# CONTROLLED ENVIRONMENT SYSTEMS FOR FARM BUILDINGS



FARM BUILDING VENTILATION

# TYPE NEF FANS



MEMBER OF AMCA AMERICAN COOLAIR CORPORATION P.O. BOX 2300 JACKSONVILLE, FLORIDA 32203 PHONE (904) 389-3646 FAX (904) 387-3449 E-MAIL – agfans@coolair.com WEBSITE – www.coolair.com

# **Coolair:** Means Performance with All-Galvanized NEF Fans

Now you can buy Coolair quality and our unique blade design at a savings to you and your customers. Type NEF Fans are the answer to your ventilation requirements. We utilize our innovative drive assembly 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.



NEF52

available. Coolair provides recommendations on your specific needs for confinement rearing of poultry, hogs and other livestock. Contact us with your particulars. The Coolair NEF Fans are offered unassembled or "knocked-down," minimizing export

Performance and efficiency are the keynotes to the Coolair NEF Fans. Our use of quality materials and precise engineering techniques in constructing blade assemblies assures you of years of quiet, trouble-free service. When economy is measured in terms of cubic feet of air per minute per dollar invested, Coolair fans are today's best investment. Coolair uses only the most efficient ball bearing, totally-enclosed motors

shipping costs.

AMERICAN COOLAIR CORPORATION certifies that the performance data for the type NEF fan models shown below is based on tests conducted in an accredited laboratory in accordance with ANSI/AMCA Standard 210-99.

#### **NEF Wall Fan Only**

	Cubic Feet per Minute (CFM) at Static Pressure														
	Fan Size	-	Motor	Fan	0" S	6.P.	.05"	.05" S.P.		.10" S.P.		.15" S.P.		.20" S.P.	
Fan Model		HP			RPM @ .05"	CFM	CFM/ Watt	CFM	CFM/ Watt	CFM	CFM/ Watt	CFM	CFM/ Watt	CFM	CFM/ Watt
NEF36J	36	1/2	802	11,720	22.0	11,136	19.7	10,541	17.8	9,963	16.2	9,311	14.5		
NEFB52L	52	1	467	24,407	21.3	23,117	19.3	21,746	17.6	20,236	16.1	18,398	14.4		
NEF54L	54	1	460	25,615	23.3	24,201	21.2	22,874	19.4	21,532	17.6	19,877	15.7		
NEF54M	54	1 1/2	515	27,780	20.3	26,470	18.7	25,232	17.3	24,023	16.0	22,701	14.8		
NEF Far	NEF Fan, Slope Wall Housing, Inlet Shutter & Guard														
MNEF36J	36	1/2	799	11,296	20.2	10,768	18.3	10,211	16.8	9,599	15.2	8,902	13.4		
NEF Far	NEF Fan, Slope Wall Housing, Inlet Shutter, Guard, & Cone														
MNEFC36J	36	1/2	798	11,788	23.2	11,342	21.2	10,703	18.9	9,969	16.4	9,191	14.4		

AMERICAN COOLAIR CORPORATION certifies that the performance data for the type NEF circulator fan models shown below is based on tests conducted in an accredited laboratory in accordance with ANSI/AMCA Standard 230-99.

#### **NEF Circulator Fan**

Fan Model	Model Fan Size Motor Fan HP RPM		CCFM	CCFM/Watt	Thrust, Ibf	Thrust Eff., Ibf/kW	
NEFB52L		1	481	35,551	29.0	27.3	22.2
NEFB52M	52	1 1/2	520	38,782	25.7	32.7	21.6
NEFB52N Δ		2	583	42,995	22.1	40.2	20.6
NEF54L		1	477	36,772	34.3	26.3	24.5
NEF54M	54	1 1/2	517	39,539	31.7	30.4	24.3
NEF54N Δ		2	585	44,763	24.8	38.9	21.5

Δ – 3-Phase Motor

**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.

## **PERFORMANCE RATINGS**

The performance ratings listed below 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.



#### NEF Fan, Slope Wall Housing, Inlet Shutter & Guard

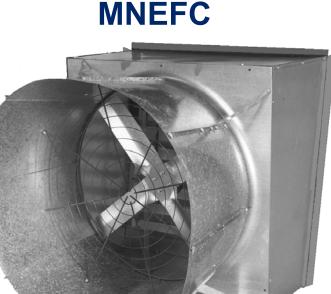
	Cubic Feet per Minute (CFM) at Static Pressure													
	Fan	BESS	Motor	Fan	0" \$	S.P.	.05"	S.P.	.10"	S.P.	.15"	S.P.	.20"	S.P.
Fan Model	Size	Lab Test #	HP	RPM @ .05"	CFM	CFM/ Watt								
MNEF52K		01197	3/4	405	20,765	27.9	19,104	24.5	17,073	21.2	14,268	17.1	10,656	12.3
MNEFE52L	52	01205	1	449	23,021	23.1	21,574	20.8	19,807	18.4	17,743	16.1	14,883	13.1
MNEF52L	52	01204	1	463	23,782	22.0	22,415	19.7	20,750	17.6	18,939	15.5	16,195	13.1
MNEF52M		01208	1-1/2	500	25,742	20.1	24,369	18.3	23,100	17.0	21,423	15.2	19,381	13.4

#### NEF Fan, Slope Wall Housing, Inlet Shutter, Guard & Cone

52	01221 01228 01225	3/4 1	404 449	23,423 25,763	35.2 28.8	20,755	28.2	17,864	22.7	13,517	16.2	7,354	8.1
52		1	449	25,763	28.8	04.077							
52	01225	1			20.0	24,277	25.7	21,394	20.7	18,906	17.4	15,580	13.8
Γ		1	464	26,608	28.0	24,390	23.6	22,590	20.4	20,209	17.4	17,132	14.2
	01232	1-1/2	500	28,771	25.3	27,030	21.6	25,505	20.2	22,712	17.0	20,170	14.3
	10251	1	424	25,700	34.1	24,100	29.8	21,600	24.8	19,200	21.4	15,400	16.0
	10252	1	457	27,700	31.9	26,100	27.7	24,000	23.9	22,200	21.0	18,500	16.4
	10255	1-1/2	487	29,400	27.5	27,900	24.5	26,000	21.5	24,200	19.2	22,400	17.1
<b>5</b> 4	10256	1-1/2	515	30,400	24.7	29,100	22.6	27,700	20.5	25,700	18.1	23,900	16.3
54	10250	1	428	25,800	36.3	24,500	32.6	22,300	27.7	20,300	23.9	16,300	17.9
	10247	1	461	28,000	33.5	26,400	29.3	24,300	24.9	22,000	21.2	19,400	18.0
	10246	1-1/2	494	29,800	30.1	28,400	26.6	26,800	23.7	24,700	20.7	22,400	17.9
	10244	1-1/2	520	30,500	25.9	29,100	23.3	27,900	21.4	26,100	19.2	24,700	17.7
	54	10252 10255 10256 10250 10247 10246	10252 1   10255 1-1/2   10256 1-1/2   10250 1   10247 1   10246 1-1/2	10252 1 457   10255 1-1/2 487   10256 1-1/2 515   10250 1 428   10247 1 461   10246 1-1/2 494	10252 1 457 27,700   10255 1-1/2 487 29,400   10256 1-1/2 515 30,400   10250 1 428 25,800   10247 1 461 28,000   10246 1-1/2 494 29,800	10252 1 457 27,700 31.9   10255 1-1/2 487 29,400 27.5   10256 1-1/2 515 30,400 24.7   10250 1 428 25,800 36.3   10247 1 461 28,000 33.5   10246 1-1/2 494 29,800 30.1	10252 1 457 27,700 31.9 26,100   10255 1-1/2 487 29,400 27.5 27,900   10256 1-1/2 515 30,400 24.7 29,100   10250 1 428 25,800 36.3 24,500   10247 1 461 28,000 33.5 26,400   10246 1-1/2 494 29,800 30.1 28,400	10252 1 457 27,700 31.9 26,100 27.7   10255 1-1/2 487 29,400 27.5 27,900 24.5   10256 1-1/2 515 30,400 24.7 29,100 22.6   10250 1 428 25,800 36.3 24,500 32.6   10247 1 461 28,000 33.5 26,400 29.3   10246 1-1/2 494 29,800 30.1 28,400 26.6	10252 1 457 27,700 31.9 26,100 27.7 24,000   10255 1-1/2 487 29,400 27.5 27,900 24.5 26,000   10256 1-1/2 515 30,400 24.7 29,100 22.6 27,700   10250 1 428 25,800 36.3 24,500 32.6 22,300   10247 1 461 28,000 33.5 26,400 29.3 24,300   10246 1-1/2 494 29,800 30.1 28,400 26.6 26,800	10252 1 457 27,700 31.9 26,100 27.7 24,000 23.9   10255 1-1/2 487 29,400 27.5 27,900 24.5 26,000 21.5   10256 1-1/2 515 30,400 24.7 29,100 22.6 27,700 20.5   10250 1 428 25,800 36.3 24,500 32.6 22,300 27.7   10247 1 461 28,000 33.5 26,400 29.3 24,300 24.9   10246 1-1/2 494 29,800 30.1 28,400 26.6 26,800 23.7	10252 1 457 27,700 31.9 26,100 27.7 24,000 23.9 22,200   10255 1-1/2 487 29,400 27.5 27,900 24.5 26,000 21.5 24,200   10256 1-1/2 515 30,400 24.7 29,100 22.6 27,700 20.5 25,700   10250 1 428 25,800 36.3 24,500 32.6 22,300 27.7 20,300   10247 1 461 28,000 33.5 26,400 29.3 24,300 24.9 22,000   10246 1-1/2 494 29,800 30.1 28,400 26.6 26,800 23.7 24,700	10252 1 457 27,700 31.9 26,100 27.7 24,000 23.9 22,200 21.0   10255 1-1/2 487 29,400 27.5 27,900 24.5 26,000 21.5 24,200 19.2   10256 1-1/2 515 30,400 24.7 29,100 22.6 27,700 20.5 25,700 18.1   10250 1 428 25,800 36.3 24,500 32.6 22,300 27.7 20,300 23.9   10247 1 461 28,000 33.5 26,400 29.3 24,300 24.9 22,000 21.2   10246 1-1/2 494 29,800 30.1 28,400 26.6 26,800 23.7 24,700 20.7	10252 1 457 27,700 31.9 26,100 27.7 24,000 23.9 22,200 21.0 18,500   10255 1-1/2 487 29,400 27.5 27,900 24.5 26,000 21.5 24,200 19.2 22,400   10256 1-1/2 515 30,400 24.7 29,100 22.6 27,700 20.5 25,700 18.1 23,900   10250 1 428 25,800 36.3 24,500 32.6 22,300 27.7 20,300 23.9 16,300   10247 1 461 28,000 33.5 26,400 29.3 24,300 24.9 22,000 21.2 19,400   10246 1-1/2 494 29,800 30.1 28,400 26.6 26,800 23.7 24,700 20.7 22,400







ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

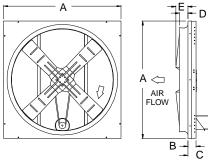
### DIMENSIONS AND DRAWINGS

 $1^{5}/_{8}$ 

Q

#### Type NEF Fans

Fan Model	Α	В	С	D	Е
NEF36	44		10 1/2		4 3/8
NEFB52	56	3 7/8	12 5/8	3 7/8	5 1/4
NEF54	58		12 5/0		5 1/4

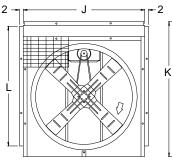


FRONT VIEW

С SIDE VIEW

#### **Type NEF FANS** In Slope Wall Housing

Fan Model	J	к	L	М	Ν	
MNEF36	44 3/8	50 5/16	44 7/8	21 7/8	28 3/4	
MNEF52	56 3/8	62 3/8	57	21 3/16	30	







Rough Opening: Add  $\frac{1}{2}$ " (1" for Size **54**) To 'J' or 'P' for **Width** For 2" Wall: Add <sup>3</sup>/<sub>4</sub>" (1" for Size 54) to 'L' or 'Q' for Height

FRONT VIEW

be imposed upon American Coolair.

For 4" Wall: Add 1<sup>1</sup>/<sub>4</sub>" to 'L' or 'Q' For Height

For 6" Wall: Add 1<sup>1</sup>/<sub>2</sub>" to 'L' or 'Q' For Height

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, on a product or plant of the that have been subject to accidental damage, misuse by the user, nauthorized 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

#### WARNING

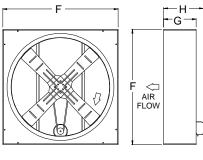
#### CAUTION

DO NOT INSTALL FAN WITH MOVING PARTS WITHIN 8 FEET OF 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 DECONTIONED ON DECENT IN OFFICION IN UNDER DESTIN PRECAUTIONS CAN RESULT IN SERIOUS INJURY OR DEATH.



#### Type NEF Fans in Waferwood

Fan Model	F	G	н	
NEF36WW	44 7/8	11 7/8	15 1/2	
NEFB52WW	56 7/8	15 3/4	22 3/4	



FRONT VIEW

SIDE VIEW

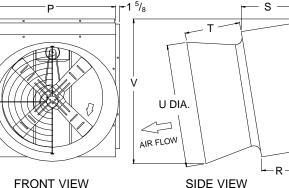
 $1^{5}/_{8}$ 

C

- 1<sup>5</sup>/a

**Type NEF Fans** in Slope Wall Housing with Cone

Fan Model	Р	Q	R	S	Т	U	v
MNEFC36	44 3/8	44 7/8	19 3/8	26 5/16	24 1/2	43 5/8	54 1/2
MNEFC52	56 3/8	57	16 5/16	25 1/8	35	64 3/4	70 7/8
MNEFC54	58 5/8	58 7/8	15	20 1/8	41 1/4	70 1/4	71 1/8



United 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