

EXHAUST FAN INFORMATION - JOB#6628267

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SDNES
1		1	DU300H	FLOAIRE	10500	0.000	740	DDP,PREMIUM	5.000	2.5700	3	230	14.3	1636 FPM	497	18.5

FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION
1		1	VAV PACKAGE W/ MANUAL CONTROL (VFD INCLUDED)
		1	VFD FACTORY MOUNTED AND WIRED IN EXHAUST FAN
		1	VFD MOUNTING BRACKET FOR DU/DR 300 - 360
		1	EXHAUST FAN HEAT BAFFLE
		1	2 YEAR PARTS WARRANTY

CURB ASSEMBLIES

NO	ON FAN	WEIGHT	ITEM	SIZE
1		53 LBS	CURB	38.500"W X 38.500"L X 20.000"H VENTED.

FAN SOUND DATA

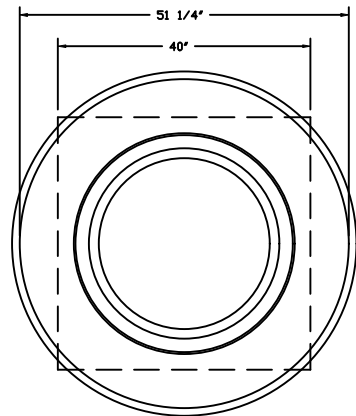
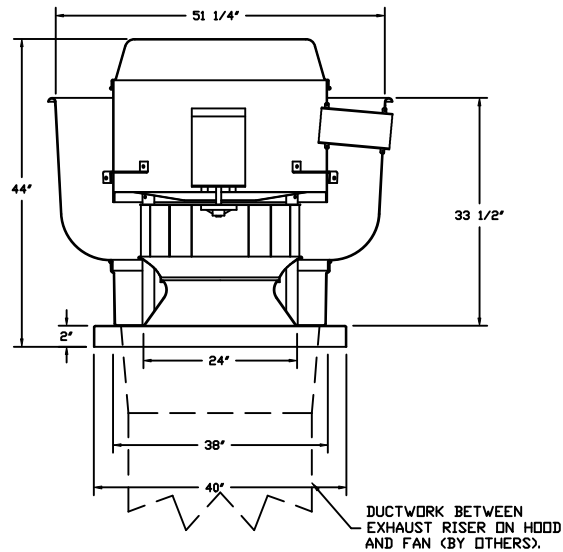
FAN UNIT NO	TAG	MOTOR	SOUND DATA			OCTAVE BAND SOUND DATA								
			LWA	SDNES @ 5 FT	DBA @ 5 FT	DISTANCE (FT)	63 HZ	125 HZ	250 HZ	500 HZ	1 KHZ	2 KHZ	4 KHZ	8 KHZ
1		EXHAUST	81.6	18.5384017301769	70.1	5	82.2	91.6	84.9	77.4	74.1	69.3	63.6	58.6



FloAire

JOB IFD PD IFD754930	
LOCATION Asheville, NC, 28806	
DATE 3/5/2024	JOB # 6628267
DWG # 1	DRAWN BY
REV.	SCALE 3/8" = 1'-0"

FAN #1 DU300H - EXHAUST FAN



TOP VIEW

FEATURES:

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL705
- VARIABLE SPEED CONTROL.
- INTERNAL WIRING.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
- HIGH HEAT OPERATION 300°F (149°C).
- NEMA 3R SAFETY DISCONNECT SWITCH.

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.

OPTIONS

- VAV PACKAGE W/ MANUAL CONTROL (VFD INCLUDED).
- VFD FACTORY MOUNTED AND WIRED IN EXHAUST FAN.
- VFD MOUNTING BRACKET FOR DU/DR 300 - 360.
- EXHAUST FAN HEAT BAFFLE.
- 2 YEAR PARTS WARRANTY.

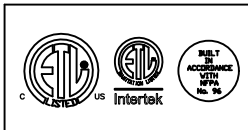
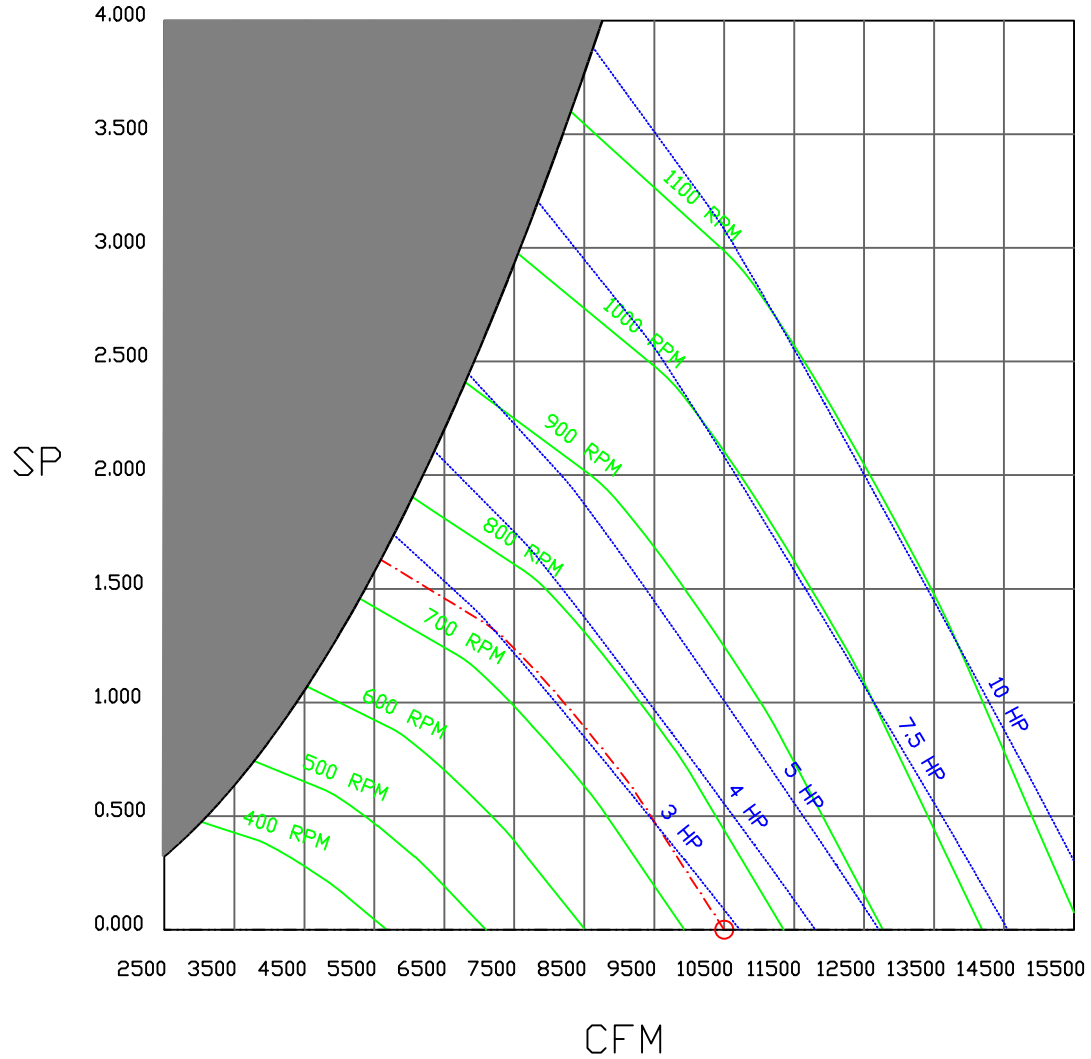


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JOB IFD PD IFD754930	
LOCATION Asheville, NC, 28806	
DATE 3/5/2024	JOB # 6628267
DWG # 2	DRAWN BY
REV.	SCALE 3/8" = 1'-0"

FAN#1 - EXHAUST PERFORMANCE CURVES.

10500 CFM, 0 SP @ 740 RPM AND 2.57 BHP AT 0 FEET AND 120 DEG F.
 * PLEASE NOTE THAT THESE CURVES WERE ADJUSTED FOR JOB SPECIFIC TEMPERATURE AND ALTITUDE.



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JOB IFD PD IFD754930	
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DATE 3/5/2024	JOB # 6628267
DWG # 3	DRAWN BY
REV.	SCALE 3/8" = 1'-0"

POWER VENTILATORS
TAG Centrifugal Upblast

PART 1 - GENERAL

1.1 SUMMARY

- A. Fan shall be a spun aluminum, G90 Galvanized, roof or wall-mounted, direct drive, upblast centrifugal exhaust ventilator.

1.2 SUBMITTALS

- A. The manufacturer assumes no liability for the use or results of use of this document. This specification is to be reviewed by the engineer to confirm requirements of the project and building codes are met.
- B. As the manufacturer continues product development, it reserves the right to change design and specifications without notice.

1.3 QUALITY ASSURANCE

- A. ETL Listed and complies with UL705 (electrical) Standards and CSA Std C22.2, No 113.
- B. Fan shall bear the AMCA certified rating seal for air performance.
- C. Wheels shall be balanced in two planes and done in accordance with AMCA standard 204-96, Balance Quality and Vibration Levels for Fans.

1.4 WARRANTY

- A. All units are provided with the following 2-year standard warranty from date of shipment.
- B. This warranty shall not apply if:
1. The equipment is not installed by a qualified installer per the manufacturer's installation instructions shipped with the product.
 2. The equipment is not installed in accordance with Federal, State, and Local codes and regulations.
 3. The equipment is misused, neglected, or not maintained per the manufacturer's maintenance instructions.
 4. The equipment is not operated within its published capacity.
 5. The invoice is not paid within the terms of the sales agreement.
- C. The manufacturer shall not be liable for incidental and consequential losses and damages potentially attributable to malfunctioning equipment. Should any part of the equipment prove to be defective in material or workmanship within the 2-year warranty period, upon examination by the manufacturer, such parts will be repaired or replaced by the manufacturer at no charge. The buyer shall pay all labor costs incurred in connection with such repair or replacement. Equipment shall not be returned without manufacturer's prior authorization. All returned equipment shall be shipped by the buyer, freight prepaid to a destination determined by the manufacturer.

PART 2 - PRODUCTS

2.1 GENERAL ASSEMBLY

- A. The fan shall be factory assembled, tested, and shipped as a complete unit.
- B. The following specifications, delivering all capacities scheduled and conforming to the design indicated herein. Alternate layouts or dimensional changes will not be accepted.

2.2 CONSTRUCTION

- A. The fan wind band shall be constructed of heavy gauge aluminum or G90 Galvanized and shall be spun on an automatic lathe to provide consistent dimensions.
- B. Horizontal and vertical internal supports shall be used to fasten the wind band to the discharge apron securely. This provides rigidity for hinging and added strength to reduce shipping damage.
- C. The discharge apron shall have a rolled bead for added strength.
- D. Base corners shall be welded to provide strength and support for hinging and cleaning and prevent leakage into the building.
- E. The fan shall bear a permanently attached nameplate displaying model and serial number of unit for future identification.
- F. Nylon washers provide a tight seal. All fasteners in the fan housing shall be backed with nylon washers.
- G. The unit shall be factory tested after assembly.

2.3 WHEEL

- A. The fan wheel shall be centrifugal backward inclined and non-overloading.
- B. The wheel blades shall be aerodynamically designed to minimize turbulence, increase efficiency and reduce noise.
- C. The wheel blades shall be welded to the wheel inlet cone.
- D. If balancing weights are required, they shall be riveted to the blades or wheel.
- E. The wheel inlet shall overlap the fan base inlet for maximum performance and efficiency.
- F. The wheel shall be firmly attached to the motor shaft with two set screws.

2.4 MOTOR

- A. Fan(s) 1 Motor Type: Open Drip Proof (ODP).
- B. Motor shall be permanently lubricated and rated for continuous duty.
- C. Furnished at the specified voltage, phase, and enclosure. Motor speed shall be variable, controlled using an integrated speed controller.
- D. Motors shall be mounted out of the airstream and furnished at the

specified voltage, phase, and enclosure.

- E. Motor mounting plate shall be constructed of heavy gauge galvanized steel.
- F. The motor compartment shall be cooled by outside air drawn through an extruded aluminum conduit tube.
- G. An integral electrical conduit running from the fan base to the motor compartment is provided for ease of installation.
- H. The conduit tube passage shall be sealed to prevent noise. Silicone rubber grommets shall isolate the conduit tube from the fan housing.
- I. The motor compartment shall be a two-piece construction. The cap has quick-release clips to provide fast and easy access to the motor compartment.

2.5 OPTIONS AND ACCESSORIES

- A. Fan #1 has fan options:
1. VAV Package w/ Manual Control (VFD Included).
 2. VFD factory mounted and wired in Exhaust Fan.
 3. VFD Mounting Bracket for DU/DR 300 - 360.
 4. Exhaust Fan Heat Baffle.

2.6 VFD OPTIONS

- A. Fan #1 has options:
1. VAV Package with Manual Control (VFD Included).
 2. VFD factory mounted and wired in exhaust fan.
 3. VFD Mounting Bracket.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine all areas and conditions under which package(s) are to be installed. Do not proceed with work until unsatisfactory conditions have been corrected in a manner acceptable to installer.

3.2 INSTALLATION

- A. Install the package in accordance with manufacturer's instructions, drawings, written specifications, manufacturer's installation manual, and all applicable building codes.

3.3 CONNECTIONS

- A. Electrical connections conform to applicable requirements in Division 26 Sections.

3.4 SYSTEM START-UP

- A. System start-up is performed by a factory-trained Service Technician.



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LOCATION Asheville, NC, 28806

DATE 3/5/2024

JOB # 6628267

DWG # 4

DRAWN BY

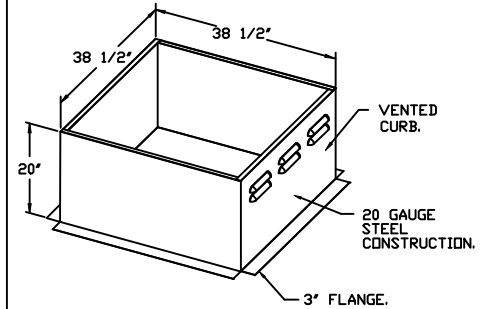
REV.

SCALE 1/4" = 1'-0"



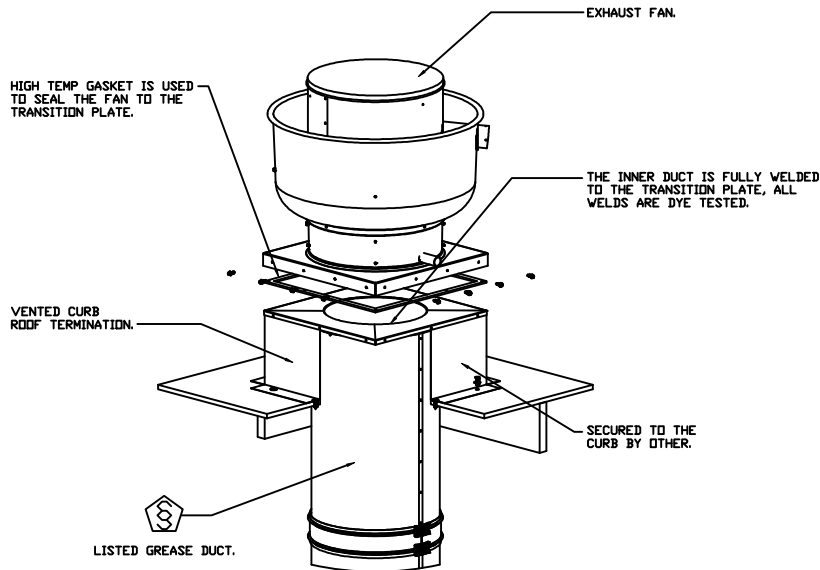
GREASE DUCT & CHIMNEY SPECIFICATIONS:
 PROVIDE GREASE DUCT EQUAL TO FLOAIRE MODEL "FDW"
 ROUND 20 GAUGE 430 STAINLESS STEEL DUCTWORK. MODEL "FDW"
 IS LISTED TO UL-1978 AND IS INSTALLED USING "V" CLAMP LOCKING
 CONNECTIONS SEALED WITH 3M FIRE BARRIER 2000 PLUS. MODEL "FDW"
 DOES NOT REQUIRE WELDING PROVIDING IT HAS BEEN INSTALLED PER
 THE MANUFACTURES INSTALLATION GUIDE.
 PROVIDE RATED ACCESS DOORS AT EVERY CHANGE IN DIRECTION AND EVERY 12' ON CENTER.
 PER MANUFACTURES LISTING MODEL "FDW" HORIZONTAL RUNS LESS THAN 75 FT. CAN BE
 SLOPED 1/16" PER 12", HORIZONTAL RUNS MORE THAN 75 FT. CAN BE SLOPED 3/16" PER 12".
 DUCT SHOULD BE SLOPED AS MUCH AS POSSIBLE TO REDUCE THE CHANCE OF GREASE
 ACCUMULATION IN HORIZONTAL RUNS.

IF THE DUCT OR CHIMNEY IS WITHIN 18 INCHES OF COMBUSTIBLE MATERIAL, PROVIDE
 UL-2221 OR UL-103 HT LISTED DOUBLE WALL GREASE DUCT OR DOUBLE WALL CHIMNEY
 EQUAL TO FLOAIRE MODEL "FDW- 2R, 2R TYPE HT, 3R, OR 3Z" ROUND 20 GAUGE 430
 STAINLESS INNER DUCT INSULATED WITH A 24 GAUGE 430 STAINLESS OUTER SHELL.



CUSTOMER APPROVAL TO MANUFACTURE:

APPROVED AS NOTED	<input type="checkbox"/>
APPROVED WITH NO EXCEPTION TAKEN	<input type="checkbox"/>
REVISE AND RESUBMIT	<input type="checkbox"/>
SIGNATURE _____	
YOUR TITLE _____	DATE _____



*NOTE: UL 762 INSTALL.



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LOCATION Asheville, NC, 28806	
DATE 3/5/2024	JOB # 6628267
DWG # 5	DRAWN BY
REV.	SCALE 3/8" = 1'-0"

Exhaust Fan Wiring

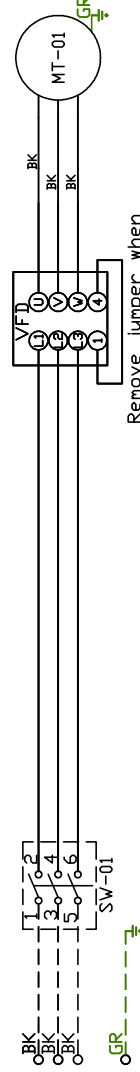
JOB 6628267 - IFD PD IFD754930

DRAWING NUMBER EXH6628267-1

SHIP DATE 2/26/2024

MODEL DU300H

Installed Options



Label	Description	Location
MT-01	Fan Motor	[3]
SW-01	Main disconnect switch	[3]

EXHAUST MOTOR_INED
5.0HP-230V-3P-14.3FLA
VFD PART: ESV40EN02TXB

ELECTRICAL INFORMATION
MOTOR/CTRL MCA: 17.9A
MOTOR/CTRL MDP: 30A

NOTES
--- DENOTES FIELD WIRING
--- DENOTES INTERNAL WIRING

WIRE COLOR

BK	-	BLACK	YW	-	YELLOW
BL	-	BLUE	GR	-	GREEN
BR	-	BROWN	GY	-	GRAY
OR	-	ORANGE	PR	-	PURPLE
RD	-	RED	PK	-	PINK
WH	-	WHITE			

