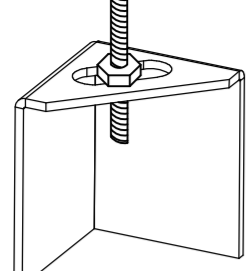


ND-2 HANGING ANGLE DETAIL

1/2" DIA. ALL THREAD ROD CONNECTED TO ROOF JOIST THROUGH ANOTHER HANGING ANGLE



*ROD AND NUTS TO BE SUPPLIED BY INSTALLING CONTRACTOR HANGING ANGLE IS PRE-FINISHED AT FACTORY

HANGING ANGLE LOCATIONS

HOOD STYLE	DIM FROM REAR	DIM FROM FRONT (24" H)	DIM FROM FRONT (30" H)
CANOPY ND2	4.166"	2.246"	2.246"
ND2-PSP-F	4.166"	2.246"	2.246"
BACKSHELF BD-2	4.166"	2.246"	-
VHB/VHB-G	36"x36"	42"x42"	48"x48"
FRONT/BACK DIMS BY SIZE	2.246"	2.246"	2.246"

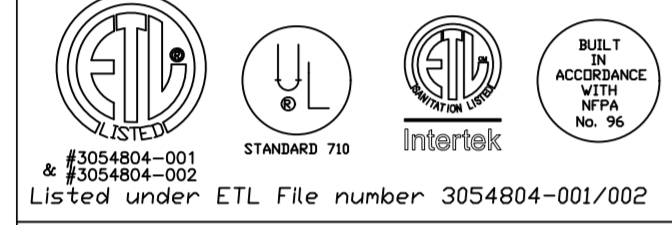
CALCULATIONS UTILIZED

EXHAUST CFM=LENGTH OF HOOD X CFM/LIN.FT. (LOAD)
 SUPPLY CFM=EXHAUST CFM X PERCENTAGE REQUIRED
 TOTAL DUCT AREA=144 X $\frac{CFM}{FPM}$
 DUCT LENGTH= $\frac{TOTAL DUCT AREA}{DUCT DEPTH}$

*CAPTIVE-AIRE DUCT CONNECTION SIZES ARE CALCULATED USING AN EXHAUST VELOCITY OF 1500-1800 FPM AND A SUPPLY VELOCITY OF 300-400 FPM

BUILDING CODES

CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH:



CLEARANCE TO COMBUSTIBLES

CAPTIVE-AIRE HOODS HAVE OPTIONAL CLEARANCE REDUCTION SYSTEMS AVAILABLE AS FOLLOWS:

MATERIAL	CLEARANCE REDUCTION SYSTEM
NON-COMBUSTIBLE	NONE REQUIRED
LIMITED-COMBUSTIBLE	3" UNINSULATED STANDOFF
COMBUSTIBLE	1" INSULATED STANDOFF

GENERAL NOTES

INSTALLATION

- ALL ELECTRICAL "FIELD" CONNECTIONS AND RELATED INTERCONNECTIONS BY ELECTRICAL CONTRACTORS.
- ALL PLUMBING "FIELD" CONNECTIONS AND RELATED INTERCONNECTIONS BY PLUMBING CONTRACTORS.
- HANGING BRACKETS LOCATED AND WELDED AS SHOWN ON PLANS. ALL OTHER HANGER MATERIALS PROVIDED BY INSTALLING CONTRACTORS.
- ALL CONNECTIONS FROM CAPTIVE-AIRE DUCT PER MECHANICAL CONTRACTOR'S PLANS.
- COOKING EQUIPMENT TO SHUTOFF IN EVENT OF FIRE.
- EXHAUST FANS TO TURN ON IN EVENT OF FIRE.
- ALL LIGHTS FIXTURE SHOWN INSTALLED BY CAPTIVE-AIRE ARE FACTORY PREWIRED. INTERCONNECTIONS BETWEEN HOODS AND TO SWITCHES BY ELECTRICAL CONTRACTORS.
- LAMPS FOR LIGHT FIXTURES BY INSTALLING CONTRACTORS.
- SEISMIC RESTRAINTS ARE RESPONSIBILITY OF INSTALLING CONTRACTOR.
- INSTALLING CONTRACTORS ASSUME ALL RELATED RESPONSIBILITY FOR VERIFICATION OF DIMENSIONAL DATA CONTAINED ON THESE DOCUMENTS FOR ACCURACY, INTEGRATION, AND ADMINISTRATION OF CODE REQUIREMENTS IN EFFECT PRIOR TO ANY RELEASE FOR PRODUCTION OF EQUIPMENT SHOWN.

BALANCE

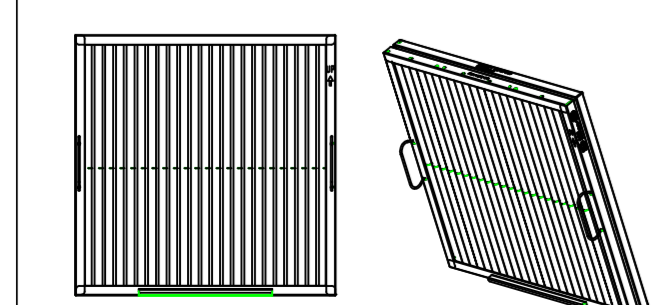
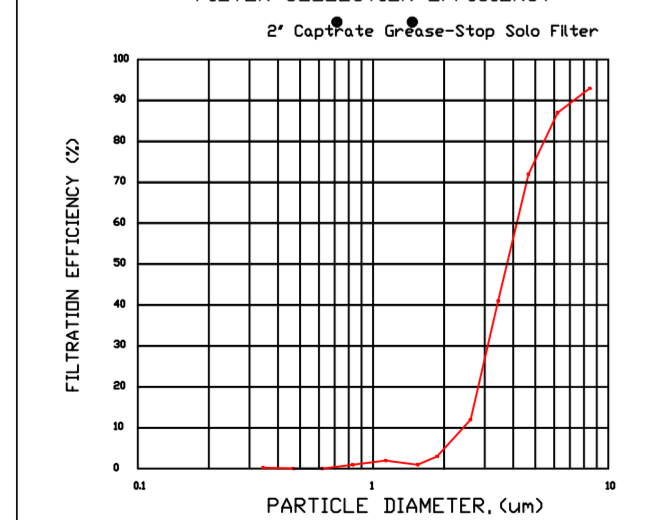
- KITCHEN HOODS MUST BE BALANCED WITH KITCHEN TO DINING AREA.
- RESTAURANT SHALL BE POSITIVE WITH RESPECT TO AMBIENT PRESSURE.

ADDITIONAL

- WRITTEN HOOD DIMENSIONS HAVE PRECEDENCE OVER SCALE.
- SIGNED AND "APPROVED" COPIES OF THIS DOCUMENT MUST BE RECEIVED BY THE FACTORY PRIOR TO COMMENCEMENT OF FABRICATION.

FILTER DETAIL

FILTER COLLECTION EFFICIENCY



CaptiveAire Captrate Solo Filter
 ETL Listed Grease Extracting Filter
 Made From 430 Stainless Steel

HOOD INFORMATION - JOB#5289253

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX. COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM RISERS					HOOD CONSTRUCTION	HOOD CONFIG END TO END	ROW	PATENT NUMBERS
										WIDTH	LENG	HEIGHT	DIA	CFM				
1	GRIDDLE HD	5424 ND-2	CAPTIVEAIRE	8' 0"	450 DEG	I	MEDIUM	200	1600	4'	14'	1600	1497	-0.734'	430 SS WHERE EXPOSED	ALONE	FRONT	EXHAUST HOODS ND-2/BD-2/SND-2 (CANADA) - CA PATENT 2520435.C
2	FRY HD	5424 ND-2	CAPTIVEAIRE	5' 0"	450 DEG	I	MEDIUM	155	775	4'	10'	775	1421	-0.436'	430 SS WHERE EXPOSED	ALONE	ALONE	
3	DISH HD	4224 VHB-G	CAPTIVEAIRE	3' 6"	700 DEG	II	N/A	150	525	4'	10'	525	963	-0.069'	304 SS 100%	ALONE	ALONE	

HOOD INFORMATION

HOOD NO	TAG	TYPE	FILTER(S)		LIGHT(S)		VIRE GUARD		UTILITY CABINET(S)		FIRE SYSTEM	ELECTRICAL	SWITCHES	FIRE HOOD SYSTEM/HANGING PIPING WEIGHT	
			QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY	RECESSED ROUND	NO	LEFT					SIZE
1	GRIDDLE HD	CAPTRATE SOLO FILTER	5	16"	16"	85% SEE FILTER SPEC	2	RECESSED ROUND	NO	LEFT	12"x54"x24"			1 LIGHT 1 FAN	ND 513 LBS
2	FRY HD	CAPTRATE SOLO FILTER	3	16"	16"	85% SEE FILTER SPEC	2	RECESSED ROUND	NO						ND 310 LBS
3	DISH HD						0								ND 161 LBS

HOOD OPTIONS

HOOD NO	TAG	OPTION
1	GRIDDLE HD	FIELD WRAPPER 18.00" HIGH FRONT, LEFT, RIGHT. LEFT QUARTER END PANEL 23" TOP WIDTH, 0" BOTTOM WIDTH, 23" HIGH 430 SS. RIGHT QUARTER END PANEL 23" TOP WIDTH, 0" BOTTOM WIDTH, 23" HIGH 430 SS. RISER SENSOR INSTALL 3IN DBL.
2	FRY HD	FIELD WRAPPER 18.00" HIGH FRONT, LEFT, RIGHT. RIGHT END PANEL 27" TOP WIDTH, 24" BOTTOM WIDTH, 39.5" HIGH 430 SS. LEFT QUARTER END PANEL 23" TOP WIDTH, 0" BOTTOM WIDTH, 23" HIGH 430 SS. RISER SENSOR INSTALL 3IN DBL.
3	DISH HD	FIELD WRAPPER 18.00" HIGH FRONT, LEFT, RIGHT.

SPECIFICATION: CAPTRATE GREASE-STOP SOLO FILTER

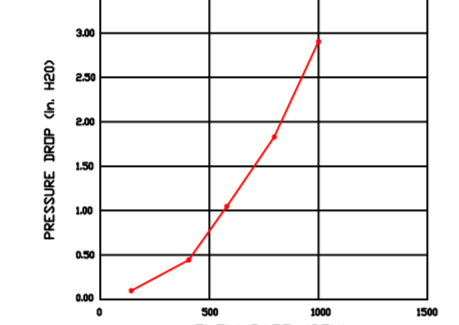
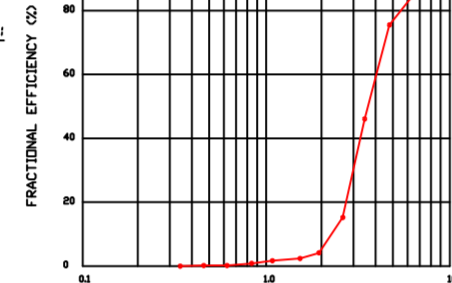
THE CAPTRATE GREASE-STOP SOLO FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE S-BAFFLE DESIGN IN CONJUNCTION WITH A SLOTTED REAR BAFFLE DESIGN, TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY.

FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

UNITS SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WHEN ASSEMBLED.

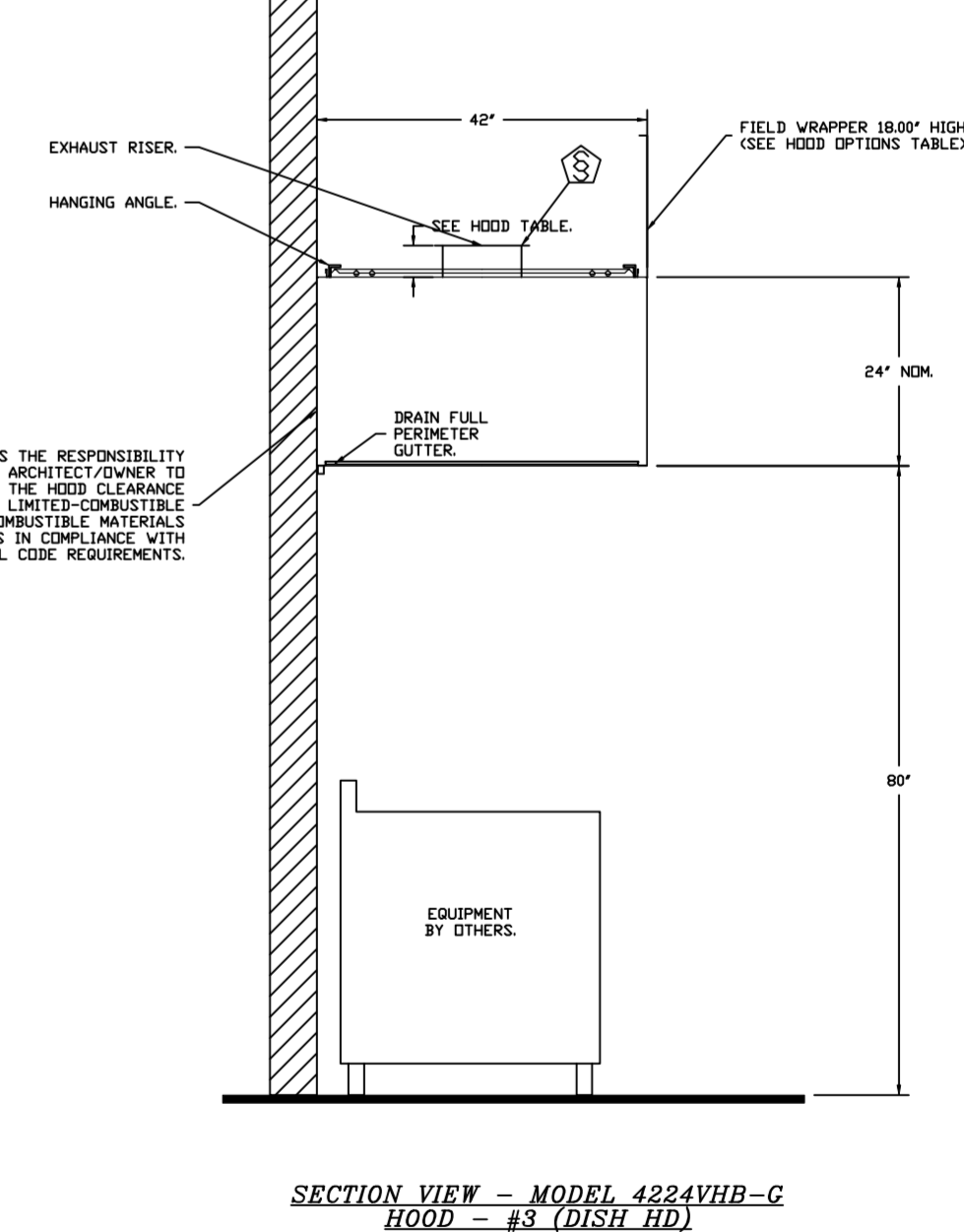
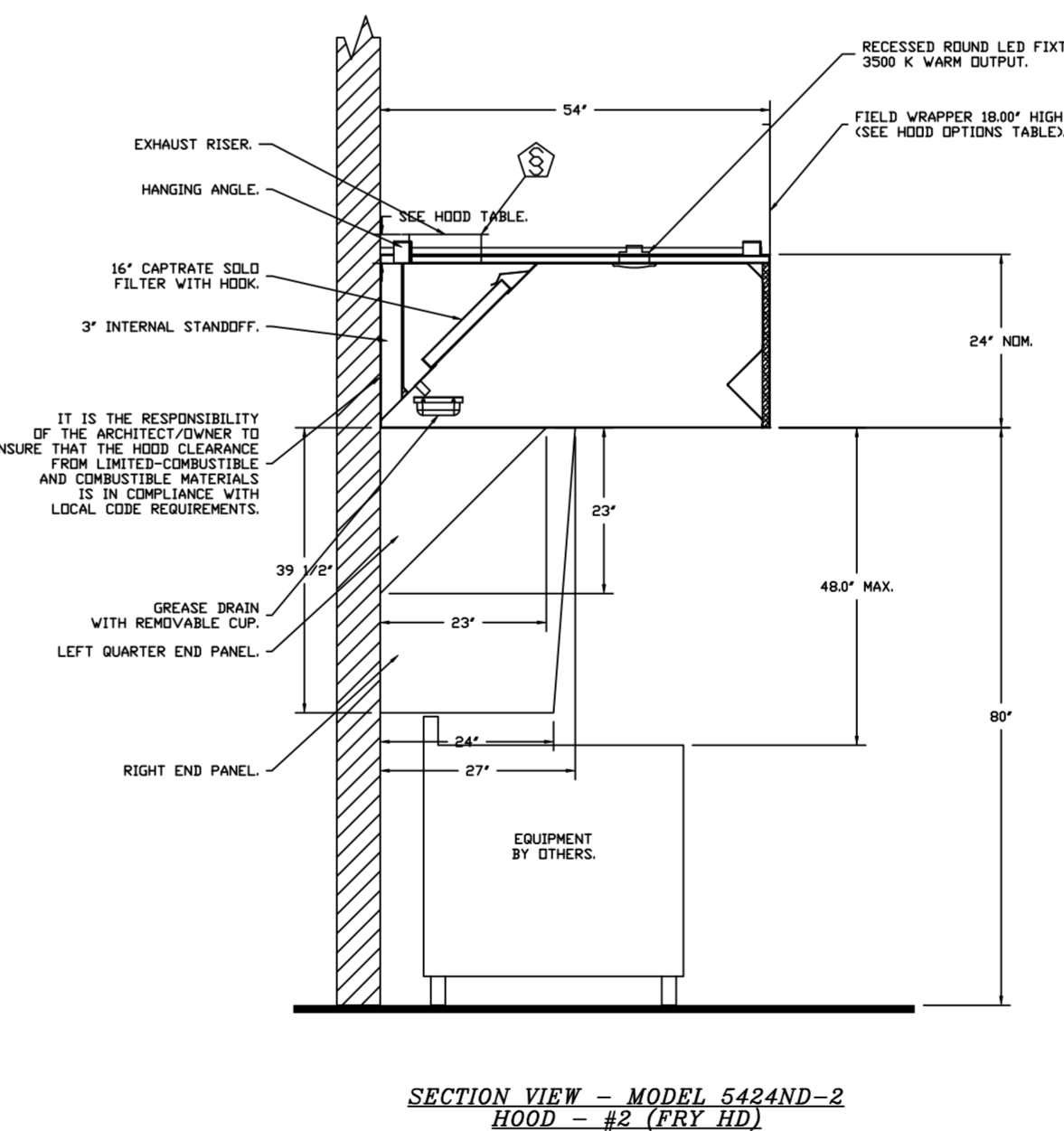
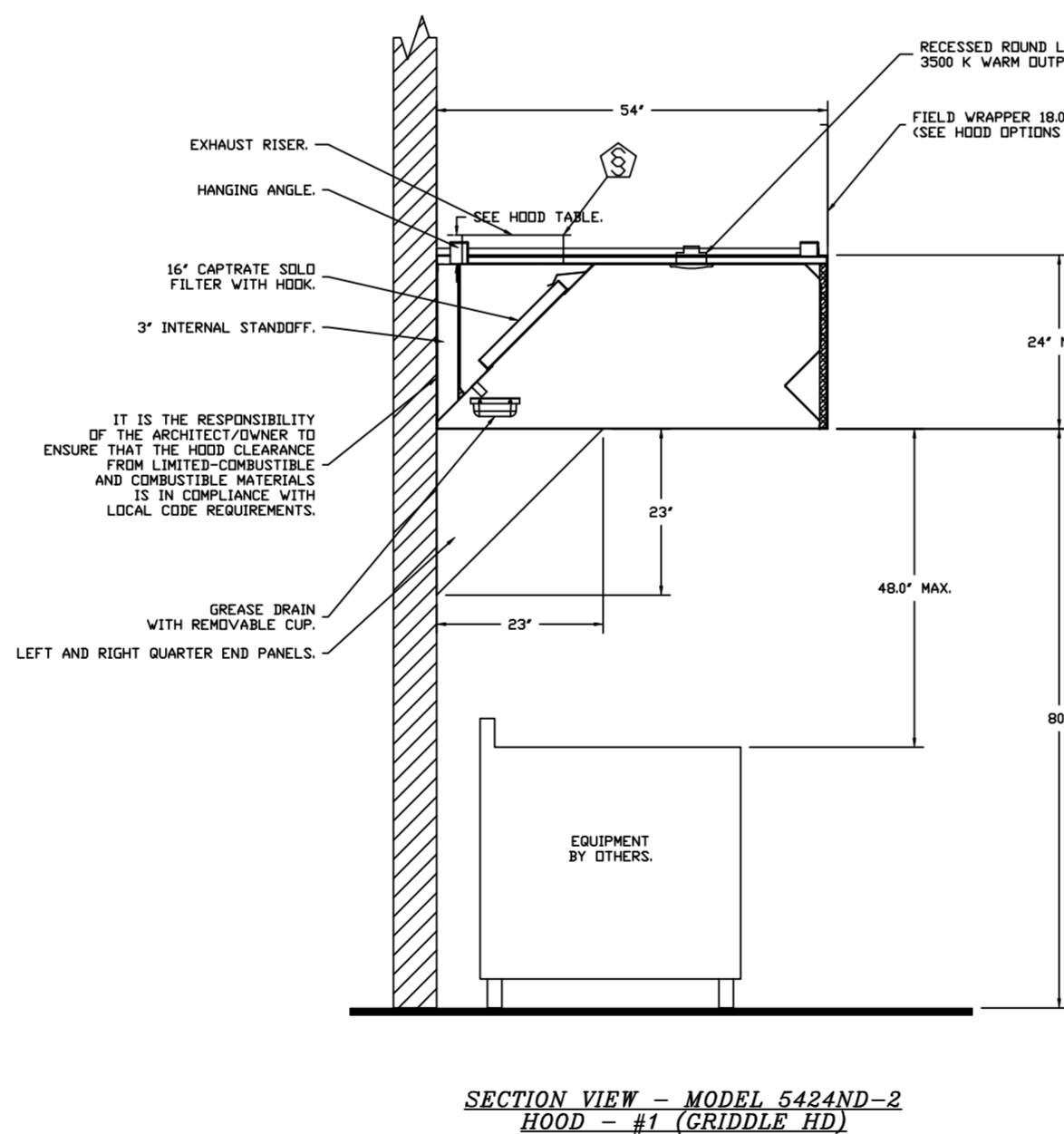
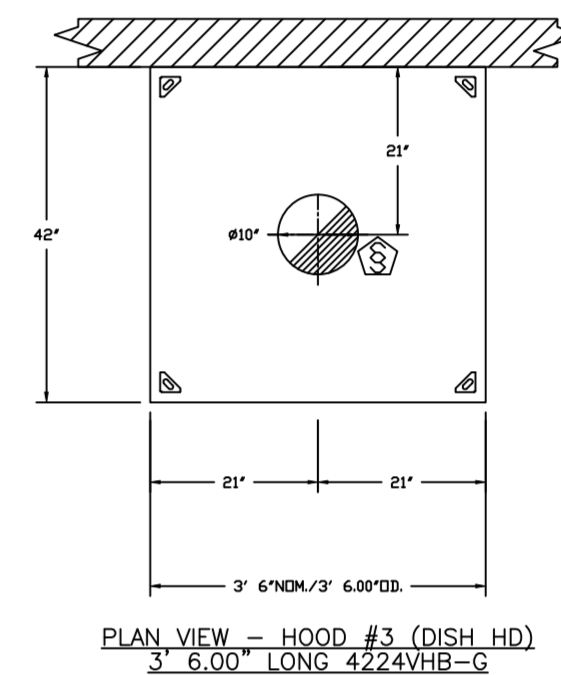
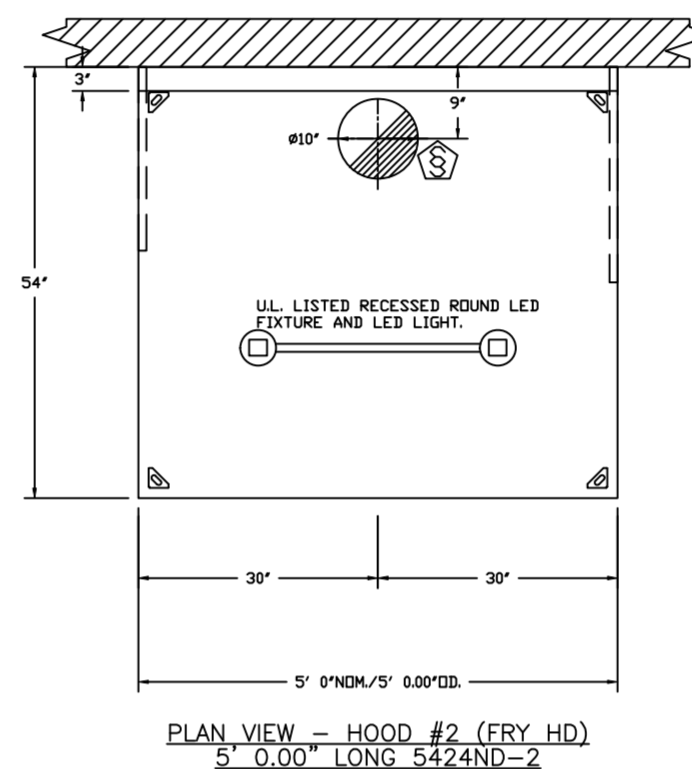
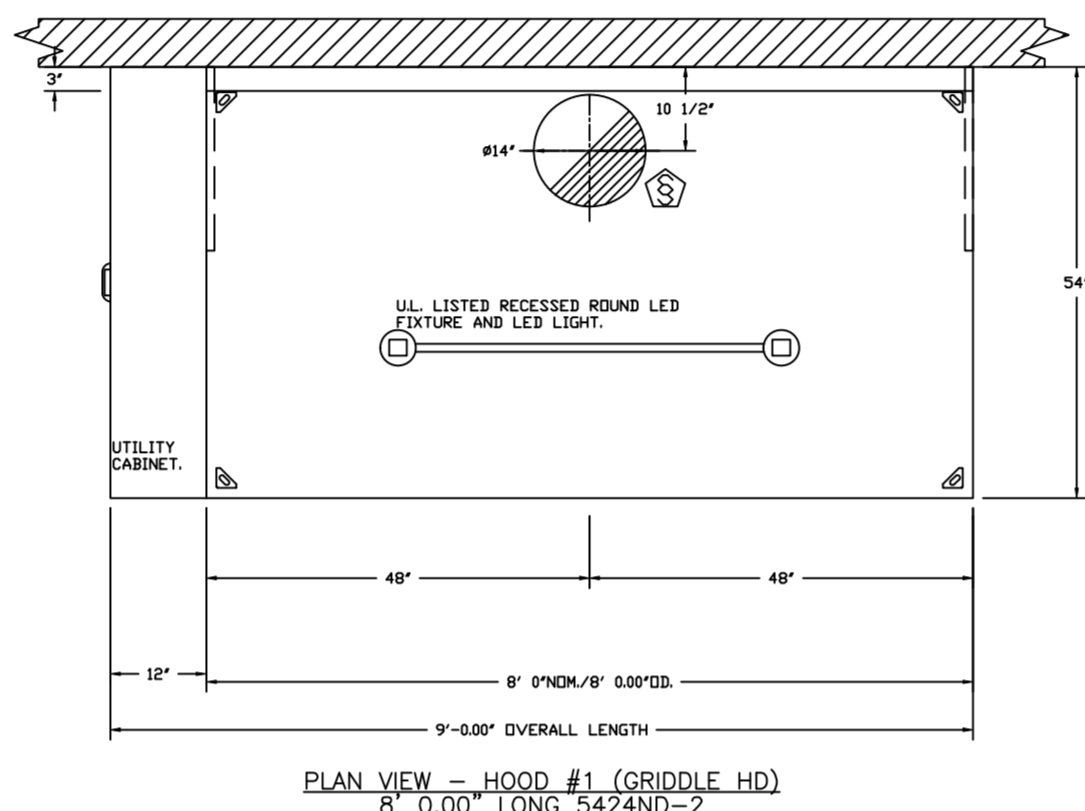
GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 70% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 80% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 10 INCHES OF WATER GAUGE. THE CAPTRATE GREASE-STOP SOLO WAS TESTED TO ASTM STANDARD ASTM F2919-05. MANUFACTURER APPROVED FOR USE IN SLOTTED PLASTIC APPLICATIONS AS A SPARK ARRESTER.

EFFICIENCY VS. PARTICLE DIAMETER



CAPTIVE-AIRE FILTERS ARE BUILT IN COMPLIANCE WITH:

NSF #96
 NSF STANDARD #2
 UL STANDARD #1646
 INT. MECH. CODE (IMC)
 ULC-5649.



FOR QUESTIONS, CALL THE:
 KANSAS CITY REGIONAL OFFICE
 1126 SWIFT STREET, KANSAS CITY, MO 64116
 PHONE: (816) 221-8575
 FAX: (816) 221-8311

CUSTOMER APPROVAL TO MANUFACTURE:

Approved as Noted
 Approved with NO Exception Taken
 Revise and Resubmit
 SIGNATURE _____ Date _____
 Your Title _____

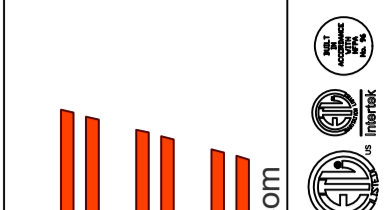
***** NOTE *****
 ALL WALLS AND STRUCTURES THAT COME WITHIN 18' OF HOOD MUST BE METAL STUDS AND SHEETROCK. WOOD STUDS OR ANY OTHER COMBUSTIBLE MATERIAL WITHIN 18' OF HOOD NO ALLOWED.

***** NOTE *****
 HOOD MANUFACTURER RECOMMENDS NO RETURNS OR 4-WAY DIFFUSERS WITHIN 10 FEET OF HOOD IN ALL DIRECTION.

***** NOTE *****
 MAKEUP AIR SHALL BE DELIVERED INTO SPACE IN MANNER THAT WILL NOT DISRUPT HOODS ABILITY TO CAPTURE AND CONTAIN.

REVISIONS

DESCRIPTION	DATE:



Freddy's - Laredo, TX
 LAREDO, TX, 78040

DATE: 1/24/2022
 DWG.#: 5289253
 DRAWN BY: michael.co
 SCALE: 1/2" = 1'-0"
 MASTER DRAWING

SHEET NO.
 1

EXHAUST FAN INFORMATION - JOB#5289253

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL.	HP	BHP	PHASE	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SONES
1	EF-1 (GRIDDLE)	1	CASRE18DD	CAPTIVEAIRE	1600	1.500	1107	DDP-PREMIUM	1.000	0.6500	3	208	3.8	928 FPM	261	13.6
2	EF-2 (FRYER)	1	DUS0HFA	CAPTIVEAIRE	775	1.250	1532	TEAD-ECM	0.500	0.3950	1	115	6.3	295 FPM	101	16.6
3	DISH EF	1	DUS3HFA	CAPTIVEAIRE	525	0.800	1487	TEAD-ECM	0.333	0.1990	1	115	4.3	260 FPM	67	14.5

DDAS/RTU FAN SCHEDULE - JOB#5289253

FAN UNIT NO	TAG	QTY	DDAS/RTU MODEL #	MANUFACTURER	BLDWR	RETURN AIR CFM	MAX OUTSIDE AIR CFM	TOTAL CFM	ESP	HP	BHP	PHASE	VOLT	MCA	MDCP	WEIGHT (LBS)
4	DDAS-1	1	CASRTU3-1200-18-207-DDAS	CAPTIVEAIRE	18P-3	0	2800	2800	0.500	2.000	1.4380	3	208	79.1A	80A	2518

DDAS/RTU COOLING SCHEDULE

FAN UNIT NO	TAG	COMPRESSOR	OUTDOOR FAN	INDOOR COIL	OUTSIDE COIL	OUTSIDE AIR DB TEMP	OUTSIDE AIR WB TEMP	MIXED AIR DB TEMP	MIXED AIR WB TEMP	LEAVING DB TEMP	LEAVING WB TEMP	LEAVING DP TEMP	TOTAL CAPACITY	SENSIBLE CAPACITY	LATENT CAPACITY	REHEAT LEAVING DB TEMP	REHEAT LEAVING WB TEMP	DESIGNED REHEAT CAPACITY	MAX REHEAT CAPACITY	REHEAT LEAVING RELATIVE HUMIDITY	MOISTURE REMOVAL RATE	IEER					
4	DDAS-1	20	190-240	3	200-240	3	60	3	7	11.9 SQFT	82.5°F	77.6°F	82.5°F	77.6°F	51.9°F	48.3°F	45.2°F	264.0 MBH	92.3 MBH	171.7 MBH	70.0°F	56.0°F	57 MBH	129.6 MBH	41	154.8 LBS/HR	18.2

DDAS/RTU HEATING SCHEDULE

FAN UNIT NO	TAG	INPUT BTUs	OUTPUT BTUs	TEMP RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE	BURNER EFFICIENCY(%)
4	DDAS-1	159848	127878	40°F	7 IN. W.C. - 14 IN. W.C.	NATURAL	80

FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION
1	EF-1 (GRIDDLE)	1	UTILITY SET GREASE CUP
		1	2 YEAR PARTS WARRANTY
2	EF-2 (FRYER)	1	GREASE BOX
		1	UPBLAST FAN WHEEL ACCESS PORT
		1	36" TALL STRAIGHT WIND BAND EXTENSION 13 (SHIPS LODSE)
		1	GUY LINE EYE BOLTS - USED FOR 3 GUY LINE TIE OFF POINTS
3	DISH EF	1	ECM WIRING PACKAGE - PWM SIGNAL FROM ECM03 PREWIRE (TELCO MOTOR), CCW ROTATION
		1	2 YEAR PARTS WARRANTY
		1	SCR-II BIRD SCREEN
		1	1 15-BDD DAMPER
		1	ECM WIRING PACKAGE - MANUAL DR 0-10VDC REFERENCE SPEED CONTROL (TELCO MOTOR), CCW ROTATION
		1	2 YEAR PARTS WARRANTY
		1	INLET PRESSURE GAUGE, 0-35"
		1	MANIFOLD PRESSURE GAUGE, 0 TO 10" WC, 1 FURNACE
		1	RTU TOTAL CFM MONITORING
		1	SINGLE POINT ELECTRICAL CONNECTION FOR RTU 750VA TRANSFORMER USED. IF A NON-DCV PREWIRE CONTROLS THIS UNIT, THE #8, #47, "MAY" OR "E2" PREWIRE OPTION MUST BE SELECTED. DOES NOT PROVIDE SUPPLY STARTER IN PREWIRE.
4	DDAS-1	1	CASLINK BUILDING MONITORING SYSTEM - INTERNET OR CELLULAR CONNECTION REQUIRED
		1	RTU DOWN DISCHARGE
		1	2" MERV 13 FILTERS FOR RTU3 (QTY. 4)
		1	2" MERV 8 FILTERS FOR RTU3 (QTY. 4)
		1	OVERHEAT STAT
		1	VFD FACTORY MOUNTED AND WIRED IN RTU COMMERCIAL CONTROL VESTIBULE
		1	RTU3 CURB DUCT HANGER
		1	RTU3 HAIL GUARD
		1	VAV PACKAGE W/ 0-10VDC INPUT CONTROL (571 VFD INCLUDED)
		1	OCCUPIED SCHEDULING
		1	CLOGGED FILTER SWITCH - NOTIFICATION ON HMI
		1	20 TON MODULATING COOLING OPTION, 208/230V, R410A REFRIGERANT, VARIABLE SPEED COMPRESSOR, ECM CONDENSING FANS
		1	20 TON MODULATING REHEAT OPTION - SPACE DEWPOINT CONTROL
		1	RTU INTAKE/RETURN DAMPER - SCHEDULED OA PERCENTAGE CONTROL
		1	RTU3 DOWN RETURN
		1	RTU RETURN MOUNTED SMOKE DETECTOR AND SAMPLING TUBE - FACTORY INSTALLED
		1	5 YEAR ENTIRE UNIT PARTS WARRANTY, 10 YEAR ENTIRE UNIT PARTS WARRANTY WITH REMOTE MONITORING AND CAPTIVEAIRE SERVICE CONTRACT, 25 YEAR STAINLESS STEEL FURNACE PARTS WARRANTY. (SEE ADDITIONAL DETAILS)

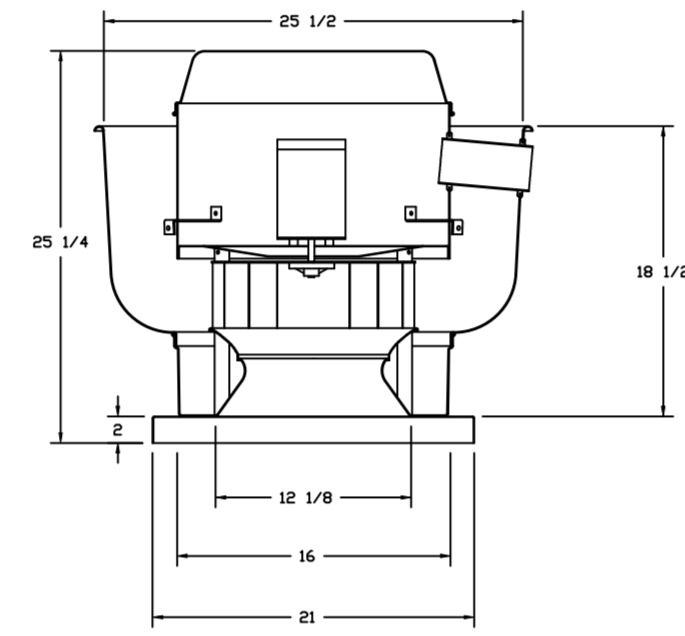
FAN ACCESSORIES

FAN UNIT NO	TAG	EXHAUST	SUPPLY					
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1	EF-1 (GRIDDLE)	YES						
2	EF-2 (FRYER)	YES						
3	DISH EF	YES						

CURB ASSEMBLIES

NO	DN FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	EF-1 (GRIDDLE)	38 LBS	CURB	26.500"W X 26.500"L X 24.000"H ALONG LENGTH, RIGHT VENTED HINGED.
2	# 2	EF-2 (FRYER)	31 LBS	CURB	19.500"W X 19.500"L X 20.000"H ALONG LENGTH, RIGHT VENTED HINGED.
3	# 3	DISH EF	27 LBS	CURB	19.500"W X 19.500"L X 20.000"H ALONG LENGTH, RIGHT VENTED HINGED.
4	# 4		78 LBS	CURB	59.500"W X 91.000"L X 14.000"H ALONG WIDTH, RIGHT INSULATED.

FAN #1 BUS3HFA - EXHAUST FAN (ITEM 74.4)



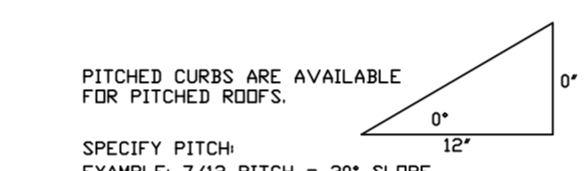
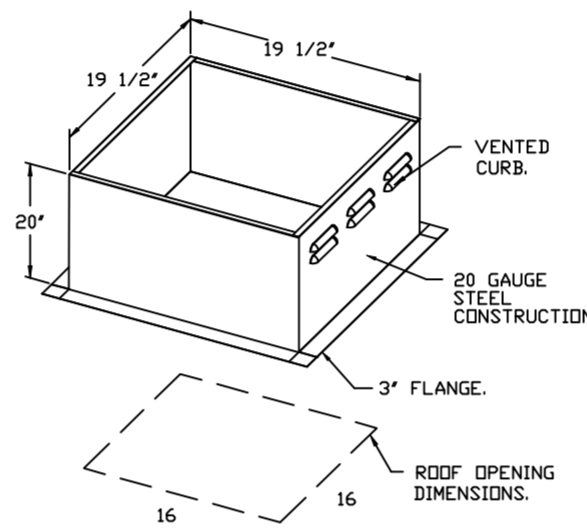
TOP VIEW

FEATURES:

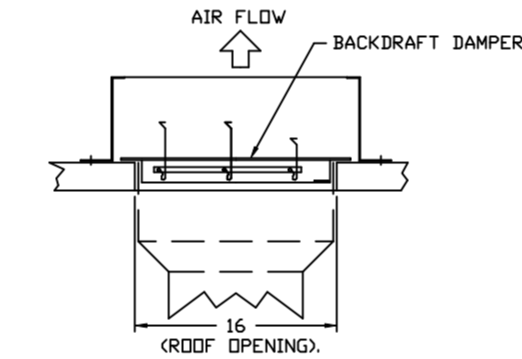
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- UL705.
- VARIABLE SPEED CONTROL.
- INTERNAL WIRING.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
- NEMA 3R SAFETY DISCONNECT SWITCH.

OPTIONS:

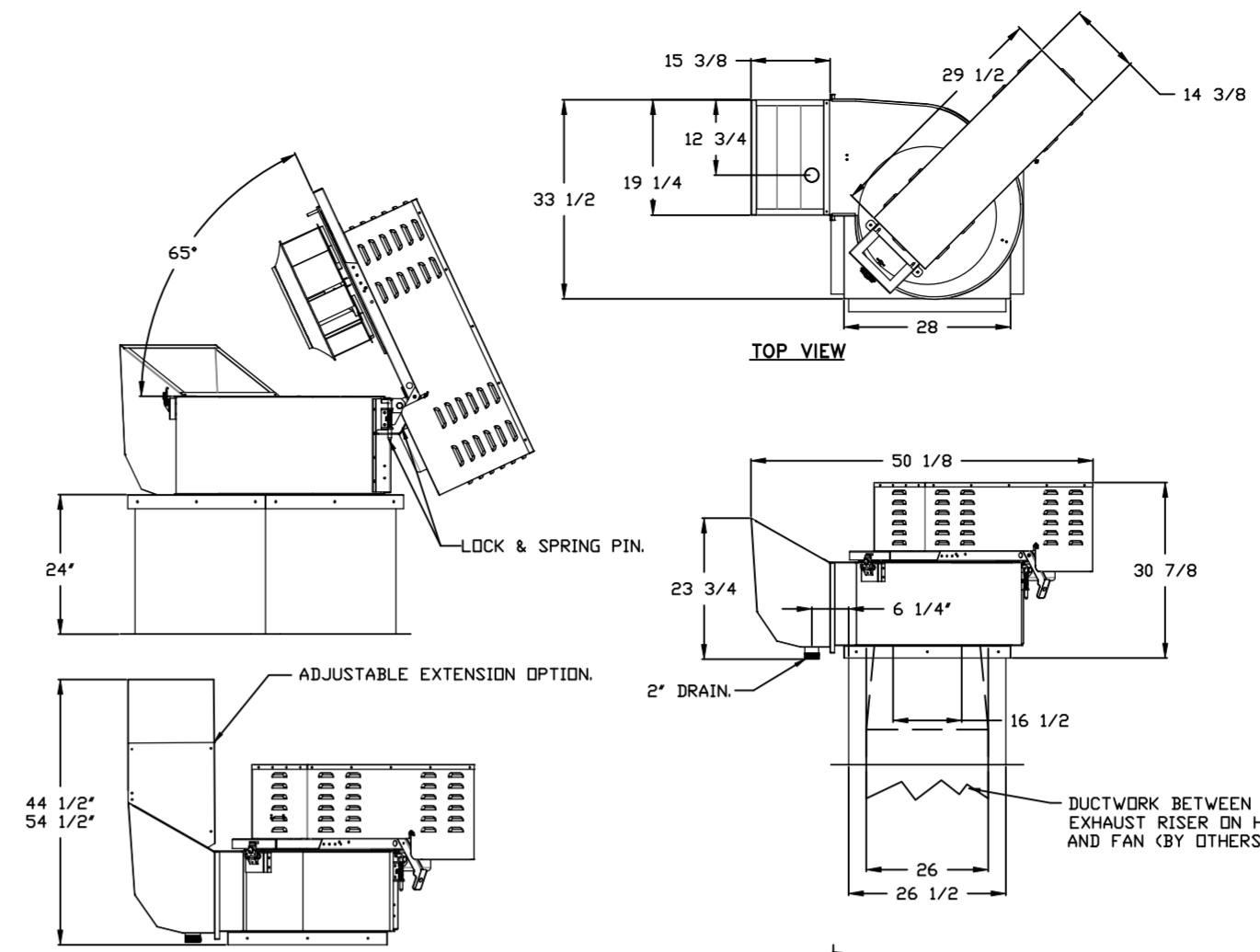
- ECM WIRING PACKAGE - EXHAUST - MANUAL DR 0-10VDC REFERENCE SPEED CONTROL - "MDC" - TELCO, CCW ROTATION.
- 1 15-BDD DAMPER.
- SCR-II BIRD SCREEN.
- 2 YEAR PARTS WARRANTY.



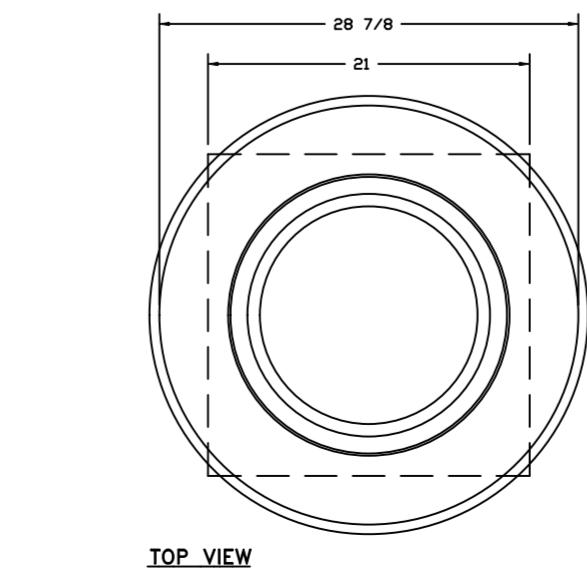
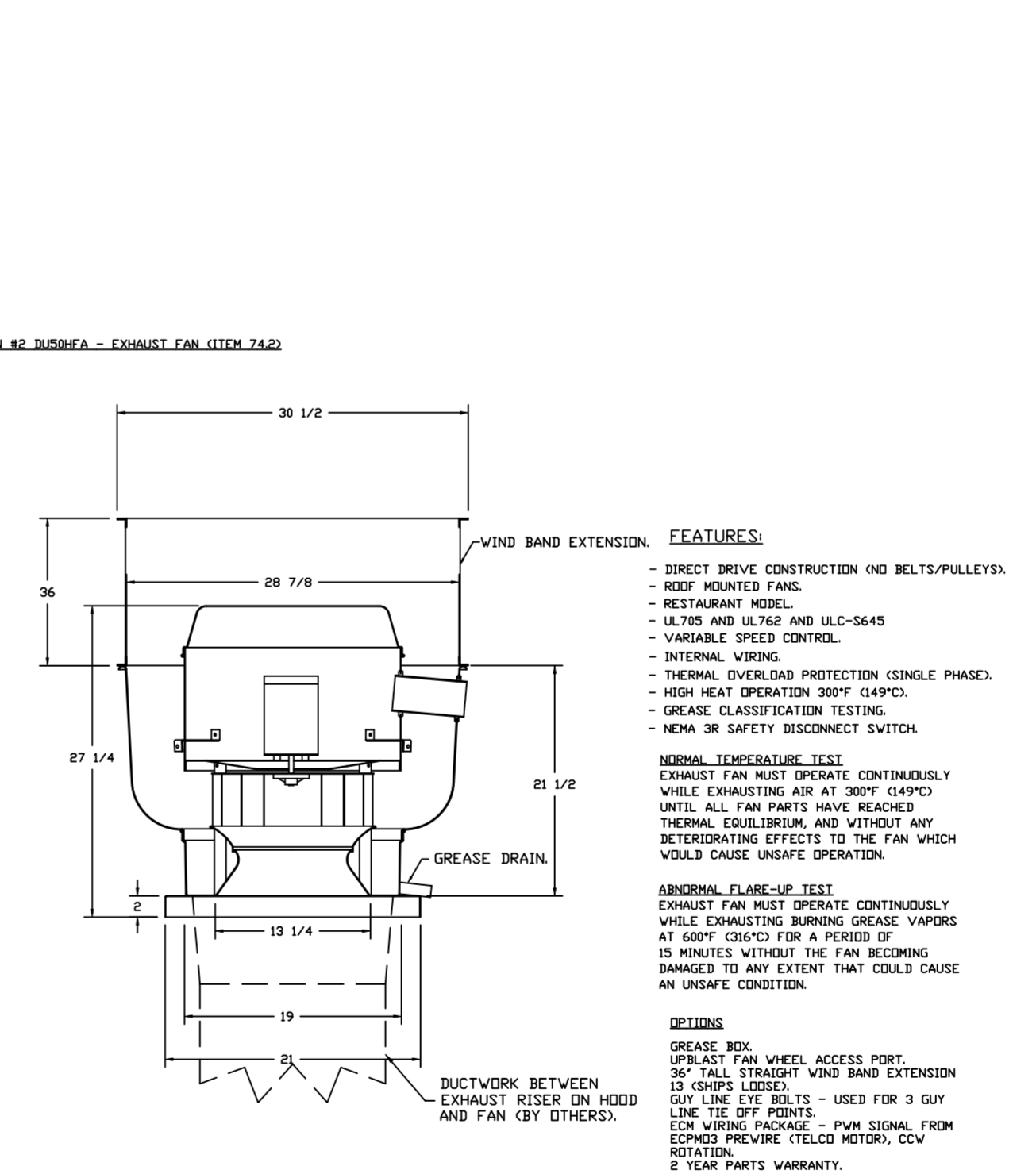
BACKDRAFT DAMPER INSTALLATION



FAN #1 CASRE18DD - EXHAUST FAN (ITEM 74.1)



FAN #2 DUS0HFA - EXHAUST FAN (ITEM 74.2)



TOP VIEW

FEATURES:

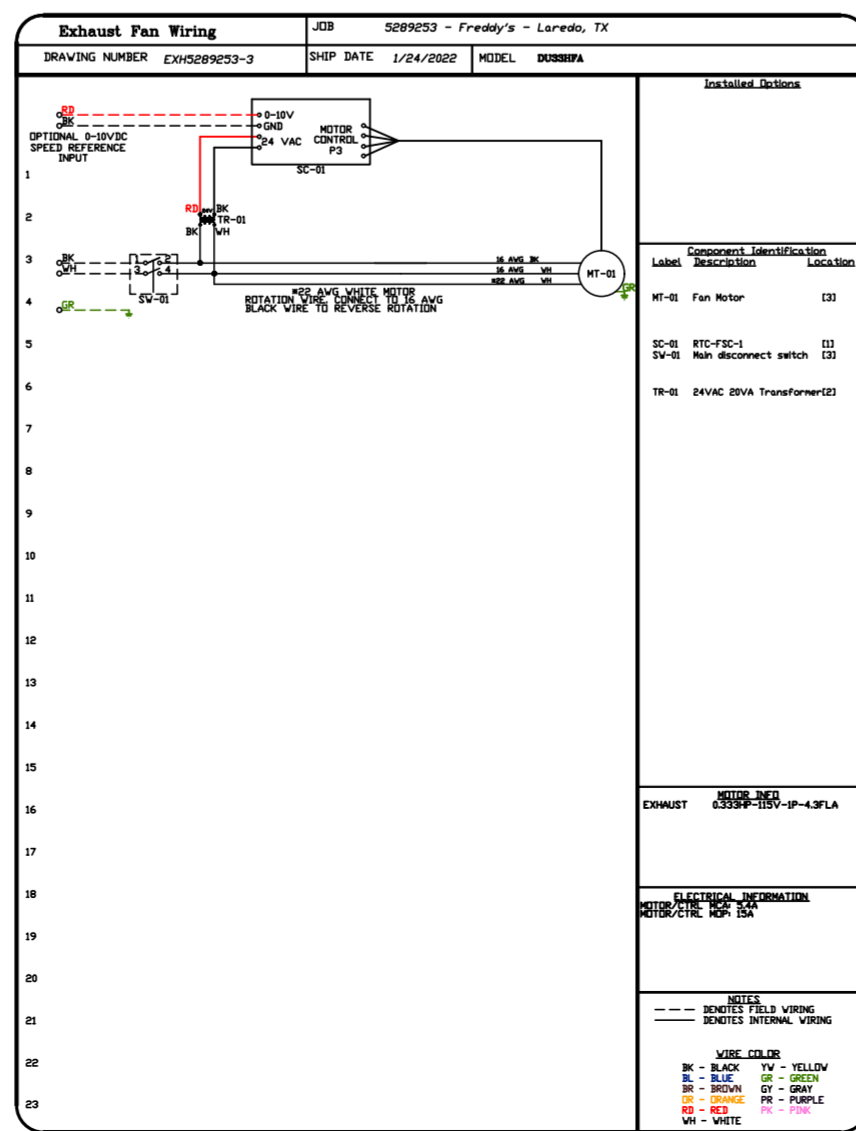
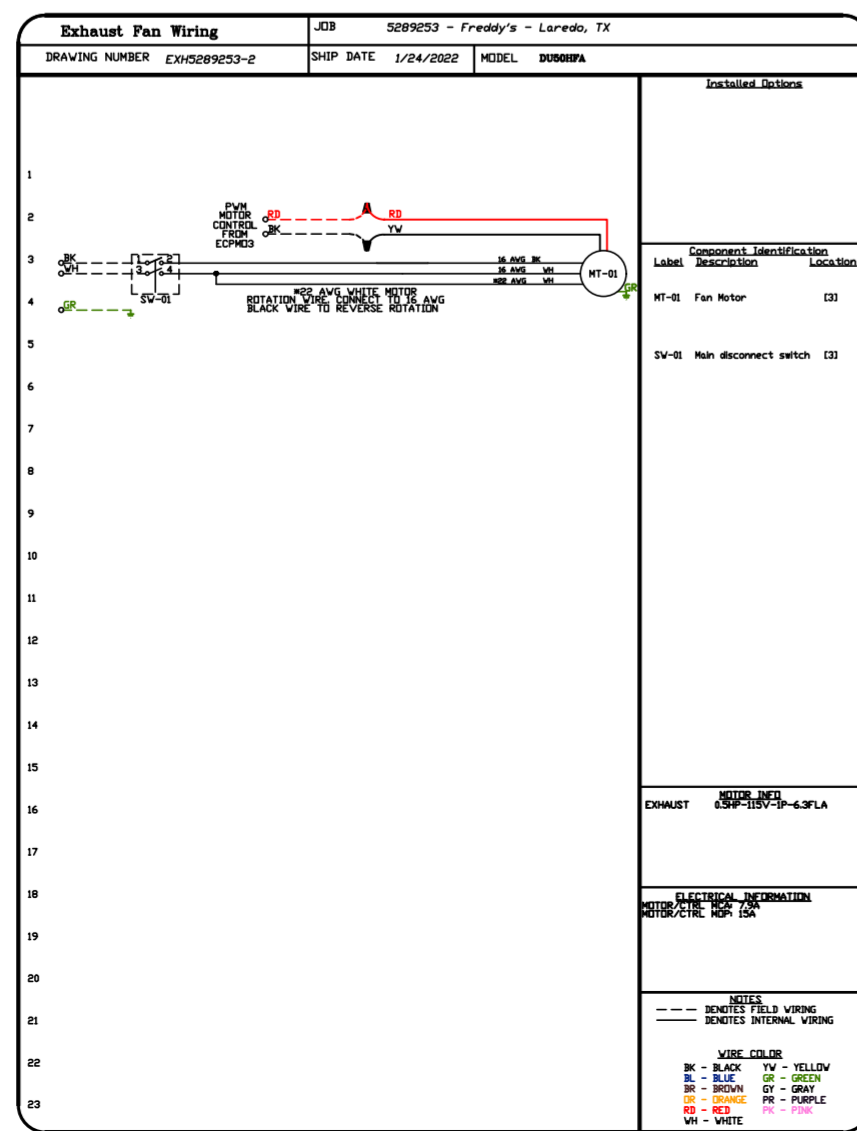
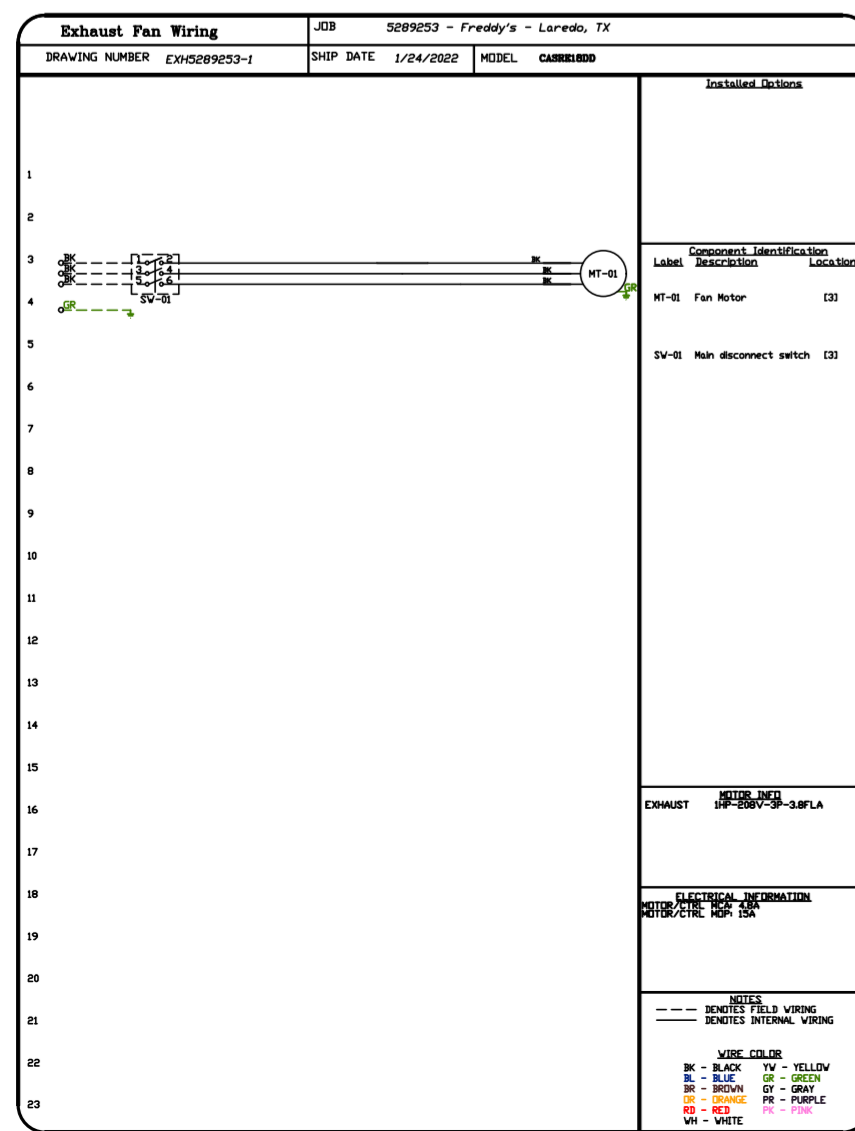
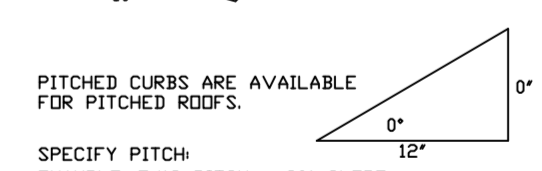
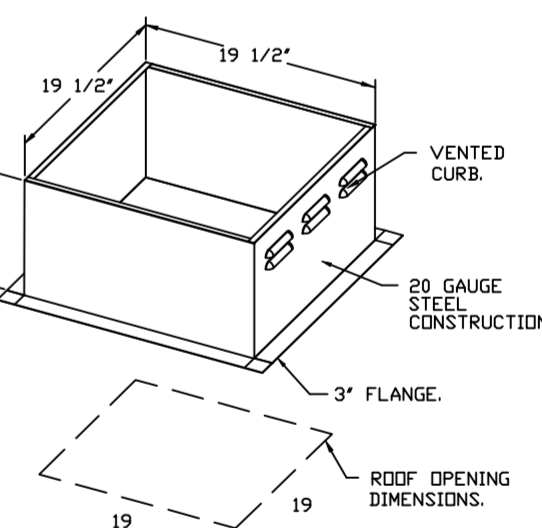
- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL705 AND UL705-SC45.
- HIGH HEAT OPERATION DIRECT DRIVE 300°F (149°C).
- HEAT SLINGER.
- GREASE CLASSIFICATION TESTING.
- TILT OUT WHEEL.
- LOCKING PIN FOR POWER PACK.
- MOTOR WEATHER COVER.
- INTERLOCKED DISCONNECT SWITCH.
- NEMA 4X SAFETY DISCONNECT SWITCH.

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

ABNORMAL FLARE-UP TEST BELT & DIRECT DRIVE 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.

DETAILS:

- UTILITY SET GREASE CUP.
- REB - DISCHARGE EXTENSION ASSEMBLY WITH HARDWARE.
- 2 YEAR PARTS WARRANTY.



REVISIONS

DESCRIPTION	DATE

CAPTIVEAIRE

www.captiveaire.com

HBT Foodservice

104 W 8th St Suite 204, Kansas City, MO, 64105 PHONE: (816) 221-8575 FAX: (816) 221-8311 EMAIL: reg9@captivair.com

Freddy's - Laredo, TX
LAREDO, TX, 78040

DATE: 1/24/2022
DWG.#: 5289253
DRAWN BY: michael.co
SCALE: 1/2" = 1'-0"
MASTER DRAWING

SHEET NO. 2

