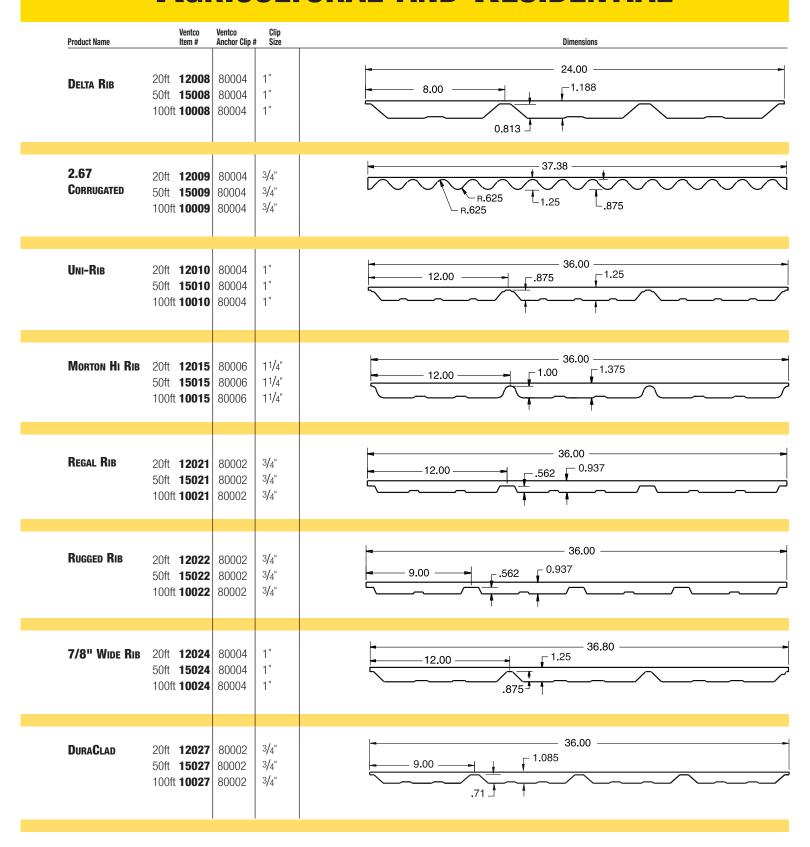
20ft, **50**ft and **100**ft

Note: Illustrations are not to scale and are representative of metal panel profiles, not the final ProfileVent® product.

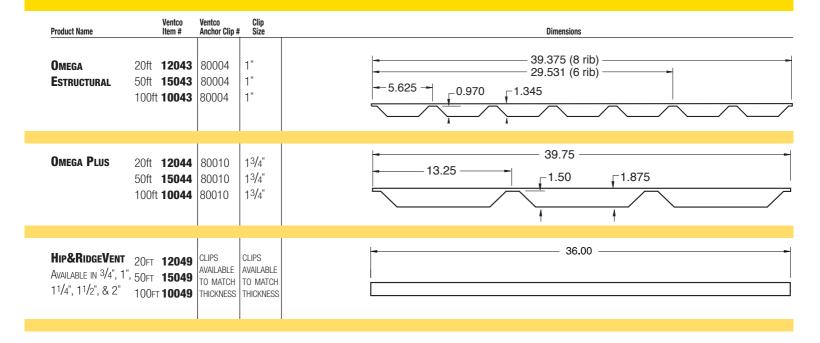
SCREW-DOWN PANEL PROFILES AGRICULTURAL AND RESIDENTIAL



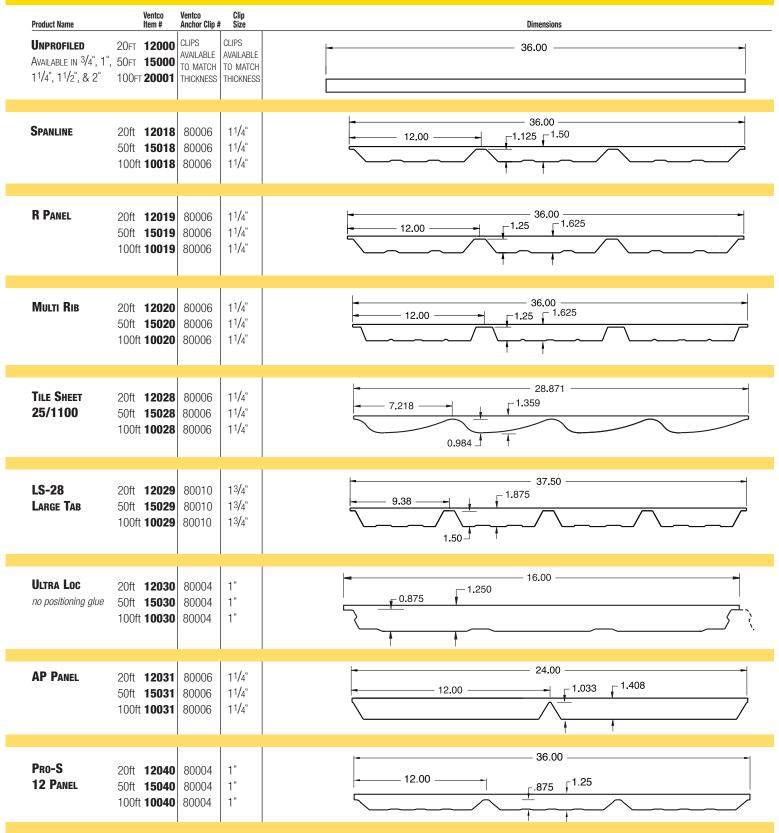
SCREW-DOWN PANEL PROFILES AGRICULTURAL AND RESIDENTIAL



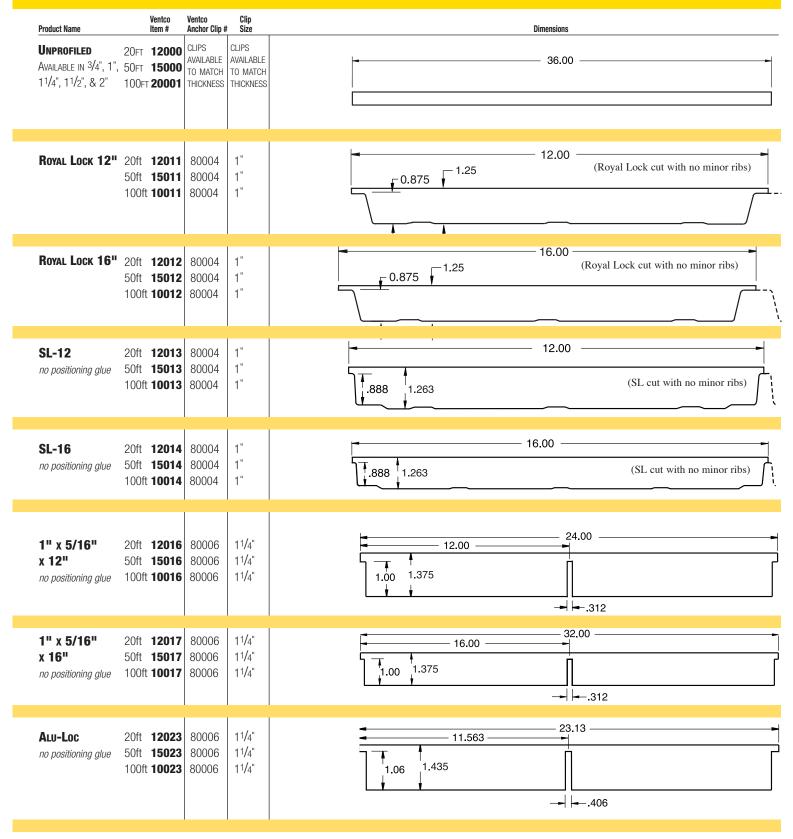
SCREW-DOWN PANEL PROFILES AGRICULTURAL AND RESIDENTIAL



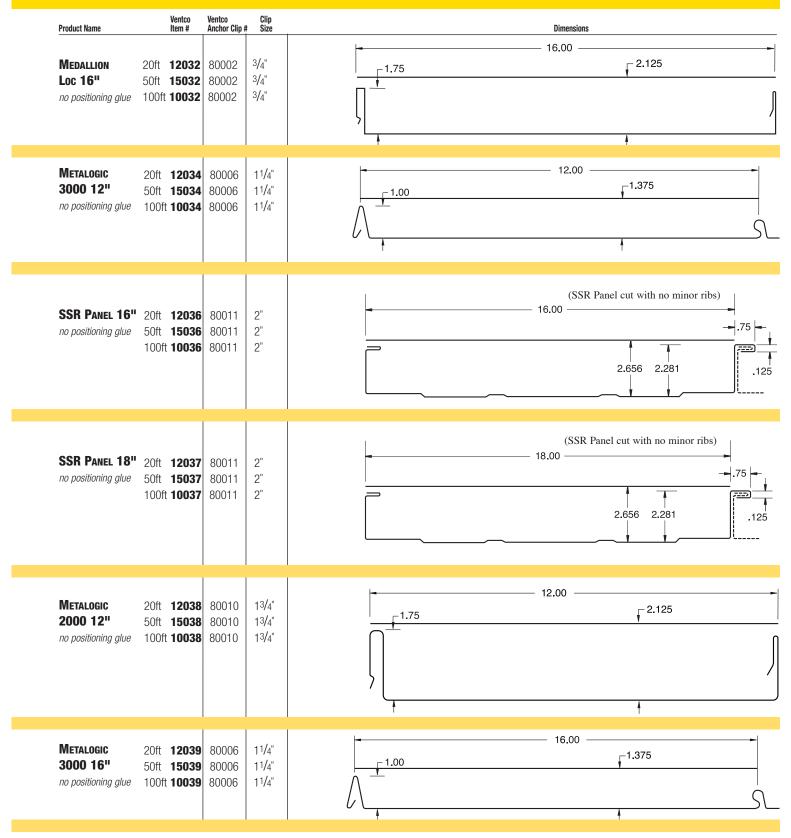
SCREW-DOWN PANEL PROFILES COMMERCIAL



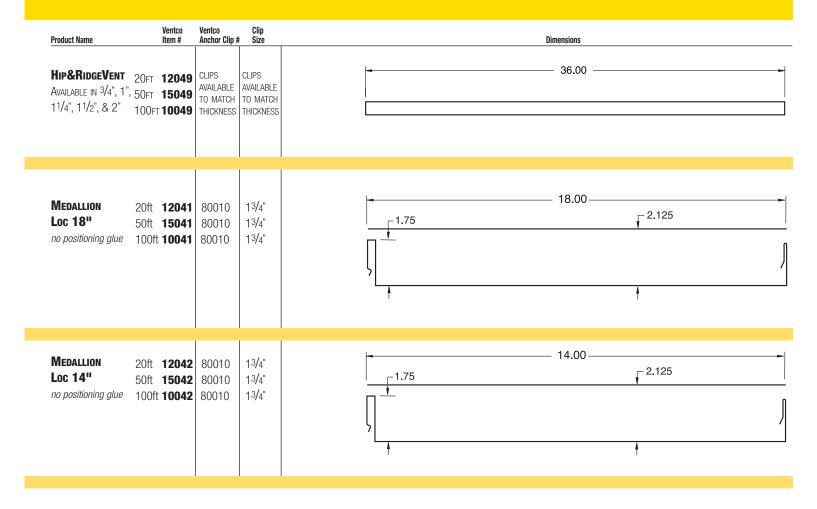
STANDING SEAM PANEL PROFILES AGRICULTURAL AND RESIDENTIAL

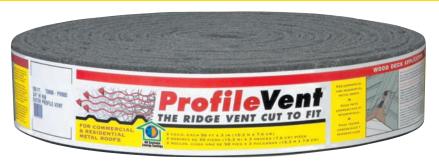


STANDING SEAM PANEL PROFILES AGRICULTURAL AND RESIDENTIAL



STANDING SEAM PANEL PROFILES AGRICULTURAL AND RESIDENTIAL





The Original Custom Ridge Vent

Cut to fit—Standing Seam and Screw-Down Panels in over 50 Profiles for Commercial, Agricultural and Residential Metal Roofs.

Built on proven technology since 1998, our specially designed equipment precisely cuts the panel profile into the surface. Working at optimum performance within varied roof pitches from 2:12 to 20:12, ProfileVent is custom cut to fit the individual panel profile. ProfileVent's compatibility with a steep roof pitch makes it uniquely suitable for these applications, without sacrificing ventilation performance. Maintain the ridge line appearance without the need to raise the ridge cap to accommodate the vent.

- ProfileVent will NOT sustain a flame— Class A Fire Rating
- Fits under almost any ridge cap
- One person roll-out installation

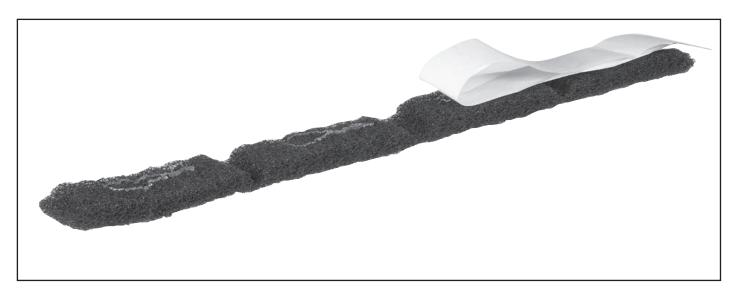
- Miami-Dade approved Noa No.: 07-0626.08
- Net free area is 10.96 sq. in. per lineal ft.
- Preferred by Contractors

ProfileVent (49 Different Profiles) Product & Freight Specifications

Item Name	20' Roll	50' Roll	100' Roll
Item Description	(2) 10' Rolls Profile Vent	(2) 25' Rolls Profile Vent	(2) 50' Rolls Profile Vent
Item#	Varies	Varies	Varies
Barcode Package	Varies	Varies	Varies
Barcode Pallet			
Lineal Ft per Package	20'	50'	100'
Package Weight	Varies	Varies	Varies
Package Size	Varies	Varies	Varies
ltems per package	2	2	2
Packages per Pallet	84	28	14
Lineal Ft per Pallet	1,680'	1,400'	1,400'
Pallet Weight	153 lbs.	131 lbs.	150 lbs.
Lineal Ft per 53' truckload	80,640'	67,200' (most items)	67,200 (most items)
Packages per 53' truckload	4,032	1,344 (most items)	672 (most items)
Pallets per 53' truckload	48	48	48
Freight	FOB Wrens, GA Plant	FOB Wrens, GA Plant	FOB Wrens, GA Plant
Pallet Dimensions	40" x 48" x 47"	40" x 48" x 47"	40" x 48" x 47"
* Net Free Area	Varies	Varies	Varies
Air Permeability	Varies	Varies	Varies



ProfileVent 3' Stick



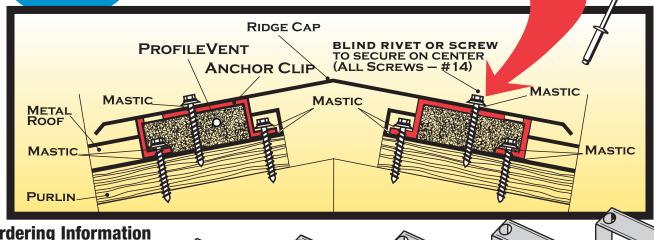
ProfileVent 3' Stick 3/4" Stick and R Panel Product & Freight Specifications

Item Name	3/4" Hi Rib Stick	3/4" Hi Rib Stick	R Panel Stick	R Panel Stick
Item Description	1" H x 2" W x 3' L PV Stick	1" H x 3" W x 3' L PV Stick	1.5" H x 2" W x 3' L PV Stick	1.5" H x 3" W x 3' L PV Stick
Item#	16005	16105	16009	16019
Lineal Ft per Packa	ge 108'	72'	72'	48'
Package Weight	6 lbs.	6 lbs.	6 lbs.	6 lbs.
Package Size	36¾" x 12¼" x 6¼"	36¾" x 12¼" x 6¼"	36¾" x 12¼" x 6¼"	36¾" x 12¼" x 6¼"
Items per package	36	24	24	16
Packages per Palle	t 24	24	24	24
Lineal Ft per Pallet	2,592'	1,728'	1,728′	1,152'
Pallet Weight	220 lbs.	220 lbs.	220 lbs.	220 lbs.
Freight	FOB Wrens, GA Plant	FOB Wrens, GA Plant	FOB Wrens, GA Plant	FOB Wrens, GA Plant
Net Free Area	23.40 Sq. in./Ln. ft.	23.40 Sq. in./Ln. ft.	31.40 Sq. in./Ln. ft.	31.40 Sq. in./Ln. ft.
Air Permeability	872 CFM	872 CFM	762 CFM	762 CFM

DPTIONAL RIDGE CAP ANCHOR CLIP

We recommend using our anchor clip to hold down the ridge cap in high wind areas and on panels with major ribs 16" on center or greater.

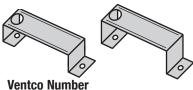
Blind Rivets can be used to anchor the ridge cap when using architectural or standing seam panels.





PATENTED*

Anchor Clip Detail



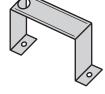
80004



80006







80011

80012

3/4" Anchor Clip 1" Anchor Clip 11/4" Anchor Clip 11/2" Anchor Clip 13/4" Anchor Clip 2" Anchor Clip

80008

80010

21/2" Anchor Clip

Item Name	¾" Anchor Clip	1" Anchor Clip	1¼" Anchor Clip	1½" Anchor Clip	1¾" Anchor Clip	2" Anchor Clip	2½" Anchor Clip
Item Description	3/4" L x 1" W x 3" H	1" L x 1" W x 3" H	1¼" L x 1" W x 3" H	1½" L x 1" W x 3" H	1¾" L x 1" W x 3" H	2" L x 1" W x 3" H	2½" L x 1" W x 3" H
Ventco Item#	80002	80004	80006	80008	80010	80011	80012
Barcode Inner Box	687966800020	687966800044	687966800068	687966800082	687966800105	687966800112	687966800129
Barcode Case	10687966800027	10687966800041	10687966800065	10687966800089	10687966800102	10687966800119	10687966800126
Clips per Inner Box	25	25	25	25	25	25	25
Inner Boxes per Case	24	24	24	24	24	24	24
Clips per Case	600	600	600	600	600	600	600
Cases Weight	35 lbs.	37 lbs.	40 lbs.	42 lbs.	45 lbs.	48 lbs.	52 lbs.
Case Size	26" x 20" x 14"	26" x 20" x 14"	26" x 20" x 14"	26" x 20" x 14"	26" x 20" x 14"	26" X 20" X 14"	26" x 20" x 14"
Inner Box Size	6" x 6" x 6"	6" x 6" x 6"	6" x 6" x 6"	6" x 6" x 6"	6" x 6" x 6"	6" X 6" X 6"	6" x 6" x 6"

Packaging

80002

- 25 clips per small box
- 24 small boxes per master box
- 600 clips per master box

Specifications

- 20 gauge galvanized steel
- Visible surface painted black for aesthetic purposes



Test Results

Ventco[™] Ridge Cap Anchor Clip

An independent engineering corporation tested the performance of the Ventco Ridge Cap Anchor Clip under high wind loading. During testing, a roof/ridge vent/cap system was subjected to wind speeds that follow the Dade County Test protocol.

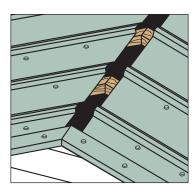
The following observations were made concerning the performance and structural integrity of the clip and ridge cap:

- No lifting of the ridge cap up to 115 mph
- No fastener pull out or loosening
- The ridge cap remained in contact with ventilation system
- No difference in performance when the cap is secured to the clip with screws or blind rivets

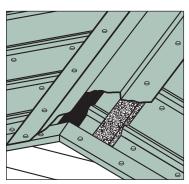
INSTALLATION INSTRUCTIONS

FOR PROFILEVENT &
OPTIONAL RIDGE CAP ANCHOR CLIP

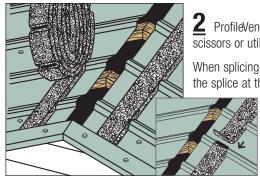
PROFILEVENT STANDARD INSTALLATION INSTRUCTIONS



Allow 2" opening at ridge for ventilation. ProfileVent® is rolled out along the ridge, gable to gable, about 1/2" to 1" upslope from the edge of the ridge cap. The positioning adhesive on most profiles will hold ProfileVent in position for easy installation.



3 Screw through ridge cap and top of each anchor clip. Blind Rivets can be used to anchor the ridge cap when using architectural or standing seam panels.



ProfileVent can be cut with scissors or utility knife.

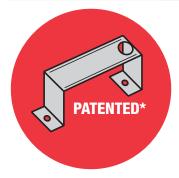
When splicing ProfileVent, make the splice at the center top of

the high rib and use caulk or sealant along the splice (see inset).



New or Reroof on Purlin or Wood Deck Construction

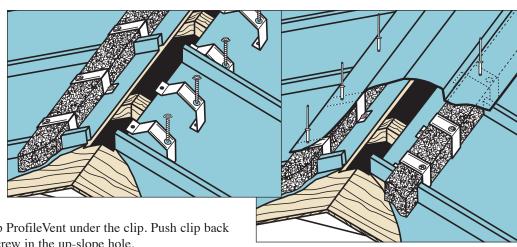
Use a 2"opening at the ridge to provide ventilation. On new or reroof wood deck construction, cut a 2" slot at the ridge (1" each side, start cut 6" from gable ends). On purlin construction position panels to leave a 2" opening.



OPTIONAL RIDGE CAP ANCHOR CLIP INSTALLATION INSTRUCTIONS

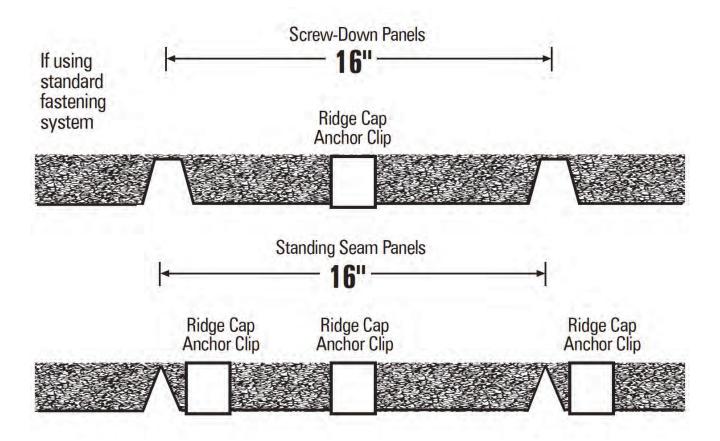
Where you have a center board, allow a 1" opening on either side for proper ventilation.

1 Install your metal roofing panel according to manufacturer's instructions. Apply mastic above and below pre-drilled holes in the clip. Before installing ProfileVent, insert #14A screw through the large down-slope access hole in top of the Ridge Cap Anchor Clip.



2 Lift the back end of clip. Slip ProfileVent under the clip. Push clip back down and insert another #14A screw in the up-slope hole.

PROFILEVENT SUGGESTED PLACEMENT OF RIDGE VENT ANCHOR CLIPS





NEVS The Technical Bulletin for ProfileVent

NET FREE AREA

Net free area will vary by product from 23.3 to 48.3 square in. of net free area per lineal ft. (See table of contents page 1.2). As with other attic ventilation systems, ProfileVent must be installed with soffit vents to meet HVI recommendations. Air flow is unrestricted by any fabric covering.

What is NFA?

Venting products are normally rated with a Net Free Area (NFA). The NFA is the open area that exists for air to pass through. The key to effective venting is to balance the NFA of soffit and ridge vents. Ideally the NFA of the soffits should be equal or greater than that of the ridge vent.

THE SIMPLE MATHEMATICS OF A BALANCED RIDGE VENTILATION SYSTEM

According to most building codes, you need 1 square foot of ventilation for every 150 square feet of attic floor space. For new home construction that includes a vapor retarder, the minimum is 1 square foot of ventilation for every 300 square feet of attic floor space. If your vents are split between ridge vents and intake vents, the minimum requirement is also 1 square foot of ventilation for every 300 square feet of attic floor space. To determine how many feet of net free area you need, use this formula:

Square feet of attic floor space

300 = Square feet of net free area needed

For example:

1500 square feet of attic floor space

300 = 5 square feet of free are a needed

DETERMINING VENTILATION REQUIREMENTS

Attic Square	Min. Net Free Area Required (if balanced between intake and exhaust)		Min Length
Footage			of Ridge
1200	4'	576"	16'
1500	5'	720"	20'
1800	6'	864"	24'
2100	7'	1008"	28'
2400	8'	1152"	32'
2600	9'	1296'	36'
3000	10'	1440"	40'
3300	11'	1584"	44'

INSTALLING A BALANCED RIDGE VENT SYSTEM

- Measure the square footage of the attic (length x width).
- Measure the length of the ridge.
- Refer to the chart above for required net free area and minimum length of ridge for attic square footage. Note: In most cases, the length of the ridge balanced with the same net free area of intake vents will satisfy FHA minimum standards and most building codes.
- Use the chart below to calculate the amount of intake vents that should be installed to balance your ridge vent system. Always install ridge vents from end to end across the entire ridge for best appearance and to provide maximum ventilation area.
- Hip roofs, dormers and T- or L-shaped roofs may require a specially designed ventilation system.

BALANCING YOUR RIDGE VENT SYSTEM

	Linear Feet of	Numbe	Number of Undereave Vents		
Length of Ridge	Continuous Soffit Vent	6" x 8"	16" x 6"	16" x 4"	
15'	30	5	6	10	
20'	40	6	9	13	
30'	60	10	13	19	
40'	80	13	17	26	
50'	100	16	21	32	
60'	120	19	26	39	
70'	140	23	30	45	
80'	160	26	34	51	
90'	180	29	39	58	



Technical Bulletin NEW © The Technical Bulletin

How to calculate Net Free Area

- **Definition:** Net Free Ventilation Area means the total unobstructed area (usually measured in square inches) through which air can enter or exhaust a non-powered ventilation component.
- For air flow paths that are non-homogeneous, meaning the area available for air to flow through changes as you progress along the air flow path, the most limiting area defines Net Free Ventilation Area.
- For a simple non-woven ridge vent, the air flow path is homogeneous except for where fasteners pass through the vent material. In this case, the formula is:

Net Free Area per lineal $ft = 2 \times (A_{Gross/ft} \times (Fraction \ air \ by \ volume) - A_{Obstruction/ft})$

Explanation of equation:

- Factor of 2: each foot of ridge has two identical areas for ventilation... one on each side of the ridge.
- $A_{Gross/fi}$: the is the total area for air flow per foot of one side of the ridge assuming no obstructions
- Fraction air by volume: for non-woven vent material, this is the ratio of the volume of air in a given piece of material to the total external volume of that piece of material. One way to measure fraction air by volume is:
 - Measure the outside dimensions of a rectangular piece of non-woven vent material and calculate the external volume $(L \times W \times H)$
 - Cut that piece of material up into small pieces being sure to keep all solids
 - Fill a graduated cylinder with water to a level that will leave enough volume for the added solids and record the level
 - Add all the cut up vent material to the graduated cylinder and record the change in volume
 - Fraction air by volume = $1 (\Delta Volume)/(External volume)$

Georgia Web non-woven ventilation material has a *Fraction air by volume* of approximately 0.96.

• $A_{Obstruction/ft}$: Area of any obstructions in the flow path per foot of one side of the ridge. For example, if there was a 1/8" diameter fastener every foot and the material thickness at the fastener location was 3/4", $A_{Obstruction/ft}$ would equal 1/8" × 3/4" = 3/32 sqin.

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