

INTRODUCTION

Cook power roof and wall ventilators provide maximum performance and durability in a wide variety of commercial and industrial air moving applications. Exhaust applications include general ventilation, fume-hood, paint booth and smoke control systems.

- AC unit top cap assembly is designed to provide weather protection for the motor and drive components while maintaining easy, tool free access for inspection and maintenance.
- Standard lifting lugs, located under the top cap, provide for safe, fast and efficient lifting of the unit to a rooftop.
- One piece fan base, which includes a high-efficiency inlet venturi and continuously welded curb cap corners, insures weathertight conditions.
- Spun aluminum baffle is designed to provide smooth, turbulent-free airflow.
- Wheels are centrifugal type featuring non-overloading, backward-inclined blades and a tapered inlet shroud.
- Accurate performance is assured through compliance with the AMCA Certified Ratings Program. All units are licensed to bear the AMCA Certified Ratings Seal for Air and Sound Performance.

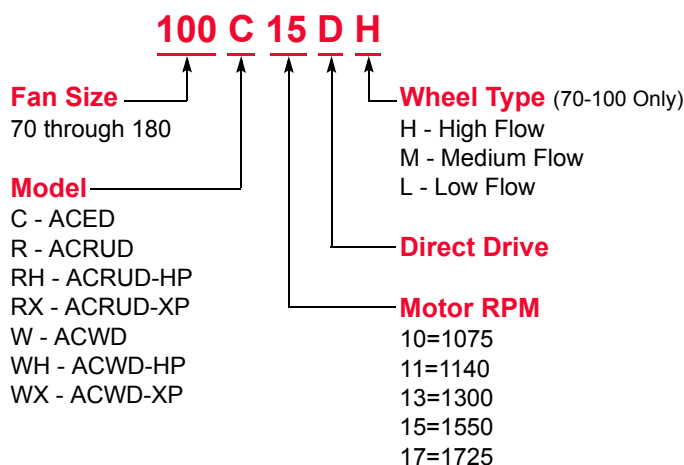
ACRU Upblast Centrifugal Exhaust Ventilator



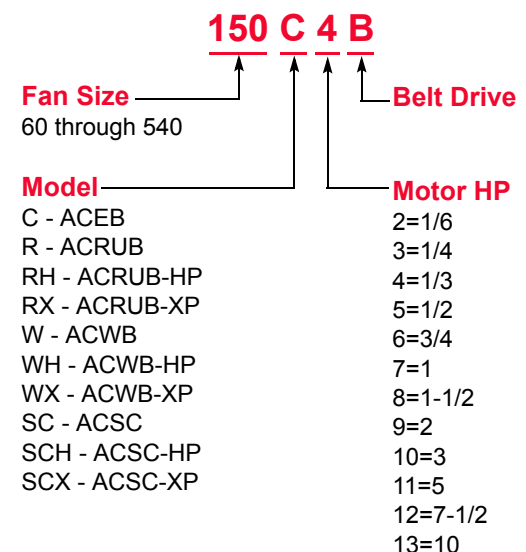
- Typically used in roof mounted applications where it is necessary to eject contaminated air away from a rooftop.
- ACRU available in 8 direct drive sizes and 17 belt drive sizes. Capacities range from 200 to 28,800 CFM, with static pressures from 0 to 1-1/2 inches.
- ACRU-HP available in 4 direct drive and 11 belt drive high pressure sizes. Capacities range from 700 to 19,200 CFM, with static pressures from 1/4 to 2-1/2 inches.
- ACRU-XP available in 3 direct drive and 10 belt drive extended pressure sizes. Capacities range from 800 to 11,000 CFM, with static pressures from 1 to 4-1/2 inches.

Model Number Chart

Direct Drive Models



Belt Drive Models



Upblast Centrifugal Exhaust Ventilator Roof Mounted Direct Drive

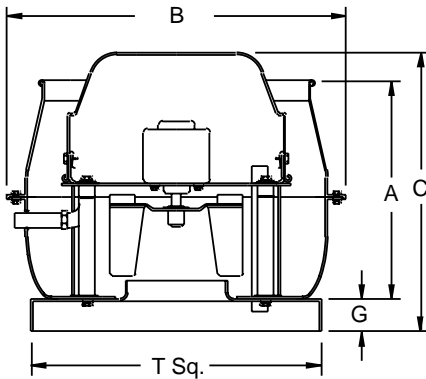


Loren Cook Company certifies that the ACRUD, ACRUD-HP and ACRUD-XP shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings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

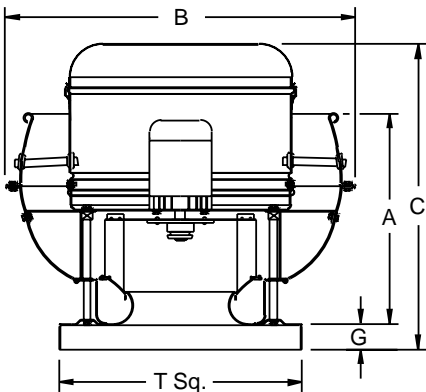


Type ACRUD, ACRUD-HP and ACRUD-XP are furnished standard with UL 705 and cUL 705 listings (Power Ventilator/ZACT).

Size 70 - 100



Size 120 - 180



Description - Fan shall be a spun aluminum, roof mounted, direct driven, upblast 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). Fan shall bear the AMCA Certified Ratings Seal for Sound and Air Performance.

Construction - Fan shall be of bolted and welded construction utilizing corrosion resistant fasteners. The spun aluminum structural components shall be constructed of minimum 16 gauge marine alloy aluminum, bolted to a rigid aluminum support structure. The aluminum base shall have a one piece inlet spinning and continuously welded curb cap corners for maximum leak protection. The windband shall have a rolled bead for added strength. An integral conduit chase shall be provided into the motor compartment to facilitate wiring connections. The motor shall be enclosed in a weather-tight compartment, separated from the exhaust airstream. 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 percent aluminum, including a precision machined cast aluminum hub. An aerodynamic aluminum inlet cone shall be provided for 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 bearings and furnished at the specified voltage, phase and enclosure.

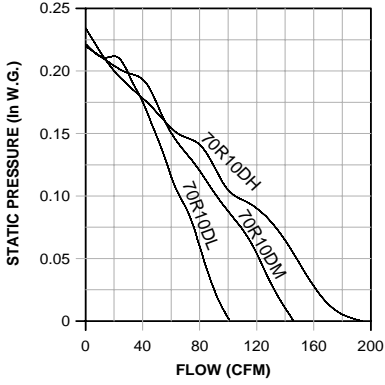
Product - Fans shall be models ACRUD, ACRUD-HP or ACRUD-XP as manufactured by Loren Cook Company of Springfield, Missouri.

ACRUD Dimension Data

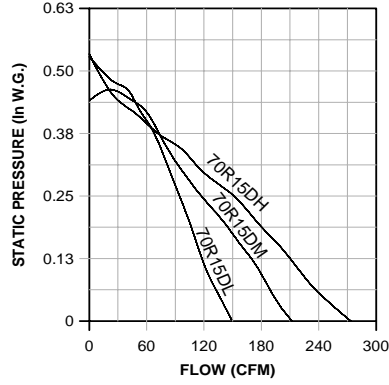
Size	A	B	C			G	T Sq.	Roof Opening Square*	Ship. Wt.
			ACRUD	ACRUD-HP	ACRUD-XP				
70	10-3/4	17-1/8	13-3/8	-	-	2	18	13-1/2	20
90	13-1/4	21-1/8	16-3/8	-	-	2	18	13-1/2	28
100	13-1/4	21-1/8	16-3/8	-	-	2	18	13-1/2	30
120	19-1/16	30-3/16	28-1/8	-	-	2	20	15-1/2	67
135	19-1/16	30-3/16	28-5/8	-	-	2	20	15-1/2	72
150	20-15/16	34-11/16	30-1/4	27-1/2	-	2	24	19-1/2	87
165	20-15/16	34-11/16	30-3/4	27-3/4	26-11/16	2	24	19-1/2	90
180	24-13/16	39-7/16	35-7/8	33-3/8	31-7/16	3	30	25-1/2	102
195	24-13/16	19-7/16	-	33-1/2	32-1/8	3	30	25-1/2	110

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

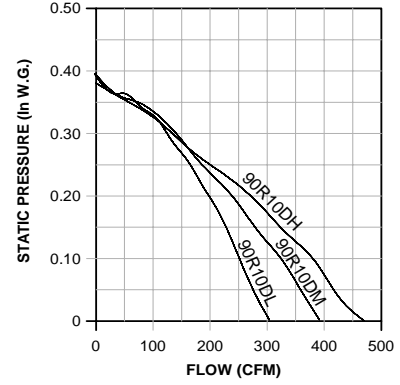
70R10DH, 70R10DM, 70R10DL



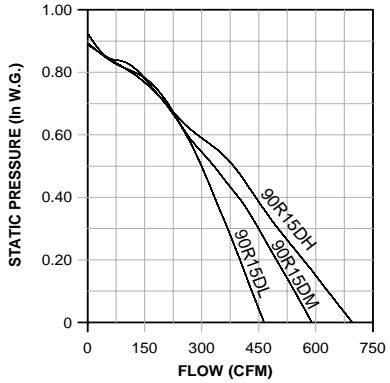
70R15DH, 70R15DM, 70R15DL



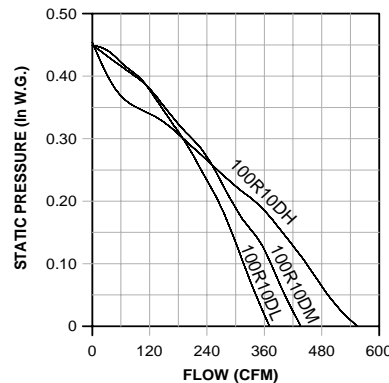
90R10DH, 90R10DM, 90R10DL



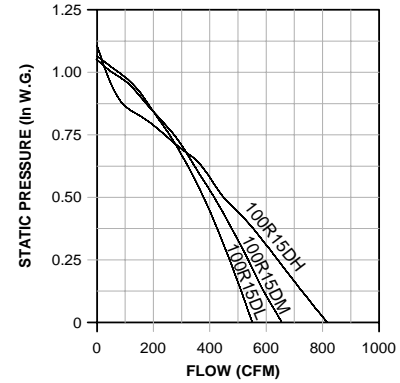
90R15DH, 90R15DM, 90R15DL



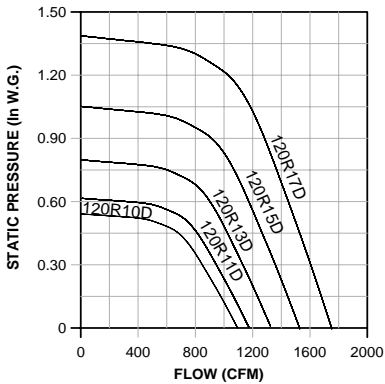
100R10DH, 100R10DM, 100R10DL



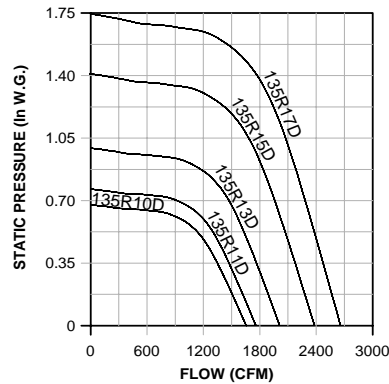
100R15DH, 100R15DM, 100R15DL



120R10D, 120R11D, 120R13D, 120R15D, 120R17D



135R10D, 135R11D, 135R13D, 135R15D, 135R17D



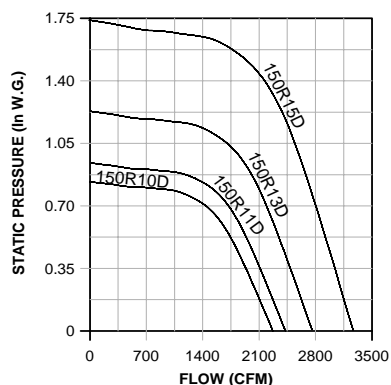
Performance certified is for Installation Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories) in the airstream. Speed (RPM) shown for models 70 - 100 is nominal. Performance is based on actual speed of test. Speed (RPM) for all other models is 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. *Motor is a 2-speed 1300/1550 RPM motor.

Catalog Number	Mtr. HP	Fan RPM	Tip Speed	Max. Watts	0.00" 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		1.250" SP		1.500" 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	Sone	BHP
70R10DL	1/25	1160	2123	72	100		56																							
70R10DM		1150	2105	75	3.4		3.6		145		76																			
70R10DH	1/20	1050	1922	80	3.7		3.3		194		89																			
70R15DL		1720	3112	86	5.0		4.9		149		117		94																	
70R15DM	1/8	1680	3057	92	5.5		5.4		211		169		116																	
70R15DH		1550	2837	92	6.6		5.9		274		210		151																	
90R10DL	1/25	1130	2655	80	6.4		6.4		306		241		167																	
90R10DM		1110	2596	85	4.6		4.2		391		299		184																	
90R10DH	1/8	1050	2478	85	5.2		4.8		470		353		201																	
90R15DL		1710	4047	95	4.4		4.3		462		422		383		340		297		246		168									
90R15DM	1/8	1680	3841	118	8.4		8.1		584		526		467		405		325		242		172									
90R10DH		1550	3658	132	9.9		9.7		696		616		533		456		384		263		166									
100R10DL	1/25	1100	2882	89	7.8		7.8		370		304		227																	
100R10DM		1090	2817	90	6.1		5.9		435		358		256		124															
100R10DH	1/8	1050	2751	94	6.1		5.8		554		424		261																	
100R15DL		1650	4362	130	6.6		6.9		549		509		468		424		376		320		254		177							
100R15DM	1/8	1640	4258	139	10.0		9.7		656		591		537		477		415		346		271		173							
100R15DH		1550	4061	169	10.6		10.3		816		727		641		554		449		372		240									
120R10D	1/6	1075	3376	-	9.6		9.5		1095		998		892		779															
120R11D	1/6	1140	3581	-	7.6	.08	7.6	.09	1161		1070		971		868		733													
120R13D	1/4*	1300	4084	-	8.7	.09	8.7	.10	1324		1244		1161		1072		981		867											
120R15D		1550	4869	-	11.4	.14	11.4	.15	1579		1512		1444		1372		1298		1223		1143		1047		872					
120R17D	1/3	1725	5417	-	14.9	.24	14.9	.25	1757		1697		1637		1574		1509		1442		1374		1304		1227		946			
135R10D	1/6	1075	3795	-	17.6	.33	17.6	.34	1656		1550		1441		1324		1177													
135R11D	1/6	1140	4029	-	9.6	.14	9.6	.15	1756		1657		1555		1447		1325		1140		1325									
135R13D	1/2*	1300	4595	-	11.2	.16	11.2	.18	2002		1915		1827		1736		1640		1535		1640		1152							
135R15D		1550	5478	-	14.6	.24	14.6	.26	2387		2315		2241		2167		2091		2012		2091		1841		1736		1358			
135R17D	3/4	1725	6089	-	19.0	.41	19.0	.43	2657		2592		2526		2459		2392		2323		2253		2180		2103		1922		1614	
					23	.56	23	.58					23	.60	23	.62	23	.63	23	.64	22	.65	22	.65	22	.66	21	.67	21	.64

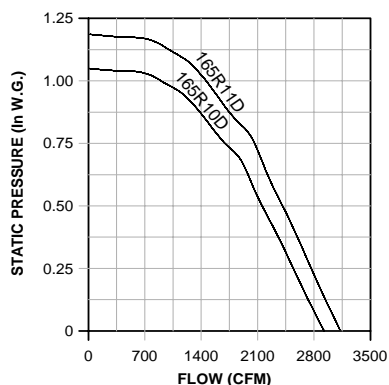
Performance certified is for Installation Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories) in the airstream. Speed (RPM) shown for models 70 - 100 is nominal. Performance is based on actual speed of test. Speed (RPM) for all other models is 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. *Motor is a 2-speed 1300/1550 RPM motor.

150 - 195 ACRUD Data

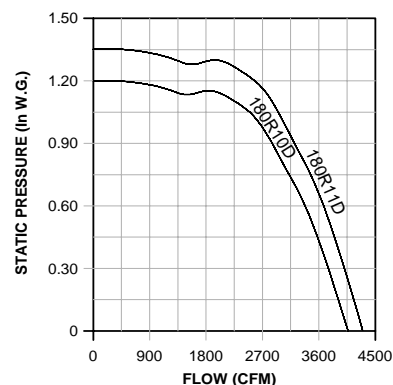
**150R10D, 150R11D, 150R13D,
150R15D**



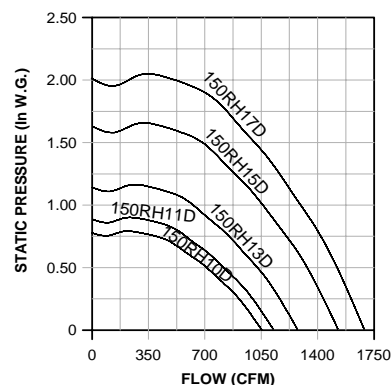
165R10D, 165R11D



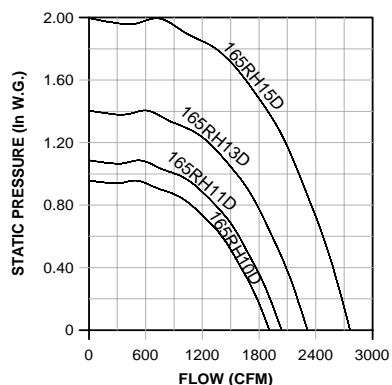
180R10D, 180R11D



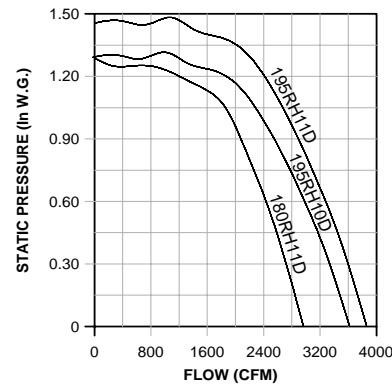
**150RH10D, 150RH11D, 150RH13D,
150RH15D, 150RH17D**



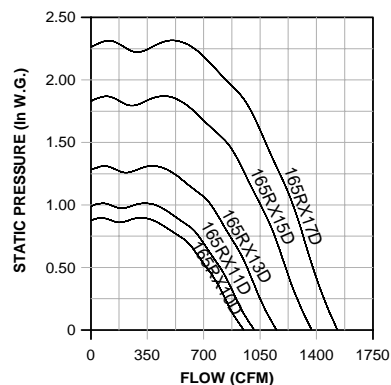
**165RH10D, 165RH11D, 165RH13D,
165RH15D**



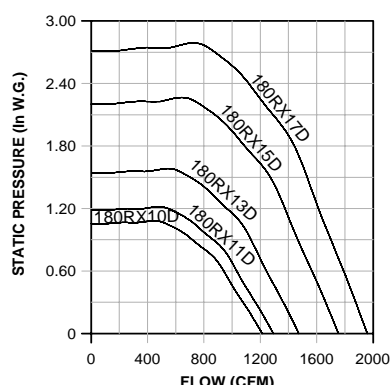
180RH11D, 195RH10D, 195RH11D



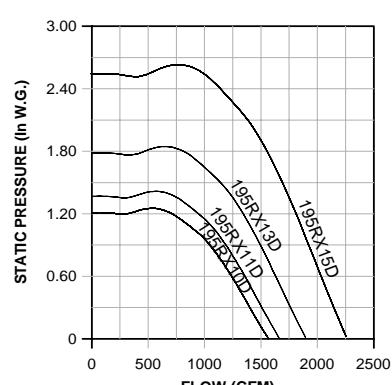
**165RX10D, 165RX11D, 165RX13D,
165RX15D, 165RX17D**



**180RX10D, 180RX11D, 180RX13D,
180RX15D, 180RX17D**



**195RX10D, 195RX11D, 195RX13D,
195RX15D**



Performance certified is for Installation Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories) in the airstream. Speed (RPM) shown for model 165R10 is nominal. Performance is based on actual speed of test. Speed (RPM) for all other 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. *Motor is a 2-speed 1300/1550 RPM motor.

150-180 ACRUD

Table with columns: Cat. No., Mtr. HP, Fan RPM, Tip Speed, 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, 1.250" SP, 1.500" SP. Rows include models 150R10D, 150R11D, 150R13D, 150R15D, 165R10D, 165R11D, 180R10D, 180R11D.

150-195 ACRUD-HP

Table with columns: Cat. No., Mtr. HP, Fan RPM, Tip Speed, 0.125" SP, 0.250" SP, 0.375" SP, 0.500" SP, 0.625" SP, 0.750" SP, 0.875" SP, 1.000" SP, 1.250" SP, 1.500" SP, 1.750" SP. Rows include models 150RH10D, 150RH11D, 150RH13D, 150RH15D, 150RH17D, 165RH10D, 165RH11D, 165RH13D, 165RH15D, 180RH11D, 195RH10D, 195RH11D.

165-195 ACRUD-XP

Table with columns: Cat. No., Mtr. HP, Fan RPM, Tip Speed, 0.125" SP, 0.250" SP, 0.375" SP, 0.500" SP, 0.625" SP, 0.750" SP, 0.875" SP, 1.000" SP, 1.250" SP, 1.500" SP, 1.750" SP. Rows include models 165RX10D, 165RX11D, 165RX13D, 165RX15D, 165RX17D, 180RX10D, 180RX11D, 180RX13D, 180RX15D, 180RX17D, 195RX10D, 195RX11D, 195RX13D, 195RX15D.

Performance certified is for Installation Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories) in the airstream. Speed (RPM) shown for model 165R10 is nominal. Performance is based on actual speed of test. Speed (RPM) for all other 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. *Motor is a 2-speed 1300/1550 RPM motor.