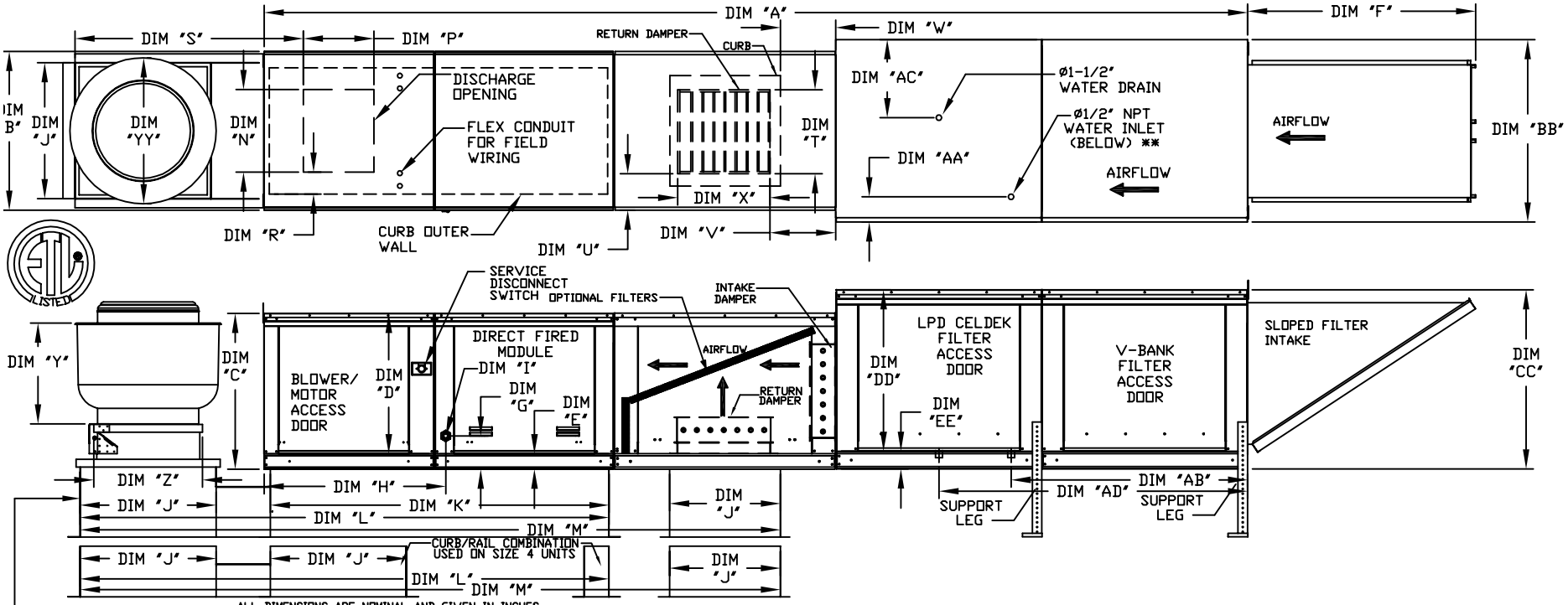
MODULAR OUTDOOR DOWN DISCHARGE DIRECT FIRED RECIRCULATING HEATER ROOF TOP PACKAGE WITH V-BANK, LPD EVAPORATIVE COOLER AND INTAKE HOOD

IHVBLPDECMBDFDAHRTP
REV.#3 09/13/2016



20 INCH HIGH EQUIPMENT CURB

* 9 INCH HIGH EXHAUST ADAPTER MAY BE REQUIRED

ALL DIMENSIONS ARE NOMINAL AND GIVEN IN INCHES.

		UNIT DIMENSIONS												CURB				DISCHARGE OPENING				RETURN OPENING					WATER INLET		DRAIN OPENING	
MODEL	UNIT SIZE	A	B	BB	C	CC	D	DD	E	EE	F	G	H	J	K	L	M	N	P	R	S	T	U	V	W	X	AA	AB	AC	AD
D.250	1	181-1/8	27-3/8	36-3/4	29-3/4	36-3/4	26-1/16	33	3-3/4	3-3/4	53-5/8	7-13/16	34-13/16	21	71	106	137-7/16	13-1/4	11-1/2	3-7/8	36-3/4	14	8	14	12-1/2	18	4-1/2	38-1/2	18	48-1/4
D.500	1	181-1/8	27-3/8	36-3/4	29-3/4	36-3/4	26-1/16	33	3-3/4	3-3/4	53-5/8	7-13/16	34-13/16	21	71	106	137-7/16	13-1/4	11-1/2	3-7/8	36-3/4	14	8	14	12-1/2	18	4-1/2	38-1/2	18	48-1/4
D.250	2	195-1/8	37-3/8	40-3/4	36-3/4	43-3/8	33-1/16	38-1/8	3-3/4	5-1/4	51-5/8	7-13/16	42-13/16	31	79	124	160-7/16	18-3/4	16	6-1/8	50-1/2	22-3/4	8	11	7-1/2	24	4-1/2	44	20	57-1/4
D.500	2	195-1/8	37-3/8	40-3/4	36-3/4	43-3/8	33-1/16	38-1/8	3-3/4	5-1/4	51-5/8	7-13/16	42-13/16	31	79	124	160-7/16	18-3/4	16	6-1/8	50-1/2	22-3/4	8	11	7-1/2	24	4-1/2	44	20	57-1/4
D.750	2	195-1/8	37-3/8	40-3/4	36-3/4	43-3/8	33-1/16	38-1/8	3-3/4	5-1/4	51-5/8	7-13/16	42-13/16	31	79	124	160-7/16	18-3/4	16	6-1/8	50-1/2	22-3/4	8	11	7-1/2	24	4-1/2	44	20	57-1/4
D.500	3	203-1/8	41-3/8	47-7/8	43-3/8	51-3/8	38-1/16	46-1/8	5-1/4	5-1/4	76-3/8	9-1/2	47-13/16	35	84	133	172-7/16	22	19	6-1/2	56	28	8	7	4-1/2	30	4-1/2	41-1/8	23-1/2	52-7/8
D.750	3	203-1/8	41-3/8	47-7/8	43-3/8	51-3/8	38-1/16	46-1/8	5-1/4	5-1/4	76-3/8	9-1/2	47-13/16	35	84	133	172-7/16	22	19	6-1/2	56	28	8	7	4-1/2	30	4-1/2	41-1/8	23-1/2	52-7/8
D.1000	3	203-1/8	41-3/8	47-7/8	43-3/8	51-3/8	38-1/16	46-1/8	5-1/4	5-1/4	76-3/8	9-1/2	47-13/16	35	84	133	172-7/16	22	19	6-1/2	56	28	8	7	4-1/2	30	4-1/2	41-1/8	23-1/2	52-7/8
D.1000	4	243-9/16	48-7/16	58-5/8	51-3/8	58-3/8	46-1/8	53-1/8	5-1/4	5-1/4	71-3/8	13-9/16	66-5/16	42	115-3/16	171-3/16	219-3/16	24-7/8	24-7/8	8-9/16	57-1/8	33	10	11	8	36	4-1/2	41-1/8	28-7/8	52-7/8
D.1500	4	243-9/16	48-7/16	58-5/8	51-3/8	58-3/8	46-1/8	53-1/8	5-1/4	5-1/4	71-3/8	13-9/16	66-5/16	42	115-3/16	171-3/16	219-3/16	24-7/8	24-7/8	8-9/16	57-1/8	33	10	11	8	36	4-1/2	41-1/8	28-7/8	52-7/8

EXHAUST UNIT DIMENSIONS			
MODEL #	Y	YY	Z *
DU12HFA	14-1/2	22	19
NCA8FA	18-1/2	27-1/4	21
DU25HFA			
DU30HFA			
DU33HFA			
NCA10FA	21-1/2	30-1/4	21
DU50HFA			
NCA14FA	23	33-3/4	24-3/4
DU75HFA			
DU85HFA			
NCA16FA	23-1/2	39-3/8	28
NCA18FA	29-1/2	38-7/8	28
NCA24FA	30-5/8	43-3/8	33
NCA30FA	33-1/2	52-3/4	40

MODEL	UNIT SIZE	BURNER LENGTH	CAPACITY (MBH)		GAS PRESSURE		GAS CONNECTION
			MIN	MAX	MIN	MAX	"I" (NPT)
D.250	1	6'	18	275	7" WC	14" WC	3/4
D.500	1	12'	18	550	7" WC	14" WC	3/4
D.250	2	6'	18	275	7" WC	14" WC	1
D.500	2	12'	18	550	7" WC	14" WC	1
D.750	2	18'	27.5	825	7" WC	14" WC	1
D.500	3	12'	18	550	7" WC	14" WC	1
D.750	3	18'	27.5	825	7" WC	14" WC	1
D.1000	3	24'	36.6	1100	7" WC	14" WC	1
D.1000	4	24'	36.6	1100	7" WC	5 PSI	1-1/4
D.1500	4	30'	45.8	1375	7" WC	5 PSI	1-1/4

CELDEK EVAPORATIVE COOLING UNIT			
TOT. WEIGHT	MEDIA SIZE & QTY	NOZZLES	MAX. FLOW RATE
1080 LBS	25"x32"x12"	20	6.5 GPH
1085 LBS	25"x32"x12"	20	6.5 GPH
1475 LBS	30"x36"x12"	28	8.4 GPH
1480 LBS	30"x36"x12"	28	8.4 GPH
1485 LBS	30"x36"x12"	28	8.4 GPH
1905 LBS	38"x43"x12"	35	10.15 GPH
1910 LBS	38"x43"x12"	35	10.15 GPH
1915 LBS	38"x43"x12"	35	10.15 GPH
2785 LBS	45"x54"x12"	42	12.6 GPH
2800 LBS	45"x54"x12"	42	12.6 GPH

V-BANK
FILTER SIZE & QTY
16"x20"x2" (8)
16"x20"x2" (8)
20"x25"x2" (8)
20"x25"x2" (8)
20"x25"x2" (8)
16"x20"x2" (15)
16"x20"x2" (15)
16"x20"x2" (15)
20"x25"x2" (12)
20"x25"x2" (12)

OPTIONAL MIXING BOX FILTERS
FILTER SIZE & QTY
10"x16"x2" (5)
10"x16"x2" (5)
20"x25"x2" (2), 16"x25"x2" (1)
20"x25"x2" (2), 16"x25"x2" (1)
20"x25"x2" (2), 16"x25"x2" (1)
15"x20"x2" (4), 15"x15"x2" (2)
15"x20"x2" (4), 15"x15"x2" (2)
15"x20"x2" (4), 15"x15"x2" (2)
18"x25"x2" (4), 16"x20"x2" (2)
18"x25"x2" (4), 16"x20"x2" (2)

MAX. ROOF OPENING 2" SMALLER THAN CURB OUTSIDE DIMENSION
**MAX. EVAP WATER PRESSURE = 50 PSI @ 70 DEG. F

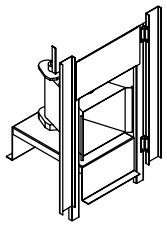
Direct Fired Profile Plate Specifications:

Description:
Direct fired burners shall have patented (US Patent No: US6629523B2), self-adjusting profile plates designed to ensure proper air velocity and pressure drop across the burner. Profile plates shall allow burners to achieve clean combustion by limiting by-product levels to a maximum of 5ppm of carbon monoxide (CO), and 0.5ppm of nitrogen dioxide (NO2).

Application:
Spring-loaded burner profile plates are engineered to automatically react to the momentum of a fresh air stream, without the need for any motors or actuators to mechanically adjust them. With this feature, all DF units are designed for demand control ventilation (DCV) requirements.

Certifications:
All profile plate assemblies shall be included in the DF unit's ETL listing and comply with combined safety standards ANSI Z83.4 and CSA 3.7 (non-recirculating DF heaters) and ANSI Z83.18 (recirculating DF heaters).

General Construction:
-Profile plates shall be formed from G90 galvanized steel.
-Profile plates shall vary in size per unit.
-Profile plates shall be mounted along the same plane as the discharge of the burner.
-Design shall incorporate properly torqued, permanently mounted spring hinges.
-Spring hinges shall be made from plated steel.



Direct Fired (DF) Profile Plate Assembly