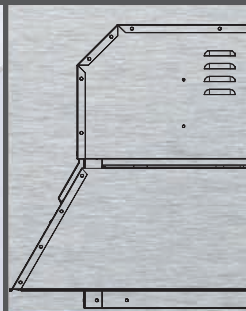
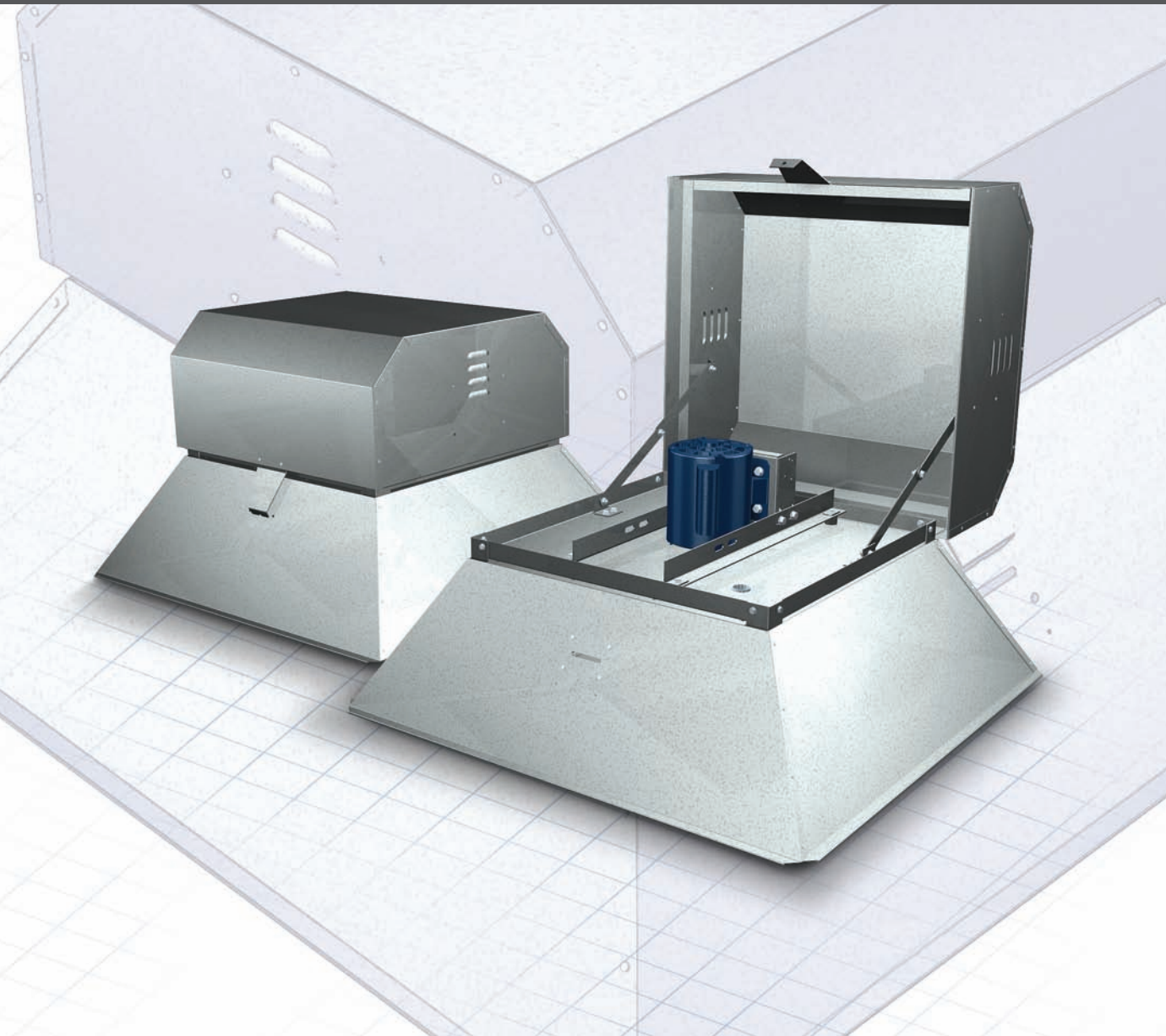


# Centrifugal Roof Exhaust Fans Models NYD and NYB

Direct and Belt Drive



BUILDING VALUE IN AIR.

 **GREENHECK**  
Building Value in Air.

August  
2008

# Model NYD & NYB

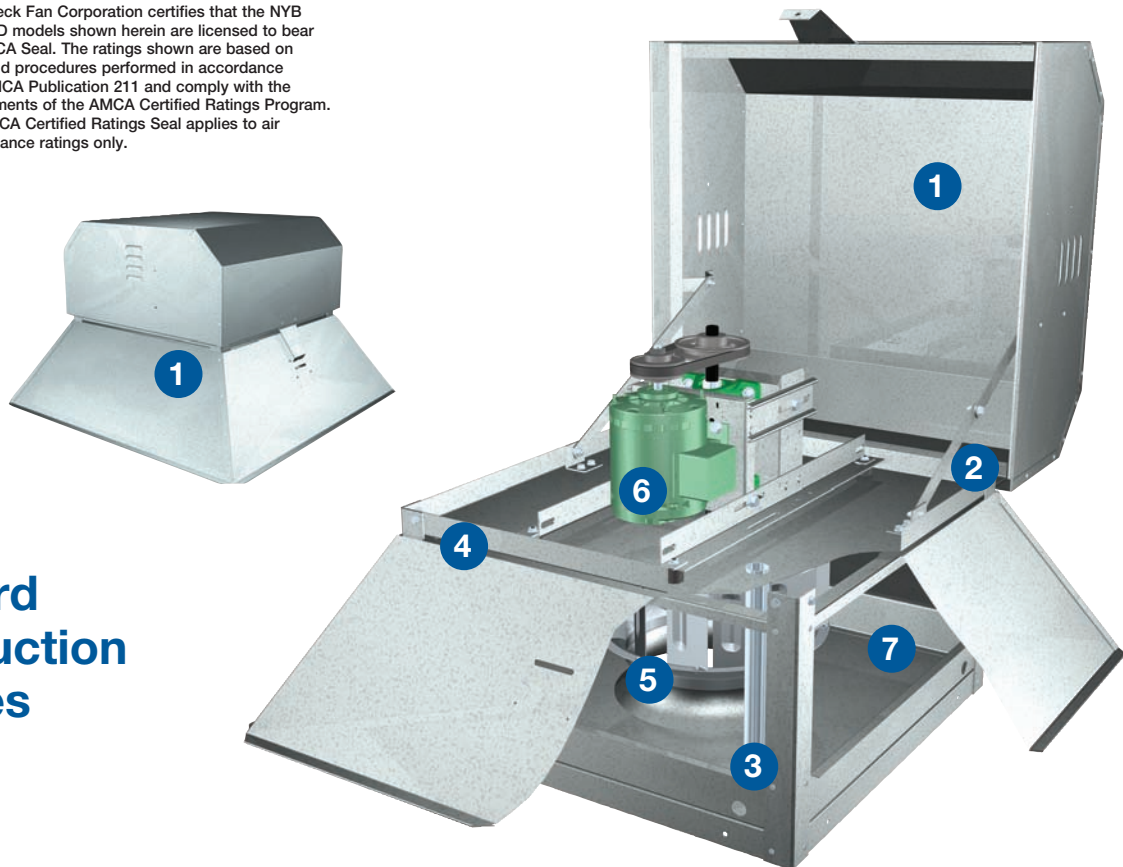
## Standard Construction Features

Greenheck's model NYD and NYB tamper-resistant centrifugal roof exhaust fans provide the industry's best performance and durability for general clean air applications where tamper resistance is required.

- Performance as cataloged is assured. All fan sizes are tested in our AMCA Accredited Laboratory and all models are licensed to bear the AMCA Air Performance seal.
- Greenheck subjects these products to extensive life testing assuring you the fans will provide years of reliable performance.



Greenheck Fan Corporation certifies that the NYB and NYD models shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings only.



## Standard Construction Features

- 1 Housing is constructed entirely of heavy-gauge galvanized steel and includes louvered vents for positive motor cooling.
- 2 Hood is hinged to swing fully open for complete access to all internal components. Open hood is safely supported and will not drop closed. Hinge is steel with protective coating.
- 3 Internal structural supports are heavy-gauge galvanized steel angles.
- 4 Drive frames and motor supports are heavy-gauge galvanized steel and are mounted on resilient isolators.
- 5 Backward-inclined, non-overloading wheel is constructed of aluminum.
- 6 Heavy-duty ball bearing motor. Single and three phase fans include a NEMA-1 switch.
- 7 Birdscreen constructed of wire mesh is attached to the structural supports. (Removed from drawing for easy viewing internally)

**Dampers** - Gravity and motorized dampers are designed to prevent outside air from entering back into the building when the fan is off. Damper sizes are shown on the performance pages.



**Curb Seal** - Rubber seal between fan and curb to assure proper sealing when attached to a curb.

**Coatings** - Wide variety of coatings and colors are available for decorative to corrosive applications.

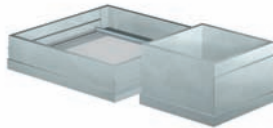


**Disconnect Switches** - A wide selection of NEMA rated switches are available for positive electrical shutoff and safety, including dust-tight, rainproof and corrosion-resistant. Switches may be internally or externally mounted.



**Permatector™** is our standard coating. Typically used for applications that require corrosion resistance in indoor and outdoor environments.

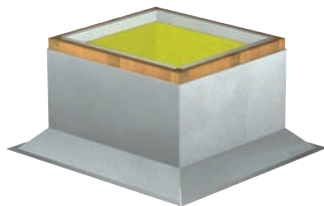
**Curb Extension** - Extensions raise the fan discharge above the roofline and provide an accessible mounting location for dampers. Insect screen bases constructed with a removable fine mesh are recommended for applications where insect entry must be prevented.



**Hi-Pro Polyester** is resistant to salt water, chemical fumes and moisture in more corrosive atmospheres. Typically used for applications that require superior chemical resistance, excellent abrasion and outdoor UV protection. This coating exceeds protective qualities of Air Dry Heresite and Heresite Baked Phenolic.

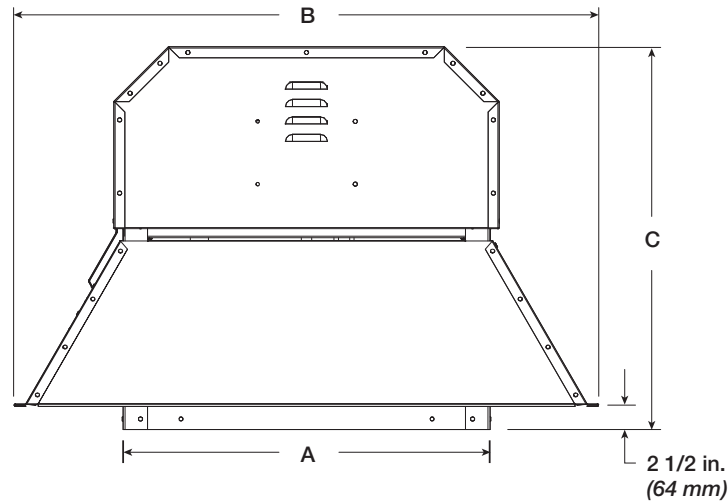
**Baked Enamel Decorative Coatings** are heat cured enamels applied either as wet paints or electrostatic powders. Customers can choose from 16 standard decorative colors or color match any color.

**Roof Curbs** - Prefabricated roof curbs reduce installation time and costs by ensuring compatibility between the fan, curb and roof opening. All curbs are insulated with fiberglass. A wide variety of roof curbs are available including: flanged, pitched and sound-absorbing.



All coatings with relative resistance charts can be found in Greenheck's Product Application Guide, Performance Coatings for Ventilation Products.

# Dimensional Data & Model Number Code

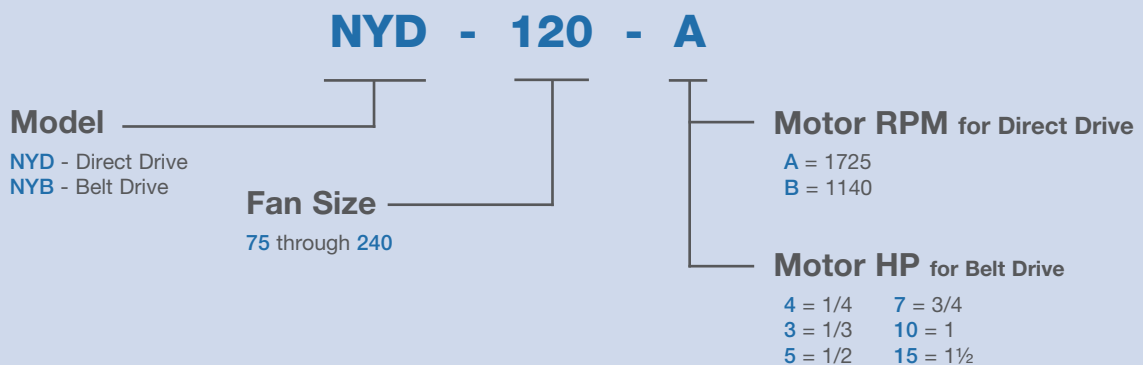


Dimensional Data				
Model	A	B	C	Damper Square
NYD-75	19 (483)	30 <sup>3</sup> / <sub>4</sub> (781)	20 <sup>1</sup> / <sub>2</sub> (521)	10 (254)
NYD-90	19 (483)	30 <sup>3</sup> / <sub>4</sub> (781)	20 <sup>1</sup> / <sub>2</sub> (521)	10 (254)
NYD/NYB-100	22 (559)	35 <sup>1</sup> / <sub>2</sub> (902)	25 (635)	12 (305)
NYD-120	24 (610)	37 (940)	23 <sup>1</sup> / <sub>8</sub> (587)	14 (356)
NYD-130	24 (610)	37 (940)	23 <sup>1</sup> / <sub>8</sub> (587)	14 (356)
NYD/NYB-140	26 (660)	41 <sup>1</sup> / <sub>2</sub> (1054)	26 <sup>7</sup> / <sub>8</sub> (683)	16 (406)
NYB-180	30 (762)	45 (1143)	32 <sup>5</sup> / <sub>8</sub> (829)	18 (457)
NYB-240	34 (864)	52 <sup>1</sup> / <sub>2</sub> (1334)	38 <sup>5</sup> / <sub>8</sub> (981)	24 (610)

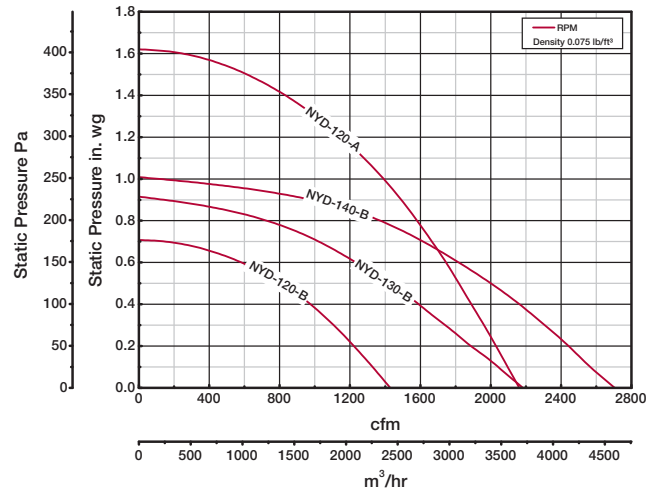
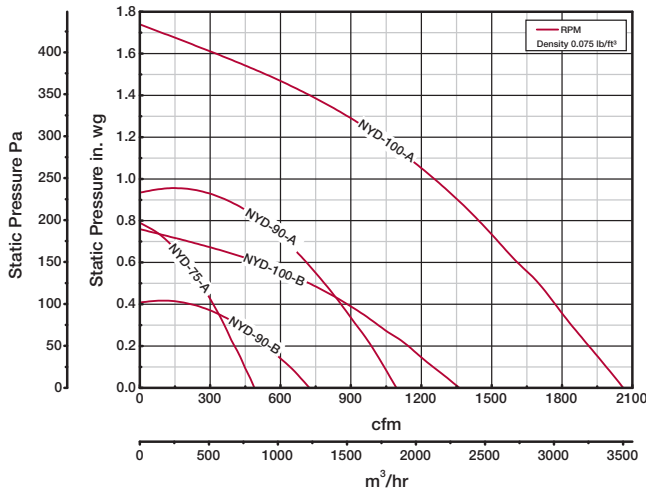
All dimensions in inches (millimeters).

## Model Number Code

The model number code is designed to completely identify the fan. The correct code letters must be specified to designate the correct construction. The remainder of the model number is determined by the size and performance.



# Performance Data NYD - Direct Drive Models

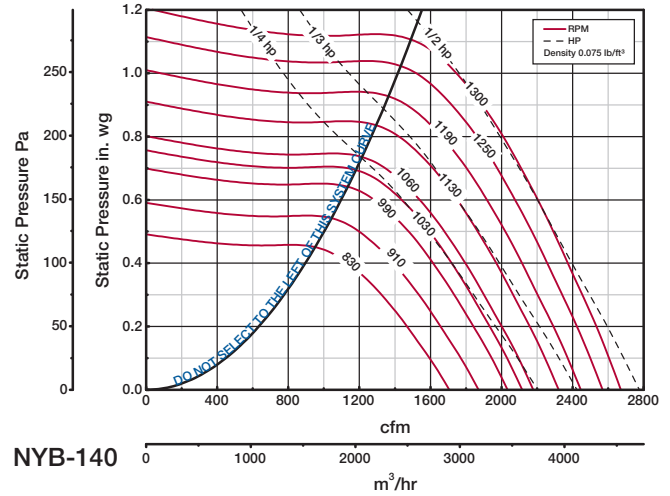
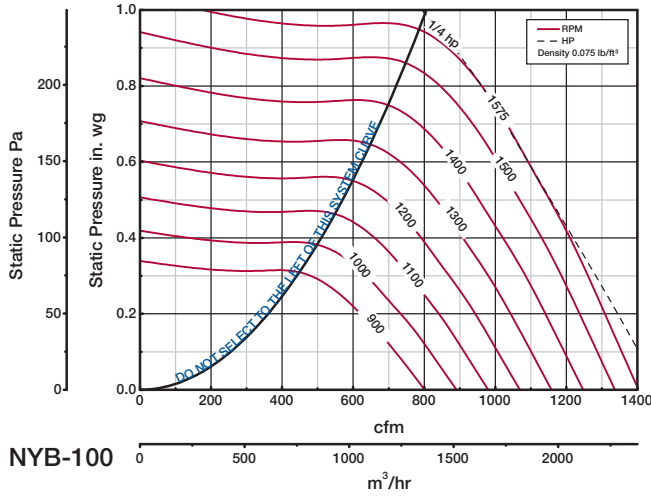


Model Number	Motor HP	Fan RPM		CFM / Static Pressure in Inches wg										
				0.000	0.125	0.250	0.300	0.375	0.500	0.625	0.750	0.875	1.000	
NYD-75-A	1/4	1725	CFM	488	438	382	359	325	258	169				
			BHP	0.05	0.05	0.05	0.06	0.06	0.06	0.06				
NYD-90-B	1/6	1140	CFM	723	617	484	418	253						
			BHP	0.04	0.05	0.05	0.05	0.05						
NYD-90-A	1/4	1725	CFM	1094	1028	957	924	874	787	690	575	339		
			BHP	0.14	0.15	0.16	0.17	0.17	0.18	0.19	0.19	0.15		
NYD-100-B	1/6	1140	CFM	1363	1223	1081	1017	920	713	417				
			BHP	0.11	0.12	0.13	0.14	0.14	0.14	0.12				
NYD-100-A	1/4	1725	CFM	2062	1970	1877	1841	1787	1700	1590	1486	1377	1255	
			BHP	0.37	0.39	0.42	0.43	0.44	0.45	0.46	0.48	0.49	0.50	
NYD-120-B	1/6	1140	CFM	1429	1303	1168	1108	1010	800					
			BHP	0.12	0.14	0.16	0.16	0.17	0.17					
NYD-120-A	3/4	1725	CFM	2162	2080	1996	1962	1908	1819	1725	1623	1513	1387	
			BHP	0.43	0.45	0.48	0.49	0.50	0.53	0.55	0.57	0.58	0.59	
NYD-130-B	1/4	1140	CFM	2184	2005	1815	1741	1627	1421	1180	745			
			BHP	0.22	0.23	0.24	0.25	0.25	0.26	0.26	0.22			
NYD-140-B	1/2	1140	CFM	2705	2534	2376	2308	2199	1999	1765	1483	1090		
			BHP	0.30	0.33	0.35	0.36	0.38	0.40	0.40	0.40	0.40	0.36	

Performance certified is for installation type A: free inlet, free outlet. Performance ratings include the effects of a birdscreen.

# Performance Data

## Model NYB-100 & NYB-140

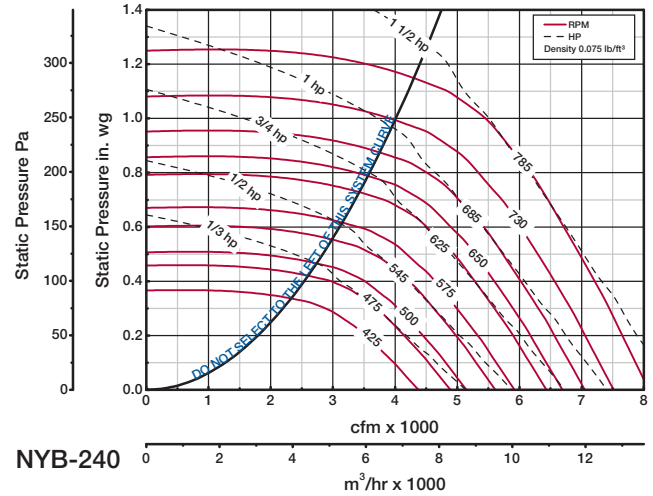
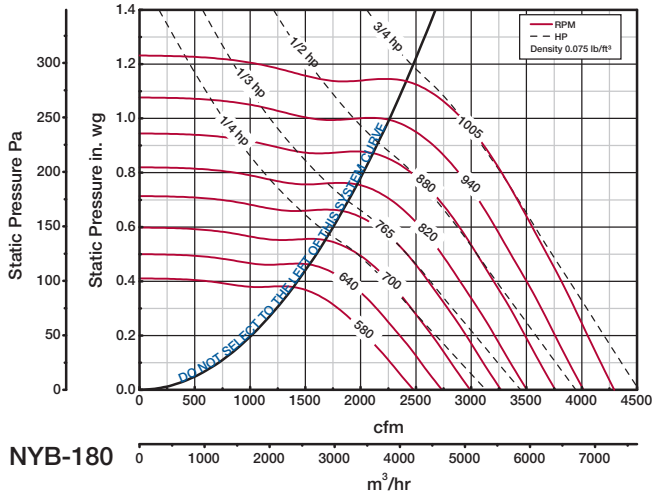


Model Number	Motor HP	Fan RPM	CFM / Static Pressure in Inches wg																				
			0	0.125	0.25	0.3	0.375	0.5	0.625	0.75	0.875	1											
NYB-100-4	1/4	900	CFM	802	696	563	476																
		BHP	0.04	0.05	0.05	0.05																	
		1000	CFM	891	797	686	635	517															
		BHP	0.06	0.06	0.06	0.06	0.06																
		1100	CFM	980	895	800	757	686															
		BHP	0.08	0.08	0.09	0.09	0.09																
		1200	CFM	1069	991	909	870	811	690														
		BHP	0.10	0.10	0.11	0.11	0.11	0.11															
		1300	CFM	1158	1087	1012	980	926	832	689													
		BHP	0.12	0.13	0.14	0.14	0.14	0.14	0.14														
1400	CFM	1247	1181	1113	1084	1038	954	859															
BHP	0.16	0.16	0.17	0.17	0.17	0.18	0.18																
1500	CFM	1337	1274	1212	1186	1145	1068	989	894														
BHP	0.19	0.20	0.21	0.21	0.21	0.22	0.22	0.22	0.22														
1575	CFM	1403	1344	1285	1260	1222	1152	1077	996	892													
BHP	0.22	0.23	0.24	0.24	0.24	0.25	0.25	0.25	0.25	0.25													
1730	CFM	1541	1488	1434	1412	1379	1320	1254	1186	1114	1029												
BHP	0.29	0.30	0.31	0.31	0.32	0.33	0.33	0.33	0.33	0.33	0.33												
NYB-140-4	1/4	830	CFM	1706	1563	1399	1323	1188															
		BHP	0.12	0.13	0.13	0.13	0.13																
		910	CFM	1870	1742	1598	1534	1430	1189														
		BHP	0.15	0.16	0.17	0.17	0.17	0.17															
990	CFM	2034	1920	1788	1734	1646	1473	1193															
BHP	0.20	0.21	0.22	0.22	0.22	0.22	0.22	0.21															
1030	CFM	2117	2007	1881	1829	1748	1593	1381															
BHP	0.22	0.23	0.24	0.25	0.25	0.25	0.25	0.25															
NYB-140-3	1/3	1060	CFM	2178	2073	1951	1901	1823	1676	1495													
		BHP	0.24	0.25	0.26	0.27	0.27	0.27	0.27	0.27													
1130	CFM	2322	2224	2112	2065	1994	1866	1721	1520														
BHP	0.29	0.31	0.32	0.32	0.33	0.33	0.33	0.33	0.32														
NYB-140-5	1/2	1190	CFM	2445	2352	2247	2204	2136	2020	1887	1732	1515											
		BHP	0.34	0.36	0.37	0.37	0.38	0.38	0.38	0.39	0.39	0.37											
		1250	CFM	2569	2480	2382	2341	2277	2170	2051	1919	1756	1465										
BHP	0.40	0.41	0.42	0.43	0.44	0.44	0.44	0.45	0.45	0.44	0.41												
1300	CFM	2672	2586	2493	2454	2394	2291	2180	2058	1918	1735												
BHP	0.45	0.46	0.48	0.48	0.49	0.50	0.50	0.51	0.50	0.49	0.49												

Performance certified is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings include the effects of a birdscreen.

# Performance Data

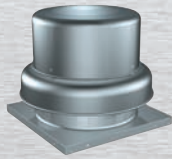
## Model NYB-180 & NYB-240



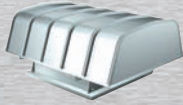
Model Number	Motor HP	Fan RPM		CFM / Static Pressure in Inches wg												
				0	0.125	0.25	0.3	0.375	0.5	0.625	0.75	0.875	1			
NYB-180-4	1/4	580	CFM	2478	2220	1933	1793	1424								
			BHP	0.12	0.14	0.14	0.15	0.14								
		640	CFM	2734	2500	2248	2142	1954								
			BHP	0.17	0.18	0.19	0.19	0.20								
		700	CFM	2991	2775	2552	2457	2308	1964							
			BHP	0.22	0.23	0.25	0.25	0.25	0.25							
NYB-180-3	1/3	765	CFM	3268	3070	2873	2787	2655	2411	2050						
			BHP	0.28	0.30	0.32	0.32	0.33	0.33	0.32						
NYB-180-5	1/2	820	CFM	3503	3318	3138	3059	2938	2732	2482	2010					
			BHP	0.35	0.37	0.39	0.39	0.40	0.41	0.41	0.38					
		880	CFM	3760	3587	3419	3351	3239	3049	2842	2580					
			BHP	0.43	0.45	0.47	0.48	0.49	0.50	0.51	0.50					
NYB-180-7	3/4	940	CFM	4016	3854	3696	3633	3534	3358	3178	2971	2706				
			BHP	0.53	0.55	0.57	0.58	0.59	0.60	0.61	0.62	0.61				
		1005	CFM	4294	4142	3993	3935	3847	3685	3518	3350	3148	2894			
			BHP	0.64	0.67	0.69	0.70	0.72	0.73	0.74	0.75	0.75	0.75			
NYB-240-3	1/3	425	CFM	4375	3869	3244	2885									
			BHP	0.21	0.23	0.24	0.23									
		475	CFM	4890	4449	3933	3701	3222								
			BHP	0.29	0.32	0.33	0.34	0.33								
NYB-240-5	1/2	500	CFM	5147	4728	4249	4047	3650								
			BHP	0.34	0.37	0.39	0.39	0.39								
		545	CFM	5610	5226	4803	4621	4336	3641							
			BHP	0.44	0.47	0.49	0.50	0.51	0.49							
NYB-240-7	3/4	575	CFM	5919	5555	5163	4993	4731	4178							
			BHP	0.51	0.55	0.58	0.58	0.59	0.59							
		625	CFM	6434	6098	5751	5598	5361	4947	4383						
			BHP	0.66	0.70	0.73	0.74	0.75	0.76	0.75						
NYB-240-10	1	650	CFM	6691	6368	6041	5894	5669	5283	4784	4053					
			BHP	0.74	0.78	0.81	0.83	0.84	0.86	0.85	0.80					
		685	CFM	7052	6745	6440	6304	6095	5731	5332	4807					
			BHP	0.86	0.91	0.94	0.96	0.98	0.99	1.01	0.99					
NYB-240-15	1½	730	CFM	7515	7227	6941	6825	6629	6294	5949	5524	5013				
			BHP	1.05	1.09	1.13	1.15	1.17	1.19	1.21	1.21	1.19				
		785	CFM	8081	7813	7547	7440	7271	6966	6649	6327	5911	5454			
			BHP	1.30	1.35	1.40	1.41	1.44	1.47	1.49	1.51	1.51	1.48			

Performance certified is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings include the effects of a birdscreen.

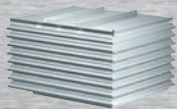
# Exhaust Fans



The spun aluminum downblast centrifugal roof exhaust fan models G and GB (direct or belt drive) are an economical means of exhausting air. They utilize a backward-inclined wheel and are available in 45 different sizes. Capacities range from 50 to 44,700 cfm and up to 3.25 in. wg of static pressure.



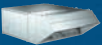
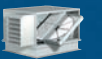
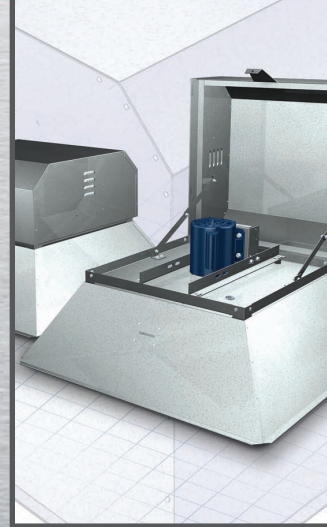
The low silhouette fabra style downblast centrifugal roof exhaust fan Series L models LD and LB (direct or belt drive) are a low profile and architectural means of exhausting air. They utilize a backward-inclined wheel and are available in 20 different sizes. Capacities range from 100 to 37,500 cfm and up to 2.0 in. wg of static pressure.



The low silhouette penthouse style downblast centrifugal roof exhaust fan Series L models LDP and LBP (direct or belt drive) are an architectural means of exhausting air. They utilize a backward-inclined wheel and are available in 20 different sizes. Capacities range from 100 to 37,500 cfm and up to 2.0 in. wg of static pressure.



The tamper resistant centrifugal roof exhaust fan models NYD and NYB (direct or belt drive) are galvanized construction and prevent entry into the unit and/or building. They utilize a backward-inclined wheel and are available in 10 different sizes. Capacities range from 170 to 8,080 cfm and up to 1.0 in. wg of static pressure.



## 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

