

EXHAUST FAN INFORMATION - Job#3590126

FAN UNIT NO.	TAG	FAN UNIT MODEL #	CFM	ESP.	RPM	H.P.	B.H.P.	#	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS.)	SONES
1		DUBSHFA	1468	0.680	1103	0.750	0.2570	1	115	8.8	465 FPM	99	10.7
2		DUBSHFA	1468	0.680	1103	0.750	0.2570	1	115	8.8	465 FPM	99	10.7
3		DR12HFA	400	0.375	1266	0.250	0.0900	1	208	1.9		49	6.9

CONDENSER DETAILS

FAN UNIT NO.	TAG	FAN UNIT MODEL #	CONDENSER NO.	TONNAGE	VOLTAGE	PHASE	FREQUENCY	MCA	RLA	MAX. FUSE SIZE	MIN. WIRE SIZE	SEER
4		A2-D.250-200-MPU	1	5	208-230	3 PHASE	60 Hz	21.4 Amps	17.4 Amps	30 Amps	12 AWG	14

MUA FAN INFORMATION - Job#3590126

FAN UNIT NO.	TAG	FAN UNIT MODEL #	BLOWER	HOUSING	MIN CFM	DESIGN CFM	ESP.	RPM	H.P.	B.H.P.	#	VOLT	FLA	COOLING COIL ENTERING DB TEMP.	COOLING COIL ENTERING WB TEMP.	COOLING COIL LEAVING DB TEMP.	COOLING COIL LEAVING WB TEMP.	COOLING COIL TOTAL CAPACITY	COOLING COIL SENSIBLE CAPACITY	COOLING COIL LATENT CAPACITY	WEIGHT (LBS.)	SONES	BURNER EFFICIENCY(%)
4		A2-D.250-200-MPU	20MF-2-MOD	A2-D.250	2000	2350	0.500	1274	2.000	1.0240	3	208	6.1	92.0F	75.0F	67.8F	67.8F	60.0 MBH	58.5 MBH	1.5 MBH	1513	11.2	92

GAS FIRED MAKE-UP AIR UNIT(S)

FAN UNIT NO.	TAG	INPUT BTUs	OUTPUT BTUs	TEMP. RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE
4		204462	188105	80 deg F	7 in. w.c. - 14 in. w.c.	Natural

FAN OPTIONS

FAN UNIT NO.	TAG	OPTION (Qty. - Descr.)
1		1 - Grease Box 1 - Fan Base Ceramic Seal - Ship Loose - For Grease Ducts 1 - Exhaust Fan Heat Baffle 1 - Upblast Fan Wheel Access Port 1 - ECM Wiring Package-Exhaust - PWM Signal from ECPM03 Prewire (NIDEC Motor)
2		1 - Grease Box 1 - Fan Base Ceramic Seal - Ship Loose - For Grease Ducts 1 - Exhaust Fan Heat Baffle 1 - Upblast Fan Wheel Access Port 1 - ECM Wiring Package-Exhaust - PWM Signal from ECPM03 Prewire (NIDEC Motor)
3		1 - 12-BDD Damper 1 - ECM Wiring Package - Manual or 0-10VDC Reference Speed Control (TELCO Motor), CCW Rotation
4		1 - Size 2 Direct Fired Heater Low CFM Profile Package. Used on Heaters under 2500 cfm. 1 - AC Interlock Relay - 24VAC Coil 1 - Motorized Backdraft Damper for A2-D Housing 1 - Low Fire Start 1 - Inlet Pressure Gauge, 0-35" 1 - Manifold Pressure Gauge, -5 to 15" wc 1 - Cooling Thermostat and Relay (Not req for evap) 1 - Single Electrical Cabinet LED Lights Used on Modular MUA Units 1 - 5 Ton Single Circuit Modular Packaged AC Cooling Option for Size 2 MUA (1000 to 2750 cfm), 208V/230V, 3 phase. Cooling thermostat or Programmable Stat Required for Proper Operation. 1 - Downturn Plenum for Size 2 DX Coil Module 1 - Separate 120V Wiring Package (Required and used only for DCV or Prewire with VFD) - Three Phase Only

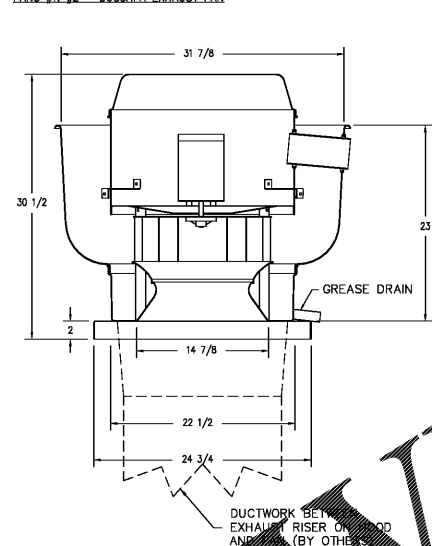
FAN ACCESSORIES

FAN UNIT NO.	TAG	EXHAUST			SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1		YES						
2		YES						
3			YES					
4							YES	

CURB ASSEMBLIES

NO.	ON FAN	WEIGHT	ITEM	SIZE
1	# 1	41 LBS	Curb	23.000"W x 23.000"L x 24.000"H Vented Hinged
2	# 2	41 LBS	Curb	23.000"W x 23.000"L x 24.000"H Vented Hinged
3	# 3	16 LBS	Curb	17.500"W x 17.500"L x 12.000"H
4	# 4	107 LBS	Curb	31.000"W x 79.000"L x 20.000"H Insulated
	# 4		Roll	6.000"W x 31.000"L x 20.000"H

FANS #1, #2 - DUBSHFA EXHAUST FAN



FEATURES:

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS)
- ROOF MOUNTED FANS
- RESTAURANT MODEL
- UL705 AND UL782 AND ULC-5845
- VARIABLE SPEED CONTROL
- INTERNAL WIRING
- WEATHERPROOF DISCONNECT
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE)
- HIGH HEAT OPERATION 300°F (149°C)
- GREASE CLASSIFICATION TESTING

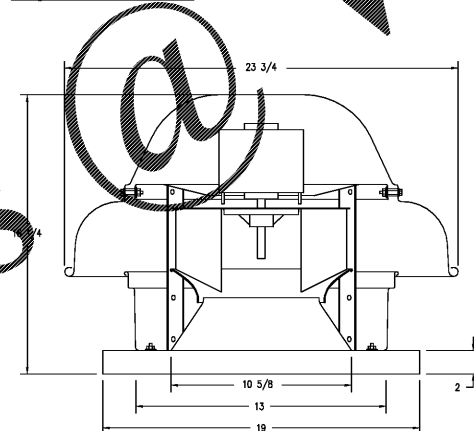
NORMAL TEMPERATURE TEST
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

ABNORMAL FLARE-UP TEST
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GAS VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD BE REPAIRABLE UNDER NORMAL SERVICE CONDITIONS.

OPTIONS:

- GREASE BOX
- FAN BASE CERAMIC SEAL - SHIP LOOSE - GREASE DUCTS
- EXHAUST FAN HEAT Baffle
- UPBLAST FAN WHEEL ACCESS PORT
- ECM WIRING PACKAGE-EXHAUST - PWM SIGNAL FROM ECPM03 PREWIRE (NIDEC MOTOR)

FAN #3 DR12HFA - EXHAUST FAN

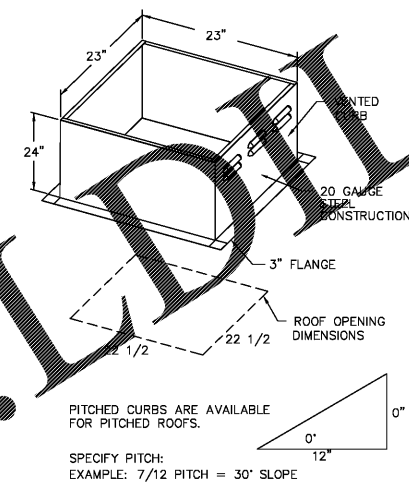


FEATURES:

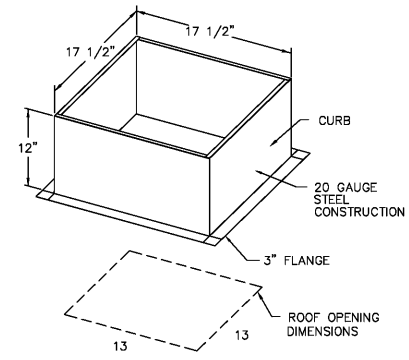
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS)
- ROOF MOUNTED FANS
- UL705
- SAFETY DISCONNECT
- STANDARD BIRD SCREEN
- SPEED CONTROL

OPTIONS:

- 12-BDD DAMPER
- ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL (TELCO MOTOR), CCW ROTATION.

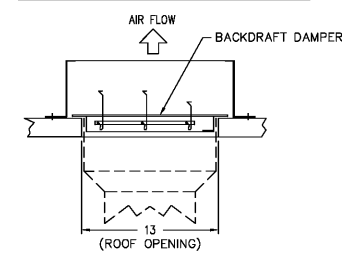


PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.
SPECIFY PITCH:
EXAMPLE: 7/12 PITCH = 30° SLOPE



PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.
SPECIFY PITCH:
EXAMPLE: 7/12 PITCH = 30° SLOPE

BACKDRAFT DAMPER INSTALLATION



REVISIONS

NO.	DESCRIPTION	DATE

CAPTIVEAIRE
www.captiveaire.com
Iowa Office
2041 Grand Ave., Suite B, West Des Moines, IA 50266 PHONE: (515) 221-1188 FAX: (515) 227-6965 EMAIL: reg7@captiveaire.com

NEW BUILDING FOR:
DQ
GRUBBERS
INTERSECTION OF DAVENPORT & ALABAMA AVENUE
BREMEN, IOWA 52514
CELL # 252 0065
AMERICAN DAIRY QUEEN
MINNEAPOLIS, MN U.S.A.
REGISTERED U.S. PATENT OFFICE, AMERICAN DAIRY QUEEN CORPORATION. THIS DRAWING, ITS DESIGN DETAIL AND INVENTION ARE THE PROPERTY OF AMERICAN DAIRY QUEEN INC. (ADQ) AND SHALL NOT BE COPIED IN ANY MANNER NOR DISCLOSED TO ANY OUTSIDE PARTY WITHOUT ADD CONSENT.

GEORGIA
REGISTERED PROFESSIONAL ENGINEER
WILLIAM J. KEMPER
11-01-18

GEORGIA ENGINEER LICENSE
NUMBER PE025568

SPECIAL NOTICES
In the event the client consents to, allows, authorizes or approves of changes to any plans, specifications or other construction documents, and these changes are not approved in writing by the design professional, the client recognizes that such changes and the results thereof are not the responsibility of the design professional. Therefore, the client agrees to release the design professional from any liability arising from the construction, use or result of such changes. In addition, the client agrees to the fullest extent permitted by law, to indemnify and hold the design professional harmless from any damage, liability or cost (including reasonable attorney's fees and costs of defense) arising from such changes. All rights reserved. No part of this drawing may be reproduced by photocopy or by any other means, or stored, processed, or transmitted in or by any computer or other systems without the prior written permission of the Engineer.

DQ - Bremen, GA
Davis Blvd & Alabama Ave,
BREMEN, GA, 30110

DATE: 10/22/2018
DWG.#: 3590126
DRAWN BY: jsievers
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO. 3

CAPTIVEAIRE
HOOD SHOP
DRAWINGS

SHEET NUMBER:
M4.3

Order Plans