



## ROUND GRAVITY VENTILATORS



### Standard Size

Round gravity ventilators are available in standard 12, 20, and 24 - inch diameter throat sizes. Other sizes up to 48 - inch available through special orders.

### Integral Dampers

The addition of a vertical-lift type damper completes the weather-tightness of the unit. The damper is supported in the open position by four strong springs and is closed by a long pull chain. Damper may be locked in any position by the use of an optional key type chain lock (please specify when ordering.) Ventilator may be furnished without damper if desired. However, overspray or driven rain may enter the vented space. Ventilator with damper may function as a smoke exhaust vent by including a fusible link in the chain operator.

### Construction

26 gauge inner and outer bands, rainshield, and base assembly are assembled with four pre-formed baffles into a simple yet sturdy ventilation unit. This design achieves a free unobstructed flow of ventilation air.

### Bird Screen

Assembly is completed by the installation of a 4 x 4 bird screen in the opening between the inner band and the rainshield to resist the entry of birds into the vent area.

### Finish

Vents are furnished standard with white or galvalume finish, but are available in special colors when specifically ordered.

### Base Design

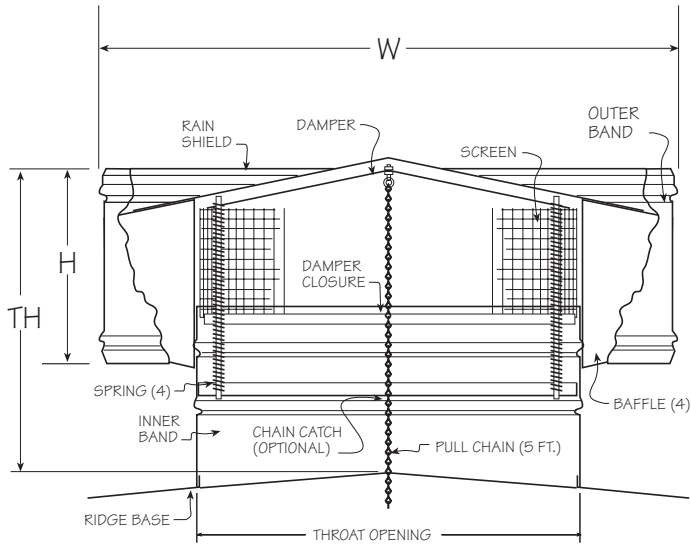
The base is specifically designed for the final installation, with specified roof slope; either ridge or single slope, and either flat or mounted into customer- furnished roof panel. Base and ventilating unit are furnished pre-assembled ready for installation. Single slope bases are mounted directly into roof panel and are placed in such a way as to prevent damming.

### Design

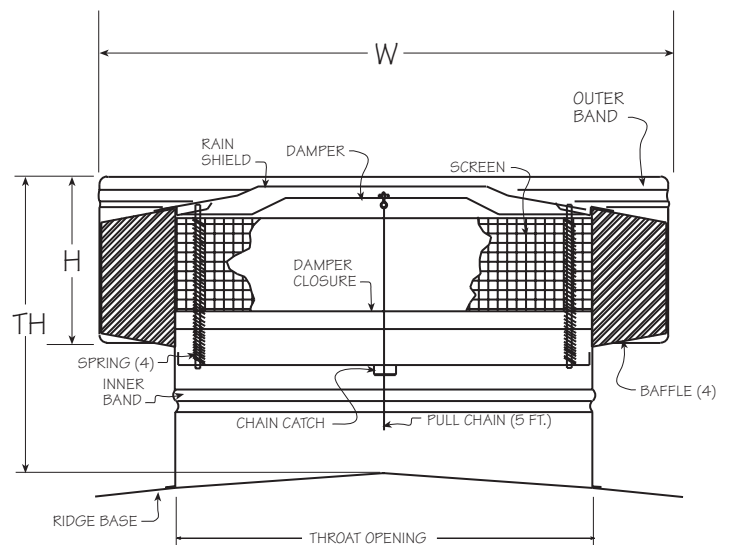
Round gravity roof ventilators are designed for economical, low volume air movement to ventilate warehouses, light industrial buildings, attics, lofts and other buildings requiring gravity or relief ventilation. They also are adaptable for use as discharge heads for mechanical or forced air ventilation systems. The volume of gravity air movement can be controlled by the adjustable damper. The damper is also effective in controlling water intrusion from wind-driven rain and back draft conditions.

Installation is by use of standard formed closures, tape sealant, caulking and fasteners as indicated on standard assembly drawings. When ordering, please specify roof slope and base type. A wooden crate is included in price.

## DIMENSIONS AND TECHNICAL DATA



12, 16, 24, 36 and 48" Throat Ventilators



20" Throat Ventilators

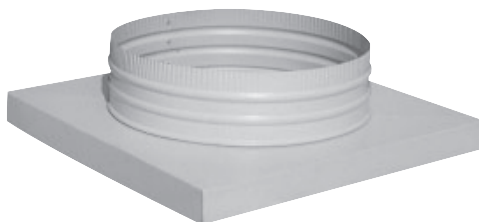
DIMENSIONS (In Inches)				SHIPPING WEIGHT
Throat*	W	H	TH	LBS.
12	18	7½	14½	38
20	30	10	17½	65
24	36	12	23½	73



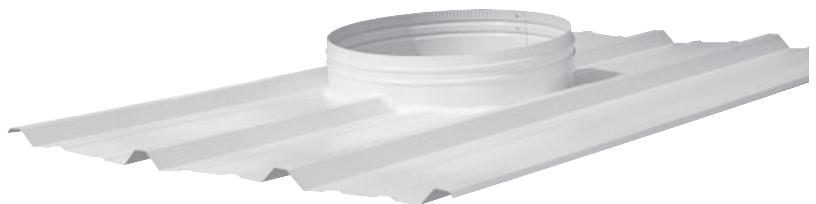
Type 1



Type 2

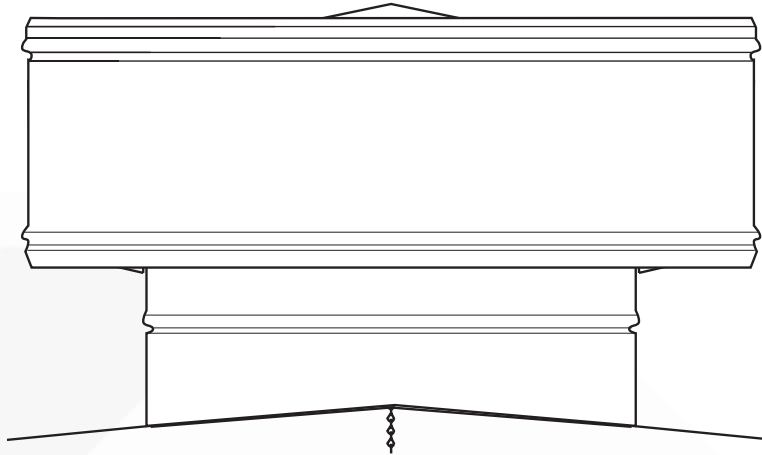


Type 3



Type 4





## Table of Capacities for Round Ventilators

### TO ESTIMATE VENTILATOR CAPACITY:

Determine the height of vent above the air intakes and the "Temperature Difference" between inlet air temperature and outlet air temperature with these two constants find the "Factor" from Table "A." Multiply base rate C.F.M. from "Table C" by the factor from "Table A." The result is approximate vent capacity at "0" M.P.H. outside wind velocity. Beside the factor in Table A is the letter A, B, C or D. This letter refers to a factor in Table "B." Multiply vent capacity for "0" M.P.H. wind by appropriate factor from Table "B" for vent capacity under the given wind condition.

### EXAMPLE:

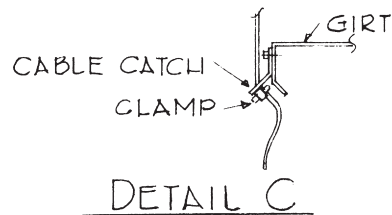
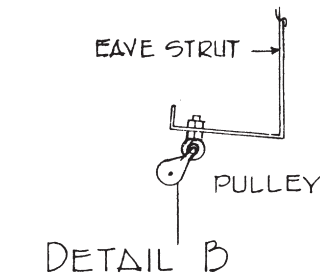
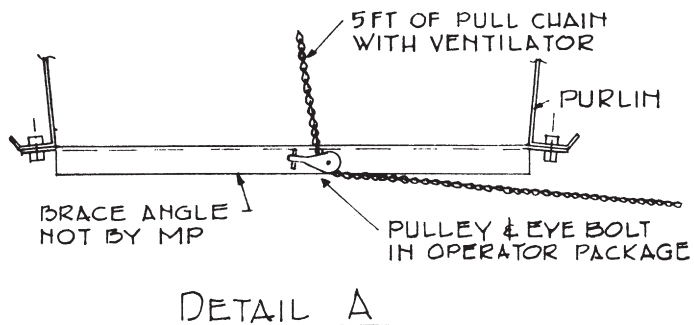
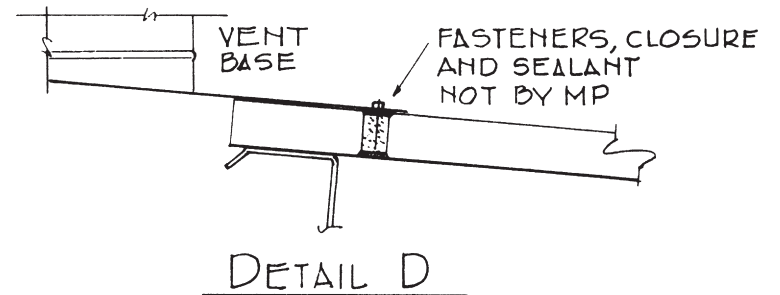
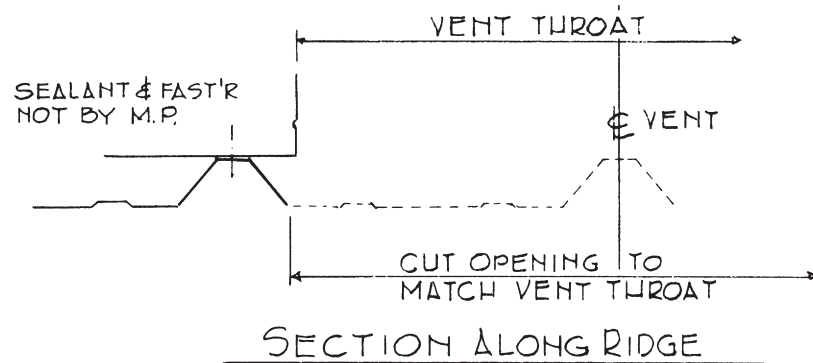
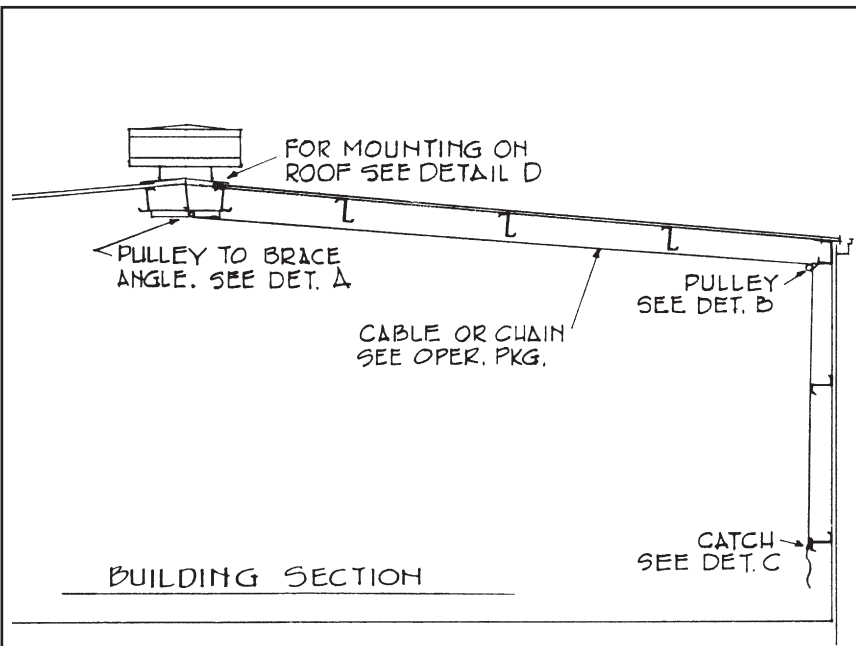
Use Ventilator Size 20"  
 Ventilator Height Above Intake 20'  
 Factor From Table "A" is .76A at 15 Temperature  
 Difference Multiply: .76 x 712 = 541 CFM at "0" M.P.H.  
 Using 3 M.P.H. Wind Vent Capacity is 541 x 1.14 = 617  
 C.F.M.

TABLE A							
Height and Temperature Factors							
HEIGHT IN FEET	Temperature Difference						
	15	20	25	30	35	40	50
15	.64A	.78A	.84A	.90B	.96B	1.02B	1.10C
20	.76A	.86A	.93B	1.00B	1.07B	1.13C	1.22C
25	.84A	.95B	1.02B	1.10C	1.18C	1.25C	1.34C
30	.91B	1.03B	1.12C	1.20C	1.29C	1.36C	1.47D
35	.97B	1.09B	1.18C	1.27C	1.36C	1.43D	1.55D
40	1.02B	1.15C	1.25C	1.34C	1.43D	1.52D	1.64D
45	1.07B	1.20C	1.30C	1.40C	1.50D	1.58D	1.71D
50	1.11C	1.26C	1.36C	1.46D	1.56D	1.65D	1.78D

TABLE B				
Wind Velocity Factors				
Wind M.P.H.	Factors			
	A	B	C	D
3	1.14	1.09	1.05	1.02
5	1.25	1.18	1.13	1.09
7	1.41	1.29	1.22	1.16
9	1.62	1.43	1.33	1.25
11	1.82	1.57	1.43	1.32

TABLE C				
Base Ratings Per Unit				
Size	12"	18"	20"	24"
C.F.M.	256	577	712	1026

RV-01.1 / Rev. 5/00




**№1 OPERATOR PACKAGE**

- 40 FT CHAIN
- 2 PULLEYS
- 1 CHAIN CATCH
- 2 "5" HOOKS

<i>PULL</i>
<i>SIDE WALL END WALL</i>

**№2 OPERATOR PACKAGE**

- 40 FT CABLE
- 2 PULLEYS
- 1 CABLE CATCH
- 2 CABLE CLAMPS

 <b>METALLIC PRODUCTS</b> 3306 Ella Blvd. Houston, TX 77018 (713) 688-6624 • 1-800-356-7746 E-mail: info@mpvent.com	DATE:
	TITLE: INSTALLATION DETAILS
	PART: ROUND GRAVITY VENT
	RV-5