# MODELS FF & FFC CEILING AND INLINE/CABINET VENTILATORS



**MODEL FF FEATURES** 

- Exhaust air up to 1500 CFM
- Forward curve centrifugal wheel for high static pressure capabilities to 1" w.g.
- Resilient mount, low RPM motor for quiet operation (except FF50 and FF80)
- Speed controllable
- AMCA Seal for Air Performance
- cULus Listed (except FF50 & FF80 which are UL only)



Model FF

# **MODEL FFC FEATURES**

- Exhaust air up to 3600 CFM
- Forward curve centrifugal wheel for high static pressure capabilities to 1" w.g.
- Resilient mount, low RPM motor for quiet operation
- Speed controllable
- AMCA Seal for Air Performance
- cULus Listed

# **MODEL OVERVIEW**

The extremely quiet FF and FFC ventilators are available from 50 to 3600 CFM, with static pressure capabilities to 1". All units have centrifugal blower wheels and low RPM motors on resilient mounts (except FF50 and FF80).

The forward curved centrifugal wheel with its high static pressure capability makes these ventilators suitable for either ducted or nonducted applications. They include removable blower assemblies and plug-in permanently lubricated motors for ease of servicing and cleaning.

Models FF and FFC are available in our Quickship program. All sizes (excludes FFC3500) are available for next day shipping from stock.

1 year fan housing warranty, 1 year motor warranty

GC\_FF-FFC\_0111 January 2011

# CONSTRUCTION/SPECIFICATION CHECKLIST

#### Grille

- · Conceals interior.
- Low profile styling, blends with any decor.
- White polymeric (FF50 FF300).
- Metal finished with white enamel finish (FF400-FF1500).

#### **Blower**

- Low RPM for quiet operation, speed controllable.
- Resilient anti-vibration mounts (FF50 & FF80 rigid mount).
- Balanced, polymeric, centrifugal blower wheel for quiet, efficient performance. (Metal wheel on FFC2000 & FFC3500).
- Permanently lubricated, thermally protected motor.
- · Plug-in motor.
- Designed for continuous operation.

### Housing

- Rugged, 20 gauge galvanized steel.
- Duct connector.
- 1/2" acoustic insulation inside (except FF50, FF80 & FFC's).
- · Integral automatic backdraft damper.
- Easy inline conversion available (FF100-FF1500).
- May be installed in ceiling or wall.
- Mounting brackets for easy installation and adaptability to numerous mounting requirements.
- Factory-shipped in horizontal discharge position, easily converted to vertical discharge.
- FFC inline units have a removable panel which allows for easy motor access without disturbing ductwork.

#### **AMCA Seal**

AMCA Air and Sound Licensed

#### **UL Label**

cULus listed (except FF50 & FF80 which are UL only).

## <u>OPTIONS/ACCESSORIES</u>

# **Roof Cap and Wall Cap**

Weather resistant duct termination.

# **Inline Adapter Kit**

- · Converts FF units into inline units.
- Available for FF100 through FF1500

## **Radiation Damper**

- UL rated for use in 1, 2, or 3 hour rated floor-ceiling, roof-ceiling design.
- Mounts directly to the fan, screws provided.
- Galvanized steel frame.
- High temperature, non-asbestos, reinforced fiber thermal fabric.
- 212°F fusible link.
- Stainless steel negator-type closure spring.
- Available for FF100 through FF1500.

#### **Metal Grille Kit**

- White enamel painted steel.
- · Mounting screws included.

#### **Duct Transition**

- Allows for quick transition to round ducting.
- · Galvanized steel construction.

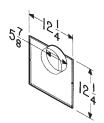
## **Vibration Dampening Hangers**

- Rubber in shear.
- Heavy-gauge steel construction with neoprene vibration dampening cushion.
- For use with 3/8" threaded rod (by others).

## Damper Kit (for FFC 2000 and FFC 3500)

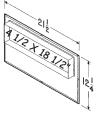
- Twin damper flaps and mounting hardware.
- Foam cushion and magnetic catch assure quiet backdraft prevention.

# **OPTIONS/ACCESSORIES (cont.)**



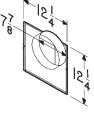
#### 961L In-Line Adaptor Kit

- Galvanized steel
- Fits FF100 & FF150
- For 6" round duct intake



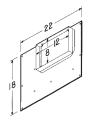
#### 982L In-Line Adaptor Kit

- Galvanized steel
- Fits FF400, FF500 & FF700
- 4 1/2 x 18 1/2" duct intake



#### 981L In-Line Adaptor Kit

- Galvanized steel
- Fits FF200, FF250 & FF300
- For 8" round duct intake



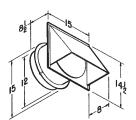
#### 983 In-Line Adaptor Kit

- · Galvanized steel
- Fits FF900 & FF1500
- 8" x 12" round duct intake



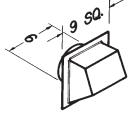
#### Model 441 Wall Cap

- · Gravity dampers
- Collar with birdscreen for attaching 10" round duct
- · Steel construction with aluminum louvers



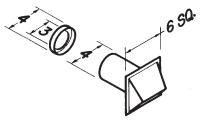
#### Model 613 Wall Cap

- · High Capacity
- Built-in backdraft damper & birdscreen
- · Aluminum natural finish
- For 12" round duct



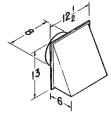
#### Model 641 Wall Cap

- Aluminum natural finish
- Built-in backdraft damper & birdscreen
- For 6" round duct



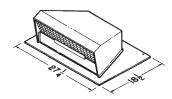
#### Model 642 Wall Cap

- Aluminum natural finish
- Built-in backdraft damper & birdscreen
- For 3" or 4" round duct (4" to 3" transition included)



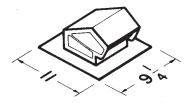
#### Model 643 Wall Cap

- Aluminum natural finish
- · Built-in backdraft damper
- For 8" round duct



#### Model 437 Roof Cap

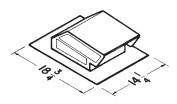
- · High capacity design up to 1200 CFM
- Built-in birdscreen
- Steel, black electrically bonded epoxy finish



#### Model 636 Roof Cap

- Black electrically bonded epoxy finish
- Built-in backdraft damper & birdscreen
- For 3" or 4" round duct

Model 636AL - Aluminum

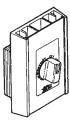


#### Model 634 Roof Cap

- Black electrically bonded epoxy finish
- Built-in backdraft damper & birdscreen
- For 3 1/4" x 10" or up to 8" round duct

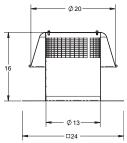
Model 644 - Aluminum

# **OPTIONS/ACCESSORIES (cont.)**



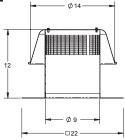
#### **Speed Control**

- · Adjust speed from 100 to 50%
- 5 amp & 10 amp 120V
- 6 amp 240V
- 6 amp 277V



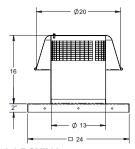
#### Model RCXIISF12 Flat Roof Cap

- · For flat roof installation
- Spun Aluminum natural finish
- Built-in birdscreen
- For up to 12" round duct



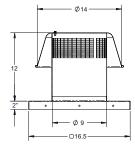
#### Model RCXIISF08 Flat Roof Cap

- · For flat roof installation
- Spun Aluminum natural finish
- Built-in birdscreen
- For up to 8" round duct



#### Model RCXII12 Curb Mount Roof Cap

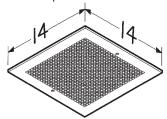
- For curb mount installation
- Use 22-1/4" x 22-1/4" x 8" high curb.
- · Spun Aluminum natural finish
- Built-in birdscreen
- For up to 12" round duct



#### Model RCXII08

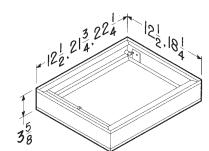
#### **Curb Mount Roof Cap**

- · For curb mount installation
- Use 14-3/4" x 14-3/4" x 8" high curb
- · Spun Aluminum natural finish
- · Built-in birdscreen
- For up to 8" round duct



#### Model MG 1 Metal Grille Kit

- White enamel painted steel
- · Mounting screws included
- Fits FF100, FF150, FF200, FF250 & FF300

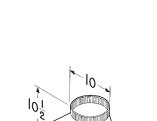


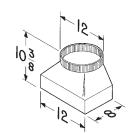
#### Models RD1, RD2 & RD3 Radiation Dampers

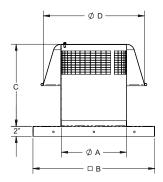
- UL rated for use in 1, 2 or 3 hour rated floor-ceiling, roof-ceiling design
- Galvanized steel frame
- High temperature, non-asbestos, reinforced fiber thermal fabric
- 212°F fusible link
- · Stainless steel negator-type closure spring
- RD1 (12 1/4' x 12 1/4") fits FF100 FF300
- RD2 (211/2" x 18") fits FF400 FF700
- RD3 (22" x 18") fits FF900 FF1500

#### Models 423 & T81212 Duct Transitions

- Galvanized steel
- Allows for guick transition to easy-to-obtain-and-install round ducting
- $\bullet$  423 ( 4 1/2" x 18" to 10 round) for use with FF400 thru FF700
- T81212 ( 8" x 12" to 12" round) for use with FF900 and FF1500







Model RCXII - 18" and 20" units

Size	Α	В	С	D
18	19	29.5	22	27
20	21	29.5	22	30



# **OPTIONAL ACCESSORY COMPATIBILITY CHART**

	CEI	LING I	//OUNT	MODE	L FF			IN	-LINE/C	ABINET	MODEL	FFC	
FF50	FF100	FF200	FF400			EE1500	FFC100	FFC200	FFC400	EEC900	EEC1500	EEC2000	FFC3500
FF80		FF300		11700	11800		FFC150	FFC300	FFC700	11 0000	F1 01300	F1 02000	11 00000
Х	Х	Х	Х			Х	Х						
	X	Х	Х	Х	Х	Х	Х	Х	Х	X	X	X	
	x	x	х	х	х		Х	Х	x	Х			
	Х	Х	Х	Х	Х								Х
	Х	Х	Х	Х	Х	Х							
			Х	Х					Х				
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	X  X  X  X  HANGE	FF50 FF100	FF50 FF100 FF200 FF300  X	FF50         FF100         FF200         FF400           FF80         FF150         FF300         FF400           X         X         X         X           X         X         X         X           X         X         X         X           X         X         X         X           X         X         X         X           X         X         X         X           X         X         X         X           X         X         X         X           X         X         X         X           X         X         X         X           X         X         X         X           X         X         X         X           X         X         X         X           X         X         X         X           X         X         X         X           X         X         X         X           X         X         X         X           X         X         X         X           X         X         X         X <t< td=""><td>FF50 FF80         FF100 FF250 FF300         FF400 FF500 FF300         FF700 FF300           X         X         X         X</td><td>FF80 FF150 FF250 FF300 FF500 FF700 FF900  X</td><td>  FF50</td><td>  FF50</td><td>  FF50</td><td>  FF50</td><td>  FF50</td><td>  FF50</td><td>  FF50</td></t<>	FF50 FF80         FF100 FF250 FF300         FF400 FF500 FF300         FF700 FF300           X         X         X         X	FF80 FF150 FF250 FF300 FF500 FF700 FF900  X	FF50	FF50	FF50	FF50	FF50	FF50	FF50

# **MODEL FF PERFORMANCE**

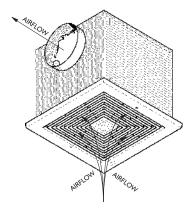
# FF CEILING VENTILATORS

MODEL		CF	M / Son	es at St	AMPS@	RPM @		Average									
FF	0	1/10	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	60HZ/ WATTS	1/8	Voltage	Ship Wt. Lbs			
100	136	115	109	93	80	65	44	-	-	-	1.1/87	640	120	23			
100	0.5	8.0	0.9	1.3	1.8	2.3	3.0	-	-	-	1.1701	0.10	120				
150	181	161	157	141	132	124	114	94	62	-	1.3/100	710	120	23			
130	1.3	1.4	1.5	2.2	2.6	3.1	3.6	4.1	4.6	-	1.5/100	710	10 120 10 120 10 120 10 120 10 120 10 120 10 120 10 120	25			
200	231	214	210	196	186	177	165	144	113	51	1.8/127	740	120	23			
200	1.6	1.8	1.7	2.3	2.9	3.5	4.1	4.9	5.3	5.3	1.0/12/	740	120	23			
250	272	261	259	250	242	233	218	201	165	99	2.1/166	2.4/466	0.4/400	0.44400	000	400	23
250	2.1	2.3	2.2	2.9	3.3	3.9	4.4	4.8	5.5	5.8	2.1/100	830	120	23			
000	312	309	308	303	296	287	273	254	219	125	0.0/040	005	005	400	00		
300	2.8	2.9	2.9	3.3	3.5	3.9	4.3	4.7	5.1	5.6	2.6/212	905	120	23			
400	480	442	434	388	344	299	229	182	114	-	4 4/440	705	400	0.4			
400	2.0	2.4	2.3	2.8	3.3	3.8	4.5	4.8	5.4	-	1.4/146	735	120	34			
500	538	520	514	491	463	434	389	339	282	186	0.01000	0.0/000	0.0/000	2/222	400	0.4	
500	3.0	3.1	3.3	3.6	4.0	4.4	5.0	5.7	6.2	6.7	2.2/232	810	120	34			
700	722	704	701	667	640	607	571	534	453	333	0.0/0.40	000	400	0.4			
700	4.5	4.6	4.7	4.8	5.0	5.2	5.6	6.2	7.1	7.2	2.9/313	960	120	34			
000	918	905	901	877	842	793	725	636	536	390	0.0/000	050	400	0.4			
900	3.8	4.0	4.1	4.0	4.2	4.3	4.4	4.9	4.5	5.3	3.0/306	650	120	64			
4500	1578	1526	1513	1438	1371	1285	1198	1103	1000	816	F 0/400	055	400	0.4			
1500	8.6	8.4	8.4	8.1	7.5	7.0	6.7	6.2	5.8	5.8	5.0/468	955	120	64			

# **COMPACT FF CEILING VENTILATORS**

MODEL		CFM / Sones at Static Pressure (PS - Inches of H <sub>2</sub> O)								AMPS@	RPM@		Average	
FF	0	1/10	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	60HZ/ WATTS	1/8	Voltage	Ship Wt. Lbs
50	52	49	47	42	29	-	-	-	-	-	0.8/48	1870	120	
50	3.9	4.3	4.4	4.6	5.5	-	-	-	-	-	0.0/40	1070	120	4
80	89	81	80	68	36	-	-	-	-	-	0.75/40	1280	120	7
60	3.9	3.8	3.8	3.8	3.9	-	-	-	-	-	0.75/48	1280	120	1

Performance ratings include the effects of inlet grille and backdraft damper. Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5' (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type B: free inlet fan sone levels. Performance certified is for installation Type B: Free inlet, Ducted outlet.





JencoFan USA Ventilation Systems, LLC., Div. of Soler & Palau Ventilation Group, certifies that the Models FF/FFC shown herein are licensed to bear the AMCA Seal. The ratings shown are based on test and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirement of the AMCA Certified Ratings Program.



# **MODEL FFC PERFORMANCE**

## FFC INLINE/CABINET VENTILATORS

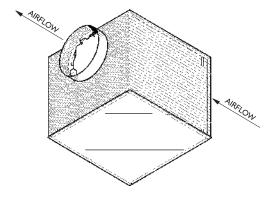
NODEL   FFC		Average
100 0.5 0.7 0.7 1.1 1.4 1.8 2.1 2.4 1.0/87 760  153 148 147 140 134 125 111 91 54 - 1.3/100 920  205 196 195 190 185 175 158 135 96 47 1.8/127 865  200 201 1.7 1.9 1.9 2.1 2.3 2.4 3.0 3.3 3.4 3.4 3.4 3.6 3.9 3.8 2.1/166 1005  300 300 294 293 285 274 259 243 214 168 113 2.6/212 1145	Voltage	Ship Wt. Lbs.
150	120	23
150		
0.9 1.0 1.1 1.4 1.6 1.9 2.1 2.2 2.4 -  200 205 196 195 190 185 175 158 135 96 47 1.7 1.9 1.9 2.1 2.3 2.4 3.0 3.3 3.4 3.4  250 248 245 245 241 235 224 208 183 141 84 2.0 2.3 2.3 2.8 2.8 3.2 3.4 3.6 3.9 3.8  300 294 293 285 274 259 243 214 168 113 2.9 3.0 3.1 3.3 3.4 3.5 3.6 3.7 4.0 3.9  2.6/212 1145	120	23
200 1.7 1.9 1.9 2.1 2.3 2.4 3.0 3.3 3.4 3.4 1.8/127 865  248 245 245 241 235 224 208 183 141 84 2.1/166 1005  250 20 2.3 2.3 2.8 2.8 3.2 3.4 3.6 3.9 3.8 2.1/166 1005  300 294 293 285 274 259 243 214 168 113 2.6/212 1145  2.9 3.0 3.1 3.3 3.4 3.5 3.6 3.7 4.0 3.9	120	20
1.7 1.9 1.9 2.1 2.3 2.4 3.0 3.3 3.4 3.4  250 248 245 245 241 235 224 208 183 141 84  2.0 2.3 2.3 2.8 2.8 3.2 3.4 3.6 3.9 3.8  300 294 293 285 274 259 243 214 168 113  2.6/212 1145	120	23
250 2.0 2.0 2.3 2.8 2.8 2.8 3.2 3.4 3.6 3.9 3.8 2.1/166 1005 300 294 293 285 274 259 243 214 168 113 2.6/212 1145	120	20
2.0 2.3 2.3 2.8 2.8 3.2 3.4 3.6 3.9 3.8  300 294 293 285 274 259 243 214 168 113 2.9 3.0 3.1 3.3 3.4 3.5 3.6 3.7 4.0 3.9  2.6/212 1145	120	23
300 2.9 3.0 3.1 3.3 3.4 3.5 3.6 3.7 4.0 3.9 2.6/212 1145	120	23
2.9 3.0 3.1 3.3 3.4 3.5 3.6 3.7 4.0 3.9	120	23
450 415 406 360 313 271 223 167 90 6.0	120	23
400 430 413 400 300 313 271 223 107 90 0.0 1.4/146 775	120	34
1.4 1.6 1.6 1.9 2.2 2.6 2.9 3.4 3.6 3.9	120	34
546 526 519 496 472 447 407 364 306 232 500 2.2/232 890	400	34
2.4 2.4 3.4 3.7 3.9 3.8 3.9 4.0 4.3 4.3	120	34
704 686 681 656 631 604 575 533 480 412	400	24
700 3.6 3.8 3.7 3.9 4.0 4.2 4.3 4.4 4.7 5.0 2.9/313 1090	120	34
930 902 894 853 807 754 685 587 442 300	400	0.4
900 3.7 3.8 3.8 3.8 3.7 3.8 3.9 4.0 4.0 4.1	120	64
1275 1228 1214 1152 1092 1029 958 871 764 631		
1500 5.0/468 1055 6.8 6.8 6.7 6.5 6.3 6.0 6.0 6.0 6.0 6.1	120	64

Performance ratings include the effects of backdraft damper. Speed (RPM) shown is nominal. Performances based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5" (1.5m) in a hemispherical free field calculated per AMCA Std. 301. Values shown are for installation Type D: ducted inlet fan sone levels. Ratings do not include the effect of duct end correction. Performance ratings include the effects of 18 feet of round inlet duct and, if needed, a rectangular to round duct transition in the airstream. Performance certified is for Installation Type D; Ducted inlet, Ducted outlet.

### FFC CABINET VENTILATORS

MODEL			CFM /	Sones at	Static Pre	ssure (PS	- Inches	of H₂O)			AMPS@					Average
FFC	0	1/10	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	60HZ/ WATTS	1/8	Voltage	Ship Wt. Lbs.		
2000	1891	1803	1791	1657	1508	1347	1165	808	-	-	5.8/590	965	120	92		
2000	10.3	9.8	9.4	9.0	8.6	9.1	8.9	7.0	-	-		903		92		
2500	3605	3498	3452	3278	3073	2983	2679	2429	2093	1693	E 4/100E	1105	240	120		
3500	15.3	14.8	14.5	14.1	13.1	12.8	12.1	11.8	11.9	10.8	5.4/1205		240	139		

Performance ratings do not include the effects of appurtenances (accessories). Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5' (1.5m) in a hemispherical free field calculated per AMCA Std. 301. Values shown are for installation Type D: ducted inlet fan sone levels. Ratings do not include the effect of duct end correction. Performance certified is for Installation Type D: Ducted inlet, Ducted outlet.



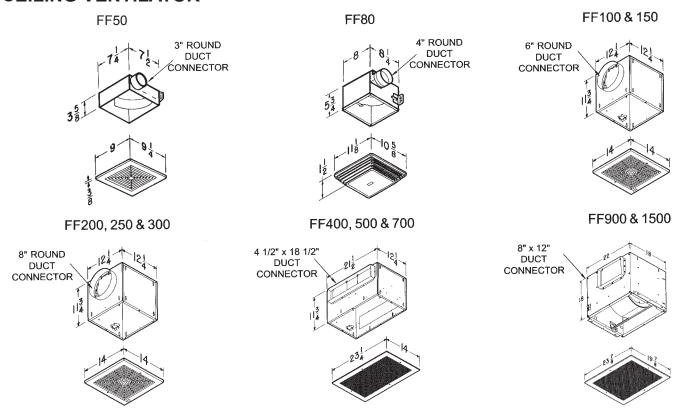


JencoFan USA Ventilation Systems, LLC., Div. of Soler & Palau Ventilation Group, certifies that the Models FF/FFC shown herein are licensed to bear the AMCA Seal. The ratings shown are based on test and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirement of the AMCA Certified Ratings Program.

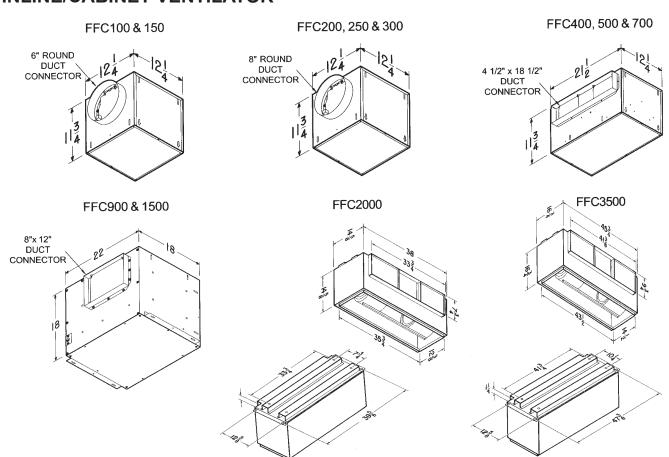


# **DIMENSIONS**

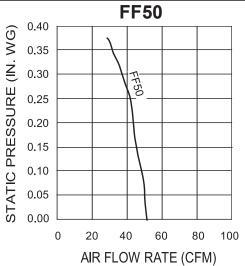
# **CEILING VENTILATOR**

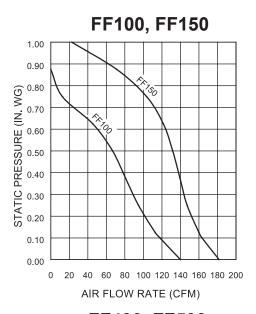


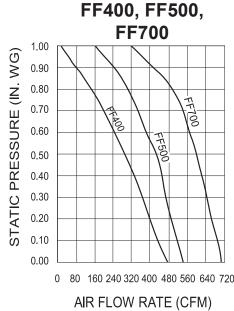
# **INLINE/CABINET VENTILATOR**

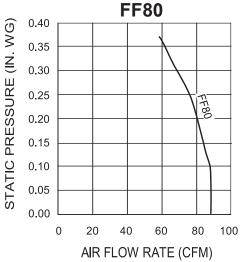


# FF CEILING VENTILATORS QUICK SELECTION GUIDE

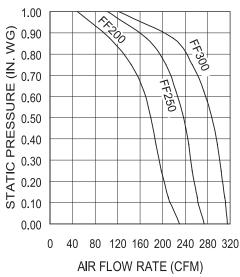


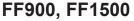


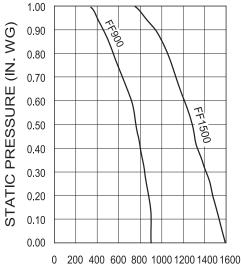








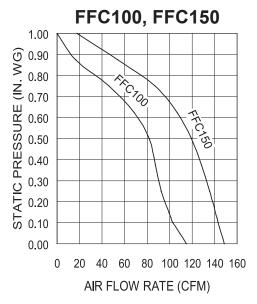




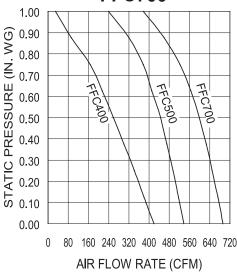
AIR FLOW RATE (CFM)

Models FF50, 80, 100, 150, 200, 250, 300, 400, 500, 700, 900, and 1500 Performance certified is for installation type B: Free inlet, Ducted outlet. Performance ratings include the effects of inlet grille and backdraft damper.

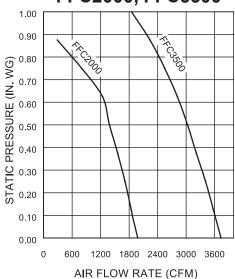
# FFC INLINE/CABINET VENTILATORS QUICK SELECTION GUIDE



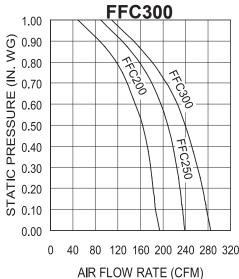
# FFC400, FFC500, FFC700



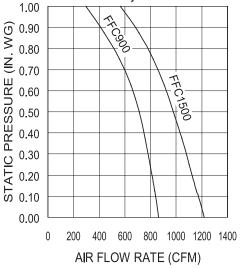
# FFC2000, FFC3500



# FFC200, FFC250,



# FFC900, FFC1500



#### FF & FFC QUICK SELECTION GUIDELINES

- 1. Locate desired CFM on bottom horizontal axis of graph.
- 2. Locate system static pressure on left vertical axis of graph.
- 3. Determine intersection of CFM and static pressure.
- 4. Select fan curve to the right of this intersection.
- 5. Solid state speed control may be used for selections left of curve, up to 50% CFM reduction.

Models FFC100, 150, 200, 250, 300, 400, 500, 700, 900 and 1500 Performance certified is for installation type D: Ducted inlet, Ducted outlet. Performance ratings include the effects of backdraft damper, 18 feet of round inlet duct and, if needed, a rectangular to round duct transition.

Models FFC2000 and 3500 Performance certified is for installation type D: Ducted inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).