

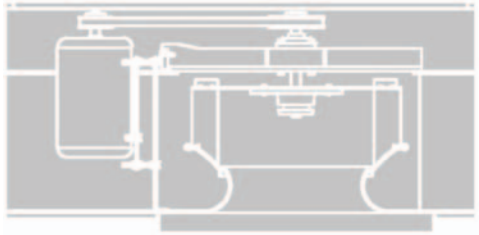
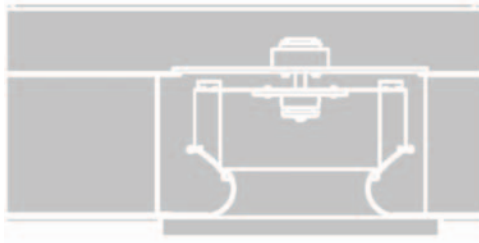
LO-PRO



COOK

# LO-PRO

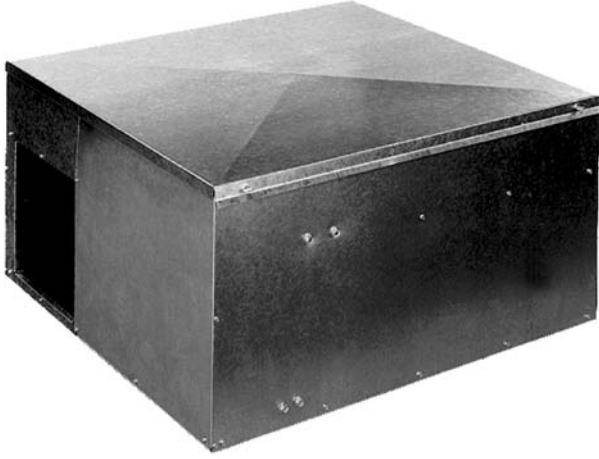
## Low Profile High Pressure Roof Exhaust Ventilator



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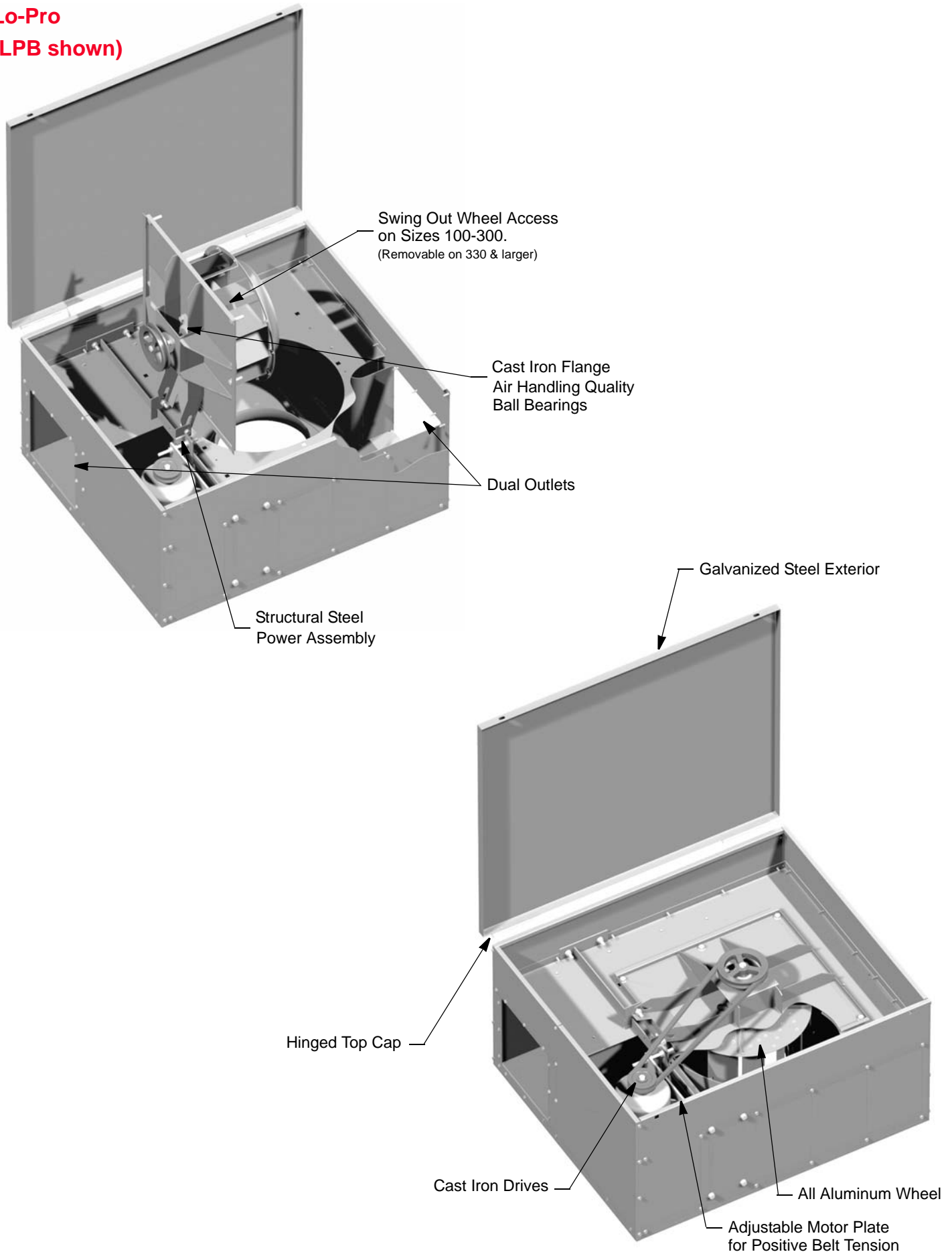
# Introduction

Cook's low profile roof exhaust ventilator provides maximum performance and durability in a wide variety of applications from general ventilator to restaurant hood exhaust. The Lo-Pro's one-of-a-kind double scroll design produces higher airflow volumes and static pressures than the conventional roof exhaust ventilator.



- Heavy gauge galvanized steel exterior is designed for maximum weather protection.
- Standard hinged top access panel on sizes 100 through 300, and removable top access panel on sizes 330 through 540.
- Hinged wheel access door on sizes 100 through 300, and removable wheel panel on sizes 300 through 540 allow the wheel and fan to be cleaned without compromising the fan to ductwork seal.
- Wheels are centrifugal type featuring non-overloading, backward-inclined blades and a tapered inlet shroud.
- When provided with optional outlet diverter the LPB is available as a UL Listed 762 for Power Ventilator for Restaurant Exhaust Appliances.
- All units are licensed to bear the AMCA Certified Ratings Seal for Air and Sound Performance.
- Available in 5 direct drive sizes and eighteen belt drive sizes. Capacities range from 650 to 55,000 CFM, with static pressure from 0 to 3 inches.

## Lo-Pro (LPB shown)



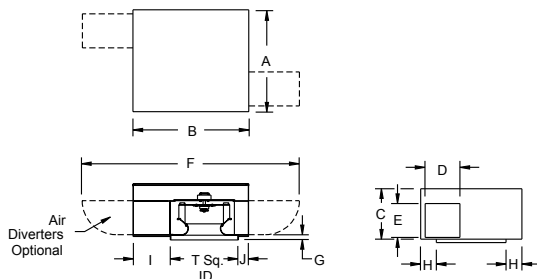
## Low Profile Centrifugal Exhaust Ventilator Roof Mounted/Direct Drive



Loren Cook Company certifies that the LPD shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.



Type LPD is furnished standard with UL 705 listing and cUL 705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.



**Description** - Fan shall be a low profile, roof mounted, direct driven, upblast exhaust ventilator.

**Certifications** - Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL 705) and UL listed for Canada (cUL 705). Fan shall bear the AMCA Certified Ratings Seal for Sound and Air Performance.

**Construction** - The fan shall be of bolted and welded construction utilizing corrosion resistant fasteners. The aluminum base shall have a one piece inlet spinning and continuously welded curb cap corners for maximum leak protection. The top cap shall have quick release latches to provide access into the motor compartment. The motor shall be mounted on a minimum 14 gauge steel power assembly. These components shall be enclosed in a weather-tight compartment, separated from the exhaust airstream. Diverters shall be provided to discharge air vertically. Fan wheel and motor shall be mounted to a hinged access door for inspection and cleaning. Unit shall bear an engraved aluminum nameplate. Nameplate shall indicate design CFM and static pressure. Unit shall be shipped in ISTA Certified Transit Tested Packaging.

**Wheel** - Wheel shall be centrifugal backward inclined, constructed of 100% aluminum, including a precision machined cast aluminum hub. An aerodynamic aluminum inlet cone shall be provided for maximum performance and efficiency. Wheel hub shall be keyed and securely attached to the fan shaft. Wheel shall be balanced in accordance with AMCA Standard 204-96, Balance Quality and Vibration Levels for Fans

**Motor** - Motor shall be heavy duty type with permanently lubricated sealed bearings and furnished at the specified voltage, phase and enclosure.

**Product** - Fan shall be model LPD as manufactured by Loren Cook Company of Springfield, Missouri.

### LPD Dimension Data

Size	A	B	C	D ID	E ID	F	G
100	22-1/16	29-7/8	13-7/8	6-11/16	6-25/32	52-3/16	2
120	25-11/16	32-3/8	15-3/8	8	8-5/32	58-13/16	2
135	28-7/16	34-1/2	16-3/8	9	9-3/16	64-1/8	2
150	31-1/8	36-11/16	17-3/8	10	10-7/32	69-3/8	2
165	33-13/16	39	18-3/8	11	11-7/32	74-11/16	2

Size	H	I	J	T Sq. ID	Shipping Weight	Roof Opening Sq.*
100	1-1/32	8-19/32	1-9/32	20	110	15-1/2
120	27/32	7-29/32	15/32	24	130	19-1/2
135	2-7/32	8-15/16	1-9/16	24	146	19-1/2
150	3-9/16	9-15/16	2-3/4	24	162	19-1/2
165	4-29/32	10-15/16	4-1/16	24	183	19-1/2

All dimensions in inches. Wights in pounds.

\*Roof opening size for curbs supplied by Loren Cook Company only.

**Description** - Fan shall be a low profile, roof mounted, belt driven, centrifugal exhaust ventilator.

**Certifications** - Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL 705) and UL listed for Canada (cUL 705). For restaurant applications, fan shall be listed by Underwriters Laboratories (UL/cUL 762) for US and Canada. Fan shall bear the AMCA Certified Ratings Seal for Sound and Air Performance.

**Construction** - The fan shall be of bolted and welded construction utilizing corrosion resistant fasteners. The aluminum base shall have a one piece inlet spinning and continuously welded curb cap corners for maximum leak protection. The top cap shall have quick release latches to provide access into the motor compartment. The motor, bearings and drives shall be mounted on a minimum 14 gauge steel power assembly. These components shall be enclosed in a weather-tight compartment, separated from the exhaust air stream. Diverters shall be provided to discharge air vertically. Fan wheel shall be mounted to an access door for inspection and cleaning. Access door for sizes 100 to 300 shall be hinged, sizes above 300 shall be removable. Unit shall bear an engraved aluminum nameplate. Nameplate shall indicate design CFM, static pressure, and maximum fan RPM. Unit shall be shipped in ISTA Certified Transit Tested Packaging.

**Wheel** - Wheel shall be centrifugal backward inclined, constructed of 100% aluminum, including a precision machined cast aluminum hub. Wheel hub shall be keyed and securely attached to the fan shaft. Wheel inlet shall overlap an aerodynamic aluminum inlet cone to provide maximum performance and efficiency. Wheel shall be balanced in accordance with AMCA Standard 204-96, Balance Quality and Vibration Levels for Fans.

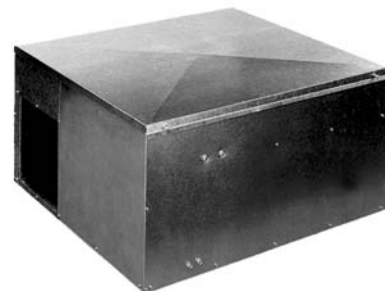
**Motor** - Motor shall be heavy duty type with permanently lubricated sealed ball bearings and furnished at the specified voltage, phase and enclosure.

**Bearings** - Bearings shall be designed and individually tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball type in a cast iron housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

**Belts and Drives** - Belts shall be oil and heat resistant, non-static type. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150% of the installed motor horsepower. The variable pitch motor drive must be factory set to the specified fan RPM.

**Product** - Fan shall be model LPB as manufactured by Loren Cook Company of Springfield, Missouri.

## Low Profile Centrifugal Exhaust Ventilator Roof Mounted/Belt Drive



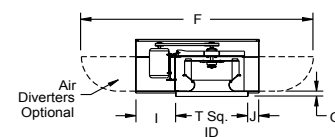
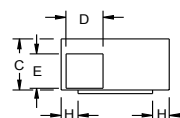
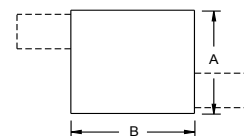
Loren Cook Company certifies that the LPB shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.



Type LPB is furnished standard with UL 705 listing and cUL 705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.



Type LPB is furnished standard with UL 762 and cUL 762 listings (Power Ventilator for Restaurant Exhaust Appliances/YZHW) when furnished with factory supplied motor and air diverter.



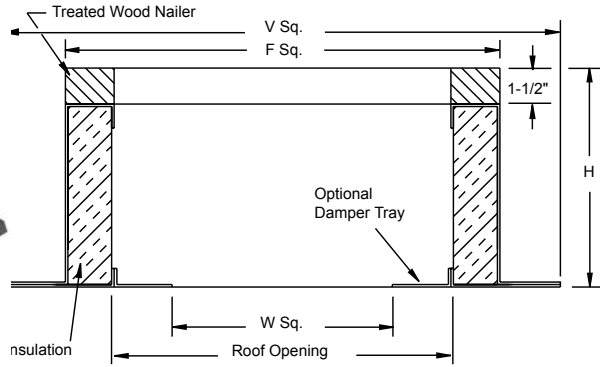
### LPB Dimension Data

Size	A	B	C	D ID	E ID	F	G	H	I	J	T Sq. ID	Shipping Weight	Roof Opening Sq.*
100	22-1/16	29-7/8	13-7/8	16-11/16	6-25/32	52-3/16	2	1-1/32	8-19/32	1-9/32	20	110	15-1/2
120	25-11/16	32-3/8	15-3/8	8	8-5/32	58-13/16	2	27/32	7-29	15/32	24	130	19-1/2
135	28-7/16	34-1/2	16-3/8	9	9-3/16	64-1/8	2	2-7/32	8-15/16	1-9/16	24	146	19-1/2
150	31-1/8	36-11/16	17-3/8	10	10-7/32	69-3/8	2	3-9/16	9-15/16	2-3/4	24	162	19-1/2
165	33-13/16	39	18-3/8	11	11-7/32	74-11/16	2	4-29/32	10-15/16	4-1/16	24	183	19-1/2
180	36-1/2	40-13/16	20-3/8	12	12-1/4	79-9/16	2	3-1/4	8-7/8	1-15/16	30	224	25-1/2
195	39-1/4	49	21-3/8	13	13-1/4	90-3/4	2	4-5/8	16-3/16	2-13/16	30	276	25-1/2
210	42	50-15/16	23-3/8	14	14-9/32	95-3/4	2	6	17-1/4	3-11/16	30	302	25-1/2
225	44-5/8	52-11/16	25-1/4	15	15-5/16	100-9/16	3	7-5/16	18-5/32	4-17/32	30	378	25-1/2
245	48-5/16	55-3/16	26-1/2	16	16-1/4	105-15/16	3	6-5/32	16-17/32	2-21/32	36	475	31-1/2
270	52-13/16	58-1/4	28	17-15/16	17-31/32	115-3/16	3	8-13/32	18-5/32	4-3/32	36	530	31-1/2
300	58-3/16	63-1/8	31-1/4	19-27/32	19-11/16	125-3/16	3	8-3/32	18-11/32	2-25/32	42	740	37-1/2
330	63-5/8	66-11/16	32-1/4	21-3/4	21-13/32	132-7/8	3	10-13/16	20-9/32	4-13/32	42	810	37-1/2
365	69-15/16	71-1/16	34-1/4	24	23-7/16	143-3/8	3	10-31/32	19-5/8	3-7/16	48	1040	43-1/2
402	76-3/4	75-11/16	36-3/8	26-13/32	25-9/16	154-3/8	3	14-3/8	22-5/32	5-17/32	48	1187	43-1/2
445	84-7/16	83-5/8	40	29-1/8	28	169-5/8	3	12-7/32	21-23/32	1-29/32	60	1455	55-1/2
490	92-9/16	91-1/4	42-1/2	32	30-9/16	184-15/16	3	16-9/32	26-13/16	4-7/16	60	1675	55-1/2
540	101-9/16	97-3/8	52-1/2	29-13/16	39-1/2	217-7/8	3	17-25/32	27-1/8	4-1/4	66	2205	61-1/2

All dimensions in inches. \*Roof opening size for curbs supplied by Loren Cook Company only.

# Accessories

## Roof Curb



### Standard Construction Features

- 18 gauge galvanized steel (RCG) or .080 aluminum (RCA).
- 1-1/2", 3 lbs. density thermal and acoustical insulation.
- Continuously welded corners.
- Wood nailer.

### Options

- Damper tray.
- No wood nailer (deduct 1-1/2" for actual height).
- 13-1/2" tall construction.

## Galvanized Steel or Aluminum Roof Curb

Size	Curb Catalog Number		F Sq.	H	V Sq.	W Sq.	Roof Opening
	Galvanized	Aluminum					
100	RCG-18	RCA-18	18-1/2	9-1/2	22-1/2	11-3/4	15-1/2
120, 135, 150, 165	RCG-22	RCA-22	22-1/2	9-1/2	26-1/2	15-3/4	19-1/2
180, 195, 210, 225	RCG-28	RCA-28	28-1/2	9-1/2	32-1/2	21-3/4	25-1/2
245, 270	RCG-34	RCA-34	34-1/2	9-1/2	38-1/2	27-3/4	31-1/2
300, 330	RCG-40	RCA-40	40-1/2	9-1/2	44-1/2	33-3/4	37-1/2
365, 402	RCG-46	RCA-46	46-1/2	9-1/2	50-1/2	39-3/4	43-1/2
445, 490	RCGH-58	-	58-1/2	9-1/2	62-1/2	51-1/2	55-1/2
540	RCGH-64	-	64-1/2	9-1/2	68-1/2	56-3/4	61-1/2

All dimensions in inches. When motor operated damper is used, a wood nailer is required.

## Sound Attenuator Curb\*

Size	Curb Catalog Number		F Sq.	H**	V Sq.	W Sq.	Roof Opening
	Galvanized	Aluminum					
100	RCG-AT-18	RCA-AT-18	18-1/2	16	22-1/2	11-3/4	15-1/2
120, 135, 150, 165	RCG-AT-22	RCA-AT-22	22-1/2	16	26-1/2	15-3/4	19-1/2
180, 195, 210, 225	RCG-AT-28	RCA-AT-28	28-1/2	16	32-1/2	21-3/4	25-1/2
245, 270	RCG-AT-34	RCA-AT-34	34-1/2	16	38-1/2	27-3/4	31-1/2
300, 330	RCG-AT-40	RCA-AT-40	40-1/2	16	44-1/2	33-3/4	37-1/2
365, 402	RCG-AT-46	RCA-AT-46	46-1/2	16	50-1/2	39-3/4	43-1/2
445, 490	RCG-AT-H-58	-	58-1/2	16	62-1/2	51-1/2	55-1/2
540	RCG-AT-H-64	-	64-1/2	16	68-1/2	56-3/4	61-1/2

All dimensions in inches. When motor operated damper is used, a wood nailer is required. \*Not available on UL 762 installations. \*\*Add 8" when installed with a damper.

### Average Sound Level Reduction

ODB1	ODB2	ODB3	ODB4	ODB5	ODB6	ODB7	ODB8
-5	-11	-9	-14	-18	-28	-35	-25

## Typical Disconnect Switches



NEMA 1



NEMA 1  
(Lockable)



NEMA 1  
(Heavy Duty)



NEMA 3R



NEMA 4



NEMA 7  
NEMA 9

**NEMA 1** - Indoor general purpose.

**NEMA 1 (Lockable)** - Indoor general purpose with locking capability.

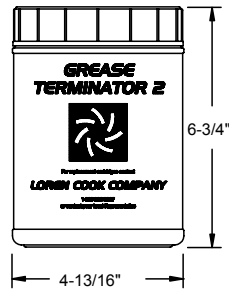
**NEMA 1 (Heavy Duty, Lockable)** - Indoor heavy duty visible blade.

**NEMA 3R** - Exterior mount, rain-tight.

**NEMA 4** - Water-tight and dust-tight.

**NEMA 7 and NEMA 9** - Lockable, indoor, explosion proof.

## Grease Terminator



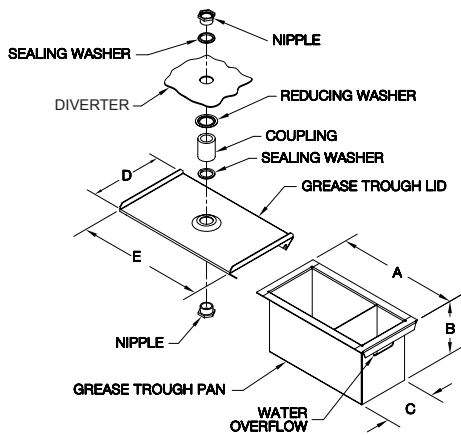
The Grease Terminator 2 is a grease-capture and containment system.

## Outlet Diverters



Outlet diverters are required for UL762 Restaurant Exhaust.

## Hanging Grease Trough

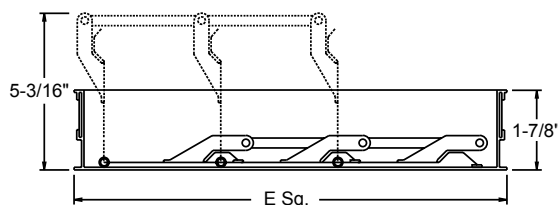


A	B	C	D	E
13-13/16	5-13/16	4-13/16	7-3/16	14-7/16

All dimensions in inches.

The hanging grease trough features an easily removable welded aluminum pan for the collection and separation of grease. The trough pan can be removed for cleaning. The grease trough is shipped loose for field mounting.

## Gravity Backdraft Damper

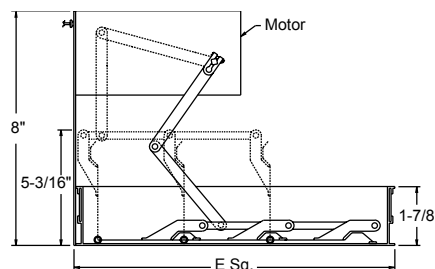


Gravity dampers feature an extruded aluminum frame, aluminum blades and aluminum hinge pins with nylon bushings. Not available on UL 762 installations.

Size	Catalog Number	E Sq.
100	BD-14	13-3/4
120, 135, 150, 165	BD-18	17-3/4
180, 195, 210, 225	BD-24	23-3/4
245, 270	BD-30	29-3/4
300, 330	BD-36	35-3/4
365, 402	BD-42	47-3/4
445-490	BD-54	53-3/4
540	BD-60	59-3/4

All dimensions in inches.

## Motorized Backdraft Damper



Motorized dampers feature an extruded aluminum frame, aluminum blades and aluminum hinge pins with nylon bushings. Motors are shipped loose for field installation. Available voltages include 110V, 220V, and 440V. Not available on UL 762 installations.

Size	Catalog Number	E Sq.
100	BDM-14	13-3/4
120, 135, 150, 165	BDM-18	17-3/4
180, 195, 210, 225	BDM-24	23-3/4
245, 270	BDM-30	29-3/4
300, 330	BDM-36	35-3/4
365, 402	BDM-42	41-3/4
445, 490	BDM-54	53-3/4
540	BDM-60	59-3/4

All dimensions in inches.



# Accessories

## Fan Speed Control



10 AMP FSC

Cook's FSC is a variable speed controller which can offer excellent energy conservation and lower sound levels when 100 percent of a direct drive fan operating capacity is not required. The FSC employs solid state circuitry for long-life and dependability. The FSC is available only on 115V and 230V shaded pole or permanent split capacitor direct drive motors and is not available on 1140 RPM and 1725 RPM motors. The FSC is normally shipped loose for field installation. Optional pre-wiring is available.

## Motors

### Direct Drive

All direct drive motors are standard single phase 115-volt:

- Sizes 70 through 100 are either shaded pole or permanent split capacitor type motors.
- Sizes 120 through 180 are either permanent split capacitor (1075, 1300, or 1550 rpm motors) or split phase (1140 or 1725 rpm motors).
- FSC can only be used on either shaded pole or permanent split capacitor type motors.

Optional motors:

- Two speed, single-phase open motors are supplied as either 1725/1140 RPM or as 1140/860 RPM.
- Explosion proof motors are available for some units, contact factory for details.
- These optional motors cannot use an FSC.

### Belt Drive

Single-phase motors:

- Open drip motors from 1/6 to 1-1/2 HP.
- Two-speed, motors in 1725/1140 RPM, from 1/6 to 1 HP.
- TEFC and Class 1, Group D, explosion proof motors from 1/4 to 1 HP.

Three-phase motors:

- Three-phase ODP motors from 1/4 to 10 HP.
- Two-speed, two winding motors in 1725/1140 RPM, from 1/3 to 5 HP.
- TEFC and Class 1, Group D, explosion proof motors from 1/4 to 10 HP.
- Variable Frequency Drive (VFD) compatible motors are available, contact factory for details.

All single-phase and three-phase, single speed, open drip motors listed in performance tables are shipped factory installed.

## Optional Coatings

**Lorenized®** is an electrostatically applied, baked polyester powder coating. Each component shall be subject to a five stage environmentally friendly wash system, followed by a minimum 2 mil thick baked powder finish. Coating must exceed 1,000 hour salt spray under ASTM B117 test method.

**Cook Epoxy Powder** is an electrostatically applied, baked epoxy powder coating. Final coating thickness is 2.5 - 3.5 mils. For outdoor applications an optional UV resistant topcoat is available to prevent cosmetic chalking of the coating.

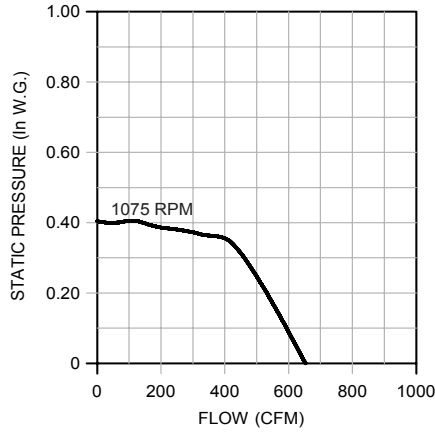
**Cook Phenolic Epoxy Powder** is an electrostatically applied, baked phenolic epoxy powder coating. Final coating thickness is 2 - 4 mils. For outdoor applications an optional UV resistant topcoat is required to prevent deterioration of the coating.

**Cook Easy Clean Powder** is an electrostatically applied, baked modified epoxy silicone powder producing a high temperature "non-stick" coating. Final coating thickness is 1.3 - 1.7 mils.

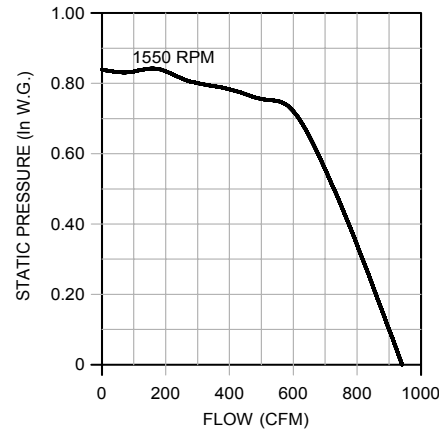
**Air Dry Phenolic (Heresite VR-504)** is a conventional spray applied phenolic resin coating. Final coating thickness is 4 - 6 mils. For outdoor applications an optional UV resistant topcoat (Heresite UC-5500) is required to prevent deterioration of the coating.

Refer to the corrosion resistance guide in the Compute-A-Fan software for a listing of the coatings above and their resistance to a variety of chemicals. Additional special coatings are available.

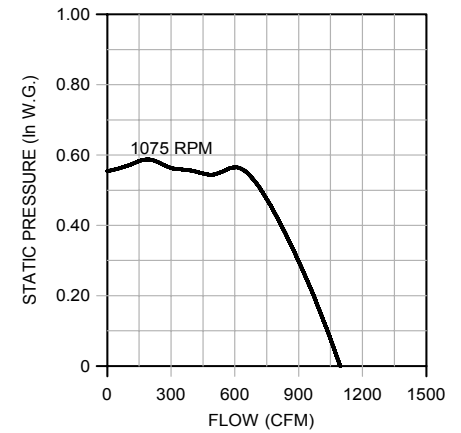
**100LP10D**



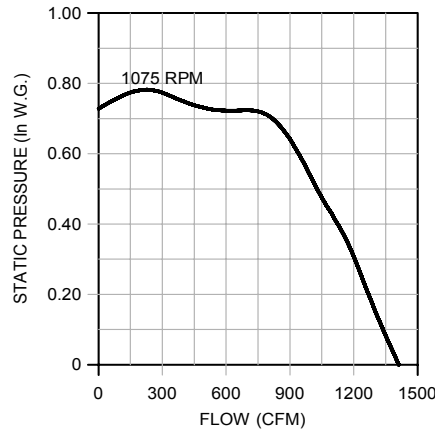
**100LP15D**



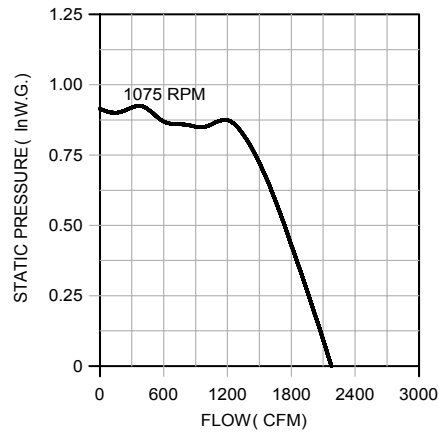
**120LP10D**



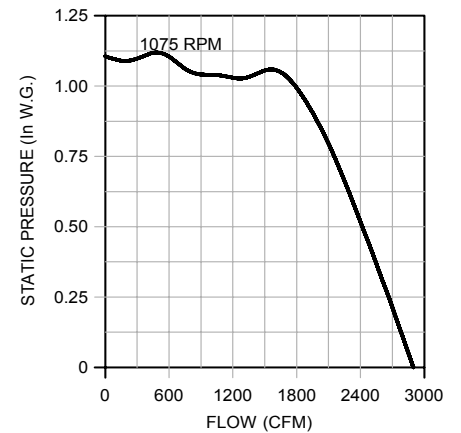
**135LP10D**



**150LP10D**



**165LP10D**



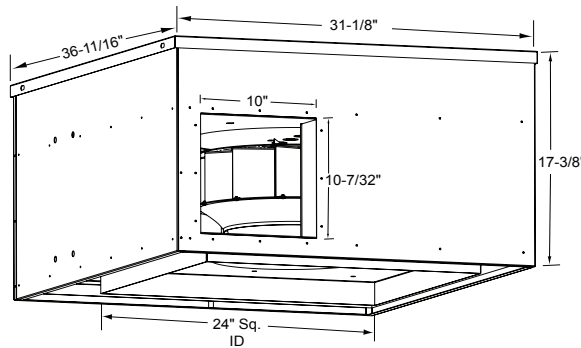
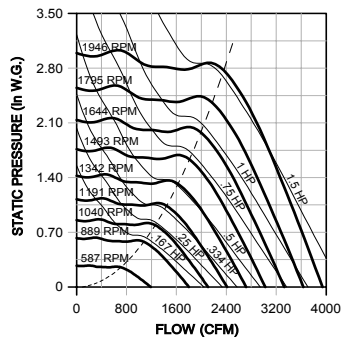
Catalog Number	Motor HP	Fan RPM	Tip Speed	Max. Input	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.000" SP	
					Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP
100LP10D	1/25	1075	2814	.03	653		578		498													
					6.7	.03	6.7	.03	6.7	.03												
100LP15D	1/8	1550	4058	.10	941		889		838		784		728		665							
					12.1	.08	12.2	.09	12.5	.09	12.8	.10	13.0	.10	13.1	.10						
120LP10D	1/6	1075	3377	.09	1097		1019		935		839		723									
					9.9	.07	9.9	.07	10.0	.08	10.1	.08	10.2	.09								
135LP10D	1/6	1075	3799	.16	1411		1320		1238		1148		1028		917							
					12.5	.13	12.5	.13	12.6	.14	12.7	.15	12.8	.16	12.9	.16						
150LP10D	1/3	1075	4222	.26	2178		2073		1964		1851		1736		1612		1462					
					11.5	.20	11.2	.22	11.0	.23	10.8	.24	10.8	.25	11.1	.26	11.3	.26				
165LP10D	1/3	1075	4644	.42	2899		2783		2665		2543		2418		2290		2153		1994		1787	
					14.0	.33	13.8	.35	13.5	.36	13.3	.38	13.2	.39	13.4	.40	13.7	.42	13.9	.42	14.1	.42

Performance shown is for Installation Type A: free inlet, free outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Speed (RPM) for all models is constant and based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: free inlet fan sone levels.









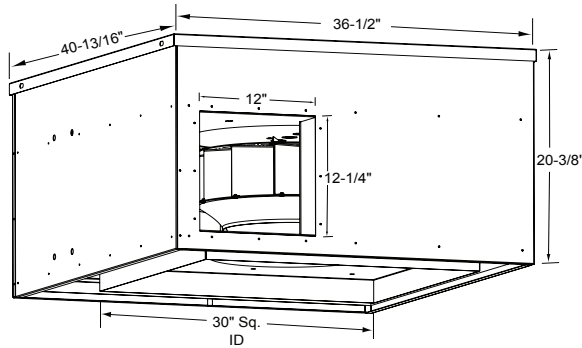
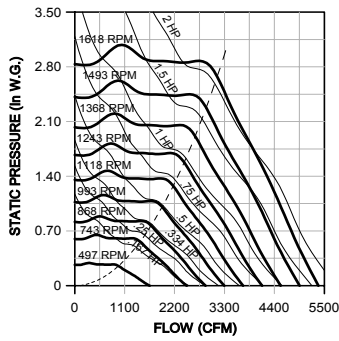
**Wheel Diameter - 15"**  
**Tip Speed (FPM) - 3.9 x RPM**  
**Maximum RPM - 1946**  
**Maximum BHP - .21 x (RPM/1000)<sup>3</sup>**  
**Maximum Motor Frame - 182T**  
**Approx. Ship Wt. (Less Motor) - 162 lbs.**  
**Roof Curb - RCG, RCA 22**  
**Roof Opening - 19-1/2" Sq.**

150 LPB

Catalog Number	Mtr. HP	Fan RPM	Tip Speed	0.000" SP		0.250" SP		0.500" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP		1.750" SP		2.000" SP		2.250" SP		2.500" SP				
				Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	
150LPB	1/6	587	2305	1189	720																							
		751	2949	3.8   0.03	3.3   0.04																							
		915	3593	1522	1204	6.1   0.07	5.3   0.09																					
	1/4	961	3773	1854	1599	1310																						
		1007	3954	8.5   0.12	7.7   0.15	7.9   0.16																						
		1052	4131	1947	1706	1441	9.2   0.14	8.6   0.17	8.7   0.19																			
	1/3	1089	4276	2040	1811	1563	10.1   0.17	9.5   0.19	9.5   0.21																			
		1126	4421	1126	4421	2131	1913	1678	1384																			
				1163	4567	11.0   0.19	10.5   0.22	10.3   0.24	10.9   0.25																			
				1206	4735	2206	1996	1770	1507	11.9   0.21	11.3   0.24	11.1   0.26	11.6   0.27															
	1/2	1249	4904	2281	2078	1861	1620	12.7   0.23	12.2   0.26	11.9   0.28	12.3   0.30																	
		1292	5073	1292	5073	2356	2160	1951	1726	13.5   0.26	13   0.29	12.7   0.31	13.1   0.33															
				1335	5242	2443	2254	2054	1842	1566	14.6   0.29	14.1   0.32	13.7   0.34	14.0   0.36	14.6   0.37													
				1402	5505	2530	2348	2156	1955	1714	15.7   0.32	15.2   0.35	14.9   0.38	15.1   0.40	15.6   0.41													
	3/4	1469	5768	2618	2442	2257	2064	1847	16.5   0.35	16.0   0.39	15.7   0.41	15.8   0.44	16.2   0.46															
		1536	6031	1536	6031	2705	2535	2357	2171	1702	17.2   0.39	16.8   0.42	16.5   0.45	16.6   0.48	17.0   0.50	17.4   0.51												
				1576	6188	2840	2679	2511	2335	2153	1934	18.4   0.45	18   0.49	17.7   0.52	18   0.54	18.3   0.57	18.7   0.59											
	1	1616	6346	2976	2822	2663	2497	2326	2136	1889	19.6   0.52	19.2   0.56	18.9   0.59	19.3   0.62	19.7   0.64	20   0.67	20   0.67											
		1695	6656	1695	6656	3112	2965	2813	2655	2494	2323	2119																
				1758	6903	21	0.59	21	0.63	20	0.67	21	0.7	21	0.73	22	0.75	22	0.77									
				1821	7151	3193	3049	2902	2749	2592	2429	2243	1999															
	1-1/2	1884	7398	22	0.64	21	0.68	21	0.72	21	0.75	22	0.78	22	0.81	22	0.83	23	0.83	23	0.83							
		1946	7641	1946	7641	3274	3134	2991	2842	2690	2533	2360	2146															
				23	0.74	23	0.79	23	0.83	23	0.86	23	0.89	23	0.92	24	0.95	24	0.97									
				3434	3301	3165	3024	2880	2733	2578	2400	2177																
	24	0.79	24	0.84	24	0.89	24	0.92	24	0.95	24	0.98	24	1.01	25	1.03	25	1.04										
	26	0.89	25	0.94	25	0.98	25	1.02	25	1.05	25	1.08	26	1.11	26	1.14	26	1.16										
	3689	3565	3440	3310	3177	3042	2904	2758	2593	2393																		
27	0.98	27	1.04	27	1.08	27	1.13	27	1.16	27	1.19	27	1.22	27	1.25	28	1.28	28	1.29									
3817	3697	3576	3452	3324	3193	3061	2924	2776	2604	2391																		
29	1.09	28	1.14	28	1.19	28	1.24	28	1.27	28	1.31	29	1.34	29	1.37	30	1.40	30	1.42	30	1.42	30	1.42	30	1.42			
3943	3827	3709	3590	3467	3341	3213	3083	2946	2794	2614																		
30	1.20	30	1.26	30	1.31	30	1.36	30	1.39	30	1.43	30	1.46	31	1.5	31	1.53	32	1.56	32	1.56	32	1.56	32	1.57			

Performance shown is for Installation Type A: free inlet, free outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: free inlet fan sone levels.





**Wheel Diameter - 18"**  
**Tip Speed (FPM) - 4.7 x RPM**  
**Maximum RPM (Standard Wheel) - 1610**  
**Maximum RPM (Reinforced Wheel) - 1618**  
**Maximum BHP - .50 x (RPM/1000)<sup>3</sup>**  
**Maximum Motor Frame - 182T**  
**Approx. Ship Wt. (Less Motor) - 224 lbs.**  
**Roof Curb - RCG, RCA 28**  
**Roof Opening - 25-1/2" Sq.**

**180 LPB**

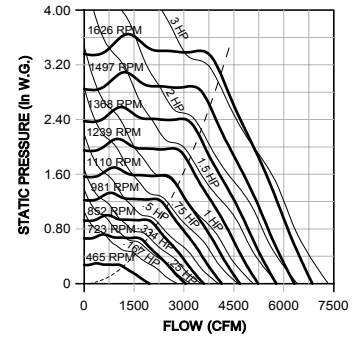
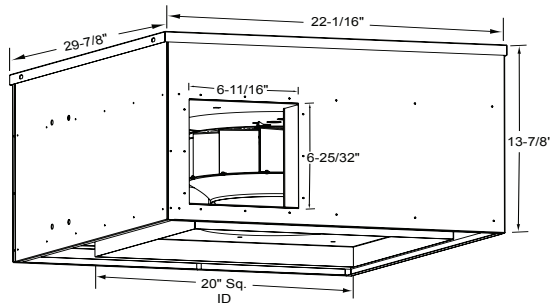
Catalog Number	Mtr. HP	Fan RPM	Tip Speed	0.000" SP		0.250" SP		0.500" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP		1.750" SP		2.000" SP		2.250" SP		2.500" SP			
				Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP
180LPB	1/6	497	2342	1650		971																					
		593	2794	1968		1402																					
		690	3251	2290		1818																					
	1/4	724	3411	2403		1953		1471																			
		758	3571	2516		2084		1619																			
		793	3736	2632		2216		1776																			
	1/3	821	3868	2725		2320		1903																			
		849	4000	2818		2423		2030																			
		877	4132	2911		2526		2154		1758																	
	1/2	920	4335	3053		2682		2340		1947																	
		963	4538	3196		2837		2519		2138																	
		1007	4745	3342		2995		2695		2337		2004															
	3/4	1058	4985	3512		3178		2894		2567		2229															
		1109	5226	3681		3359		3087		2790		2455															
		1159	5461	3847		3537		3273		3001		2682		2388													
	1	1199	5650	3979		3679		3421		3164		2863		2563													
		1239	5838	4112		3820		3567		3323		3041		2741		2480											
		1278	6022	4242		3957		3709		3476		3211		2917		2652											
	1-1/2	1341	6319	4451		4178		3937		3716		3476		3203		2929		2691									
		1404	6616	4660		4399		4163		3952		3732		3482		3214		2968									
		1468	6917	4872		4622		4393		4188		3983		3756		3504		3252		3029							
	2	1518	7153	5038		4795		4572		4371		4175		3963		3727		3478		3247		3040					
		1568	7389	29	1.34	29	1.44	29	1.49	28	1.51	29	1.52	30	1.57	31	1.64	31	1.69	31	1.71	32	1.73				
				5204	4969	4750	4552	4364	4165	3944	3706	3470	3261														
31				1.48	30	1.58	30	1.64	30	1.66	31	1.67	31	1.70	32	1.78	32	1.85	33	1.88	33	1.90					
1618	7624	5370		5142		4927		4734		4551		4363		4156		3930		3697		3479		3284					
				32	1.62	32	1.73	32	1.80	31	1.82	32	1.83	33	1.85	33	1.92	33	2.00	34	2.05	34	2.07	35	2.09		

Performance shown is for Installation Type A: free inlet, free outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: free inlet fan sone levels.



# 195 LPB Data

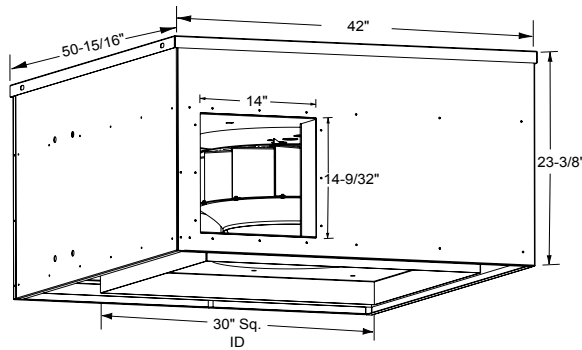
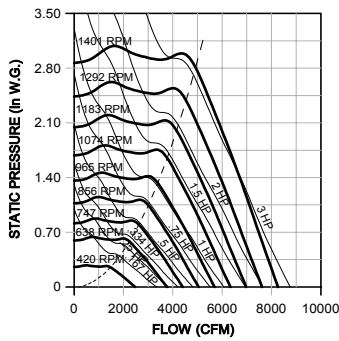
**Wheel Diameter - 19.5"**  
**Tip Speed (FPM) - 5.1 x RPM**  
**Maximum RPM (Standard Wheel) - 1429**  
**Maximum RPM (Reinforced Wheel) - 1626**  
**Maximum BHP - .74 x (RPM/1000)<sup>3</sup>**  
**Maximum Motor Frame - 184T**  
**Approx. Ship Wt. (Less Motor) - 276 lbs.**  
**Roof Curb - RCG, RCA 28**  
**Roof Opening - 25-1/2" Sq.**



## 195 LPB

Catalog Number	Mtr. HP	Fan RPM	Tip Speed	0.000" SP		0.250" SP		0.500" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP		1.750" SP		2.000" SP		2.250" SP		2.500" SP		
				Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
195LPB	1/6	465	2373	1962	1177																					
		604	3083	2549	1960																					
	1/4	634	3236	2675	2118																					
		664	3389	2802	2270	1701																				
		695	3548	2933	2423	1874																				
	1/3	731	3731	3085	2596	2077																				
		768	3920	3241	2770	2291																				
	1/2	825	4211	3482	3035	2614	2150																			
		882	4502	3722	3297	2919	2468																			
	3/4	926	4727	3908	3498	3145	2722																			
		970	4951	4093	3699	3364	2975	2578																		
				4283	3903	3581	3226	2831																		
	1015	5181	4283	3903	3581	3226	2831																			
	1	1050	5360	4431	4061	3748	3416	3032	2690																	
		1085	5539	4579	4219	3912	3601	3234	2886																	
				4726	4376	4076	3780	3435	3081																	
	1120	5717	4726	4376	4076	3780	3435	3081																		
	1-1/2	1175	5998	4959	4623	4331	4056	3742	3396	3086																
		1230	6279	5191	4868	4584	4323	4038	3713	3392	3112															
				5427	5118	4840	4590	4328	4030	3713	3426															
	1286	6565	5427	5118	4840	4590	4328	4030	3713	3426																
	2	1330	6789	5613	5313	5041	4797	4550	4273	3968	3672	3413														
		1374	7014	5798	5507	5241	5003	4768	4508	4220	3924	3659														
				5980	5697	5436	5202	4976	4733	4461	4172	3899	3656													
	1417	7233	5980	5697	5436	5202	4976	4733	4461	4172	3899	3656														
	3	1487	7591	6275	6005	5752	5525	5310	5087	4842	4574	4299	4045	3816												
		1557	7948	6571	6312	6068	5845	5639	5432	5209	4964	4704	4444	4206												
				6862	6614	6378	6160	5960	5763	5558	5335	5094	4842	4596												
		1626	8300	6862	6614	6378	6160	5960	5763	5558	5335	5094	4842	4596												

Performance shown is for Installation Type A: free inlet, free outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: free inlet fan sone levels.



**Wheel Diameter - 21"**  
**Tip Speed (FPM) - 5.5 x RPM**  
**Maximum RPM (Standard Wheel) - 1277**  
**Maximum RPM (Reinforced Wheel) - 1401**  
**Maximum BHP - 1.2 x (RPM/1000)<sup>3</sup>**  
**Approx. Ship Wt. (Less Motor) - 302 lbs.**  
**Roof Curb - RCG, RCA 28**  
**Roof Opening - 25-1/2" Sq.**

**210 LPB**

Catalog Number	Mtr. HP	Fan RPM	Tip Speed	0.000" SP		0.250" SP		0.500" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP		1.750" SP		2.000" SP		2.250" SP		2.500" SP		
				Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
210LPB	1/6	420	2309	2478	1488																					
		521	2864	3074	2317																					
	1/4	547	3007	3227	2512																					
		573	3150	3381	2702																					
		599	3293	3534	2887	2153																				
	1/3	631	3469	3723	3110	2433																				
		662	3639	3906	3321	2690																				
	1/2	711	3908	4195	3649	3079																				
		760	4178	4484	3971	3452	2870																			
	3/4	798	4387	4708	4218	3732	3189																			
		836	4596	4932	4464	4005	3497																			
		875	4810	5163	4714	4278	3804	3292																		
	1	905	4975	5340	4905	4484	4034	3546																		
		935	5140	5517	5095	4688	4259	3794																		
		965	5305	5694	5285	4890	4481	4036	3566																	
	1-1/2	1013	5569	5977	5587	5210	4827	4412	3975																	
		1061	5833	6260	5887	5526	5165	4779	4368	3940																
		1108	6091	6537	6180	5832	5490	5128	4742	4340	3905															
	2	1146	6300	6761	6416	6079	5748	5404	5037	4653	4255															
		1184	6509	6986	6651	6324	6004	5676	5326	4960	4581	4170														
		1221	6712	7204	6879	6561	6250	5936	5602	5251	4889	4513														
	3	1281	7042	7558	7249	6944	6647	6350	6040	5713	5374	5025	4661													
		1341	7372	7912	7616	7324	7039	6757	6467	6162	5844	5517	5181	4828												
		1401	7702	8266	7983	7703	7428	7158	6885	6600	6302	5994	5678	5355												

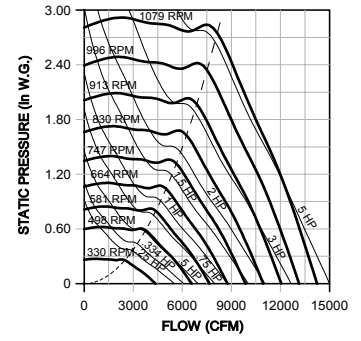
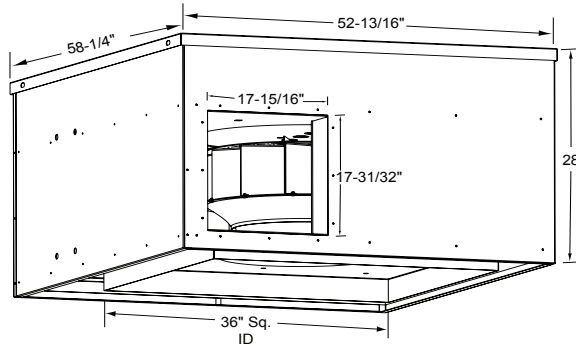
Performance shown is for Installation Type A: free inlet, free outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: free inlet fan sone levels.





# 270 LPB Data

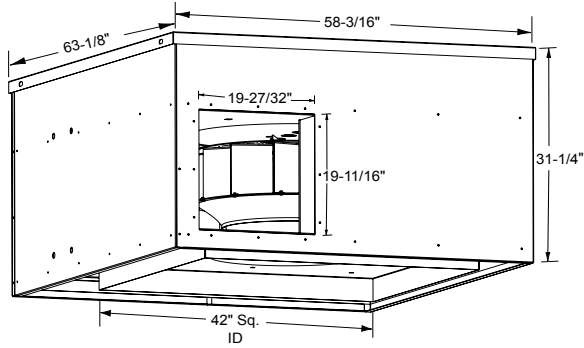
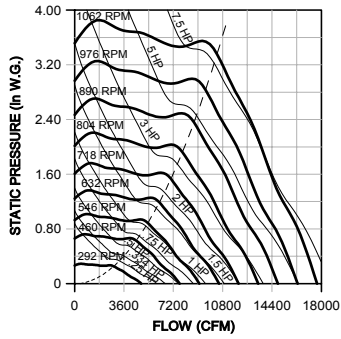
- Wheel Diameter - 27"
- Tip Speed (FPM) - 7.1 x RPM
- Maximum RPM (Standard Wheel) - 876
- Maximum RPM (Reinforced Wheel) - 1079
- Maximum BHP - 4.2 x (RPM/1000)<sup>3</sup>
- Maximum Motor Frame - 215T
- Approx. Ship Wt. (Less Motor) - 530 lbs.
- Roof Curb - RCG, RCA 34
- Roof Opening - 31-1/2" Sq.



## 270 LPB

Catalog Number	Mtr. HP	Fan RPM	Tip Speed	0.000" SP		0.250" SP		0.500" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP		1.750" SP		2.000" SP		2.250" SP		2.500" SP				
				Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	
270LPB	1/4	330	2332	4356		2566																						
		388	2742	4.3	0.12	3.3	0.15																					
				5.9	0.20	4.8	0.24																					
	1/3	408	2883	5386		4021																						
		429	3032	6.4	0.23	5.4	0.28																					
				7.0	0.27	5.9	0.33																					
	1/2	461	3258	6085		4956																						
		492	3477	7.9	0.33	6.8	0.40																					
	8.9			0.41	7.8	0.48	7.2	0.50																				
	3/4	530	3746	6996		6058		4832																				
		567	4007	10.1	0.51	9.0	0.59	8.4	0.63																			
				11.5	0.62	10.2	0.71	9.5	0.76																			
	1	596	4212	7867		7049		6031		4937																		
		625	4417	12.5	0.72	11.2	0.82	10.3	0.88	9.9	0.89																	
	16.2			0.83	15.5	0.94	14.7	1.00	13.9	1.03																		
	1-1/2	656	4637	8659		7922		7076		6043																		
		687	4856	17.4	0.96	16.7	1.07	15.9	1.15	15.1	1.19																	
				18.5	1.10	17.8	1.22	17.0	1.30	16.3	1.36	15.6	1.37															
	718	5075	19.7	1.26	19.0	1.39	18.2	1.48	17.5	1.54	16.8	1.56																
					19.7	1.26	19.0	1.39	18.2	1.48	17.5	1.54	16.8	1.56														
	2	742	5244	9794		9148		8451		7603		6696		5824														
		766	5414	21.0	1.39	19.9	1.52	19.1	1.62	18.4	1.69	17.7	1.72	16.8	1.72													
				22	1.53	21	1.67	20	1.77	19.4	1.84	18.7	1.89	18.1	1.89													
	791	5591	23	1.69	22	1.83	21	1.94	20	2.02	19.7	2.07	19.1	2.08														
					23	1.69	22	1.83	21	1.94	20	2.02	19.7	2.07	19.1	2.08												
	3	820	5796	10824		10241		9630		8942		8114		7312		6532												
		849	6001	24	1.88	23	2.03	22	2.15	22	2.23	21	2.29	20	2.32	19.5	2.32											
				25	2.08	24	2.24	24	2.37	23	2.46	22	2.53	22	2.57	21	2.58											
		878	6206	26	2.31	26	2.47	25	2.60	24	2.7	24	2.78	23	2.83	23	2.85	22	2.85									
	28			2.55	27	2.72	26	2.86	26	2.97	25	3.05	25	3.12	24	3.15	24	3.15										
	5	951	6722	12553		12052		11539		10995		10393		9691		8969		8299		7629								
		994	7026	30	2.93	29	3.10	29	3.26	28	3.38	27	3.47	27	3.55	26	3.61	26	3.62	25	3.62							
				33	3.35	32	3.53	31	3.70	31	3.83	30	3.93	29	4.02	28	4.09	28	4.13	28	4.14	26	4.13					
		1037	7330	36	3.80	35	3.99	34	4.17	34	4.32	33	4.43	32	4.53	31	4.61	31	4.67	30	4.69	30	4.70					
	39			4.28	39	4.48	38	4.66	37	4.83	36	4.96	35	5.06	35	5.15	34	5.23	33	5.27	33	5.29	32	5.29				

Performance shown is for Installation Type A: free inlet, free outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated ratings per AMCA Standard 301. Values shown are for Installation Type A: free inlet fan sone levels.



**Wheel Diameter - 30"**  
**Tip Speed (FPM) - 7.9 x RPM**  
**Maximum RPM (Standard Wheel) - 837**  
**Maximum RPM (Reinforced Wheel) - 1062**  
**Maximum BHP - 6.6 x (RPM/1000)<sup>3</sup>**  
**Maximum Motor Frame - 254T**  
**Approx. Ship Wt. (Less Motor) - 740 lbs.**  
**Roof Curb - RCG, RCA 40**  
**Roof Opening - 37-1/2" Sq.**

**300 LPB**

Catalog Number	Mtr. HP	Fan RPM	Tip Speed	0.000" SP		0.250" SP		0.500" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP		1.750" SP		2.000" SP		2.250" SP		2.500" SP			
				Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP
300LPB	1/4	292	2293	4.6	0.13	3.4	0.17																				
		333	2615	5.9	0.20	4.7	0.24																				
	1/3	351	2756	6.5	0.23	5.4	0.28																				
		368	2890	7.2	0.26	6.0	0.31																				
	1/2	396	3110	8.3	0.33	7.3	0.39																				
		423	3322	9.5	0.40	8.5	0.47	7.2	0.50																		
	3/4	455	3573	11.0	0.50	10.1	0.57	8.8	0.61																		
		487	3824	12.7	0.61	11.8	0.70	10.4	0.74																		
	1	512	4021	14.1	0.71	13.2	0.80	11.9	0.85	10.6	0.89																
		537	4217	15.4	0.82	14.6	0.91	13.4	0.97	12.2	1.02																
	1-1/2	577	4531	17.1	1.02	16.3	1.12	15.3	1.19	14.1	1.24																
		616	4838	18.8	1.24	18.0	1.35	16.8	1.43	15.9	1.48	14.9	1.54														
	2	637	5002	19.8	1.37	19.0	1.48	17.8	1.58	16.9	1.63	16.0	1.69														
		658	5167	21.0	1.51	20	1.62	18.7	1.73	17.8	1.79	17.0	1.84	16.0	1.89												
		679	5332	22	1.66	21	1.78	19.6	1.89	18.7	1.95	18.0	2.01	17.2	2.07												
	3	713	5599	23	1.93	23	2.05	21	2.17	20	2.24	19.4	2.30	18.7	2.37												
		747	5866	25	2.22	24	2.34	23	2.47	21	2.56	21	2.62	20	2.69	19.4	2.75										
		780	6126	26	2.52	26	2.65	24	2.79	23	2.90	22	2.96	21	3.02	21	3.10	19.9	3.15								
5	829	6510	29	3.03	28	3.17	26	3.31	25	3.44	24	3.52	23	3.59	23	3.66	22	3.74	21	3.79							
	878	6895	31	3.60	31	3.74	29	3.89	28	4.04	27	4.15	26	4.22	26	4.29	25	4.37	25	4.45	23	4.50					
	927	7280	34	4.23	34	4.39	32	4.55	31	4.70	30	4.84	29	4.92	28	5.00	28	5.07	27	5.16	27	5.25	26	5.30			
7-1/2	972	7634	38	4.88	37	5.04	36	5.21	34	5.37	33	5.53	32	5.64	31	5.72	30	5.79	30	5.87	30	5.97	29	6.05			
	1017	7987	41	5.59	41	5.76	39	5.93	38	6.10	37	6.28	35	6.41	34	6.50	34	6.58	33	6.66	32	6.75	32	6.85			
	1062	8340	45	6.37	45	6.54	43	6.72	42	6.9	40	7.08	39	7.24	38	7.35	37	7.44	36	7.52	36	7.61	35	7.71			

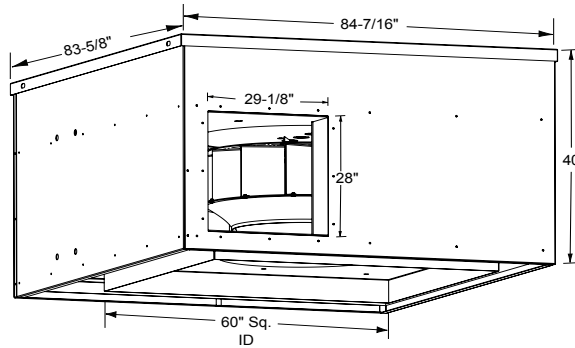
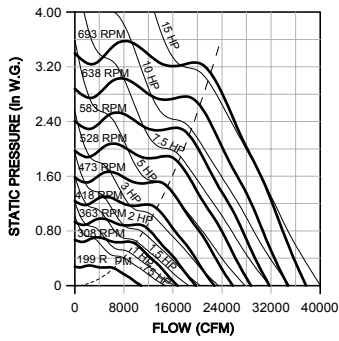
Performance shown is for Installation Type A: free inlet, free outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: free inlet fan sone levels.











**Wheel Diameter - 44.5"**  
**Tip Speed (FPM) - 11.7 x RPM**  
**Maximum RPM (Standard Wheel) - 463**  
**Maximum RPM (Reinforced Wheel) - 930**  
**Maximum BHP - 47.7 x (RPM/1000)<sup>3</sup>**  
**Maximum Motor Frame - 284T**  
**Approx. Ship Wt. (Less Motor) - 1455 lbs.**  
**Roof Curb - RCGH - 58**  
**Roof Opening - 55-1/2" Sq.**

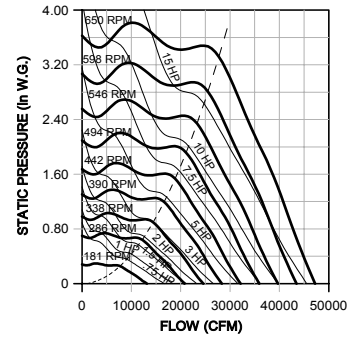
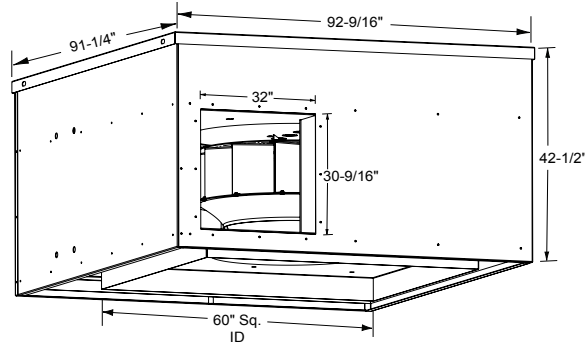
**445 LPB**

Catalog Number	Mtr. HP	Fan RPM	Tip Speed	0.000" SP		0.250" SP		0.500" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP		1.750" SP		2.000" SP		2.250" SP		2.500" SP			
				Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP
445LPB	3/4	199	2318	10834	6525																						
		528	2935	13719	10452																						
	1	265	3087	14427	11384																						
		278	3238	15135	12276																						
	1-1/2	298	3471	16224	13574	10566																					
		319	3716	17367	14876	12085																					
	2	335	3902	18238	15846	13226																					
		351	4089	19109	16804	14390	11848																				
	3	368	4287	20035	17813	15619	13165																				
		385	4485	20960	18814	16808	14396																				
		403	4694	21940	19871	18013	15677	13487																			
	5	428	4986	23301	21330	19609	17487	15429																			
		453	5277	24662	22782	21152	19292	17224	15285																		
		479	5580	26078	24286	22725	21095	19085	17285																		
	7-1/2	502	5848	27330	25611	24098	22608	20758	18939	17210																	
		525	6116	28582	26931	25461	24067	22413	20578	18955	17120																
		549	6395	29889	28305	26874	25551	24081	22316	20682	19119																
	10	568	6617	30923	29388	27989	26707	25347	23699	22032	20542	18906															
		587	6838	31957	30469	29097	27853	26575	25061	23400	21912	20447															
		605	7048	32937	31490	30148	28929	27714	26318	24709	23193	21799	20274														
	15	627	7304	34135	32737	31428	30237	29078	27806	26307	24763	23387	22024														
		649	7560	35333	33980	32702	31538	30422	29246	27876	26362	24953	23652	22292													
		671	7817	36531	35221	33976	32832	31752	30647	29398	27964	26524	25231	23971													
		693	8073	37728	36458	35246	34123	33071	32015	30868	29543	28123	26796	25574													

Performance shown is for Installation Type A: free inlet, free outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: free inlet fan sone levels.

# 490 LPB Data

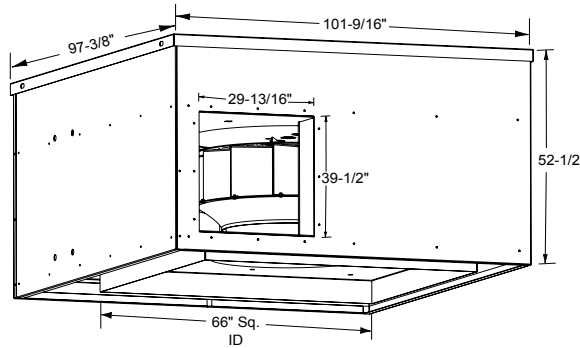
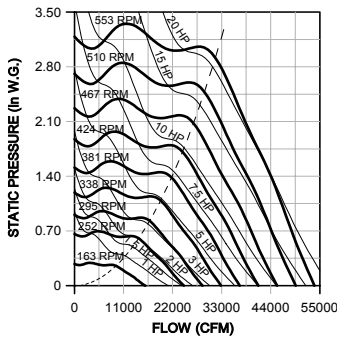
**Wheel Diameter** - 49"  
**Tip Speed (FPM)** - 12.8 x RPM  
**Maximum RPM (Standard Wheel)** - 360  
**Maximum RPM (Reinforced Wheel)** - 650  
**Maximum BHP** - 77.3 x (RPM/1000)<sup>3</sup>  
**Maximum Motor Frame** - 286T  
**Approx. Ship Wt. (Less Motor)** - 1675 lbs.  
**Roof Curb** - RCGH - 58  
**Roof Opening** - 55-1/2" Sq.



## 490 LPB

Catalog Number	Mtr. HP	Fan RPM	Tip Speed	0.000" SP		0.250" SP		0.500" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP		1.750" SP		2.000" SP		2.250" SP		2.500" SP						
				Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP			
490LPB	3/4	181	2321	13156		7943																								
				5.1	0.36	3.9	0.46																							
	214	2745	15555		11231																									
			7.1	0.60	5.9	0.73																								
	1	225	2886	16354		12297																								
				7.7	0.69	6.7	0.84																							
	236	3027	17154		13359																									
			8.4	0.80	7.4	0.96																								
	1-1/2	254	3258	18462		15019																								
				9.7	1.00	8.7	1.19																							
	271	3476	19698		16489		12846																							
			11.1	1.21	10.0	1.43	8.7	1.52																						
	2	285	3656	20715		17652		14204																						
				12.3	1.41	11.1	1.65	9.8	1.75																					
	299	3835	21733		18790		15535																							
			13.5	1.63	12.4	1.89	10.8	1.99																						
	3	321	4117	23332		20551		17663		14605																				
				15.5	2.02	14.5	2.31	12.9	2.43	11.4	2.55																			
	343	4400	24931		22290		19766		16817																					
			17.4	2.46	16.6	2.79	15.2	2.95	13.7	3.06																				
	5	375	4810	27257		24794		22617		19870		17327																		
				20	3.22	19.2	3.59	18.0	3.81	16.7	3.90	15.5	4.06																	
	408	5233	29655		27359		25368		23066		20559		18142																	
			23.0	4.14	22	4.56	21	4.84	19.5	4.98	18.4	5.10	17.2	5.25																
	7-1/2	428	5490	31109		28905		26989		24937		22462		20262																
				25	4.78	24	5.22	22	5.54	21	5.72	20	5.82	19.2	6.00															
	448	5747	32563		30446		28589		26726		24399		22208		19996															
			27.0	5.48	26	5.95	24	6.30	23	6.52	22	6.62	21	6.79	20	6.94														
468	6003	34017		31979		30176		28442		26337		24110		22112																
		29	6.25	28	6.74	26	7.12	25	7.38	24	7.51	23	7.65	22	7.85															
10	484	6208	35180		33204		31438		29777		27854		25641		23680		21610													
			30	6.92	29	7.43	28	7.83	26	8.12	25	8.28	24	8.39	24	8.60	23	8.75												
500	6414	36343		34426		32694		31094		29325		27194		25208		23324														
		32	7.62	31	8.15	29	8.59	28	8.90	27	9.10	26	9.21	25	9.39	24	9.60													
515	6606	37433		35569		33869		32312		30657		28651		26632		24822		22822												
		34	8.33	33	8.88	31	9.33	30	9.67	28	9.91	28	10	27	10.2	26	10.4	25	10.6											
15	540	6927	39250		37466		35817		34322		32808		31036		29037		27222		25493											
			37	9.6	37	10.2	35	10.7	33	11.1	31	11.3	31	11.5	30	11.6	29	11.8	29	12.1										
565	7247	41067		39358		37762		36311		34891		33320		31467		29601		27931		26247										
		41	11.00	41	11.6	38	12.1	37	12.6	35	12.9	34	13.1	33	13.24	33	13.39	32	13.6	31	13.9									
590	7568	42884		41245		39696		38285		36933		35510		33853		32019		30309		28733		27089								
		45	12.5	45	13.2	43	13.7	41	14.20	39	14.6	37	14.8	37	15	36	15.1	35	15.3	35	15.6	34	15.8							
20	610	7825	44338		42751		41242		39856		38548		37209		35698		33962		32218		30648		29123							
			49	13.8	48	14.5	46	15.10	44	15.60	42	16.00	40	16.3	39	16.5	39	16.7	38	16.8	38	17.1	37	17.4						
630	8081	45792		44253		42783		41423		40147		38869		37481		35878		34158		32547		31066								
		52	15.3	52	15.9	50	16.6	47	17.1	45	17.5	43	17.9	42	18.1	42	18.30	41	18.4	41	18.6	40	18.9							
650	8338	47245		45752		44318		42982		41737		40509		39214		37744		36102		34463		32971								
		55	16.8	55	17.5	52	18.1	50	18.7	48	19.1	46	19.5	44	19.8	44	20	43	20.2	43	20.3	42	20.6							

Performance shown is for Installation Type A: free inlet, free outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: free inlet fan sone levels.



**Wheel Diameter - 54"**  
**Tip Speed (FPM) - 14.1 x RPM**  
**Maximum RPM (Standard Wheel) - 347**  
**Maximum RPM (Reinforced Wheel) - 553**  
**Maximum BHP - 125.5 x (RPM/1000)<sup>3</sup>**  
**Maximum Motor Frame - 286T**  
**Approx. Ship Wt. (Less Motor) - 2205 lbs.**  
**Roof Curb - RCGH - 64**  
**Roof Opening - 61-1/2" Sq.**

**540 LPB**

Catalog Number	Mtr. HP	Fan RPM	Tip Speed	0.000" SP		0.250" SP		0.500" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP		1.750" SP		2.000" SP		2.250" SP		2.500" SP		
				Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
540LPB	1	163	2304	15857	0.43	9431																				
		201	2841	19554	0.80	14518																				
	1-1/2	216	3053	21013	1.00	16457																				
		231	3265	22472	1.22	18299	13421																			
	2	243	3435	23640	1.42	19693	15203																			
		254	3590	24710	1.62	20926	16656																			
	3	273	3859	26558	2.02	23001	19078																			
		292	4128	28407	2.47	25034	21540	17835																		
	5	310	4382	30158	2.95	26939	23847	20259																		
		328	4637	31909	3.50	28829	26035	22556	19206																	
		347	4905	33757	4.14	30811	28230	24997	21954																	
	7-1/2	364	5145	35411	4.78	32581	30124	27209	24169	21006																
		381	5386	37065	5.48	34340	31979	29372	26332	23596																
		398	5626	38719	6.25	36098	33809	31445	28518	25867																
	10	411	5810	39983	7.88	37436	35197	32979	30210	27537	24941															
		424	5994	41248	8.33	38769	36576	34463	31894	29190	26757															
		438	6192	42610	8.95	40204	38054	36030	33674	30979	28597	26050														
	15	459	6488	44653	9.58	42350	40261	38338	36242	33709	31280	29038														
		480	6785	46696	11.7	44486	42456	40609	38701	36419	33961	31777	29581													
		502	7096	48836	12.5	46717	44749	42961	41186	39168	36821	34578	32534	30348												
	20	515	7280	50101	13.5	48033	46100	44342	42626	40736	38508	36237	34209	32184	29745											
		528	7464	51365	14.6	49347	47447	45717	44050	42273	40173	37919	35864	33926	31823											
		541	7648	52630	15.7	50659	48790	47086	45461	43765	41808	39612	37515	35613	33670											
		539	7817	53797	16.8	51867	50032	48347	46757	45128	43285	41171	39051	37147	35290											
		553	7817	55300	18.3	55000	55000	55000	55000	55000	55000	55000	55000	55000	55000											

Performance shown is for Installation Type A: free inlet, free outlet. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: free inlet fan sone levels.

# UL 762 Listed for Restaurant Exhaust Appliances

Cook products, with UL 762 listing are designed to eject contaminated or grease-laden air. The products are UL listed to operate continuously at elevated temperatures, and continue operation during grease flare-up.

## Products UL Listed to Operate up to 300°F

- VCR/VCR-HP/VCR-XP
- VCRD/VCRD-HP/VCRD-XP
- Lo-Pro (requires diverters)
- CPV/CPA/CPA-A
- QMX/QMX-HP/QMXU/QMXU-HP/QMXLE/QMXLE-HP
- CIC

CPV, CPA, CPA-A, QMX, QMX-HP and CIC must be ordered with drain and access door to comply with UL requirements. Weather covers are required for outdoor applications. When airstream temperatures are expected to exceed 180°F, high temperature accessories may be required.

## Loren Cook Products UL Listed to Operate up to 500°F

- CPS/CPS-A
- CA/CA-SWSI Arrangement 1, 9 and 10
- CA-4/CA-4 SWSI Arrangement 1 and 2
- CF/CF Arrangement 1, 9 and 10
- CF-4/CF-4 Arrangement 1 and 2
- QMX/QMX-HP Arrangement 9
- CIC

These Cook products must be ordered with drain and access door to comply with UL requirements. Weather covers are required for outdoor applications.

When airstream temperatures are expected to exceed 180°F, high temperature accessories may be required.

All of the units are intended for installation in accordance with the Standard of the National Fire Protection Association for the installation of Equipment for the Removal of Smoke and Grease-Laden Vapors from Commercial Cooking Equipment, NFPA 96.



VCR / VCR-HP / VCR-XP  
VCRD / VCRD-HP / VCRD-XP



Lo-Pro - Shown with diverters



CPS / CPA / CPS-A / CPA-A  
Shown with weather cover



CA / CF



CA-4 / CF-4



QMX / QMX-HP



QMXLE / QMXLE-HP



QMXU / QMXU-HP



CIC



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