

REVERSIBLE

FABRA FAN

EXHAUST/SUPPLY

*Hooded Axial Roof Ventilators with
Reversible Cast Aluminum Propellers*



- Direct Drive
- Belt Drive
- Filtered



REVERSIBLE ROOF FANS (Exhaust / Supply)



Model RPDR & RPDRF - Direct Drive & Direct Drive Filtered

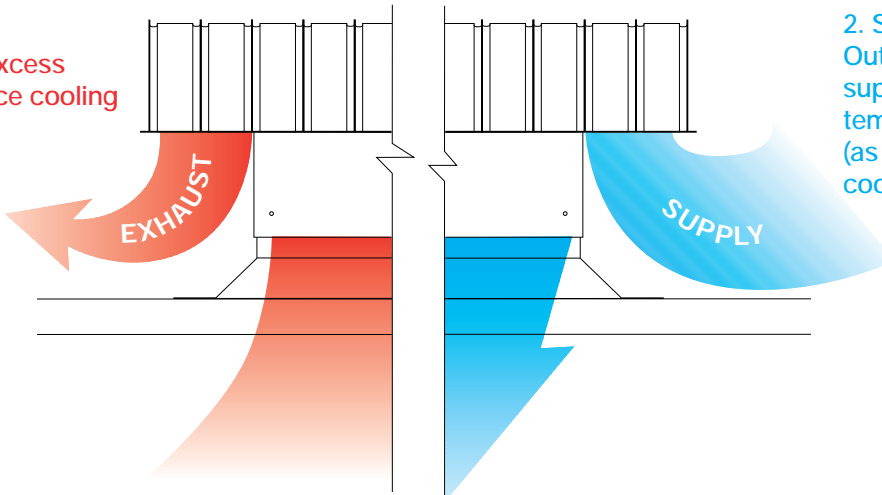
Model RPBR & RPBRF - Belt Drive & Belt Drive Filtered

Ventilation requirements are often subject to daily or seasonal changes in temperature. The Greenheck Reversible fan is compatible with ducted or non-ducted systems and offers the ability to either exhaust or supply air on demand to maintain comfortable working conditions. By exhausting excess heat or supplying fresh outside air, the reversing fan saves cooling costs. Fewer fans required on the job means lower initial costs and lower installation costs, with fewer roof penetrations.



ONE FAN - TWO FUNCTIONS

1. EXHAUST
Evacuates excess heat to reduce cooling costs.



2. SUPPLY
Outside air can be supplied when temperatures are cooler (as at night) to reduce cooling costs.

RPDR - DIRECT DRIVE RPDRF - DIRECT DRIVE FILTERED

SIZES

Models RPDR/RPDRF are available in six sizes, 24" - 54".

PERFORMANCE

Performance capacities extend from 3,400 CFM to 44,850 CFM and static pressures to 1/2". Performance is equivalent in the exhaust and supply mode.

Performance data on [pages 6 & 7](#) represents selected blade pitch combinations. Additional combinations offer capacities to meet a wide range of application requirements.

RPBR - BELT DRIVE RPBRF - BELT DRIVE FILTERED

SIZES

Models RPBR/RPBRF are available in eight sizes, 24" - 72".

PERFORMANCE

Performance capacities extend from 3,270 CFM to 70,500 CFM and static pressures to 1/2". Performance is equivalent in the exhaust and supply mode.

Performance data on [pages 8 - 11](#) represents one of many available blade pitch combinations. Additional combinations offer capacities to meet a wide range of application requirements.

Construction Features

Fan **hoods and bases** are constructed of aluminum, galvanized steel or painted steel as specified. Hood panels are arched and precision roll formed for strength and weather tightness. Hoods are bolted to heavy gauge support angles. Bases include prepunched mounting holes.

Birdscreens are constructed of 1/2" galvanized steel mesh. Filters are optional.

Reversing fan **propellers** are designed to produce a high level of efficiency over a broad selection range. Tapered airfoil blades are cast of aluminum alloy. The propeller is designed to move air in both the exhaust or supply modes. Airflow will be slightly less in the exhaust mode. Propellers are balanced prior to assembly.

Heavy duty, **pillow block bearings** are 100% factory tested and are designed specifically for air handling applications with a minimum (L-50) life in excess of 200,000 hours.

Non filtered hoods thru size 36 and filtered hood in size 24 are shipped fully assembled. Hoods for larger size units are shipped knocked down.

Fan shown is Model RPBR-30 with optional tall base, VCD-1100 damper and protective guard.

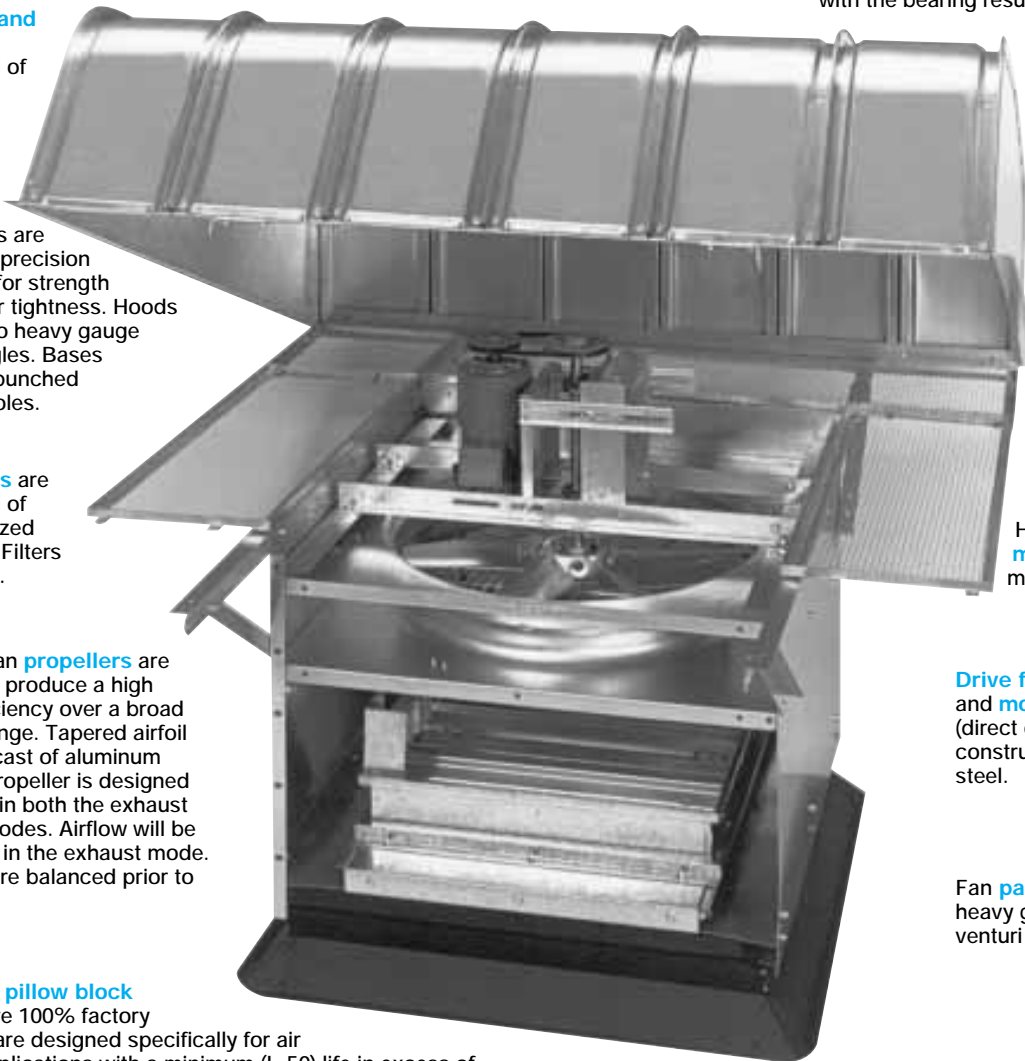
Fan **shafts** are precisely ground and polished steel sized so that the first critical speed is at least 25% over the maximum operating speed. Close tolerances where the shaft makes contact with the bearing result in longer bearing life.

Drives are sized for a minimum of 150% of driven horsepower. Pulleys are cast iron machined sheaves. Motor pulleys are adjustable for final system balancing. Belts are static free and oil resistant.

Heavy duty ball bearing **motors** are carefully matched to the fan load.

Drive frames (belt drive fans) and **motor support frames** (direct drive fans) are constructed of heavy gauge steel.

Fan **panels** are constructed of heavy gauge steel with a double venturi for efficient air flow.



Filtered Units

For applications where contaminants must be removed from air supplied to the building, models RPDRF & RPBRF feature 2" washable aluminum mesh filters. Basic hood and fan construction is similar to the non filtered models. Filters are mounted in open-end racks for easy removal. (See photo detail at right.) In sizes 36 and larger, access panels are supplied at both ends of the hood to allow filters to be removed without raising the hood.

See page 5 for the filter performance chart. To maintain cataloged performance, filters must be cleaned regularly.



Options & Accessories

Tall Bases

Tall bases with access doors are recommended for all reversible fan installations which include dampers. Dampers, actuators and linkages are factory assembled as part of the tall base and shipped as a single unit, reducing time and costs of field assembly. To permit access for inspection, cleaning and service, dampers and actuators are mounted on a slide-out rack. Tall bases are designed to provide the necessary minimum spacing between the propeller and the damper. There is ample space within the tall base for ease of initial electrical wiring. Access doors include two cam latches with plated steel handles.

Filters

For applications where contaminants must be removed from air supplied to the building, 2" aluminum mesh washable filters are available. Filters are mounted in open end racks for easy removal. In fan sizes 36" and larger, access panels are provided to allow filter removal without raising the hood.

Roof Curbs

Prefabricated roof curbs are available to reduce installation time and costs by ensuring compatibility between the fan and the roof opening. See Greenheck's roof curb catalog for complete details.

Hood Insulation

Hoods can be lined with 1/2" fiberglass insulation to prevent condensation and reduce sound levels.

Disconnect Switches

A complete line of disconnect switches (including NEMA 1 and NEMA 3R) are available for positive electrical shutoff to protect personnel servicing the fan.

Tie Down Points

Four galvanized steel brackets are available as cable attachment points at the ends of each hood support rail. Cable tie-downs prevent damage to the hood in locations where unusually strong winds occur. Cables are by others.

Exhaust/Supply Dampers

Standard, low leakage and insulated low leakage control dampers are available. The damper can either be curb mounted or mounted in the tall base for ease of service.

Motor Options

Motor enclosure options include open drip proof and totally enclosed for single speed motors, and open drip proof for two speed motors. Single phase motors are available in 115/208/230 volt, and three phase motors are available in 208/230/460 and 575 volt.

Paint

Special coatings are available for decorative or protective purposes. Decorative coatings are applied to exterior surfaces of the hood and base. Protective coatings are applied to the entire unit.

Guards

Protective guards mounted to the underside of the double venturi provide protection for the fan and nearby personnel.

Reversible Fan Control Center Model ES-CC

The model ES-CC Control Center is designed specifically for the Greenheck Reversible Fan. Its function is the selection and control of the Exhaust / Supply operation from a convenient remote location.

The ease of installation and operation of the control center makes it more economical than the design and construction of a custom control system in the field. (Wiring between fan and control center is by others).

Controls are housed in a NEMA 1 cabinet constructed of heavy gauge steel and coated with Greenheck's Perma-Tector™ finish. A door interlocking disconnect switch is provided to help prevent electrical shock when the door is opened. Magnetic starters are included as part of the control center as standard.

Controls

Mode Selector

The mode selector switch is used to engage the desired fan function. A time delay is provided to allow the fan to come to a complete stop before reversing.

Options

An indicator light mounted on the control panel door is available to indicate power to the fan.



Filter Performance

For models RPDRF & RPBRF, with 2" washable aluminum filters, use the filter performance graph at right to determine the static pressure drop added by the filters.

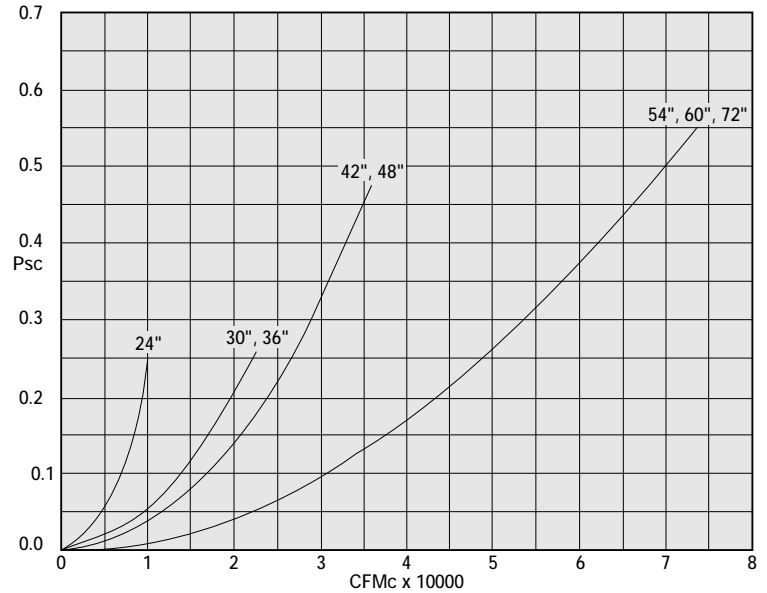
The airflow (CFMc) and the desired fan size must be known to determine the pressure drop added by the filters.

Example: 20,000 CFMc at .125" Psc
42" filtered belt drive fan.

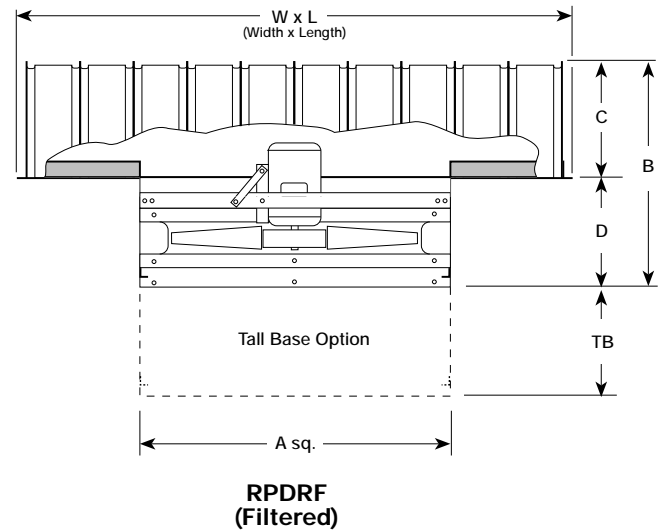
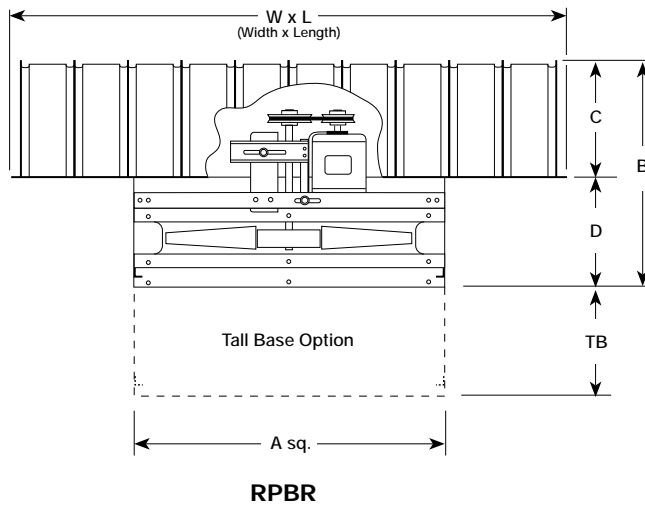
On the graph at right, locate the 20,000 CFM line and read upward to its intersection with the 42" curve. Read left to the static pressure valve (Psc), in this case .14" Psc.

Add .14" Psc from filter chart to the original .125" Psc for a total of .265" Psc.

Using the RPBR-42 performance table on page 9, 20,000 CFM at .265" Psc falls into the 5HP range at 1025 FRPM.



Dimensional Data



UNIT	A	B	C	D	TB	STANDARD HOOD WXL	FILTERED HOOD WXL	DAMPER SIZE	RECOMMENDED ROOF OPENING	BASE GAUGE		HOOD GAUGE		APPROX. WT.	
										GALV	ALUM	GALV	ALUM	GALV	ALUM
24	34 ¹ / ₄	32	18	14	14 ¹ / ₄	66 x 63	66 x 63	24 x 24	26 ¹ / ₂ x 26 ¹ / ₂	18	.064	24	.040	260	240
30	40 ¹ / ₄	34	20	14	17 ¹ / ₄	74 x 75	78 x 87	30 x 30	32 ¹ / ₂ x 32 ¹ / ₂	18	.064	24	.040	292	267
36	46 ¹ / ₄	38 ¹ / ₂	21	17 ¹ / ₂	17 ¹ / ₄	76 x 87	94 x 87	36 x 36	38 ¹ / ₂ x 38 ¹ / ₂	18	.064	24	.040	339	314
42	52 ¹ / ₄	43	24 ¹ / ₂	18 ¹ / ₂	17 ¹ / ₄	86 x 99	100 x 99	42 x 42	44 ¹ / ₂ x 44 ¹ / ₂	18	.080	22	.051	463	438
48	58 ¹ / ₄	44	24 ¹ / ₂	19 ¹ / ₂	17 ¹ / ₄	100 x 111	112 x 111	48 x 48	50 ¹ / ₂ x 50 ¹ / ₂	18	.080	22	.051	669	639
54	64 ¹ / ₄	49 ¹ / ₂	27	22 ¹ / ₂	17 ¹ / ₄	112 x 111	124 x 123	54 x 54	56 ¹ / ₂ x 56 ¹ / ₂	16	.100	22	.051	824	784
60	70 ¹ / ₄	50 ¹ / ₂	27	23 ¹ / ₂	17 ¹ / ₄	124 x 123	136 x 135	60 x 60	62 ¹ / ₂ x 62 ¹ / ₂	16	.100	20	.051	967	917
72	80 ¹ / ₄	53	29	24	17 ¹ / ₄	136 x 135	136 x 147	72 x 72	74 ¹ / ₂ x 74 ¹ / ₂	16	.100	20	.051	1141	1081

Direct Drive in sizes 24 - 54.

Belt Drive in sizes 24 - 72.

Due to Greenheck's policy of continuous product improvement, dimensions are subject to change without notice. For complete dimensional information refer to the applicable submittals for this product.

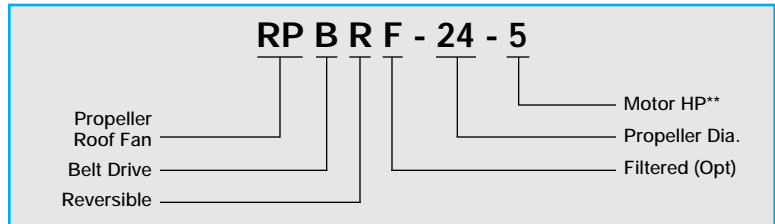
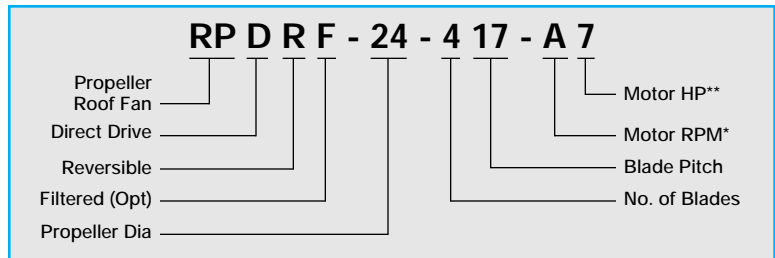
Model Number Code

The model number system is designed to completely identify the fan. The correct code letters must be specified to designate direct or belt drive and filtered fans. The remainder of the model number is determined by the size and performance selected from pages 6 - 11.

Motor RPM*	Motor HP**	
F = 680	4 = 1/4 HP	20 = 2 HP
C = 870	3 = 1/3 HP	30 = 3 HP
B = 1160	5 = 1/2 HP	50 = 5 HP
A = 1750	7 = 3/4 HP	75 = 7 1/2 HP
	10 = 1 HP	100 = 10 HP
	15 = 1 1/2 HP	150 = 15 HP

NOTE: Reversible fan standard construction includes low base except where tall bases are specified. Specify tall bases in a comment line below the model number code.

Hood and base material must be specified as aluminum, galvanized steel or painted steel.



Performance Data — Direct Drive

RPDR-24 Max. Motor Frame Size = 182T

MODEL	RPM (TS)	MOTOR HP	MAX BHP	SONES @ .125"	CFM / STATIC PRESSURE IN INCHES W.G.				
					0.000	0.125	0.250	0.375	0.500
RPDR-24-625-C4	870	1/4	0.26	17.9	4562	3424			
RPDR-24-632-C3	(5466)	1/3	0.35	17.8	5200	3655			
RPDR-24-421-B3	1160 (7288)	1/3	0.36	24	5069	4324	2962		
RPDR-24-429-B5		1/2	0.56	26	6062	5164	3372		
RPDR-24-623-B5		1/2	0.56	26	5765	5175	4097		
RPDR-24-632-B7	1750 (10995)	3/4	0.83	30	6933	6165	4513	3227	
RPDR-24-417-A7		3/4	0.87	46	6476	6068	5619	4978	4104
RPDR-24-421-A10		1	1.20	46	7647	7202	6680	6049	4995
RPDR-24-428-A15		1 1/2	1.80	54	8980	8463	7854	7005	5633
RPDR-24-622-A15		1 1/2	1.80	51	8458	8095	7707	7175	6424
RPDR-24-432-A20		2	2.10	57	9462	8853	8236	7270	5732
RPDR-24-625-A20	2	2.11	53	9177	8786	8354	7752	6927	

RPDR-30 Max. Motor Frame Size = 184T

MODEL	RPM (TS)	MOTOR HP	MAX BHP	SONES @ .125"	CFM / STATIC PRESSURE IN INCHES W.G.				
					0.000	0.125	0.250	0.375	0.500
RPDR-30-618-C5	870	1/2	0.59	23	8802	6738	4570	2071	
RPDR-30-625-C7	(6890)	3/4	0.84	25	9293	7998	5237	2136	
RPDR-30-410-B5	1160 (9186)	1/2	0.55	30	7219	6308	5004	2889	
RPDR-30-416-B7		3/4	0.81	32	9030	8056	6745	4080	
RPDR-30-617-B10		1	1.16	36	10104	9381	8452	6986	4926
RPDR-30-625-B15		1 1/2	1.74	43	12391	11522	10402	8328	6174
RPDR-30-630-B20	1750 (13859)	2	2.18	45	13345	12411	11135	8202	5895
RPDR-30-405-A10		1	1.16	57	8271	7621	6969	6308	5065
RPDR-30-410-A15		1 1/2	1.79	62	10890	10308	9692	9008	8175
RPDR-30-414-A20		2	2.39	69	12763	12170	11514	10808	9941
RPDR-30-420-A30		3	3.47	74	15185	14503	13813	13043	12108
RPDR-30-623-A50		5	5.30	85	17853	17323	16790	16147	15449

RPDR-36 Max. Motor Frame Size = 215T

MODEL	RPM (TS)	MOTOR HP	MAX BHP	SONES @ .125"	CFM / STATIC PRESSURE IN INCHES W.G.				
					0.000	0.125	0.250	0.375	0.500
RPDR-36-617-F5	680	1/2	0.58	22	9774	7834			
RPDR-36-625-F7	(6408)	3/4	0.80	24	11587	8557			
RPDR-36-410-C5	870 (8199)	1/2	0.55	27	9299	7569	4060		
RPDR-36-611-C7		3/4	0.81	33	10555	9219	7113		
RPDR-36-617-C10		1	1.18	35	12505	11140	8619	5277	
RPDR-36-625-C15		1 1/2	1.64	36	14569	12821	8909	5713	
RPDR-36-409-B10	1160 (10932)	1	1.21	47	11904	10573	9215	6477	4019
RPDR-36-605-B10		1	1.18	47	10869	9867	8812	7261	5274
RPDR-36-610-B15		1 1/2	1.72	51	13614	12584	11615	10457	7760
RPDR-36-614-B20		2	2.31	56	15450	14457	13440	12167	9276
RPDR-36-620-B30		3	3.17	63	17821	16945	15664	13982	10505

Performance shown is for Model RPDR without ducts or filters.

Performance Data — Direct Drive

RPDR-42 Max. Motor Frame Size = 254T

MODEL	RPM (TS)	MOTOR HP	MAX BHP	SONES @ .125"	CFM / STATIC PRESSURE IN INCHES W.G.				
					0.000	0.125	0.250	0.375	0.500
RPDR-42-615-F7	680 (7477)	3/4	0.83	30	14402	11925	7245		
RPDR-42-620-F10		1	1.13	33	16168	13084	8697		
RPDR-42-625-F15		1½	1.75	37	16848	13687	9444	5025	
RPDR-42-630-F20		2	2.21	38	17652	13917	10204	4541	
RPDR-42-609-C10	870 (9566)	1	1.21	43	14217	12556	10359	6833	
RPDR-42-613-C15		1½	1.77	44	17100	15299	13048	9244	5983
RPDR-42-618-C20		2	2.27	47	19782	17814	15124	11061	8528
RPDR-42-625-C30		3	3.30	56	21556	19083	15743	12748	10019
RPDR-42-402-B10	1160 (12755)	1	1.20	51	9651	7825	5478	3093	
RPDR-42-405-B15		1½	1.58	59	13631	12040	10140	7206	4626
RPDR-42-608-B20		2	2.53	62	17765	16574	15262	13712	8792
RPDR-42-613-B30		3	3.65	69	22800	21467	20083	18579	16110
RPDR-42-620-B50		5	5.43	80	27581	26050	24419	22144	19658
RPDR-42-627-B75		7½	7.90	88	29289	27404	25584	23214	20068

RPDR-48

Max. Motor Frame Size = 256T

MODEL	RPM (TS)	MOTOR HP	MAX BHP	SONES @ .125"	CFM / STATIC PRESSURE IN INCHES W.G.				
					0.000	0.125	0.250	0.375	0.500
RPDR-48-407-F5	680 (8545)	1/2	0.54	27	12084	8583			
RPDR-48-412-F7		3/4	0.80	26	15447	12055			
RPDR-48-612-F10		1	1.17	35	16887	14520	9604		
RPDR-48-618-F15		1½	1.75	40	20376	17861	13146		
RPDR-48-623-F20		2	2.29	43	22605	19822	14883		
RPDR-48-630-F30		3	3.18	47	24574	21556	15110		
RPDR-48-404-C7	870 (10933)	3/4	0.87	37	12326	9879	5552		
RPDR-48-407-C10		1	1.20	41	15460	13072	8798	3585	
RPDR-48-411-C15		1½	1.65	47	19016	16624	13372	7833	
RPDR-48-611-C20		2	2.35	51	20781	19037	16889	12815	9145
RPDR-48-616-C30		3	3.30	55	24781	22831	20705	17207	12495
RPDR-48-625-C50		5	5.45	64	29935	27670	25209	21365	16034
RPDR-48-630-C75	7½	6.84	70	31440	29089	26513	20339	16291	
RPDR-48-402-B15	1160 (14575)	1½	1.70	60	13075	11340	8861	5683	
RPDR-48-405-B20		2	2.24	74	18115	16335	14412	10766	7692
RPDR-48-409-B30		3	3.22	71	23111	21346	19543	17255	13127
RPDR-48-612-B50		5	5.57	76	28807	27478	26133	24604	22548
RPDR-48-618-B75		7½	8.25	96	34760	33317	31841	30299	28402
RPDR-48-624-B100		10	11.45	98	39237	37593	35930	34194	32168

RPDR-54

Max. Motor Frame Size = 286T

MODEL	RPM (TS)	MOTOR HP	MAX BHP	SONES @ .125"	CFM / STATIC PRESSURE IN INCHES W.G.				
					0.000	0.125	0.250	0.375	0.500
RPDR-54-408-F15	680 (9778)	1½	1.61	38	18757	15818	11821	7123	
RPDR-54-605-F15		1½	1.51	36	15372	12937	9833	6725	3413
RPDR-54-412-F20		2	2.29	44	23448	20464	17050	12348	6668
RPDR-54-609-F20		2	2.28	39	20828	18582	15674	12237	8808
RPDR-54-614-F30		3	3.38	46	27130	24892	22042	18842	14978
RPDR-54-622-F50		5	5.61	53	35053	32465	29335	25659	21858
RPDR-54-630-F75	7½	8.06	57	39868	36782	33249	28695	24974	
RPDR-54-408-C30	870 (12511)	3	3.27	63	23999	21377	19381	16157	12542
RPDR-54-415-C50		5	5.23	67	32838	30648	28189	25422	22179
RPDR-54-422-C75		7½	8.47	69	40693	38238	35870	32778	28581
RPDR-54-617-C75		7½	8.19	86	38959	36990	35115	32745	30389
RPDR-54-622-C100		10	11.14	92	44847	42894	40748	38277	35144

Performance shown is for Model RPDR without ducts or filters.



Performance Data — Belt Drive

RPBR-24

Max. RPM = 1635

Max. Motor Frame Size = 145T

MODEL	HP	RPM	TS	MAX BHP	SONES @ .125"	CFM / STATIC PRESSURE IN INCHES W.G.				
						0.000	0.125	0.250	0.375	0.500
RPBR-24-4	1/4	850	5361	0.24	19.7	4457	3268			
		905	5708	0.29	21	4745	3694			
RPBR-24-3	1/3	940	5929	0.32	22	4929	3960			
		995	6275	0.38	23	5217	4365	2866		
RPBR-24-5	1/2	1025	6465	0.42	23	5375	4580	3168		
		1070	6749	0.48	24	5611	4899	3553		
		1100	6938	0.53	25	5768	5097	3803		
		1135	7159	0.58	26	5951	5305	4089		
RPBR-24-7	3/4	1195	7537	0.67	29	6266	5659	4567	3262	
		1240	7821	0.75	31	6502	5922	4917	3732	
		1295	8168	0.85	33	6790	6241	5341	4220	
RPBR-24-10	1	1330	8389	0.93	35	6974	6443	5606	4515	
		1370	8641	1.02	37	7184	6672	5903	4846	3662
		1425	8988	1.15	39	7472	6986	6302	5288	4239
RPBR-24-15	1 1/2	1460	9208	1.23	40	7656	7185	6552	5565	4571
		1505	9492	1.34	42	7892	7437	6871	5916	4955
		1550	9776	1.47	44	8128	7687	7175	6265	5332
		1590	10028	1.60	46	8337	7907	7413	6571	5661
		1635	10312	1.73	48	8573	8155	7679	6911	6023

RPBR-30

Max. RPM = 1450

Max. Motor Frame Size = 184T

MODEL	HP	RPM	TS	MAX BHP	SONES @ .125"	CFM / STATIC PRESSURE IN INCHES W.G.				
						0.000	0.125	0.250	0.375	0.500
RPBR-30-3	1/3	650	5147	0.28	17.6	6943				
		690	5464	0.38	19.2	7370	5233			
RPBR-30-5	1/2	745	5899	0.47	22	7958	6285			
		805	6375	0.58	25	8599	7162			
RPBR-30-7	3/4	835	6612	0.65	26	8919	7550			
		875	6929	0.74	28	9346	8061			
		920	7285	0.85	31	9827	8628			
RPBR-30-10	1	960	7602	1.01	33	10254	9122	7070		
		1000	7919	1.14	36	10682	9609	7900		
RPBR-30-15	1 1/2	1050	8315	1.31	40	11216	10212	8825		
		1095	8671	1.47	44	11696	10750	9561		
		1145	9067	1.71	48	12230	11344	10214	8021	
RPBR-30-20	2	1180	9344	1.88	49	12604	11757	10666	8748	
		1230	9740	2.12	50	13138	12342	11306	9783	
		1265	10018	2.29	51	13512	12738	11749	10430	
RPBR-30-30	3	1315	10414	2.58	53	14046	13302	12376	11326	9115
		1360	10770	2.88	55	14527	13807	12929	11958	10049
		1405	11126	3.16	58	15008	14311	13477	12544	10983
		1450	11483	3.46	62	15488	14813	14022	13125	11850

Performance shown is for Model RPBR without ducts or filters.
BHP does not include drive losses.

Performance Data — Belt Drive

RPBR-36

Max. RPM = 1415

Max. Motor Frame Size = 184T

MODEL	HP	RPM	TS	MAX BHP	SONES @ .125"	CFM / STATIC PRESSURE IN INCHES W.G.				
						0.000	0.125	0.250	0.375	0.500
RPBR-36-5	1/2	625	5931	0.50	20	9601	6731			
		655	6216	0.57	22	10062	7706			
RPBR-36-7	3/4	710	6738	0.72	25	10907	8992			
		750	7117	0.85	27	11522	9762			
RPBR-36-10	1	800	7592	1.02	31	12290	10707			
		830	7876	1.14	34	12751	11252			
RPBR-36-15	1½	875	8303	1.39	36	13442	12061	9150		
		910	8636	1.55	37	13980	12683	10490		
		945	8968	1.72	39	14517	13301	11363		
RPBR-36-20	2	1010	9585	2.07	44	15516	14435	12832		
		1040	9869	2.26	46	15977	14955	13411		
RPBR-36-30	3	1110	10534	2.81	52	17052	16137	14741	12734	
		1150	10913	3.10	56	17667	16783	15482	13734	
		1195	11340	3.45	61	18358	17508	16296	14838	
RPBR-36-50	5	1240	11767	3.94	65	19050	18230	17103	15774	13047
		1280	12147	4.31	69	19664	18870	17814	16545	14660
		1325	12574	4.74	74	20355	19589	18609	17403	15787
		1370	13001	5.21	77	21047	20305	19399	18252	16893
		1415	13428	5.71	79	21738	21020	20183	19080	17887

RPBR-42

Max. RPM = 1180

Max. Motor Frame Size = 184T

MODEL	HP	RPM	TS	MAX BHP	SONES @ .125"	CFM / STATIC PRESSURE IN INCHES W.G.				
						0.000	0.125	0.250	0.375	0.500
RPBR-42-5	1/2	500	5530	0.43	20	11888	6713			
		555	6138	0.57	23	13196	8716			
RPBR-42-7	3/4	585	6470	0.68	25	13909	10065			
		630	6968	0.86	28	14979	11614			
RPBR-42-10	1	665	7355	1.02	31	15811	12647			
		690	7632	1.15	33	16405	13372	8993		
RPBR-42-15	1½	725	8019	1.33	34	17238	14428	10054		
		765	8461	1.55	37	18189	15634	11584		
		795	8793	1.73	38	18902	16524	12699		
RPBR-42-20	2	840	9291	2.09	42	19972	17836	14831	10864	
		875	9678	2.31	46	20804	18756	15948	11888	
RPBR-42-30	3	910	10065	2.61	48	21636	19669	16990	13165	
		950	10507	2.98	51	22587	20705	18164	14677	
		995	11005	3.44	55	23657	21863	19479	16567	13281
RPBR-42-50	5	1025	11337	3.74	58	24371	22631	20396	17987	14207
		1065	11779	4.18	62	25322	23650	21604	19333	15744
		1100	12167	4.60	65	26154	24537	22649	20379	17060
		1140	12609	5.14	70	27105	25547	23832	21559	18702
		1180	13052	5.72	74	28056	26551	25002	22725	20602

Performance shown is for Model RPBR without ducts or filters.
BHP does not include drive losses.

Performance Data — Belt Drive

RPBR-48

Max. RPM = 1130

Max. Motor Frame Size = 215T

MODEL	HP	RPM	TS	MAX BHP	SONES @ .125"	CFM / STATIC PRESSURE IN INCHES W.G.				
						0.000	0.125	0.250	0.375	0.500
RPBR-48-7	3/4	480	6078	0.69	23	15116	9862			
		520	6585	0.85	24	16376	12393			
RPBR-48-10	1	545	6902	0.97	25	17163	13520			
		560	7092	1.16	26	17636	14185	7338		
RPBR-48-15	1½	615	7788	1.48	30	19368	16371	10315		
		650	8231	1.72	33	20470	17699	11927		
RPBR-48-20	2	680	8611	1.96	36	21415	18814	14029		
		705	8928	2.28	38	22202	19706	15743	10308	
RPBR-48-30	3	755	9561	2.73	43	23777	21469	18415	12717	
		805	10194	3.26	49	25352	23210	20632	15240	
RPBR-48-50	5	830	10511	3.69	51	26139	24074	21620	16987	12697
		870	11018	4.19	56	27399	25447	23162	19724	14600
		905	11461	4.65	61	28501	26642	24493	21663	16220
		940	11904	5.18	65	29603	27825	25810	23240	18334
		975	12347	5.75	69	30705	28991	27084	24790	20760
RPBR-48-75	7½	1015	12854	6.38	74	31965	30318	28505	26419	23475
		1050	13297	7.00	78	33068	31475	29740	27772	25241
		1090	13804	7.76	82	34327	32794	31140	29301	27040
		1130	14310	8.57	87	35587	34108	32532	30813	28809

RPBR-54

Max. RPM = 830

Max. Motor Frame Size = 254T

MODEL	HP	RPM	TS	MAX BHP	SONES @ .125"	CFM / STATIC PRESSURE IN INCHES W.G.				
						0.000	0.125	0.250	0.375	0.500
RPBR-54-15	1½	400	5752	1.29	22	21919	16285			
		430	6183	1.70	23	23562	18247	12437		
RPBR-54-20	2	455	6543	1.99	24	24932	19940	14759		
		480	6902	2.31	26	26302	22218	16781		
RPBR-54-30	3	505	7262	2.80	29	27672	24044	18466	12965	
		525	7549	3.10	31	28768	25404	19923	15063	
		545	7837	3.43	34	29864	26749	21531	16967	
RPBR-54-50	5	570	8196	4.07	37	31234	28339	23316	19214	13506
		595	8556	4.54	40	32604	29869	24955	21037	16226
		620	8915	5.07	44	33974	31388	26570	22716	18738
		645	9275	5.65	47	35344	32897	28341	24563	21011
RPBR-54-75	7½	670	9635	6.28	51	36714	34397	30625	26570	23129
		695	9994	6.97	54	38084	35888	32687	28351	24830
		725	10425	7.86	57	39728	37670	34742	30321	26833
		750	10785	8.63	61	41098	39147	36435	31941	28786
RPBR-54-100	10	770	11073	9.26	63	42194	40325	37779	33223	30390
		790	11360	9.94	66	43290	41481	39086	34714	31906
		810	11648	10.69	70	44385	42622	40317	36548	33232
		830	11935	11.47	73	45481	43760	41542	38359	34545

Performance shown is for Model RPBR without ducts or filters.
BHP does not include drive losses.

Performance Data — Belt Drive

RPBR-60

Max. RPM = 805

Max. Motor Frame Size = 254T

MODEL	HP	RPM	TS	MAX BHP	SONES @ .125"	CFM / STATIC PRESSURE IN INCHES W.G.				
						0.000	0.125	0.250	0.375	0.500
RPBR-60-20	2	440	6911	1.97	27	26801	20934	14113		
		465	7304	2.28	30	28324	23471	16545		
RPBR-60-30	3	480	7539	2.49	31	29237	24764	17930		
		495	7775	2.73	33	30151	25865	19254		
		515	8089	3.06	35	31369	27317	20987		
		530	8325	3.46	37	32283	28397	22269	16246	
RPBR-60-50	5	555	8717	3.91	40	33806	30134	24366	18878	
		580	9110	4.41	42	35328	31807	26351	21252	
		605	9503	4.98	45	36851	33468	28288	23472	
		630	9896	5.76	48	38374	35116	30228	25640	20748
RPBR-60-75	7½	650	10210	6.26	51	39592	36428	32383	27349	22675
		670	10524	6.79	54	40811	37735	34371	29032	24565
		685	10759	7.24	57	41724	38711	35477	30278	25905
		705	11074	7.87	60	42942	40016	36941	31855	27664
		725	11388	8.53	63	44161	41336	38393	33414	29395
RPBR-60-100	10	745	11702	9.21	67	45379	42650	39834	34955	31108
		765	12016	9.91	71	46597	43960	41266	36480	32799
		785	12330	10.66	75	47815	45266	42624	38472	34469
		805	12644	11.43	80	49034	46568	43965	40611	36071

RPBR-72

Max. RPM = 705

Max. Motor Frame Size = 256T

MODEL	HP	RPM	TS	MAX BHP	SONES @ .125"	CFM / STATIC PRESSURE IN INCHES W.G.				
						0.000	0.125	0.250	0.375	0.500
RPBR-72-20	2	340	6408	1.90	24	34031	20399			
		360	6785	2.25	26	36033	24289			
RPBR-72-30	3	380	7162	2.66	29	38035	29312			
		395	7445	2.99	30	39536	31605			
		415	7822	3.47	33	41538	34845			
RPBR-72-50	5	430	8105	3.85	36	43039	37353			
		450	8482	4.55	38	45041	39811	22926		
		470	8859	5.07	41	47043	42014	26673		
		490	9236	5.66	44	49045	44199	30661		
RPBR-72-75	7½	510	9613	6.41	47	51047	46369	34519		
		535	10084	7.41	52	53549	49063	41082		
		555	10461	8.50	56	55551	51205	44148	28723	
RPBR-72-100	10	580	10932	9.50	60	58053	53867	48111	33551	
		600	11309	10.47	63	60055	55987	51477	37528	
		620	11686	11.53	67	62057	58098	54484	41395	
RPBR-72-150	15	640	12063	13.04	71	64059	60217	56700	47044	33024
		660	12440	14.08	75	66061	62335	58903	51051	36772
		685	12911	15.61	81	68563	64973	61639	54868	41792
		705	13288	17.03	86	70565	67077	63816	58014	45700

Performance shown is for Model RPBR without ducts or filters.
BHP does not include drive losses.



TYPICAL SPECIFICATIONS

Models RPDR & RPDRF Direct Drive - Reversible Fan

All hooded reversible roof ventilators shall be direct drive axial type. Propeller construction shall be cast aluminum, airfoil, reversible design. Propellers shall be statically and dynamically balanced.

Fan hood and base construction shall be aluminum, galvanized steel or painted steel as specified. Hood panels shall be arched with interlocking seams for weather protection. Fan bases shall be low style except where tall bases are specified. (Where access doors are required to service dampers and actuators, tall bases should be specified).

Birdscreens constructed of 1/2" welded galvanized steel mesh shall be mounted horizontally across the discharge/intake area of the hood. Hood support members shall be heavy gauge galvanized steel angles.

Motors shall be heavy duty ball bearing type carefully matched to the fan load and furnished at the specified voltage, phase and enclosure. A standard square key and set screws or tapered locking bushing shall attach the propeller securely to the motor shaft.

Motor support frame assemblies shall be constructed of heavy gauge steel angles. Fan panels shall be heavy gauge steel with formed flanges and a double venturi.

Safety guards of heavy welded wire construction shall be attached to the underside of the fan panel.

Each unit shall bear a permanently affixed nametag with a fan model number, a serial number, and a mark. Optional control centers shall bear a nametag with identical information.

Hooded reversible axial roof ventilators shall be direct drive models RPDR & RPDRF (filtered) as manufactured by Greenheck, Schofield, Wisconsin.

TYPICAL SPECIFICATIONS

Models RPBR & RPBRF Belt Drive - Reversible

All hooded reversible roof ventilators shall be belt drive axial type. Propeller construction shall be cast aluminum, airfoil, reversible design. Propellers shall be statically and dynamically balanced.

Fan hood and base construction shall be aluminum, galvanized steel or painted steel as specified. Hood panels shall be arched with interlocking seams for weather protection. Fan bases shall be low style except where tall bases are specified. (Where access doors are required to service dampers and actuators, tall bases should be specified).

Birdscreens constructed of 1/2" welded galvanized steel mesh shall be mounted horizontally across the discharge/intake area of the hood. Hood support members shall be heavy gauge galvanized steel angles.

Motors shall be heavy duty ball bearing type carefully matched to the fan load and furnished at the specified voltage, phase and enclosure.

Drive frame assemblies shall be constructed of heavy gauge steel angles. Fan panels shall be heavy gauge steel with formed flanges and a double venturi.

Safety guards of heavy welded wire construction shall be attached to the underside of the fan panel.

Ground and polished steel fan shafts shall be mounted in permanently lubricated, air handling quality, pillow block bearings. Bearings shall be selected for a minimum (L50) life in excess of 200,000 hours at maximum cataloged operating speed. A standard square key and set screws or tapered lock bushing shall attach the propeller securely to the fan shaft. Retaining rings shall be provided at each end of the fan shaft. Pulleys shall be of the fully machined cast iron type, keyed and securely attached to the wheel and motor shafts. The motor sheaves shall be adjustable for final system balancing. Drives shall be sized for a minimum 150% of driven horsepower.

Each unit shall bear a permanently affixed nametag with a fan model number, a serial number, and a mark. Optional control centers shall bear a nametag with identical information.

Hooded reversible axial roof ventilators shall be belt drive models RPBR & RPBRF (filtered) as manufactured by Greenheck, Schofield, Wisconsin.

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 installation or removal costs.

Due to continuing research, Greenheck reserves the right to change specifications without notice.

