

#### REBEL Introduction & Construction Features

The REBEL direct drive propeller roof fans are available in 4 fan sizes with propeller diameters ranging from 12 inches to 24 inches. The REBEL provides maximum performance, durability, economy, and flexibility in a wide range of supply (REBS) and exhaust (REBE) air moving applications. The REBS capacity ranges from 400 CFM up to 5600 CFM, with static pressures from 0 to 5/8 inches wg. The REBE capacity ranges from 150 CFM up to 5800 CFM, with static pressures from 0 to 1 inch wg.

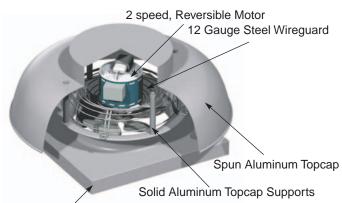
#### REBEL



#### **Features**

- Can be reconfigured in the field from supply to exhaust and vice versa.
- One piece stamped aluminum propeller with press fit plated steel hub (size 12); stamped aluminum propeller blades riveted to a plated steel hub (sizes 16-24).
- Hub securely fastened to the motor shaft utilizing setscrews.
- Motors are reversible, 2 speed.

#### **Construction Features**



Aluminum Base/Welded Corners

# Standard Conduit for Electrical Access Base with Integral Spun Aluminum Blades with Stiffening Ridges

#### **Accessories**

#### **Typical Disconnect Switches**

**NEMA 1** - Indoor general purpose.

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

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

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

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

#### **Optional Coatings**

Lorenized<sup>®</sup> 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.

#### **Roof Curb**

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Γ	Size	Catalog Number								
L	0120	Galvanized	Aluminum							
Γ	12	RCG-18	RCA-18							
Г	16	RCG-26	RCA-26							
Г	20	RCG-30	RCA-30							
Г	24	RCG-34	RCA-34							

#### **Gravity Backdraft Damper**

Size	Catalog Number						
3126	Supply	Exhaust					
12	BDI-14	BD-14					
16	BDI-22	BD-22					
20	BDI-26	BD-26					
24	BDI-30	BD-30					

#### **Motorized Backdraft Damper**

Size	Catalog Number						
3126	Supply	Exhaust					
12	BDMI-14	BDM-14					
16	BDMI-22	BDM-22					
20	BDMI-26	BDM-26					
24	BDMI-30	BDM-30					

- Bird Screen
- Fan Speed Control
- Flat Roof Base
- Hinged Sub-Base

Description - Fan shall be a roof mounted, direct drive, aluminum propeller exhaust or supply ventilator with spun aluminum top cap.

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 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 continuously welded curb cap corners for maximum leak protection. The motor shall be mounted on a 12 gauge steel wire guard. Unit shall bear an engraved aluminum nameplate and shall be shipped in ISTA Certified Transit Tested Packaging.

Propeller - Propeller shall have aluminum blades and a plated steel hub. The hub shall be securely fastened to the motor shaft utilizing setscrews. Propeller shall be balanced in accordance with AMCA Standard 204-96, Balance Quality and Vibration

Motor - Motor shall be 115/1/60, open drip proof type with permanently lubricated sealed

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

#### **Propeller Exhaust/** Supply/Reversible





Loren Cook Company certifies that the REBEL 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 comply with the requirements of the AMCA Certified Ratings Program.



Type REBEL is furnished standard with UL 705 and cUL 705 listings (Power Ventilator/ZACT).

#### **REBEL** Dimension Data

Size	Α	В	С	G	T-Sq.	Roof Opening Square*
12	14-9/16	5-1/8	28-1/4	2	20	15-1/2
16	16	6-1/8	33-1/4	2	28	23-1/2
20	18-3/8	7-1/8	43-1/4	2	32	27-1/2
24	21-5/8	9-1/8	47-1/4	3	36	31-1/2

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

## C Dia. T Sq.

#### **REBEL - Exhaust Performance Data**

Table 1 All add 1 Ollo Mario Data											
Catalog No.	Max Watts/BHP	Motor	or CFM vs. Static Pressure								
	Wax Walls/DIF	RPM	0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"
120REBE	.07	1075	1022	840	688	457	154				
125REBE	.13	1550	1184	1056	950	847	643	569	409	179	
160REBE	.12	850	1707	1411	1145	851	644	329			
165REBE	.16	1085	1848	1593	1351	1127	909	744	412		
200REBE	.16	750	2700	1967	1415	963					
205REBE	.38	1075	3821	3359	2931	2471	2082	1671	1361	794	273
240REBE	.34	750	4665	3591	2643	2012	1391				
245RFBF	75	1075	5879	5367	4841	4289	3783	3190	2819	2486	2016

Performance shown is for Installation Type A: Free inlet, Free outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances in the airstream.

#### **REBEL - Supply Performance Data**

Catalog No.	Max Watts/BHP	Motor	CFM vs. Static Pressure								
Catalog No.	Wax Walls/DIF	RPM	0"	1/16"	1/8"	3/16"	1/4"	3/8"	7/16"	1/2"	5/8"
120REBS	.07	1075	1063	951	810	688	520				
125REBS	.13	1550	1187	1113	1005	908	818	621	532	415	
160REBS	.12	850	1630	1460	1315	1153	987				
165REBS	.18	1085	1749	1503	1362	1249	1037	894	736		
200REBS	.18	750	3112	2784	2341	1748	1063				
205REBS	.38	1075	3831	3648	3447	3197	2923	2336	1924	1553	
240REBS	.37	750	4644	4223	3773	3129	2316				
245REBS	.78	1075	5657	5416	5170	4900	4618	4059	3726	3399	2745

Performance shown is for Installation Type A: Free inlet, Free outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances in the airstream.



### **LOREN COOK COMPANY**

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