

MECHANICAL

These documents are approved for compliance with the STATE OF MICHIGAN MECHANICAL CODE subject to field inspection and the conditions of approval.



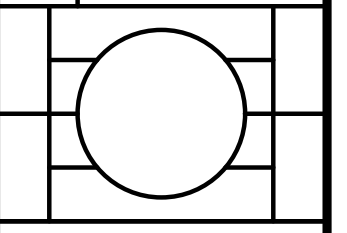
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NEW CULVER'S RESTAURANT
NEC N Alger Rd & W Cheesman Rd
Pine River Township, MI 48801
County of GRATIOT



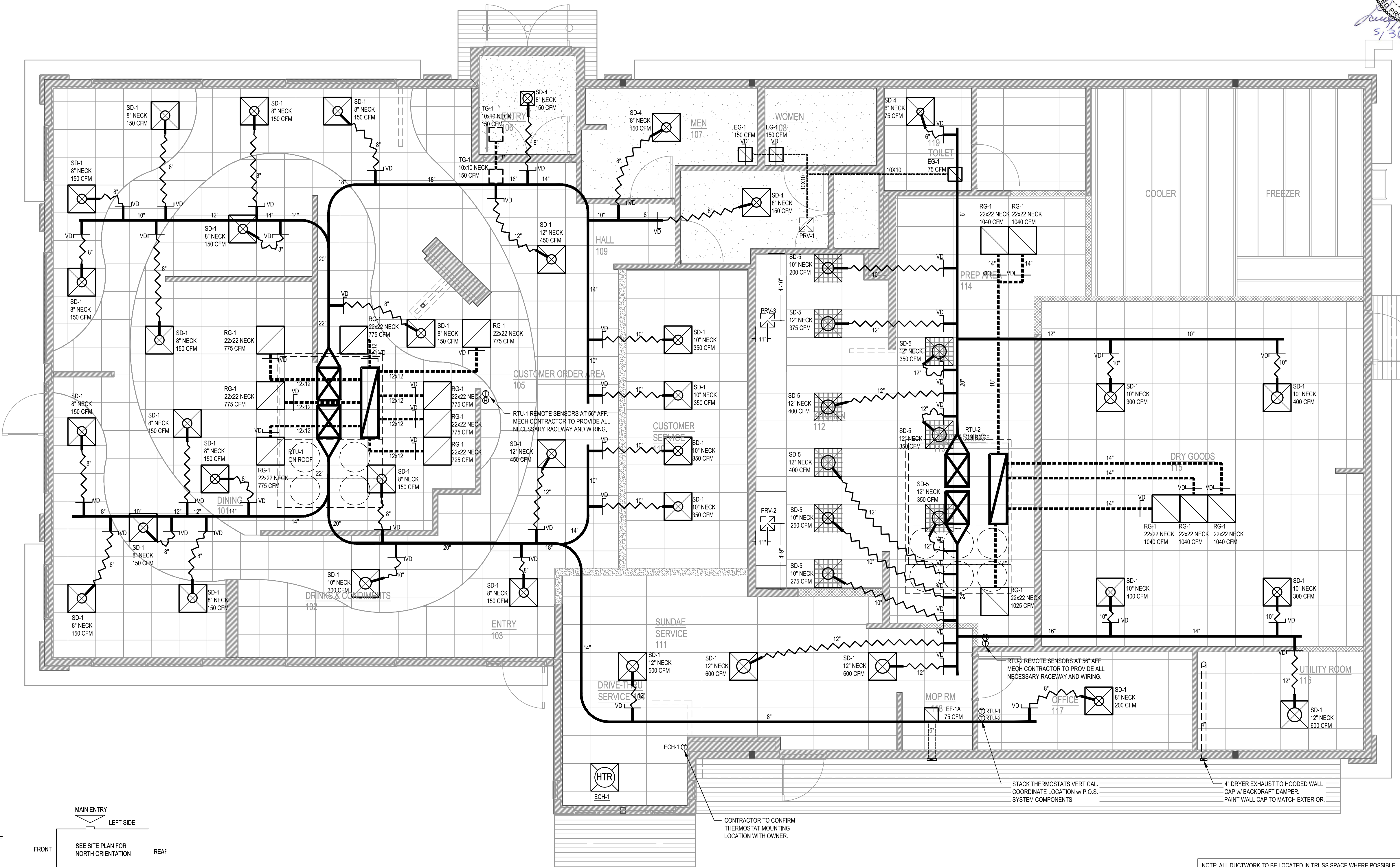
OWNER:
K-BERGER 12, LLC
11232 Sky View Lane
Minocqua, WI 54648
Peter Spohn
608-5113-1877

ARCHITECT:
OLLMANN ERNEST MARTIN ARCHITECTS
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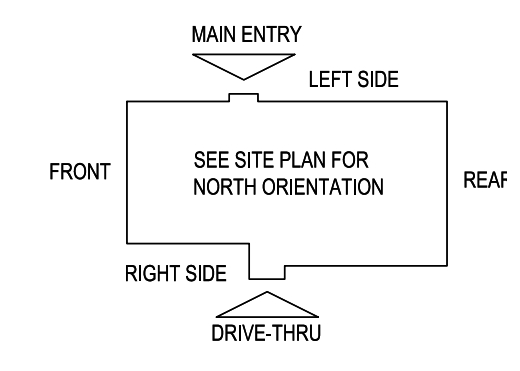


HVAC PLAN, DIFFUSER SCHEDULE
Date: 05-31-2024
Revision:

M101



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



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	EXHAUST	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

DIFFUSER NOTES:

- PROVIDE w/ ADJUSTABLE OPPOSED BLADE DAMPER
- VERIFY ALL DIFFUSERS AND RETURN GRILLE COLORS WITH OWNER AND ARCHITECT
- PROVIDE w/ 22X22 PLENUM BOX.
- ALL DIFFUSERS AND RETURNS LOCATED IN BLACK CEILING SHALL BE FLAT BLACK FINISH.

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°, COOLING 72°
2. KITCHEN: HEATING 68°, COOLING 74°

CONTRACTOR TO CONFIRM THERMOSTAT MOUNTING LOCATION WITH OWNER.

STACK THERMOSTATS VERTICAL. COORDINATE LOCATION w/ P.O.S. SYSTEM COMPONENTS

4" DRYER EXHAUST TO HOODED WALL CAP w/ BACKDRAFT DAMPER. PAINT WALL CAP TO MATCH EXTERIOR.



MECHANICAL

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GENERAL NOTES

- 1. DEVIATIONS FROM THE HVAC PLANS ARE THE RESPONSIBILITY OF THE HVAC CONTRACTOR & WILL NOT RESULT IN ADDITIONAL COSTS TO THE OWNER UNLESS WRITTEN CHANGE ORDERS ARE APPROVED BY THE OWNER.
2. ALL WORK TO BE PERFORMED TO STATE CODE & SMACNA GUIDELINES.
3. INSTALL UNITS ACCORDING TO MANUFACTURERS GUIDELINES.
4. PROVIDE OWNER W/ OPERATION & MAINTENANCE MANUALS & SYSTEM SCHEMATICS.
5. CONTRACTOR TO CONFIRM VOLTAGES & PHASES OF EQUIPMENT PRIOR TO INSTALLATION.
6. VERIFY ALL EXISTING CONDITIONS PRIOR TO INSTALLATION (DRAWINGS ARE DIAGRAMMATIC IN NATURE & DO NOT REFLECT EXACT LOCATIONS OF EQUIPMENT OR OTHER APPARATUSES.)
7. PROVIDE SHOP DRAWINGS TO THE ARCHITECT/DESIGNER FOR EQUIPMENT, FANS, REGISTERS, ETC. PRIOR TO PROCUREMENT.
8. PROVIDE OWNER W/ COLOR CHOICES FOR SWITCHES & OTHER APPARATUSES WHERE APPLICABLE.
9. VENT OWNER WATER HEATER AS REQUIRED.
10. VENT DRYER THRU SIDEWALL TO EXTERIOR AS REQUIRED. MAINTAIN CLEARANCE FROM INTAKES AS NOTED.
11. HANG & SUPPORT MATERIALS SHALL BE INSTALLED THE LATEST EDITION OF THE ASHRAE HANDBOOK OF FUNDAMENTALS.
12. MAINTAIN AT LEAST 10 FEET CLEARANCE FROM INTAKES OR WINDOWS ON ALL EXHAUST VENTS.
13. TEST, ADJUST, & CALIBRATE CONTROL SYSTEMS AS REQUIRED. PROVIDE SCHEMATICS / DESCRIPTION TO THE OWNER PRIOR TO INSTALLATION.
14. INSTALLER RESPONSIBLE FOR FINAL TEST & BALANCING DURING TRAINING WEEK. PROVIDE WRITTEN REPORT BY THIRD PARTY INDEPENDENT TAB CONTRACTOR.
15. VERIFY W/ OWNER EXACT HEATER LOCATION TO AVOID BUILDING FUNCTION INTERFERENCE.
16. REPLACE ALL AIR FILTERS PRIOR TO TURNING SYSTEM OPERATIONS OVER TO OWNER.
17. HVAC CONTRACTOR IS RESPONSIBLE FOR A COMPLETE & FULLY WORKING SYSTEM.
18. DUCT DIMENSIONS LISTED ARE NET FREE - CLEAR INSIDE DIMENSIONS.
19. VERIFY DUCT LOCATIONS PRIOR TO FABRICATION. (VERIFY LIMITED AREA FOR DUCTWORK & OTHER APPARATUSSES.)
20. INSULATE DUCT WORK TO SMACNA GUIDELINES & STATE CODES.
21. INSTALL VOLUME CONTROL DAMPERS AS INDICATED ON PLANS.
22. FLEXIBLE ROUND DUCT WORK NOT TO EXCEED 8 FEET IN LENGTH, AVOID UNNECESSARY TURNS & SLACK.
23. RETURN AIR DUCT WORK TO BE LINED FOR SOUND ATTENUATION.
24. DUCT WORK TO BE STANDARD GAUGE SHEET METAL (FIBROUS DUCT NOT ALLOWED.)
25. INSULATE EXHAUST DUCT FOR EXHAUST FAN TO EXTERIOR TERMINATION.
26. COORDINATE WORK W/ GENERAL CONTRACTOR & OWNER TO MAXIMIZE CEILING HEIGHT & AVOID CONFLICTS.
27. SIS WALL PANELS FOR THE KITCHEN AREA ARE TO BE FURNISHED AND INSTALLED BY THE HVAC CONTRACTOR. PANELS ARE TO BE 18 GA. TYPE 304 SIS. SEE DETAILS AND LOCATIONS ON THE A103 DRAWING.
28. EXHAUST FANS AND FURNACE FANS TO RUN CONTINUOUSLY DURING OCCUPIED MODE.
29. NIGHT SET BACK THERMOSTATS TO BE INSTALLED ON ALL HVAC EQUIPMENT.

2023-185 CULVER'S OF PINE RIVER TOWNSHIP, MI PINE RIVER TOWNSHIP, MI

RTU SCHEDULES

Table with columns: UNIT No, AREA SERVED, SUPPLY FAN TYPE, SA FAN VFD, SUPPLY CFM, MIN OA CFM, ESP, OA TEMP, MIXED AIR TEMP, COIL CAPACITY, HEATING, ELECTRICAL (1), MANUFACTURER, MODEL.

ADDITIONAL FACTORY INSTALLED OPTIONS FOR BOTH UNITS:
1) WEATHERPROOF DISCONNECT
2) FACTORY INSTALLED/FIELD POWERED GFCI
3) RETURN SMOKE DETECTOR
4) DRAIN PAN OVERFLOW SWITCH
5) SINGLE ENTHALPY ECONOMIZER W/ FAULT DETECTION DIAGNOSTICS
6) BAROMETRIC RELIEF
7) HAIL GUARDS
8) 2" MERV 13 FILTERS
9) SS HEAT EXCHANGER
10) HOT GAS REHEAT

ADDITIONAL FIELD INSTALLED OPTIONS FOR BOTH UNITS:
1) 14" DOWNFLOW HYBRID CURB
2) PVC DRAIN TRAP KIT
3) REMOTE TEMPERATURE AND HUMIDITY SENSORS
4) LENNOX MODEL CS7500 PROGRAMMABLE THERMOSTAT
5) OUTDOOR AIR CFM CONTROL

NOTES:
1) NOTIFY ELECTRICAL CONTRACTOR OF BREAKER REQUIREMENTS AFTER SELECTION

- PRV-1 RESTROOM EXHAUST FAN - REFER TO SHEET M204
PRV-2 GRIDDLE EXHAUST FAN - REFER TO SHEET M202
PRV-3 FRYER EXHAUST FAN - REFER TO SHEET M203
EF-1A MOP ROOM EXHAUST FAN - REFER TO SHEET M204

- ITEM #49A GRIDDLE HOOD - REFER TO SHEET M202
ITEM #59A FRYER HOOD - REFER TO SHEET M203
ECH-1 ELECTRIC CEILING HEATER Q-MARK OR EQUAL CDF-548 ELECTRIC CEILING HEATER & CDF RECESSED MOUNTING FRAME, CDF-TR4 TRANSFORMER & WALL MOUNTED THERMOSTAT. 208/240 VOLT SINGLE PHASE = 19.2 AMPS (SUPPLIED AND INSTALLED BY ELECTRICAL CONTRACTOR.)

- 22. FLEXIBLE ROUND DUCT WORK NOT TO EXCEED 8 FEET IN LENGTH, AVOID UNNECESSARY TURNS & SLACK.
23. RETURN AIR DUCT WORK TO BE LINED FOR SOUND ATTENUATION.
24. DUCT WORK TO BE STANDARD GAUGE SHEET METAL (FIBROUS DUCT NOT ALLOWED.)
25. INSULATE EXHAUST DUCT FOR EXHAUST FAN TO EXTERIOR TERMINATION.
26. COORDINATE WORK W/ GENERAL CONTRACTOR & OWNER TO MAXIMIZE CEILING HEIGHT & AVOID CONFLICTS.
27. SIS WALL PANELS FOR THE KITCHEN AREA ARE TO BE FURNISHED AND INSTALLED BY THE HVAC CONTRACTOR. PANELS ARE TO BE 18 GA. TYPE 304 SIS. SEE DETAILS AND LOCATIONS ON THE A103 DRAWING.
28. EXHAUST FANS AND FURNACE FANS TO RUN CONTINUOUSLY DURING OCCUPIED MODE.
29. NIGHT SET BACK THERMOSTATS TO BE INSTALLED ON ALL HVAC EQUIPMENT.

CONTROL NOTES

[NOTE: KITCHEN HOODS SUPPLIED AND INSTALLED BY HVAC CONTRACTOR]

- 1. WIRE RTU-1, RTU-2 TO SHUT-DOWN & EXHAUST HOOD FANS TO CONTINUE TO RUN UPON ACTIVATION OF THE ANSUL SYSTEM.
2. WIRE RTU-1 & RTU-2 TO SHUT-DOWN UPON ACTIVATION OF ANY IN-DUCT SMOKE DETECTOR.
3. OCCUPIED MODE: FANS IN RTU-1 & RTU-2, EXHAUST FANS PRV-1, PRV-2, PRV-3 AND EF-1 TO RUN CONTINUOUSLY.
4. UNOCCUPIED MODE: FANS IN RTU-1 & RTU-2 TO RUN ONLY WHEN COOLING OR HEATING IS CALLED FOR.

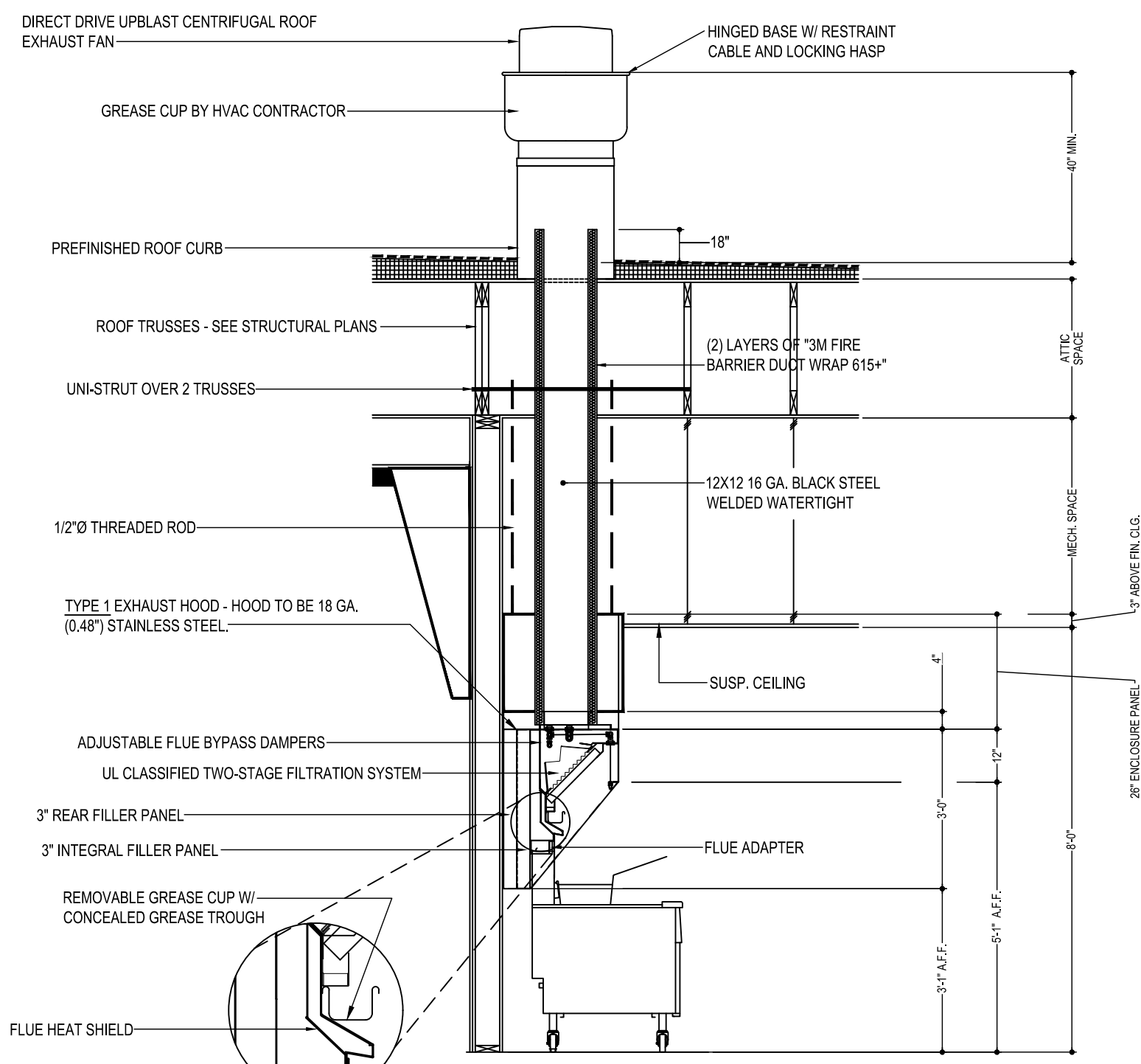
TEST & BALANCE NOTES

- 1. ACCUREX WILL PROVIDE BALANCED AIRFLOW & FUNCTIONAL CHARACTERISTICS OF THE HVAC SYSTEM AS THEY RELATE TO AIRFLOW & AIR PRESSURE ONLY. SERVICES TO BE PERFORMED BY A CERTIFIED NEBB FIRM & ITS MANAGING GROUP NATIONAL TAB.
2. SERVICES NOT INCLUDED: PULLEY / SHEAVE CHANGES, MOTOR CHANGE OUTS, OR RETURN TRIPS DUE TO DELAYS CAUSED BY JOB INCOMPLETENESS.
3. ESTABLISH MINIMUM OUTSIDE AIR FLOW INDICATED ON SCHEDULES AT ALL SUPPLY FAN SPEEDS.

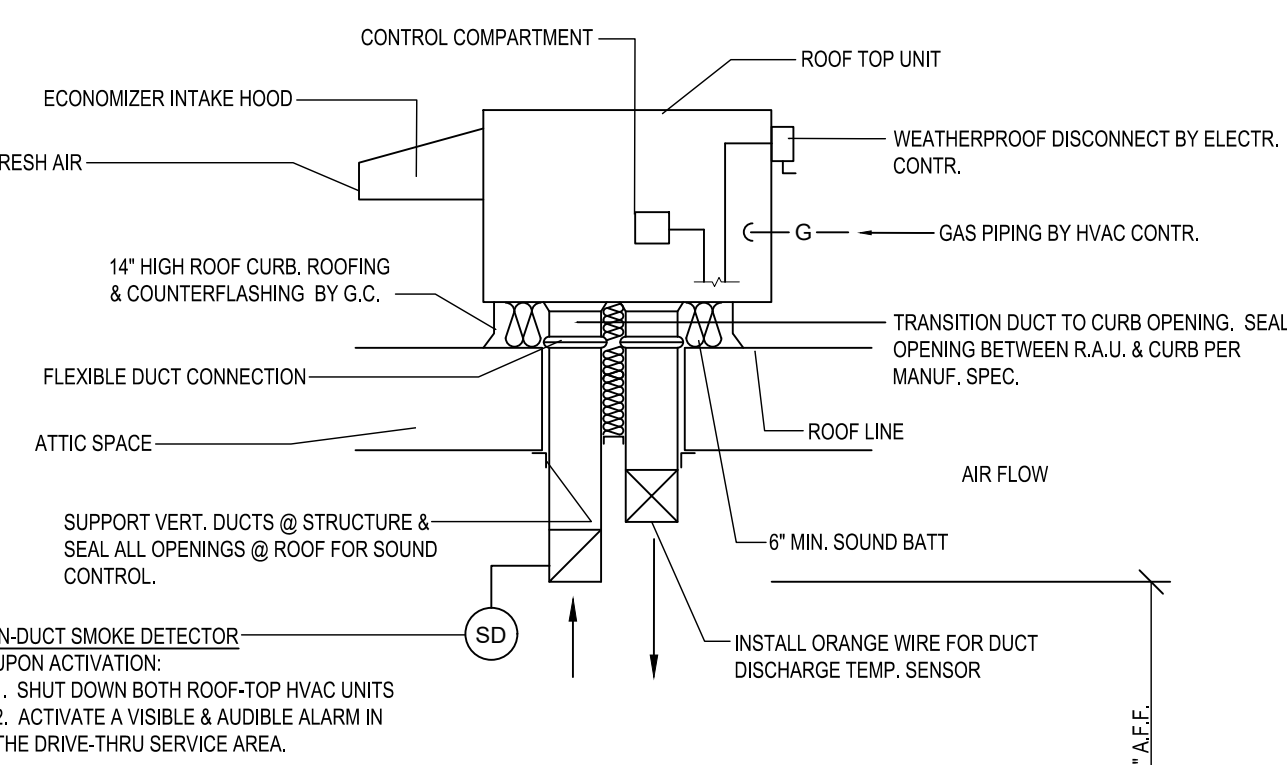
Table with sections: AIR BALANCE TABLE EXHAUST AIR FLOW, VENTILATION REQUIRED PER 2015 MICHIGAN MECHANICAL CODE, and OVERALL AIRFLOW SUMMARY.

NATIONAL ACCOUNT PROGRAM

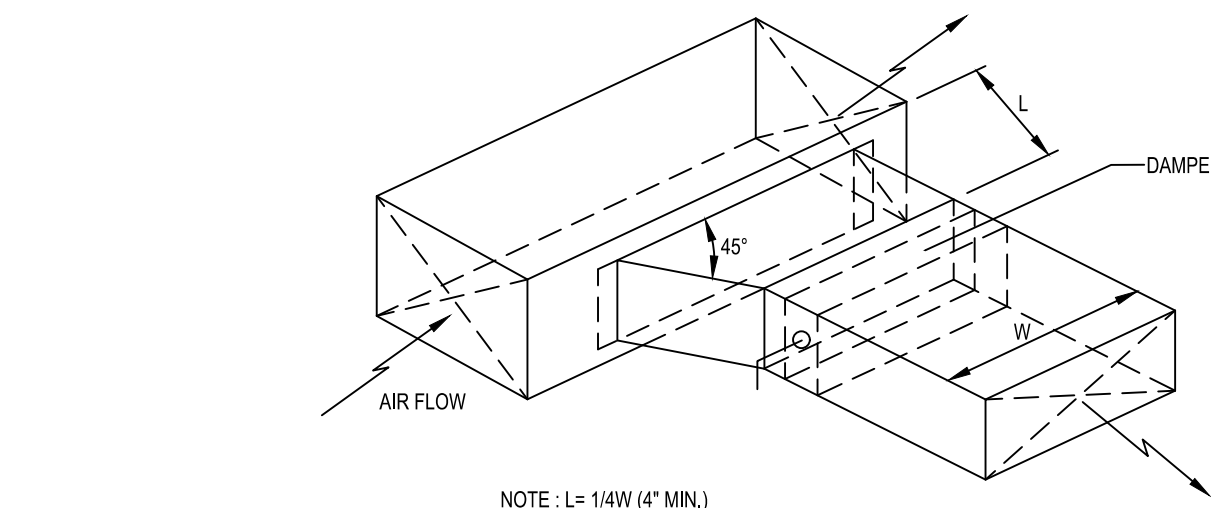
- 1. LENNOX INDUSTRIES, INC. - ROOFTOP HVAC EQUIPMENT
SALES: LennoxNationalAccounts@Lennoxind.com copy to Dave.Ebner@Lennoxind.com
NATIONAL ACCOUNT TECHNICAL SUPPORT: (800) 367-6288 Option #2 lennoxind.com
2. ACCUREX/ GREENHECK FAN CORPORATION - KITCHEN HOODS, EXHAUST FANS, ROOF CURBS, ANSUL SYSTEMS, ACCESSORIES AND TEST AND BALANCE
CONTACT PHILIP KRAFT: 1-282-227-7885 philip.kraft@accurex.com
SECONDRARY CONTACT BRAD BORCHARDT: 1-715-551-0869 brad.borchardt@accurex.com
SECONDRARY CONTACT ANDY JACOBS: andy.jacobs@accurex.com
ACCUREX WILL PROVIDE BALANCED AIRFLOW AND FUNCTIONAL CHARACTERISTICS OF THE HVAC AS THEY RELATE TO AIRFLOW AND RESISTANCE ONLY. SERVICES TO BE PERFORMED BY A CERTIFIED NEBB FIRM AND ITS MANAGING GROUP - NATIONAL TAB
3. RAYMON AIR DISTRIBUTION EQUIPMENT - DIFFUSERS AND GRILLES
NATIONAL ACCOUNTS SALES: HUNZICKER LLC, MARIE WILSON - (608) 945-9551 marie@hunzickerllc.com



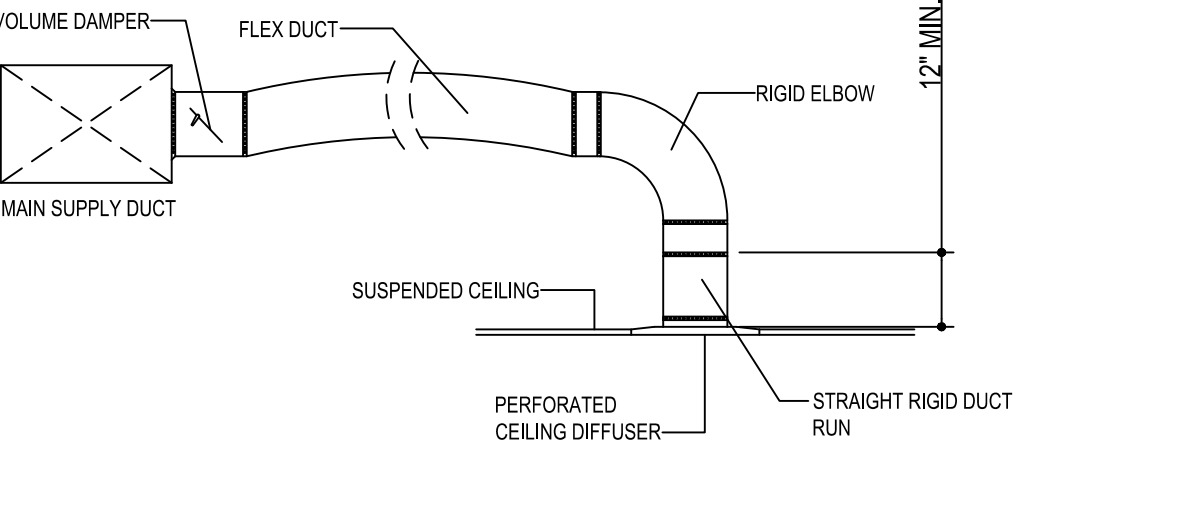
C3 KITCHEN HOOD EXHAUST DETAIL SCALE: N.T.S. VERIFY MOUNTING HEIGHTS W/ OWNER AND GENERAL CONTRACTOR



A6 ROOFTOP HVAC UNIT SCALE: N.T.S.



C6 BRANCH DUCT TAKEOFF DETAILS SCALE: N.T.S.



E5 DUCT LINER INSTALLATION DETAIL SCALE: N.T.S. NOTE: USE ONLY ON VERTICAL DROP FROM RTU TO WITHIN 9'-10" A.F.F. DUCT LINER WILL NOT BE PERMITTED ON ANY HORIZ. RUNS.

LENNOX SETTINGS FOR CULVERS

IN ORDER TO SET UP THE RTUS YOU WILL NEED TO DOWNLOAD LENNOX CORE SERVICE APP. AND PAIR YOUR DEVICE WITH THE CORE CONTROLLER. ONCE PAIRED YOU WILL SEE THE OPERATION OVERVIEW SCREEN. SEE INSTALLATION MANUAL FOR INSTRUCTIONS ON DOWNLOADING THE APP. OR SCAN THE QR CODE ON THE FRONT COVER OF THE CONTROLLER

- HEAT DELAY ADJUSTMENT
HEAT DELAY WILL BE PR66 IN THE CORE CONTROLLER AND CHANGED IN THE APP AS SHOWN IN THE MENU PATH BELOW. DEFAULT IS SET AT 3600 SECONDS.
FRESH AIR TEMPERING (HEATING)
THIS IS ADJUSTED THROUGH THE MENU FROM THE MAIN SCREEN

- GLOBAL ECONOMIZER MODE (KITCHEN UNIT ONLY)
THIS IS SET BY CHANGING CONFIGURATION ID#1 CHARACTER 2 TO G
ECONOMIZER MINIMUM POSITION SET-UP
THIS IS ADJUSTED THROUGH THE MENU FROM THE MAIN SCREEN

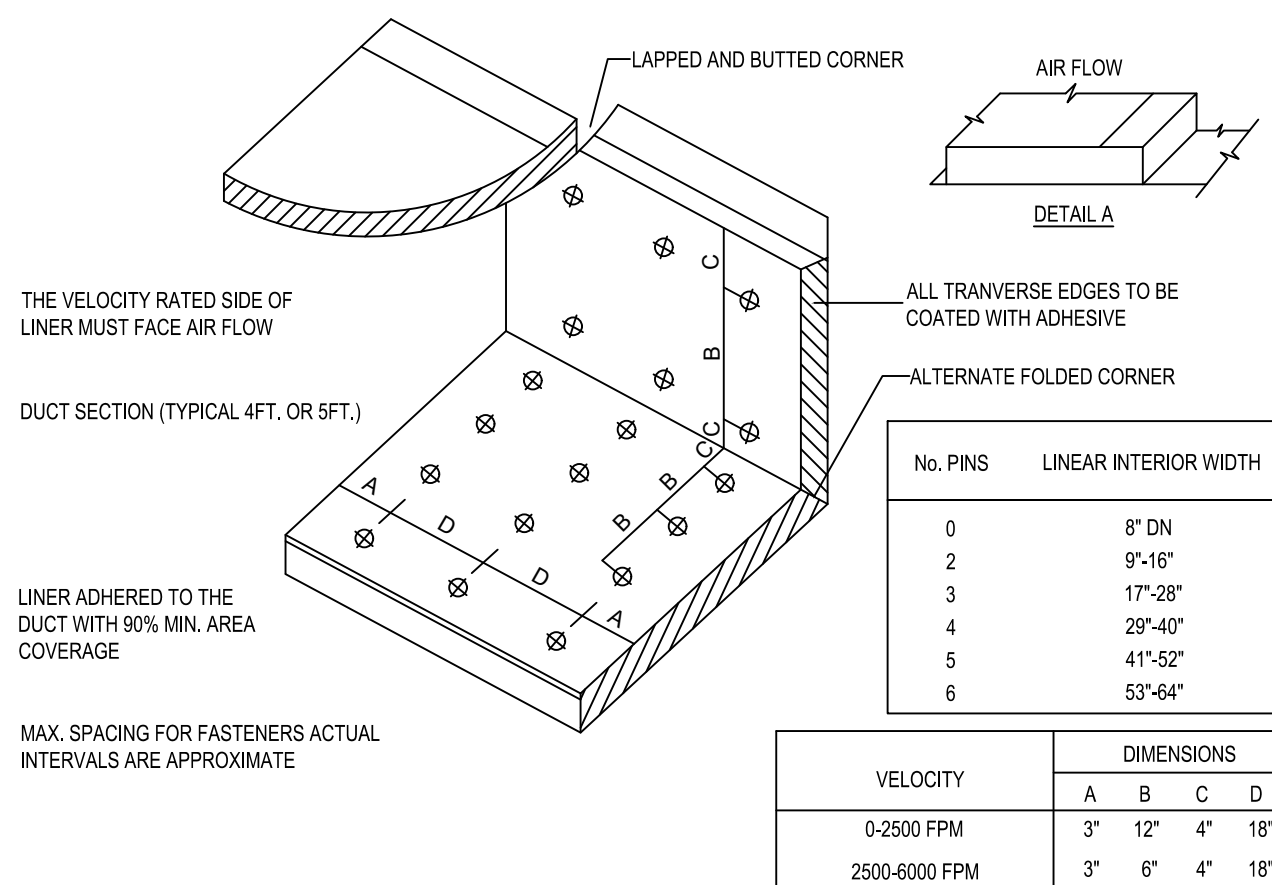
- OCCUPIED AND UNOCCUPIED
USING 24V THERMOSTAT CONTROL OCCUPIED/ UNOCCUPIED WILL BE DETERMINED BY INPUT ON P237-8 ON THE IA BOARD

COOKING APPLIANCE / TYPE 1 HOOD INTERLOCK

- 1. REMOTE SWITCH ON - POWER TO KITCHEN FAN CONTROL CENTER (KFCC)
2. KFCC CONTROLS
a) EXHAUST FANS PRV-2 (GRILLE) & PRV-3 (FRYERS) ARE STARTED.
b) OPENS OUTSIDE AIR INTAKE ON RTU-1 & RTU-2 TO MINIMUM FRESH AIR OPENING.
c) POWER TO OUTLETS #51 (GRILLE) & #60 (FRYERS).
3. GRILLE & FRYER CAN BE STARTED.
4. IN CASE OF FIRE:
a) SHUNT TRIP BREAK FOR GRILLE & FRYERS OUTLET TRIPS.
b) ANSUL SYSTEM IS ACTIVATED.
c) THE MECHANICAL GAS VALVES CLOSES.
d) SHUT DOWN RTU-1 & RTU-2 & CLOSE OUTSIDE AIR.
e) EXHAUST FANS PRV-2 & PRV-3 CONTINUE TO RUN.

GREASE HOOD FIRE SUPPRESSION SYSTEM

WET-CHEMICAL EXTINGUISHING SYSTEMS SHALL BE INSTALLED, MAINTAINED, PERIODICALLY INSPECTED AND TESTED IN ACCORDANCE WITH NFPA 17A AND THEIR LISTING.



Project information including owner name (NEW CULVER'S RESTAURANT), address (NEC N Alger Rd & W Cheesman Rd), location (Pine River Township, MI 48801), architect (OLLMANN ERNEST MARTIN ARCHITECTS), owner (K-BERGER 12, LLC), and revision information.

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
1	GRIDDLE HOOD	XGEP-64-S	64	TOP 23 BOT 8	FRT 12 BACK 36	430 SS WHERE EXPOSED	MEDIUM	1500	12	12		1500	1.918			137	SINGLE

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
1	GRIDDLE HOOD					GREASE GRABBER	4	16	16			
						STAINLESS STEEL	0	20				

HOOD OPTIONS
 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

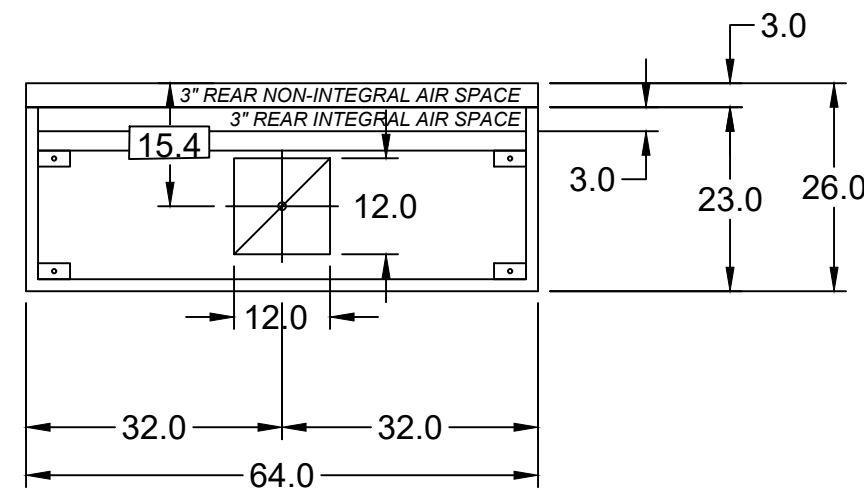
SPECIAL DESIGN REQUESTS
 SDR #K1100145 - FLUE BYPASS HOOD
 SDR #K1800144 - CULVERS 4VAT 2FIRE PROCESS - GRIDDLE HOOD

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	1.801	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"

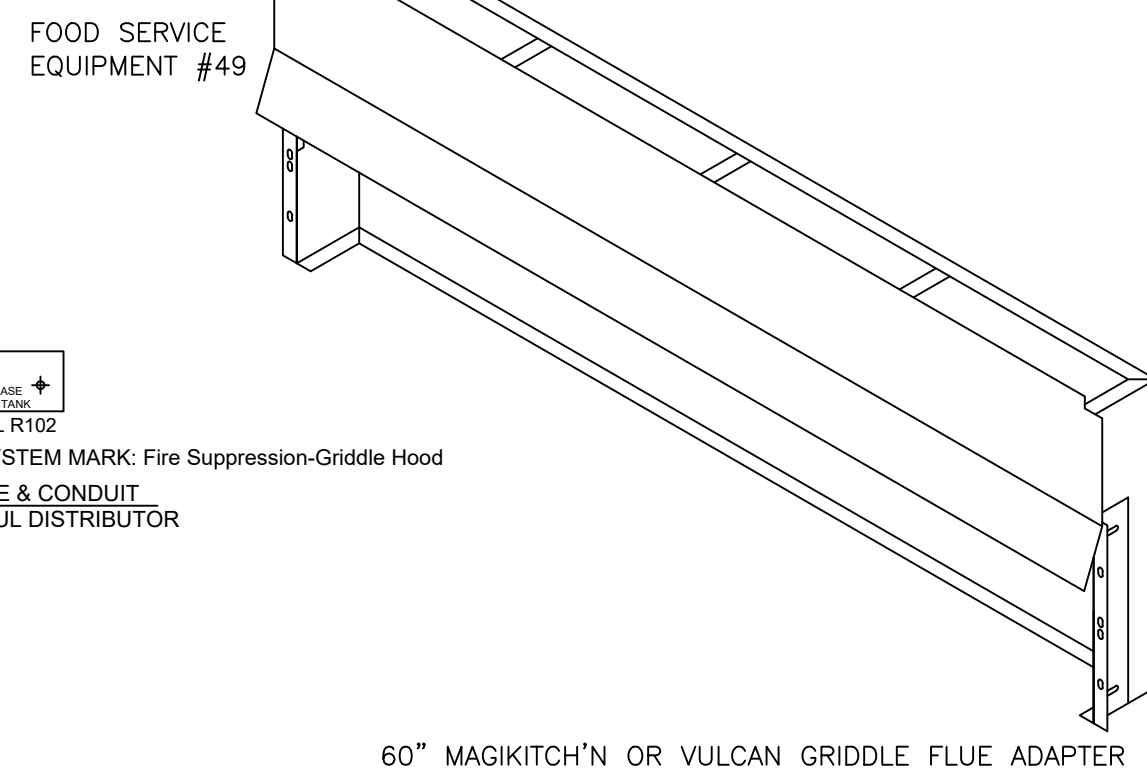
PRV-2 Griddle Fan : SELECTED OPTIONS AND ACCESSORIES

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

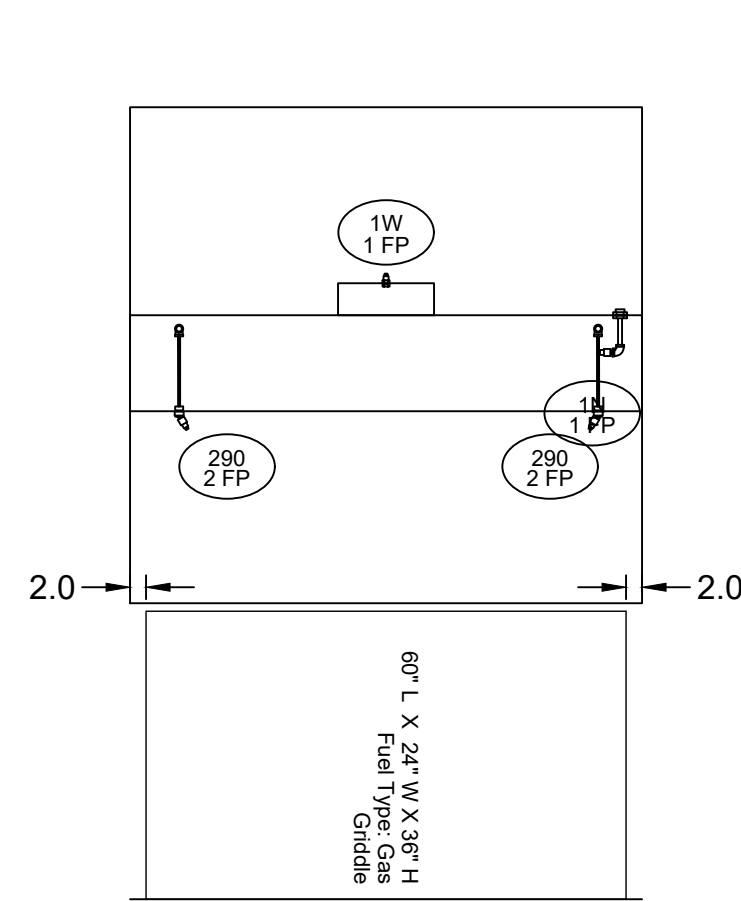


MARK: Griddle Hood - SECTION 1 PLAN VIEW

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



60" MAGIKITCH'N OR VULCAN GRIDDLE FLUE ADAPTER

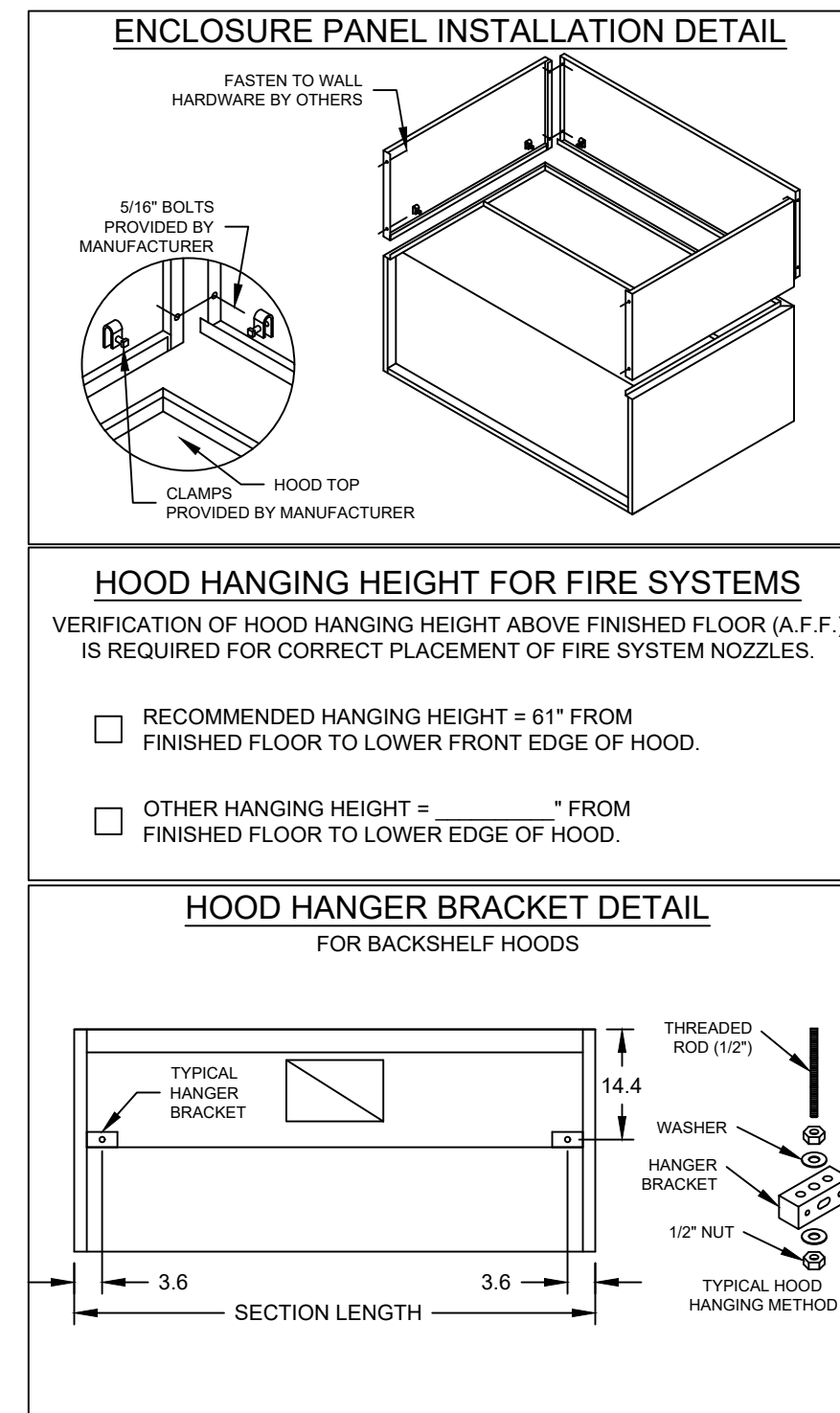
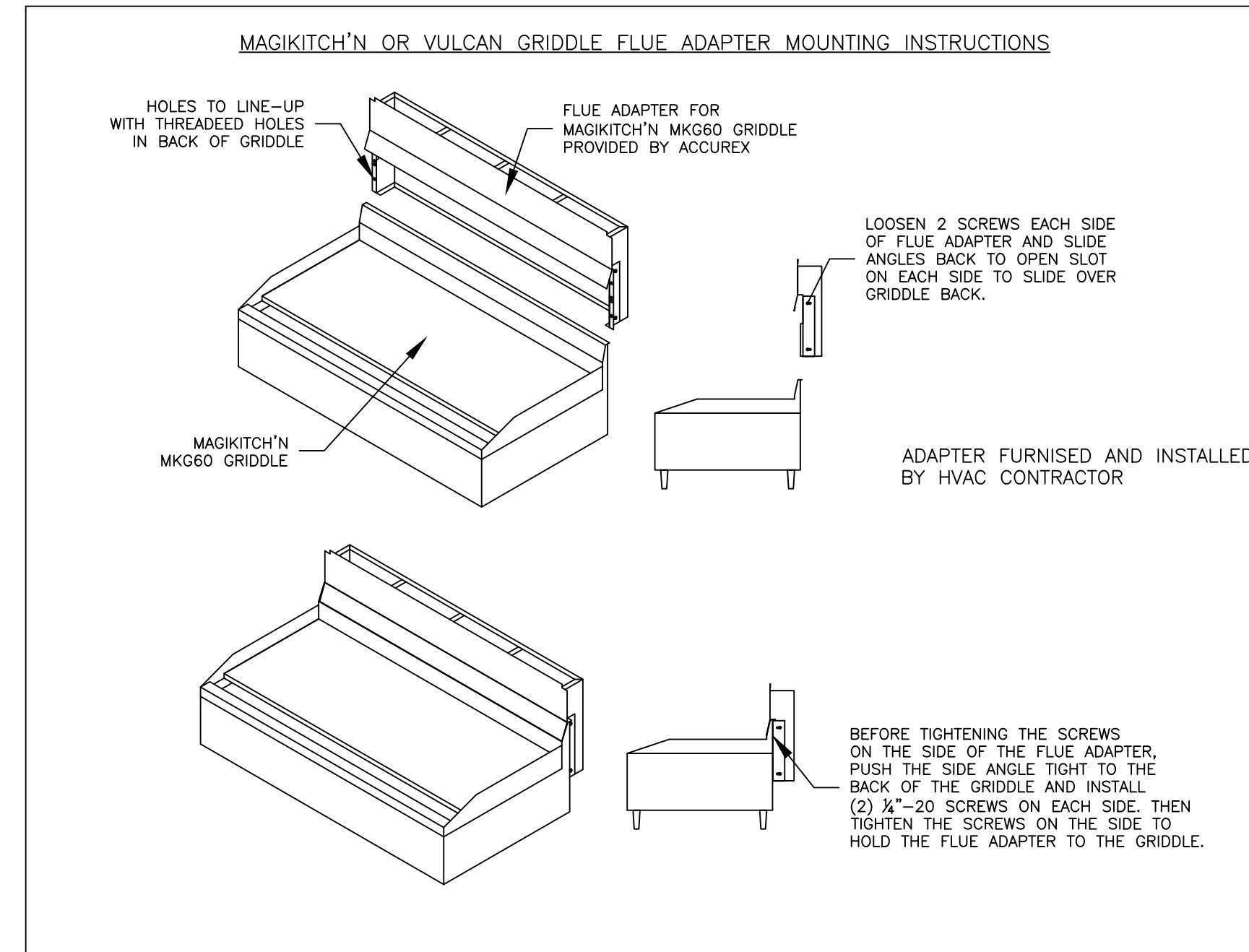
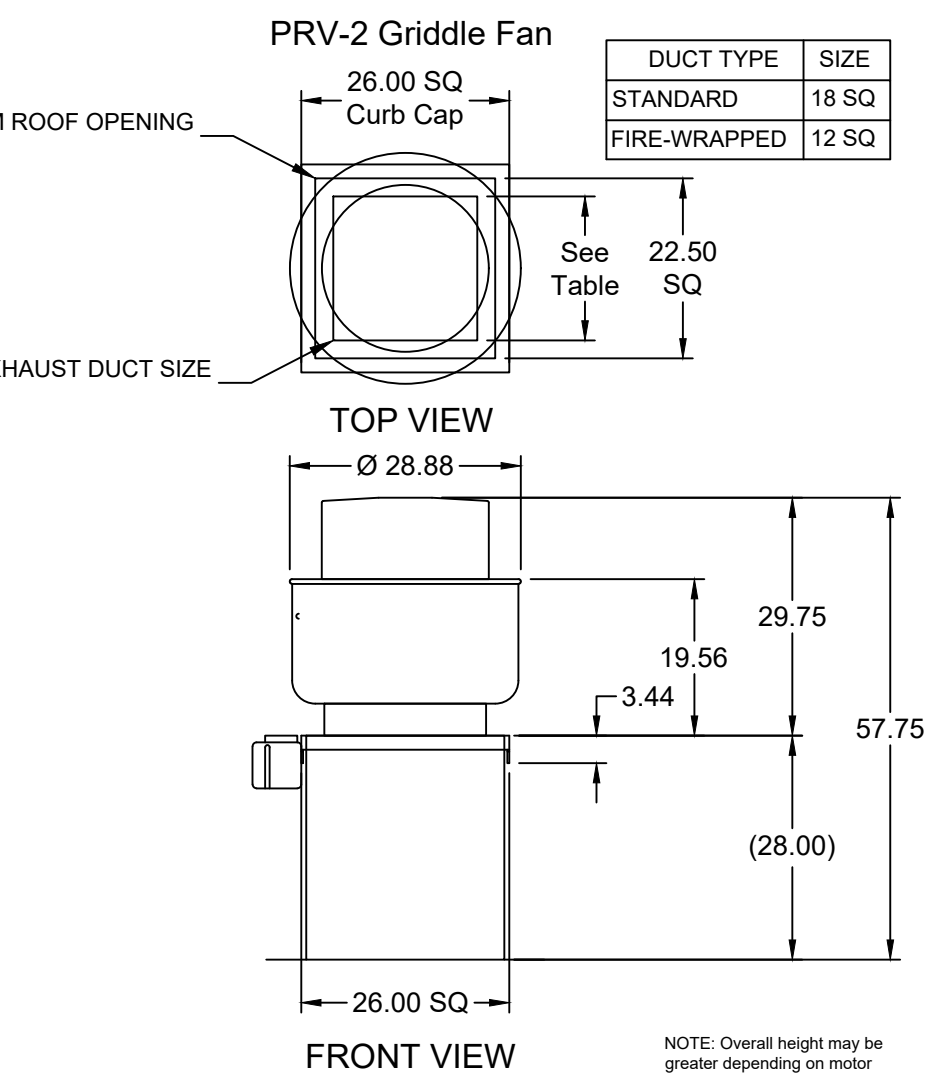
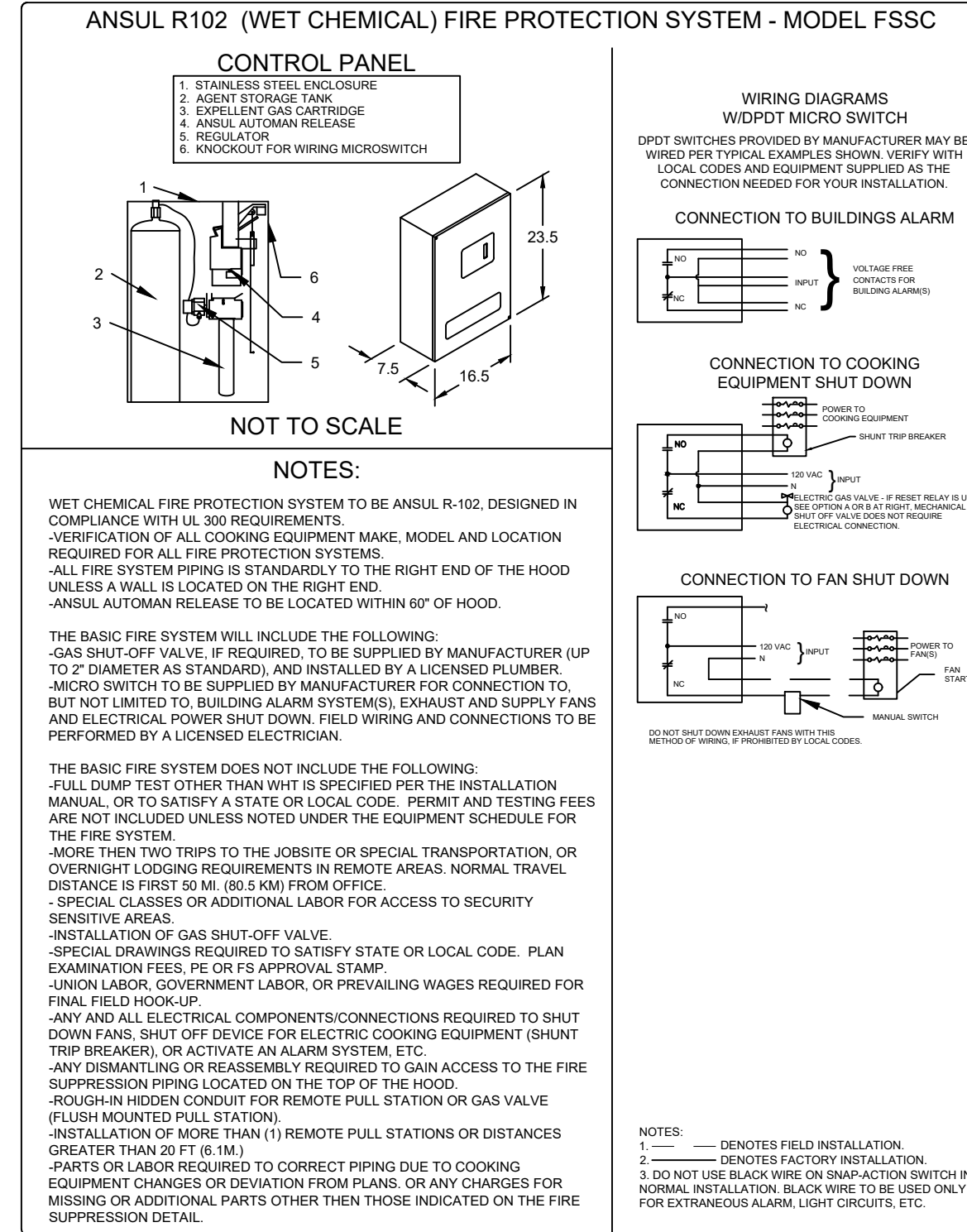
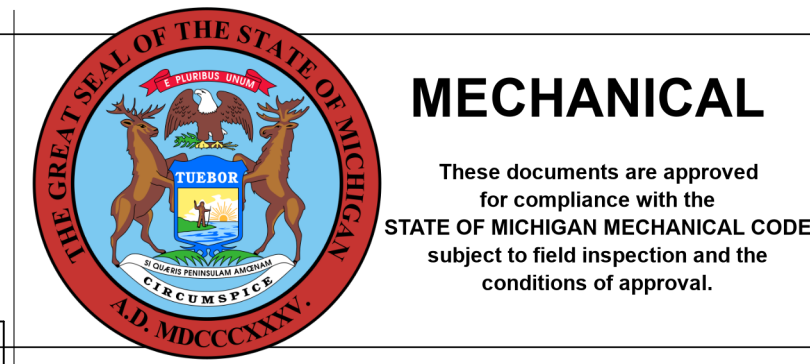


SECTION 1 ELEVATION VIEW

MARK: Griddle Hood SECTION VIEW

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

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



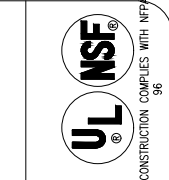
ACCUREX

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 PHILLIP KRAFT
 PHILLIP.KRAFT@ACCUREX.COM
 262-227-7865

CULVERS - METRO L 2021 (S)

PROJECT 5/24/2024

GRIDDLE HOOD
 PRV-2 GRIDDLE FAN
 FIRE SUPPRESSION-GRIDDLE HOOD



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NEW CULVER'S RESTAURANT
 NEC N Alger Rd & W Cheesman Rd
 Pine River Township, MI 48801
 County of GRATIOT

Culver's Franchising System, Inc.
 1240 Water Street
 Prairie du Sac, WI 53578
 608-543-7980

OWNER:
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 11232 Sky View Lane
 Minocqua, WI 54548
 Peter Spohn
 608-5113-1877

OLLMANN ERNEST MARTIN ARCHITECTS
 200 South State Street
 Belvidere Illinois 61008
 815-544-7190 Phone
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GRIDDLE HOOD/EXHAUST SCHEDULE & DETAILS

Date: 05-31-2024 Revision:

2023-185

M202



HOOD INFORMATION																	
HOOD NO.	MARK	MODEL	HOOD DIMENSIONS (IN.)			HOOD CONSTR.	COOKING LOAD / DUTY RATING	EXHAUST					SUPPLY		TOTAL WEIGHT LBS.	SECTION LOCATION	
			LENGTH	WIDTH	HEIGHT			TOTAL CFM	COLLAR(S)		CFM	S.P.	MUA CFM	AC CFM			
1	FRYER HOOD	XXEP-83-S	83	TOP 23 BOT 3	FRT 12 BACK 36	430 SS W/HERE EXPOSED	MEDIUM	1500	12	12	DIA.	1500	0.518			169	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 TYPE	SIZE	MODEL	CONTROLS INTERFACE
1	FRYER HOOD					X-TRACTOR (SPARK ARRESTOR INCL.)	STAINLESS STEEL	5	16					

HOOD OPTIONS
 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

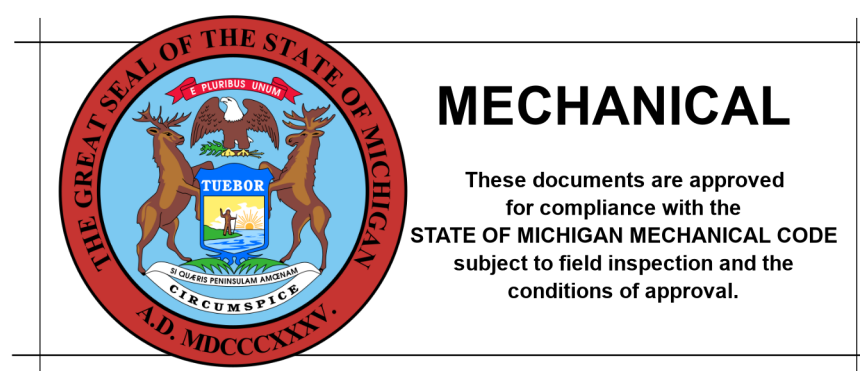
SPECIAL DESIGN REQUESTS
 SDR #K1100559 - NEW PITCO 4L FRYER FLUE BYPASS SYSTEM
 SDR #K1700974 - CULVERS 4VAT 2FIRE PROCESS - FRYER HOOD
 SDR #K2000140 - IF FRYMASTER FRYER FLUE BYPASS

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-3 Fryer Fan	XCUE-140-VG	1,500	1	1,365	0.46	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-3 Fryer Fan : SELECTED OPTIONS AND ACCESSORIES

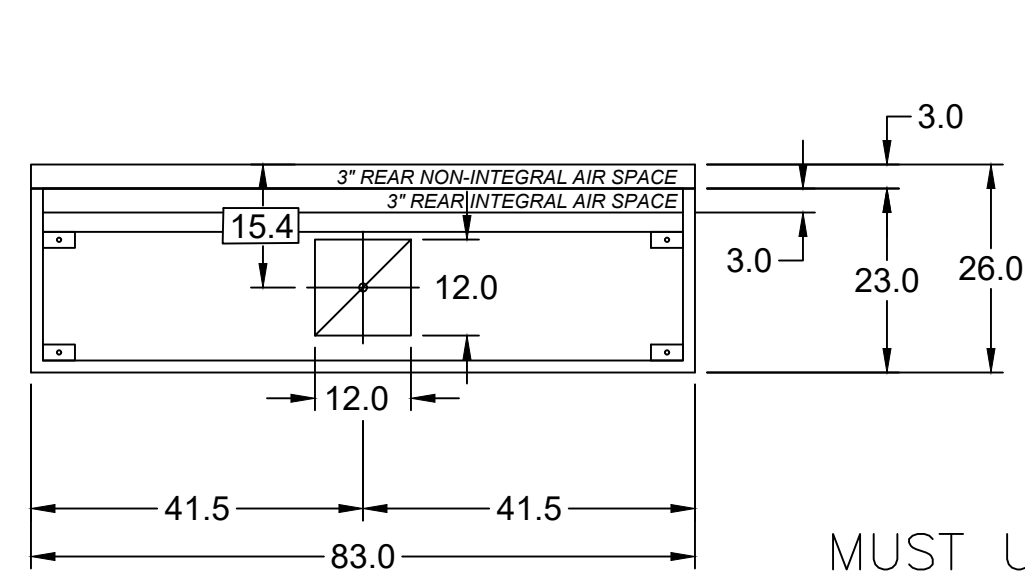
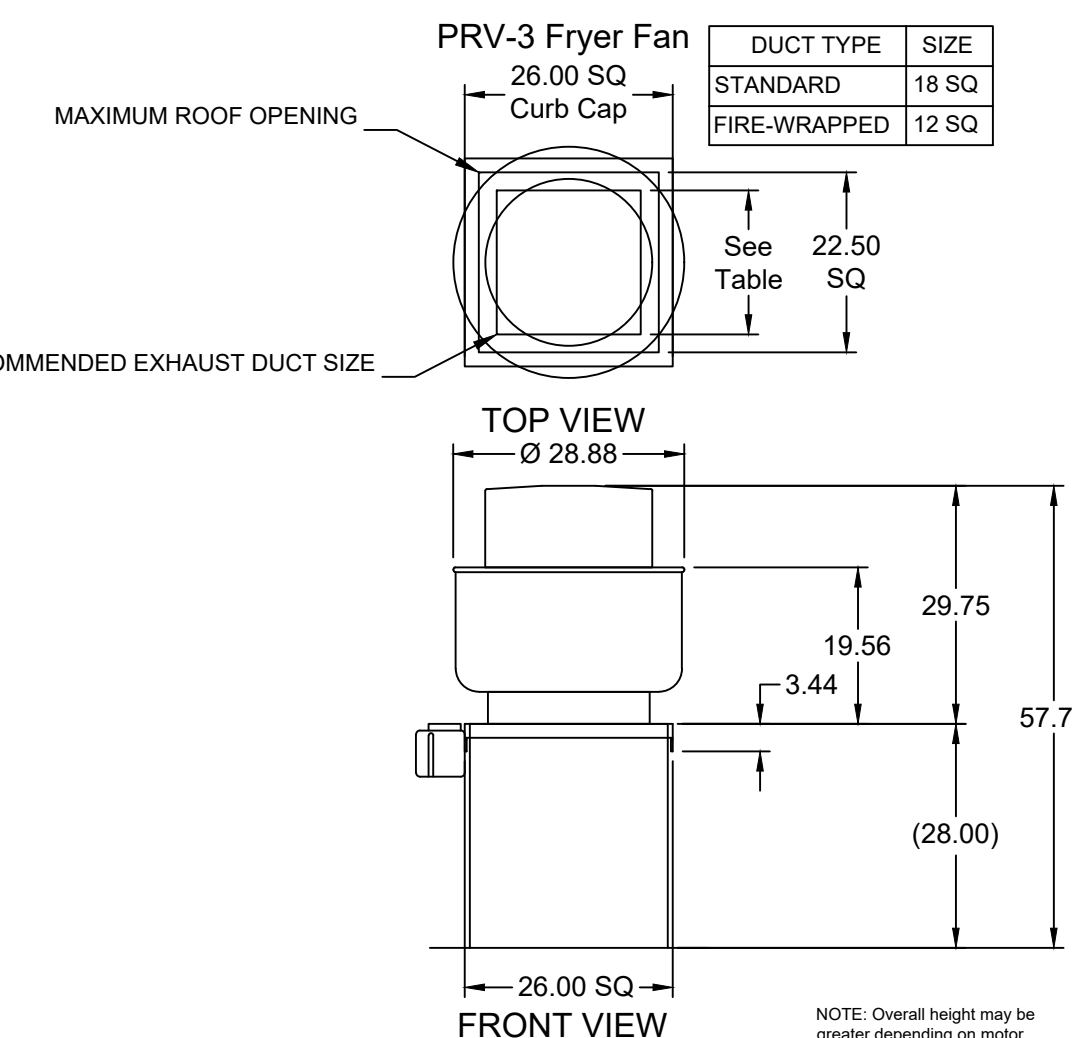
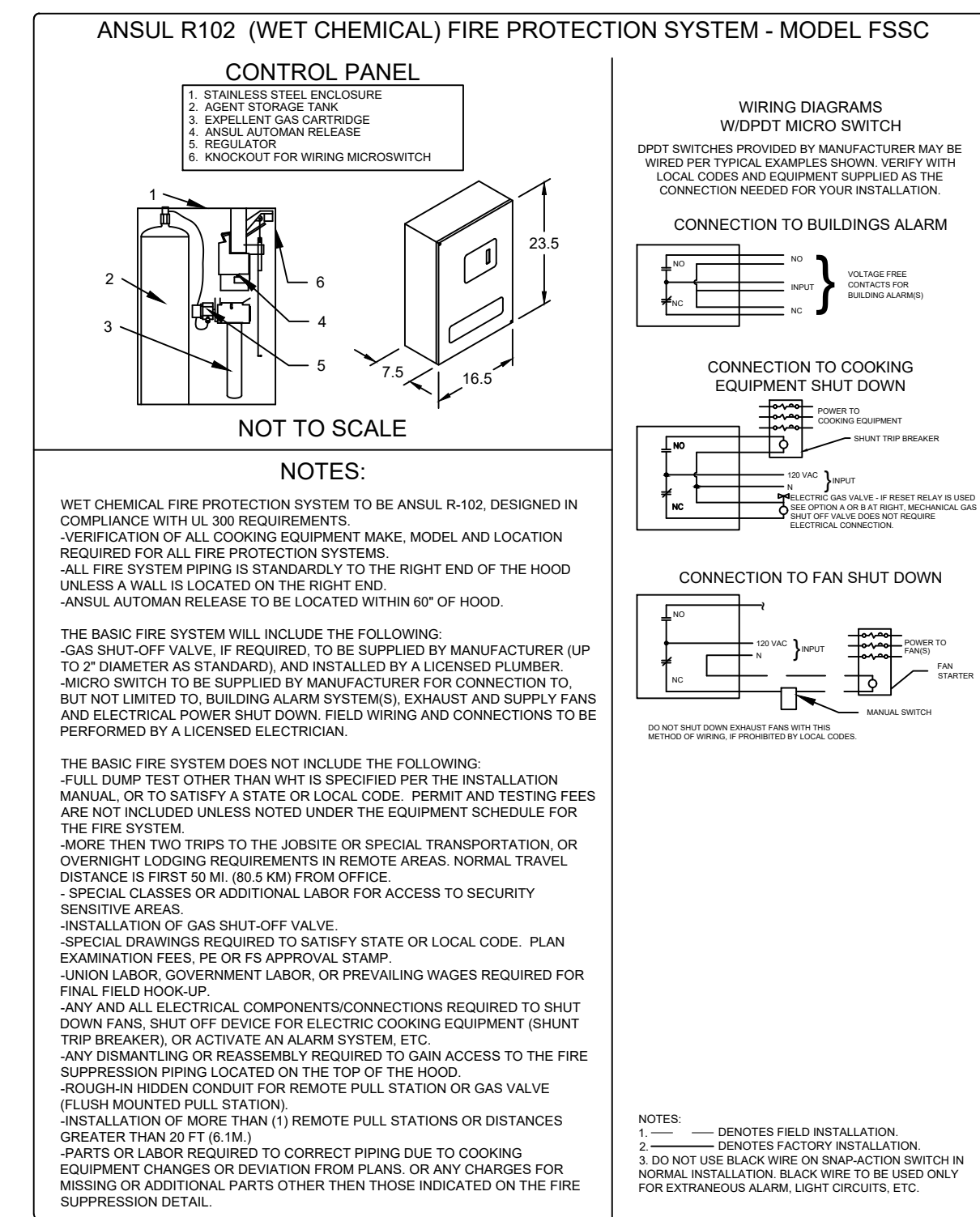
One piece fully welded windband
 Tapered bushing wheel hub
 Breather tube outlet area min. 4.4 sq. in. (sizes 99-480), 2.0 sq. in. (sizes 60-95)
 Min. windband material thickness: 0.051" aluminum (060-240), 0.064" aluminum (240HP, 240XP), 0.080" aluminum (sizes 300-480)
 Larger Curb Cap Size - 26 Square
 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



FIRE SYSTEM INFORMATION									
MARK	MODEL	LOCATION	FLOW POINTS		SUPPLY LINE	DETECTION	MARK(S) PROTECTED BY FIRE SYSTEM		
			HOODS	PCU			FRYER HOOD SECTION 1		
FIRE SUPPRESSION-FRYER HOOD	ANSUL R-102 WET CHEMICAL	REMOTE MOUNTED	18 UTILIZED	22 AVAILABLE	CONTINUOUS	FUSIBLE LINK			

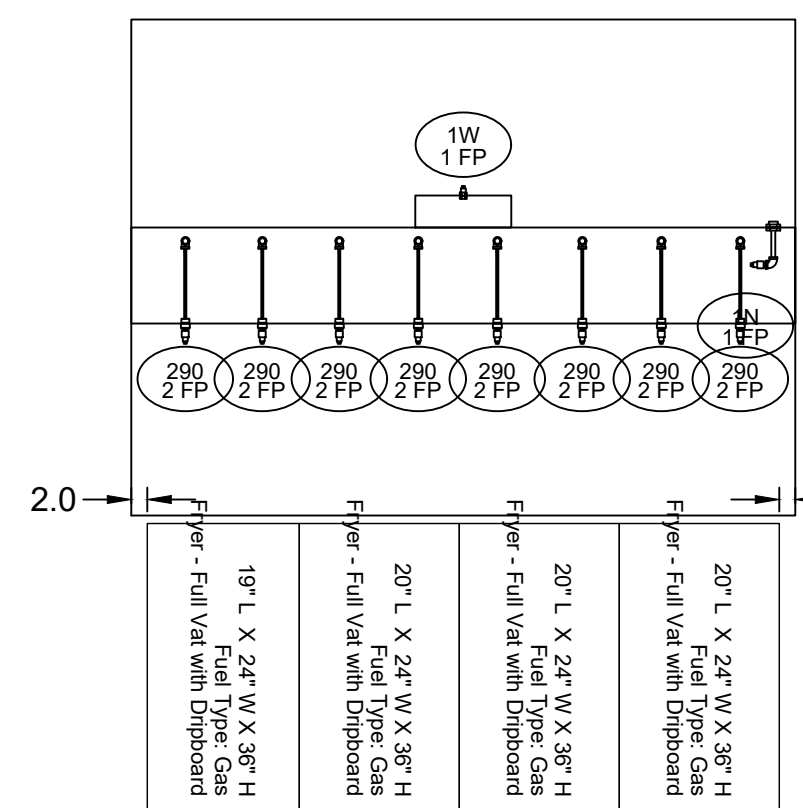
FIRE SYSTEM OPTIONS AND ACCESSORIES
 FULL INSTALLATION (INCLUDES PRE-PIPED HOOD(S) WITH DETECTION AND FACTORY COORDINATED INSTALL)
 CHROME SLEEVES FOR FACTORY PROVIDED APPLIANCES DROPS - INCLUDED
 METAL BLOW-OFF CAPS - INCLUDED
 PRE-TEST - INCLUDED

HOOD SUPPRESSION AGENT - INCLUDED - 6 GAL. - [(2) 3.0 TANK(S)]
 REMOTE PULL STATION - STANDARD - INSTALLATION AT SINGLE POINT OF EGRESS

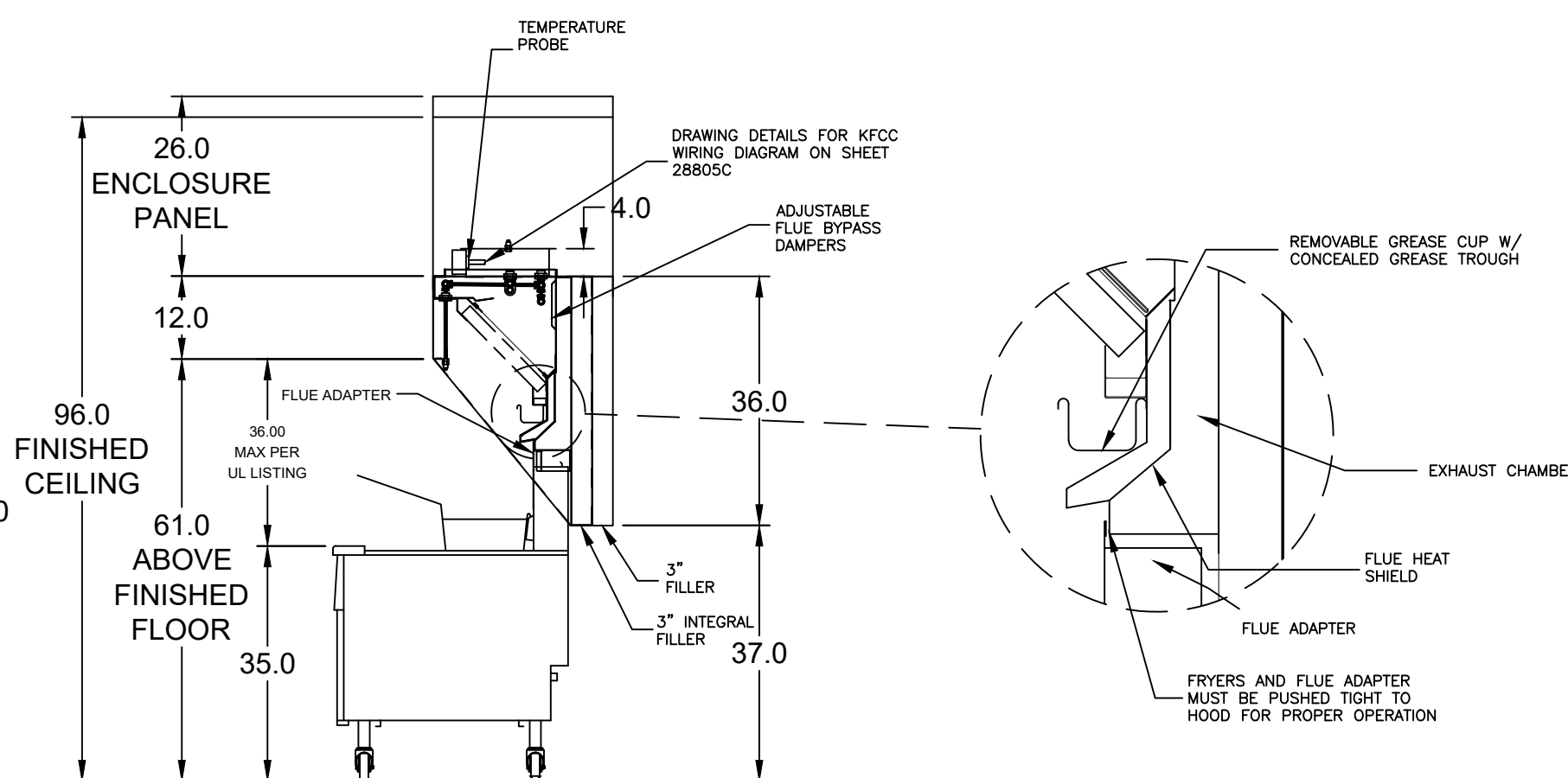


MUST USE WITH PITCO MODEL CU-SSH60W/WR 4VAT FRYER IF FRYMASTER MODEL 41814GF-CFS IS BEING USED, NOTIFY ACCUREX REP

MARK: Fryer Hood PLAN VIEW

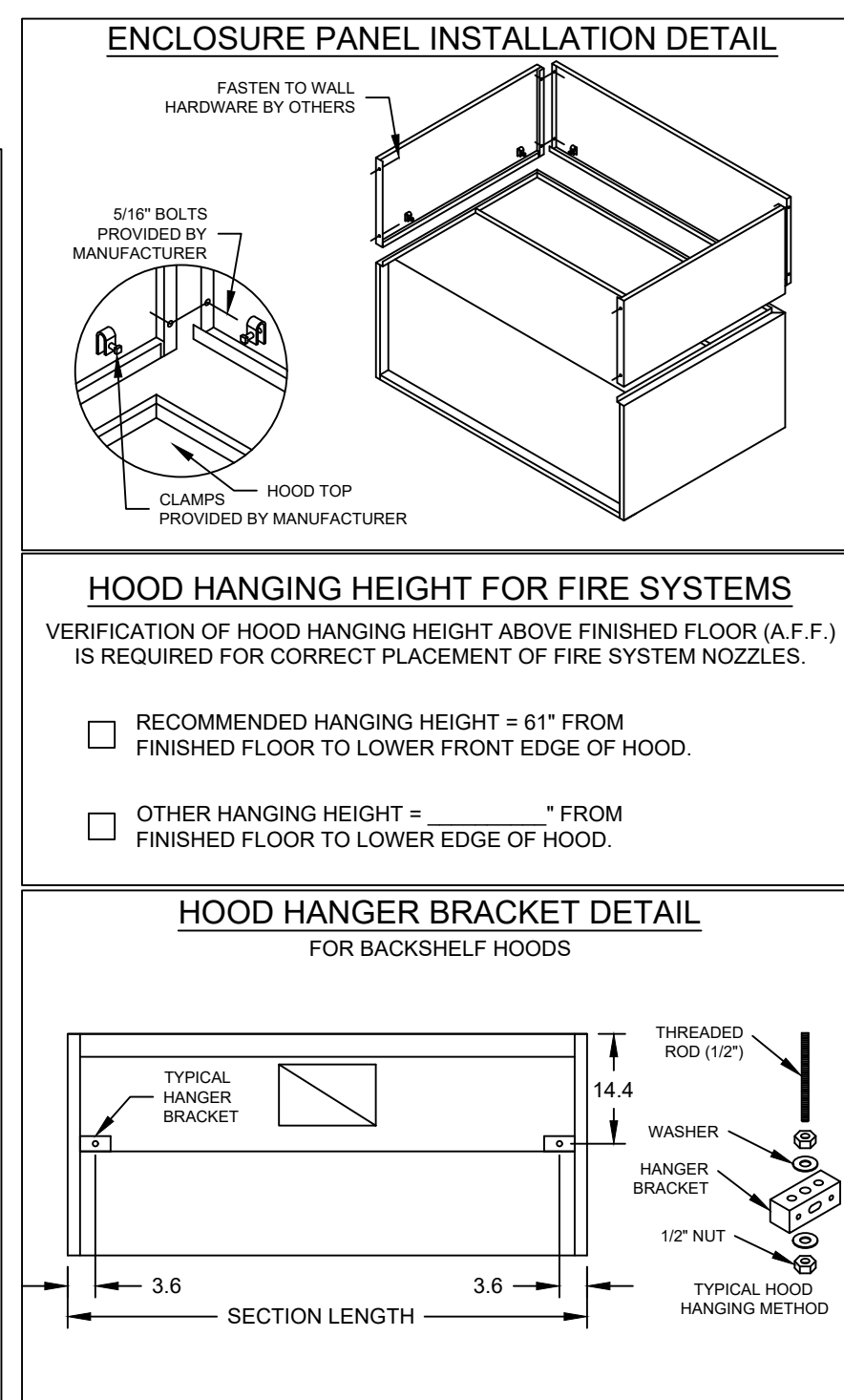
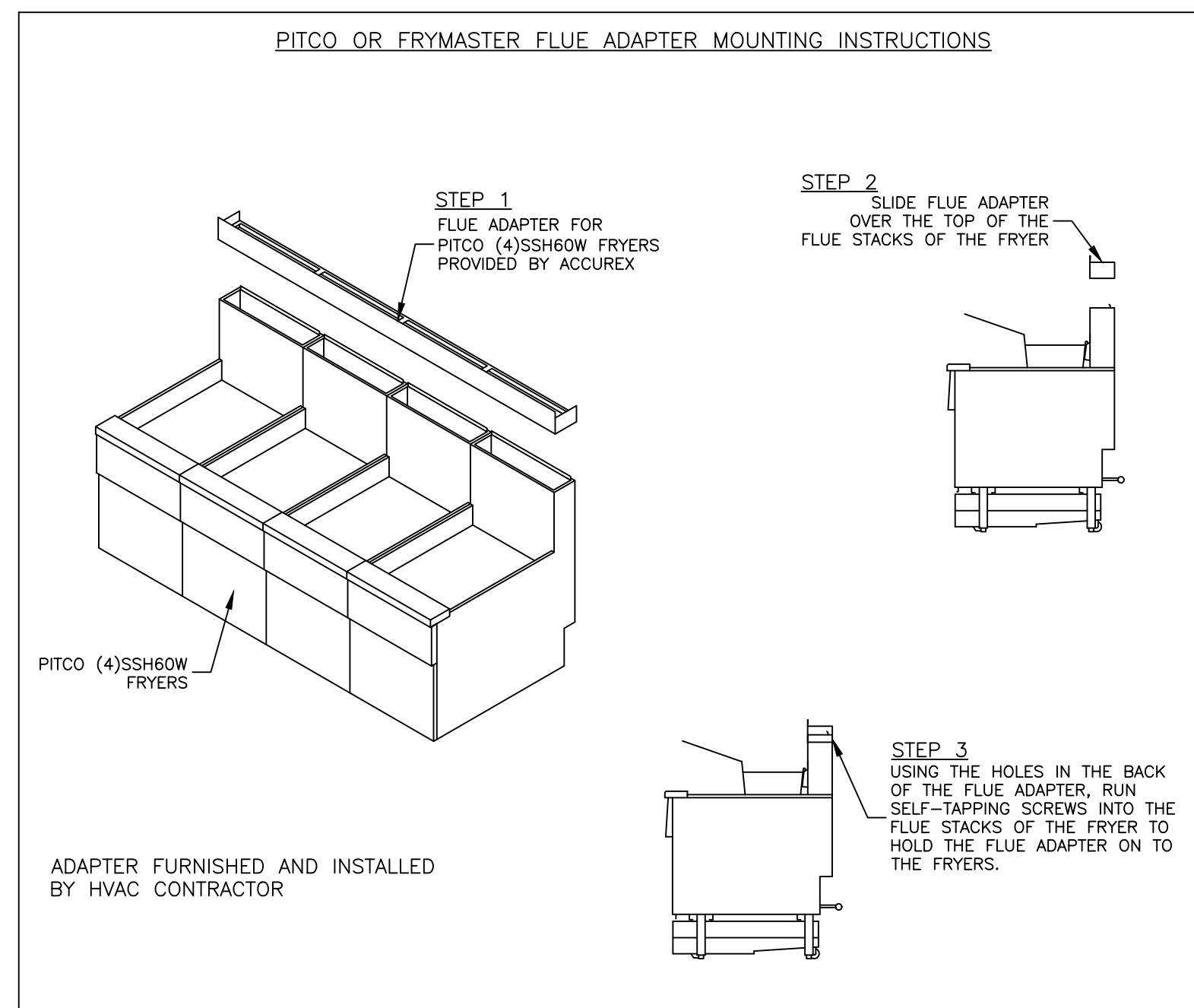


SECTION 1 ELEVATION VIEW



MARK: ITEM #59 SECTION VIEW

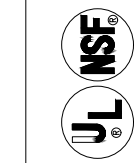
PITCO MODEL CU-SSH60W/WR 4-VAT FRYER FLUE ADAPTER OR FRYMASTER MODEL 41814GF-CFS



ACCUREX

CULVERS - METRO L 2021 (S)

ACCUREX - WI/IA
 PHILLIP KRAFT
 PHILLIP.KRAFT@ACCUREX.COM
 262-227-7865



FRYER HOOD
 PRV-3 FRYER FAN
 FIRE SUPPRESSION-FRYER HOOD

PROJECT 5/24/2024

MARK

© 2024

NEW CULVER'S RESTAURANT
 NEC N Alger Rd & W Cheesman Rd
 Pine River Township, MI 48801
 1240 Water Street
 County of GRATIOT

OWNER:
 K-BERGER 12, LLC
 11232 Sky View Lane
 Minocqua, WI 54648
 Peter Spohn
 608-513-1877

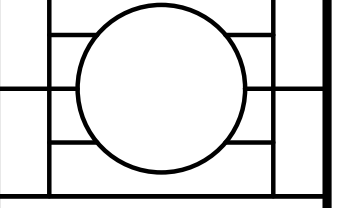
OWNER:
 OLLMANN ERNEST MARTIN ARCHITECTS
 200 South State Street
 Belvidere Illinois 61008
 815-544-7190 Phone
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FRYER HOOD/EXHAUST SCHEDULE & DETAILS

Date: 05-31-2024
 Revision:

2023-185
 M203

LOWELL J. LARSON
 ENGINEER
 No. 6201039755
 STATE OF MICHIGAN PROFESSIONAL ENGINEER



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	
1	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

SPECIAL DESIGN REQUESTS

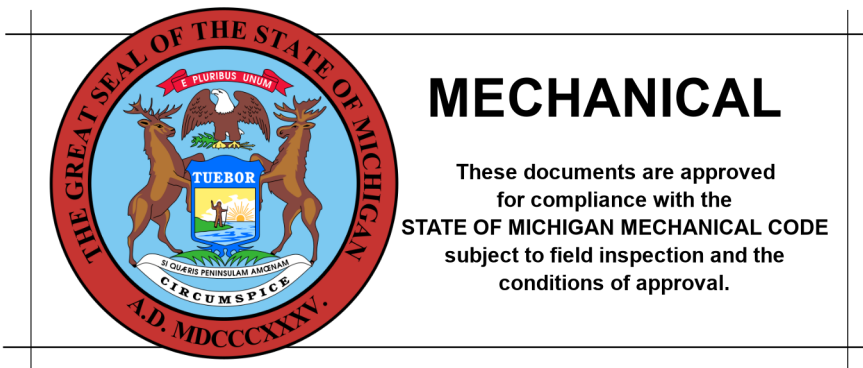
(1)-WC-4 Wall Cap (F1600858)

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	400	0.5	1,466	0.06	40	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
Hinge, Factory Installed
Damper Shipped Loose, BD-100-PB-10X10, Gravity Operated, Not Coated
Birdscreen: Galvanized, nom. 84% Free Area
Composite Wheel Material



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

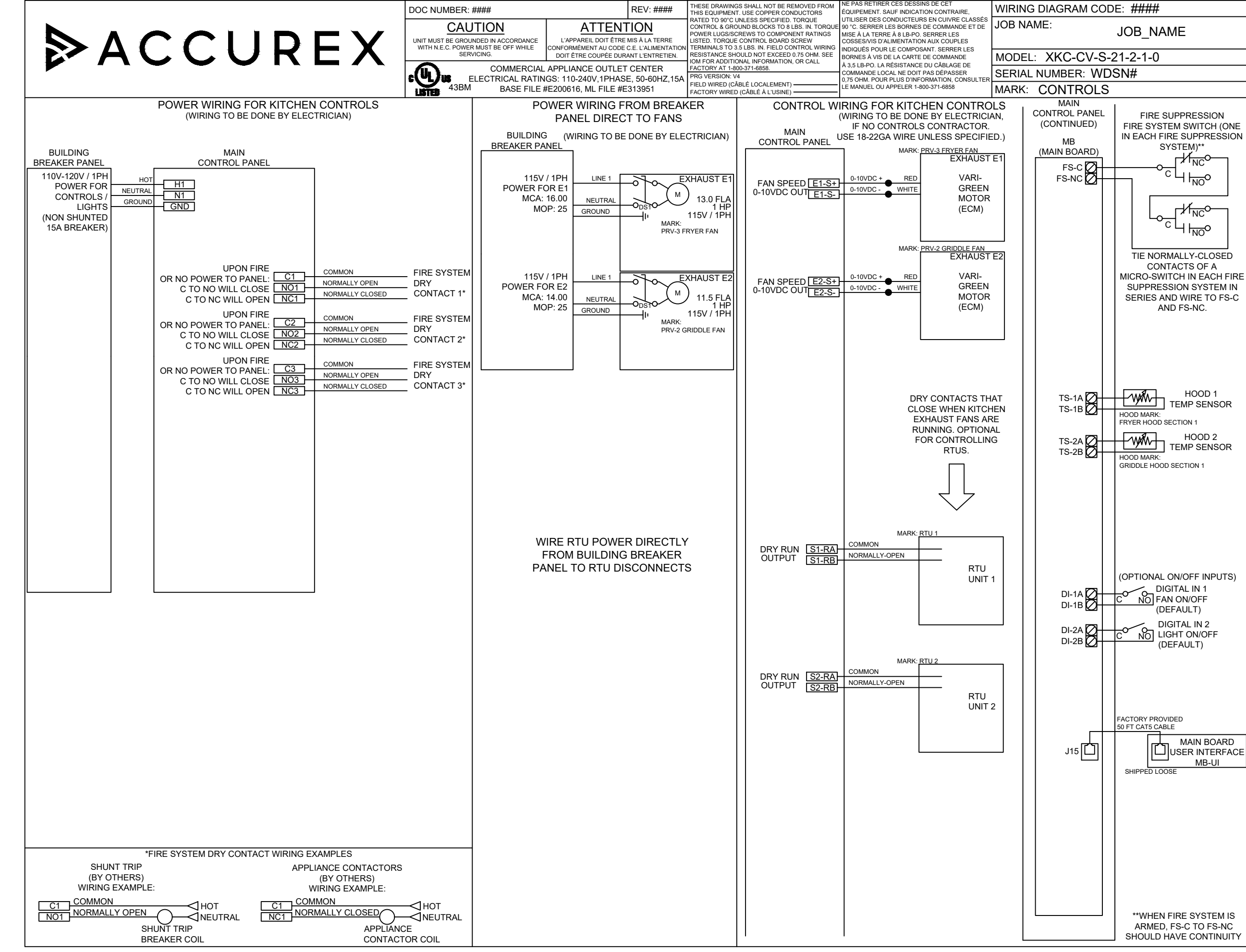
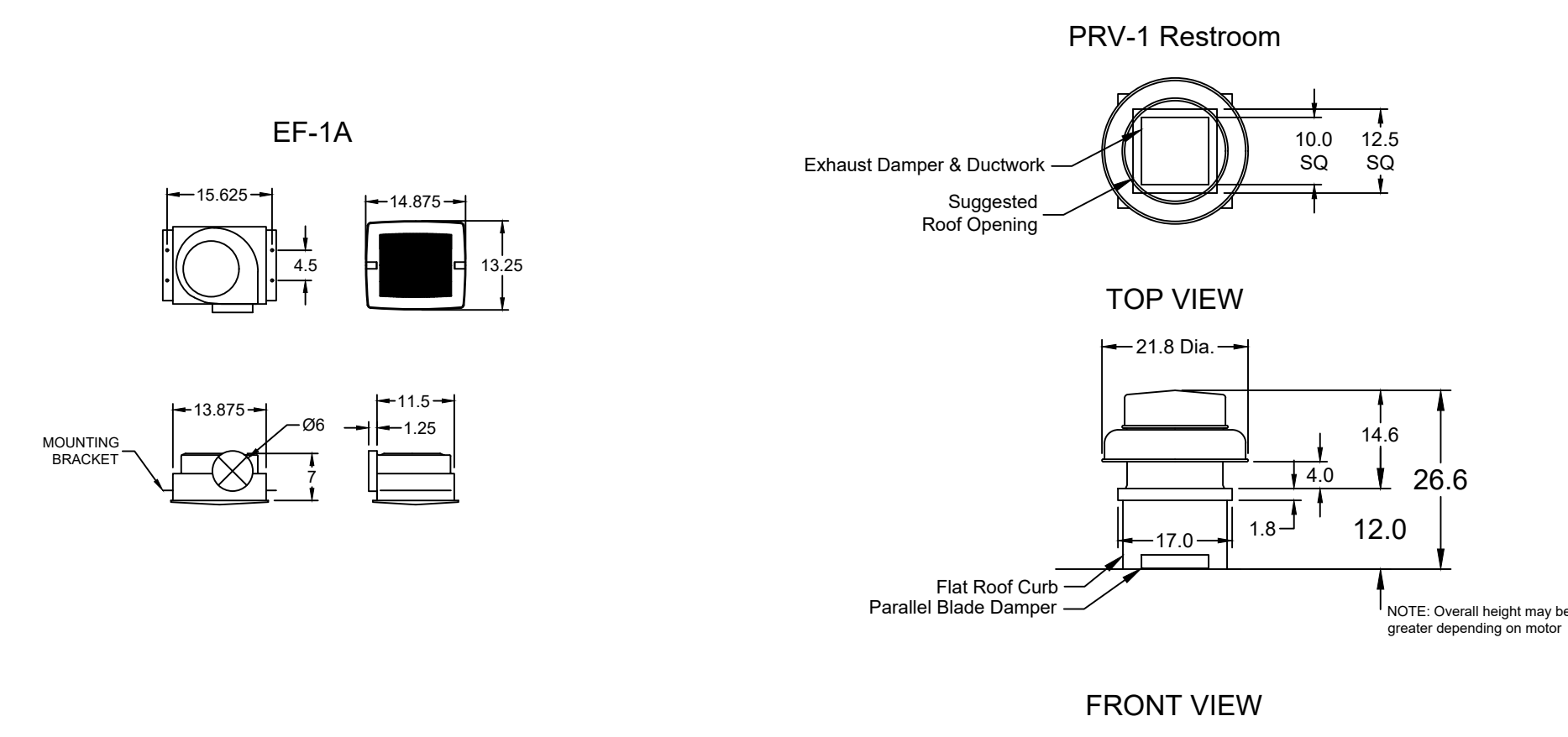
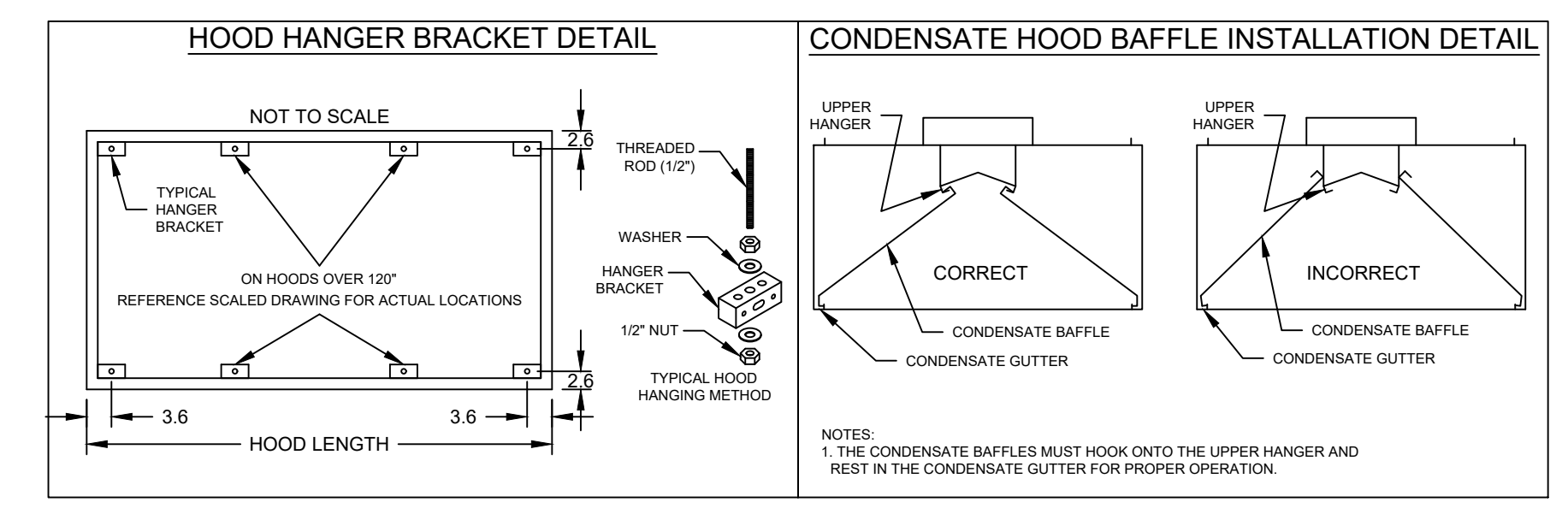
FANS CONTROLLED											
FAN #	TYPE	FAN	FAN MARK	ZONE	CFM	MOTOR HP	MOTOR VOLT	CYCLE	MOTOR PHASE	MOTOR STARTER IN PANEL	VFD IN PANEL
1	SUPPLY	S1	RTU-1	1	1500	1	208	60	3	NO	NO
2	SUPPLY	S2	RTU-2	2	1500	1	208	60	3	NO	NO
3	EXHAUST	E1	PRV-2 GRIDDLE FAN	2	1497	1	115	60	1	NO	NO
4	EXHAUST	E2	PRV-3 FRYER FAN	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

ACCUREX - W.I.A
PHILLIP KRAFT
PHILLIP.KRAFT@ACCUREX.COM
262-227-7865

PROJECT: 5/24/2024
MARK: ITEM 25 CONDENSATE HOOD PRV-1 RESTROOM EF-1A CONTROLS
CULVERS - METROL 2021 (NC) 1.27.2023

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