

# Gravity Ventilators Models WIH and WRH Intake and Relief



BUILDING VALUE IN AIR.



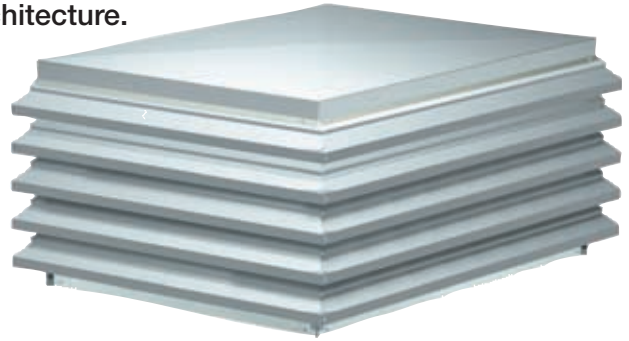
November  
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# Louvered Penthouse Gravity Ventilator

## Models WIH & WRH

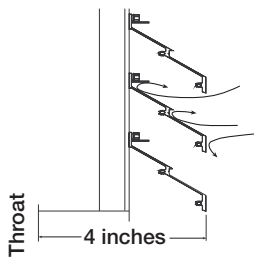
Greenheck designs penthouse units for aesthetically pleasing gravity intake or relief applications.

- Clean horizontal lines blend perfectly with modern architecture.
- The special louver design results in low pressure drops, low hood heights, and maintains maximum weather resistance.
- All-aluminum construction assures lasting durability and appearance.
- The removable cover is equipped with insulation to prevent condensation.



The flexible design of the WIH (Intake) and WRH (Relief) allow the units to be shipped in preassembled sections. These sections are easy to assemble on the jobsite and can be assembled without special tools. All required fasteners and complete assembly instructions are shipped with each unit.

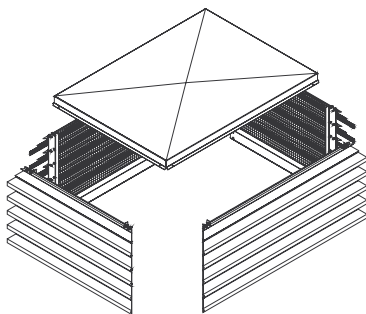
## Construction Features



**Stormproof Louver Blades** – Each unit features stormproof aluminum louver blades with mitered corners. The stormproof louver was tested under the most extreme weather conditions and found to be a superior design. The sturdy extruded aluminum louver blade has a material thickness of 0.080 inches.



**Weathershield** – The interior vertical edge of the curb cap forms the throat and weathershield. Each corner is also shielded to prevent leakage. The louvers are mounted 4 inches from the roof opening for added weather protection.

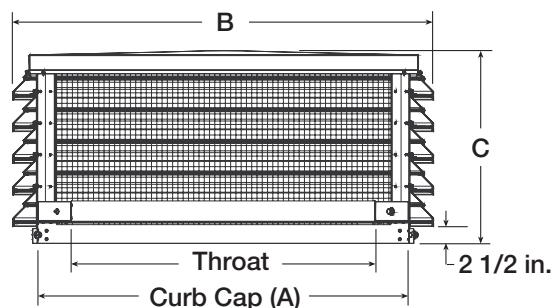


**Assembled Sides and Cover** – The unit is made into four side sections and a reinforced cover. A factory assembled side consists of the curb cap, vertical supports, and the quantity of louvers required for the specified height.

The sides are joined at the four corners by stainless steel screws in each louver. These screws are countersunk to maintain the appearance of the mitered corner. The cover is securely fastened to the unit by stainless steel fasteners.

## Dimensional Drawing

See table on opposite page for product dimensions.



# Dimensional and Performance Data

**Intake (WIH) CFM**

**Relief (WRH) CFM**

<b>Dimensions</b> (inches)						Total Pressure Drop in inches wg*							Total Pressure Drop in inches wg*						
						THROAT VELOCITY (ft./min.)							THROAT VELOCITY (ft./min.)						
						.008	.030	.048	.069	.094	.123	.192	.024	.055	.075	.097	.123	.152	.22
Throat	Area (ft <sup>2</sup> )	A	B	C	Number of Louvers	200	400	500	600	700	800	1000	400	600	700	800	900	1000	1200
12 x 12	1.0	20 x 20	26 x 26	12 1/4	3	200	400	500	600	700	800	1000	400	600	700	800	900	1000	1200
12 x 14	1.2	20 x 22	26 x 28	12 1/4	3	240	480	600	720	840	960	1200	480	720	840	960	1080	1200	1440
12 x 16	1.3	20 x 24	26 x 30	12 1/4	3	260	520	650	780	910	1040	1300	520	780	910	1040	1170	1300	1560
12 x 18	1.5	20 x 26	26 x 32	12 1/4	3	300	600	750	900	1050	1200	1500	600	900	1050	1200	1350	1500	1800
12 x 22	1.8	20 x 30	26 x 36	12 1/4	3	360	720	900	1080	1260	1440	1800	720	1080	1260	1440	1620	1800	2160
12 x 24	2.0	20 x 32	26 x 38	12 1/4	3	400	800	1000	1200	1400	1600	2000	800	1200	1400	1600	1800	2000	2400
14 x 14	1.36	22 x 22	28 x 28	12 1/4	3	272	544	680	816	952	1088	1360	544	816	952	1088	1224	1360	1632
14 x 16	1.55	22 x 24	28 x 30	12 1/4	3	310	620	775	930	1085	1240	1550	620	930	1085	1240	1395	1550	1860
14 x 18	1.75	22 x 26	28 x 32	12 1/4	3	350	700	875	1050	1225	1400	1750	700	1050	1225	1400	1575	1750	2100
14 x 20	1.95	22 x 28	28 x 34	12 1/4	3	390	780	975	1170	1365	1560	1950	780	1170	1365	1560	1755	1950	2340
14 x 24	2.34	22 x 32	28 x 38	12 1/4	3	468	936	1170	1404	1638	1872	2340	936	1404	1638	1872	2106	2340	2808
14 x 28	2.70	22 x 36	28 x 42	12 1/4	3	540	1080	1350	1620	1890	2160	2700	1080	1620	1890	2160	2430	2700	3240
16 x 16	1.78	24 x 24	30 x 36	12 1/4	3	356	712	890	1068	1246	1424	1780	712	1068	1246	1424	1602	1780	2136
16 x 20	2.22	24 x 28	30 x 34	12 1/4	3	444	888	1110	1332	1554	1776	2220	888	1332	1554	1776	1998	2220	2664
16 x 24	2.68	24 x 30	30 x 36	12 1/4	3	536	1072	1340	1608	1876	2144	2680	1072	1608	1876	2144	2412	2680	3216
16 x 28	3.11	24 x 36	30 x 42	12 1/4	3	622	1244	1555	1866	2177	2488	3110	1244	1866	2177	2488	2799	3110	3732
16 x 30	3.33	24 x 38	30 x 44	12 1/4	3	666	1332	1665	1998	2331	2664	3330	1328	1992	2324	2656	2988	3320	3984
16 x 32	3.55	24 x 40	30 x 46	12 1/4	3	710	1420	1775	2130	2485	2840	3500	1420	2130	2485	2840	3195	3550	4260
18 x 18	2.25	26 x 26	32 x 32	12 1/4	3	450	900	1125	1350	1575	1800	2250	900	1350	1575	1800	2025	2250	2700
18 x 24	3.0	26 x 32	32 x 38	12 1/4	3	600	1200	1500	1800	2100	2400	3000	1200	1800	2100	2400	2700	3000	3600
18 x 26	3.25	26 x 34	32 x 40	12 1/4	3	650	1300	1625	1950	2275	2600	3250	1300	1950	2275	2600	2925	3250	3900
18 x 30	3.74	26 x 38	32 x 44	16	4	748	1496	1870	2244	2618	2992	3740	1496	2244	2618	2992	3366	3740	4488
18 x 32	4.0	26 x 40	32 x 46	16	4	800	1600	2000	2400	2800	3200	4000	1600	2400	2800	3200	3600	4000	4800
18 x 36	4.5	26 x 44	32 x 50	16	4	900	1800	2250	2700	3150	3600	4500	1800	2700	3150	3600	4050	4500	5400
22 x 22	3.37	30 x 30	36 x 36	16	4	674	1348	1685	2022	2359	2696	3370	1348	2022	2359	2696	3033	3370	4044
22 x 26	3.97	30 x 34	36 x 40	16	4	794	1588	1985	2382	2779	3176	3970	1588	2382	2779	3176	3573	3970	4764
22 x 30	4.6	30 x 38	36 x 44	16	4	920	1840	2300	2760	3220	3680	4600	1840	2760	3220	3680	4140	4600	5520
22 x 36	5.5	30 x 44	36 x 50	19 1/4	5	1100	2200	2750	3300	3850	4400	5500	2200	3300	3850	4400	4950	5500	6600
22 x 40	6.1	30 x 48	36 x 54	19 1/4	5	1220	2440	3050	3660	4270	4880	6100	2440	3660	4270	4880	5490	6100	7320
22 x 44	6.73	30 x 52	36 x 58	19 1/4	5	1346	2692	3365	4038	4711	5384	6730	2692	4038	4711	5384	6057	6730	8076
24 x 24	4.0	32 x 32	38 x 38	16	4	800	1600	2000	2400	2800	3200	4000	1600	2400	2800	3200	3600	4000	4800
24 x 30	5.0	32 x 38	38 x 44	19 1/4	5	1000	2000	2500	3000	3500	4000	5000	2000	3000	3500	4000	4500	5000	6000
24 x 36	6.0	32 x 44	38 x 50	19 1/4	5	1200	2400	3000	3600	4200	4800	6000	2400	3600	4200	4800	5400	6000	7200
24 x 40	6.67	32 x 48	38 x 54	19 1/4	5	1334	2668	3335	4002	4669	5336	6670	2668	4002	4669	5336	6003	6670	8004
24 x 44	7.35	32 x 52	38 x 58	19 1/4	5	1470	2940	3675	4410	5145	5880	7350	2940	4410	5145	5880	6615	7350	8820
24 x 48	8.0	32 x 56	38 x 62	19 1/4	5	1600	3200	4000	4800	5600	6400	8000	3200	4800	5600	6400	7200	8000	9600
28 x 28	5.44	36 x 36	42 x 42	19 1/4	5	1088	2176	2720	3264	3808	4352	5440	2176	3264	3808	4352	4896	5440	6528
28 x 36	7.0	36 x 44	42 x 50	19 1/4	5	1400	2800	3500	4200	4900	5600	7000	2800	4200	4900	5600	6300	7000	8400
28 x 40	7.8	36 x 48	42 x 54	19 1/4	5	1560	3120	3900	4680	5460	6240	7800	3120	4680	5460	6240	7020	7800	9360
28 x 44	8.55	36 x 52	42 x 58	19 1/4	5	1710	3420	4275	5130	5985	6840	8550	3420	5130	5985	6840	7695	8550	10260
28 x 50	9.75	36 x 58	42 x 64	19 1/4	5	1950	3900	4875	5850	6825	7800	9750	3900	5850	6825	7800	8775	9750	11700
28 x 56	10.9	36 x 64	42 x 70	23 1/2	6	2180	4360	5450	6540	7630	8720	10900	4360	6540	7630	8720	9810	10900	13080
32 x 32	7.1	40 x 40	46 x 46	19 1/4	5	1420	2840	3550	4260	4970	5680	7100	2840	4260	4970	5680	6390	7100	8520
32 x 36	8.0	40 x 44	46 x 50	19 1/4	5	1600	3200	4000	4800	5600	6400	8000	3200	4800	5600	6400	7200	8000	9600
32 x 40	8.9	40 x 48	46 x 54	19 1/4	5	1780	3560	4450	5340	6230	7120	8900	3560	5340	6230	7120	8010	8900	10680
32 x 48	10.7	40 x 56	46 x 62	23 1/2	6	2140	4280	5350	6420	7490	8560	10700	4280	6420	7490	8560	9630	10700	12840
32 x 54	12.0	40 x 62	46 x 68	23 1/2	6	2400	4800	6000	7200	8400	9600	12000	4800	7200	8400	9600	10800	12000	14400
32 x 64	14.2	40 x 72	46 x 78	27 1/4	7	2840	5680	7100	8520	9940	11360	14200	5680	8520	9940	11360	12780	14200	17040
36 x 36	9.0	44 x 44	50 x 50	19 1/4	5	1800	3600	4500	5400	6300	7200	9000	3600	5400	6300	7200	8100	9000	10800
36 x 40	10.0	44 x 48	50 x 54	23 1/2	6	2000	4000	5000	6000	7000	8000	10000	4000	6000	7000	8000	9000	10000	12000
36 x 48	12.0	44 x 56	50 x 62	23 1/2	6	2400	4800	6000	7200	8400	9600	12000	4800	7200	8400	9600	10800	12000	14400
36 x 54	13.5	44 x 62	50 x 68	23 1/2	6	2700	5400	6750	8100	9450	10800	13500	5400	8100	9450	10800	12150	13500	16200
36 x 60	15.0	44 x 68	50 x 74	23 1/2	6	3000	6000	7500	9000	10500	12000	15000	6000	9000	10500	12000	13500	15000	18000
36 x 72	18.0	44 x 80	50 x 86	27 1/4	7	3600	7200	9000	10800	12600	14400	18000	7200	10800	12600	14400	16200	18000	21600
42 x 42	12.25	50 x 50	56 x 56	23 1/2	6	2450	4900	6125	7350	8575	9800	12250	4900	7350	8575	9800	11025	12250	14700
42 x 48	14.0	50 x 56	56 x 62	27 1/4	7	2800	5600	7000	8400	9800	11200	14000	5600	8400	9800	11200	12600	14000	16800
42 x 54	15.75	50 x 62	56 x 68	27 1/4	7	3150	6300	7875	9450	11025	12600	15750	6300	9450	11025	12600	14175	15750	18900
42 x 60	17.5	50 x 68	56 x 74	31	8	3500	7000	8750	10500	12250	14000	17500	7000	10500	12250	14000	15750	17500	21000
42 x 72	21.0	50 x 80	56 x 86	31	8	4200	8400	10500	12600	14700	16800	21000	8400	12600	14700	16800	18900	21000	25200
42 x 84	24.5	50 x 92	56 x 98	34 1/4	9	4900	9800	12250	14700	17150	19600	24500	9800	14700	17150	19600	22050	24500	29400
48 x 48	16.0	56 x 56	62 x 62	27 1/4	7	3200	6400	8000	9600	11200	12800	16000	6400	9600	11200	12800	14400	16000	19200
48 x 54	18.0	56 x 62	62 x 68	31	8	3600	7200	9000	10800	12600	14400	18000	7200	10800	12600	14400	16200	18000	21600
48 x 6																			

# Typical Specifications

## Models WIH/WRH

Models WIH and WRH shall be low silhouette louvered penthouse units for intake or relief applications.

Units shall feature a stormproof 0.080 inch aluminum louver with mitered corners.

Construction shall be all-aluminum to assure lasting durability and appearance.

Unit shall have a removable aluminum cover for internal access.

Cover shall be lined with fiberglass insulation to prevent condensation.

Louvers shall be mounted 4 inches from the roof opening for maximum weather protection.

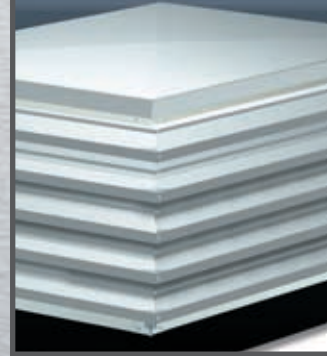
Cover shall be securely fastened to the unit by corrosion resistant fasteners.

Birdscreen shall be constructed of 1/2 inch mesh securely mounted across intake/relief openings.

Louver design shall result in low pressure drops, low hood heights, and maintain maximum weather resistance.

Options include a variety of bird and insect screens, dampers, roof curbs, special finishes and factory assembled based on shipping limitations.

Models WIH or WRH shall be manufactured by Greenheck Fan Corporation, in Schofield, Wisconsin and in Sacramento, California.



## Building Value in Air

Greenheck delivers value to mechanical engineers by helping them solve virtually any air quality challenges their clients face with a comprehensive selection of

top quality, innovative air-related equipment. We offer extra value to contractors by providing easy-to-install, competitively priced, reliable products that arrive on time.

And building owners and occupants value the energy efficiency, low maintenance and quiet dependable operation they experience long after the construction project ends.

## Our Warranty

Greenheck warrants this equipment to be free from defects in material and workmanship for a period of one year from the purchase date. Any units or parts which prove defective during the warranty period will be replaced at our option when returned to our factory, transportation prepaid. Motors are warranted by the motor manufacturer for a period of one year. Should motors furnished by Greenheck prove defective during this period, they should be returned to the nearest authorized motor service station. Greenheck will not be responsible for any removal or installation costs.

*As a result of our commitment to continuous improvement, Greenheck reserves the right to change specifications without notice.*



Prepared to Support  
Green Building Efforts

