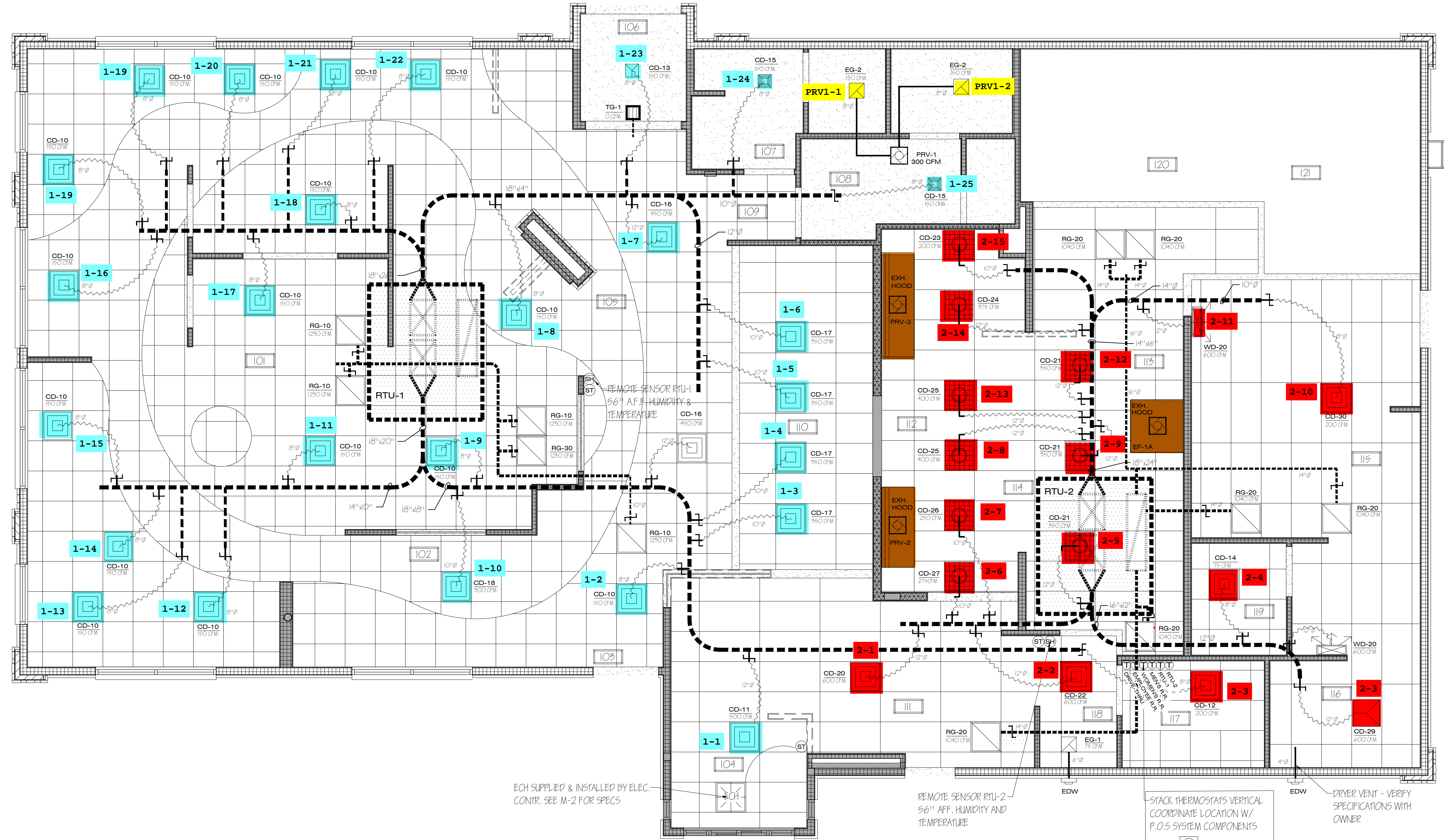


H.V.A.C. LEGEND:

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

- 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 I FLEXIBLE AIR CONNECTOR PER UL 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.

- RECOMMENDED HVAC SET POINTS:
1. DINING HEATING 70°, COOLING 72°
 2. KITCHEN HEATING 68°, COOLING 74°

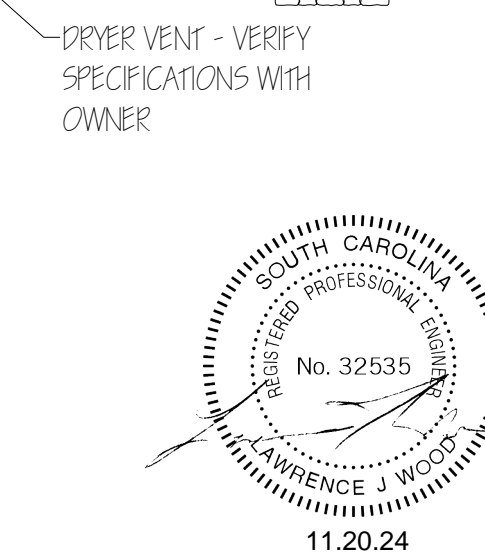


ECH SUPPLIED & INSTALLED BY ELEC. CONTR. SEE M-2 FOR SPECS

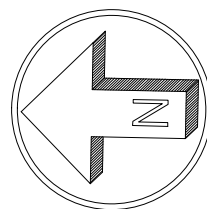
REMOTE SENSOR RTU-2 56" AFF. HUMIDITY AND TEMPERATURE

- RTU-1
- RTU-2
- DRIVE-THRU

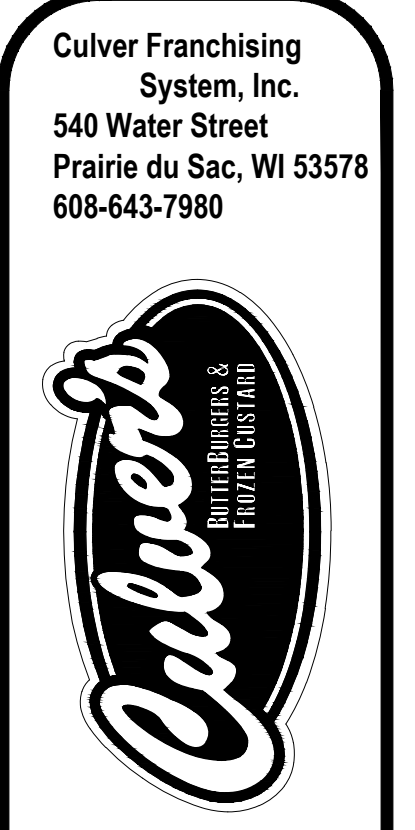
STACK THERMOSTATS VERTICAL COORDINATE LOCATION W/ P.O.S SYSTEM COMPONENTS



HVAC PLAN - MIRRORED METRO L - 2023 PROTOTYPE
SCALE: 1/4" = 1'-0"



WARNING: These plans are for the exclusive use of Culver Franchising Systems, Inc. and authorized franchise holders only. No part of these plans or the design they represent may be duplicated or reproduced without permission of Culver Franchising System, Inc.



CULVER'S RESTAURANT
3103 N. PLEASANTBURG DRIVE
GREENVILLE, SOUTH CAROLINA

Date	Revision
11-20-24	FOR CONSTRUCTION

Sheet
M-1

P:\2024\2024165 Culver's Cheryle SchWorking Drawings\2024165 M-1.dwg, 11/18/2024 8:35:02 AM, mdela

GENERAL NOTES

- 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.
- ALL WORK TO BE PERFORMED TO STATE AND LOCAL CODES & SMACNA GUIDELINES.
- INSTALL UNITS ACCORDING TO MANUFACTURERS' GUIDELINES.
- PROVIDE OWNER w/OPERATION & MAINTENANCE MANUALS & SYSTEM SCHEMATICS.
- CONTRACTOR TO CONFIRM VOLTAGES & PHASES OF EQUIPMENT PRIOR TO INSTALLATION.
- EXHAUST FANS AND FURNACE FANS TO RUN CONTINUOUSLY DURING OCCUPIED MODE.
- VERIFY w/ OWNER EXACT WATER HEATER LOCATION TO AVOID BUILDING FUNCTION INTERFERENCE.
- NIGHT SET BACK THERMOSTATS TO BE INSTALLED ON ALL HVAC EQUIPMENT.
- INSULATE DUCT WORK TO SMACNA GUIDELINES AND STATE CODES.
- INSTALL VOLUME CONTROL DAMPERS AS INDICATED ON PLANS.
- MAINTAIN AT LEAST 10 FEET CLEARANCE FROM INTAKES OR WINDOWS ON ALL EXHAUST VENTS.
- RETURN AIR DUCT WORK TO BE LINED FOR SOUND ATTENUATION.
- FLEXIBLE ROUND DUCT WORK NOT TO EXCEED 8 FEET IN LENGTH. AVOID UNNECESSARY TURNS & SLACK.
- DUCT WORK TO BE STANDARD GAUGE SHEET METAL (FIBROUS DUCT NOT ALLOWED).
- COORDINATE WORK WITH GENERAL CONTRACTOR & OWNER TO MAXIMIZE CEILING HEIGHT & AVOID CONFLICTS.
- TEST, ADJUST & CALIBRATE CONTROL SYSTEMS AS REQUIRED. PROVIDE SCHEMATICS & DESCRIPTION TO THE OWNER PRIOR TO INSTALLATION.
- INSULATE EXHAUST DUCT FOR EXHAUST FAN TO EXTERIOR TERMINATION. comply with note 31 below.
- CONTRACTOR TO VERIFY GAS METER CAPACITY WITH LOCAL GAS SUPPLIER.
- VERIFY ALL EXISTING CONDITIONS PRIOR TO INSTALLATION (DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT REFLECT EXACT LOCATIONS OF EQUIPMENT OR OTHER APPARATUSES.)
- PROVIDE SHOP DRAWINGS TO THE ARCHITECT/DESIGNER FOR EQUIPMENT, FANS, REGISTERS ETC. PRIOR TO PROCUREMENT.
- PROVIDE OWNER WITH COLOR CHOICES FOR SWITCHES AND OTHER APPARATUSES WHERE APPLICABLE.
- WATER HEATER IS EXISTING TO REMAIN.
- VENT DRYER TO EXTERIOR AS REQUIRED. MAINTAIN CLEARANCES FROM INTAKES AS NOTED ABOVE.
- HANG AND SUPPORT MATERIALS SHALL BE INSTALLED THE LATEST EDITION OF THE ASHRAE HANDBOOK OF FUNDAMENTALS.
- HVAC CONTRACTOR RESPONSIBLE FOR A COMPLETE AND FULLY WORKING SYSTEM.
- REPLACE ALL AIR FILTERS PRIOR TO TURNING SYSTEM OPERATIONS OVER TO OWNER.
- INSTALLER IS RESPONSIBLE FOR FINAL TEST & BALANCING DURING TRAINING WEEK & PROVIDE A WRITTEN REPORT TO OWNER.
- HVAC CONTRACTOR TO INSTALL #2 GAS w/ 1/4" WATER COLUMN MAX. PER STATE CODE & AGA GUIDELINES (LABEL AS REQUIRED).
- VERIFY DUCT LOCATIONS PRIOR TO FABRICATION. VERIFY LIMITED AREA FOR DUCTWORK & OTHER APPARATUSES.
- SS WALL PANELS FOR THE KITCHEN AREA ARE TO BE FURNISHED AND INSTALLED BY THE HVAC CONTRACTOR.** PANELS ARE TO BE 18 GA. TYPE 304 S/S. SEE DETAILS AND LOCATIONS ON THE A-6 AND A-8.1 DRAWINGS.
- COMMERCIAL KITCHEN HOOD VENTILATION DUCTS AND EXHAUST EQUIPMENT SHALL BE IN COMPLIANCE WITH NFPA-96-2014, WHICH IS THE STANDARD OF THE NATIONAL FIRE PROTECTION ASSOCIATION LISTED IN CHAPTER 15 OF THE CODE.

MECHANICAL EQUIPMENT SPECIFICATIONS

- RTU - 1** **LENNOX EMERGENCY SERIES PACKAGED ROOFTOP UNITS WITH PRODIGY CONTROLLER**
COMBINATION GAS WITH HIGH TWO STAGE HEATING AND COOLING ROOFTOP UNIT WITH HUMIDITROL AND S/S HEAT EXCHANGERS. LOW HEAT 135,000 BTU/HR AND HIGH HEAT 208,000 BTU/HR OUTPUT HEATING CAPACITY. 80% AFUE THERMAL EFF. 180,000 NET COOLING CAPACITY. 12.0 EER MINIMUM. BLOWER MOTOR SET FOR NOMINAL 6,150 CFM & FRESH AIR INTAKE DAMPER SET FOR MINIMUM 1,900 CFM. UNIT TO BE 208/3, 71 MCA, 80 MOCB & DRIVE KIT 1. VERIFY AMPERAGE AND COORDINATE WITH ELECTRICAL CONTRACTOR. IN ADDITION TO OPTIONS LISTED ABOVE INCLUDE THE FOLLOWING FACTORY INSTALLED OPTIONS: TWO STAGE CONTROL, WEATHERPROOF DISCONNECT SWITCH, FACTORY INSTALLED/FIELD POWERED GFCI, RETURN SMOKE DETECTOR, DRAIN PAN OVERFLOW SWITCH, SINGLE ENTHALPY ECONOMIZER WITH BAROMETRIC RELIEF AND HOODS, BLOWER BELT AUTO TENSIONER. INCLUDE THE FOLLOWING FIELD INSTALLED OPTIONS: 2" MERV8 FILTERS, SPARE BELT, DOWN FLOW HYBRID CURB, PVC DRAIN TRAP KIT, REMOTE HUMIDITY SENSOR, MESH HAIL GUARD, LENNOX MODEL 13H15 PROGRAMMABLE THERMOSTAT. **NO SUBSTITUTIONS.**
- RTU - 2** **LENNOX EMERGENCY SERIES PACKAGED ROOFTOP UNITS WITH PRODIGY CONTROLLER**
COMBINATION GAS WITH HIGH TWO STAGE HEATING AND COOLING ROOFTOP UNIT WITH HUMIDITROL AND S/S HEAT EXCHANGER. LOW HEAT 135,000 BTU/HR AND HIGH HEAT 208,000 BTU/HR OUTPUT HEATING CAPACITY. 80% AFUE THERMAL EFF. 210,000 NET COOLING CAPACITY. 12.0 EER MINIMUM. BLOWER MOTOR SET FOR NOMINAL 6,150 CFM & FRESH AIR INTAKE DAMPER SET FOR MINIMUM 1,900 CFM. UNIT TO BE 208/3, 87 MCA, 100 MOCB & DRIVE KIT 1. VERIFY AMPERAGE AND COORDINATE WITH ELECTRICAL CONTRACTOR. IN ADDITION TO OPTIONS LISTED ABOVE INCLUDE THE FOLLOWING FACTORY INSTALLED OPTIONS: TWO STAGE CONTROL, WEATHERPROOF DISCONNECT SWITCH, FACTORY INSTALLED/FIELD POWERED GFCI, RETURN SMOKE DETECTOR, DRAIN PAN OVERFLOW SWITCH, SINGLE ENTHALPY ECONOMIZER WITH BAROMETRIC RELIEF AND HOODS, BLOWER BELT AUTO TENSIONER. INCLUDE THE FOLLOWING FIELD INSTALLED OPTIONS: 2" MERV8 FILTERS, SPARE BELT, DOWN FLOW HYBRID CURB, PVC DRAIN TRAP KIT, REMOTE HUMIDITY SENSOR, MESH HAIL GUARD, LENNOX MODEL 13H15 PROGRAMMABLE THERMOSTAT. **NO SUBSTITUTIONS.**
- PRV - 1** **ACCUREX MODEL XRED-090-D** DOWNBLAST EXHAUST FAN WITH ROOF CURB AND BACKDRAFT DAMPER. 375 CFM AT .5" SP, .0667 HP MOTOR, 115 VOLTS, SINGLE PHASE. FAN TO RUN CONTINUOUSLY DURING OCCUPIED MODE. **NO SUBSTITUTIONS.**
- PRV - 2 (ITEM #49)** **ACCUREX MODEL XCUE-140-VG KITCHEN FAN** UPBLAST EXHAUST FAN W/CLEAN-OUT PORT, MOUNTED HINGE BASE, & AUTO BELT TENSIONER, SPARE BELT, & ROOF CURB WITH CURB EXTENSION. 1500 CFM AT 0.518" SP, 1.0 HP MOTOR, 115 VOLTS SINGLE PHASE FAN TO RUN CONTINUOUSLY DURING OCCUPIED MODE. **NO SUBSTITUTIONS.**
- PRV - 3 (ITEM #59)** **ACCUREX MODEL XCUE-140-VG KITCHEN FAN** UPBLAST EXHAUST FAN W/CLEAN-OUT PORT, MOUNTED HINGE BASE, & AUTO BELT TENSIONER, SPARE BELT, & ROOF CURB WITH CURB EXTENSION. 1500 CFM AT 0.518" SP, 1.0 HP MOTOR, 115 VOLTS SINGLE PHASE FAN TO RUN CONTINUOUSLY DURING OCCUPIED MODE. **NO SUBSTITUTIONS.**
- EF1-A (ITEM #25)** **ACCUREX MODEL XRED-090-D** CONDENSATE DOWNBLAST EXHAUST FAN WITH ROOF CURB AND BACKDRAFT DAMPER. 350 CFM AT .6" SP, .0667 HP MOTOR, 115 VOLTS, SINGLE PHASE. FAN TO RUN w/STARTING OF DISHWASHER & FOR ONE MINUTE AFTER THE CYCLE IS COMPLETE. **NO SUBSTITUTIONS.**
- EF - 1** **ACCUREX MODEL XCR-B80** CEILING EXHAUST FAN, SPEED CONTROL & MODEL WC-4 HOODED WALL CAP. PAINT WALL CAP TO MATCH EXTERIOR FINISH. 75 CFM AT .125"SP, 115 VOLT, SINGLE PHASE. FAN TO RUN CONTINUOUSLY DURING OCCUPIED MODE. **NO SUBSTITUTIONS.**
- ITEM #49** **GRIDDLE EXHAUST HOOD - ACCUREX MODEL XGEP-5.33S** 64" X 26" X 36" HIGH, LOW PROXIMITY w/FLUE BYPASS. 1500 CFM AT 1.918" SP, 12" x 12" DUCT COLLAR. INCLUDES THE 3" INTEGRAL AIR SPACE ON BACK OF HOOD & AN ADDITIONAL 3" REAR FILLER PANEL. STAINLESS STEEL WHERE EXPOSED, w/GREASE GRABBER TWO-STAGE FILTRATION SYSTEM. 26" HIGH ENCLOSURE PANELS, FRONT, LEFT AND RIGHT SIDES. GREASE TROUGH SHALL BE PITCHED TO THE LEFT END OF THE HOOD. APPROVALS SHALL INCLUDE UL LISTING AND THE NSF SEAL. THE VENTILATOR SHALL CONFORM TO THE REQUIREMENTS OF NFPA-96 & TO ALL PREVAILING LOCAL CODE REQUIREMENTS. **NO SUBSTITUTIONS.**
- ITEM #59** **FRYER EXHAUST HOOD - ACCUREX MODEL XXEP-FB-6.92-S** 83" X 26" X 36" HIGH, LOW PROXIMITY w/FLUE BYPASS. 1500 CFM AT .518" SP, 12" x 12" DUCT COLLAR. INCLUDES THE 3" INTEGRAL AIR SPACE ON BACK OF HOOD & AN ADDITIONAL 3" REAR FILLER PANEL. STAINLESS STEEL WHERE EXPOSED, w/X-TRACTOR STAINLESS STEEL FILTERS. TWO-STAGE FILTRATION SYSTEM. 26" HIGH ENCLOSURE PANELS, FRONT, LEFT AND RIGHT SIDES. GREASE TROUGH SHALL BE PITCHED TO THE LEFT END OF THE HOOD. APPROVALS SHALL INCLUDE UL LISTING AND THE NSF SEAL. THE VENTILATOR SHALL CONFORM TO THE REQUIREMENTS OF NFPA-96 & TO ALL PREVAILING LOCAL CODE REQUIREMENTS. **NO SUBSTITUTIONS.**
- ITEM #25A** **DISHWASHER CONDENSATE HOOD - ACCUREX MODEL XD3-3.5-S** CONDENSATE HOOD w/BAFFLE, 42" X 42" X 24" HIGH, STAINLESS STEEL WHERE EXPOSED. 350 CFM AT .127 SP, 7 x 7 DUCT COLLAR. APPROVALS SHALL INCLUDE THE NSF SEAL. (UL LABEL NOT REQUIRED FOR NON-GREASE APPLICATION). THE VENTILATOR SHALL CONFORM TO THE REQUIREMENTS OF NFPA-96 & TO ALL PREVAILING LOCAL CODE REQUIREMENTS. **NO SUBSTITUTIONS.**
- ECH** **ELECTRIC CEILING HEATER -** Q-MARK OR EQUAL CDF-548 ELECTRIC CEILING HEATER & CDF RECESSED MOUNTING FRAME, CDF-TR4 TRANSFORMER & THERMOSTAT. 208/240 VOLT SINGLE PHASE. 19.2 AMPS. **(SUPPLIED AND INSTALLED BY ELECTRICAL CONTRACTOR)**

DIFFUSER/GRILLE SCHEDULE										
QNTY	Mark	Manuf.	Model	Type	Mounting	Diffuser	Neck	CFM	Zone	Notes
16	CD-10	CARNES	SFTB24	SUPPLY	GRID	4-WAY	8"	150	RTU-1	2
1	CD-11	CARNES	SJT824	SUPPLY	GRID	4-WAY	10"	500	RTU-1	1
1	CD-12	CARNES	SJT824	SUPPLY	GRID	4-WAY	8"	200	RTU-1	1
1	CD-13	CARNES	SFTB24	SUPPLY	CEILING	3-WAY	8"	150	RTU-1	3
1	CD-14	CARNES	SFTB24	SUPPLY	GRID	4-WAY	8"	75	RTU-2	
2	CD-15	CARNES	SKSA	SUPPLY	CEILING	4-WAY	8"	150	RTU-1	3
2	CD-16	CARNES	SFTB24	SUPPLY	GRID	4-WAY	12"	450	RTU-1	
4	CD-17	CARNES	SFTB24	SUPPLY	GRID	4-WAY	10"	350	RTU-1	
1	CD-18	CARNES	SFTB24	SUPPLY	GRID	4-WAY	10"	300	RTU-1	6
1	CD-20	CARNES	SFTB24	SUPPLY	GRID	4-WAY	10"	600	RTU-2	
3	CD-21	CARNES	SPRB22412	SUPPLY	GRID	PERFORATED	12"	350	RTU-2	
1	CD-22	CARNES	SFTB24	SUPPLY	GRID	4-WAY	10"	600	RTU-2	
1	CD-23	CARNES	SPRB22410	SUPPLY	GRID	PERFORATED	10"	200	RTU-2	
1	CD-24	CARNES	SPRB22412	SUPPLY	GRID	PERFORATED	12"	375	RTU-2	
2	CD-25	CARNES	SPRB22412	SUPPLY	GRID	PERFORATED	12"	400	RTU-2	
1	CD-26	CARNES	SPRB22410	SUPPLY	GRID	PERFORATED	10"	250	RTU-2	
1	CD-27	CARNES	SPRB22410	SUPPLY	GRID	PERFORATED	10"	275	RTU-2	
1	CD-29	CARNES	SKEA	SUPPLY	GRID	3-WAY	12"	600	RTU-2	
1	CD-30	CARNES	SKSA	SUPPLY	CEILING	4-WAY	8"	200	RTU-2	
1	EG-1	CARNES	RAPAH	EXHAUST	GRID	12" x 12"	6"	75	RTU-2	
2	EG-2	CARNES	RTLAH	EXHAUST	CEILING	12" x 12"	6"	150	RTU-1	4
4	RG-10	CARNES	RAPMF	RETURN	GRID	RETURN	12 x 12"	1230	RTU-1	8
6	RG-20	CARNES	RAPMF	RETURN	GRID	RETURN	14"	1040	RTU-2	8
1	RG-30	CARNES	RAPMF	RETURN	GRID	RETURN	10"	1230	RTU-1	8
1	TG-1	CARNES	RSABH	TRANSFER	WALL	12 x 4"	12" x 4"	0	RTU-1	5
2	WD-20	CARNES	RTDBH	SUPPLY	WALL	24 x 6"	12"	600	RTU-2	

DIFFUSER NOTES:
 1. PROVIDE KYDA EXTENSION ROD WITH KNOB
 2. 4 OF THE CD-10 DIFFUSERS ARE TO BE FLAT BLACK. ALL OTHERS TO BE WHITE SEE REFLECTED CEILING PLAN FOR LOCATIONS.
 3. 12X12 NOMINAL PANEL SIZE.
 4. PROVIDE WITH ADJUSTABLE OPPOSED BLADE DAMPER
 5. MOUNT SO THE OCCUPANT CAN NOT SEE INTO THE DUCT
 6. FLAT BLACK FINISH
 7. DESIGN CFM MUST BE MAINTAINED FOR PROPER HOOD OPERATION
 8. REMOVABLE CORE DIFFUSERS

CONTROL NOTES

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

LENNOX SETTINGS FOR CULVERS

IN ORDER TO SET UP THE RTU'S 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 PR65 IN THE CORE CONTROLLER AND CHANGED IN THE APP AS SHOWN IN THE MENU PATH BELOW. DEFAULT IS SET AT 3600 SECONDS.
- TAP THE MENU BUTTON (THREE LINES IN THE UPPER LEFT OF THE SCREEN) TO OPEN THE MENU. SCROLL DOWN AND TAP ON RTU OPTIONS
 - TAP EDIT PARAMETER. CHOOSE FROM THE CATEGORY OF PARAMETERS LISTED. (FOR HEAT DELAY CHOOSE HEATING)
 - CHOOSE THE PARAMETER TO ADJUST (65). SELECT "0" FOR NO HEAT DELAY (0 SECONDS)

GLOBAL ECONOMIZER MODE (KITCHEN UNIT ONLY)

- THIS IS SET BY CHANGING CONFIGURATION ID#1 CHARACTER 2 TO G
- FROM THE MAIN SCREEN (OPERATION OVERVIEW) TAP THE MENU BUTTON (THREE LINES IN THE UPPER LEFT OF THE SCREEN) TO OPEN THE MENU
 - TAP INSTALL
 - TAP NEXT ON DATE AND TIME
 - TAP NEXT ON RTU NAME, MODEL NUMBER, SERIAL NUMBER AND CATEGORY IF ALREADY ENTERED, IF NOT PLEASE ENTER
 - TAP CONFIGURATION ID 1 AND CHANGE 2ND CHARACTER TO G

ECONOMIZER MINIMUM POSITION SET-UP

- THIS IS ADJUSTED THROUGH THE MENU FROM THE MAIN SCREEN
- TAP THE MENU BUTTON (THREE LINES IN THE UPPER LEFT OF THE SCREEN)
 - SCROLL DOWN AND TAP RTU OPTIONS
 - TAP EDIT PARAMETERS
 - CHOOSE FROM THE CATEGORY OF PARAMETERS LISTED (AIRFLOW)
 - CHOOSE THE PARAMETER TO ADJUST (132) MINIMUM FRESH AIR DAMPER POSITION DURING OCCUPIED OPERATION

OCCUPIED AND UNOCCUPIED

- USING 24V THERMOSTAT CONTROL OCCUPIED/ UNOCCUPIED WILL BE DETERMINED BY INPUT ON P297-8 ON THE M4 BOARD
- FOR (KITCHEN UNIT ONLY) BOTH THE THERMOSTAT AND HOOD FANS MUST BE TIED INTO P297-8 ON THE M4 CONTROL BOARD

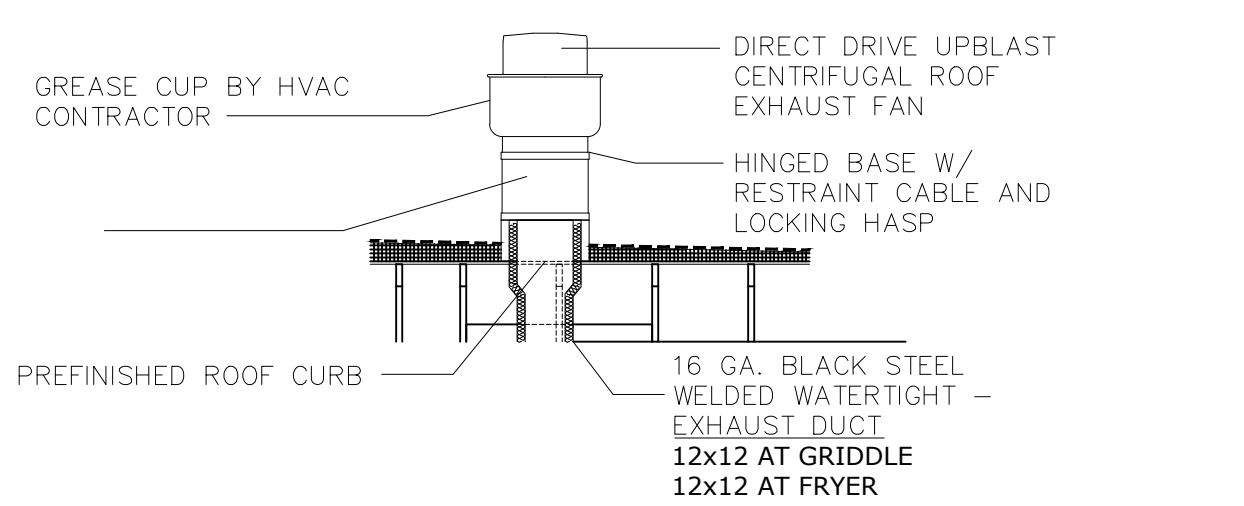
FRESH AIR TEMPERING (HEATING)

- THIS IS ADJUSTED THROUGH THE MENU FROM THE MAIN SCREEN
- TAP THE MENU BUTTON (THREE LINES IN THE UPPER LEFT OF THE SCREEN) TO OPEN THE MENU
 - TAP SETUP
 - TAP TEST AND BALANCE
 - TAP DAMPER
 - THERE ARE SEVERAL SETTINGS TO SELECT IN THIS MENU PATH BEFORE REACHING THE DESIRED SETTING. FRESH AIR HEATING ENABLED =YES OR NO. AFTER ENABLING FAH THE NEXT SCREEN WILL ALLOW THE FAH SET POINT TO BE CONFIGURED. SUGGESTED FAH TEMPERATURE RANGES 65-67 DEGREES F. VERIFY WITH ENGINEER

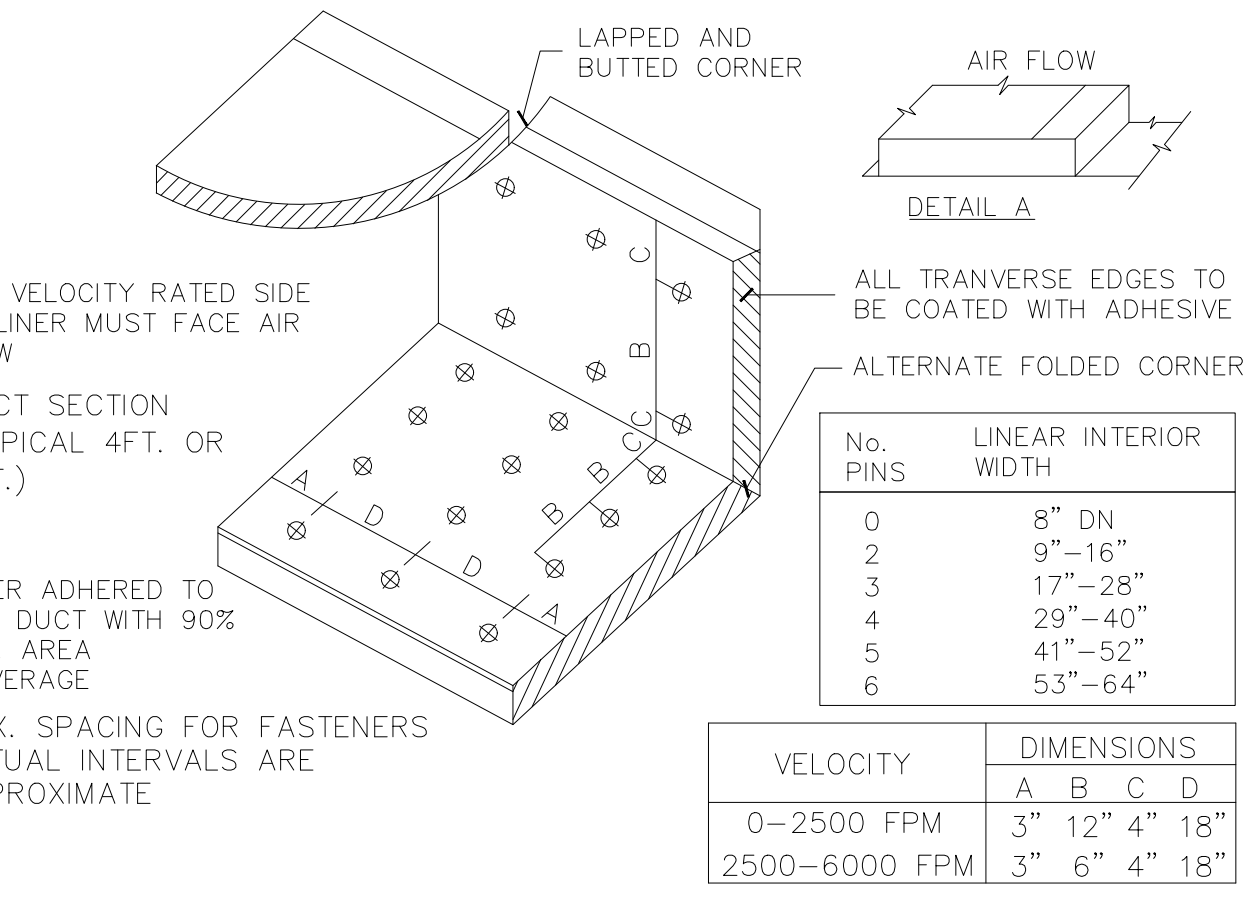
FRESH AIR TEMPERING (COOLING)

- THIS IS ADJUSTED THROUGH THE MENU FROM THE MAIN SCREEN
- TAP THE MENU BUTTON (THREE LINES IN THE UPPER LEFT OF THE SCREEN) TO OPEN THE MENU
 - TAP SETUP
 - TAP TEST AND BALANCE
 - TAP DAMPER
 - THERE ARE SEVERAL SETTINGS TO SELECT IN THIS MENU PATH BEFORE REACHING THE DESIRED SETTING. FRESH AIR HEATING ENABLED =YES OR NO. AFTER ENABLING FAH THE NEXT SCREEN WILL ALLOW THE FAH SET POINT TO BE CONFIGURED. SUGGESTED FAH TEMPERATURE RANGES 73-75 DEGREES F. VERIFY WITH ENGINEER

ENSURE THAT THE PROBE STYLE SENSOR GETS INSTALLED IN THE SUPPLY DUCTWORK FOR FAH/FAc TO OPERATE PROPERLY
 FOR HELP PLEASE CALL LENNOX NATIONAL ACCOUNT TECH SUPPORT AT 1-800-367-6285
 CHECK FOR CORRECT OPERATION AND WIRING OF ALL SENSORS



KITCHEN HOOD EXHAUST FAN DETAIL
 N.T.S.

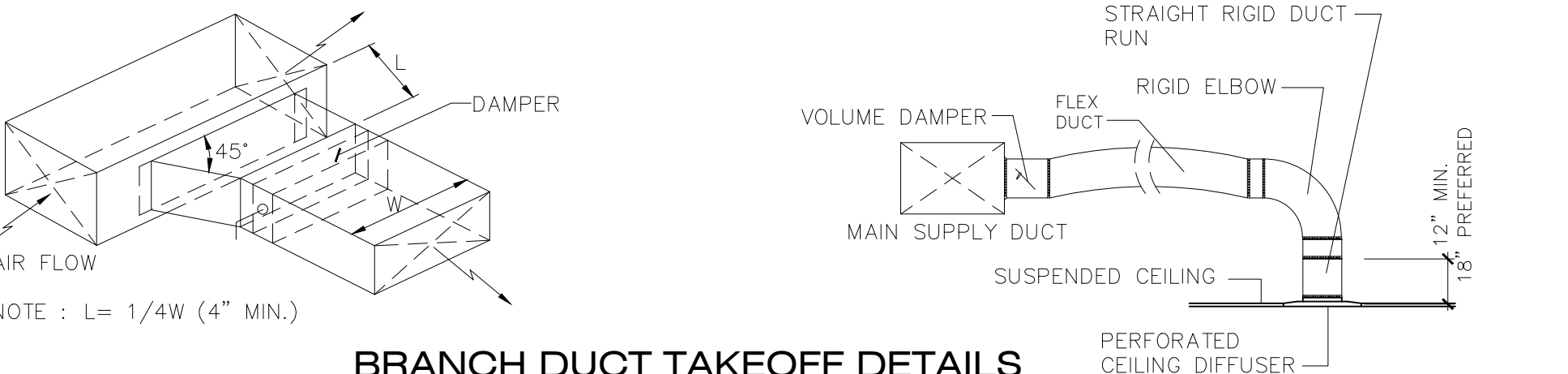


DUCT LINER INSTALLATION DETAIL
 N.T.S. NOTE: USE ONLY ON VERTICAL DROP FROM RTU TO WITHIN 9'-10" A.F.F.. DUCT LINER WILL NOT BE PERMITTED ON ANY HORIZ. RUNS.

NATIONAL ACCOUNT PROGRAM

- LENNOX INDUSTRIES, INC. - ROOFTOP HVAC EQUIPMENT**
National Accounts Sales: (800) 367-6285 Option #1 lennoxind.com
National Account Technical Support: (800) 367-6285 Option #2 lennoxind.com
- ACCUREX/ GREENHECK FAN CORPORATION - KITCHEN HOODS, EXHAUST FANS, ROOF CURBS, ANSUL SYSTEMS, AND ACCESSORIES**
CONTACT Andy Jacobs @ 1-715-301-6022 or andrew.jacobs@accurex.com
Secondary contact Sara Block @ 1-877-377-2548
- CARNES COMPANY - DIFFUSERS AND GRILLES**
National Accounts Sales: Chris Stratton @ (608) 845-6411 cstratton@carnes.com
National Accounts Rep: Brian Baker @ (608) 845-6411 bbaker@carnes.com

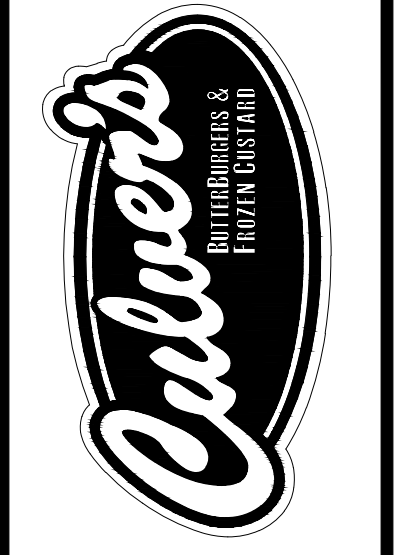
NOTE : KITCHEN HOODS AND FANS SUPPLIED AND INSTALLED BY HVAC CONTRACTOR - MINIMUM FOUR WEEK LEAD TIME.



BRANCH DUCT TAKEOFF DETAILS
 N.T.S.

ARCHITECTURAL CONCEPTS
 ARCHITECTURE PLANNING ENGINEERING
 6650 CROSSING DRIVE, S.E. GRAND RAPIDS, MI 49508
 (616) 554-1222 FAX (616) 554-1225

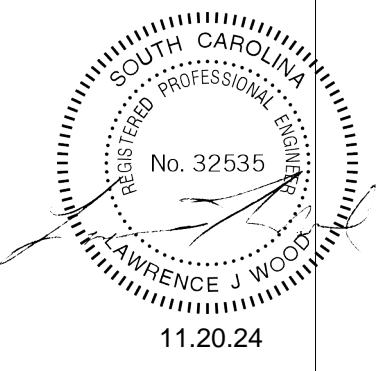
Culver's Franchising System, Inc.
 540 Water Street
 Prairie du Sac, WI 53578
 608-643-7980



CULVER'S RESTAURANT
3103 N. PLEASANTBURG DRIVE
GREENVILLE, SOUTH CAROLINA

Date	Revision
11-20-24	FOR CONSTRUCTION

Sheet
M-2



WARNING!: These plans are for the exclusive use of Culver's Franchising Systems, Inc. and authorized franchise holders only. No part of these plans or the design they represent may be duplicated or reproduced without permission of Culver's Franchising System, Inc.

P:\2024\2024158 Culver's Cherrydale SCH\Working Drawings\2024158 M-2.dwg, 11/18/2024, 8:35:14 AM, mdelora

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			TOTAL CFM	WIDTH	LENGTH	DIA.	CFM	S.P.	MUA CFM			AC CFM
1	GRIDDLE HOOD ITEM 49	XGEP-64-S	64	TOP 23 BOT 8	FRT 12 BACK 36	430 SS WHERE EXPOSED	MEDIUM	1500	12	12		1500	1.918			136.8	SINGLE

HOOD INFORMATION

HOOD NO.	MARK	LIGHTING DETAILS			GREASE FILTRATION DETAILS			UTILITY CABINET(S)			
		FIXTURE TYPE	BULB / LAMP INFO	QTY	FOOT CANDLES	TYPE / MODEL	QTY	SIZE (IN.)	LOCATION	FIRE SYSTEM	CONTROLS
1	GRIDDLE HOOD ITEM 49					GREASE GRABBER	4	16			
						STAINLESS STEEL	0	20	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 #K1100145 - FLUE BYPASS HOOD
 SDR #K1800144 - CULVERS 4VAT 2FIRE PROCESS - GRIDDLE HOOD

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	1.8	1,702	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

FIRE SYSTEM INFORMATION

MARK	MODEL	LOCATION	FLOW POINTS		SUPPLY LINE	DETECTION
			HOODS	PCU		
FIRE SUPPRESSION-GRIDDLE HOOD	ANSUL R-102 WET CHEMICAL	REMOTE MOUNTED	6 UTILIZED 11 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
 HOOD SUPPRESSION AGENT - INCLUDED - 3 GAL. - ((1) 3.0 TANK(S))
 REMOTE PULL STATION - STANDARD - INSTALLATION AT SINGLE POINT OF EGRESS

ANSUL R102 (WET CHEMICAL) FIRE PROTECTION SYSTEM - MODEL FSSC

CONTROL PANEL

WIRING DIAGRAMS

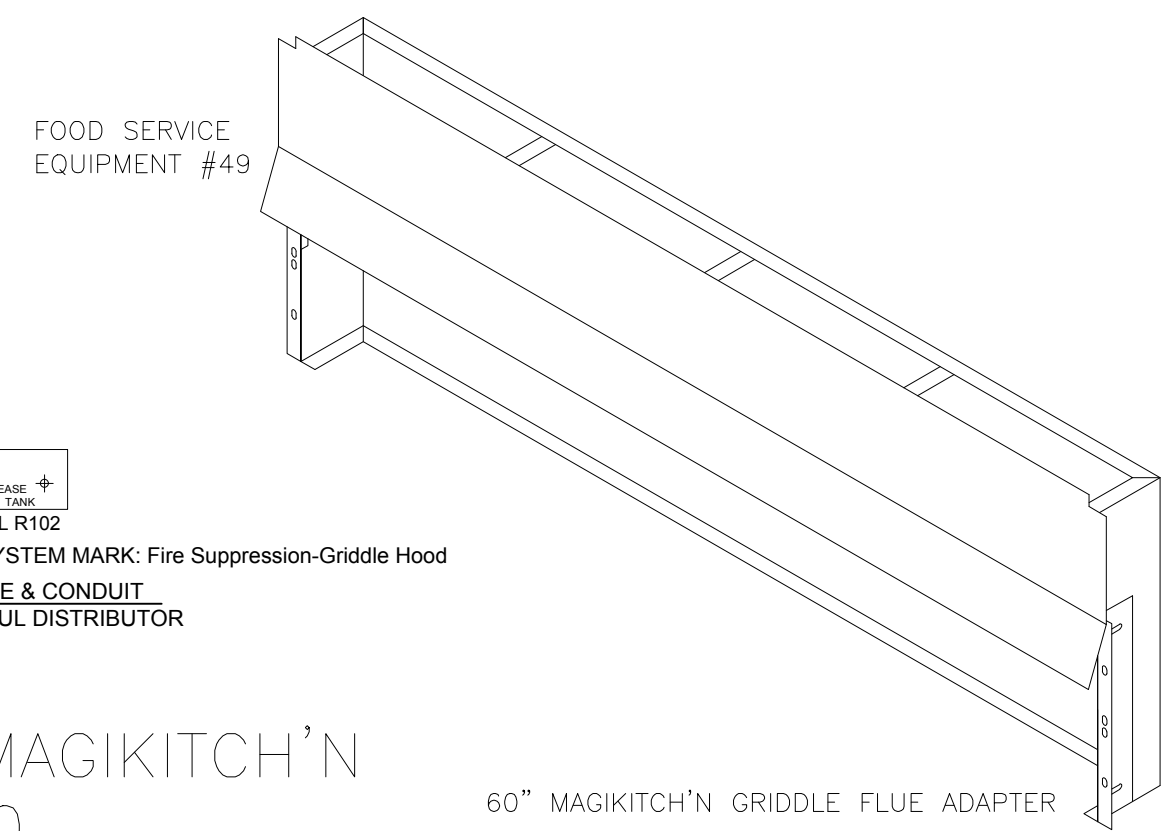
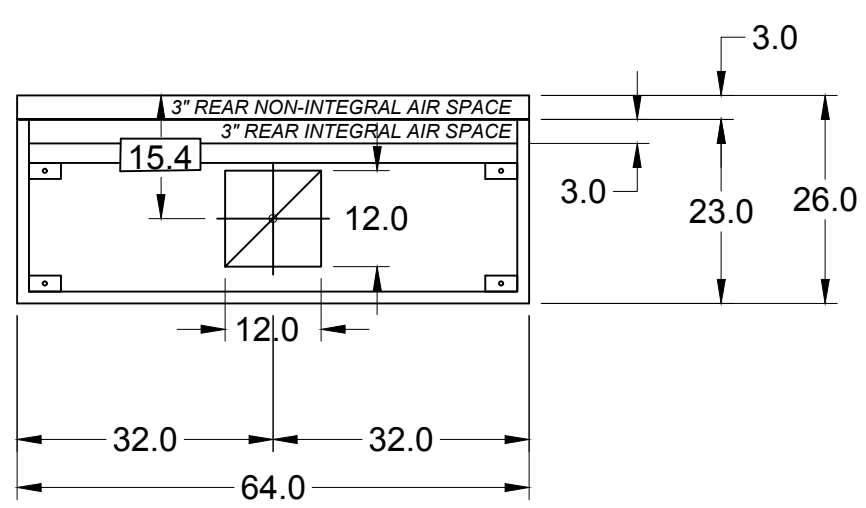
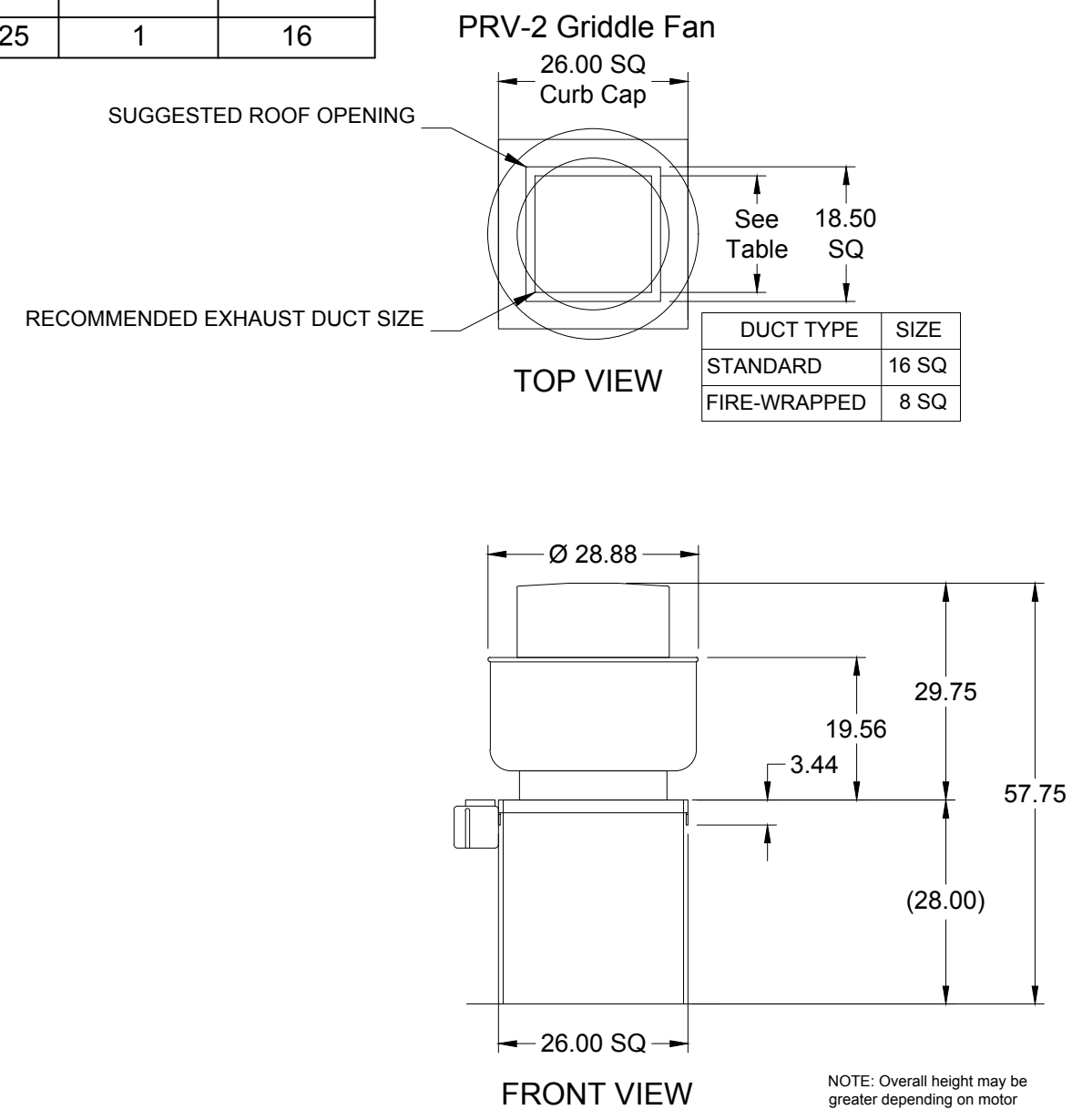
WIDPOT MICRO SWITCH
 CONNECTION TO BUILDINGS ALARM
 CONNECTION TO COOKING EQUIPMENT SHUT DOWN
 CONNECTION TO FAN SHUT DOWN

NOTES:

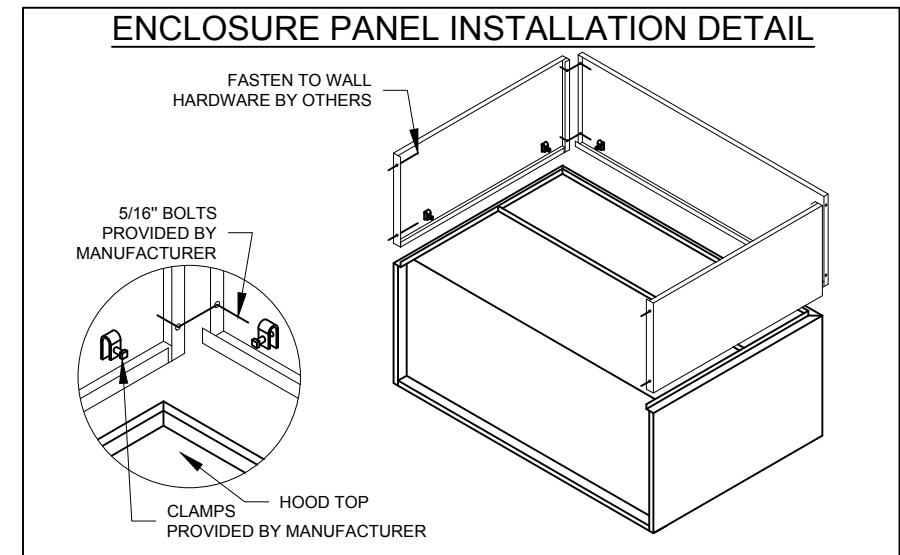
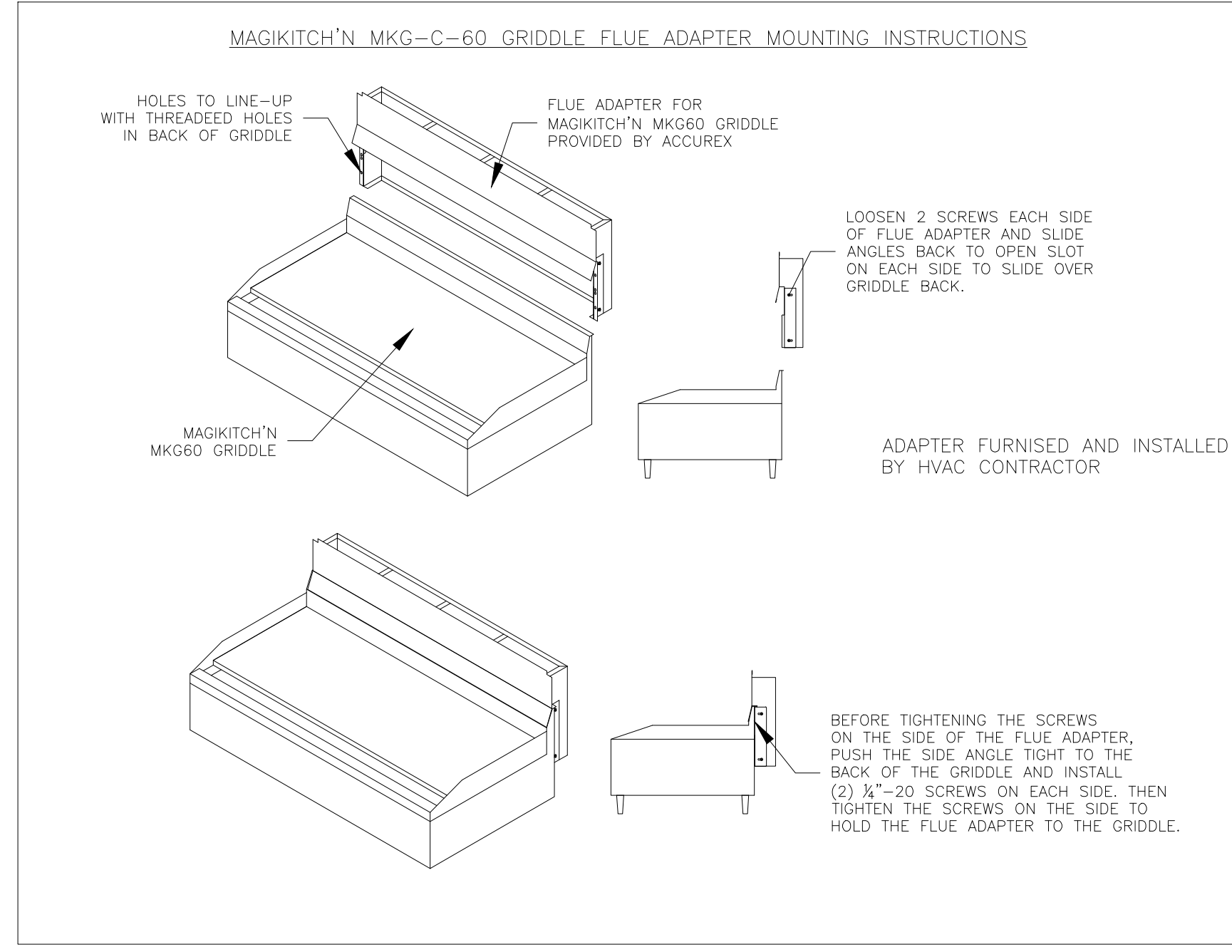
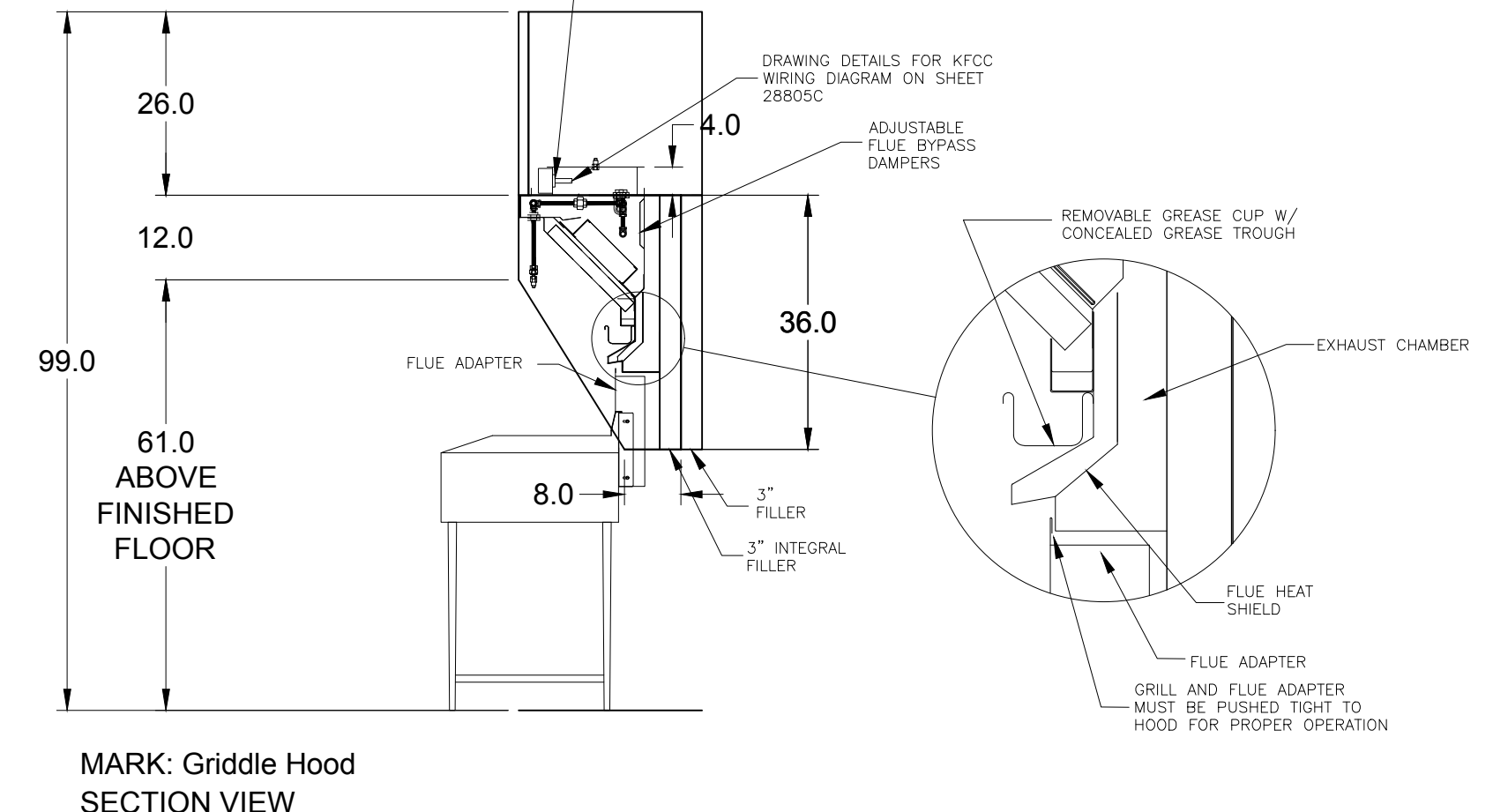
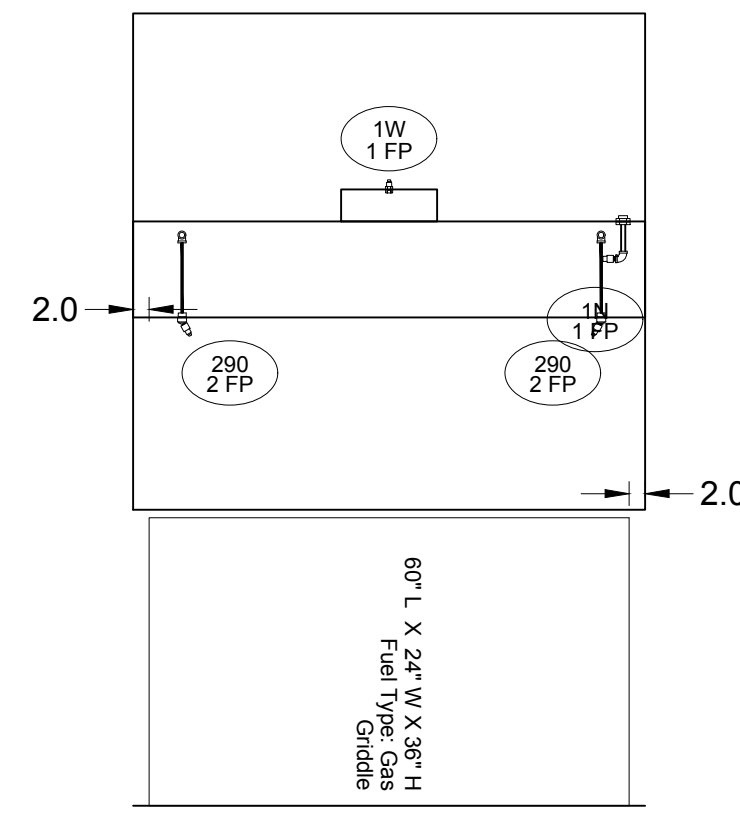
WET CHEMICAL FIRE PROTECTION SYSTEM TO BE ANSUL R-102, DESIGNED IN COMPLIANCE WITH UL 300 REQUIREMENTS.
 VERIFICATION OF ALL COOKING EQUIPMENT MAKE, MODEL AND LOCATION REQUIRED FOR ALL FIRE PROTECTION SYSTEMS.
 ALL FIRE SYSTEM PIPING IS STANDARD TO THE RIGHT END OF THE HOOD UNLESS A WALL IS LOCATED ON THE RIGHT END.
 -ANSUL AUTOMAN RELEASE TO BE LOCATED WITHIN 60" OF HOOD.

THE BASIC FIRE SYSTEM DOES NOT INCLUDE THE FOLLOWING:
 -GAS SHUT-OFF VALVE, IF REQUIRED, TO BE SUPPLIED BY MANUFACTURER (UP TO 2" DIAMETER AS STANDARD) AND INSTALLED BY A LICENSED PLUMBER.
 -MOTOR SWITCH TO BE SUPPLIED BY MANUFACTURER FOR CONNECTION TO, BUT NOT LIMITED TO, BUILDING ALARM SYSTEMS, EXHAUST AND SUPPLY FANS AND ELECTRICAL POWER SHUT DOWN FIELD WIRING AND CONNECTIONS TO BE PERFORMED BY A LICENSED ELECTRICIAN.

THE BASIC FIRE SYSTEM DOES NOT INCLUDE THE FOLLOWING:
 -FULL DUMP TEST OTHER THAN WHAT IS SPECIFIED PER THE INSTALLATION MANUAL, OR TO SATISFY A STATE OR LOCAL CODE. PERMIT AND TESTING FEES ARE NOT INCLUDED UNLESS NOTED UNDER THE EQUIPMENT SCHEDULE FOR THE FIRE SYSTEM.
 -MORE THAN TWO TRIPS TO THE JOBSITE OR SPECIAL TRANSPORTATION, OR OVERNIGHT LOGGING REQUIREMENTS IN REMOTE AREAS. NORMAL TRAVEL DISTANCE IS FIRST 50 MI. (80.5 KM) FROM OFFICE.
 -SPECIAL CLASSES OR ADDITIONAL LABOR FOR ACCESS TO SECURITY SENSITIVE AREAS.
 -INSTALLATION OF GAS SHUT-OFF VALVE.
 -SPECIAL DRAWINGS REQUIRED TO SATISFY STATE OR LOCAL CODE. PLAN EXAMINATION FEES, PE OR PS APPROVAL STAMP.
 -UNION LABOR GOVERNMENT LABOR, OR PREVAILING WAGES REQUIRED FOR FINAL FIELD HOOK-UP.
 -ANY AND ALL ELECTRICAL COMPONENTS/CONNECTIONS REQUIRED TO SHUT DOWN FANS, SHUT OFF DEVICE FOR ELECTRIC COOKING EQUIPMENT (SHUNT TRIP BREAKER), OR ACTIVATE AN ALARM SYSTEM, ETC.
 -ANY CRANING OR REASSEMBLY REQUIRED TO GAIN ACCESS TO THE FIRE SUPPRESSION PIPING LOCATED ON THE TOP OF THE HOOD.
 -ROUGH-IN HIDDEN CONDUIT FOR REMOTE PULL STATION OR GAS VALVE (FLUSH MOUNTED PULL STATION).
 -INSTALLATION OF MORE THAN (1) REMOTE PULL STATIONS OR DISTANCES GREATER THAN 20 FT (6.1M).
 -PARTS OR LABOR REQUIRED TO CORRECT PIPING DUE TO COOKING EQUIPMENT CHANGES OR DEVIATION FROM PLANS, OR ANY CHARGES FOR MISSING OR ADDITIONAL PARTS OTHER THAN THOSE INDICATED ON THE FIRE SUPPRESSION DETAIL.



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

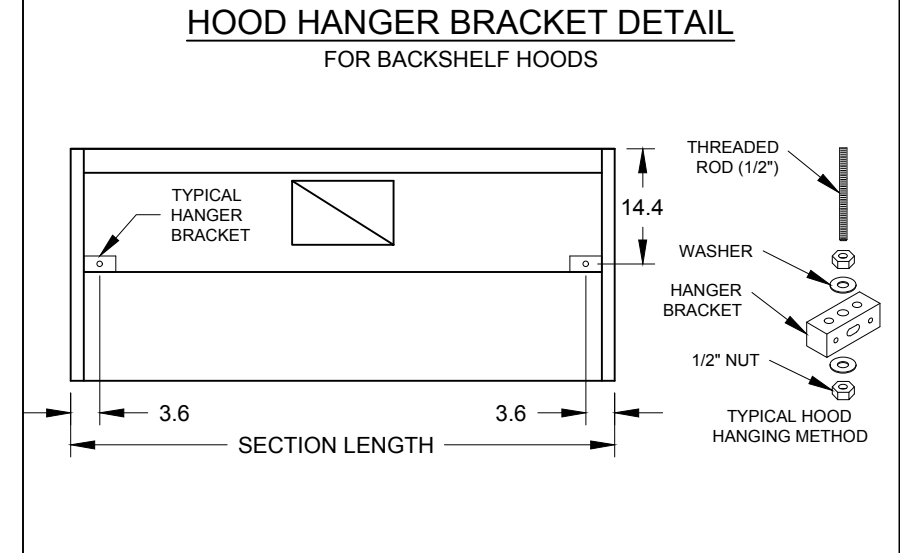


HOOD HANGING HEIGHT FOR FIRE SYSTEMS

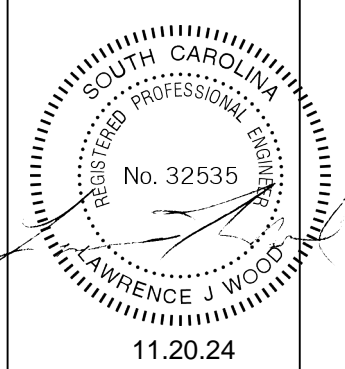
VERIFICATION OF HOOD HANGING HEIGHT ABOVE FINISHED FLOOR (A.F.F.) IS REQUIRED FOR CORRECT PLACEMENT OF FIRE SYSTEM NOZZLES.

RECOMMENDED HANGING HEIGHT = 61" FROM FINISHED FLOOR TO LOWER FRONT EDGE OF HOOD.

OTHER HANGING HEIGHT = _____" FROM FINISHED FLOOR TO LOWER EDGE OF HOOD.



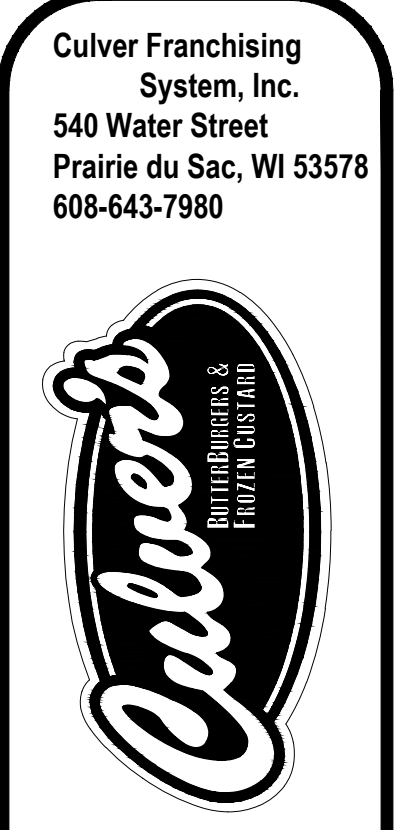
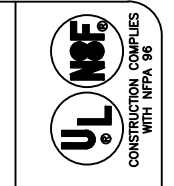
ACCUREX



ACCUREX - WI, IA
 PHILLIP KRAFT
 PHILLIP.KRAFT@ACCUREX.COM
 262.227.7865

CULVERS-METRO L
 PROTOTYPE_VG_NODH
 GRIDDLE HOOD
 PRV-2 GRIDDLE FAN
 FIRE SUPPRESSION-GRIDDLE HOOD

PROJECT
 12/14/2019



CULVER'S RESTAURANT
3103 N. PLEASANTBURG DRIVE
GREENVILLE, SOUTH CAROLINA

Date	Revision
11-20-24	FOR CONSTRUCTION

Sheet
M-3

WARNING: These plans are for the exclusive use of Culver Franchising Systems, Inc. and authorized franchise holders only. No part of these plans or the design they represent may be duplicated or reproduced without permission of Culver Franchising System, Inc.

HOOD 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	FRYER HOOD ITEM 59	XXEP-83-S	83	TOP 23 BOT 3	FRT 12 BACK 36	430 SS WHERE EXPOSED	MEDIUM	1500	12	12		1500	0.518			169.1	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.) L H	LOCATION	FIRE SYSTEM TYPE	SIZE	MODEL	CONTROLS INTERFACE
1	FRYER HOOD ITEM 59				X-TRACTOR STAINLESS STEEL	5 0	16 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 #K1100559 - NEW PITCO 4L FRYER FLUE BYPASS SYSTEM
 SDR #K1700974 - CULVERS 4VAT 2FIRE PROCESS - FRYER HOOD

Direct Drive Upblast Centrifugal Roof Exhaust Fan

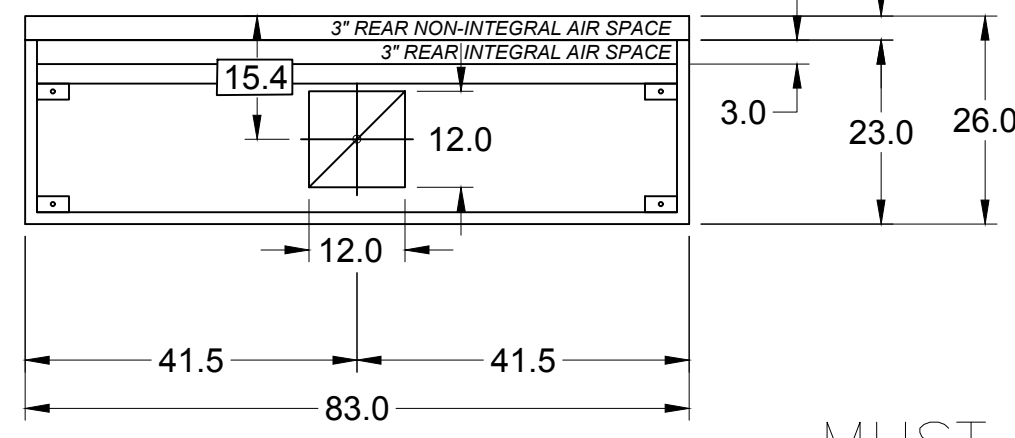
MARK INFORMATION		FAN INFORMATION					MOTOR INFORMATION						
QTY	MARK	MODEL	VOLUME (CFM)	TOTAL EXTERNAL SP (IN WG)	FAN RPM	OPERATING POWER (HP)	WEIGHT (LB.)	SIZE (HP)	V/C/P	ENCLOSURE	MOTOR RPM	WINDINGS	NEC FLA*
1	PRV-3 Fryer Fan	XCUE-140-VG	1,500	1	1,349	0.46	92	1	115/60/1	OP	1725	1	16

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

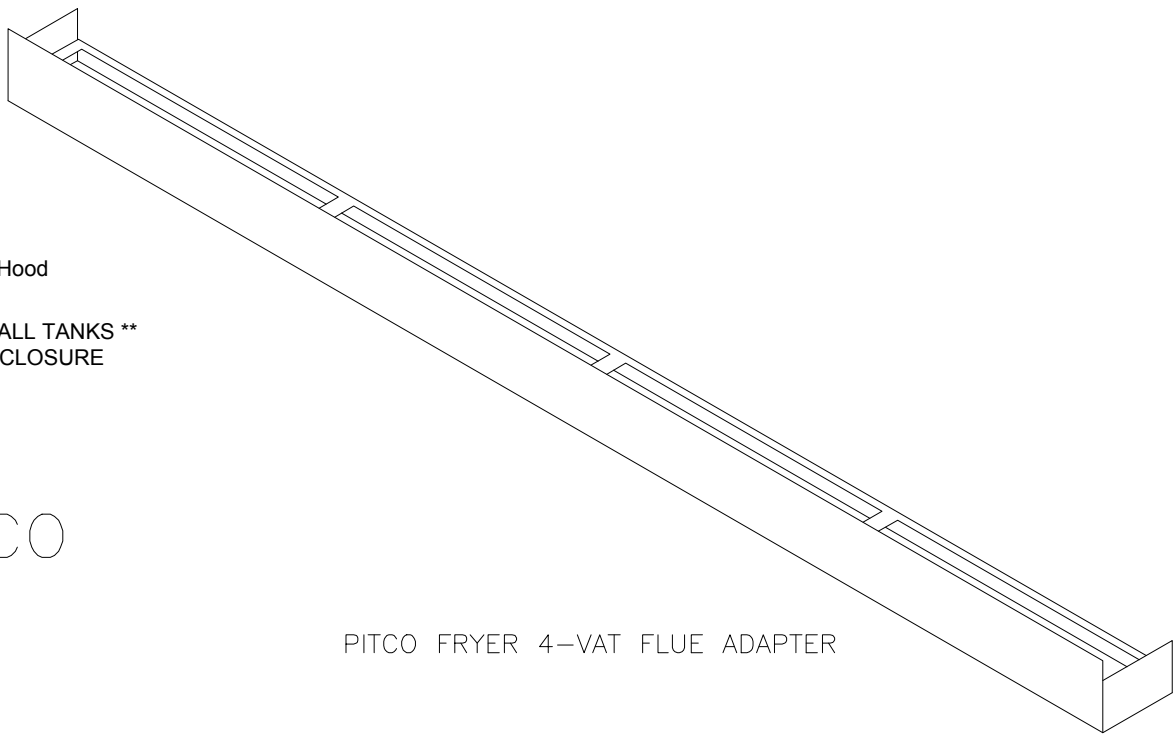
PRV-3 Fryer Fan : SELECTED OPTIONS AND ACCESSORIES

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 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

FOOD SERVICE EQUIPMENT #59



MUST USE WITH PITCO MODEL CU-SSH60W



FIRE SYSTEM INFORMATION

MARK	MODEL	LOCATION	FLOW POINTS		SUPPLY LINE	DETECTION
			HOODS	PCU		
FIRE SUPPRESSION-FRYER HOOD	ANSUL R-102 WET CHEMICAL	REMOTE MOUNTED	18 UTILIZED 22 AVAILABLE		CONTINUOUS	FUSIBLE LINK

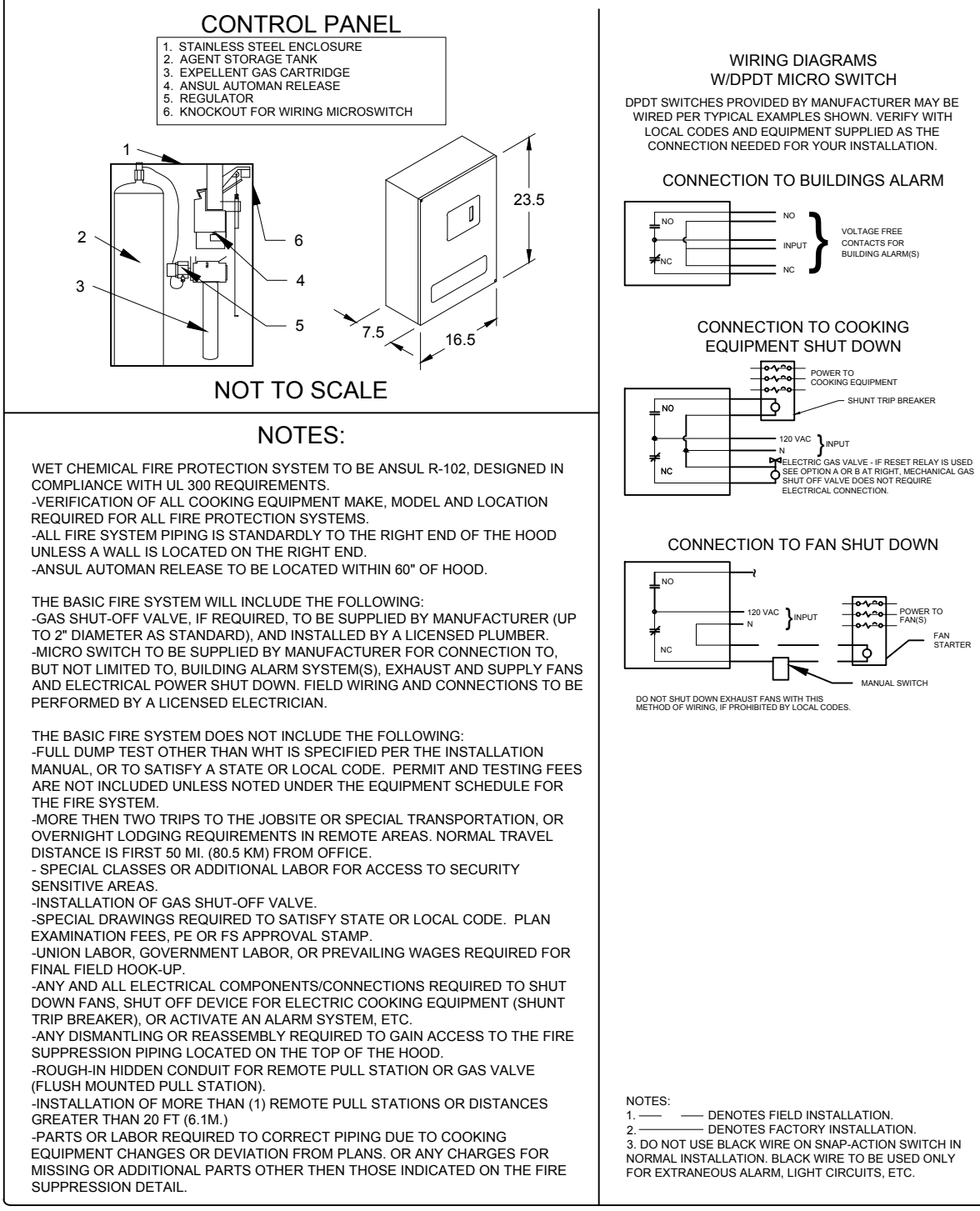
MARK(S) PROTECTED BY FIRE SYSTEM
 FRYER HOOD SECTION 1

FIRE SYSTEM OPTIONS AND ACCESSORIES

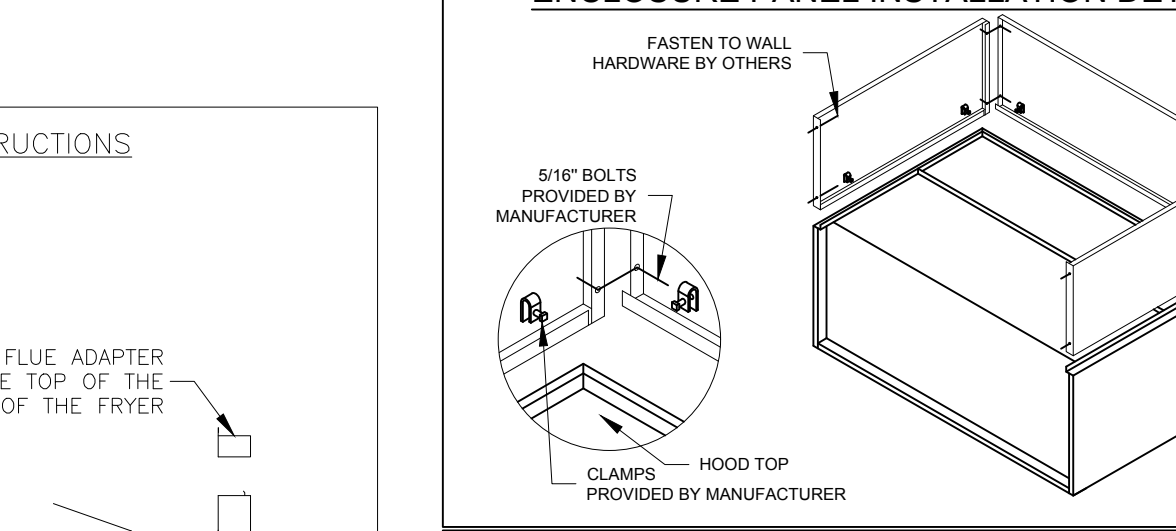
FULL INSTALLATION (INCLUDES PRE-PIPED HOOD(S) WITH DETECTION AND FACTORY COORDINATED INSTALL)
 CHROME SLEEVES FOR FACTORY PROVIDED APPLIANCES DROPS - INCLUDED
 METAL BLOW-OFF CAPS - INCLUDED
 PRE-TEST - INCLUDED

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

ANSUL R102 (WET CHEMICAL) FIRE PROTECTION SYSTEM - MODEL FSSC



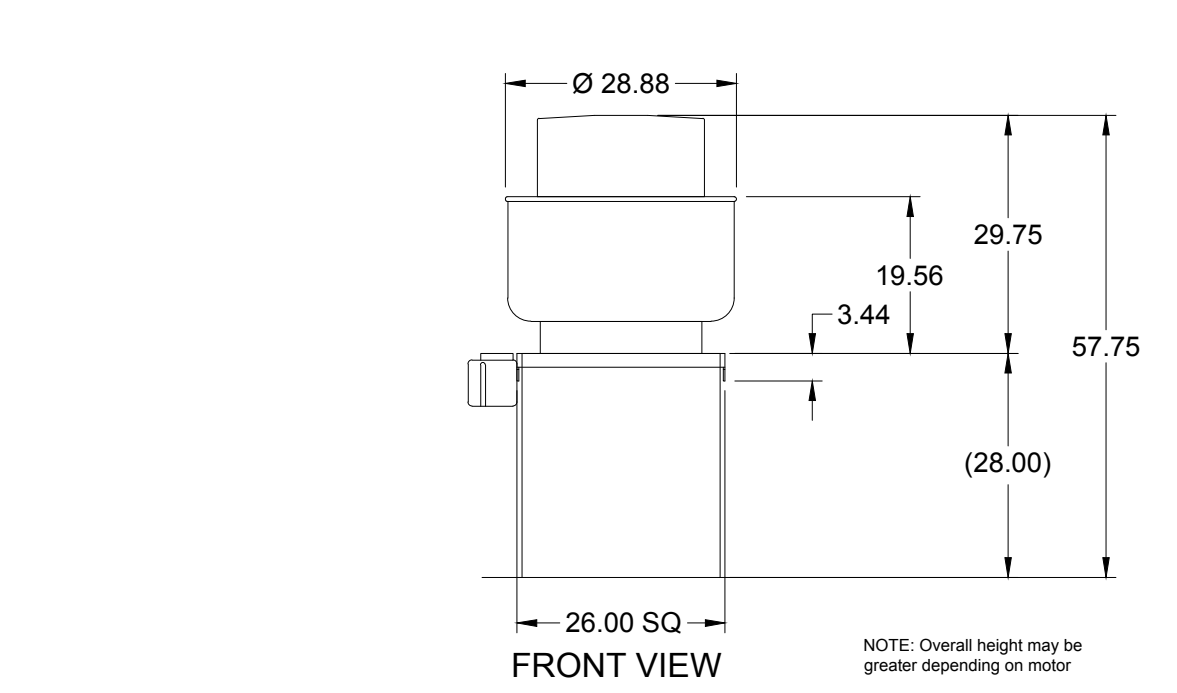
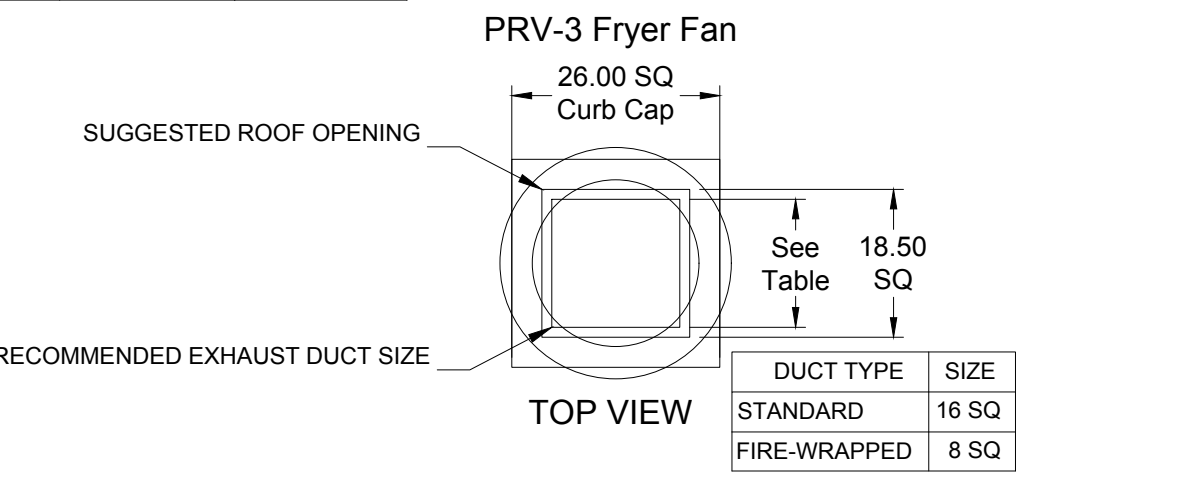
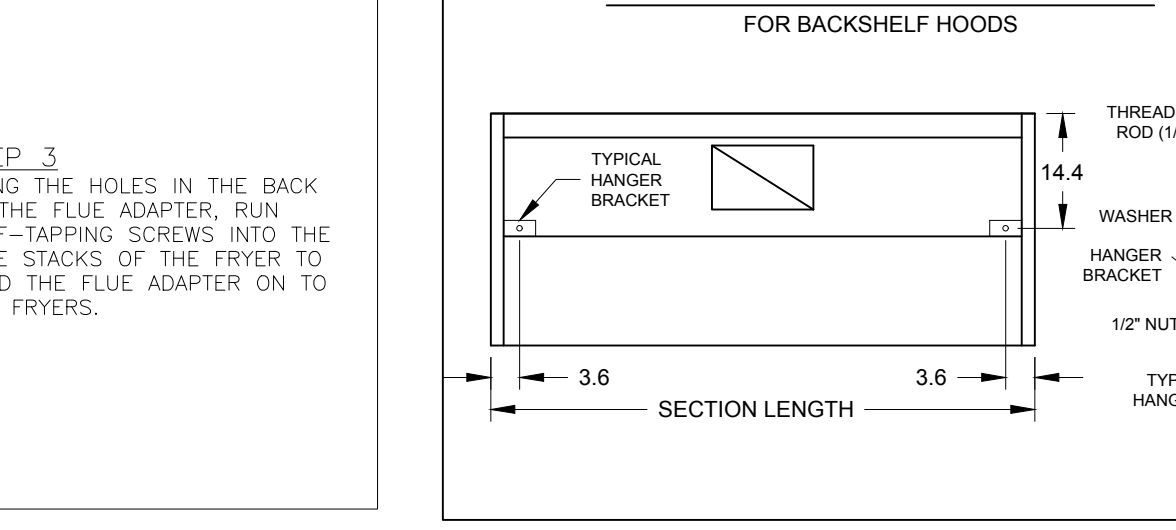
ENCLOSURE PANEL INSTALLATION DETAIL



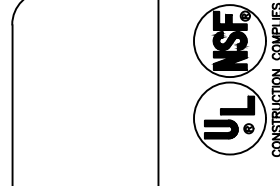
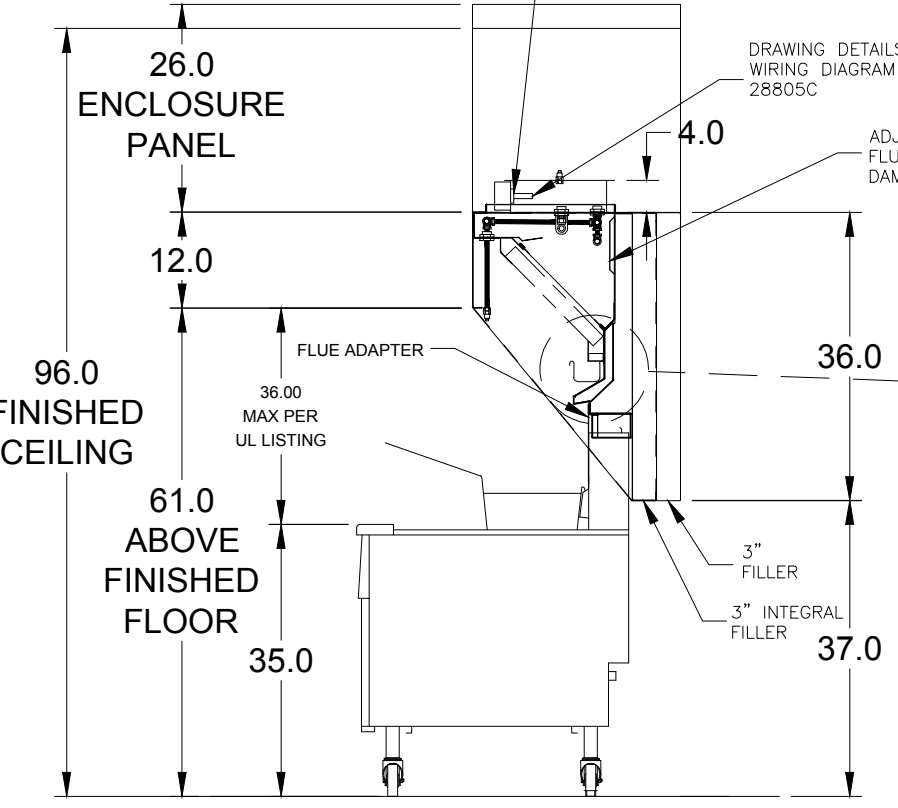
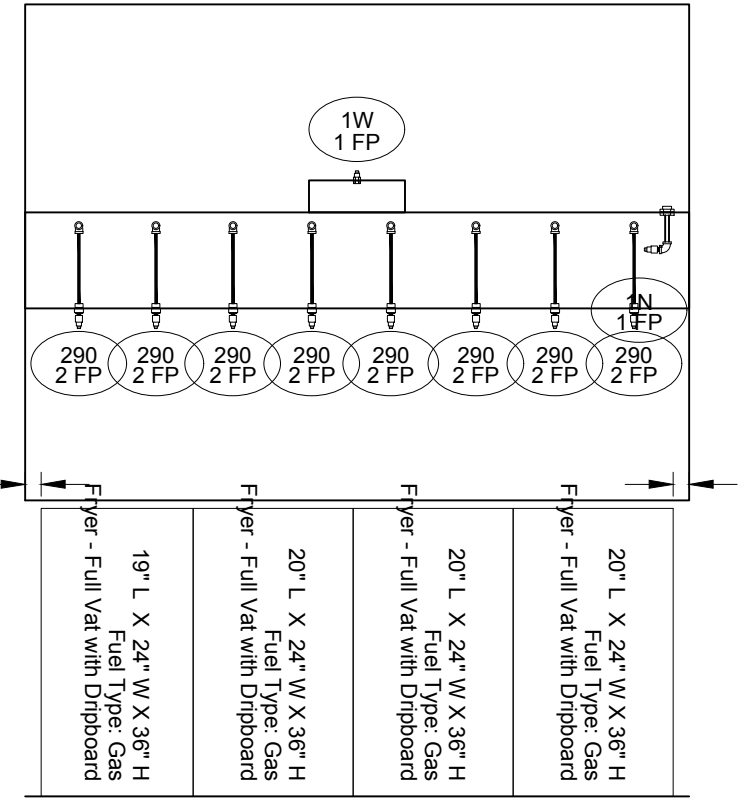
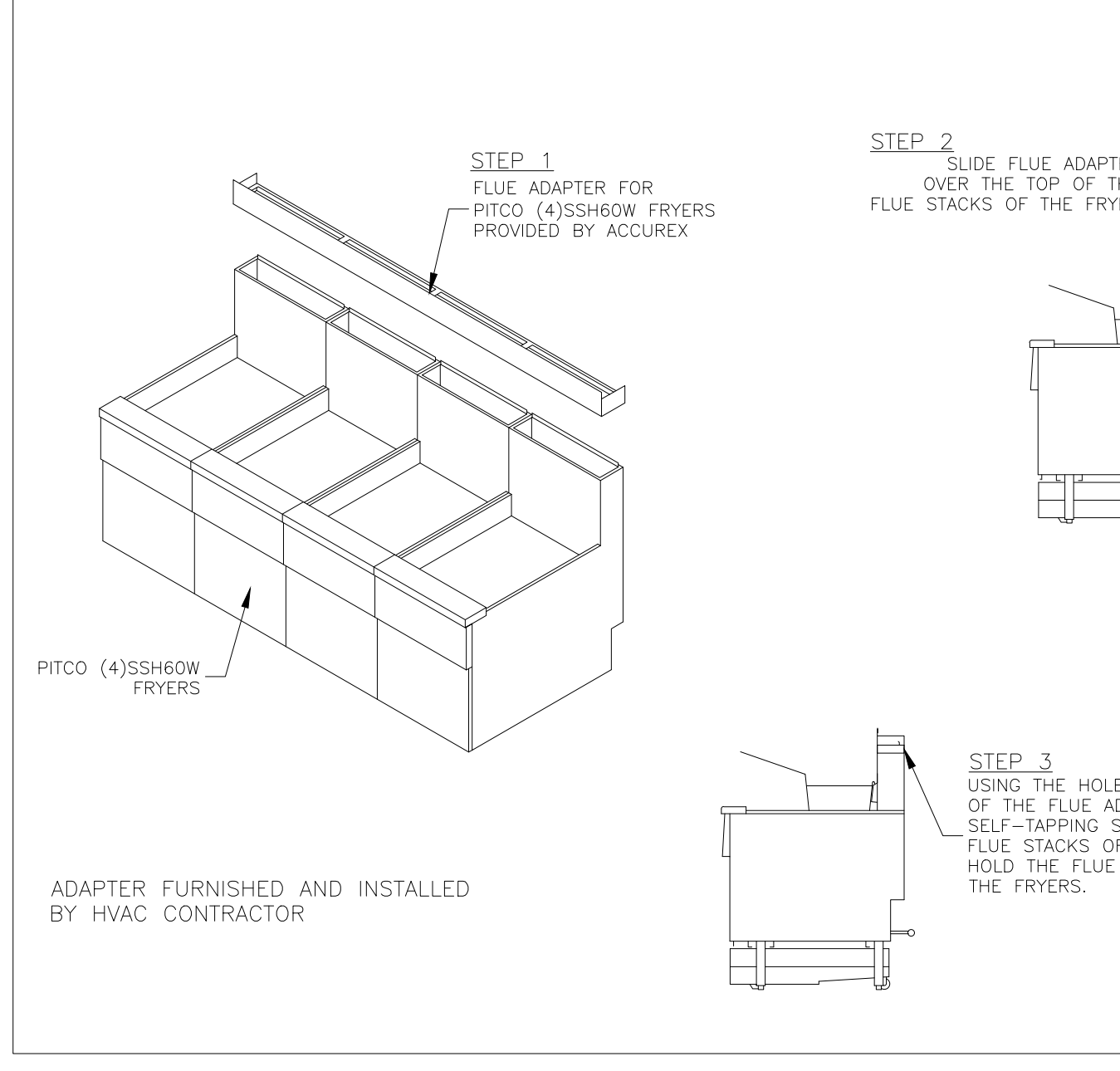
HOOD HANGING HEIGHT FOR FIRE SYSTEMS

VERIFICATION OF HOOD HANGING HEIGHT ABOVE FINISHED FLOOR (A.F.F.) IS REQUIRED FOR CORRECT PLACEMENT OF FIRE SYSTEM NOZZLES.
 RECOMMENDED HANGING HEIGHT = 61" FROM FINISHED FLOOR TO LOWER FRONT EDGE OF HOOD.
 OTHER HANGING HEIGHT = " FROM FINISHED FLOOR TO LOWER EDGE OF HOOD.

HOOD HANGER BRACKET DETAIL FOR BACKSHELF HOODS



PITCO CU-SSH60W FRYERS FLUE ADAPTER MOUNTING INSTRUCTIONS

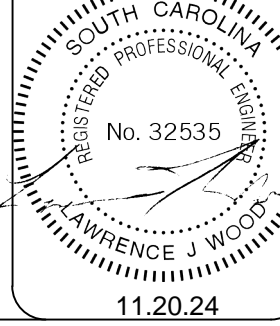


CULVERS-METROL
 PROTOTYPE_VG_NODH
 FRYER HOOD
 PRV-3 FRYER FAN
 FIRE SUPPRESSION-FRYER HOOD

PROJECT
 12/14/2019

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

ACCUREX



CULVER'S RESTAURANT
3103 N. PLEASANTBURG DRIVE
GREENVILLE, SOUTH CAROLINA

Date	Revision
11-20-24	FOR CONSTRUCTION

Sheet
M-4

WARNING: These plans are for the exclusive use of Culver Franchising Systems, Inc. and authorized franchise holders only. No part of these plans or the design they represent may be duplicated or reproduced without permission of Culver Franchising System, Inc.



6550 CROSSING DRIVE, S.E.
GRAND RAPIDS, MI 49508
(616) 554-1222
FAX (616) 554-1225



CULVER'S RESTAURANT
3103 N. PLEASANTBURG DRIVE
GREENVILLE, SOUTH CAROLINA

Date	Revision
11-20-24	FOR CONSTRUCTION

Sheet
M-5

WARNING: These plans are for the exclusive use of Culver Franchising Systems, Inc. and authorized franchise holders only. No part of these plans or the design they represent may be duplicated or reproduced without permission of Culver Franchising System, Inc.

EQUIPMENT SCHEDULE			
ELECTRICAL CONTROL BOX		MARK: XKC	
DESCRIPTION / ACCUREX MODEL	EXHAUST FAN QTY	SUPPLY FAN QTY	POWER FREQUENCY
KITCHEN FAN CONTROL CENTER / XKC SHIP LOOSE / SHIP LOOSE FOR REMOTE MOUNTING	2	0	60 CYCLE
CONTROL PANEL ENCLOSURE - 18 GA 304 STAINLESS STEEL ENCLOSURE (NEMA-1) - DIMENSIONS 18 X 20 X 6			
WIRING DIAGRAM # T100 2 - 25			
STARTERS PROVIDED IN CONTROL PANEL - QTY 2			
USER INTERFACE CONTROL - QTY 1			
INTEGRATED EXHAUST TEMPERATURE INTERLOCK SYSTEM			
FACTORY MOUNTED EXHAUST TEMPERATURE SENSORS - QTY 2			
COMPLIES WITH INTERNATIONAL MECHANICAL CODE 2006 SECTION 507.2.1.1			
TURN ON EXHAUST IN FIRE			
THERMAL OVERLOADS IN CABINET			
SPECIAL DESIGN REQUESTS			
SDR #K0800240 - USE KIT #622883, WIRING DIAG #Z905336			
TYPE 2 KITCHEN HOOD		MARK: ITEM #25	
HOOD NO.	ACCUREX MODEL STYLE / CONFIGURATION	HOOD DIMENSIONS SECTION LENGTH WIDTH HEIGHT	GREASE CLIP OR DRAIN HOOD TEMP. RATING TOTAL WEIGHT SECTION LOCATION
1	XDS-42-S CONDENSATE HOOD - DOUBLE BAFFLE	42.0 IN. 42 IN. 24 IN.	RIGHT NA 224.0 LBS. NA

EXHAUST PLENUM COLLARS							
HOOD SECTION #	DISTANCE TO END (IN.)	WIDTH (IN.)	LENGTH (IN.)	DIAMETER (IN.)	VOLUME (CFM)	S.P. (IN. WC)	VELOCITY (FT/MIN)
1 / 1	21	7	7	NA	350	0.127	1029
TOTAL EXHAUST CFM - SECTION 1					350.0 = 100.0 CFM / FT		

EQUIPMENT SCHEDULE												
Direct Drive Centrifugal Roof Exhaust Fan MARK: PRV-1 Restroom												
Qty	Accurex Model	Volume (CFM)	SP (in wg)	FRPM	Operating Power (hp)	Weight (Lb.)	Size (hp)	V/CP	Enc.	Motor RPM	Windings	FLA
1	XRED-090-VG	375	0.5	1485	0.060	30	0.1	115/60/1	OP	1725	1	NA

EQUIPMENT SCHEDULE												
Direct Drive Centrifugal Roof Exhaust Fan MARK: PRV-4 Condensate Fan												
Qty	Accurex Model	Volume (CFM)	SP (in wg)	FRPM	Operating Power (hp)	Weight (Lb.)	Size (hp)	V/CP	Enc.	Motor RPM	Windings	FLA
1	XRED-095-VG	350	0.6	1486	0.09	33	0.167	115/60/1	OP	1725	1	4.4

EQUIPMENT SCHEDULE												
Ceiling Exhaust Fan MARK: EF-1 Condensate Fan												
Qty	Accurex Model	Volume (CFM)	SP (in wg)	FRPM	Operating Power (hp)	Weight (Lb.)	Size (hp)	V/CP	Enc.	Motor RPM	Windings	FLA
2	XCR-880	75	0.125	885	0.01	10	0.0	115/60/1	OP	900	1	NA

EQUIPMENT SCHEDULE									
UL/GUL 705 Listed - Electric fan									
Solid State Speed Control. 6.0 amp. mounted and wired									
Round Hooded Wall cap. (PN: WC-6) Mounted and Wired)									
Designer Grid									
Round dust connection									
Polypropylene Wheel Material									
Energy Star Rated									

FOR TECHNICAL SUPPORT ON ACCUREX CONTROLS PLEASE CALL
ACCUREX TECHNICAL SUPPORT:
1-800-371-6858
SECONDARY CONTACTS ARE:
AARON VAN KREY 715.841.8521
TYLER SCHILLING 715.841.8749



Thank you for your interest in Accurex

SUBMITTAL

Please return one approved print to your Accurex Representative including signatures, date, and answers to all submittal 'verify' notes and questions. Fabrication will not begin until after approved drawings are received.

APPROVED AS SUBMITTED
 APPROVED AS NOTED
 REJECTED - REVISE AND RESUBMIT

SIGNATURE _____ DATE _____



CONSTRUCTION COMPLIES WITH NFPA 96

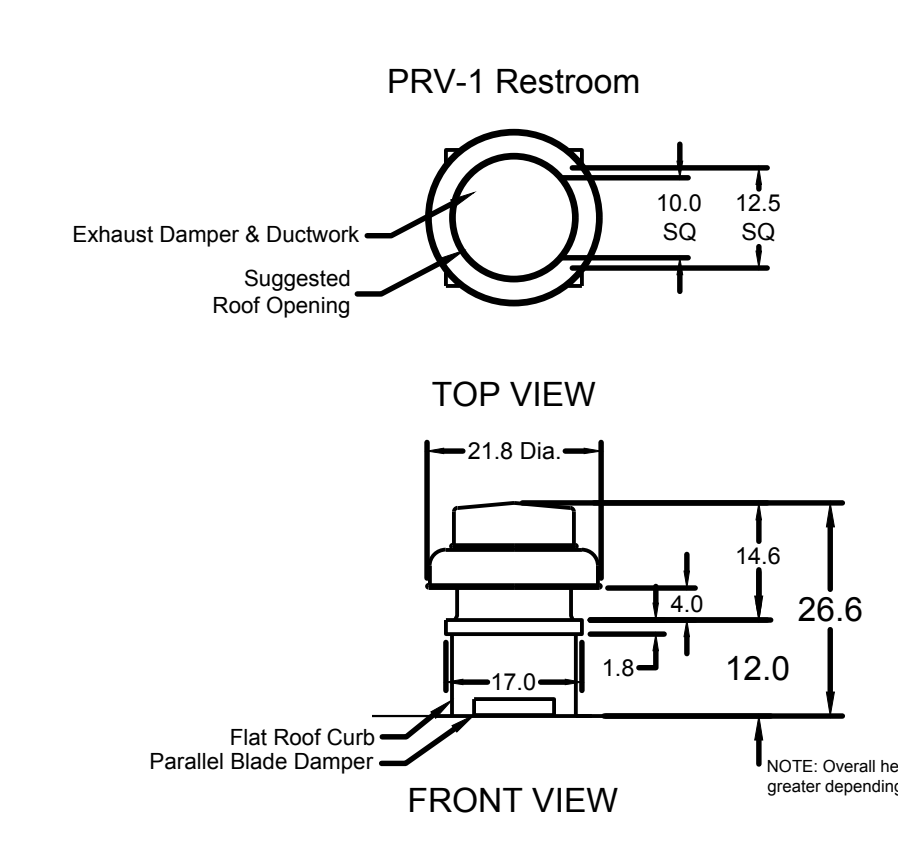
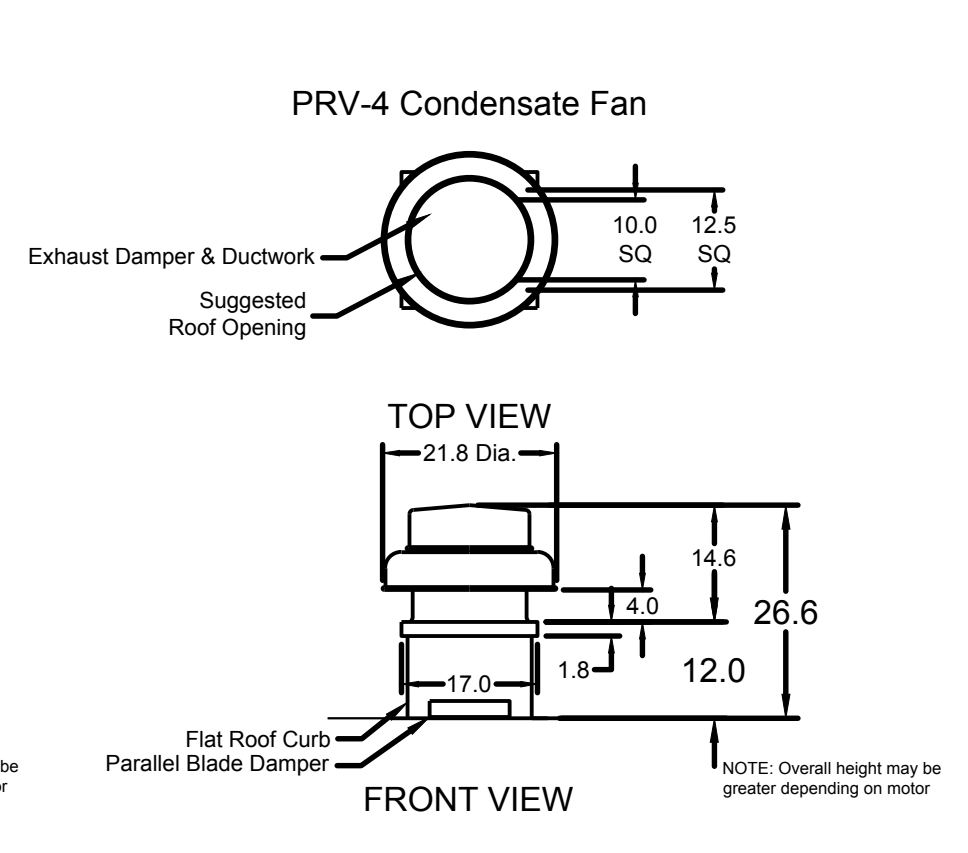
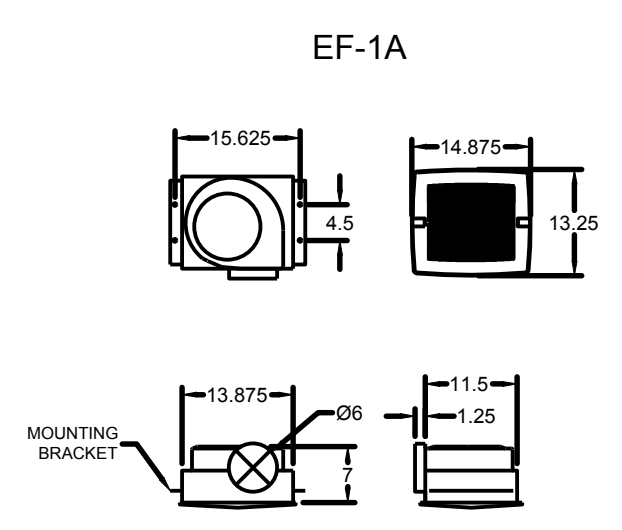
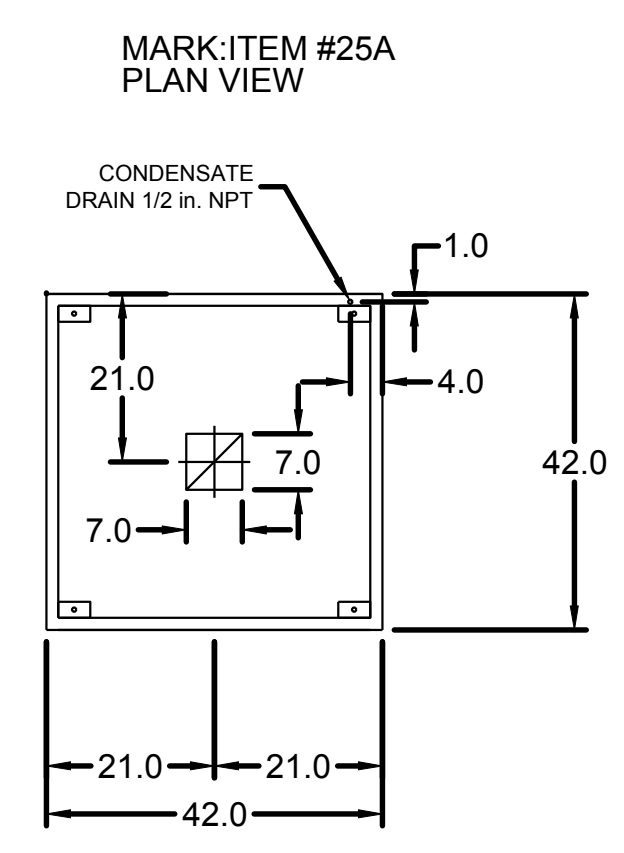
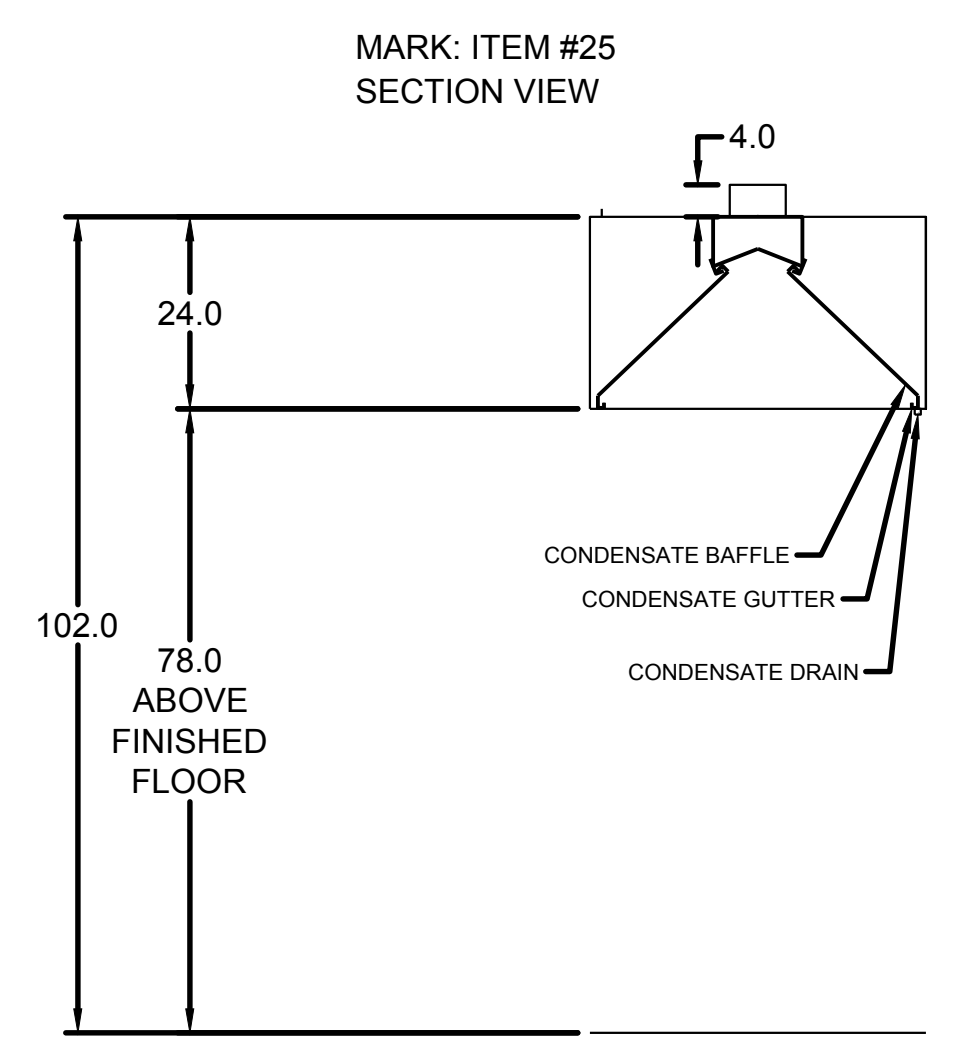
REV	DESCRIPTION	DATE

ACCUREX

CULVER'S MASTER TEMPLATE

SCALE 1/24

C28805C



MARK: CONTROLS

CAUTION

UNIT SHALL BE GROUNDED IN ACCORDANCE WITH N.E.C. POWER MUST BE OFF WHILE SERVICING.

LISTED 43BM COMMERCIAL APPLIANCE OUTLET CENTER ELECTRICAL RATINGS: 120V, 1PHASE, 60HZ, 15A BASE FILE #E200616, ML FILE #E313951

THESE DRAWINGS SHALL NOT BE REMOVED FROM THIS EQUIPMENT. USE COPPER CONDUCTORS RATED TO 90°C UNLESS SPECIFIED. TORQUE CONTROL & GROUND BLOCKS TO 8 LBS. IN. TORQUE POWER LUGS/SCREWS TO COMPONENT RATINGS LISTED. FIELD CONTROL WIRING RESISTANCE SHOULD NOT EXCEED 0.75 OHM. SEE IOM FOR ADDITIONAL INFORMATION, OR CALL ACCUREX AT 1-800-371-6858.

PRG VERSION: V2.00
FIELD WIRED
FACTORY SUPPLIED AND WIRED

WIRING DIAGRAM CODE:
JOB NAME:
CULVERS-METRO L NEW CONTROLS

MODEL: XKC-CV-S-21-2-1-0
SERIAL NUMBER:

CONDENSATE HOOD BAFFLE INSTALLATION DETAIL

NOTES:
1. THE CONDENSATE BAFFLES MUST HOOK ONTO THE UPPER HANGER AND REST IN THE CONDENSATE GUTTER FOR PROPER OPERATION.

HOOD HANGER BRACKET DETAIL

GENERAL DRAWING NOTES

Verify building entry conditions or limitations for equipment access to space.

Verify type and height of finished ceiling and if hood(s) may extend above finished ceiling (if required).

Seismic installation and bracing of equipment is by others. Accurex will not accept liability for problems that result from sub-standard installation, including field electrical wiring that deviate from supplied diagrams, jobsite conditions (ductwork, fuel types and structural conditions) that Accurex has not been notified of at the time of ordering. Or use of this equipment other than that for which it is designed.

It is the responsibility of the purchaser to hire qualified personnel for installation and start-up of all equipment. Installation and start-up information is shipped with all equipment via the Installation, Operation and Maintenance Manual (IOM), also included is a troubleshooting guide. Have all start-up info available prior to any warranty claims and/or factory technical support.

VENTILATION SYSTEM NOTES

Greenheck ventilators are designed in compliance with all national codes: NFPA # 96, national electric code, BOCA, uniform mechanical code, international mechanical code, and southern building conference. See national evaluation report #436 for allowable values, and/or conditions of use concerning material presented in this document. Local codes may vary. It is the responsibility of the purchaser to submit drawings to local authorities.

Exhaust and supply air volumes are to be maintained within -5% to +10% tolerance of values indicated. Static pressure(s) indicated are for the ventilator at the duct connection(s) only.

The grease filter face velocities are based on the filter manufacturers recommendations for maximum grease extraction. Inlet opening air velocities for wetwash, dry cartridge and high velocity cartridge filters manufactured by Greenheck are designed to deliver maximum grease extraction.

Hoods installation (by others unless otherwise noted) shall be in accordance with NFPA # 96 and applicable building codes.

POWER WIRING FOR KITCHEN CONTROLS
(WIRING TO BE DONE BY ELECTRICIAN)

POWER WIRING FROM BREAKER PANEL DIRECT TO FANS
(WIRING TO BE DONE BY ELECTRICIAN)

WIRE RTU POWER DIRECTLY FROM BUILDING BREAKER PANEL TO RTU DISCONNECTS

CONTROL WIRING FOR KITCHEN CONTROLS
(WIRING TO BE DONE BY ELECTRICIAN, IF NO CONTROLS CONTRACTOR. USE 18-22GA WIRE UNLESS SPECIFIED.)

"FIRE SYSTEM DRY CONTACT WIRING EXAMPLES"

SHUNT TRIP (BY OTHERS) WIRING EXAMPLE:

APPLIANCE CONTACTORS (BY OTHERS) WIRING EXAMPLE:

P:\2024\20241658_Culver's_Chemtable_Sch\Working Drawings\20241658_M-5.dwg, 11/18/2024, 8:35:49 AM, mdelora



SUBMITTAL

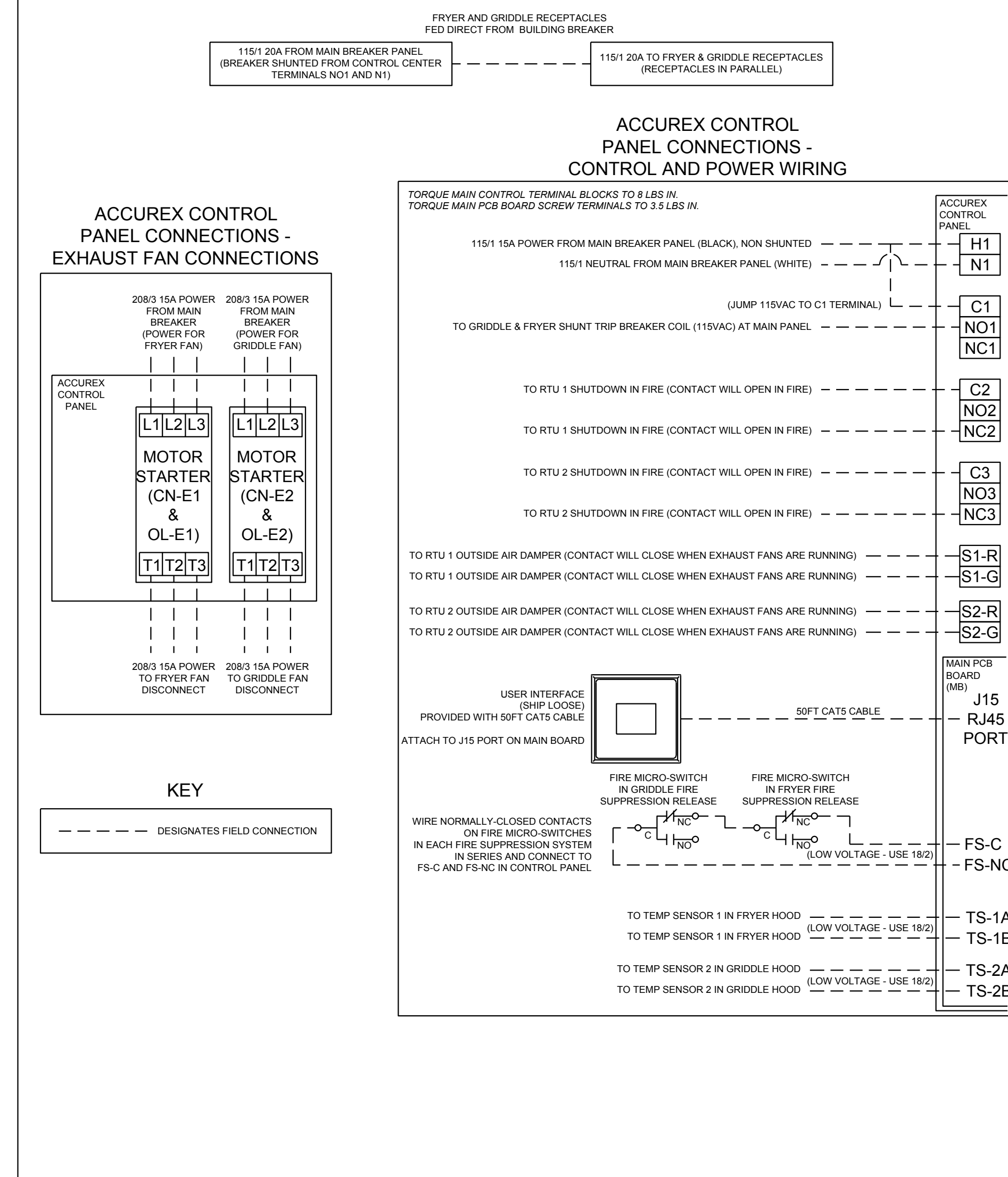
Please return one approved print to Greenheck including signature, date, and answers to all submittal "verify" notes and questions. Fabrication will not begin until after approved drawings are received.

APPROVED AS SUBMITTED
 APPROVED AS NOTED
 REJECTED - REVISE AND RESUBMIT

SIGNATURE _____ DATE _____



CULVER'S ELECTRICAL FIELD CONNECTION INSTALLATION INSTRUCTIONS



CULVER'S INSTALLATION AND OPERATION GUIDE Accurex Control Panel, Fans, Appliance Receptacles

Mechanical Scope of Work

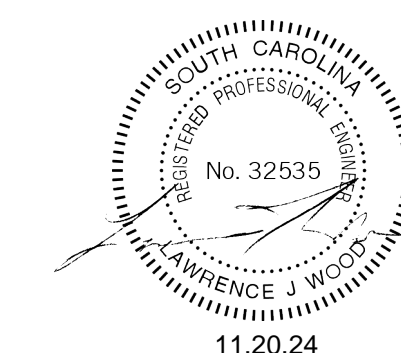
- 1) Mechanical Contractor to mount Accurex Control Panel (Model XKC, 18" W x 20" H x 6" D) in specified location above drop ceiling.
- 2) Assuming all electrical has been completed by Electrical Contractor, Mechanical Contractor to start up fans by pressing "Fans" button on user interface. Verify power to exhaust fans.

Electrical Scope of Work

- 1) Electrical Contractor shall provide one 115VAC 20A circuit with shunt trip breaker (115VAC trip coil) for fryer and griddle receptacles. This circuit will have these receptacles, two for the fryers and one for the griddle. Circuit to be powered directly from circuit breaker.
- 2) Electrical Contractor to install Accurex user interface on wall (user interface provided by Accurex, recess into wall). Connect user interface back to Accurex control panel using factory-provided CAT5 cable (connect to J15 port on main board in Accurex control panel).
- 3) Electrical Contractor to run a separate 115VAC 15A circuit (from non-shunted breaker) to Accurex control panel terminal blocks H1 and N1 to power controls.
- 4) Electrical Contractor to run two 208/60/3 15A circuits from main breaker panel to each motor starter in the Accurex control panel (L1, L2, L3). Run power from T1, T2, T3 on each motor starter in Accurex control panel to kitchen exhaust fan disconnects.
- 5) Electrical Contractor to connect jumper wire from terminal block H1 to terminal block C1 in Accurex control panel, and then run wires from NO1 and N1 in Accurex control panel back to 115VAC shunt-trip breaker coil for fryer and griddle receptacles.
- 6) Electrical Contractor to wire a normally-closed contact off of a micro-switch in each fire suppression system release (one FS for fryer hood, and one FS for griddle hood) in series, and tie this series circuit loop back to FS-C and FS-NC on the main control board (MB) in the Accurex control panel.
- 7) Electrical Contractor to wire RTU 1 & 2 damper control to Accurex control panel terminal blocks S1-R / S1 - G and S2-R / S2-G as indicated on wiring diagram.
- 8) Electrical Contractor to wire RTU 1 & 2 control (8 amp max) circuits to Accurex control panel terminal blocks C2 and NC2 for RTU1 and C3 and NC3 for RTU 2 to shut down units in a fire.
- 9) Electrical Contractor to wire temp sensor in fryer hood collar back to Accurex control panel and land on TS-1A / TS-1B on main PCB board (use 18 to 22ga plenum rated cable)
- 10) Electrical Contractor to wire temp sensor in griddle hood collar back to Accurex control panel and land on TS-2A / TS-2B on main PCB board (use 18 to 22ga plenum rated cable)

Sequence of Operation

- 1) Make sure fryer and griddle receptacles are receiving power (breaker feeding appliance outlets is on).
- 2) Make sure RTU 1 & RTU 2 are both receiving power (breaker feeding RTUs are on and RTU disconnects are on).
- 3) Turn fans on via "Fans" button on user interface. Both fryer and griddle fans should turn on, and RTU 1 & 2 outside air dampers should open/adjust to bring in design OA.
- 4) Before fire system agent tanks are installed, manually trigger fire system while fan switch is on. This should accomplish the following:
 - Display on user interface should state "FIRE DETECTED"
 - Shunt trip breaker will trip causing a loss of power to fryer and griddle receptacles
 - Gas valve will close shutting gas off to the fryer and griddle
 - Exhaust fans will remain on
 - RTU 1 & 2 will shut down
- 5) Put fire system in the "cocked" position and reset shunt trip breaker. Breakers feeding appliance outlets should be able to be reset manually, and RTU's power should be restored.
- 6) Press "Fans" button on the user interface to turn the fans off. This will shut down power to the fans. RTU outside air dampers will close. RTUs will remain operational providing 100% return air only.



11.20.24

WARNING: These plans are for the exclusive use of Culver Franchising Systems, Inc. and authorized franchise holders only. No part of these plans or the design they represent may be duplicated or reproduced without permission of Culver Franchising System, Inc.



Culver Franchising System, Inc.
540 Water Street
Prairie du Sac, WI 53578
608-643-7980



CULVER'S RESTAURANT
3103 N. PLEASANTBURG DRIVE
GREENVILLE, SOUTH CAROLINA

Date	Revision
11-20-24	FOR CONSTRUCTION

Sheet
M-6