

October 18, 2021

**Softball Batting Cage – Palatka Campus (SJR-BID-14-2021)
St. Johns River State College**

Architect's Job Number: 015W04

ADDENDUM

All items in the Addendum are incorporated into the Contract Documents.

Item 1.

The following questions have been received following the issuance of Addendum No. 1:

Q1: What is the R-value of the insulation?

A1: Contractor shall provide batt insulation similar and equal to JM Formaldehyde-Free Thermal/Acoustical Fiberglass Batts with an R-value of 19.

Item 2.

Supply Gable end fans at each end of the batting cage. Two (2) fans total. Provide power from new electrical panel. See Attachment A for fan information (COOK XWHD 24" fan). Fan shall be installed on inside of batting cage and shall direct air from the exterior to the interior (under the batting cage). Metal building supplier shall provide supports for the fan.

End of Addendum No. 3

Propeller Wall



COOK



XWD X Series Aluminum Prop.						
Motor	Construction	Configuration	Model	Prop Size	Max. CFM	Max. S. P.
Direct Drive EC	Standard Duty	Standard	XWDEC	10 - 20"	4292	0.75"
		Packaged	XWDEC			
Direct Drive	Standard Duty	Standard	XWD	8 - 24"	6,600	0.5"
		Packaged	XPD			
	Heavy Duty	Standard	XWHD	12 - 24"	8,000	0.75"
		Packaged	XPHD			



XLW, XMW, XLWH & XMWH X.Stream Steel Prop.								
Motor	Construction	Prop. Type	Configuration	Model	Prop Size	Max. CFM	Max. S. P.	24hr
Belt Drive	Standard Duty	Low Pressure	Standard	XLW	20 - 60"	33,000	0.5"	✓
			Packaged	XLP		28,000	0.5"	✓
		Medium Pressure	Standard	XMW	20 - 60"	33,000	1"	✓
			Packaged	XMP		27,000	1"	✓
	Heavy Duty	Low Pressure	Standard	XLWH	20 - 60"	59,000	1"	✓
			Packaged	XLPH		49,000	1"	✓
Medium Pressure		Standard	XMWH	20 - 60"	57,000	0.75"	✓	
		Packaged	XMPH		46,000	1"	✓	



AWD & AWB A Series Cast Aluminum Prop.					
Motor	Configuration	Model	Prop Size	Max. CFM	Max. S. P.
Direct Drive	Standard	AWD	12 - 48	33,000	0.75"
	Packaged	APD	16 - 36	12,000	0.375"
Belt Drive	Standard	AWB	24 - 48	42,000	0.5"
	Packaged	APB	24 - 48	20,000	0.375"

24hr 24 Hour Express



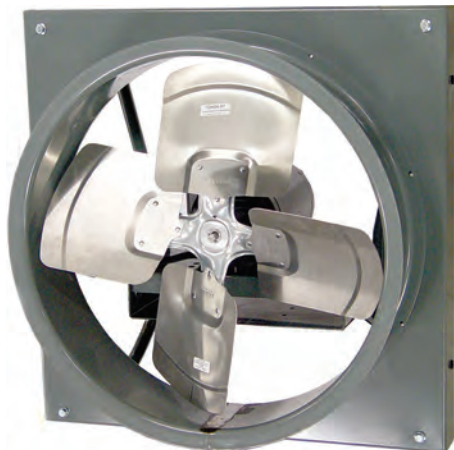
EWD & EWB E Series Extruded Aluminum Prop.					
Motor	Configuration	Model	Prop Size	Max. CFM	Max. S. P.
Direct Drive	Standard	EWD	20 - 54"	59,000	1"
	Packaged	EPD		50,000	1"
Belt Drive	Standard	EWB	24 - 72"	95,000	1.5"
	Packaged	EPB		80,000	0.75"



Packaged fans

- XPD, XPDEC, XLP, XMP, APD, APB, EPD, and EPB are packaged fans utilizing corresponding COOK propellers. Packaged fans include a standard wall fan in a galvanized steel enclosure with integral mounting flange and weather resistant shutter. See page 4
- Available in exhaust or supply.
- APD & APB are licensed to bear AMCA Certified Seal for Air Performance.

Note: Propeller Wall fans are available in exhaust (standard) and supply. Be advised: propeller wall fans may bring moisture into the building when used for supply. See ASP Series, KSP Series, CFS Series, HMD, QMXX, CVR-S, SEP, ETS, REBS, HES-D, HES, HXS or Economizer for other supply options.



XWHD

Wall Fan, Heavy Duty, Aluminum Propeller, Direct Drive

- **Description:** Fan shall be a wall mounted, direct driven, propeller exhaust fan.
- **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 motor shall be mounted on a 14 gauge steel mounting plate and power assembly. The power assembly shall be bolted to a minimum 14 gauge steel panel with continuously welded corners and an integral venturi. 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.
- **Coating:** All steel fan components shall be Lorenized™ with an electrostatically applied, baked polyester powder coating. Each component shall be subject to a five stage environmentally friendly wash system, followed by a 1.5 to 2.5 mil thick baked powder finish. Paint must exceed 1,000 hours salt spray under ASTM B117 test method.
- **Propeller:** Propeller shall have aluminum blades riveted to a painted steel hub. The hub shall be securely fastened to the motor shaft utilizing two setscrews. Propeller shall be balanced in accordance with AMCA Standard 204-05, Balance Quality and Vibration Levels for Fans.
- **Motor:** Motor shall be NEMA Design B with Class B insulation rated for continuous duty and furnished at the specified voltage, phase and enclosure.
- **Product:** Fan shall be type XWHD as manufactured by LOREN COOK COMPANY of Springfield, Missouri.



LOREN COOK COMPANY certifies that the XWHD 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.



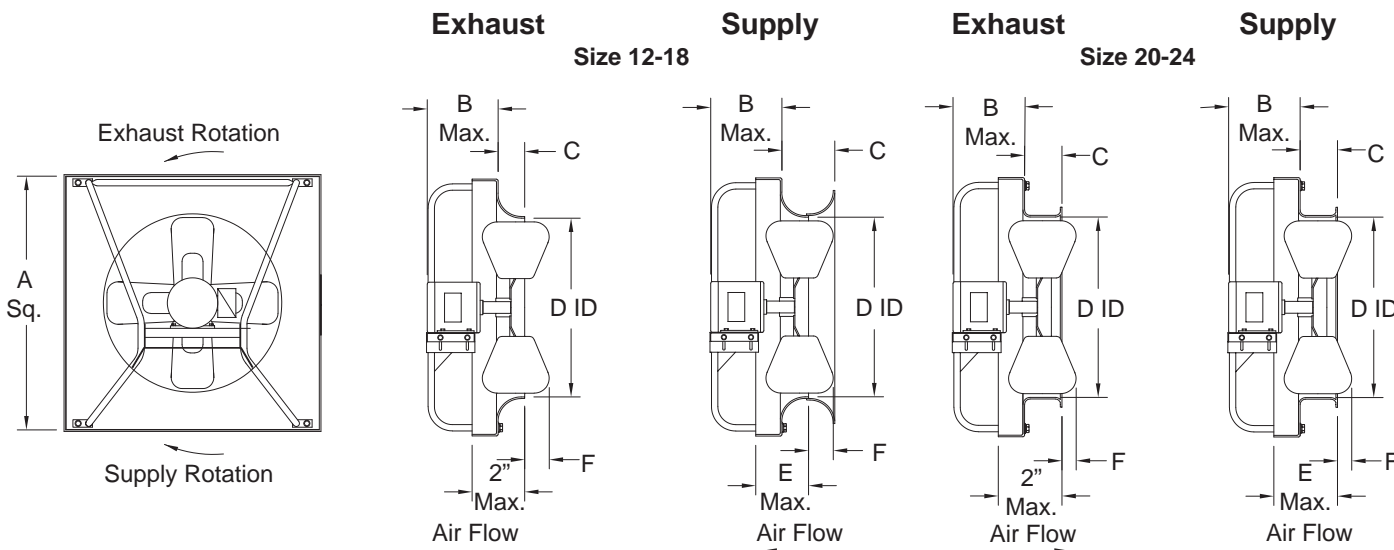
Model XWHD is furnished standard with UL 705 and CUL 705 listing (Power Ventilator) when furnished with factory supplied motor.

Also available in a supply model: XWHD-S.

Dimensions (inches)

Size	A	B	C		D	E	F	Wall opening*	Shipping weight (pounds)
			Exhaust	Supply					
12	16-3/16	4-3/4	1-3/4	3-1/4	12-3/4	3-1/2	1-1/2	16-7/16	68
14	20-3/16	5-13/16	2-1/2	**	14-3/4	4-1/2	1-5/8	20-7/16	89
16	20-3/16	5-13/16	2-1/2	4-1/2	16-3/4	4-1/2	2	20-7/16	93
18	24-3/16	5-13/16	2-3/4	**	18-3/4	4-3/4	2-1/8	24-7/16	107
20	24-3/16	5-13/16	6-5/8	6-5/8	20-3/4	8-5/8	-5/8	24-7/16	113
24	30-3/16	6-1/16	6-5/8	6-5/8	25	6-5/8	5/8	30-7/16	140

Weights are estimated, including ODP motor. *See accessories for wall opening. **Size not available in supply.



Typical Wall Installations

1. Exhaust fan with OSHA wire guard & shutter in a steel structure with corrugated siding

An installer provides a sleeve of suitable material to support the fan at a correct distance from the shutter. The minimum distance is the A dimension.

2. Supply fan with wall collar, OSHA wire guard, motorized supply shutter & weather hood

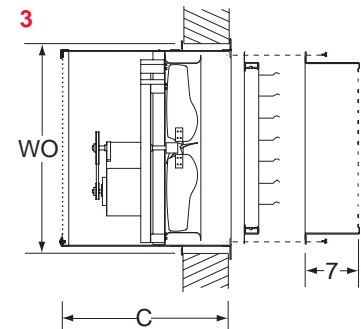
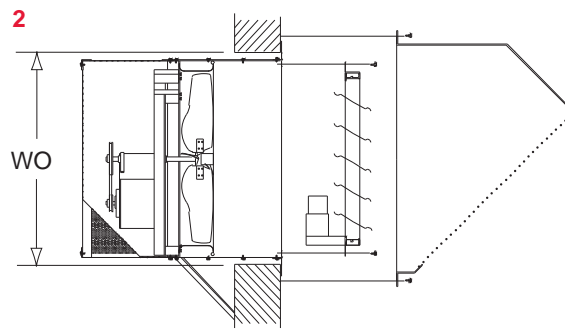
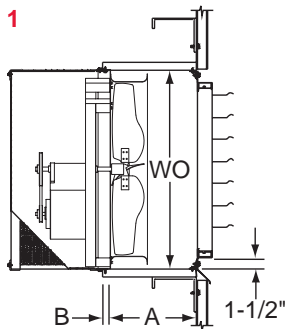
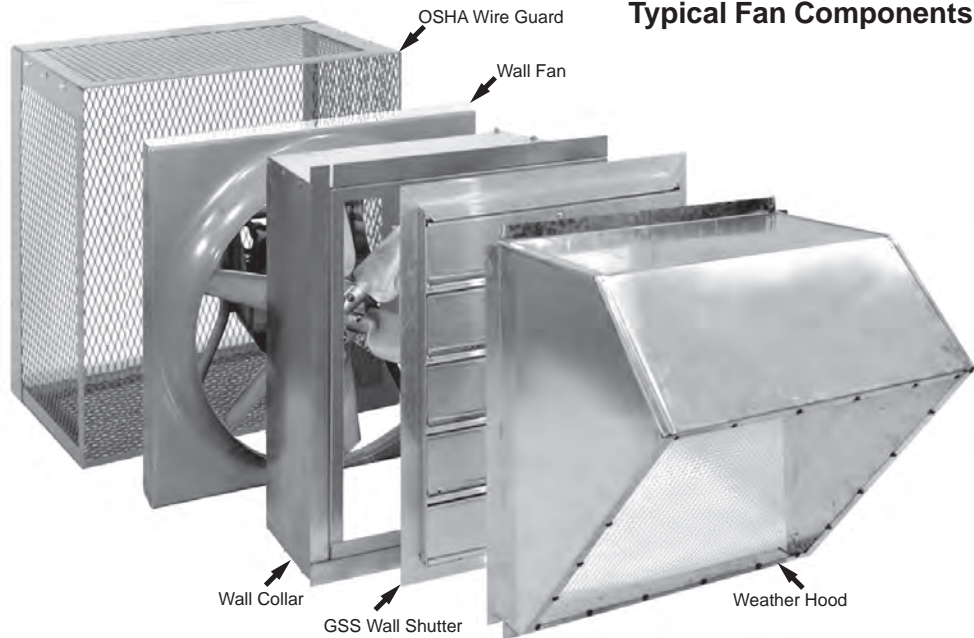
An installer provides suitable fasteners to support the fan. Fasteners should be placed on 6 inch to 10 inch centers on the perimeter of the wall collar. Wall collar should be caulked to the exterior of the wall. The weather hood should be securely fastened and

sealed to the wall. Fans with motors in excess of 80 lbs. should be additionally supported by hanging rods or supports placed underneath the fan. Intake velocities greater than 500 FPM may carry airborne mist into the space.

3. Exhaust Packaged Fan in a masonry wall with shutter guard

An installer provides suitable fasteners (Hex bolts or Lag screws) to support the fan. It is recommended that 5/16 inch minimum bolts on 6 inch to 10 inch centers be used on the perimeter of the housing. The mounting flange should be caulked to the exterior of the wall. Fans with motors in excess of 80 lbs. should be additionally supported by hanging rods or supports placed underneath the fan.

Typical Fan Components



Standard fan	Size				A	B	C		WO (Wall Opening)	
	XWD / XWHD	XLW(H) / XMW(H)	AWD / AWB	EWD / EWB			Direct	Belt	Standard fan	Wire guard
Pac Fan	XPD / XPHD	XLP(H) / XMP(H)	APD / APB	EPD / EPB						
	8	-	-	-	11	1	13-5/8	-	12-7/16	13-1/4
	10-12	-	12	-	12	1	17-5/8	-	16-7/16	17-1/4
	14-16	-	16	-	12	1	20	-	20-7/16	21-1/4
	18-20	-	20	-	13	1	22	-	24-7/16	25-1/4
	24	-	-	-	16	1-1/2	24-3/8	-	30-7/16	31-5/16
	-	20	-	-	15	1	-	32-1/2	24-7/16	25-1/4
	-	24	24	-	16	1-1/2	24-3/8	34-1/4	30-7/16	31-5/16
	-	30	30	24	16	1-1/2	28-3/8	38	36-7/16	37-5/16
	-	36	36	30	17	1-1/2	33-5/8	39-1/2	42-7/16	43-5/16
	-	42	42	36	17	1-1/2	39-5/8	40-3/4	48-7/16	49-3/8
	-	48	48	42	17	1-1/2	40-1/8	50-3/4	54-7/16	55-3/8
	-	54	-	48	17	1-1/2	44-3/4	61-1/2	60-7/16	61-7/16
	-	60	-	54	17	1-1/2	-	67-1/2	66-7/16	67-7/16
	-	-	-	60	17	1-1/2	-	73-1/2	72-7/16	73-7/16
	-	-	-	72	17	1-1/2	-	85-1/2	84-7/16	85-7/16

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 1



NEMA 1
(Lockable)



NEMA 3R



NEMA 4

Motors

Direct Drive

Single speed:

- ODP single phase, shaded pole or PSC motors are supplied on XWD and XPD units. These motors can be used with an FSC.
- ODP, TEFC and Explosion-proof motors are available in speeds of 1725 and 1140. Single phase motors are available from 1/6 to 1-1/2 HP. Three phase motors are available from 1/4 to 20 HP.
- ODP single phase, 860 rpm motors are available in 1/6 and 1/4 HP.
- TEFC three phase, 860 rpm motors are available from 1/2 to 10 HP.
- TEFC three phase, 680 rpm motors are available in 3/4 to 3 HP.

Two speed:

- 1725 rpm motors are 1725/1140, 1140 rpm motors are 1140/860.
- Explosion-proof motors are available for some sizes.

Vari-Flow® EC Direct Drive

Electronically Commutated (EC) Motors offer significantly improved energy efficiency and controllability over traditional fractional HP motors. COOK EC motors are offered in 1/4, 1/2 and 3/4 HP sizes for 120 volt, single phase applications. These totally enclosed, non-ventilated (TENV) motors have an adjustable speed range from 500 to 1725 RPM. There are 2 versions of the EC motor:

The "Motor Mounted Speed Control" version includes an integral potentiometer mounted on the exterior of the motor for precise adjustment of the motor speed. A screwdriver is used during field balancing to set the desired speed. This is a "set it and forget it" fan speed control.

The "External Signal Speed Control" version requires a 0-10 volt DC signal to adjust the speed of the motor. This external signal speed control option is used when you need to adjust the fan

speed during typical operation. The designer may choose to change fan speed due to changes in duct pressure, building load, temperature, time, etc. This motor can be paired with our optional fan speed control or pressure controller or connected to the building automation system. The motor will operate from 2-10 VDC and will turn off when the control signal is below 1.9 VDC.

Belt Drive

Single speed:

- Single phase motors are available from 1/6 to 1-1/2 HP.
- Three phase ODP, TEFC and Explosion-proof motors are available from 1/4 to 25 HP.

Two speed:

- Single phase motors are available in 1725/1140 rpm from 1/6 to 1 HP.
- Three phase motors are available in 1725/1140 rpm with two windings from 1/3 to 20 HP.

Controls

Fan Speed Controls

COOK's FSC is a variable speed controller which allows operation of XWD / XPD units from 100 percent of capacity down to approximately 50 percent. 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.

Fan Speed Control for EC Motors

External Speed Control for the Cook EC Motor allows the fan speed to be adjusted remotely via an easy to read dial. The controller allows for adjustment from 20-100% of the fan speed. The controller works with the external signal version of the Cook EC Motor and requires 24 VAC power for operation.

Pressure control for EC Motors

Constant pressure controller for the Cook EC Motor is for applications where the fan is intended to maintain a near constant pressure in a system such as dryer vents. The pressure controller reads the pressure in a duct system via the provided pressure transducer and automatically adjusts the fan rpm to maintain a preset value. The controller works with the external signal version of the Cook EC Motor and is shipped loose for field installation.



XPHD Direct Drive 18-24

Fan Size	Catalog Number	HP	Max. BHP	Fan RPM	FA Sones	CFM at Static Pressure											
						0.000	0.050	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750
18	18XPH24D08	1/6	0.07	860	6.0	1609	1512	1401	1327	1205							
	18XPH24D11	1/6	0.17	1140	9.9	2133	2061	1986	1946	1904	1806	1660	1399				
	18XPH24D17	3/4	0.58	1725	22	3227	3180	3132	3108	3084	3035	2984	2930	2844	2666	2336	
	18XPH29D08	1/6	0.09	860	6.0	1942	1837	1713	1633	1529							
	18XPH29D11	1/4	0.22	1140	11.1	2574	2496	2414	2371	2324	2215	2074	1831				
	18XPH29D17	3/4	0.74	1725	23	3895	3843	3792	3765	3739	3685	3629	3571	3475	3281	3010	
	18XPH34D08	1/6	0.11	860	6.4	2190	2088	1965	1879	1770							
	18XPH34D11	1/4	0.26	1140	11.3	2903	2827	2747	2704	2658	2546	2395	2196				
18XPH34D17	1	0.92	1725	23	4393	4343	4293	4267	4241	4189	4134	4076	3979	3776	3498	2923	
20	20XPH24D08	1/6	0.10	860	8.2	2001	1852	1673	1563	1430	1171						
	20XPH24D11	1/4	0.25	1140	13.8	2653	2542	2425	2362	2294	2140	1954	1735	1475			
	20XPH24D17	1	0.84	1725	27	4014	3941	3868	3831	3793	3716	3635	3549	3411	3142	2804	2469
	20XPH28D08	1/6	0.11	860	8.4	2326	2188	2022	1916	1792							
	20XPH28D11	1/4	0.27	1140	14.0	3083	2981	2874	2816	2752	2605	2430	2208				
	20XPH28D17	1	0.97	1725	27	4665	4599	4531	4497	4462	4391	4317	4238	4108	3850	3536	3101
	20XPH32D08	1/6	0.15	860	9.4	2712	2566	2401	2302	2182	1846						
	20XPH32D11	1/3	0.36	1140	15.7	3595	3486	3373	3314	3251	3113	2945	2727	2298			
	20XPH32D17	1-1/2	1.23	1725	31	5439	5368	5296	5259	5223	5148	5072	4992	4866	4624	4316	3908
	20XPH36D08	1/4	0.18	860	10.5	3000	2828	2634	2522	2402	2114						
20XPH36D11	1/2	0.43	1140	17.6	3976	3848	3716	3646	3572	3411	3233	3042	2652				
20XPH36D17	1-1/2	1.44	1725	35	6017	5933	5848	5805	5762	5674	5584	5490	5341	5065	4764	4424	
24	24XPH28D08	1/3	0.35	860	11.9	4799	4579	4357	4244	4127	3869	3535					
	24XPH28D11	1	0.87	1140	19.2	6362	6196	6030	5946	5862	5693	5519	5337	5022	4287		
	24XPH32D08	1/2	0.48	860	13.0	5460	5238	5014	4902	4787	4537	4212	3715				
	24XPH32D11	1	1.09	1140	21	7238	7070	6902	6818	6733	6564	6393	6215	5912	5168		
	24XPH36D08	3/4	0.60	860	14.5	6098	5883	5660	5542	5417	5136	4794	4257				
24XPH36D11*	1-1/2	1.37	1140	23	8083	7922	7759	7676	7592	7418	7232	7033	6696	5934			

*3 phase only

Performance shown is for Installation Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories) in the airstream. The sound ratings shown are loudness values in hemispherical sones at 1.5m (5 ft) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: free inlet hemispherical sone levels. Model XPHD is not licensed to bear the AMCA Seal.

APD Direct Drive 16-36

Fan Size	Catalog Number	HP	Max. BHP	Fan RPM	FA Sones	CFM at Static Pressure			
						0.000	0.125	0.250	0.375
16	16P17D	1/4	0.23	1725	15.9	1946	1604	1104	
	16P17DA	1/3	0.36	1725	17.2	2327	1929	1271	1027
20	20P8D	1/6	0.12	860	9.0	2236	1242		
	20P11D	1/4	0.26	1140	13.4	2939	2400	1529	
24	24P8D	1/6	0.18	860	10.8	3391	2729	1647	
	24P8DA	1/4	0.22	860	11.5	3805	3157	1948	
	24P11D	1/3	0.35	1140	15.4	4144	3653	3122	2266
	24P11DA	1/2	0.56	1140	17.4	5227	4766	4237	3420
30	30P8D	1/3	0.35	860	14.0	5610	4628	3385	
	30P8DA	1/2	0.56	860	16.6	6818	5875	4475	3124
	30P8DB	3/4	0.78	860	18.3	7972	7042	5857	3836
	30P11D	1	1.07	1140	25	8462	7773	7044	5993
36	36P8D	1/2	0.60	860	19.0	8260	7154	5771	
	36P8DA	3/4	0.79	860	20	9064	7958	6580	4843
	36P8DB	1	1.08	860	23	10620	9542	8234	6060
	36P8DC	1-1/2	1.53	860	25	12304	11275	10027	7201

Performance shown is for Installation Type A: free inlet, free outlet. Performance ratings include the effects of shutter, housing and wire guard in the airstream. The sound ratings shown are loudness values in hemispherical sones at 1.5m (5 ft) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: free inlet hemispherical sone levels. Model APD is licensed to bear the AMCA Certified Ratings Seal for air performance only.

EPD Direct Drive 24-54

Fan Size	Catalog Number	HP	Max. BHP	Fan RPM	FA Sones	CFM at Static Pressure						
						0.000	0.125	0.250	0.375	0.500	0.750	1.000
24	24EP416D11	1/3	0.33	1140	17.3	4302	3791	3162	2346			
	24EP620D11	1/2	0.54	1140	24	5219	4817	4362				
	24EP624D11	3/4	0.72	1140	22	5902	5466	4985	4392	3745	1745	
	24EP416D17	1	1.14	1725	34	6510	6184	5841	5467	5048	4069	
	24EP420D17	1-1/2	1.40	1725	36	7367	6998	6625	6243	5843	4747	
30	30EP416D08	1/2	0.36	860	17.0	5653	4719	3675	2395			
	30EP420D08	1/2	0.48	860	18.6	6422	5481	4384	3422	1663		
	30EP616D08	1/2	0.51	860	21	6053	5424	4694	3666	2250		
	30EP624D08	1	0.90	860	22	7951	7228	6404	5233	4342		
	30EP416D11	1	0.85	1140	27	7493	6781	6090	5366	4496	2245	
36	36EP416D08	1	0.90	860	24	10920	9753	8509	7142	5702		
	36EP420D08	1	1.14	860	26	12232	10991	9706	8337	6863		
	36EP616D08	1-1/2	1.23	860	21	11006	10253	9333	8323	7318	4898	
	36EP632D08	3	2.95	860	42	17477	16138	14788	13421	12051	8839	
	36EP416D11	2	2.08	1140	38	14476	13601	12710	11779	10794	8690	6253
42	42EP416D08	2	1.92	860	32	16982	15519	14069	12612	10913	7293	
	42EP420D08	3	2.39	860	35	18955	17494	15966	14329	12661	8878	
	42EP616D08	3	2.58	860	40	16774	15853	14867	13771	12678	10070	
	42EP624D08	5	4.45	860	45	22923	21378	19996	18813	17733	14855	
	42EP416D11	5	4.46	1140	53	22512	21407	20305	19209	18122	15843	13113
48	48EP616D06	3	2.42	680	35	20474	19181	17695	15980	14221	10188	
	48EP624D06	5	4.10	680	28	26999	25224	23445	21653	19800	15098	
	48EP420D08	5	4.58	860	46	27972	26501	24960	23250	21352	17322	12329
	48EP616D08	5	4.89	860	52	25894	24884	23824	22636	21302	18552	15602
	48EP624D08	7-1/2	8.31	860	39	34146	32743	31339	29931	28519	25638	22450
54	54EP430D06	7-1/2	6.55	680	40	37614	34510	31685	28761	25177	17283	
	54EP432D06	7-1/2	7.26	680	42	39703	36402	33095	29773	26353	17559	
	54EP626D06	7-1/2	7.66	680	50	38960	36948	34885	32705	30367	25257	16735
	54EP632D06	10	9.81	680	26	44210	41944	39562	36907	34005	27403	19929
	54EP432D08	15	14.51	860	62	59036	57058	54987	52672	50001	43263	34814
	54EP624D08	15	13.51	860	55	46450	44874	43282	41657	39982	36500	32915

Performance shown is for Installation Type A: free inlet, free outlet. Performance ratings include the effects of shutter, housing and wire guard in the airstream. The sound ratings shown are loudness values in hemispherical sones at 1.5m (5 ft) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: free inlet hemispherical sone levels. Model EPD is not licensed to bear the AMCA Seal.