

CONSTRUCTION PLANS FOR CULVER'S OF CAMDENTON

70 JACK CROWELL ROAD
CAMDENTON, MO
CAMDEN COUNTY



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UTILITY NOTE:
THIS PLAN REFLECTS ABOVE GROUND INDICATIONS OF UTILITIES AND INFORMATION AVAILABLE FROM UTILITY COMPANIES. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.



LOCATION MAP
N. T. S.

No.	Revision	By	Date

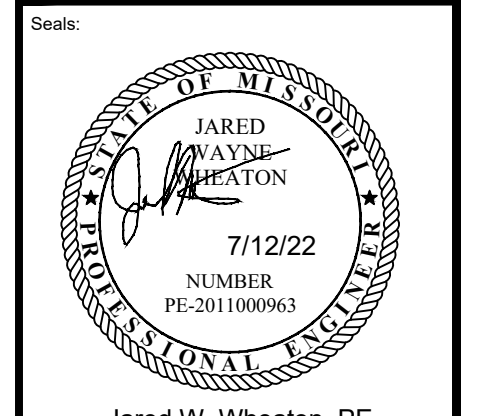
CAD File: const plans
Field Book: N/A
Drawn By: AJK
Approved By: JWW

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PH: (573) 392-3312
3048 Hwy. 52 Eldon, MO 65026

SHORELINE SURVEYING & ENGINEERING, LLC
Missouri State Certificates of Authority:
LS - 2017001656
E - 2017004119

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Jared W. Wheaton, PE
MO # PE 2011000963

Consultants:

Project:
CULVER'S OF CAMDENTON
70 JACK CROWELL ROAD
CAMDENTON, MO
CAMDEN COUNTY

Sheet Title:
COVER SHEET

Date: 7-12-22
Scale: N.T.S.

Project Number:
12082-22-E1

Sheet Number:
G1.0

No.	Revision:	By:	Date:

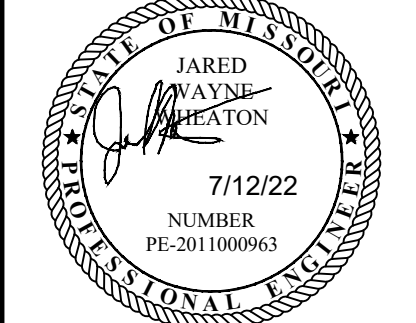
CAD File: MEP
 Drawn By: CCS
 Field Book:
 Approved By: JWW

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Seal:

 Jared W. Wheaton, PE
 MO # PE 2011000963

Consultants:

Project:
 CULVER'S OF CAMDENTON
 70 JACK CROWELL ROAD
 CAMDENTON, MO
 CAMDEN COUNTY

Sheet Title:
 HVAC PLAN
 SUPPLY AIR

Date: 07/12/2022
 Scale: AS SHOWN

Project Number:
 12082-22:E1

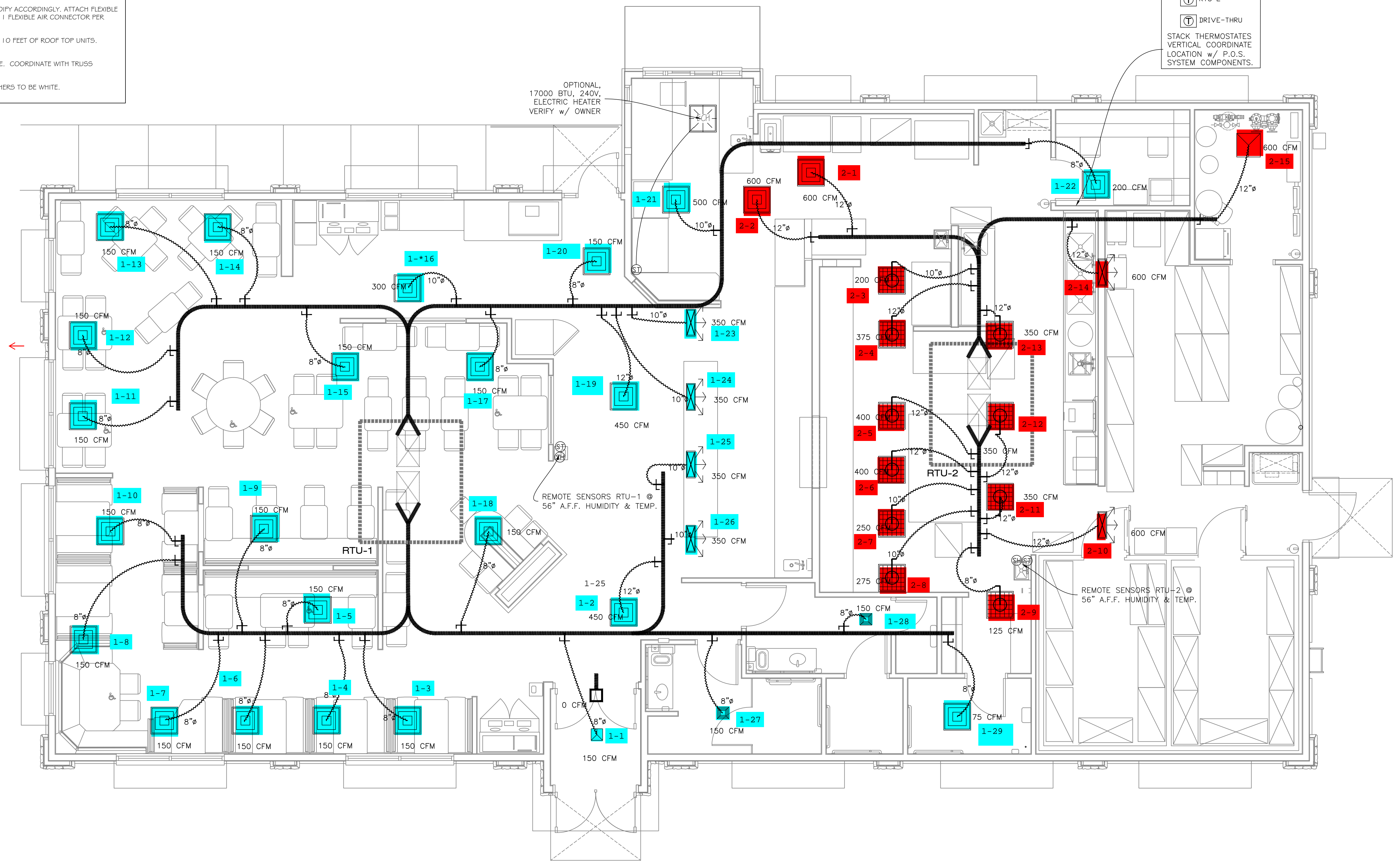
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 M1.0

- GENERAL NOTES:**
1. VERIFY ALLOWABLE FLEX DUCT LENGTHS WITH LOCAL CODES AND MODIFY ACCORDINGLY. ATTACH FLEXIBLE AIR CONNECTOR TO RIGID DUCT w/STEEL DRAW BANDS ONLY. CLASS 1 FLEXIBLE AIR CONNECTOR PER U.L.181 - MAX LENGTH 8'-0". PROVIDE SUPPORT AT 4'-0" O.C.
 2. VENTING OF ANY COMBUSTIBLE BY-PRODUCTS IS PROHIBITED WITHIN 10 FEET OF ROOF TOP UNITS. VERIFY WITH LOCAL BUILDING INSPECTOR.
 3. ALL SUPPLY AND RETURN DUCTWORK TO BE LOCATED IN TRUSS SPACE. COORDINATE WITH TRUSS SUPPLIER.
 4. DIFFUSERS AND RETURN GRILLES IN BLACK ACT TO BE BLACK, ALL OTHERS TO BE WHITE.

HVAC LEGEND:

WD-20 ← DIFFUSER DESIGNATION
 600 CFM ← DIFFUSER C.F.M.

- CD CEILING DIFFUSER W/ C.F.M. - 4 WAY
- CD PERFORATED CEILING DIFFUSER
- CD CEILING DIFFUSER W/ C.F.M. - 3 WAY
- CD CEILING DIFFUSER W/ C.F.M. - 2 WAY
- RG RETURN DIFFUSER - SUSP. CEILING
- EG EXHAUST GRILLE
- PRV POWER ROOF VENT
- ECH ELECTRIC CEILING HEATER
- WD - WALL OR BULKHEAD SUPPLY GRILLE - LINEAR
- TG - TRANSFER GRILL
- SH - SENSOR HUMIDITY
- ST - SENSOR TEMPERATURE



RTU SCHEDULE						
TAG	TONNAGE	ELECTRICAL	SEER	COOLING BTU	MAX. CFM	GAS CONNEX.
RTU1	20	208/230V, 3PH, 60 HTZ	11	240,000	7000	3/4"
RTU2	25	208/230V, 3PH, 60 HTZ	12	290,000	8200	3/4"

HVAC PLAN - SUPPLY AIR
 1/4" = 1'-0"

THE EQUIPMENT ROUGH-IN ITEMS AND THEIR DIMENSIONED LOCATIONS FOR ALL CONNECTIONS ARE ACCURATE TO THE BEST OF OUR KNOWLEDGE AND SHALL BE VERIFIED WITH THE EQUIPMENT SUPPLIER, OWNER AND/OR THE EQUIPMENT ROUGH-IN DRAWINGS. IN SOME INSTANCES, THE OWNER OR SUPPLIER MAY MAKE SUBSTITUTIONS OR THE EQUIPMENT ITEM MAY VARY FROM WHAT IS SHOWN. THEREFORE, THE ARCHITECT/OWNER SHALL BE IMMEDIATELY NOTIFIED PRIOR TO CONSTRUCTION OF ANY DEVIATIONS FROM WHAT IS SHOWN OR IMPLIED ON THESE DRAWINGS. FAILURE OF THE APPROPRIATE CONTRACTOR TO VERIFY ROUGH-INS OR THEIR LOCATIONS SHALL PLACE THE RESPONSIBILITY FOR ANY SUBSEQUENT RELOCATION AND/OR ADDITIONAL ROUGH-INS DIRECTLY UPON THE CONTRACTOR.

No.	Revision:	By:	Date:

CAD File: MEP
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Seals:

Jared W. Wheaton, PE
 MO # PE 2011000963

Consultants:

Project:
CULVER'S OF CAMDENTON
 70 JACK CROWELL ROAD
 CAMDENTON, MO
 CAMDEN COUNTY

Sheet Title:
**HVAC PLAN
 RETURN AIR**

Date: 07/12/2022
 Scale: AS SHOWN

Project Number:
 12082-22:E1

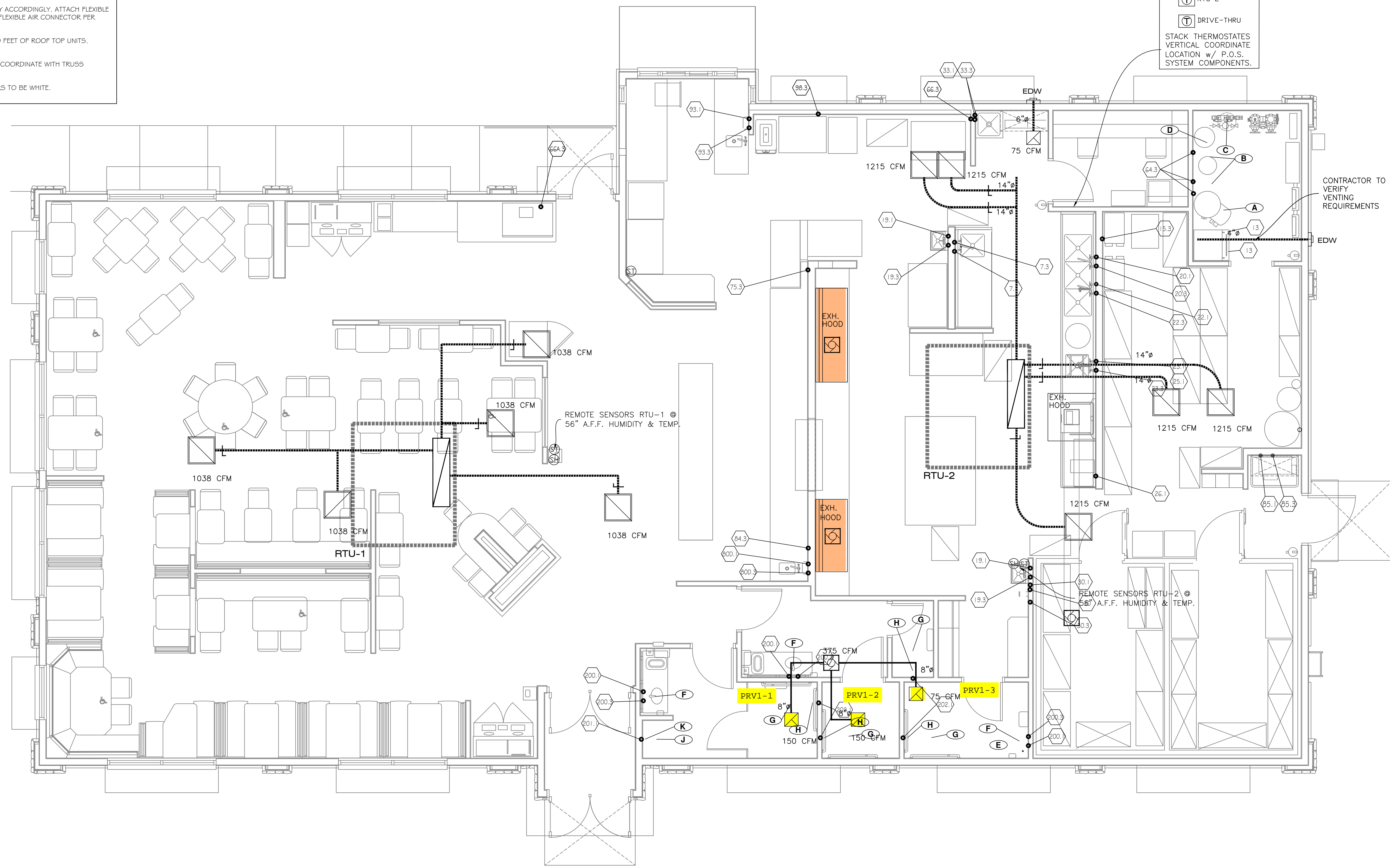
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M2.0

- GENERAL NOTES:**
1. VERIFY ALLOWABLE FLEX DUCT LENGTHS WITH LOCAL CODES AND MODIFY ACCORDINGLY. ATTACH FLEXIBLE AIR CONNECTOR TO RIGID DUCT w/STEEL DRAW BANDS ONLY. CLASS 1 FLEXIBLE AIR CONNECTOR PER U.L.181 - MAX LENGTH 8'-0". PROVIDE SUPPORT AT 4'-0" O.C.
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HVAC PLAN - RETURN AIR
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HOOD NO.	MARK	MODEL	HOOD DIMENSIONS (IN.)			HOOD CONSTR.	COOKING LOAD / DUTY RATING	TOTAL CFM	EXHAUST COLLAR(S)					SUPPLY		TOTAL WEIGHT LBS.	SECTION LOCATION		
			LENGTH	WIDTH	HEIGHT				WIDTH	LENGTH	DIA.	CFM	S.P.	MUA CFM	AC CFM				
																		TOP 23 BOT 8	FRT 12 BACK 36
1	GRIDDLE HOOD	XGEP-64-S	64																

MARK	MODEL	LOCATION	FLOW POINTS		SUPPLY LINE	DETECTION	MARK(S) PROTECTED BY FIRE SYSTEM
			HOODS	PCU			
FIRE SUPPRESSION-GRIDDLE HOOD	ANSUL R-102 WET CHEMICAL	REMOTE MOUNTED	6 UTILIZED	11 AVAILABLE	CONTINUOUS	FUSIBLE LINK	GRIDDLE HOOD SECTION 1

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		CONTROLS
								L	H		TYPE	SIZE	
1	GRIDDLE HOOD					GREASE GRABBER	4	16	16				
						STAINLESS STEEL	0	20					

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
 HOOD SUPPRESSION TANK - INCLUDED - 3 GAL. - [(1) 3.0 TANK(S)]
 REMOTE PULL STATION - STANDARD - FIELD INSTALLATION AT SINGLE POINT OF EGRESS

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

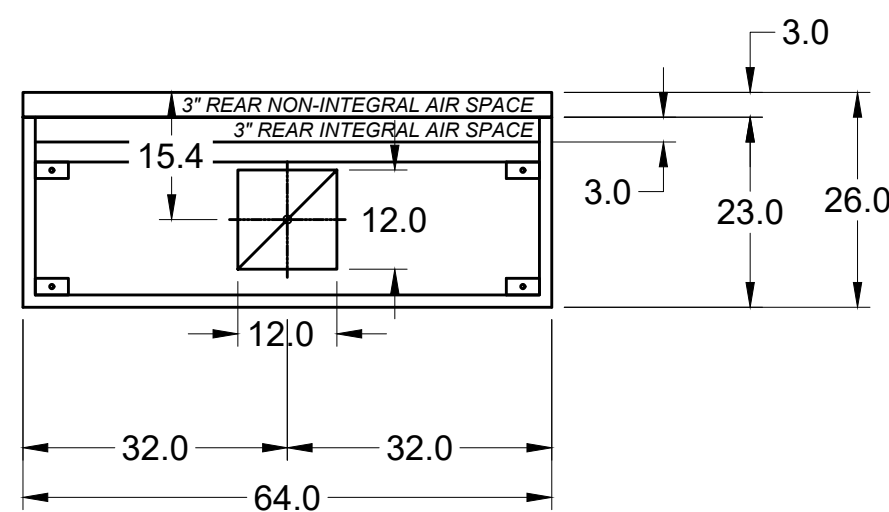
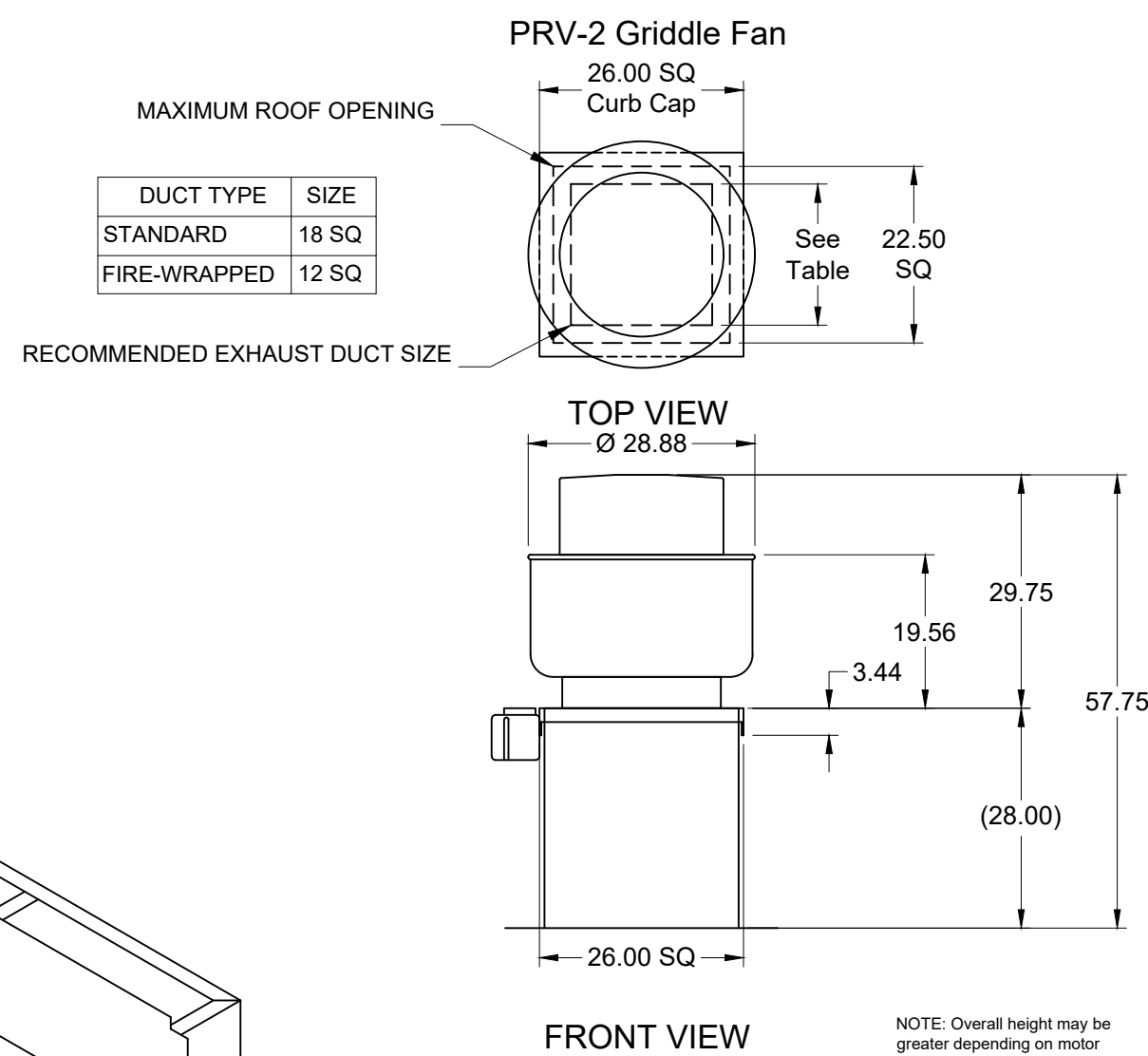
SPECIAL DESIGN REQUESTS
 SDR #K1800144 - CULVERS 4VAT 2FIRE PROCESS - GRIDDLE HOOD

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	1.799	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

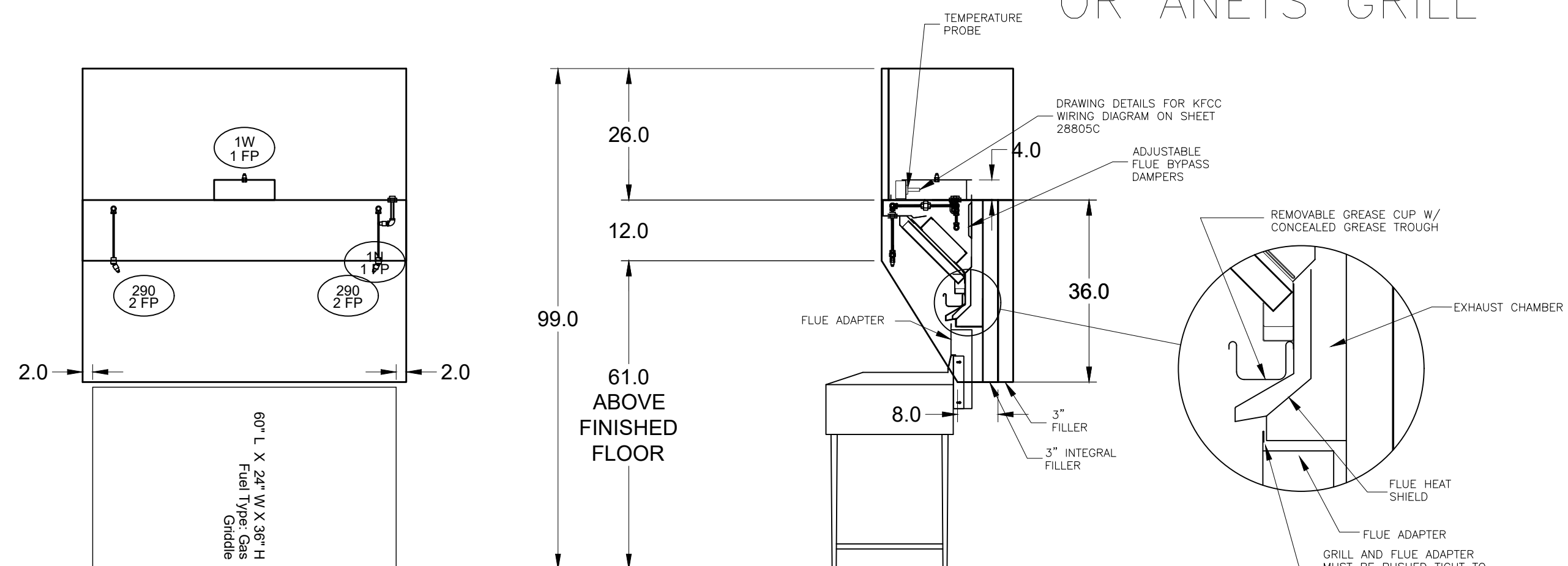
PRV-2 Griddle Fan - SELECTED OPTIONS AND ACCESSORIES

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 762 Listed - "Power Ventilators for Rest. Exh. Appliances"
 Switch, NEMA-3R, Toggle, Shipped with Unit
 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



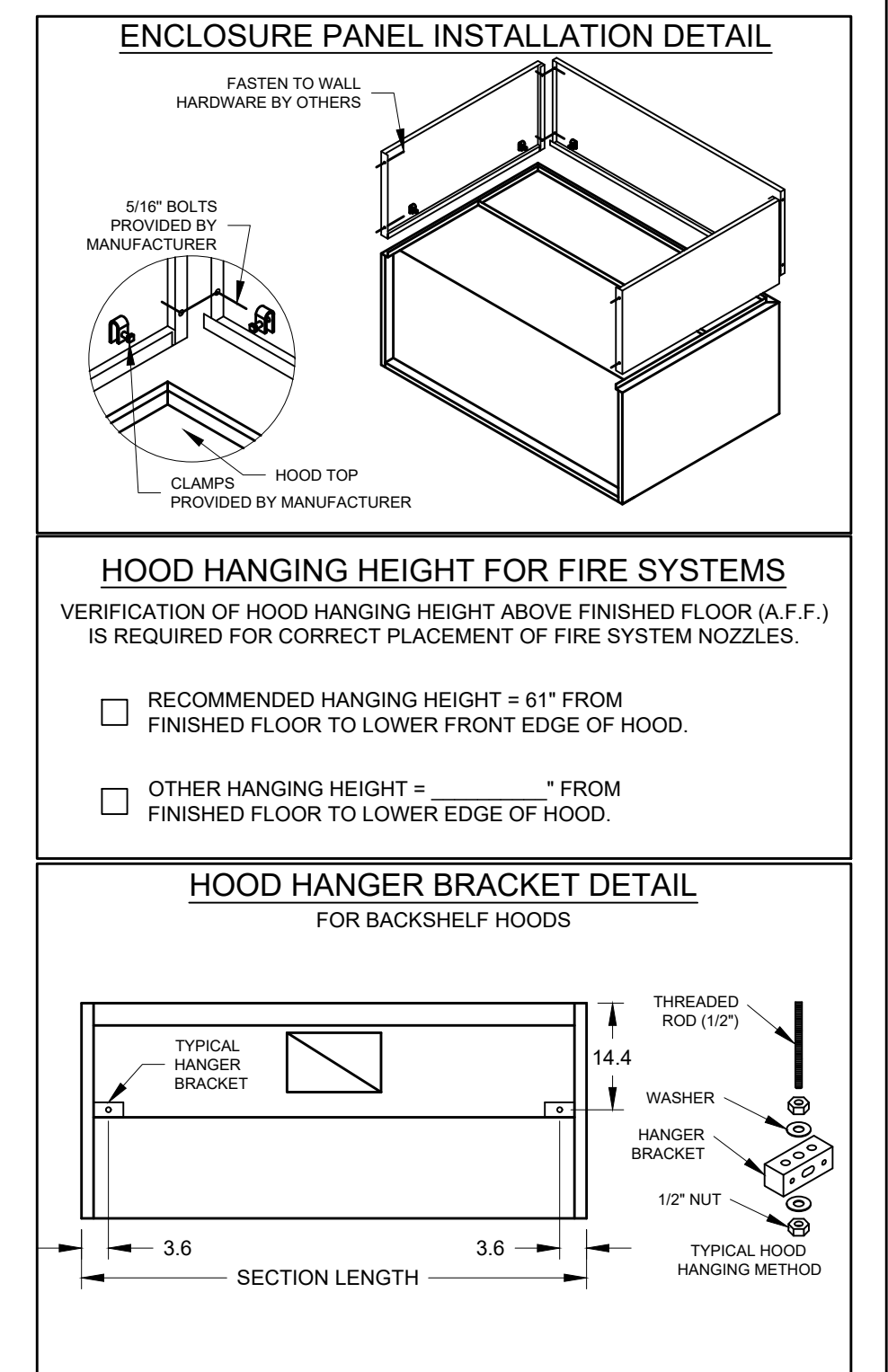
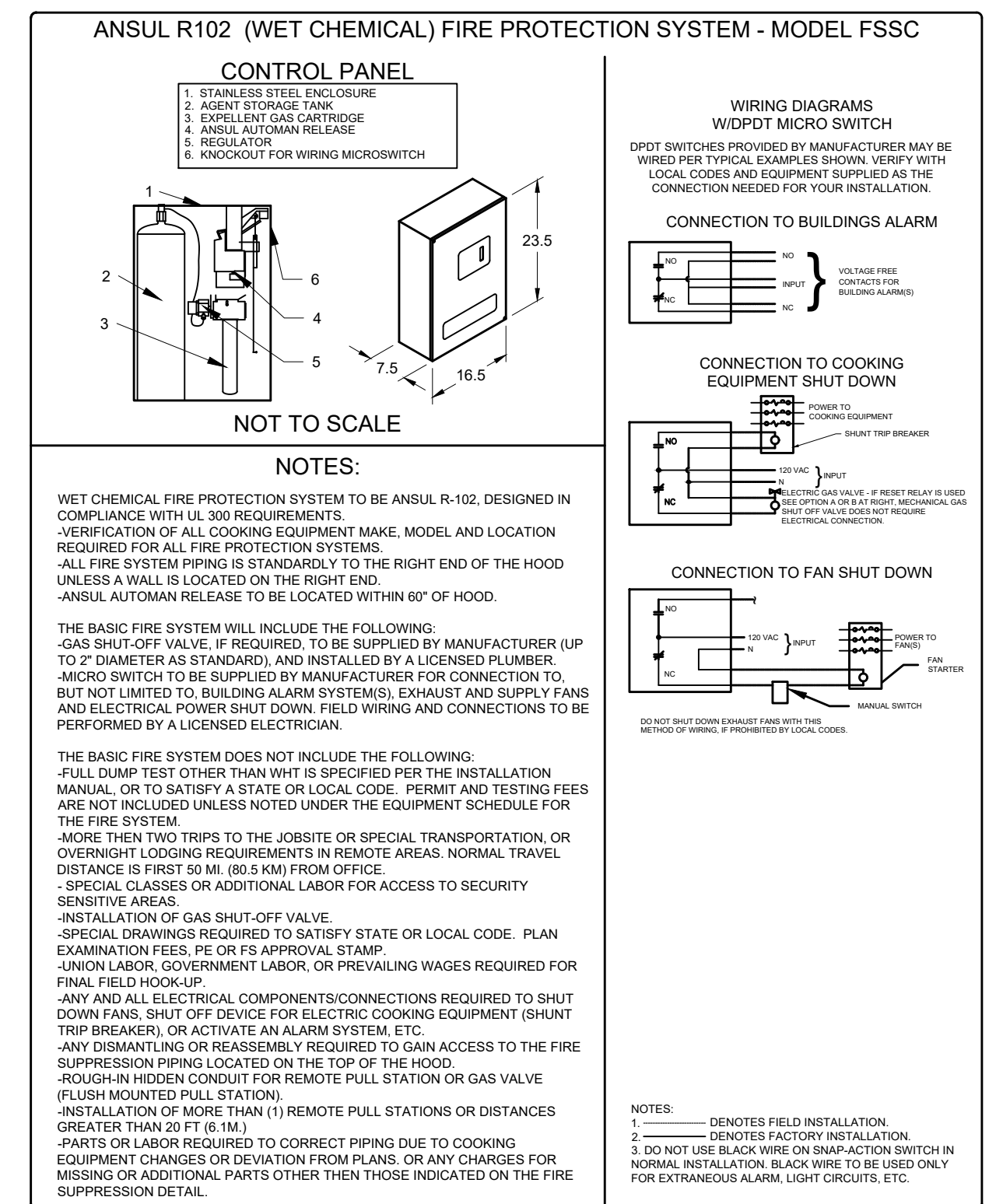
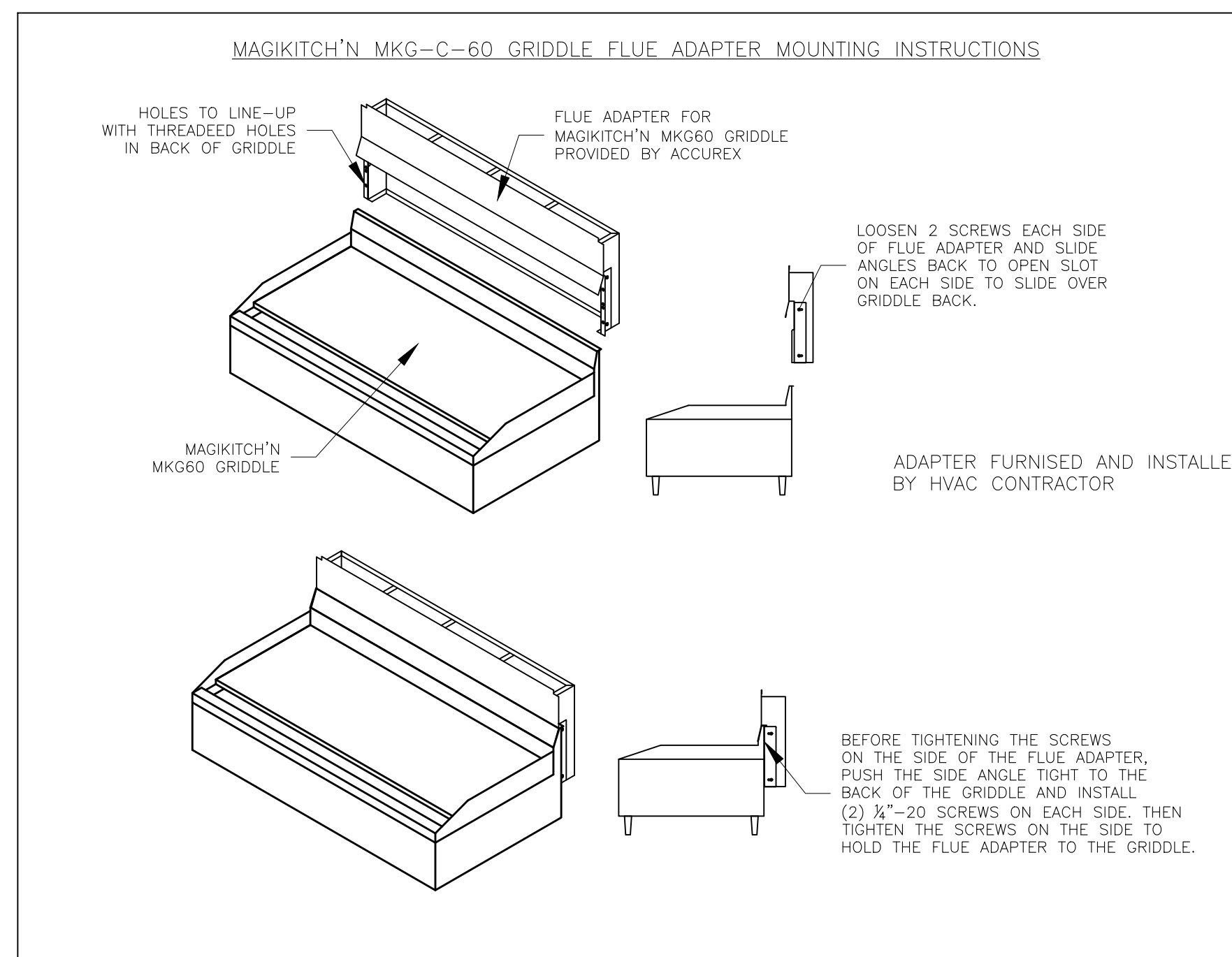
MARK: Griddle Hood - SECTION 1 PLAN VIEW

MUST USE WITH MAGIKITCH'N MODEL MKG-C-60
 VERIFY MAGIKITCHEN OR ANETS GRILL
 60" MAGIKITCH'N GRIDDLE FLUE ADAPTER



SECTION 1 ELEVATION VIEW

MARK: Griddle Hood SECTION VIEW



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	375	0.5	1,467	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
Birdscreen: Galvanized, nom. 84% Free Area	Composite Wheel Material

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	EF-1A	XCR-B80	75	0.125	882	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

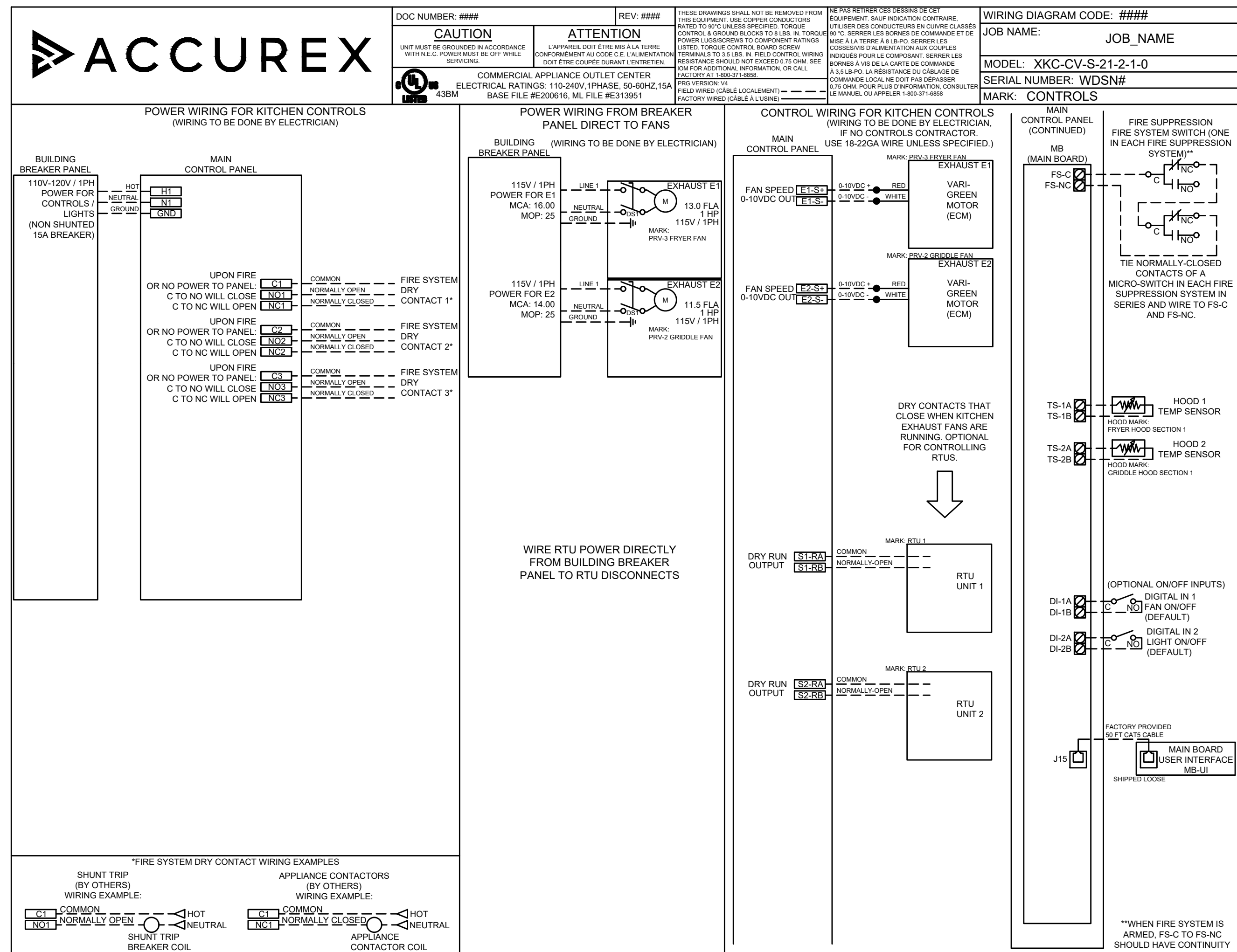
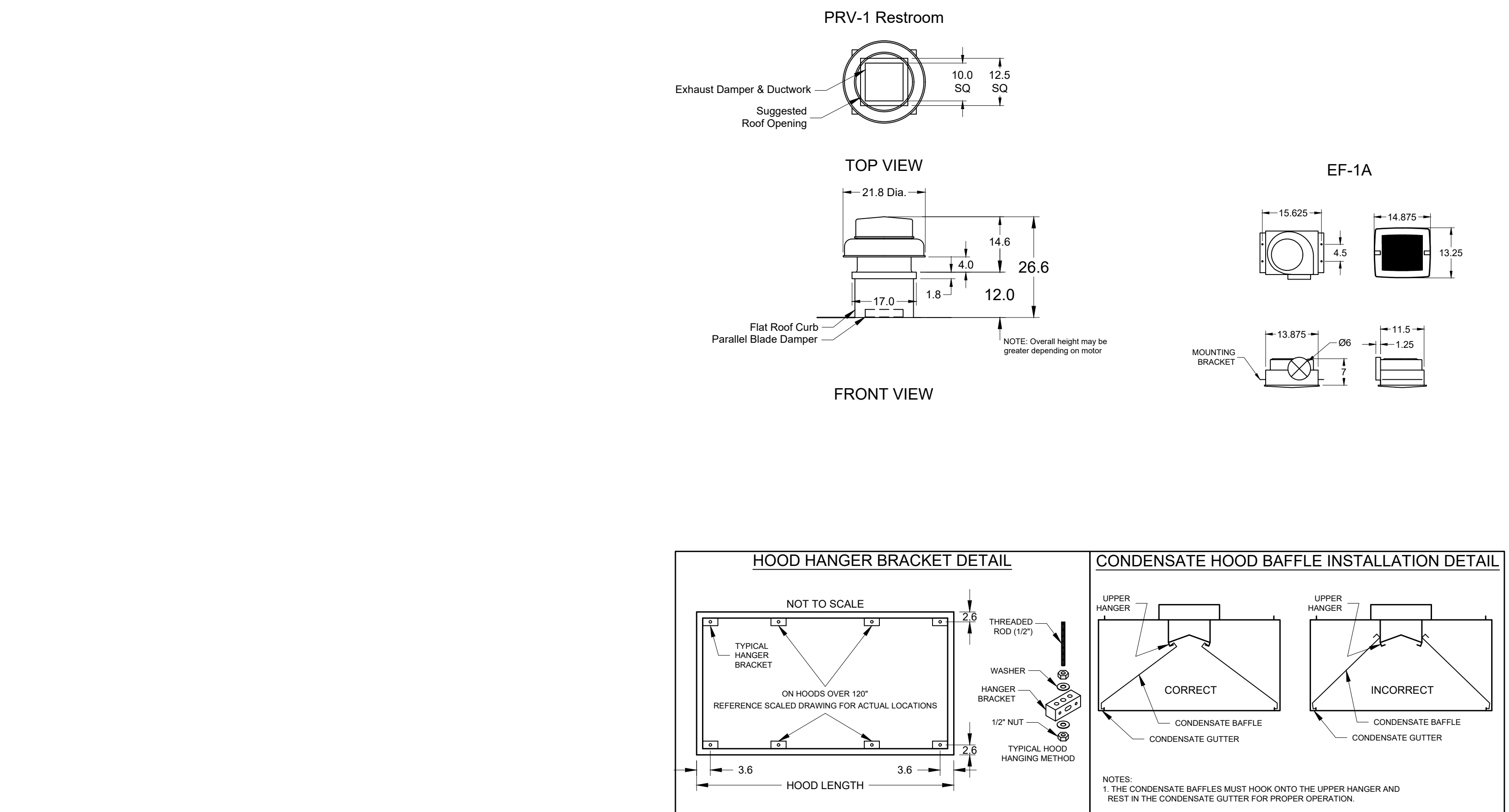
SPECIAL DESIGN REQUESTS	
(1)-WC-4 Wall Cap (F1600858)	

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		SPECIAL DESIGN REQUESTS	
TEMP SENSORS (FACTORY INSTALLED) - QTY. 2	DRY FIRE CONTACTS - QTY. 2	EXHAUST MAX DURING FIRE	SUPPLY OFF DURING FIRE
		SDR #K2000462 - CULVERS CONTROL PANEL - EXTRA SET OF FIRE CONTACTS - REVISE WIRING DIAGRAMS	



PROJECT: 12/4/2019
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 PHILLIP KRAFT
 PHILLIP.KRAFT@ACCUREX.COM
 262-227-7865
 UL NSF
 LISTED
 CULVERS - CAMDENTON, MO
 ITEM 25 CONDENSATE HOOD
 PRV-1 RESTROOM
 EF-1A
 CONTROLS