



REPRESENTED BY:

TODD AIR SOLUTIONS  
101 E FISHER ST, 3rd FLOOR  
SALISBURY NC 28144  
Phone: 704 630-1101  
Fax: 704 630-0528

DRAWING SUBMITTAL

CUSTOMER:

AVANI ENVIRONMENTAL  
PO BOX 1279  
YOUNGSVILLE, NC 27596

DATE: 5/29/2012

ATTENTION: Mr. Bob Venezia  
P.O. # 4628  
CFV # 1206661  
REPRESENTATIVE ORDER # CFQ# 215760

  x   REFERENCE             APPROVAL             CORRECTION

DRAWING NO.	DESCRIPTION
- - - -	SPECIFICATION SHEET
1206661	MODEL: HDBI-330
A27205	INLET FLANGE
A27453	DISCHARGE FLANGE
A17110-330	DISCHARGE DAMPER

REMARKS: 2D AUTOCAD DRAWING INCLUDED.



**SPECIFICATION SHEET**

CFV NO. <b>1206661</b>	CUSTOMER ID NUMBER <b>3566220</b>	PAGE <b>1</b>	
S O L D	AVANI ENVIRONMENTAL PO BOX 1279 YOUNGSVILLE, NC 27596	S H I P	TRENHOLM STATE TECHNICAL COLLEGE PATT- BOOKSTORE/RECEIVING BLDG. B PATTERSON CAMPUS 3920 TROY HIGHWAY MONTGOMERY, AL 36116
T O		T O	
	CUSTOMER P.O. NUMBER <b>4628</b>	BUYER <b>Mr. Bob Venezia</b>	SCHEDULED SHIP DATE <b>6/15/12</b>

MARKS  
**Attn: Jerry Cantrell - PO#24593**

SHIP VIA <b>Averitt</b>		REPRESENTATIVE <b>TODD AIR SOLUTIONS</b>			REP. ORDER NO. <b>CFQ# 215760</b>		SHIPPING CHARGES <b>Prepaid &amp; Add</b>		
QTY. <b>1</b>	DESCRIPTION <b>HEAVY DUTY BI BLOWER</b>			MODEL <b>HDBI-330</b>	ROT <b>CW</b>	DISCH <b>UB</b>	ARR <b>4</b>	WHEEL/PROP <b>HDBI 65%</b>	INLET
MOTOR DATA	HP <b>40</b>	RPM <b>1750</b>	PH <b>3</b>	CYCLE <b>60</b>	VOLTAGE <b>SEE BELOW</b>	FRAME <b>324T</b>	ENCLOSURE <b>TEFC</b>	SUPPLIED BY <b>CFV</b>	INSTALLED BY <b>CFV</b>
	CFV MOTOR PART NUMBER <b>377296T</b>							GROOVES	FXD/ADJ
FAN DATA	DENSITY <b>.075</b>	TEMP. <b>70°F.</b>	ALTITUDE	CFM <b>16000</b>	SP <b>10.000</b>	RPM <b>1750</b>	BHP <b>37.100</b>	MOTOR SHEAVE   BUSHING	
AT OPERATING CONDITIONS									FAN SHEAVE   BUSHING
MOTOR VENDOR MODEL NUMBER <b>NP0404</b>									

**Record Print, 2D CAD Drawings**

**Complete Motor Description:**

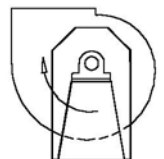
**MTR,40 HP,1425/1750 RPM,3PH,50/60Hz,190/380/50 & 230/460/60,TEFC,Prem Eff,FM, 324T,1.15 SF,F Insul.,40C Amb.,Relube with zerk fittings,F1 Box, Conduit box ground screw,Stainless Nameplate,Cast Iron Frame, CE, 40 HP & 1.00 SF ON 50 HZ., NOT PE ON 50 HZ., MAX-PE TYPE,TECO**

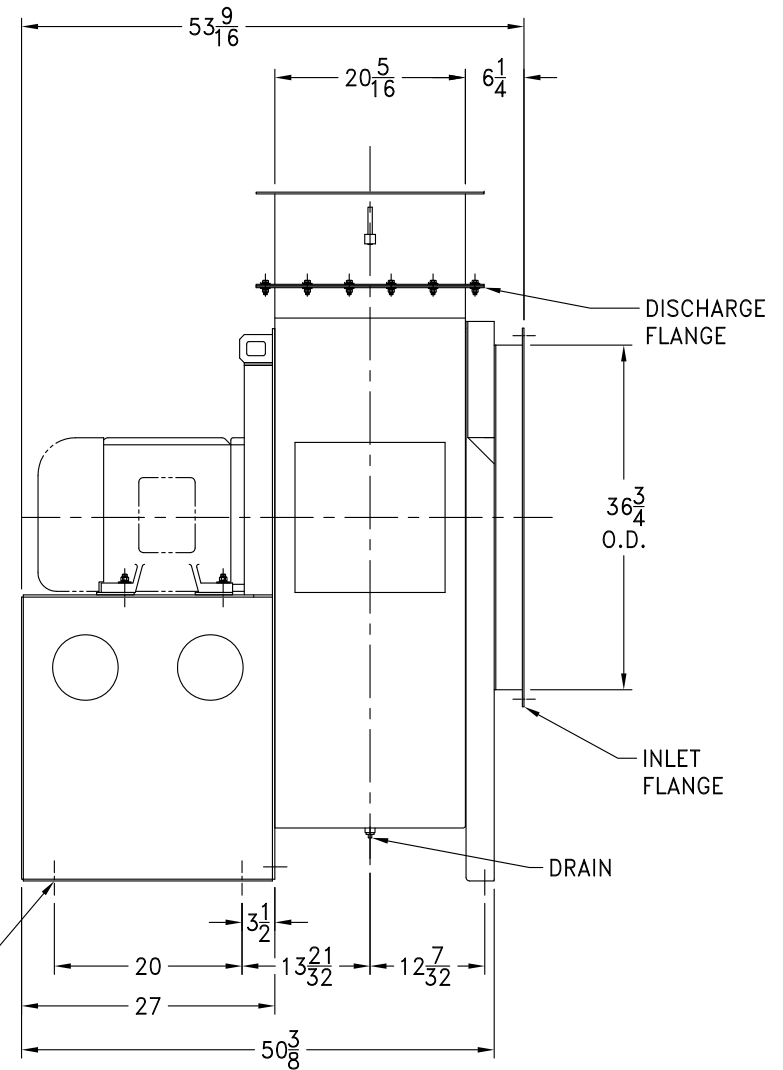
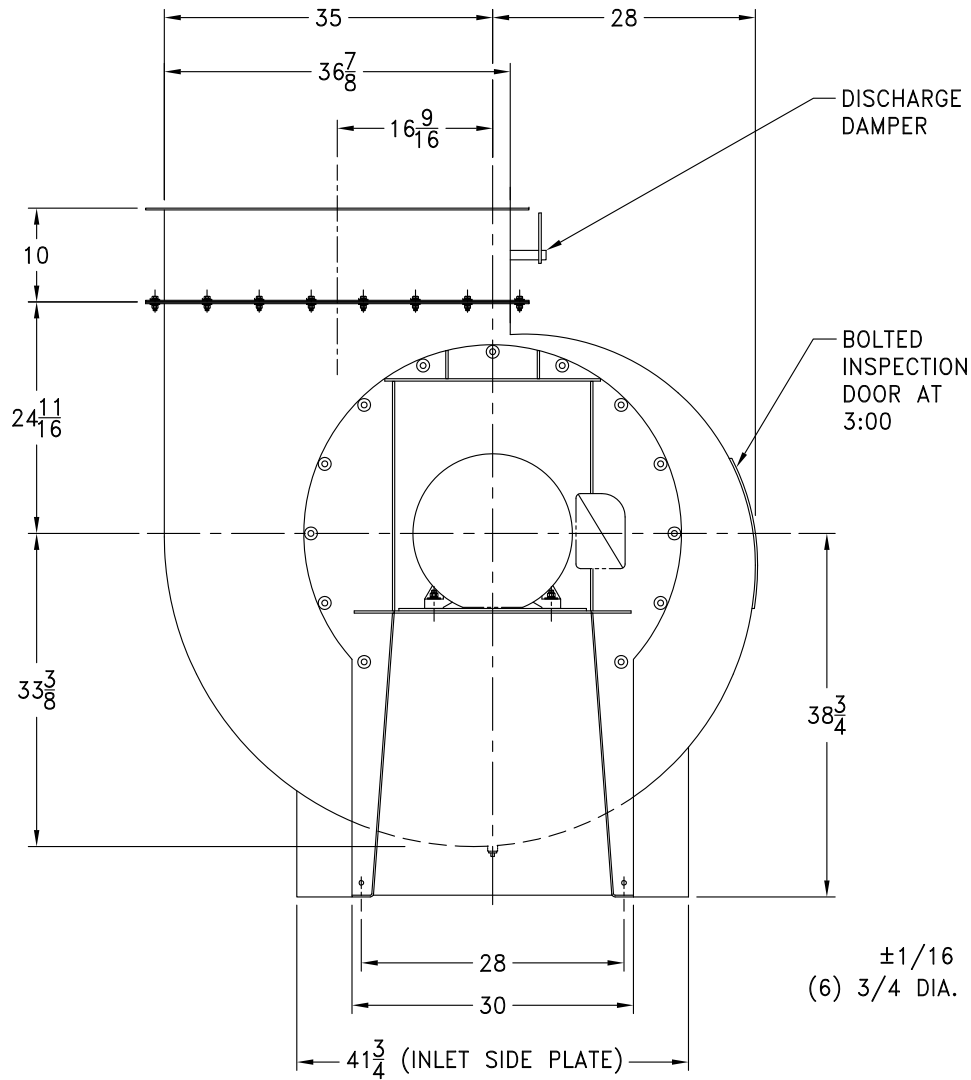
**Maximum allowable wheel speed at 70°F is 2300 RPM**

- CLASS II/III/IV WHEEL CONSTRUCTION**
- PAINT DAMPER WITH SAME SPECIAL COATING AS FAN**
- MANUAL CONTROLLED OPPOSED BLADE DISCHARGE DAMPER**
- DRILL DISCHARGE FLANGE STANDARD**
- DRILL INLET FLANGE STANDARD BOLT CIRCLE ON-CENTERS**
- BOLTED INSPECTION DOOR AT 3 O'CLOCK**
- DRAIN**
- TEFLON SHAFT SEAL**
- AVANI BLUE PAINT**

**Estimated Shipping Weight: 2232 pounds**

**Submittal Email: [bvenezia@avanienvironmental.com](mailto:bvenezia@avanienvironmental.com)**





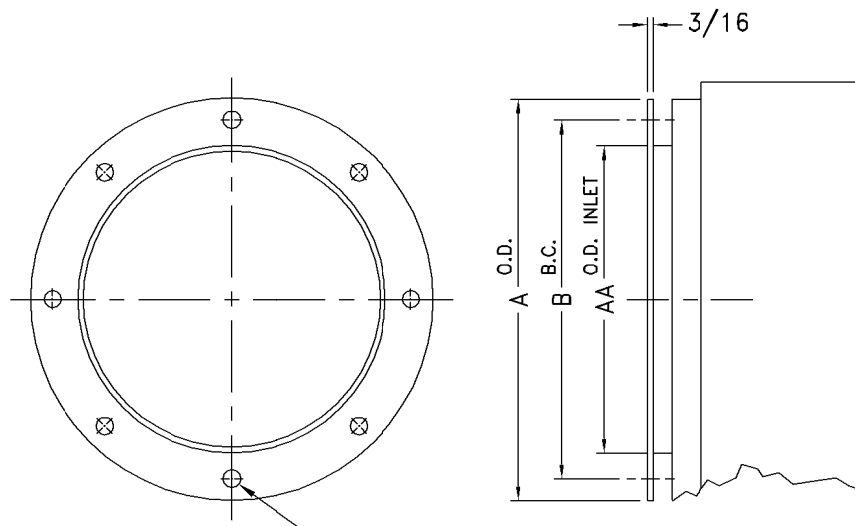
±1/16  
(6) 3/4 DIA. HOLES

CW UP BLAST DISCAHRGE SHOWN ABOVE

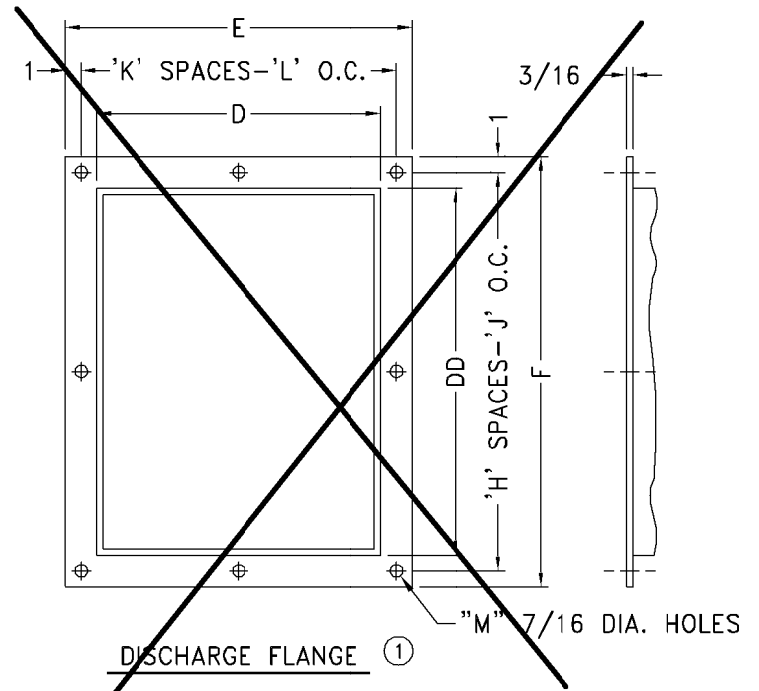
**NOTES:**

1. MOTOR: 40 HP, 1750 RPM, 324T FRAME, TEFC.
2. SEE DWG. A27205 FOR INLET FLANGE DETAIL.
3. SEE DWG. A27453 FOR DISCHARGE FLANGE DETAIL.
4. SEE DWG. A17110-330 FOR DISCHARGE DAMPER DETAIL.
5. CLASS II/III/IV, 65% WIDTH WHEEL CONSTRUCTION.
6. TEFLON SHAFT SEAL.

				<b>SUPERSEDES:</b>	<b>TOLERANCES:</b> FRACTIONS ± 1/8 ANGLES: ± 1° DECIMALS: X.XXX = ±0.005 X.XX = ±0.060 X.X = ±0.120	<b>SCALE:</b> FULL IN CAD	 <b>cincinnati fan</b> 7697 SNIDER ROAD MASON, OHIO 45040
				<b>SIMILAR TO:</b>	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED	DATE: 5/29/12	
					MATERIAL:	DR. BY: JH	
						CHK. BY:	TITLE HDBI-330 ARR. 4, 65% WIDTH W/ DISCHARGE DAMPER FOR AVANI ENVIRONMENTAL
<b>NO.</b>	<b>DESCRIPTION</b>	<b>DATE</b>	<b>INITIALS</b>	<b>CERTIFIED</b>	<b>ASSEMBLY</b>	<b>DRAWING NO.</b>	<b>SHEET REV.</b>
	REVISIONS					<b>A</b> 1206661	1 of 1



INLET FLANGE  
"N" HOLES, "P" DIA.

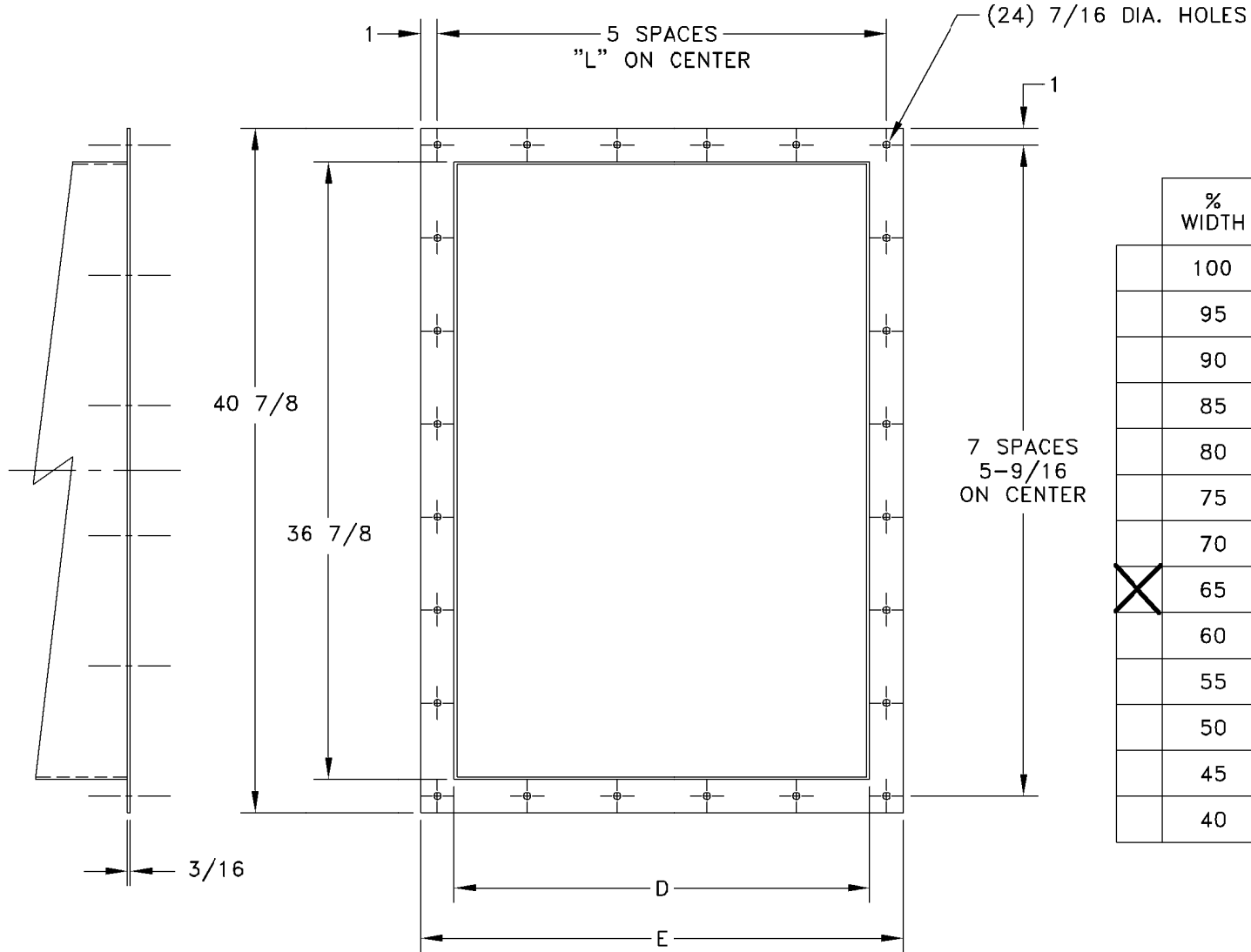


DISCHARGE FLANGE ①

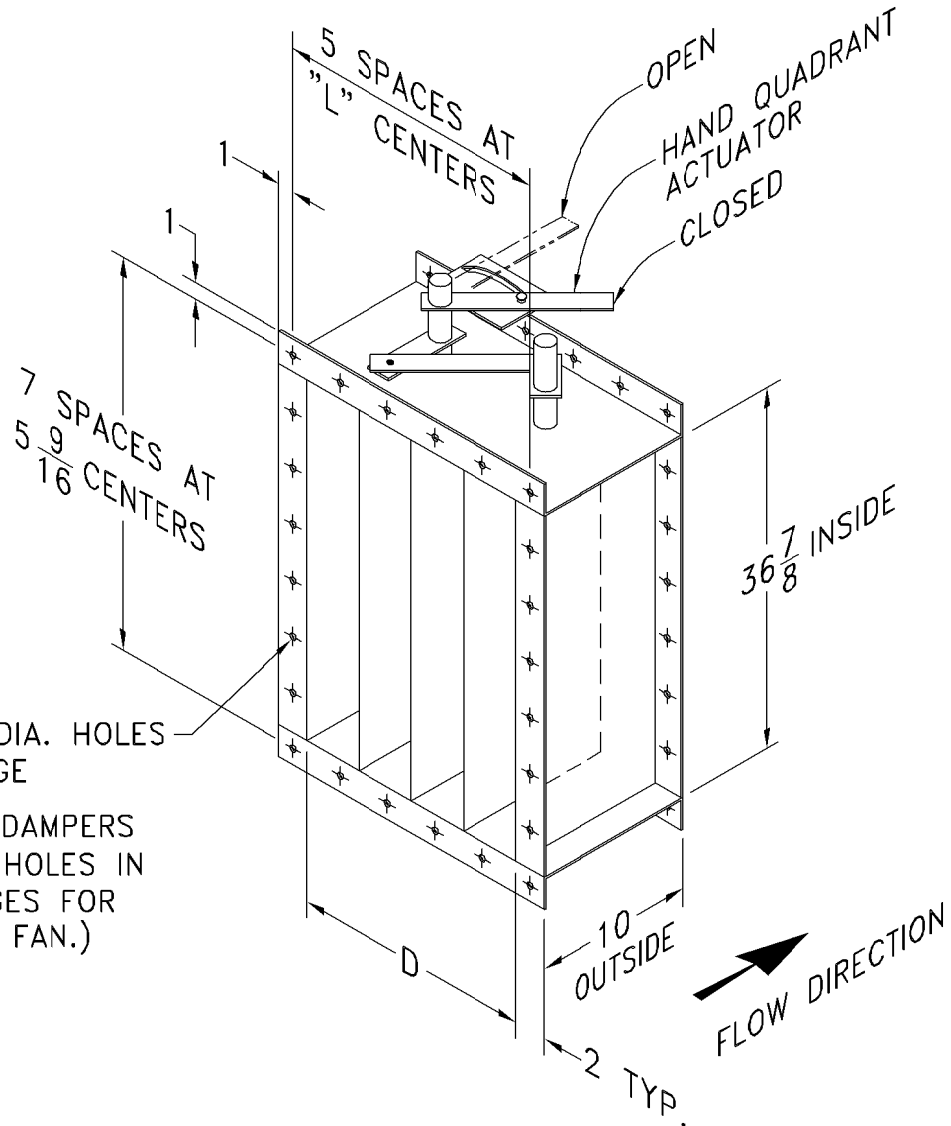
INLET					
SIZE	A O.D.	B B.C.	N	AA DIA.	P
120	16	14-3/8	8	13-1/4	7/16
130	17-3/4	15-15/16	8	14-5/8	7/16
150	19-1/4	17-1/2	8	16-1/8	7/16
160	21-1/8	19-3/8	8	18	7/16
180	23-1/2	21-1/2	12	20	7/16
200	25-1/2	23-1/2	12	22	7/16
220	28-1/8	26-1/8	12	24-5/8	7/16
240	30-3/4	28-3/4	16	27	7/16
270	33-3/4	31-5/8	16	30	7/16
300	37-1/4	35-1/4	16	33-1/2	7/16
330	40-3/8	38-3/4	16	36-3/4	1/2
360	43-5/8	42	16	40	1/2

DISCHARGE								
D	E	F	H	J	K	L	M	DD
9-3/8	13-3/8	17-11/16	2	7-27/32	2	5-11/16	8	13-3/4
10-3/8	14-3/8	19-3/16	2	8-19/32	2	6-3/16	8	15-1/4
11-3/8	15-3/8	20-3/4	3	6-1/4	2	6-11/16	10	16-13/16
12-1/2	16-1/2	22-7/16	3	6-13/16	2	7-1/4	10	18-7/16
13-7/8	17-7/8	24-1/2	3	7-1/2	2	7-15/16	10	20-3/8
15-1/4	19-1/4	26-3/8	3	8-1/8	3	5-3/4	12	22-3/8
16-7/8	20-15/16	28-7/8	4	6-23/32	3	6-5/16	14	24-7/8
18-9/16	22-5/8	31-3/8	4	7-11/32	3	6-7/8	14	27-3/8
20-7/16	24-1/2	34-1/8	4	8-1/32	3	7-1/2	14	30-1/16
22-3/4	26-3/4	37-5/8	5	7-1/8	3	8-1/4	16	33-9/16
24-7/8	28-7/8	40-7/8	7	5-9/16	5	5-3/8	24	36-3/4
27-1/4	31-1/4	44-1/4	7	6-1/32	5	5-27/32	24	40-1/4

NOTE:  
① NOT AVAILABLE ON ANY MODEL FOR DOWNBLAST, BOTTOM ANGULAR DOWN OR TOP ANGULAR DOWN DISCHARGE POSITIONS.  
DISCHARGE FLANGE IS STANDARD ON SIZES -270 THRU -360.



% WIDTH	"D"	"E"	"L"
100	24-7/8	28-7/8	5-3/8
95	24-1/4	28-1/4	5-1/4
90	23-9/16	27-9/16	5-1/8
85	22-15/16	26-15/16	5
80	22-1/4	26-1/4	4-27/32
75	21-5/8	25-5/8	4-23/32
70	20-15/16	24-15/16	4-19/32
<del>65</del>	20-5/16	24-5/16	4-15/32
60	19-5/8	23-5/8	4-5/16
55	19	23	4-3/16
50	18-5/16	22-5/16	4-1/16
45	17-11/16	21-11/16	3-15/16
40	17-1/16	21-1/16	3-13/16



(24) 7/16 DIA. HOLES  
EACH FLANGE

(STANDARD DAMPERS  
HAVE BOLT HOLES IN  
BOTH FLANGES FOR  
BOLTING TO FAN.)

	% WIDTH	D	L
	100	24-7/8	5-3/8
	95	24-1/4	5-1/4
	90	23-9/16	5-1/8
	85	22-15/16	5
	80	22-1/4	4-27/32
	75	21-5/8	4-23/32
	70	20-15/16	4-19/32
✗	65	20-5/16	4-15/32
	60	19-5/8	4-5/16
	55	19	4-3/16
	50	18-5/16	4-1/16
	45	17-11/16	3-15/16
	40	17-1/16	3-13/16

- NOTES:
1. OPPOSED BLADE IS STANDARD. □ PARALLEL BLADE IS OPTIONAL.
  2. DAMPER BLADES WILL BE PERPENDICULAR TO FAN SHAFT.
  3. STANDARD MATERIAL IS CARBON STEEL WITH RUST INHIBITING PRIMER. □ OPTIONAL MATERIAL \_\_\_\_\_.
  4. STANDARD CONSTRUCTION MAX. TEMPERATURE: 300° F.  
□ OPTIONAL HIGH TEMPERATURE CONSTRUCTION MAX. TEMPERATURE: 800° F.

