

EXHAUST FAN INFORMATION - Job#3338996

FAN UNIT NO.	TAG	FAN UNIT MODEL #	CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS.)	SDNES
1	KEX-1: KITCHEN LEFT	DU85HFA	1378	0.750	1097	0.750	0.2600	1	230	5.2	436 FPM	97	10.6
2	KEX-2: KITCHEN RIGHT	DU85HFA	1378	0.750	1097	0.750	0.2600	1	230	5.2	436 FPM	97	10.6

MUA FAN INFORMATION - Job#3338996

FAN UNIT NO.	TAG	FAN UNIT MODEL #	BLOWER	HOUSING	MIN CFM	DESIGN CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	WEIGHT (LBS.)	SDNES	BURNER EFFICIENCY(%)
3	MUA-1: KITCHEN	A1-D.250-G10	G10	A1-D.250	1000	2520	0.500	1227	2.000	1.4410	3	208	6.1	643	23	92

GAS FIRED MAKE-UP AIR UNIT(S)

FAN UNIT NO.	TAG	INPUT BTUs	OUTPUT BTUs	TEMP. RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE
3	MUA-1: KITCHEN	192900	177468	65 deg F	7 in. w.c. - 14 in. w.c.	Natural

FAN OPTIONS

FAN UNIT NO.	TAG	OPTION (Qty. - Descr.)
1	KEX-1: KITCHEN LEFT	1 - Grease Box
		1 - Fan Base Ceramic Seal - Installed At Plant - For Grease Ducts
		1 - ECM Wiring Package-Exhaust - PWM Signal from ECPMD3 Prewire (NIDEC Motor)
2	KEX-2: KITCHEN RIGHT	1 - Grease Box
		1 - Fan Base Ceramic Seal - Installed At Plant - For Grease Ducts
		1 - ECM Wiring Package-Exhaust - PWM Signal from ECPMD3 Prewire (NIDEC Motor)
3	MUA-1: KITCHEN	1 - AC Interlock Relay - 24VAC Coil
		1 - Motorized Backdraft Damper for A1-D Housing
		1 - Low Fire Start
		1 - Inlet Pressure Gauge, 0-35"
		1 - Manifold Pressure Gauge, -5 to 15" wc
		1 - Extra Set of Belts
		1 - Curb Duct Hanger
1 - Separate 120V Wiring Package (Required and used only for DCV or Prewire with VFD) - Three Phase Only		

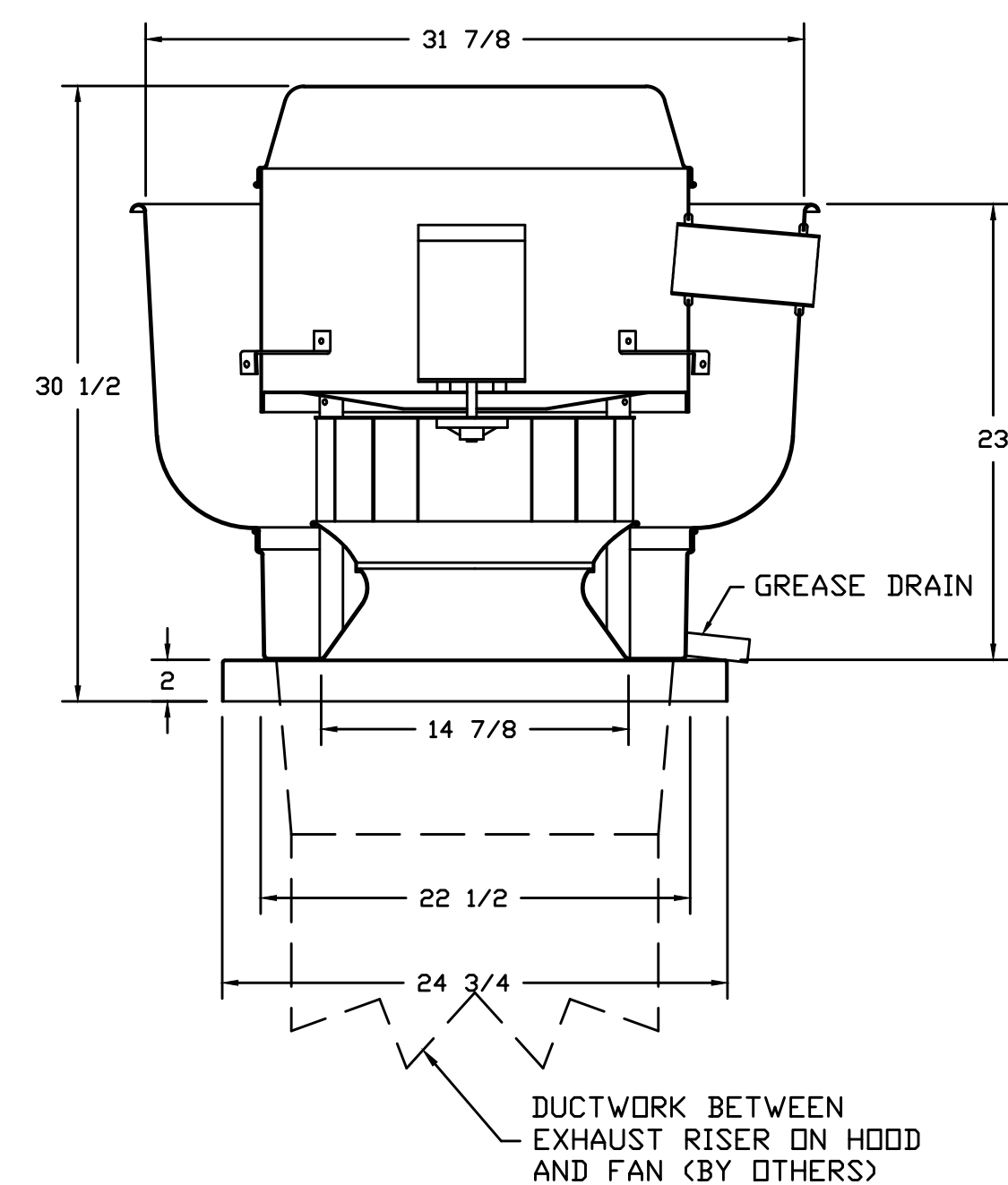
CURB ASSEMBLIES

NO.	DN FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	KEX-1: KITCHEN LEFT	36 LBS	Curb	23.000"W x 23.000"L x 20.000"H Vented Hinged
2	# 2	KEX-2: KITCHEN RIGHT	36 LBS	Curb	23.000"W x 23.000"L x 20.000"H Vented Hinged
3	# 3	MUA-1: KITCHEN	63 LBS	Curb	21.000"W x 71.000"L x 20.000"H Insulated

FAN SOUND INFORMATION

FAN UNIT NO.	MOTOR	RPM	LWA	SDNES	DBA	DISTANCE FT	OCTAVE 1	OCTAVE 2	OCTAVE 3	OCTAVE 4	OCTAVE 5	OCTAVE 6	OCTAVE 7	OCTAVE 8
1	Exhaust	1097	72.4	10.6	60.9	5	72.2	75.8	74	68.1	65.3	64.9	61.1	54.1
2	Exhaust	1097	72.4	10.6	60.9	5	72.2	75.8	74	68.1	65.3	64.9	61.1	54.1
3	Supply	1227	84.7	23	73.2	5	86	86.3	84.6	81.3	77.4	77.8	73.7	70.1

FANS #1 (KEX-1: KITCHEN LEFT), #2 (KEX-2: KITCHEN RIGHT) - DU85HFA EXHAUST FAN FEATURES:



- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS)
- ROOF MOUNTED FANS
- RESTAURANT MODEL
- UL705 AND UL762 AND ULC-S645
- 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 GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

OPTIONS

- GREASE BOX
- FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS
- ECM WIRING PACKAGE-EXHAUST - PWM SIGNAL FROM ECPMD3 PREWIRE (NIDEC MOTOR)

DUCTWORK BETWEEN EXHAUST RISER ON HOOD AND FAN (BY OTHERS)

BASIS OF DESIGN:

THE BASIS OF DESIGN IS CAPTIVE AIR, EQUAL GREENHECK, COOK OR APPROVED EQUAL MAY BE USED.

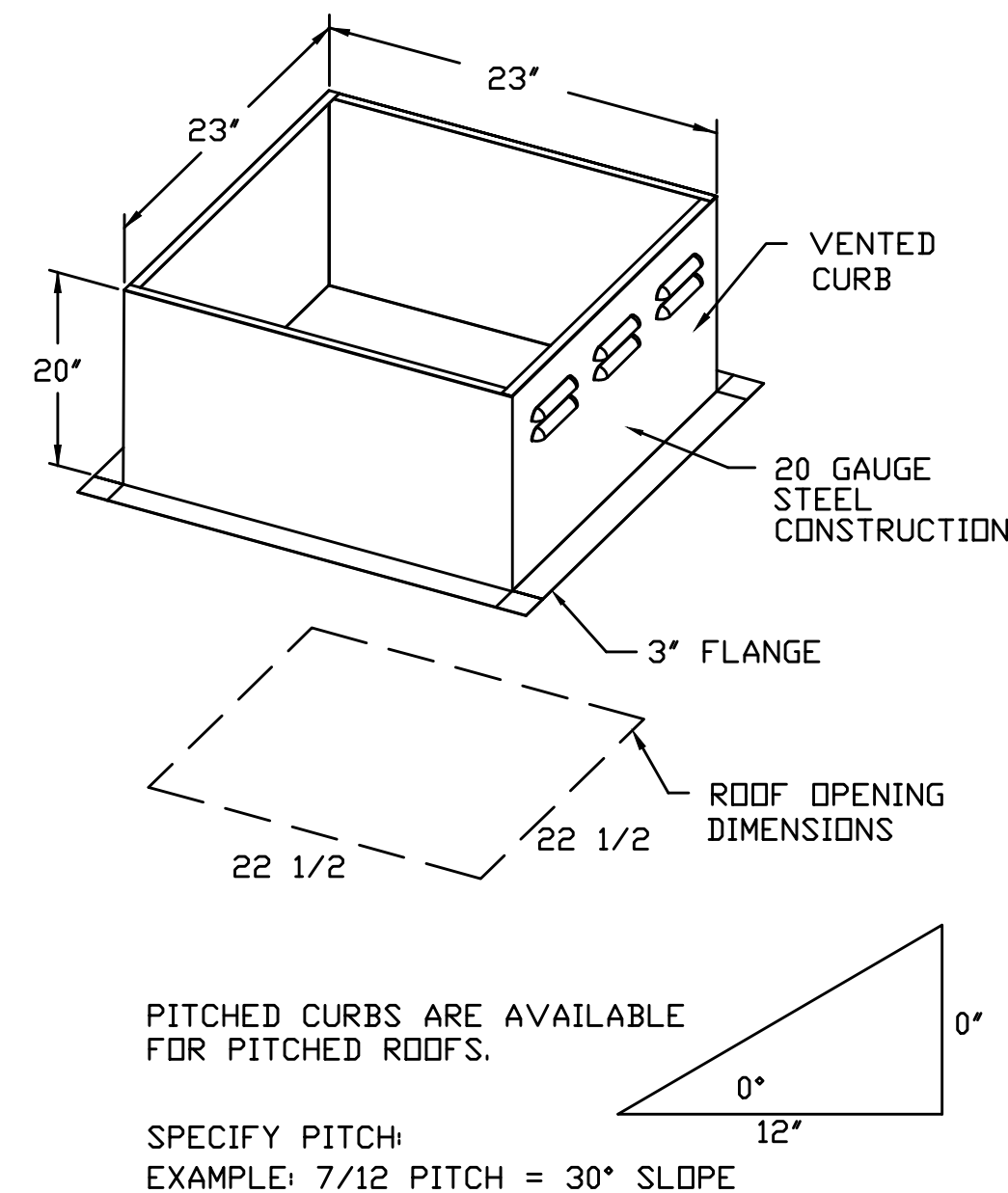
THE EQUIPMENT SCHEDULES, DETAILS AND INSTALLATION GUIDES ARE BASED ON THE CAPTIVE AIR DESIGN, OTHER MANUFACTURES MAY BE USED, BUT IN ALL CASES THE CONTRACTOR IS RESPONSIBLE FOR DELIVERING A FULLY FUNCTIONAL SYSTEM.

THIS DESIGN USES A DEMAND CONTROL VENTILATION SYSTEMS (DCV) TO REDUCE ENERGY CONSUMPTION DURING LOW COOKING SITUATIONS, ANY SUBSTITUTIONS MUST MEET ALL THE ETO (ENERGY TRUST OF OREGON) REQUIREMENTS FOR INCENTIVES. PROVIDE VARIABLE SPEED EXHAUST FANS AND MAKE UP AIR UNIT.

PROVIDE ANY ADDITIONAL HOOD SHROUD MATERIAL AS NEEDED TO CONCEAL ANY DUCT WORK BETWEEN TOP OF HOOD AND CEILING PER HEALTH CODE.

JOB Foster Homeless Shelter Portland HVAC	
LOCATION PORTLAND, OR, 97214	
DATE 3/14/2018	JOB # 3338996
DWG # 1	DRAWN BY Sean Elias
REV.	SCALE

REFERENCE INFORMATION:



PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.

SPECIFY PITCH:
EXAMPLE: 7/12 PITCH = 30° SLOPE

"AMERICAN MANUFACTURED IS PREFERRED"

RECORD DRAWING:
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AS-BUILT PREPARED 1.22.2020

FOSTER SHELTER
6144 SE FOSTER RD., PORTLAND, OREGON 97206
CLIENT: MULTNOMAH COUNTY



PROJECT NO. 17-0918	ISSUE DATE 05.04.2018
REVISIONS	
△	CHECKSHEET 5.23.2018
△	OWNER CHANGES 2.26.2019

SHEET

CAPTIVE AIR
DETAILS
M5.0
PERMIT SET
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