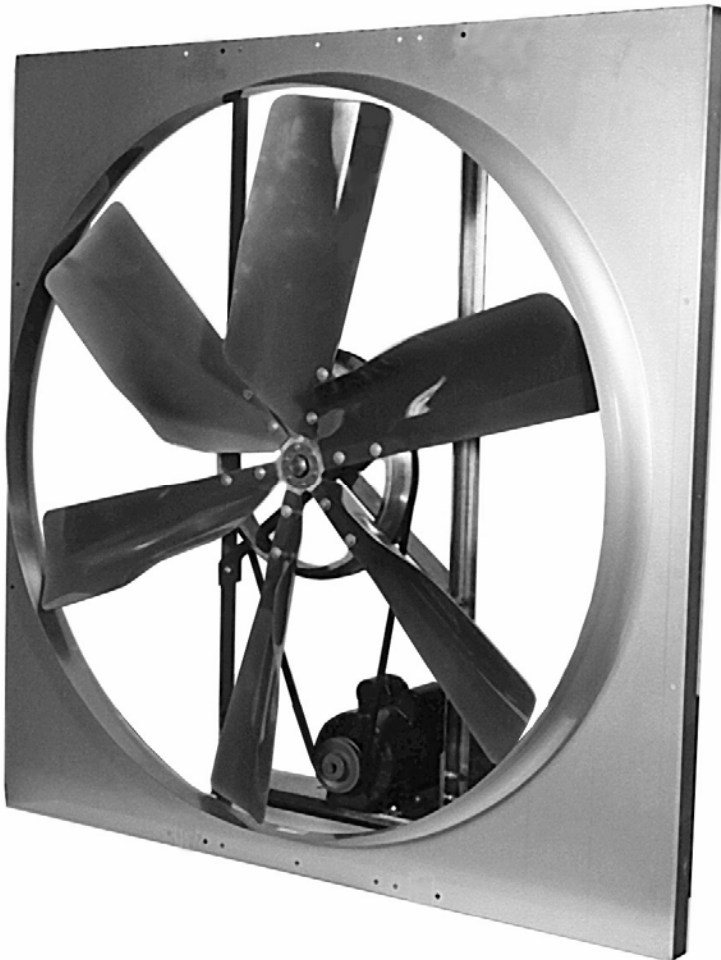


# CONTROLLED ENVIRONMENT SYSTEMS FOR FARM BUILDINGS



FARM BUILDING  
VENTILATION

TYPE  
**NCF**  
FANS

**FARM PRODUCTS DIVISION**



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# Coolair® Means Performance with Galvanized NCF Fans

- Ⓒ Welded all-galvanized panel and frame
- Ⓒ Can be used for circulation, for spot cooling, or for wall exhaust
- Ⓒ Innovative drive design which applies power through V-belts directly to the propeller; Blade load is concentrated directly over the bearings for more economical operation and longer bearing life.
- Ⓒ Dynamically balanced 6-bladed propeller is designed for efficient and quiet operation
- Ⓒ Utilizes totally-enclosed, efficient ball bearing motors



**NCF52 Circulator Fan with  
Optional Mounting Bracket**

## NCF Circulator Fans

The performance ratings listed below (Item numbers 1-8) were obtained through testing by the Bioenvironmental and Structural Systems Lab (BESS Lab) at the University of Illinois in accordance with ANSI/AMCA Standard 230-12.

Item No.	Fan Model	Size	Motor HP	BESS Test #	Fan RPM	Airflow Thrust CFM	Airflow Eff. Thrust CFM/W	Thrust Lb <sub>F</sub>	Thrust Eff. Lb <sub>F</sub> /W
1	NCFA36J	36	1/2	c09238	496	10,940	22.1	10.2	20.7
2	NCFA36J <b>Δ</b>		1/2	c09240	498	11,310	24.0	10.9	23.1
3	NCFE52L	52	1	c09210	334	21,800	28.6	19.4	25.5
4	NCF52L		1	c09212	377	24,300	22.5	24.2	22.5
5	NCF52M		1 1/2	c09213	409	26,200	18.4	28.0	19.7
6	NCFE52L <b>Δ</b>		1	c09215	330	21,300	27.7	18.5	24.1
7	NCF52L <b>Δ</b>		1	c09217	370	24,400	23.4	24.3	23.3
8	NCF52M <b>Δ</b>		1 1/2	c09214	414	26,600	20.0	28.9	21.7

**Δ** -- 3-Phase Motor

# NCF Wall Exhaust Fans

The performance ratings listed below (Item numbers 9-21) were obtained through testing by the Bioenvironmental and Structural Systems Lab (BESS Lab) at the University of Illinois. All fans were tested with a shutter and discharge guard, and some may also include an optional discharge cone as noted in the fan description. The fan housing was mounted flush to the test chamber face, as in an actual building installation. Power measurements were taken on the fan/motor combination and include motor efficiency and drive losses.

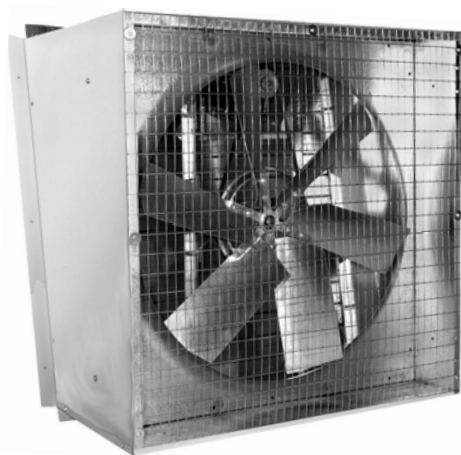


## NCF Fan with Slope Wall Housing, Inlet Shutter, & Guard

CUBIC FEET PER MINUTE (CFM) AT STATIC PRESSURE															
Item No.	Fan Model	Fan Size	BESS Lab Test #	Motor HP	Fan RPM	0" S.P.		.05" S.P.		.10" S.P.		.15" S.P.		.20" S.P.	
						CFM	CFM/W	CFM	CFM/W	CFM	CFM/W	CFM	CFM/W	CFM	CFM/W
9	MNCFB48K	48	01245	3/4	352	18,062	25.5	16,527	22.6	14,639	19.2	11,939	15.1	6,804	8.1
10	MNCFBE48L		01244	1	379	19,744	23.0	18,309	20.6	16,623	18.1	14,548	15.4	11,104	11.3
11	MNCFB48L		01241	1	411	21,418	20.2	20,176	18.5	18,736	16.8	17,092	14.7	15,129	12.6
12	MNCFE52L	52	99160	1	337	22,479	24.4	20,864	22.2	18,961	19.7	16,543	17.1	12,732	13.1
13	MNCF52L		99158	1	375	24,884	20.1	23,529	18.4	21,829	16.8	19,913	15.2	17,217	13.1
14	MNCF52M		99156	1-1/2	395	26,103	18.7	24,816	17.4	23,397	16.1	21,755	14.7	19,615	13.2

## NCF Fan with Slope Wall Housing, Inlet Shutter, Guard, & Discharge Cone

15	MNCFBC48K	48	01110	3/4	357	20,708	29.5	19,261	26.0	16,916	21.4	13,972	16.8	7,956	9.3
16	MNCFBEC48L		01105	1	381	22,236	26.3	20,971	23.5	19,027	20.2	16,601	16.8	13,435	13.2
17	MNCFBC48L		01106	1	414	24,267	24.3	23,115	22.0	21,437	19.3	19,245	16.6	16,938	14.0
18	MNCFC52K	52	01126	3/4	328	23,397	30.0	21,294	25.9	18,298	21.3	14,993	16.9	4,072	4.4
19	MNCFEC52L		01118	1	354	25,364	26.3	23,545	23.4	21,132	20.0	18,048	16.6	12,543	11.3
20	MNCFC52L		01114	1	374	27,028	24.6	25,359	22.0	23,109	19.1	20,331	16.2	16,677	12.9
21	MNCFC52M		01113	1-1/2	408	29,287	21.8	27,966	20.0	25,950	17.8	23,731	15.8	21,211	13.7



## NCF Fan with Slope Wall Housing, Inlet Shutter, & Guard

CUBIC FEET PER MINUTE (CFM) AT STATIC PRESSURE														
Item No.	Fan Model	Fan Size	Motor HP	Fan RPM	0" S.P.		.05" S.P.		.10" S.P.		.15" S.P.		.20" S.P.	
					CFM	CFM/W	CFM	CFM/W	CFM	CFM/W	CFM	CFM/W	CFM	CFM/W
22	MNCFAE36J	36	1/2	449	10,532	19.5	9,813	17.8	8,931	15.7	7,884	13.6	5,085	8.0
23	MNCFAC36J		1/2	483	11,363	17.2	10,688	15.7581	9,877	14.2188	8,982	12.7	7,638	10.5

## NCF Fan with Slope Wall Housing, Inlet Shutter, Guard, & Discharge Cone

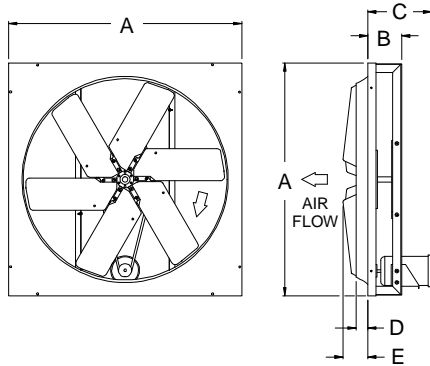
24	MNCFAE36J	36	1/2	450	11,810	23.1	10,952	20.3	9,953	17.9	8,869	15.6	7,295	12.8
25	MNCFAC36J		1/2	483	12,669	20.4	11,888	18.2	11,010	16.4	9,951	14.5	8,794	12.5

**WARNING:** If these ventilation products are used in agricultural structures to support life where failure of the ventilation could result in loss or injury, the user must provide an adequate back-up ventilation system and a failure alarm system. The user must accept the risk of such loss or injury from failure of the ventilation system.

# Dimensions & Drawings

## NCF Circulator Fans

Fan Size	A	B	C	D	E
36	44	5 3/4	12	2 1/2	3 3/4
48	56	4 3/4	12 3/8	3 7/8	6
52			13		

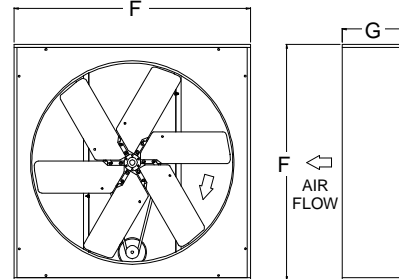


FRONT VIEW

SIDE VIEW

## NCF Fans in Metal Box

Fan Size	F	G
36	44 3/8	12 1/8
48	56 3/8	15 1/8
52		

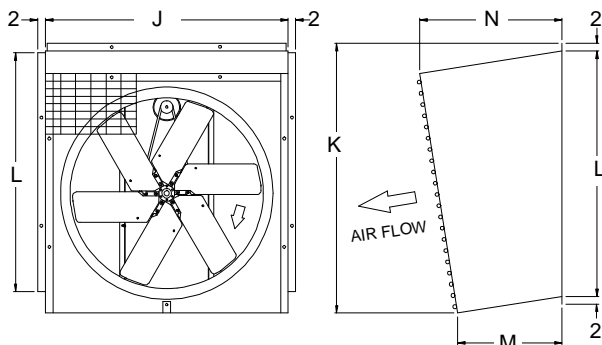


FRONT VIEW

SIDE VIEW

## NCF Fans in SWH Slope Wall Housing

Fan Size	J	K	L	M	N
36	44 3/8	50 5/16	44 13/16	21 7/8	28 3/4
48 & 52	56 3/8	62 3/8	57	21 3/16	30

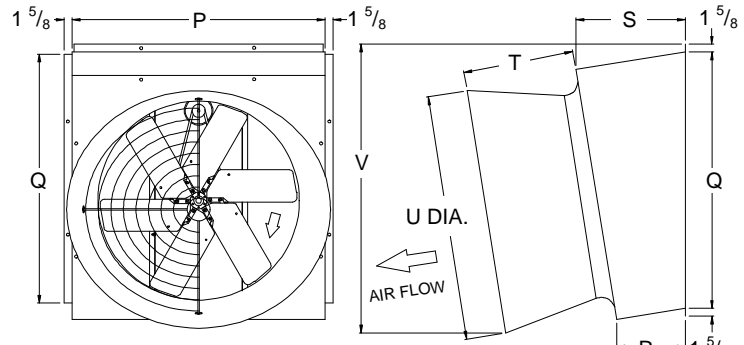


FRONT VIEW

SIDE VIEW

## NCF Fans in SWHC Slope Wall Collar with Cone

Fan Size	P	Q	R	S	T	U	V
36	44 3/8	44 13/16	19 3/8	26 3/8	24 1/2	43 5/8	54 1/2
48	56 3/8	57	16 3/8	25 1/8	32 3/8	59 3/4	68
52					35		



FRONT VIEW

SIDE VIEW

### Rough Opening:

Add 1/2" To 'J' or 'P' for Width  
For 2" Wall: Add 3/4" To 'L' or 'Q' for Height

For 4" Wall: Add 1 1/4" To 'L' or 'Q' For Height  
For 6" Wall: Add 1 1/2" To 'L' or 'Q' For Height

### WARNING



**CAUTION**  
**DO NOT** INSTALL FAN WITH MOVING PARTS WITHIN 8 FEET OF FLOOR OR GRADE LEVEL WITHOUT A GUARD THAT COMPLIES WITH OSHA REGULATIONS. **DO NOT** USE UNLESS ELECTRICAL WIRING COMPLIES WITH ALL APPLICABLE CODES. **DO NOT** WIRE WITHOUT PROVIDING FOR A POWER SOURCE DISCONNECT AT THE FAN ITSELF. **DO NOT** SERVICE EXCEPT BY A QUALIFIED MAINTENANCE TECHNICIAN AND ONLY AFTER DISCONNECTING THE POWER SOURCE. FAILURE TO OBSERVE THESE PRECAUTIONS CAN RESULT IN SERIOUS INJURY OR DEATH.

### Limited Warranty

In the sale of its products American Coolair Corporation agrees to correct by repairs or replacement any defects in workmanship or material which may develop under proper or normal use during the period of one year from date of shipment from factory. Any product or part proving upon American Coolair's examination to be defective during limited warranty period will be replaced or repaired, at American Coolair's option, f.o.b. factory, without charge. Deterioration or wear caused by chemicals, abrasive action or excessive heat shall not constitute defects. Motors are guaranteed only to the extent of the manufacturer's warranty. American Coolair's limited warranty does not apply to any of its products or parts that have been subject to accidental damage, misuse by the user, unauthorized alterations, improper installation or electrical wiring, or lack of proper lubrication or other service requirements established by American Coolair. Repairs or replacements provided under the above terms shall constitute fulfillment of all American Coolair's obligations with respect to limited warranty. THE LIMITED WARRANTY STATED HEREIN IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, STATUTORY OR IMPLIED, INCLUDING WITHOUT LIMITATION THAT OF MERCHANTABILITY AND FITNESS. No liability for reinstallation cost or for any special, indirect or consequential damages of any nature is assumed or shall be imposed upon American Coolair.

