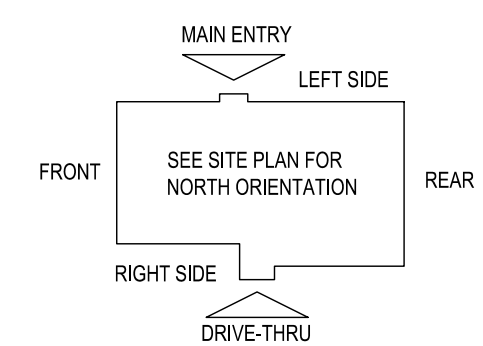


**E5 HVAC PLAN**  
SCALE: 1/4" = 1'-0"



NOTE: ALL DUCTWORK TO BE LOCATED IN TRUSS SPACE WHERE POSSIBLE. SEE FRAMING PLAN.  
HVAC SETPOINTS RECOMMENDED BY CORPORATE OPERATIONAL GUIDELINES:  
1. DINING: HEATING 70 DEGF, COOLING 72 DEGF  
2. KITCHEN: HEATING 68 DEGF, COOLING 74 DEGF

**SUPPLY DUCTWORK SIZING TABLE\***

ROUND		RECTANGULAR	
SIZE	CFM RANGE	SIZE	CFM RANGE
8"	115 - 235	8"x8"	205 - 300
10"	240 - 435	10"x8"	305 - 400
12"	440 - 710	10"x10"	405 - 550
14"	715 - 1,070	12"x10"	555 - 700
16"	1,075 - 1,530	12"x12"	705 - 900
18"	1,535 - 2,090	14"x12"	905 - 1,105
20"	2,095 - 2,760	16"x12"	1,110 - 1,315
22"	2,765 - 3,550	18"x12"	1,320 - 1,520
24"	3,555 - 4,470	20"x12"	1,525 - 1,740
*CONTRACTOR MAY SUBSTITUTE RECTANGULAR FOR ROUND DUCTWORK ON MAIN RUNS AT THEIR DISCRETION. BRANCHES TO DIFFUSERS TO REMAIN ROUND.			
		22"x12"	1,745 - 1,950
		24"x12"	1,955 - 2,170
		26"x12"	2,175 - 2,400
		28"x12"	2,405 - 2,610
		30"x12"	2,615 - 2,840
		32"x12"	2,845 - 3,070
		34"x12"	3,075 - 3,290
		36"x12"	3,295 - 3,520
		36"x14"	3,525 - 4,420

**DIFFUSER, REGISTER, AND GRILLE SCHEDULE**

TAG	SERVICE	TYPE	MATERIAL	THROW	FACE	NECK	MOUNTING	MANUFACTURER/MODEL	Notes
SD-1	SUPPLY	LOUVERED	STEEL	4-WAY	24X24	SEE PLAN	LAY-IN	RAYMON PRO2	2.4
SD-2 - NOT USED									
SD-3	SUPPLY	LOUVERED	STEEL	3-WAY	12X12	SEE PLAN	SURFACE	RAYMON PRO2/QMF/DAG	2.4
SD-4	SUPPLY	LOUVERED	STEEL	4-WAY	12X12	SEE PLAN	SURFACE	RAYMON PRO2/QMF	2.4
SD-5	SUPPLY	PERFORATED	STEEL	PERFORATED	24X24	SEE PLAN	LAY-IN	RAYMON RPR	2.4
RG-1	RETURN	SQUARE EGGRATE	ALUMINUM	N/A	24X24	22X22	LAY-IN	RAYMON FGEC-TB1	2.3.4
EG-1	RETURN	LOUVERED GRILLE	ALUMINUM	N/A	12X12	SEE PLAN	SURFACE	RAYMON RA-HVD	1.2.4
TG-1	TRANSFER	LOUVERED GRILLE	ALUMINUM	N/A	SEE PLAN	SEE PLAN	SURFACE	RAYMON RA-RH	2.4
<b>DIFFUSER NOTES:</b>									
1. PROVIDE w/ ADJUSTABLE OPPOSED BLADE DAMPER									
2. VERIFY ALL DIFFUSERS AND RETURN GRILLE COLORS WITH OWNER AND ARCHITECT									
3. PROVIDE w/ 22X22 PLENUM BOX.									
4. ALL DIFFUSERS AND RETURNS LOCATED IN BLACK CEILING SHALL BE FLAT BLACK FINISH.									

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**NEW CULVER'S RESTAURANT**  
2701 E Division Street  
Diamond, IL 60416  
County of WILL

**OWNER:**  
DIAMOND CUSTARD LLC  
400 E Summit Ave  
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Tony Milazzo, 262-761-5381  
Brandon Davidson, 815-863-4790  
Bobby Maier, 262-515-5683

**ARCHITECT:**  
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**DATE:** 12-11-2024  
**REVISION:**

**HVAC PLAN, DIFFUSER SCHEDULE**

2024-154  
**M101**



HOOD INFORMATION																	
HOOD NO.	MARK	MODEL	HOOD DIMENSIONS (IN.)			HOOD CONSTR.	COOKING LOAD / DUTY RATING	EXHAUST COLLAR(S)					SUPPLY		TOTAL WEIGHT LBS.	SECTION LOCATION	
			LENGTH	WIDTH	HEIGHT			WIDTH	LENGTH	DIA.	CFM	S.P.	MUA CFM	AC CFM			
1	GRIDDLE HOOD	XGEP-64-S	64	TOP 23 BOT 8	FRT 12 BACK 36	430 SS WHERE EXPOSED	MEDIUM	1500	12	12		1500	0.924			137	SINGLE

HOOD INFORMATION													
HOOD NO.	MARK	LIGHTING DETAILS			GREASE FILTRATION DETAILS			UTILITY CABINET(S)					
		FIXTURE TYPE	BULB / LAMP INFO	QTY	FOOT CANDLES	TYPE / MODEL MATERIAL	QTY	SIZE (IN.)	LOCATION	FIRE SYSTEM	SIZE	MODEL	CONTROLS
1	GRIDDLE HOOD					X-TRACTOR (SPARK ARRESTOR INCL.) STAINLESS STEEL	4	16	16				

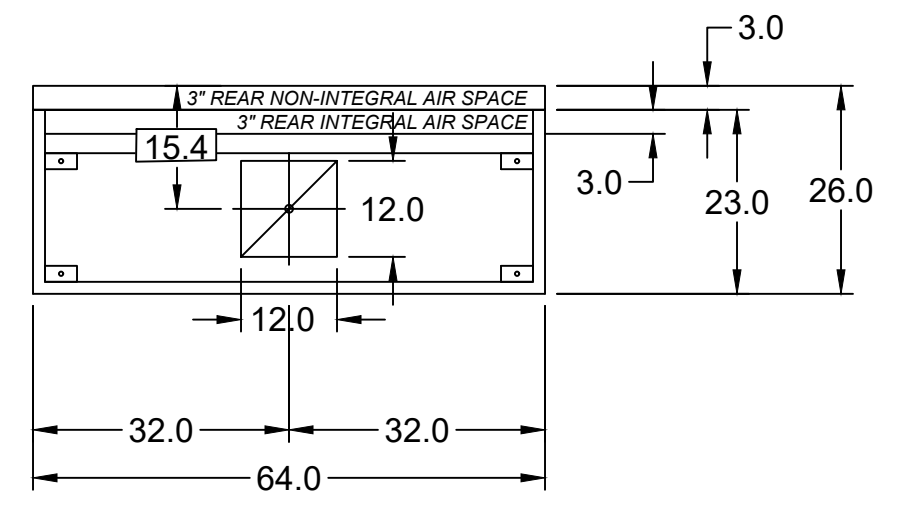
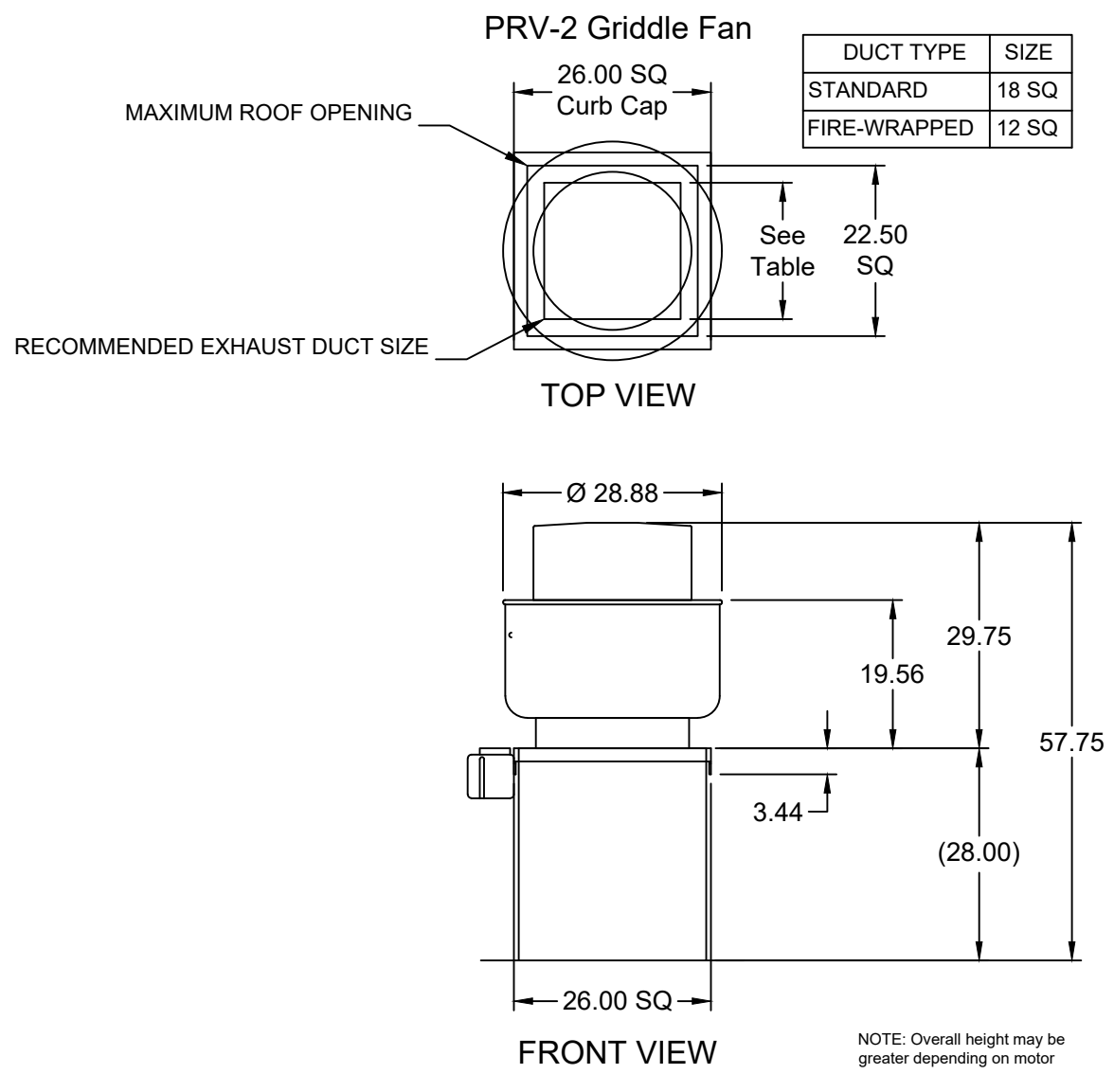
HOOD OPTIONS		SPECIAL DESIGN REQUESTS	
UL 710 LISTED W/ OUT EXHAUST FIRE DAMPER - UL #R25625	BACK NON-INTEGRAL AIR SPACE - 3 IN WIDE	SDR #K1100145 - FLUE BYPASS HOOD	SDR #K1700974 - CULVERS 4VAT 2FIRE PROCESS - FRYER HOOD
26 IN HIGH CEILING ENCLOSURES - FRONT LEFT RIGHT - FIELD INSTALLED	FACTORY MOUNTED EXHAUST COLLAR(S)	PERFORMANCE ENHANCING LIP (PEL) TECHNOLOGY	SDR #K1800144 - CULVERS 4VAT 2FIRE PROCESS - GRIDDLE HOOD
STANDING SEAM CONSTRUCTION FOR SUPERIOR STRENGTH			

Direct Drive Upblast Centrifugal Roof Exhaust Fan													
MARK INFORMATION		FAN INFORMATION				MOTOR INFORMATION							
QTY	MARK	MODEL	VOLUME (CFM)	TOTAL EXTERNAL SP (IN WG)	FAN RPM	OPERATING POWER (HP)	WEIGHT (LB.)	SIZE (HP)	V/C/P	ENCLOSURE	MOTOR RPM	WINDINGS	NEC FLA*
1	PRV-2 Griddle Fan	XCUE-140-VG	1,500	1.801	1,725	0.83	92	1	115/60/1	OP	1725	1	16

\*NEC FLA - Based on table 430.250 or 430.248 of National Electrical Code 2020. Actual motor FLA may vary for sizing thermal overload, consult factory\*

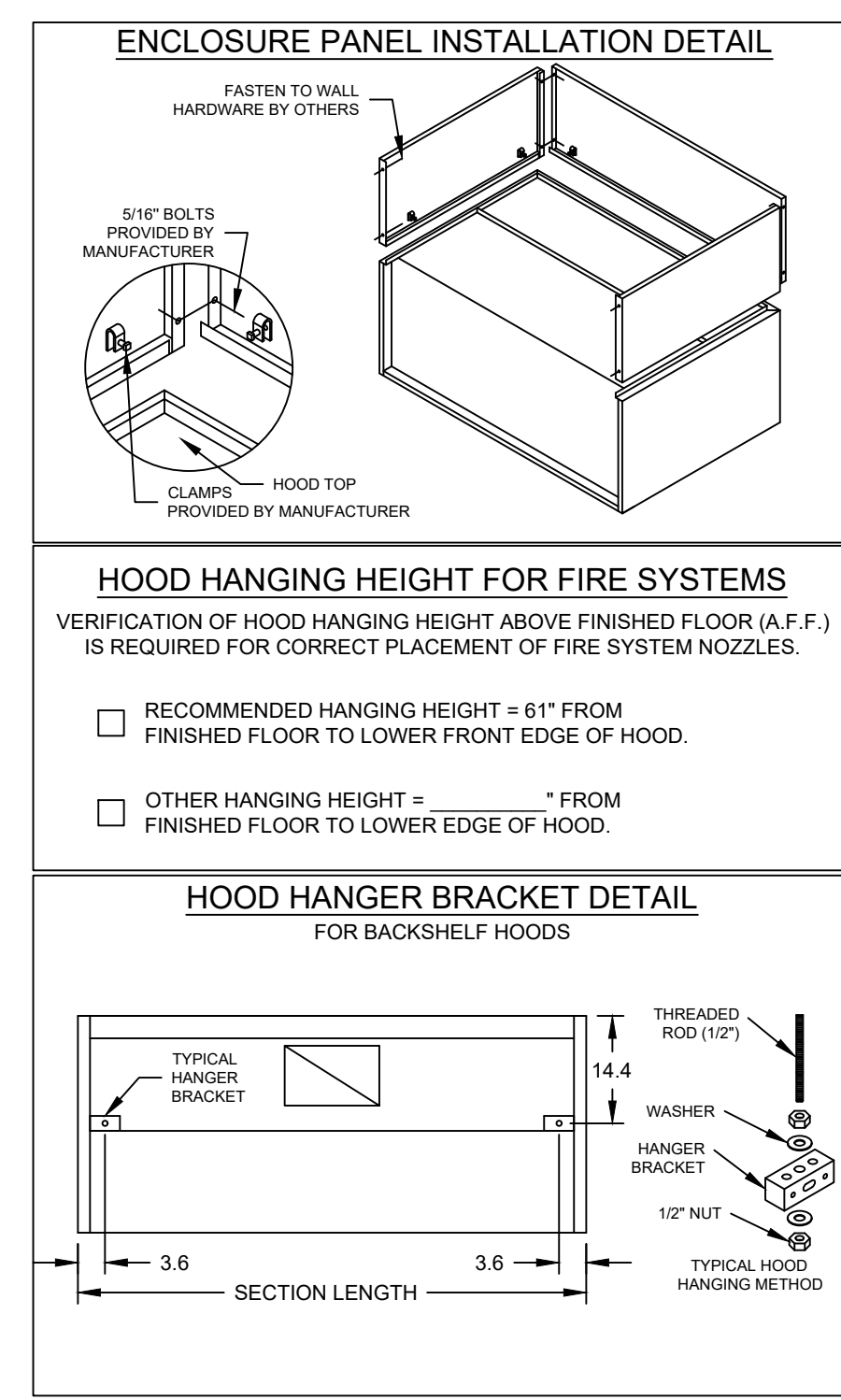
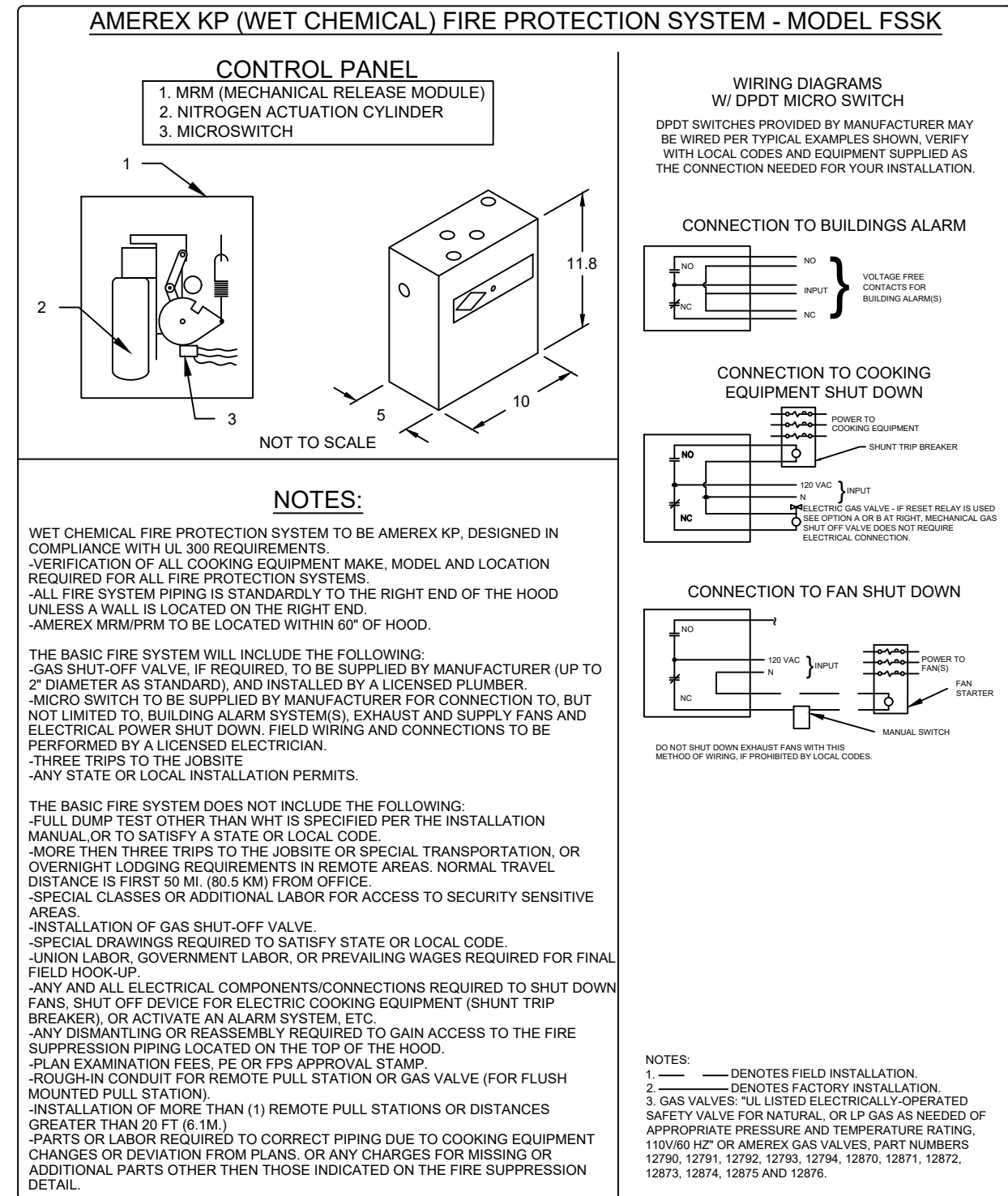
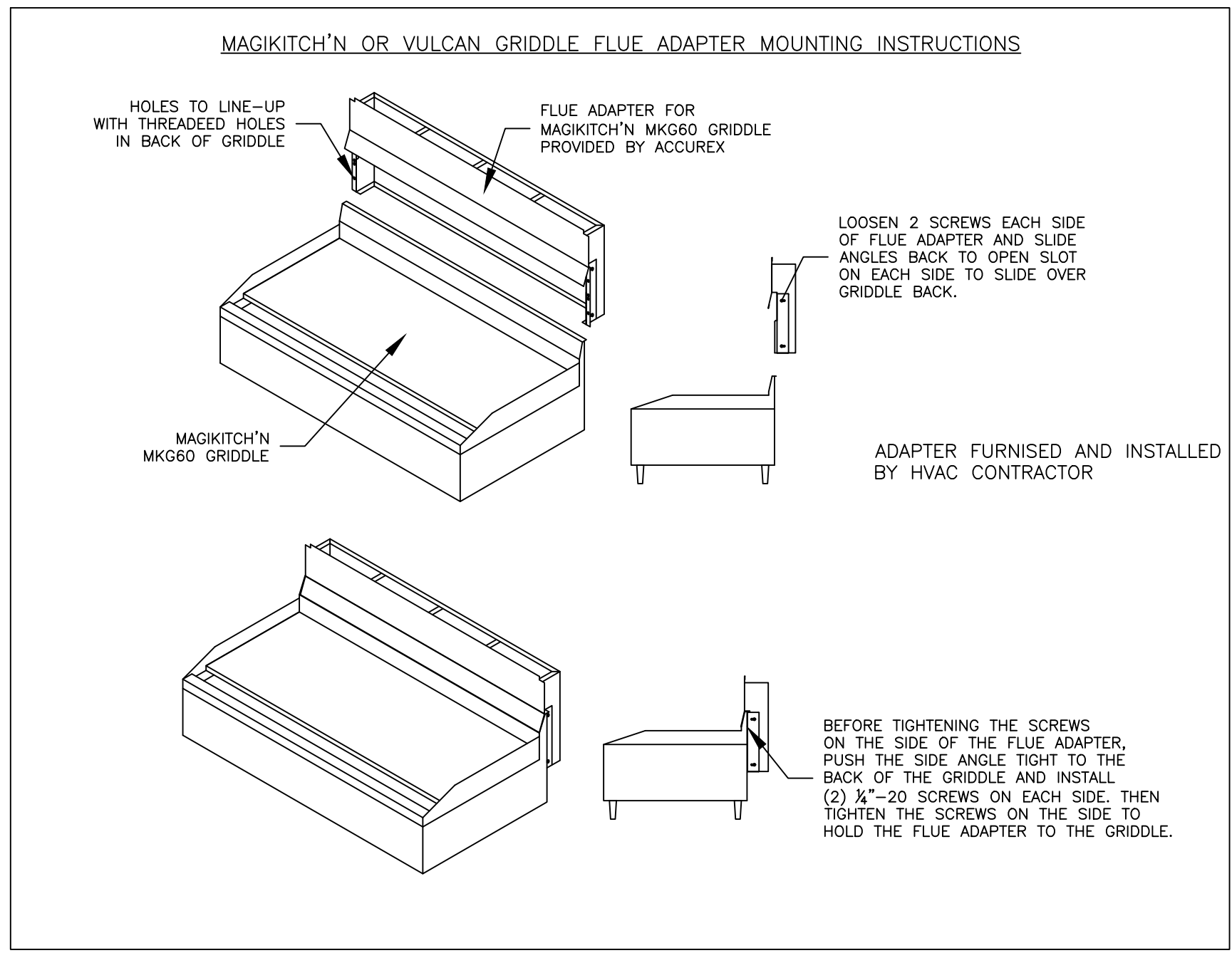
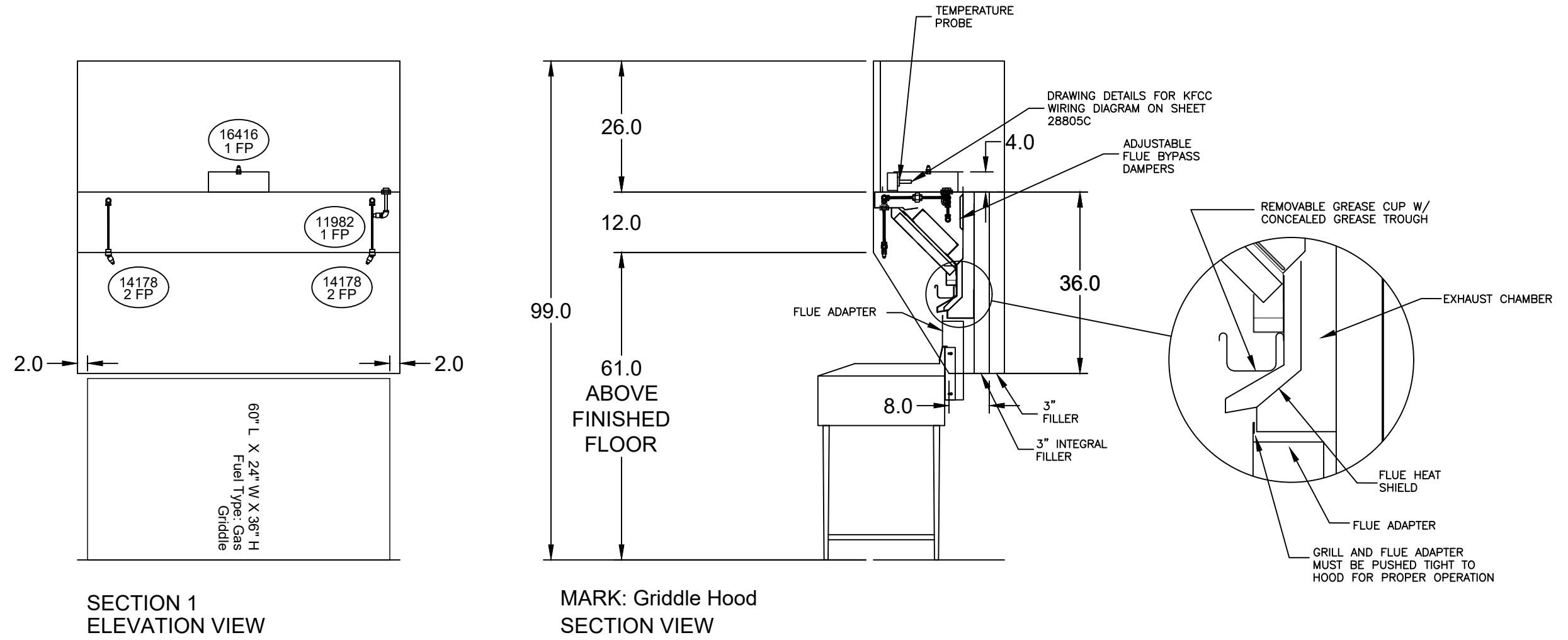
**PRV-2 Griddle Fan : SELECTED OPTIONS AND ACCESSORIES**

One piece fully welded windband  
Tapered bushing wheel hub  
Breather tube outlet area min. 4.4 sq. in. (sizes 99-480), 2.0 sq. in. (sizes 60-95)  
Min. windband material thickness: 0.051" aluminum (060-240), 0.064" aluminum (240HP, 240XP), 0.080" aluminum (sizes 300-480)  
Larger Curb Cap Size - 26 Square  
UL/cUL 705 Listed - Supplement SC - "Power Ventilators for Restaurant Exh. Appliances" (Formerly UL 762)  
Switch, NEMA-3R, Toggle,  
Hinge, Factory Installed  
High Temp Curb Seal Rated for Continuous Duty at 1500 F (Factory Attached)  
Grease Trap (PN 475538)  
Clean-out Port - Factory Installed  
Conduit Chase Qty 1



MUST USE WITH MAGIKITCH'N MODEL MKG-C-60 OR VULCAN MODEL VIG60-R3

60" MAGIKITCH'N OR VULCAN GRIDDLE FLUE ADAPTER



FIRE SYSTEM INFORMATION							
MARK	MODEL	LOCATION	FLOW POINTS		SUPPLY LINE	DETECTION	MARK(S) PROTECTED BY FIRE SYSTEM
			HOODS	PCU			
FIRE SUPPRESSION	AMEREX KP WET CHEMICAL	REMOTE MOUNTED	16 UTILIZED	22 AVAILABLE	CONTINUOUS	FUSIBLE LINK	GRIDDLE HOOD SECTION 1 FRYER HOOD SECTION 1

FIRE SYSTEM OPTIONS AND ACCESSORIES

FULL INSTALLATION (INCLUDES PRE-PIPED HOOD(S) WITH DETECTION AND FACTORY COORDINATED INSTALL)

CHROME SLEEVES FOR FACTORY PROVIDED APPLIANCES DROPS - INCLUDED

METAL BLOW-OFF CAPS - INCLUDED

GAS VALVE - INCLUDED - MECHANICAL SHUTOFF VALVE, 1.50" (AMEREX) - PART# AMEREXMECHSHUTOFFVALVE150

HOOD SUPPRESSION TANK - INCLUDED - 7.5 GAL. - ((2) 3.75 TANK(S))

REMOTE PULL STATION - MULTIPLE - FIELD INSTALLATION AT TWO POINTS OF EGRESS

SINGLE ENCLOSURE FOR RELEASE & FIRST TANK FOR REMOTE MOUNTING - INCLUDED

TANK ENCLOSURES (STAINLESS STEEL) FOR REMOTE MOUNTING - INCLUDED

PROJECT: 7/11/2024

MARK: GRIDDLE HOOD, PRV-2 GRIDDLE FAN, FIRE SUPPRESSION

CULVERS METRO L 2025 (S)

ACCUREX - WI, IA  
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262-227-7865

UL NSF

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NEW CULVER'S RESTAURANT  
2701 E Division Street  
Diamond, IL 60416  
County of WILL

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GRIDDLE HOOD/EXHAUST SCHEDULE & DETAILS

Date: 12-11-2024  
Revision:

2024-154

M202



Direct Drive Centrifugal Roof Exhaust Fan

MARK INFORMATION			FAN INFORMATION					MOTOR INFORMATION					
QTY	MARK	MODEL	VOLUME (CFM)	TOTAL EXTERNAL SP (IN WG)	FAN RPM	OPERATING POWER (HP)	WEIGHT (LB.)	SIZE (HP)	V/C/P	ENCLOSURE	MOTOR RPM	WINDINGS	NEC FLA*
1	PRV-1 Restroom	XRED-090-VG	300	0.5	1,466	0.06	31	0.1	115/60/1	TN	1725	1	NA

\*NEC FLA - Based on table 430.250 or 430.248 of National Electrical Code 2020. Actual motor FLA may vary for sizing thermal overload, consult factory"

PRV-1 Restroom : SELECTED OPTIONS AND ACCESSORIES	
Standard Curb Cap Size - 17 Square	
UL/cUL 705 Listed - "Power Ventilators"	
Switch, NEMA-1, Toggle, Shipped with Unit	
Damper Shipped Loose, BD-100-PB-10X10, Gravity Operated, Not Coated, Nominal Size	
Birdscreen: Galvanized, nom. 84% Free Area	
Composite Wheel Material	

Ceiling Exhaust Fan

MARK INFORMATION			FAN INFORMATION					MOTOR INFORMATION					
QTY	MARK	MODEL	VOLUME (CFM)	TOTAL EXTERNAL SP (IN WG)	FAN RPM	OPERATING POWER (HP)	WEIGHT (LB.)	SIZE (HP)	V/C/P	ENCLOSURE	MOTOR RPM	WINDINGS	
2	EF-1A	XCR-B80	75	0.125	881	0.01	10	0	115/60/1	OP	900	1	

EF-1A : SELECTED OPTIONS AND ACCESSORIES	
UL/cUL 507 Listed - Electric Fan	
Solid State Speed Control, 6 Amp, Mounted and Wired Internally	
Round Hooded Wall Cap, (PN: WC-6) Shipped Loose	
Round Duct Connection	
Adjustable easy installation mounting bracket	
Standard Grille	
Polypropylene Wheel Material	
Can Be Used to Comply with: ASHRAE 62.2 and Washington State Energy Code	

CONTROL INFORMATION

MARK	ELECTRICAL CONTROL PACKAGE			USER INTERFACE		
	MODEL	LOCATION	TYPE	LOCATION		
CONTROLS	XKC-CV-S-22-2-1-0	SHIP LOOSE ENCLOSURE	FULL COLOR TOUCHSCREEN	SHIP LOOSE		

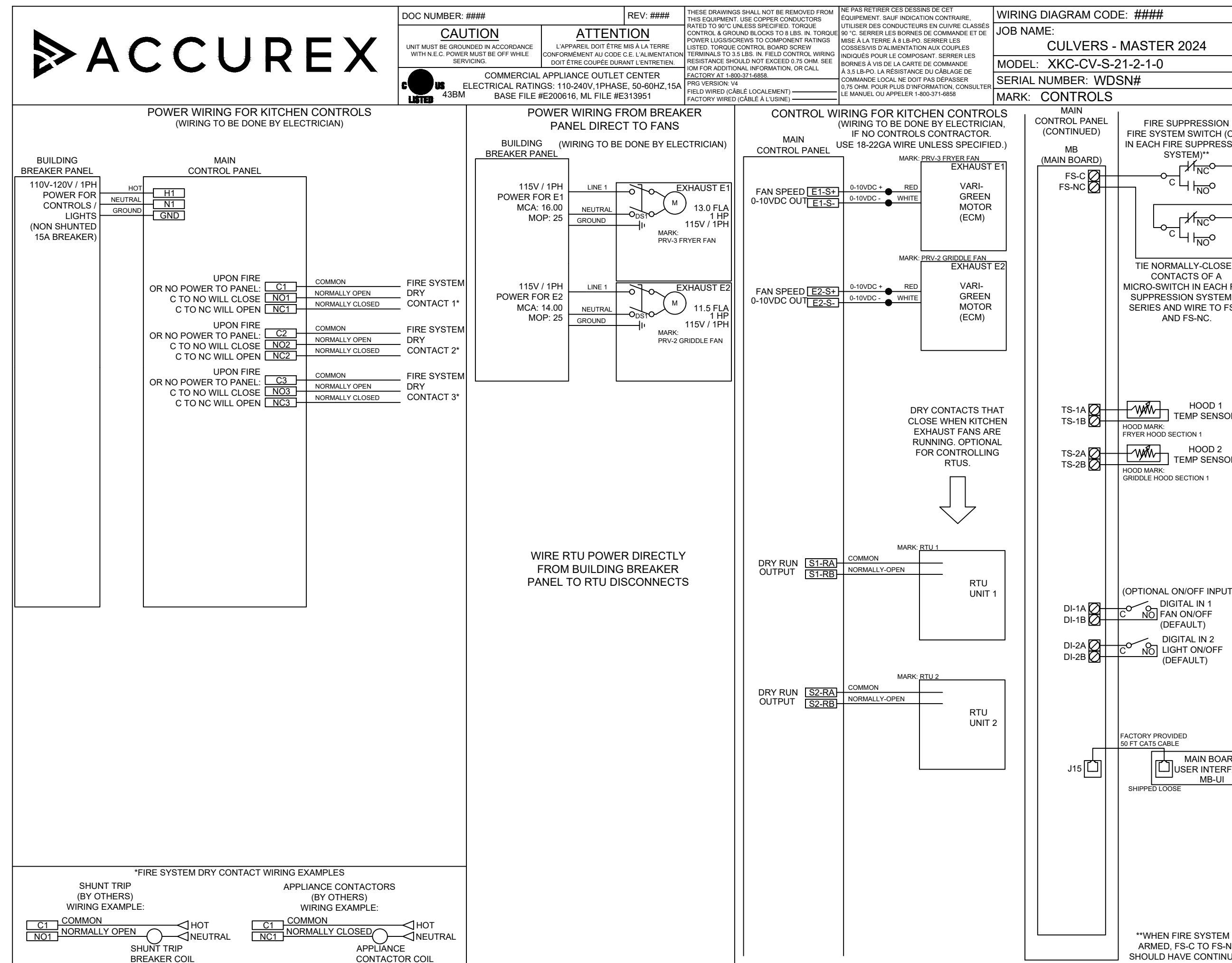
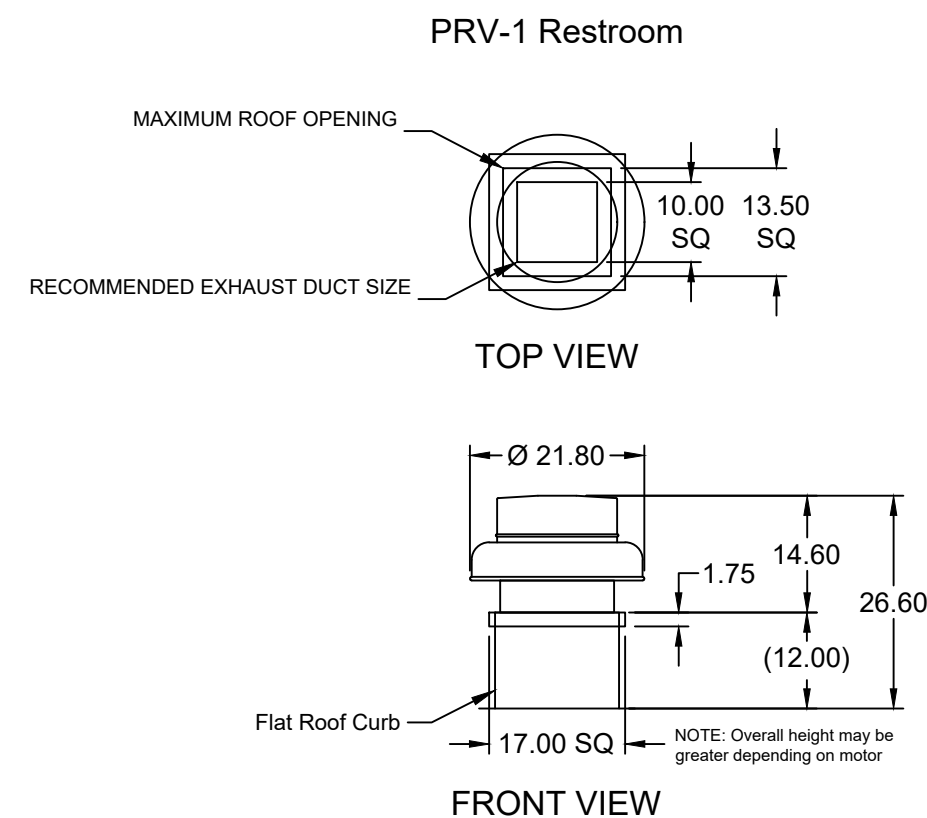
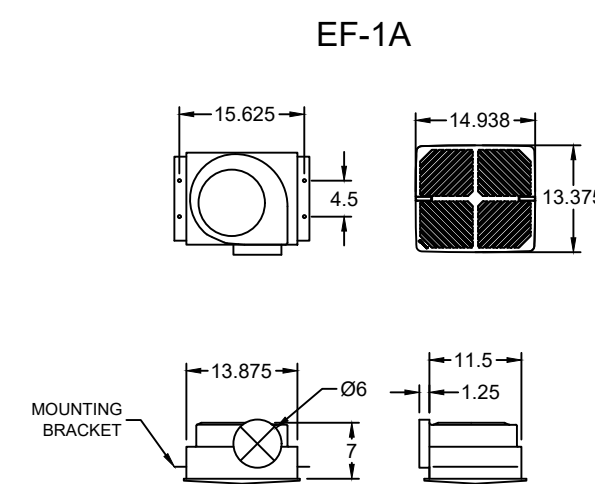
FANS CONTROLLED											
FAN #	TYPE	FAN	FAN MARK	ZONE	CFM	MOTOR HP	MOTOR VOLT	CYCLE	MOTOR PHASE	MOTOR STARTER IN PANEL	VFD IN PANEL
1	SUPPLY	S1	RTU-1	1	1500	1	208	60	3	NO	NO
2	SUPPLY	S2	RTU-2	2	1500	1	208	60	3	NO	NO
3	EXHAUST	E1	PRV-2 GRIDDLE FAN	2	1500	1	115	60	1	NO	NO
4	EXHAUST	E2	PRV-3 FRYER FAN	1	1500	1	115	60	1	NO	NO

CONTROL FEATURES

TEMP SENSORS (FACTORY INSTALLED) - QTY. 2  
 DRY FIRE CONTACTS - QTY. 2  
 EXHAUST MAX DURING FIRE  
 SUPPLY OFF DURING FIRE

SPECIAL DESIGN REQUESTS

SDR #K2000462 - CULVERS CONTROL PANEL - EXTRA SET OF FIRE CONTACTS - REVISE WIRING DIAGRAMS



ACCUREX

PROJECT 7/11/2024  
 ACCUREX - WI, IA  
 PHILLIP KRAFT  
 PHILLIP.KRAFT@ACCUREX.COM  
 262-227-7865  
 CULVERS METRO L 2025 (S)  
 MARK  
 CONDENSATE HOOD  
 PRV-4 CONDENSATE FAN  
 PRV-1 RESTROOM FAN  
 EF-1A  
 CONTROLS  
 UL NSF  
 LISTED

FAN SCHEDULE & DETAILS

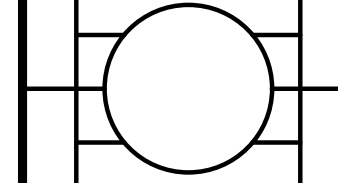
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2024-154