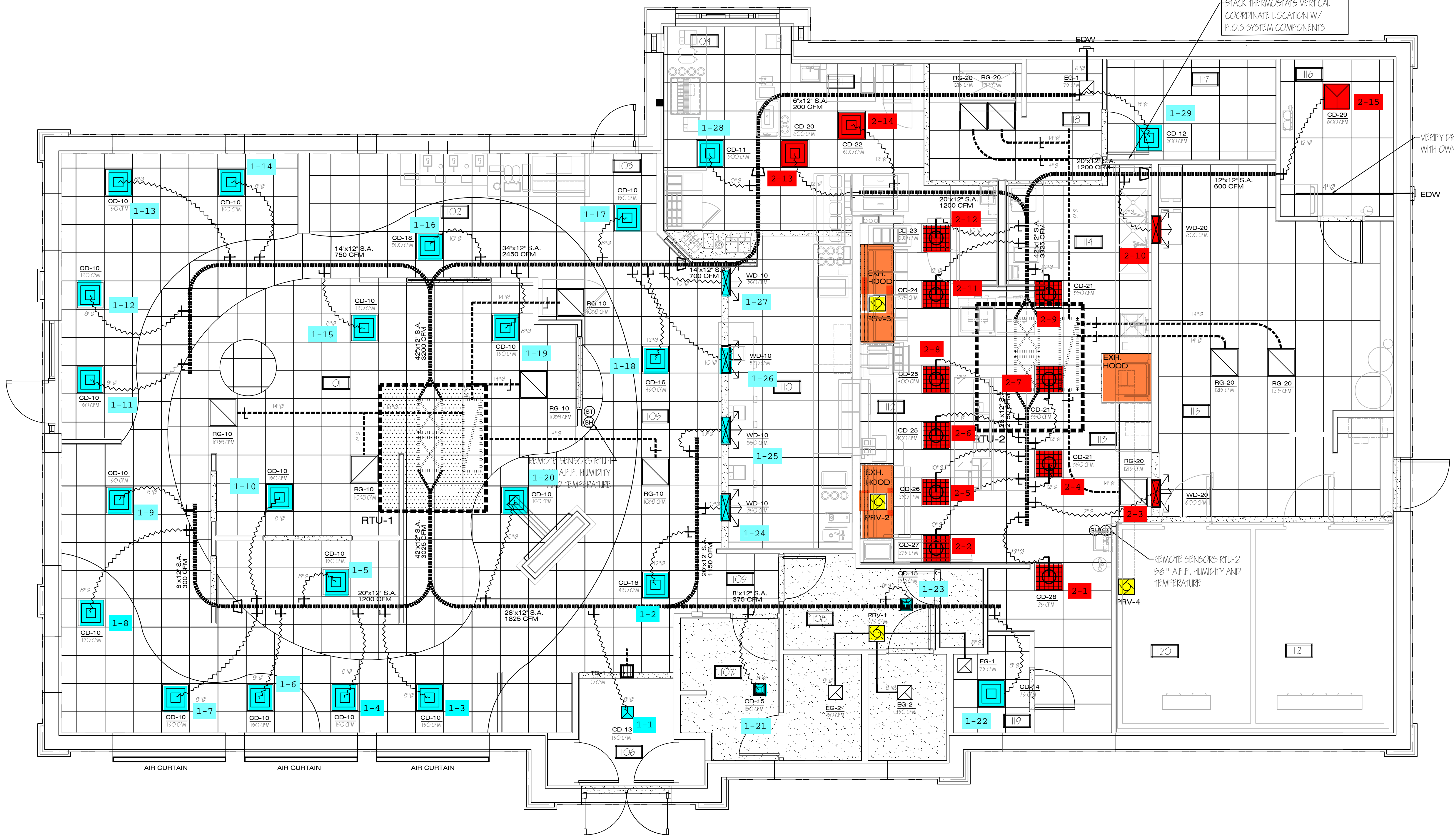


AREA TAG	VENTILATED AREA (SF)	OPENABLE AREA (SF)		VENTILATION METHOD	AREA TYPE	Occ. per 1000sf	Rp CFM/Person	Ra CFM/SF	Exh. Rate CFM/SF FOR RR	REQ. O.A.	PROV. O.A.	REQ. EXH.	PROV. EXH.
		REQ'D	PROV'D										
AREAS SUPPLIED BY RTU-1													
CUSTOMER AREA	2110	84	21	MECHANICAL	FAST FOOD	100	7.5	0.18	0	1962		0	0
MENS RR	108	4	0	MECHANICAL	PUBLIC RR	0	0	0	50	0		100	150
WOMENS RR	127	5	0	MECHANICAL	PUBLIC RR	0	0	0	50	0		100	150
STAFF RR	33	1	0	MECHANICAL	PUBLIC RR	0	0	0	50	0		50	75
OFFICE	84	3	0	MECHANICAL	OFFICES	5	5	.06	0	7		0	0
FRESH AIR SUPPLIED BY RTU-1										1969	2440	0	
AREAS SUPPLIED BY RTU-2													
KITCHEN	512	20	0	MECHANICAL	KITCHEN (COOKING)	20	7.5	0.12	0.7	138		358	3350
BACK OF HOUSE	918	37	0	MECHANICAL	NO IMC CLASS	0	0	0	0	0		0	0
FRESH AIR SUPPLIED BY RTU-2										138	1900		

- H.V.A.C. LEGEND:**
- WD-20 600 CFM ← DIFFUSER DESIGNATION
  - ← DIFFUSER C.F.M.
  - CD 4-WAY CEILING DIFFUSER W/ C.F.M. - 4 WAY
  - CD PERFORATED CEILING DIFFUSER
  - CD 3-WAY CEILING DIFFUSER W/ C.F.M. - 3 WAY
  - CD 2-WAY 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

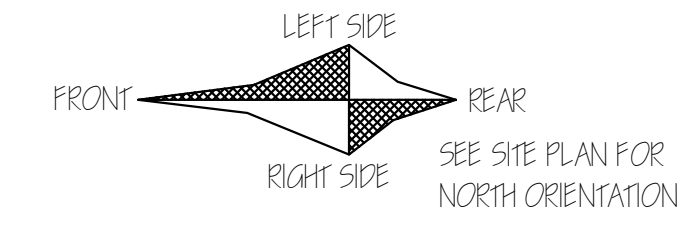
- GENERAL NOTES:**
- VERIFY ALLOWABLE FLEX DUCT LENGTHS WITH LOCAL CODES AND MODIFY ACCORDINGLY. ATTACH FLEXIBLE AIR CONNECTOR TO RIGID DUCT W/ STEEL DRAW BANDS ONLY. CLASS I FLEXIBLE AIR CONNECTOR PER UL-181 - MAX LENGTH 8'-0". PROVIDE SUPPORT AT 4'-0" O.C.
  - VENTING OF ANY COMBUSTIBLE BY-PRODUCTS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

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



- RTU-1
  - RTU-2
  - DRIVE-THRU
- STACK THERMOSTATS VERTICAL COORDINATE LOCATION W/ P.O.S SYSTEM COMPONENTS

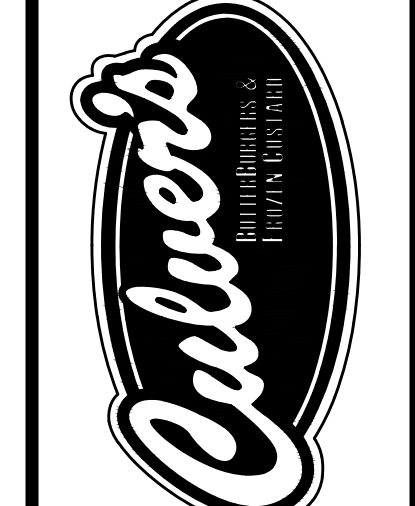
**HVAC PLAN - METRO L + 2' - 2021**  
SCALE: 1/4" = 1'-0"



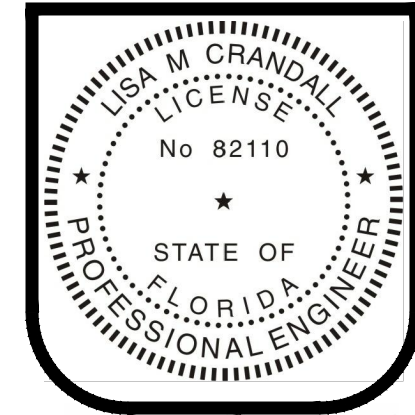
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Date	Revision	By
9/22/2021	1	REV PER POLK COUNTY COMMENTS
11/15/2021	2	ISSUE FOR BID
12/01/2021	3	REVISE PER CULVER'S COMMENTS

Culver Franchising System, LLC  
1240 Water Street  
Prairie du Sac, WI 53578  
608-643-7980



**CUSTARD QUEENS, INC.**  
333 W 4th STREET, MARION, IN 46952  
**METRO L + 2' - 2021 PLANS**  
Lakeland Florida



Lisa M. Crandall  
12-01-2021

Sheet Contents:

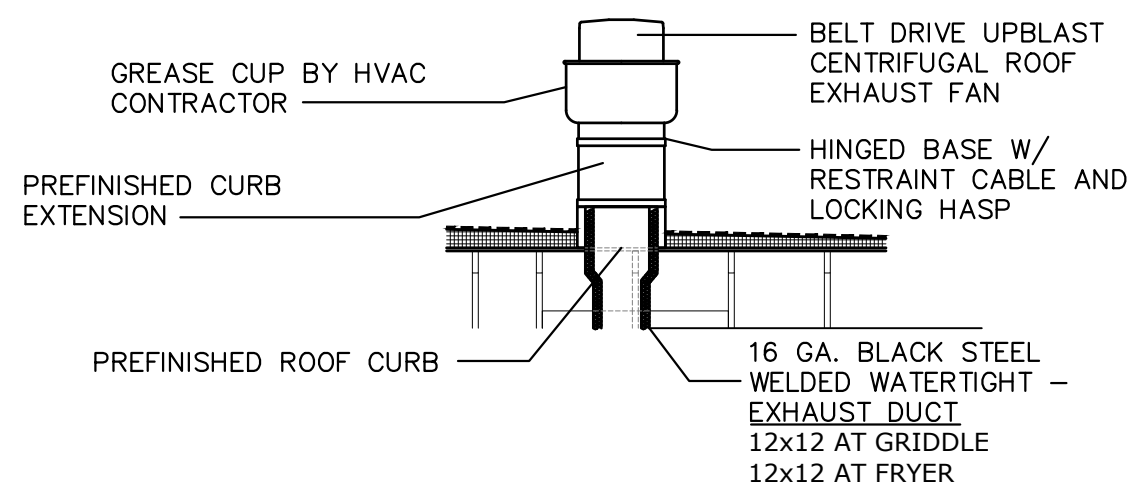
<b>HVAC PLAN</b>
Project No. 2021-002 LAKELAND
Drawn By: LMC/ XC/ ASW
Date: Feb. 01, 2021

Sheet  
**M-1**

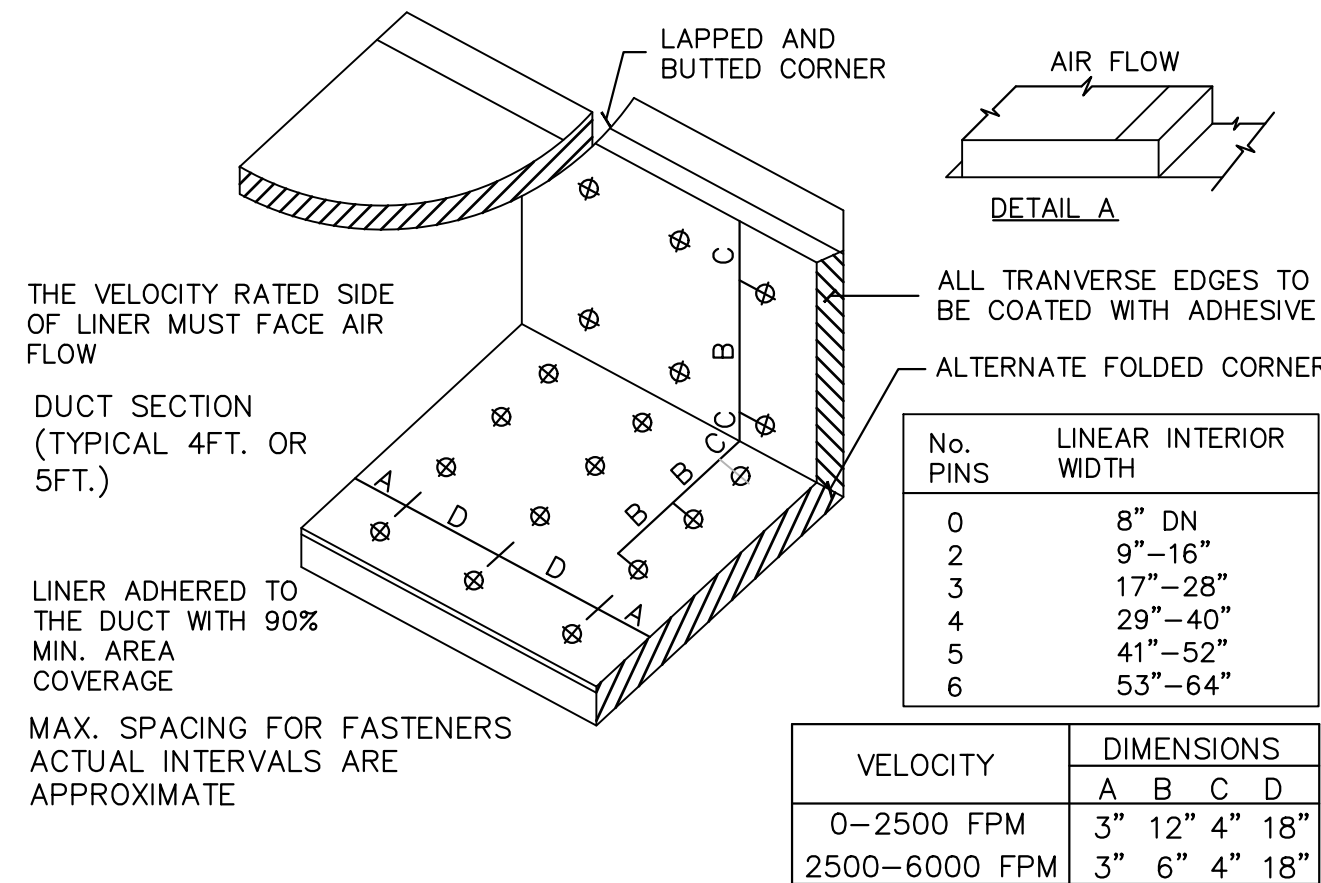
LISA CRANDALL, PE 236 EAST MAIN STREET, GAS CITY, IN 46933 765.677.0996 LISA@CRANDALLOFFICES.COM

## 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 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 & 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.
- 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
- VENT OWNERS WATER HEATERS AS REQUIRED
- 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 ASHREA 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).
- DUCT DIMENSIONS LISTED ARE NET FREE - CLEAR INSIDE DIMENSIONS.
- VERIFY DUCT LOCATIONS PRIOR TO FABRICATION. VERIFY LIMITED AREA FOR DUCTWORK & OTHER APPARATUSES.
- S/S 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 A6 DRAWING.



**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.

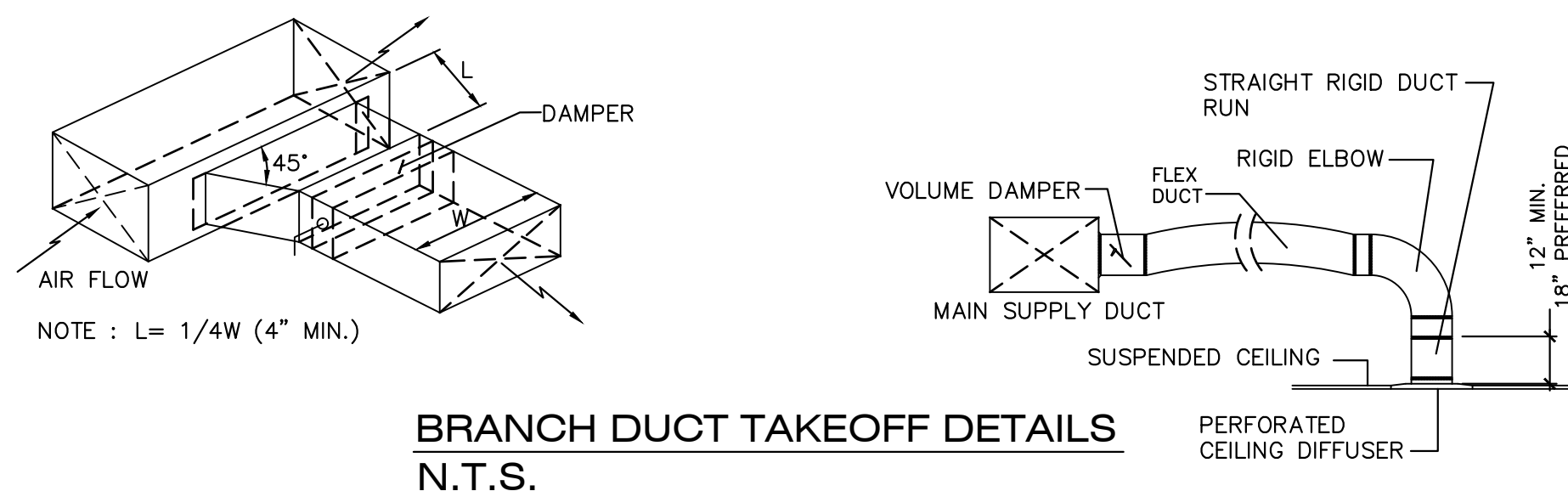
## MECHANICAL EQUIPMENT SPECIFICATIONS

- RTU - 1** **LENNOX LGH-180-H4B**  
COMBINATION GAS WITH 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% EFF, 180,000 NET COOLING CAPACITY, 11.0 EER, 208/230 VOLT, 3 PHASE, 90.0 AMPS & DRIVE KIT 1, BLOWER MOTOR SET FOR NOMINAL 6475 CFM & FRESH AIR INTAKE DAMPER SET FOR MINIMUM 2440 CFM. PROVIDE FULL ECONOMIZER, ROOF CRUB, TWO STAGE CONTROL, DUCT DISCHARGE CONTROL, IN-DUCT SMOKE DETECTOR, BELT TENSIONER WITH SPARE BELT, MERR 4-FILTERS, LOOSE SHIPPED CONDENSATE TRAP & HONEYWELL OR EQUAL T7350 NIGHT SET BACK THERMOSTAT AND 100 AMP/3 PHASE 250 VOLT N.F. DISCONNECT SWITCH.  
**NO SUBSTITUTIONS.**
- RTU - 2** **LENNOX LGH-210-H4B**  
COMBINATION GAS WITH 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% EFF, 210,000 NET COOLING CAPACITY, 11.0 EER, 208/230 VOLT, 3 PHASE, 90.0 AMPS & DRIVE KIT 1. BLOWER MOTOR SET FOR NOMINAL 6075 CFM & FRESH AIR INTAKE DAMPER SET FOR MINIMUM 1900 CFM. PROVIDE FULL ECONOMIZER, ROOF CRUB, TWO STAGE CONTROL, DUCT DISCHARGE CONTROL, IN-DUCT SMOKE DETECTOR, BELT TENSIONER WITH SPARE BELT, MERR 4-FILTERS, LOOSE SHIPPED CONDENSATE TRAP & HONEYWELL OR EQUAL T7350 NIGHT SET BACK THERMOSTAT AND 100 AMP/3 PHASE 250 VOLT N.F. DISCONNECT SWITCH.  
**NO SUBSTITUTIONS.**
- PRV - 1** **ACCUREX MODEL XRED-095-D** CONDENSATE 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** **ACCUREX MODEL XRUB-160XP-15 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 **2.33" SP, 1.5 HP MOTOR**, 208 VOLTS, THREE PHASE FAN TO RUN CONTINUOUSLY DURING OCCUPIED MODE. **NO SUBSTITUTIONS.**
- PRV - 3** **ACCUREX MODEL XRUB-140-7 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 **1.00" SP, .75 HP MOTOR**, 208 VOLTS, THREE PHASE FAN TO RUN CONTINUOUSLY DURING OCCUPIED MODE. **NO SUBSTITUTIONS.**
- PRV - 4** **ACCUREX MODEL XRED-095-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**.  
**NO SUBSTITUTIONS.**
- ITEM #59** **FRYER EXHAUST HOOD - ACCUREX MODEL XKEP-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**.  
**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**. 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** 0 MARK OR EQUAL GDF-540 ELECTRIC CEILING HEATER & GDF RECESSED MOUNTING FRAME, GDF-TR4 TRANSFORMER & THERMOSTAT, 208/240 VOLT SINGLE PHASE, **19.2 AMPS**. (SUPPLIED & INSTALLED BY ELECTRICAL CONTRACTOR)
- OHD** **OVERHEAD DOOR @ WINDOW** OVERHEAD DOOR 521 OR EQUAL MANUAL OVERHEAD DOOR, 96" WIDE x 8'-0" TALL, STAINLESS STEEL FINISHING (SUPPLIED & INSTALLED BY ELECTRICAL CONTRACTOR)
- AIR CURTAIN** **AIR CURTAIN @ WINDOW** BERNER SLC07-209A A-SS 96" WIDE ELECTRIC AIR CURTAIN, UNHEATED, 120V/ 1ø/ 60 Hz, STAINLESS STEEL FINISHING (SUPPLIED & INSTALLED BY ELECTRICAL CONTRACTOR)
- PATIO FAN** **PATIO CEILING FAN** WESLEY 52" OUTDOOR CEILING FAN, MODERN STYLE, 3 BLADES, 6 SPEEDS, OIL RUBBED BRONZE FINISHING (SUPPLIED & INSTALLED BY ELECTRICAL CONTRACTOR)

## 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, ACCESSORIES AND TEST AND BALANCE**  
CONTACT Andy Jacobs @ 1-715-301-6022 or andrew.jacobs@accurex.com  
Secondary contact Phillip Kraft 1-262-227-7865 phillip.kraft@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
- 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 SHAL BE AND INSTALLED BY HVAC CONTRACTOR - MINIMUM FOUR WEEK LEAD TIME.**



**BRANCH DUCT TAKEOFF DETAILS**  
N.T.S.

## DIFFUSER/GRILLE SCHEDULE

QNTY	Mark	Manuf.	Model	Type	Mounting	Diffuser	Neck	CFM	Zone	Notes
15	CD-10	CARNES	SFTB24	SUPPLY	GRID	4-WAY	8"	150	RTU-1	2
1	CD-11	CARNES	SJT24	SUPPLY	GRID	4-WAY	10"	500	RTU-1	1
1	CD-12	CARNES	SJT24	SUPPLY	GRID	4-WAY	8"	150	RTU-1	1
1	CD-13	CARNES	SKSA	SUPPLY	CEILING	3-WAY	8"	150	RTU-1	3
1	CD-14	CARNES	SFTB24	SUPPLY	GRID	4-WAY	8"	75	RTU-1	
2	CD-15	CARNES	SKSA	SUPPLY	CEILING	4-WAY	8"	150	RTU-1	3
2	CD-16	CARNES	SFTB24	SUPPLY	GRID	4-WAY	8"	450	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	12"	600	RTU-2	
3	CD-21	CARNES	SPRB22412	SUPPLY	GRID	PERFORATED	12"	350	RTU-2	7
1	CD-22	CARNES	SFTB24	SUPPLY	GRID	4-WAY	12"	600	RTU-2	
1	CD-23	CARNES	SPRB22410	SUPPLY	GRID	PERFORATED	10"	200	RTU-2	7
1	CD-24	CARNES	SPRB22412	SUPPLY	GRID	PERFORATED	12"	375	RTU-2	7
2	CD-25	CARNES	SPRB22412	SUPPLY	GRID	PERFORATED	12"	400	RTU-2	7
1	CD-26	CARNES	SPRB22410	SUPPLY	GRID	PERFORATED	10"	250	RTU-2	7
1	CD-27	CARNES	SPRB22410	SUPPLY	GRID	PERFORATED	10"	275	RTU-2	7
1	CD-28	CARNES	SPRB22408	SUPPLY	GRID	PERFORATED	8"	125	RTU-2	
1	CD-29	CARNES	SKEA	SUPPLY	GRID	3-WAY	12"	600	RTU-2	
2	EG-1	CARNES	RAPAH	EXHAUST	GRID	24 x 24	8"	75	RTU-1	
2	EG-2	CARNES	RTLAH	EXHAUST	CEILING	12 x 12	8"	150	RTU-1	4
5	RG-10	CARNES	RAPMF	RETURN	GRID	RETURN	12 x 12"	1220	RTU-1	8
5	RG-20	CARNES	RAPMF	RETURN	GRID	RETURN	14"	1215	RTU-2	8
1	TG-1	CARNES	RSABH	TRANSFER	WALL	12 x 4"	12" x 4"	0	RTU-1	5
4	WD-10	CARNES	RTDBH	SUPPLY	WALL	12 x 6"	10"	350	RTU-1	
2	WD-20	CARNES	RTDBH	SUPPLY	WALL	24 x 6"	12"	600	RTU-2	

### DIFFUSER NOTES:

- PROVIDE KXDA EXTENSION ROD WITH KNOB
- 4 OF THE CD-10 DIFFUSERS ARE TO BE FLAT BLACK. ALL OTHERS TO BE WHITE. SEE REFLECTED CEILING PLAN FOR LOCATIONS.
- 12X12 NOMINAL PANEL SIZE
- PROVIDE WITH ADJUSTABLE OPPOSED BLADE DAMPER
- MOUNT SO THE OCCUPANT CAN NOT SEE INTO THE DUCT
- FLAT BLACK FINISH
- DESIGN CFM MUST BE MAINTAINED FOR PROPER HOOD OPERATION
- 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

### Kitchen Unit

Parameter 3.01 HEAT DELAY NEEDS TO BE SET TO "DISABLED". CONTROL PARAMETER 3.01=0 Pg. 92  
ECONOMIZER DIP SWITCHES A56 (EM1) NEED TO BE SET TO "GLOBAL" MODE. 1=ON 2=OFF (Pg. 5 FIG 8)  
ECONOMIZER MIN POSITION POTENTIOMETER NEEDS TO BE DETERMINED AND SET BY AIR BALANCER. (Pg. 52 FIG 33)  
BOTH THE THERMOSTAT AND THE HOOD FANS MUST BE TIED INTO TB1 TERMINAL 8&9 FOR OCC/UNOCC CONTROL.  
FRESH AIR TEMPERING (HEATING) CONTROL PARAMETER 6.20=160 "-55F" (KITCHEN IS USUALLY IN COOLING MODE)  
(PARAMETER 6.20 Pg 99; x CHARTS Pg 109)

### Dining Room Unit

PARAMETER 3.01 HEAT DELAY NEEDS TO BE SET TO "DISABLED". CONTROL PARAMETER 3.01=0 Pg. 92  
ECONOMIZER DIP SWITCHES A56 (EM1) NEED TO BE SET TO ECONOMIZER TYPE PURCHASED/INSTALLED. 1=? 2=?  
(Pg. 5 FIGURE 8)  
ECONOMIZER MIN POSITION POTENTIOMETER NEEDS TO BE DETERMINED AND SET BY AIR BALANCER. (Pg. 52 FIGURE 33)  
THE THERMOSTAT MUST BE TIED INTO TB1 TERMINAL 8&9 FOR OCC/UNOCC CONTROL  
FRESH AIR TEMPERING (HEATING) CONTROL PARAMETER 6.20=142 "68F" (ROOM NEUTRAL)  
(PARAMETER 6.20 PAGE 99; x CHARTS PAGE 109)

OTHER PARAMETERS THAT WE DIDN'T SET, BUT ARE PART OF START-UP:

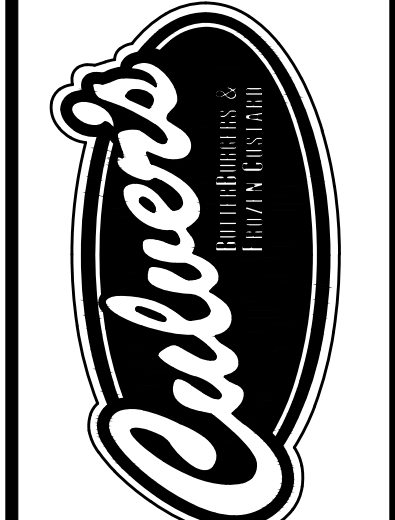
- ROOM SET POINT
- REMOTE SENSOR OPERATION
- TEMP DEADBANDS

CHECK FOR CORRECT OPERATION AND WRING OF ALL SENSORS.

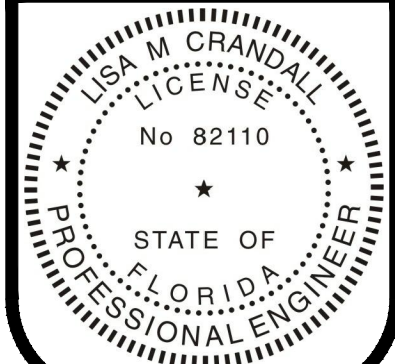
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Prairie du Sac, WI 53578  
608-643-7980



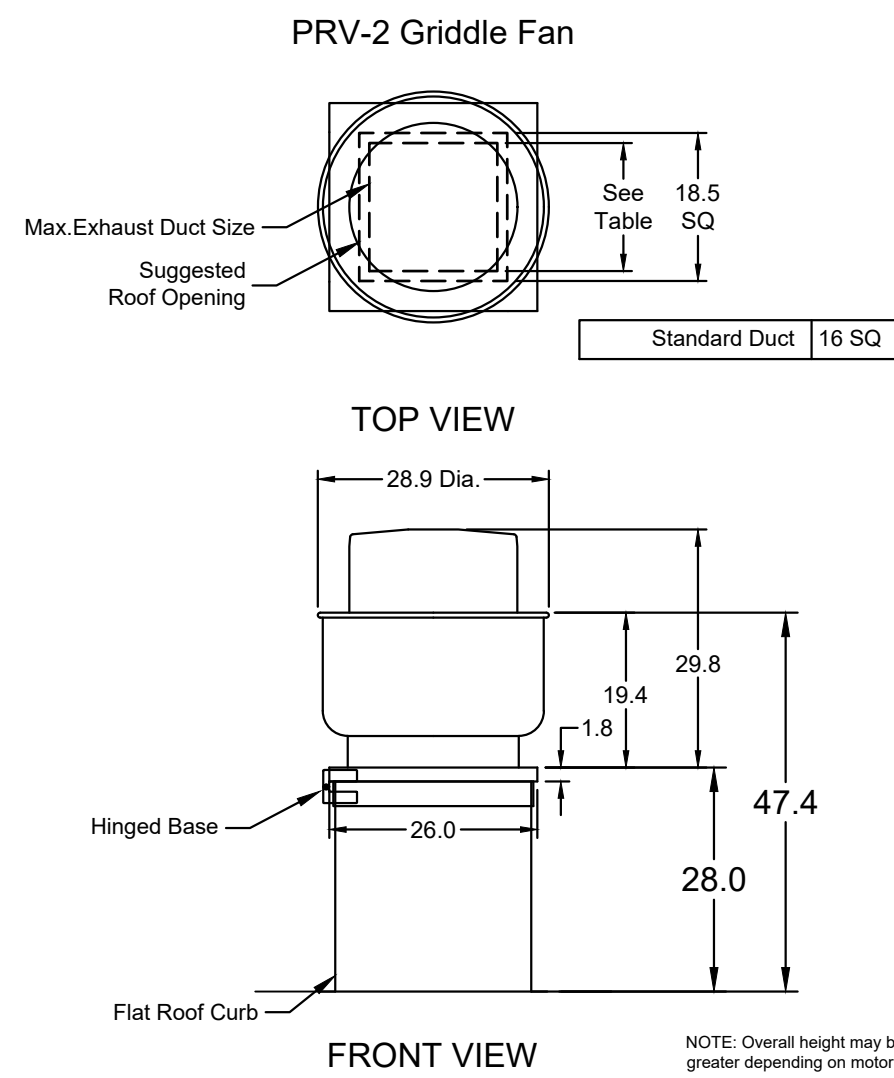
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Lakeland Florida



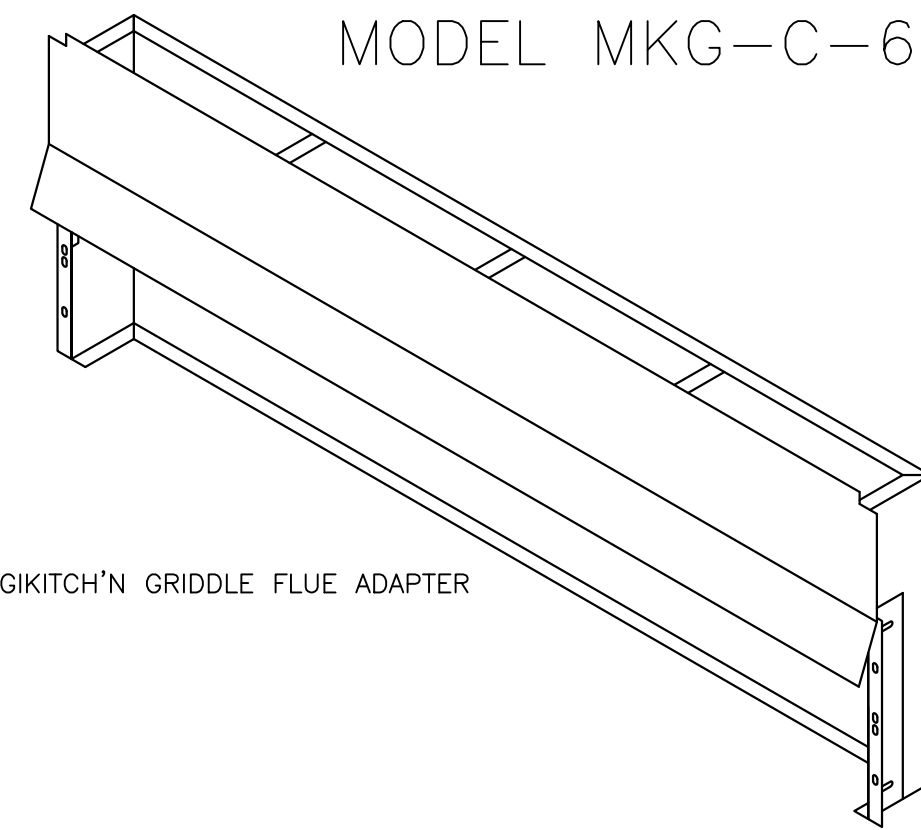
Lisa Crandall  
12-01-2021

Sheet Contents:  
**HVAC NOTES**  
Project No. 2021-002 LAKELAND  
Drawn By: LMC/ XC/ ASW  
Date: Feb. 01, 2021

Sheet  
**M-2**

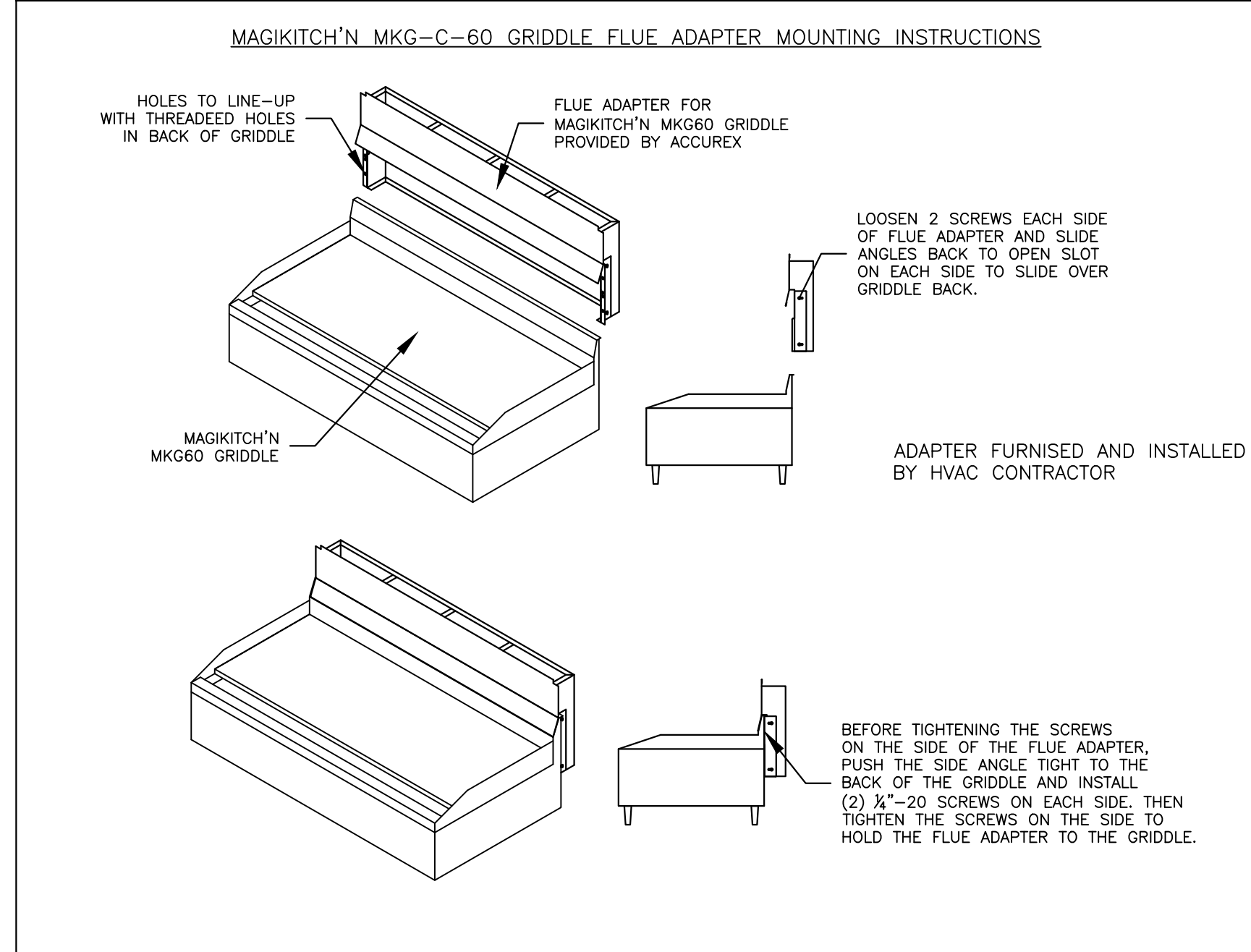


MUST USE WITH MAGIKITCH'N MODEL MKG-C-60



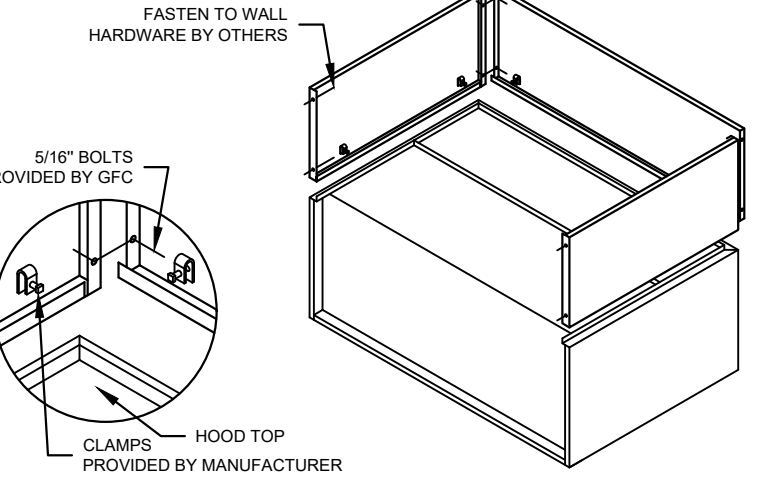
60" MAGIKITCH'N GRIDDLE FLUE ADAPTER

MAGIKITCH'N MKG-C-60 GRIDDLE FLUE ADAPTER MOUNTING INSTRUCTIONS



EQUIPMENT SCHEDULE												
TYPE 1 KITCHEN HOOD					MARK: ITEM#49							
HOOD NO.	ACCUREX MODEL STYLE / CONFIGURATION	HOOD DIMENSIONS			GREASE CUP OR DRAIN	HOOD TEMP. RATING	TOTAL WEIGHT	SECTION LOCATION				
		SECTION LENGTH	WIDTH	HEIGHT								
1	XGEP-64-S SINGLE WALL EXHAUST ONLY LOW PROXIMITY	64 IN.	TOP 23 IN. FRONT 12 IN. BOT 8 IN. BACK 36 IN.		RIGHT	600 DEG F.	136.0 LBS.	SINGLE				
HOOD NO.	ILLUMINATION DETAILS			GREASE FILTRATION DETAILS								
	FIXTURE TYPE	BULB / LAMP INFO	QTY	INTENSITY FT CANDLES	TYPE / MODEL MATERIAL	QTY	LENGTH	HEIGHT				
1	NONE	NA	0 / 0 IN. OC		GREASE GRABBER STAINLESS STEEL	4	16 IN.	16 IN.				
HOOD SECTION #		EXHAUST PLENUM COLLARS										
1 / 1		DISTANCE TO END (IN.)	WIDTH (IN.)	LENGTH (IN.)	VOLUME (CFM)	S.P. (IN. WC)	VELOCITY (FT/MIN)					
		32	12	12	NA	1500	1.918	1500				
TOTAL EXHAUST CFM - SECTION 1		1500 = 281 CFM / FT										
OPTIONS AND ACCESSORIES												
430 STAINLESS STEEL WHERE EXPOSED UL 710 LISTED W/ OUT EXHAUST FIRE DAMPER - UL #R25625 BACK NON-INTEGRAL AIR SPACE - 3 IN WIDE 28 IN HIGH CEILING ENCLOSURES - FRONT LEFT RIGHT - FIELD INSTALLED FACTORY MOUNTED EXHAUST COLLAR(S) THIS HOOD IS PART OF A TEMPERATURE INTERLOCK CONTROL SYSTEM INCLUDES PERFORMANCE ENHANCING LIP (PEL) TECHNOLOGY STANDING SEAM CONSTRUCTION FOR SUPERIOR STRENGTH EMBOSSED STAINLESS STEEL FINISH FOR HIGH CORROSION RESISTANCE EQUIPMENT SPECIFIC S/S FLUE ADAPTER												
SPECIAL DESIGN REQUESTS												
SDR #K1100145 - FLUE BYPASS HOOD												
FIRE SUPPRESSION SYSTEM												
MARK: FS FOR GRILL HOOD												
MANUFACTURER / MODEL	SUPPRESSANT TYPE	FLOW POINTS	SUPPLY LINE	DETECTION	MOUNTING							
ANSUL R-102 WET CHEMICAL	6 UTILIZED 11 AVAILABLE	CONTINUOUS	FUSIBLE LINK	REMOTE MOUNTED	RIGHT END							
FULL INSTALLATION INCLUDES PRE-PIPED HOOD(S) WITH DETECTION AND FACTORY COORDINATED INSTALL CHROME SLEEVES FOR FACTORY PROVIDED APPLIANCES DROPS - INCLUDED SUPPRESSION AGENT - INCLUDED - 3 GAL. - (1) 3 TANK(S) GAS VALVE - INCLUDED - MECHANICAL SHUTOFF VALVE, SUPPLIED UP TO 2" REMOTE PULL STATION - STANDARD - INSTALLATION AT SINGLE POINT OF EGRESS METAL BLOW-OFF CAPS - INCLUDED FIRE SYSTEM PERMIT - REQUIRED - FEE INCLUDED 360°F. FUSIBLE LINK OR AS TESTED AND INSTALLED BY LOCAL INSTALLER PER UL MANUAL												
FIRE SYSTEM PROTECTED HOOD(S) (UL-300) (MARK NAME / SECTION)												
GRILL HOOD SECTION 1 - (LENGTH 64.0 IN.) - LOW PROXIMITY HOOD - GREASE GRABBER FILTRATION SYSTEM												
Belt Drive Upblast Centrifugal Roof Exhaust Fan												
MARK: PRV-2												
Qty	Accurex Model	Volume (CFM)	SP (in w.c)	FRPM	Operating Power (hp)	Weight (Lb.)	Size (hp)	V/C/P	End:	Motor RPM	Windings	FLA
1	XRUB-160XP-15	1500	2.337	2.411	1.29	171	1.5	208/60/3	OP	1725	1	6.6
OPTIONS AND ACCESSORIES												
UL/GUL 762 Listed - "Power Ventilators for Rest. Exh. Appliances" Switch, NEMA-1, (PN-N1TSNG-3-30) Toggle, Shipped with unit Larger curb cap size - 28" Square Roof curb-Galv., GPF-26-G28, Under sized 1.5" Total Hinged Base (Attached) High Temp Curb Seal Rated for Continuous duty at 2000°F (Attached) Clean-out Port Grease Trap with Drain Connection (PN 475538) Heat Baffle (Attached) Bearings with Grease Fittings, L10 life of 100,000 hrs (L50 avg. life 500,000 hrs)												

ENCLOSURE PANEL INSTALLATION DETAIL

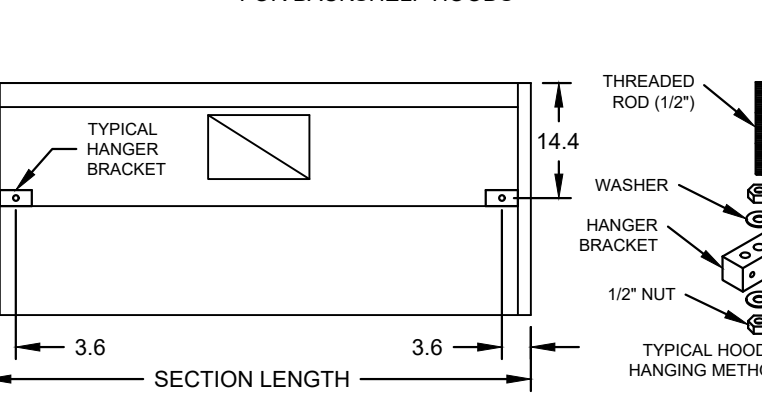


HOOD HANGING HEIGHT FOR FIRE SYSTEMS

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

- RECOMMENDED HANGING HEIGHT = 60" 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



GENERAL DRAWING NOTES

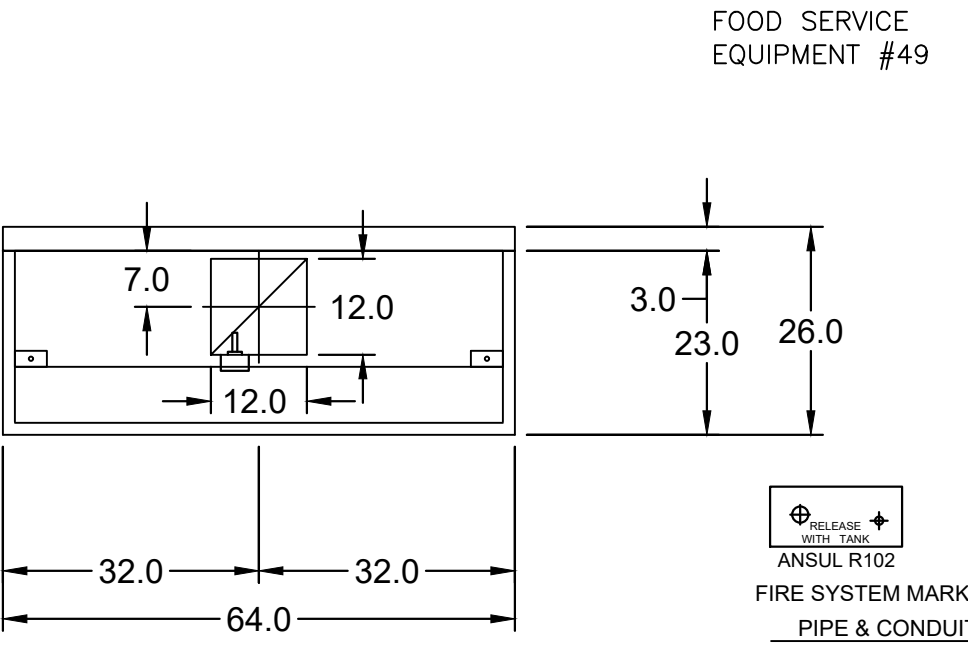
Verify building entry conditions or limitations for equipment access to space.  
Verify type and height of finished ceiling and if hood(s) may extend above finished ceiling (if required).  
Seismic installation and bracing of equipment is by others.  
Greenheck will not accept liability for problems that result from sub-standard installation, including field electrical wiring that deviates from supplied diagrams, jobsite conditions (ductwork, fuel types and structural conditions) that GFC 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 (OM), 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

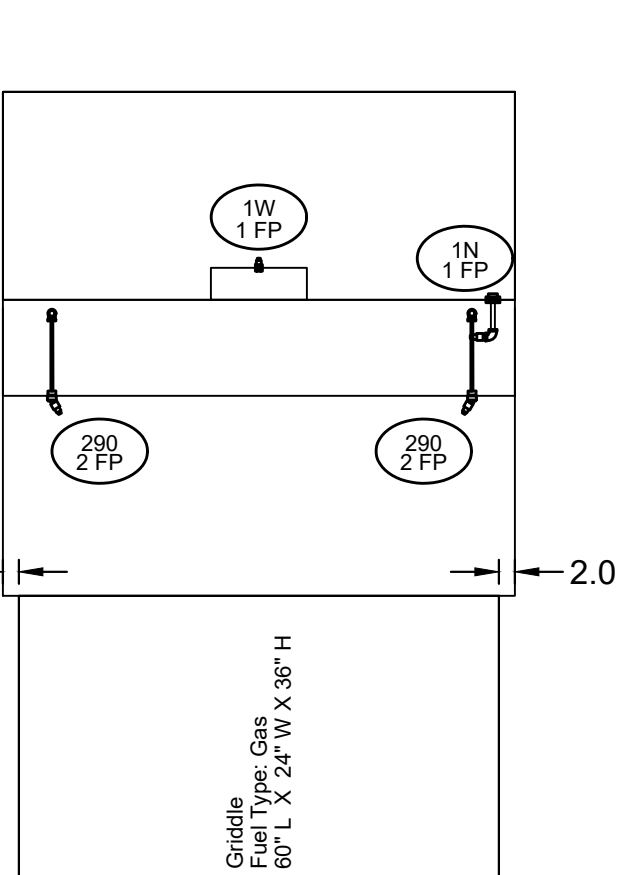
Greenheck ventilators are designed in compliance with all national codes: NFPA # 96, national electric code, BOCA, uniform mechanical code, international mechanical code, and southern building conference. See national evaluation report #436 for allowable values, and/or conditions of use concerning material 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 waterwash, 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.

PROPRIETARY INFORMATION NOTICE

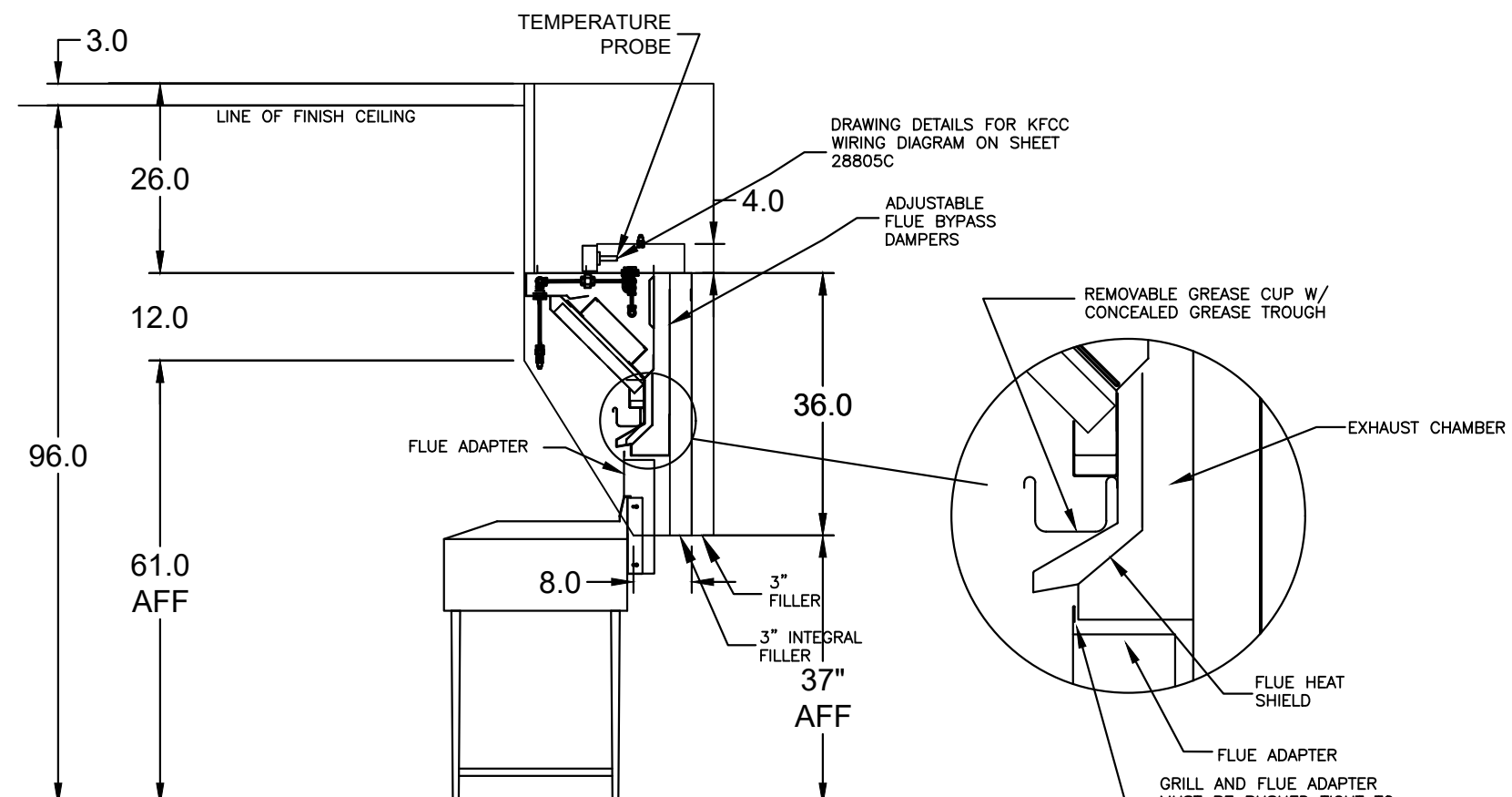
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MARK: ITEM #49 PLAN VIEW

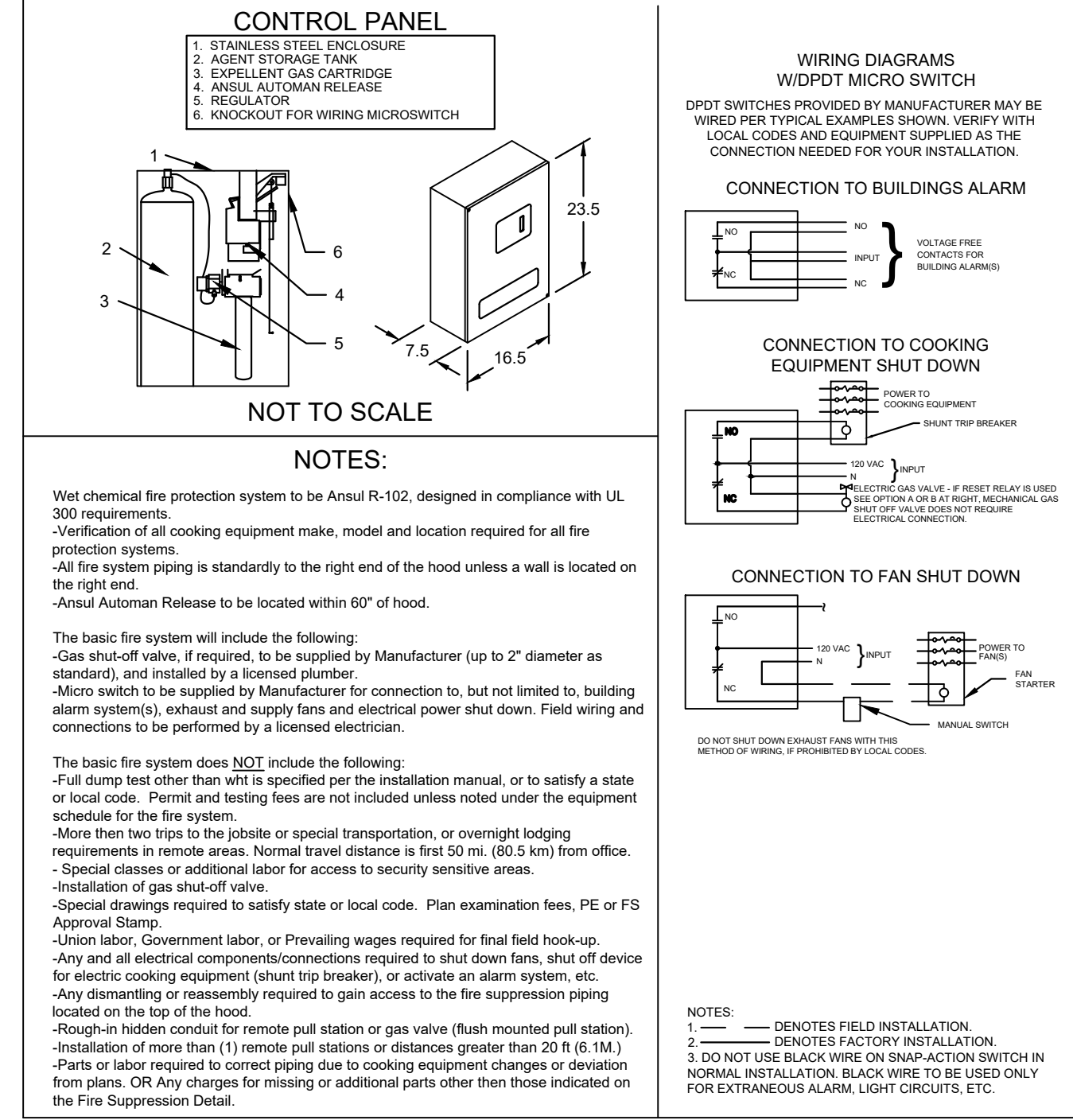


MARK: ITEM #49 ELEVATION VIEW



MARK: ITEM #49 SECTION VIEW

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



Thank you for your interest in Accurex

SUBMITTAL

Please return one approved print to your Greenheck Representative 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 \_\_\_\_\_

REV DESCRIPTION DATE

ACCUREX

CULVER'S MASTER TEMPLATE

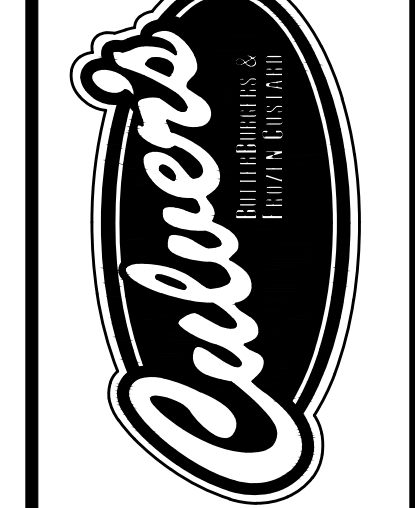
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C28805A

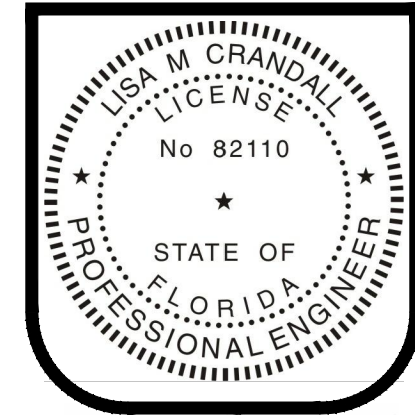
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Date	Revision	By
9/22/2021	1. REV PER POLK COUNTY COMMENTS	
11/15/2021	2. ISSUE FOR BID	
12/01/2021	3. REVISE PER CULVER'S COMMENTS	

Culver Franchising System, LLC  
 1240 Water Street  
 Prairie du Sac, WI 53578  
 608-643-7980



CUSTARD QUEENS, INC.  
 333 W 4th STREET, MARION, IN 46952  
**METRO L + 2' - 2021 PLANS**  
 Lakeland Florida



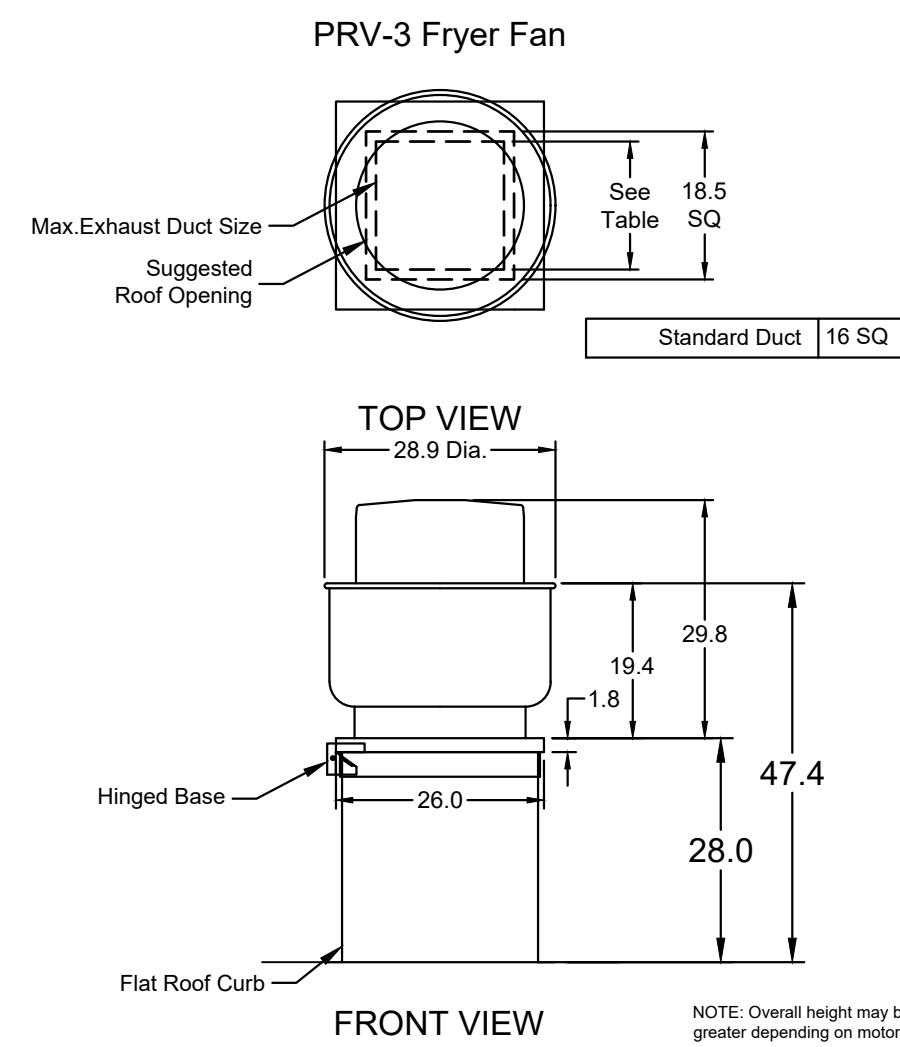
Lisa Crandall  
 12-01-2021

Sheet Contents:  
**HVAC HOOD, FAN & FIRE SUP.**

Project No. 2021-002 LAKELAND  
 Drawn By: LMC/ XC/ ASW  
 Date: Feb. 01, 2021

Sheet  
**M-3**

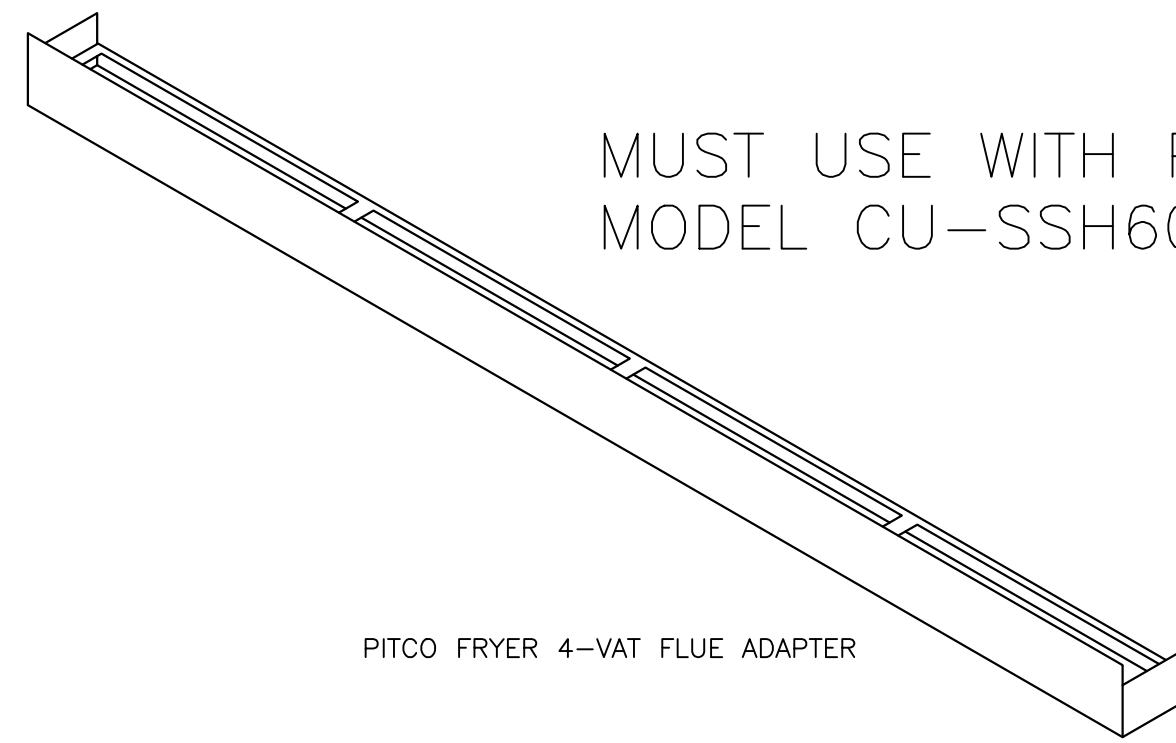
BID SET 12-01-2021



FOOD SERVICE EQUIPMENT #59

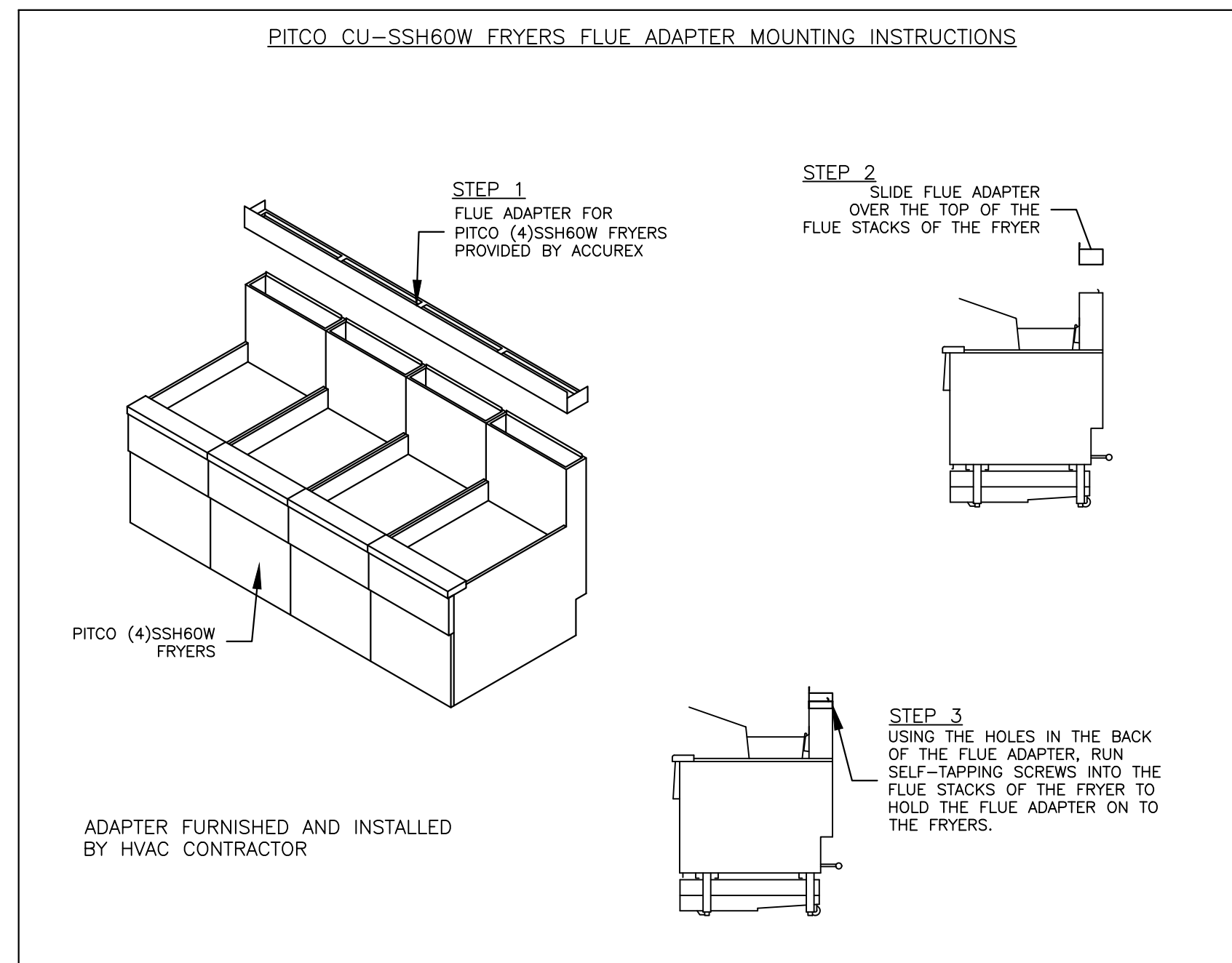
# 4-VAT FRYER BATTERY

MUST USE WITH PITCO MODEL CU-SSH60W



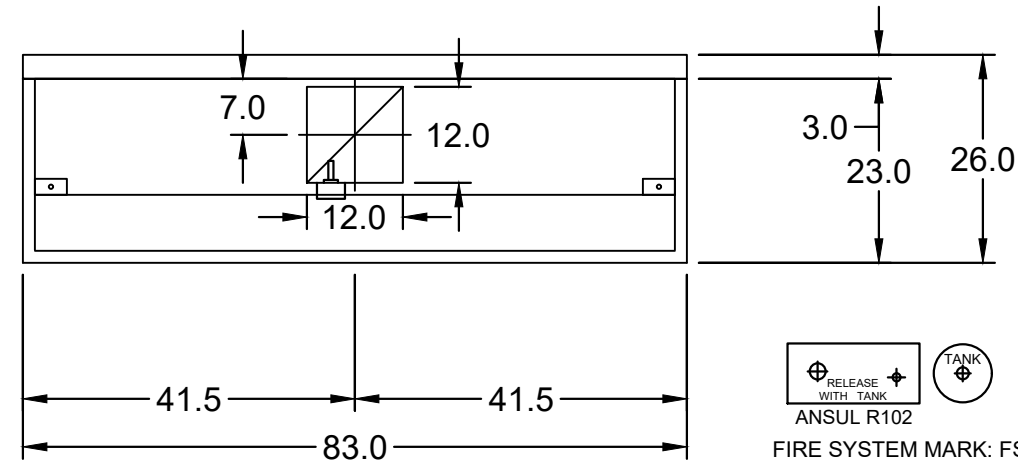
PITCO FRYER 4-VAT FLUE ADAPTER

## PITCO CU-SSH60W FRYERS FLUE ADAPTER MOUNTING INSTRUCTIONS

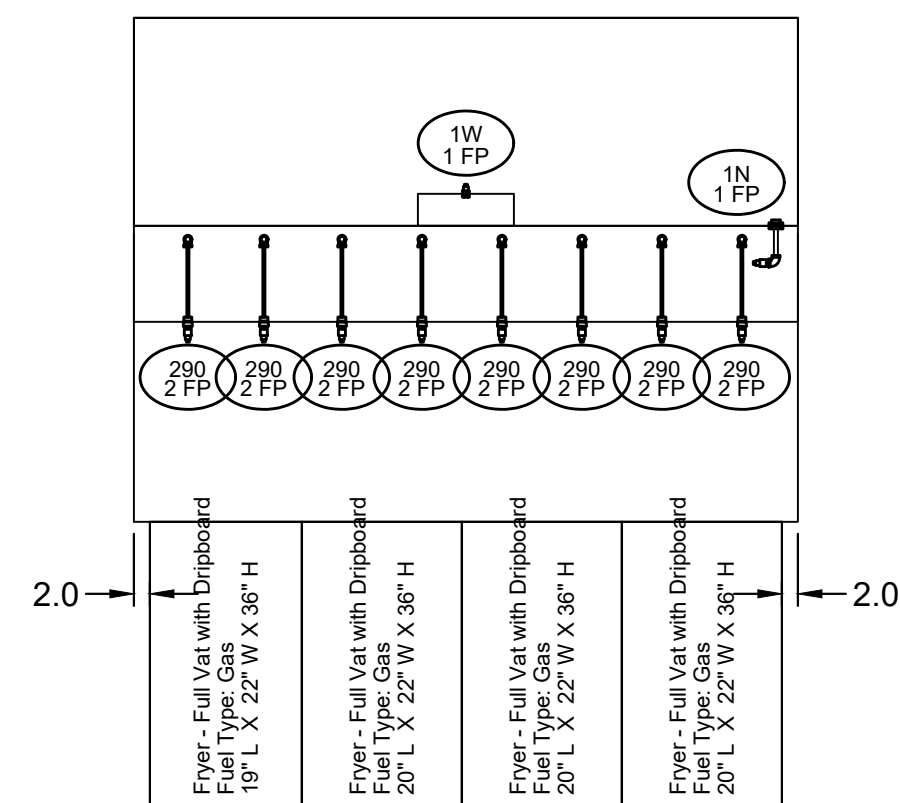


ADAPTER FURNISHED AND INSTALLED BY HVAC CONTRACTOR

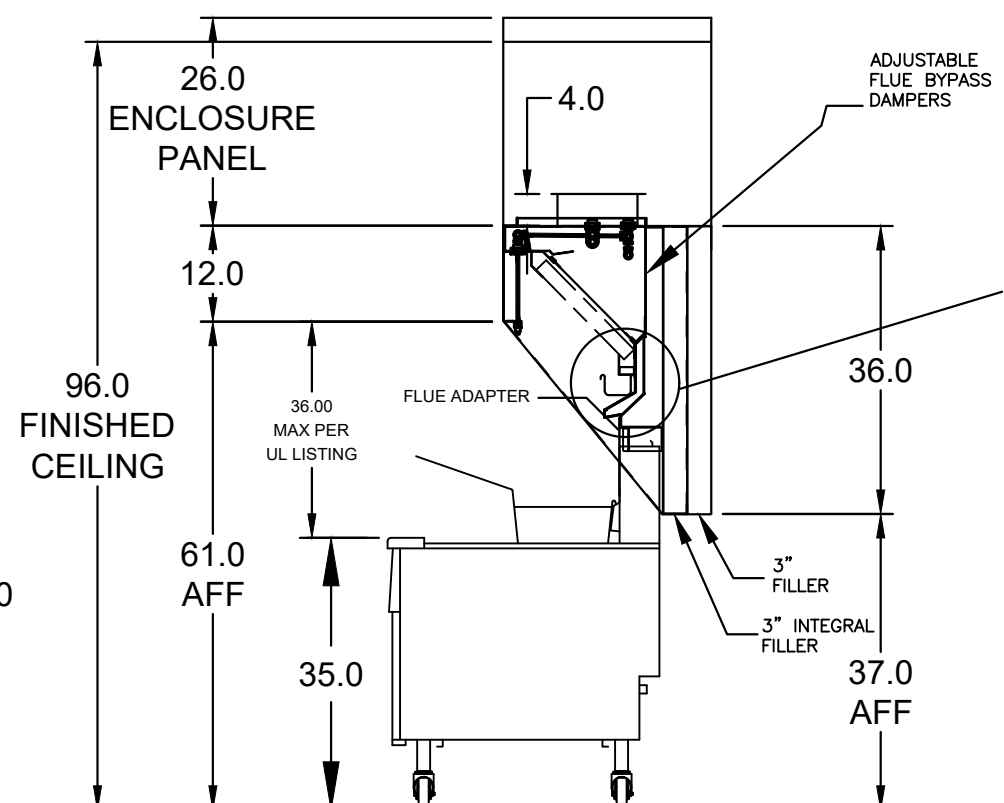
FIRE SYSTEM MARK: FS FOR FRYER HOOD  
PIPE & CONDUIT BY ANSUL DISTRIBUTOR



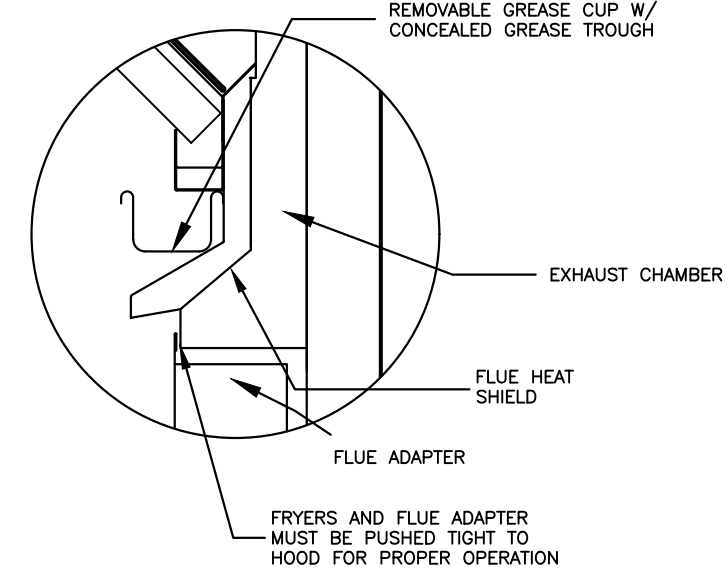
MARK: ITEM #59 PLAN VIEW



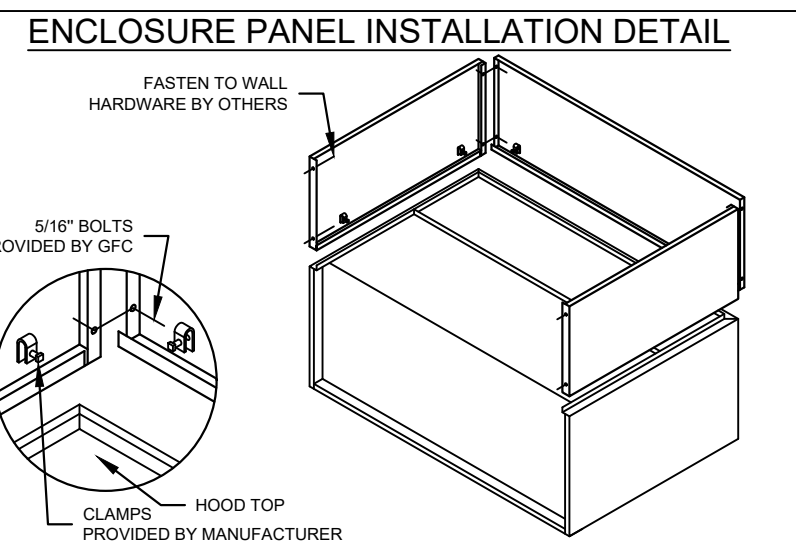
MARK: ITEM #59 ELEVATION VIEW



MARK: ITEM #59 SECTION VIEW

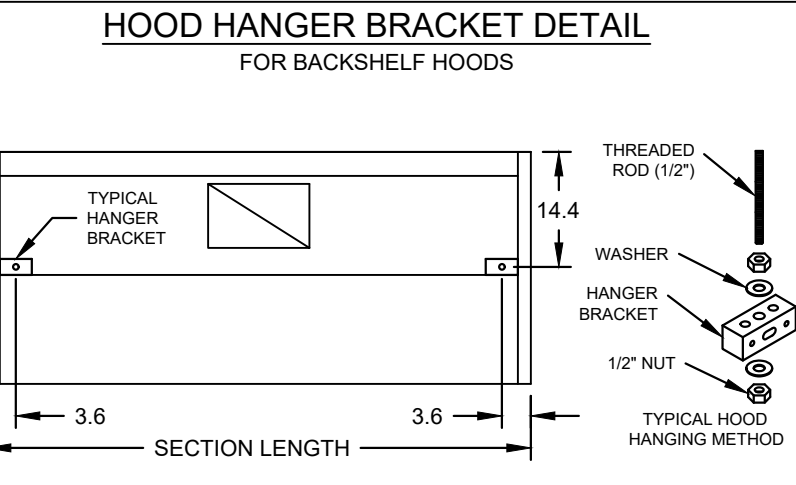


FRYERS AND FLUE ADAPTER MUST BE PUSHED TIGHT TO HOOD FOR PROPER OPERATION



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



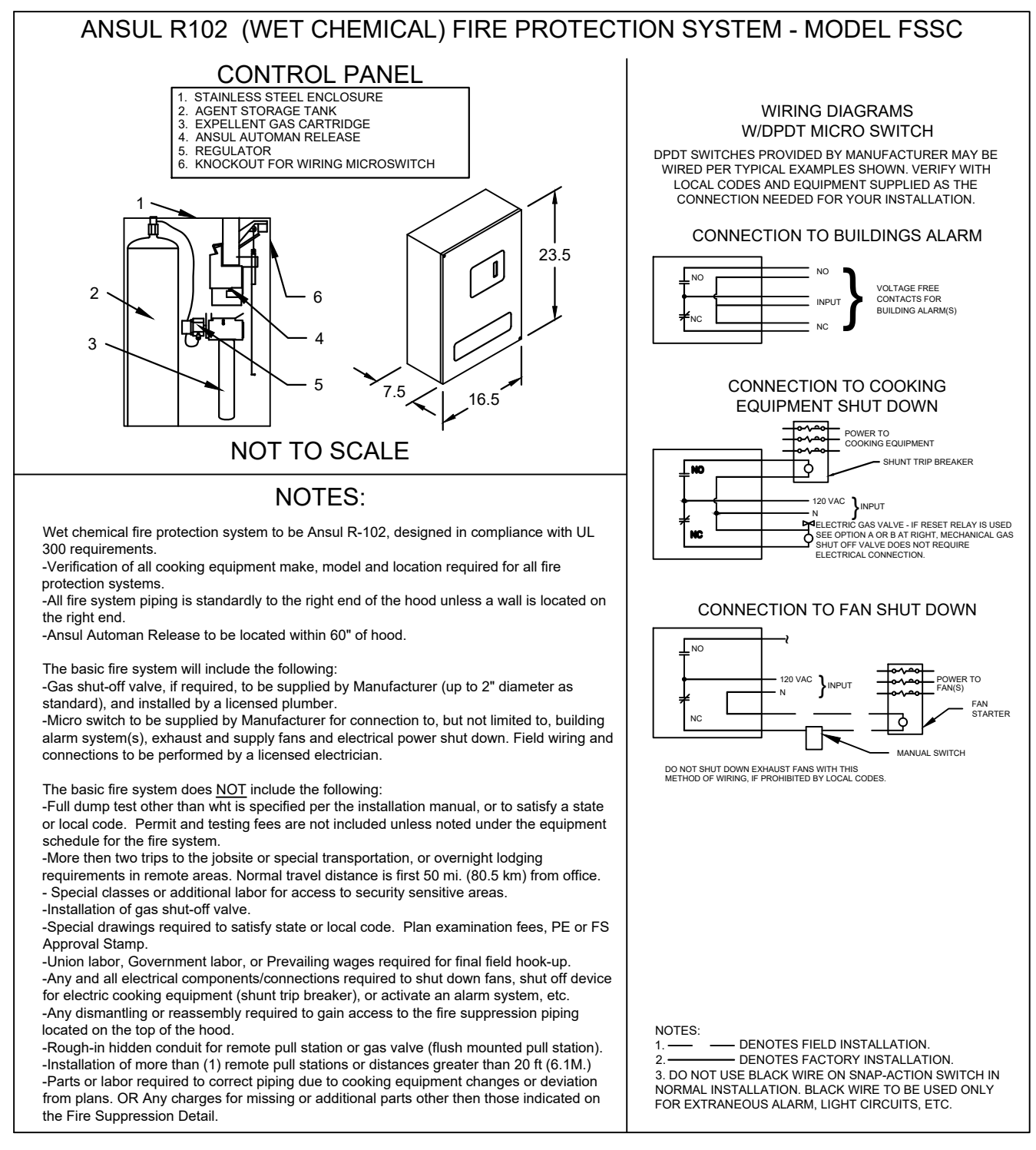
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EQUIPMENT SCHEDULE												
TYPE 1 KITCHEN HOOD					MARK: ITEM #59							
HOOD NO.	ACCUREX MODEL STYLE / CONFIGURATION	HOOD DIMENSIONS			GREASE CUP OR DRAIN	HOOD TEMP. RATING	TOTAL WEIGHT	SECTION LOCATION				
1	SINGLE WALL EXHAUST ONLY LOW PROXIMITY	83 IN.	TOP 23 IN. FRONT 12 IN. BOT 3 IN. BACK 36 IN.	RIGHT	600 DEG F	169.0 LBS.	SINGLE					
ILLUMINATION DETAILS					GREASE FILTRATION DETAILS							
HOOD NO.	FIXTURE TYPE	BULB / LAMP INFO	INTENSITY FT CANDLES	TYPE / MODEL MATERIAL	QTY	LENGTH	HEIGHT					
1	NONE	NA	0 / 0 IN. OC	X-TRACTOR STAINLESS STEEL	5	16 IN.	16 IN.					
HOOD SECTION #		EXHAUST PLENUM COLLARS										
COLLAR #		DISTANCE TO END (IN.)	WIDTH (IN.)	LENGTH (IN.)	DIAMETER (IN.)	VOLUME (CFM)	S.P. (IN. WC)	VELOCITY (FT/MIN)				
1 / 1		41.5	12	12	NA	1500	0.518	1500				
TOTAL EXHAUST CFM - SECTION 1												
						1500		217 CFM / FT				
OPTIONS AND ACCESSORIES												
430 STAINLESS STEEL WHERE EXPOSED 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) THIS HOOD IS PART OF A TEMPERATURE INTERLOCK CONTROL SYSTEM INCLUDES PERFORMANCE ENHANCING (LIP PELL) TECHNOLOGY STANDING SEAM CONSTRUCTION FOR SUPERIOR STRENGTH EMBOSSED STAINLESS STEEL FINISH FOR HIGH CORROSION RESISTANCE EQUIPMENT SPECIFIC S/S FLUE ADAPTER												
SPECIAL DESIGN REQUESTS												
SDR #K1100559 - NEW 4L FRYER SYSTEM												
FIRE SUPPRESSION SYSTEM												
MARK: FS FOR FRYER HOOD												
MANUFACTURER / MODEL	FLOW POINTS	SUPPLY LINE	DETECTION	MOUNTING								
ANSUL R-102 WET CHEMICAL	18 UTILIZED 22 AVAILABLE	CONTINUOUS	FUSIBLE LINK	RIGHT END REMOTE MOUNTED								
FULL INSTALLATION (INCLUDES PRE-PIPED HOODS) WITH DETECTION AND FACTORY COORDINATED INSTALL CHROME SLEEVES FOR FACTORY PROVIDED APPLIANCES DROPS - INCLUDED SUPPRESSION AGENT - INCLUDED - 6 GAL. (2) 3.0 TANK(S) GAS VALVE - INCLUDED - MECHANICAL SHUTOFF VALVE, SUPPLIED UP TO 2" REMOTE PULL STATION - STANDARD - INSTALLATION AT SINGLE POINT OF EGRESS METAL BLOW-OFF CAPS - INCLUDED FIRE SYSTEM PERMIT - REQUIRED - FEE INCLUDED 500°F. FUSIBLE LINK OR AS TESTED AND INSTALLED BY LOCAL INSTALLER PER UL MANUAL												
FIRE SYSTEM PROTECTED HOOD(S) (UL-300) (MARK NAME / SECTION)												
FRYER HOOD SECTION 1 - (LENGTH 83.0 IN.) - LOW PROXIMITY HOOD												
EQUIPMENT SCHEDULE												
Belt Drive Upblast Centrifugal Roof Exhaust Fan					MARK: PRV-3							
Qty	Accurex Model	Volume (CFM)	S/P (in wpg)	FRPM	Operating Power (hp)	Weight (lb.)	Size (hp)	V/CP	End. Motor RPM	Winding	FLA	
1	XRUB-140-7	1500	1	1377	0.5	160	0.75	208/60/3	OP	1725	1	3.5
OPTIONS AND ACCESSORIES												
UL/GUL 762 Listed - "Power Ventilators for Rest. Exh. Appliances" Switch, NEMA-1, Toggle, Shipped with unit Larger curb cap size - 26" square Roof curb-Galv. GFR-26-G28, Undersized 1.5" total Hinged Base (Attached) Curb Seal (Attached) Clean-out Port Grease Trap with Drain Connection (FN 475538) Heat Baffle (Attached)												



Thank you for your interest in Accurex

**SUBMITTAL**

Please return one approved print to your Greenheck Representative 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 \_\_\_\_\_

REV	DESCRIPTION	DATE

ACCUREX

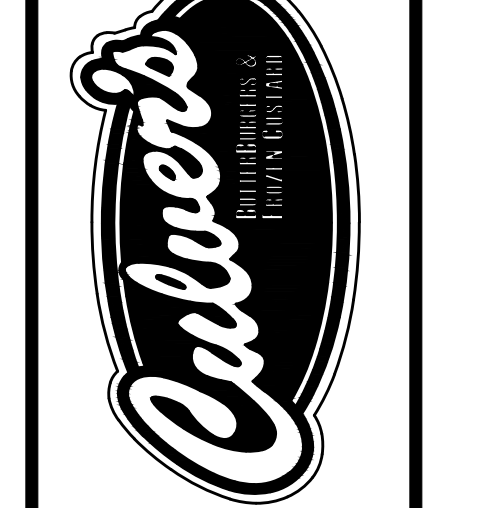
CULVER'S MASTER TEMPLATE

SCALE: 1/24

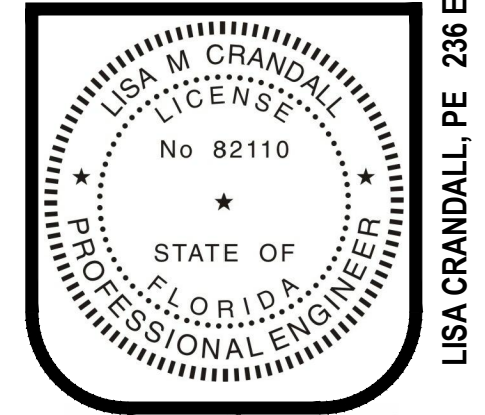
C28805B

By	Revision	Date

Culver Franchising System, LLC  
1240 Water Street  
Prairie du Sac, WI 53578  
608-643-7980



CUSTARD QUEENS, INC.  
333 W 4th STREET, MARION, IN 46952  
METRO L + 2' - 2021 PLANS  
Lakeland Florida



Sheet Contents:  
**HVAC HOOD, FAN & FIRE SUP.**

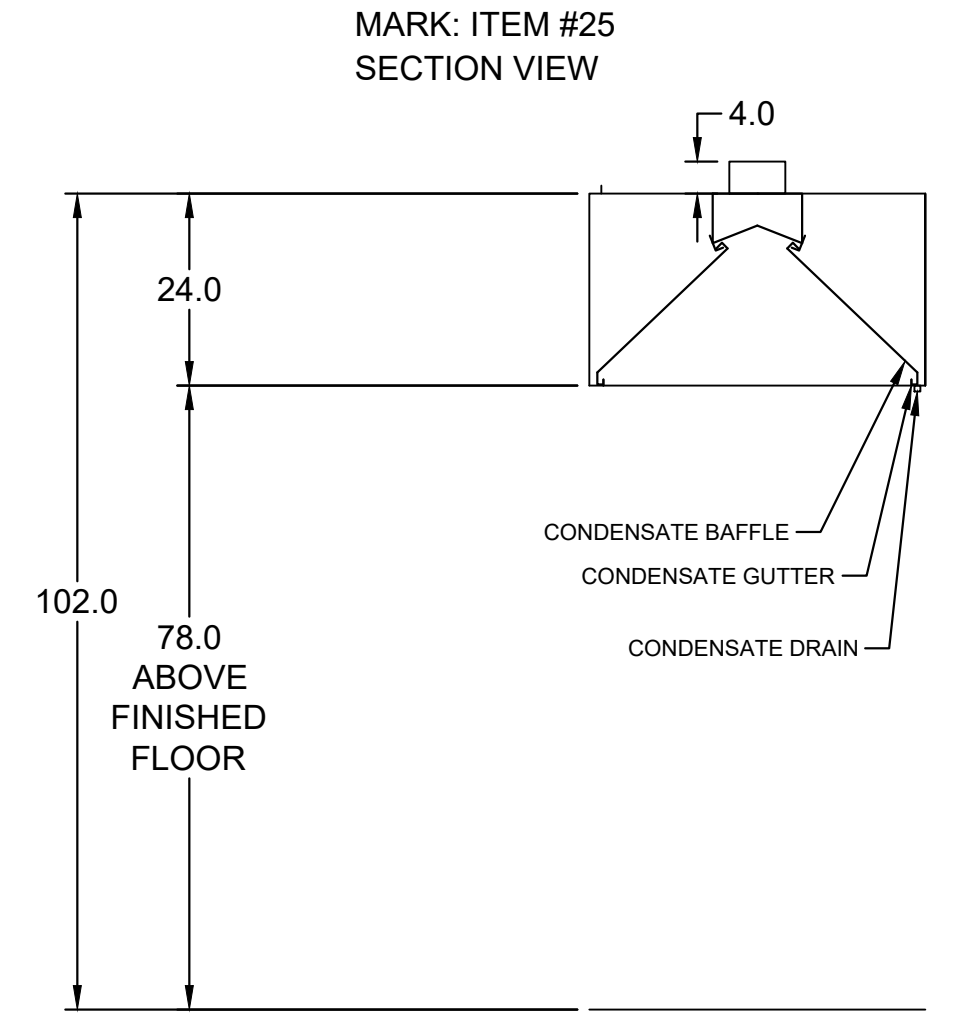
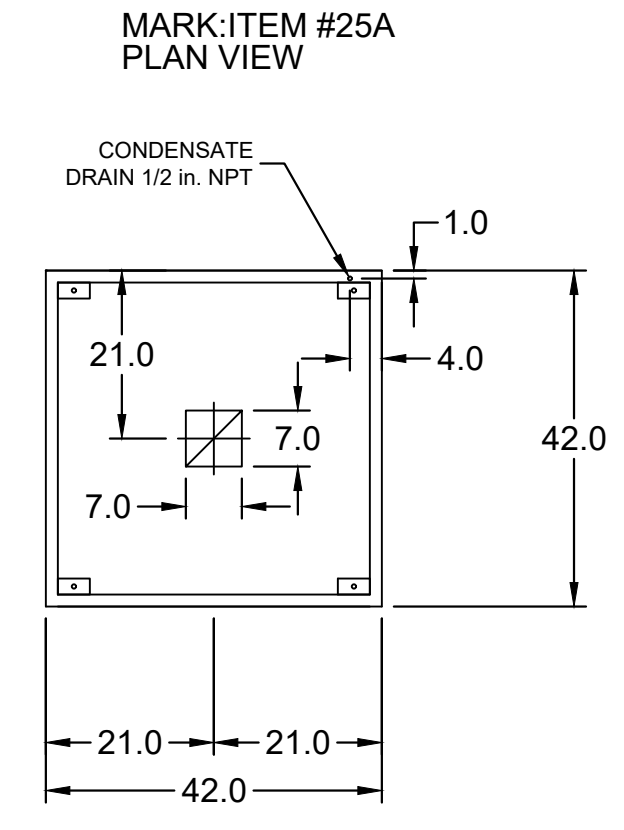
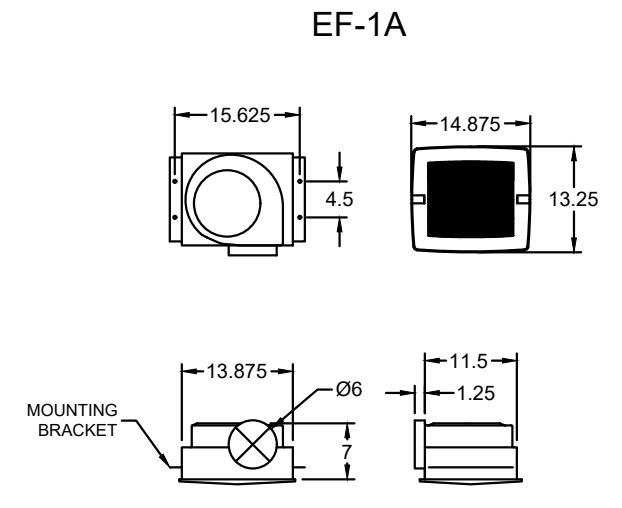
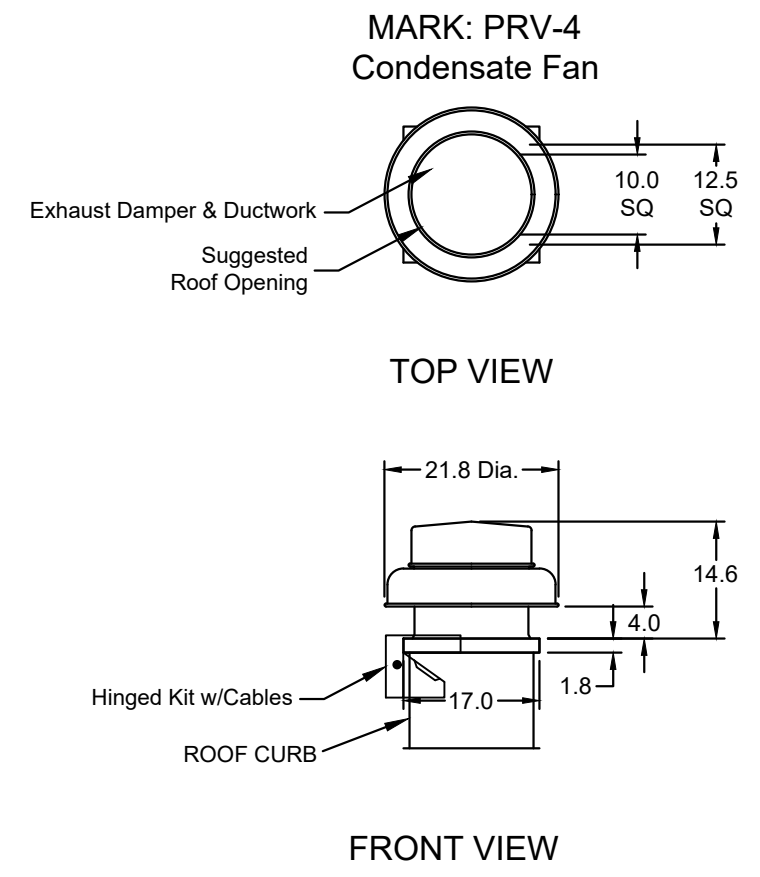
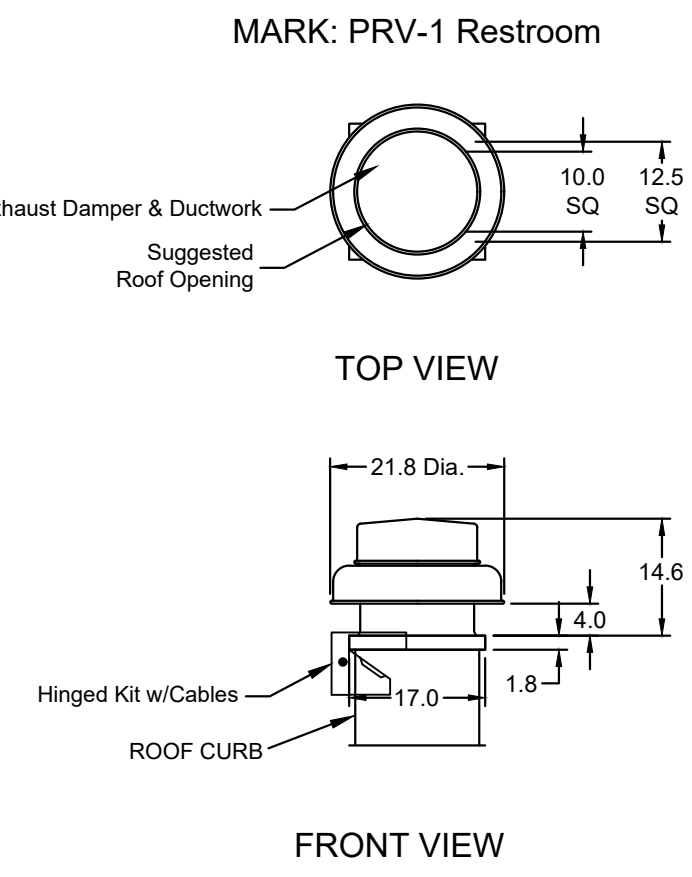
Project No. 2021-002 LAKELAND  
Drawn By: LMC/ XC/ ASW  
Date: Feb. 01, 2021

Sheet  
**M-4**

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LISA CRANDALL, PE 236 EAST MAIN STREET, GAS CITY, IN 46933 765.677.0996 LISA@CRANDALLOFFICES.COM

BID SET 12-01-2021



EQUIPMENT SCHEDULE								
MARK: KFCC	DESCRIPTION / ACCUREX MODEL	EXHAUST FAN QTY	SUPPLY FAN QTY	POWER FREQUENCY				
	KITCHEN FAN CONTROL CENTER / KFCC SHIP LOOSE / SHIP LOOSE FOR REMOTE MOUNTING	2	0	60 CYCLE				
CONTROL PANEL ENCLOSURE - 16 GA 304 STAINLESS STEEL ENCLOSURE (NEMA-1) - DIMENSIONS 12 X 18 X 6								
WIRING DIAGRAM # T100-2 - 20 STARTERS PROVIDED IN CONTROL PANEL - QTY 2								
2 POSITION FAN SWITCH - 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								
1 SPEED FAN(S)								
SPECIAL DESIGN REQUESTS								
SDR #K0800240 - USE KIT #S2863, WIRING DIAG. #Z2905336								
TYPE 2 KITCHEN HOOD								
HOOD NO.	ACCUREX MODEL STYLE / CONFIGURATION	SECTION LENGTH	WIDTH	HEIGHT	GREASE CUP OR DRAIN	HOOD TEMP. RATING	TOTAL WEIGHT	SECTION LOCATION
1	XRD-423	42.0 IN.	42 IN.	24 IN.	RIGHT	NA	224.0 LBS.	NA

EXHAUST PLENUM COLLARS								
HOOD SECTION #	COLLAR #	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	End.	Motor RPM	Windings	FLA
1	XRED-095-D	375	0.5	1479	0.060	43	0.0667	115/601	OP	1550	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	End.	Motor RPM	Windings	FLA
1	XRED-095-D	350	0.5	1455	0.07	43	0.0667	115/601	OP	1550	1	NA

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	End.	Motor RPM	Windings	FLA
2	XCR-B80	75	0.125	885	0.01	10	0.0	115/601	OP	900	1	NA

EQUIPMENT SCHEDULE												
UL/LUL 705 Listed - "Power Ventilators"						UL/LUL 705 Listed - Electric fan						
Qty	Accurex Model	Volume (CFM)	SP (in wg)	FRPM	Operating Power (hp)	Weight (Lb.)	Size (hp)	V/CP	End.	Motor RPM	Windings	FLA
1	XRD-095-D	350	0.5	1455	0.07	43	0.0667	115/601	OP	1550	1	NA

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1	XRD-095-D	350	0.5	1455	0.07	43	0.0667	115/601	OP	1550	1	NA

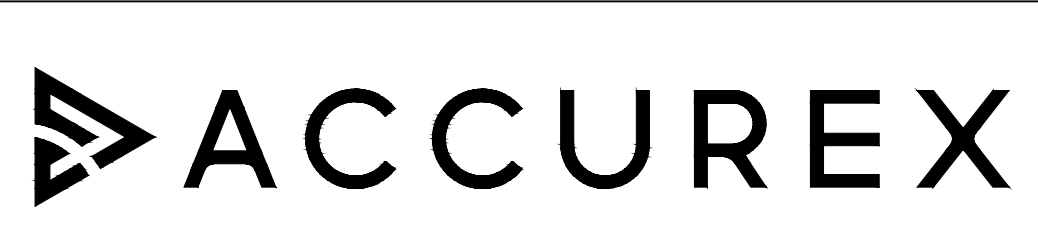
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**MARK: CONTROLS**

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

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

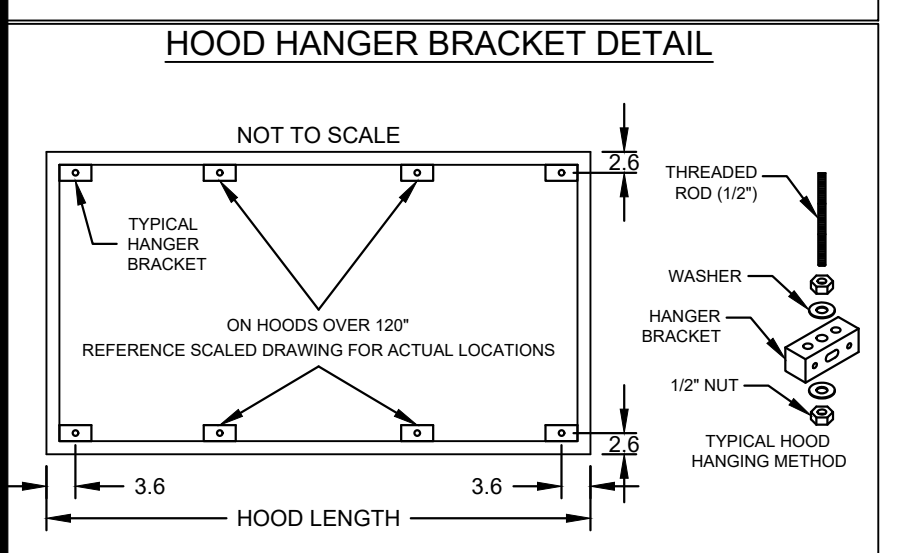
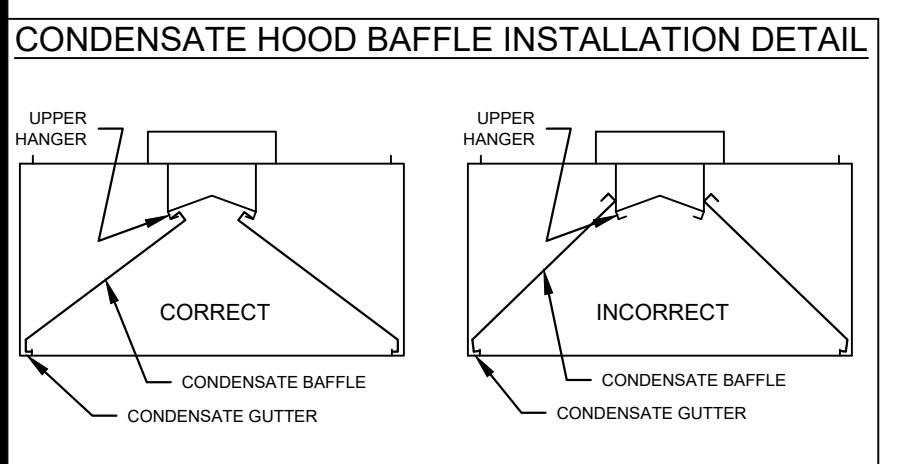
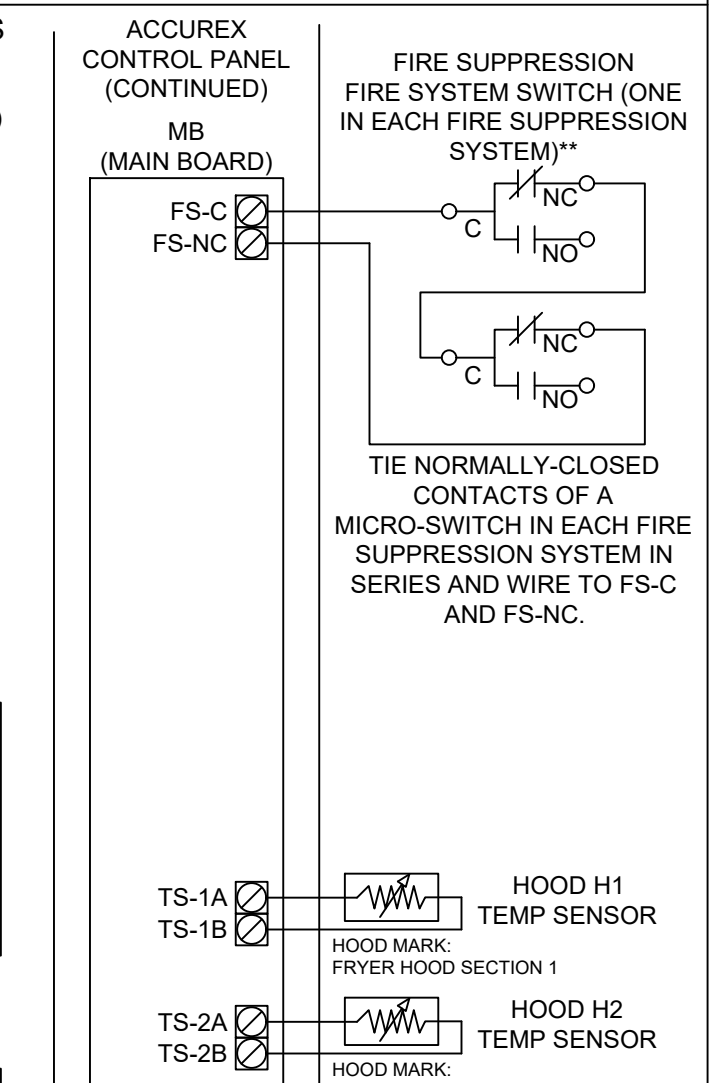
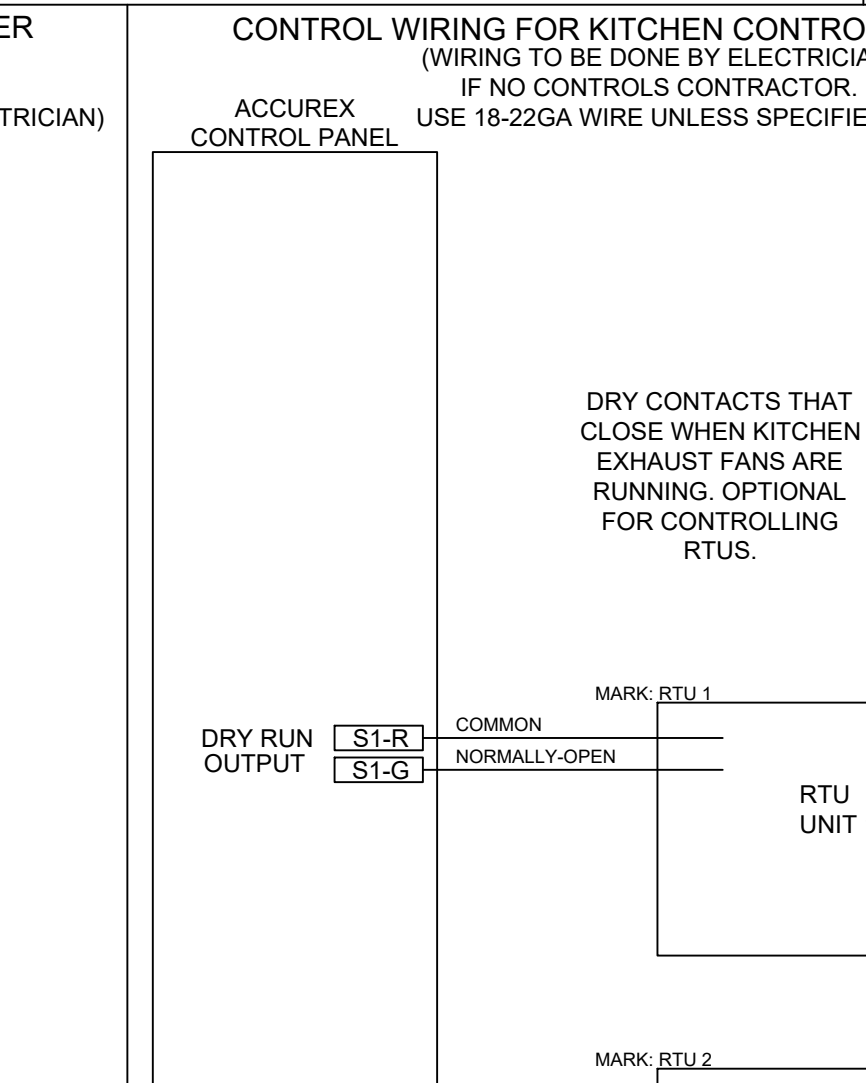
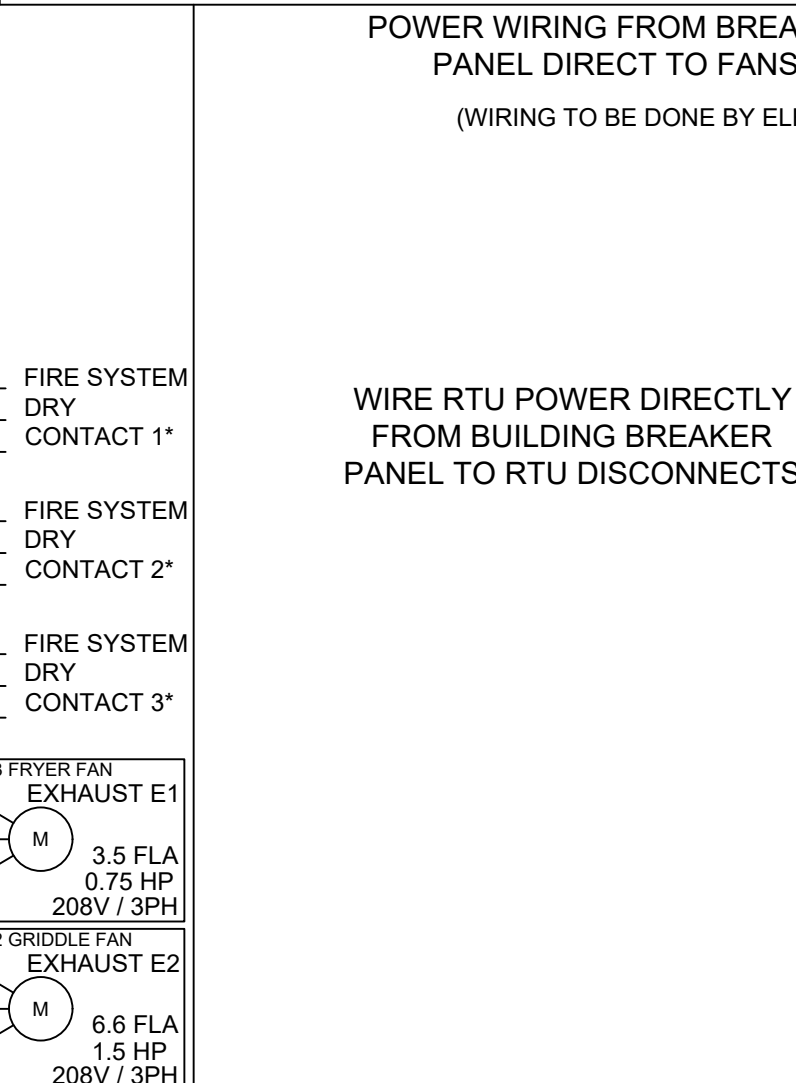
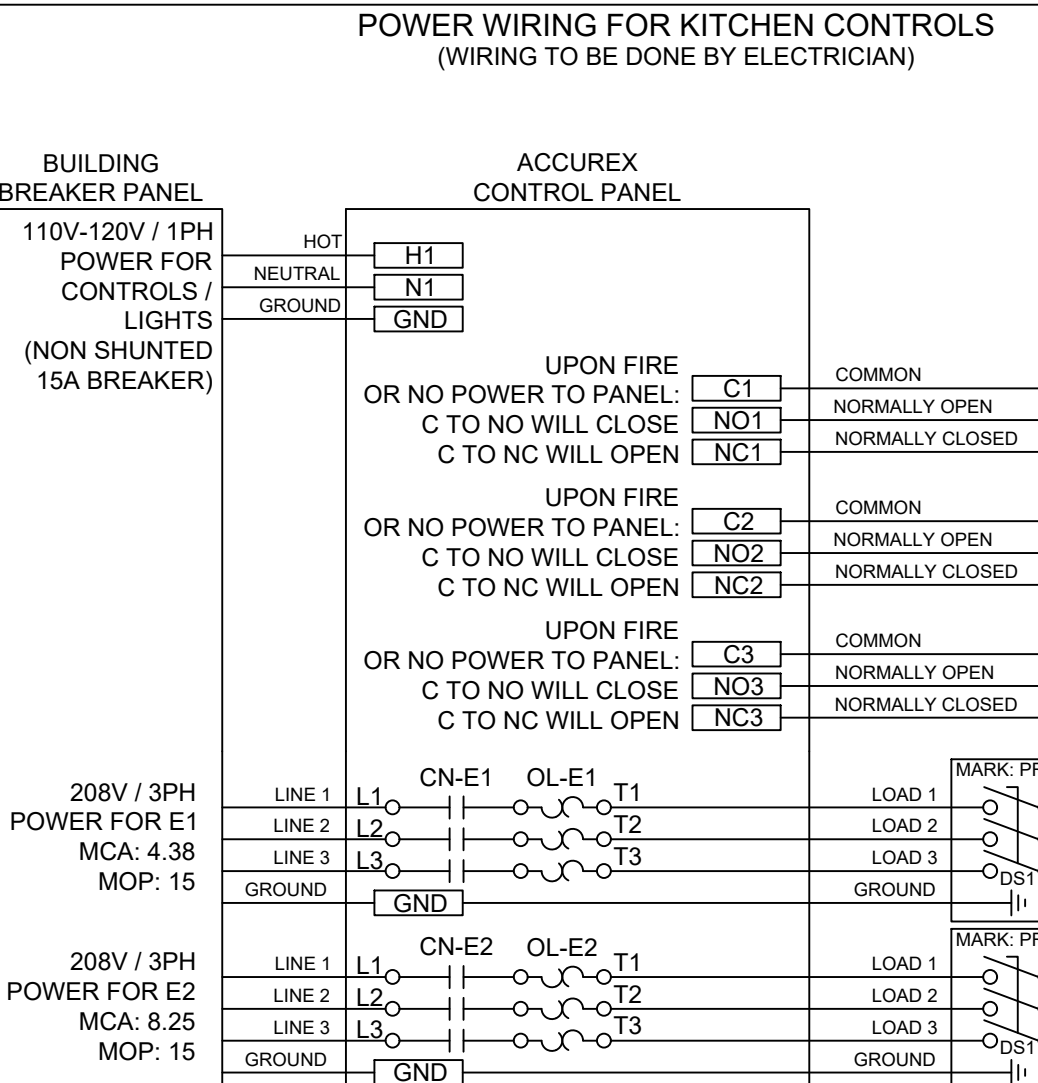
THESE DRAWINGS SHALL NOT BE REMOVED FROM THIS EQUIPMENT. USE COPPER CONDUCTORS RATED TO 90°C UNLESS SPECIFIED. TORQUE CONTROL & GROUND BLOCKS TO 8 LBS. IN. TORQUE POWER LUGS/SCREWS TO COMPONENT RATINGS LISTED. FIELD CONTROL WIRING RESISTANCE SHOULD NOT EXCEED 0.75 OHM. SEE IOM FOR ADDITIONAL INFORMATION,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



**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.

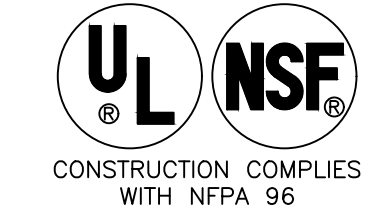
The grease filter face velocities are based on the filter manufacturers recommendations for maximum grease extraction. Inlet opening air velocities for waterwash, dry cartridge and high velocity cartridge filters manufactured by Greenheck are designed to deliver maximum grease extraction.

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

**PROPRIETARY INFORMATION NOTICE**

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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 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 \_\_\_\_\_

REV	DESCRIPTION	DATE

ACCUREX

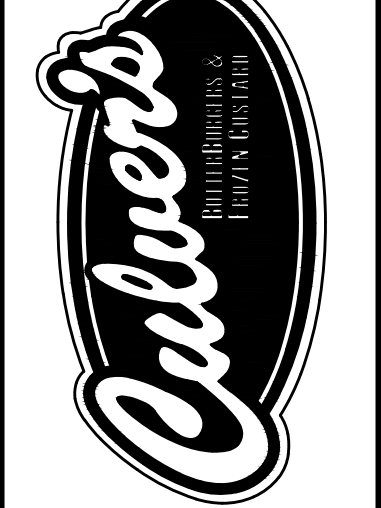
CULVER'S MASTER TEMPLATE

SCALE: 1/24

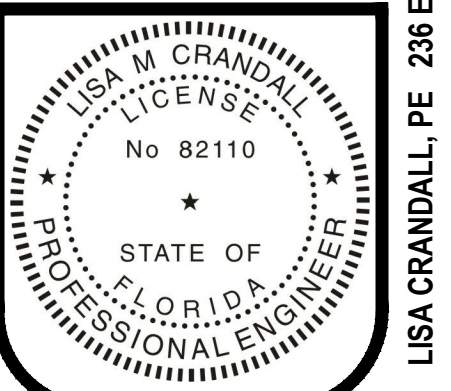
C28805C

By	Revision	Date
	1	9/22/2021
	2	11/15/2021
	3	12/01/2021

Culver Franchising System, LLC  
1240 Water Street  
Prairie du Sac, WI 53578  
608-643-7980



**CUSTARD QUEENS, INC.**  
333 W 4th STREET, MARION, IN 46952  
**METRO L + 2' - 2021 PLANS**  
Lakeland Florida



Sheet Contents:  
**HVAC HOOD, FAN & FIRE SUP.**

Project No. 2021-002 LAKELAND  
Drawn By: LMC/XC/ASW  
Date: Feb. 01, 2021

Sheet  
**M-5**

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LISA CRANDALL, PE 236 EAST MAIN STREET, GAS CITY, IN 46933 765.677.0996 LISA@CRANDALLOFFICES.COM

**BID SET 12-01-2021**

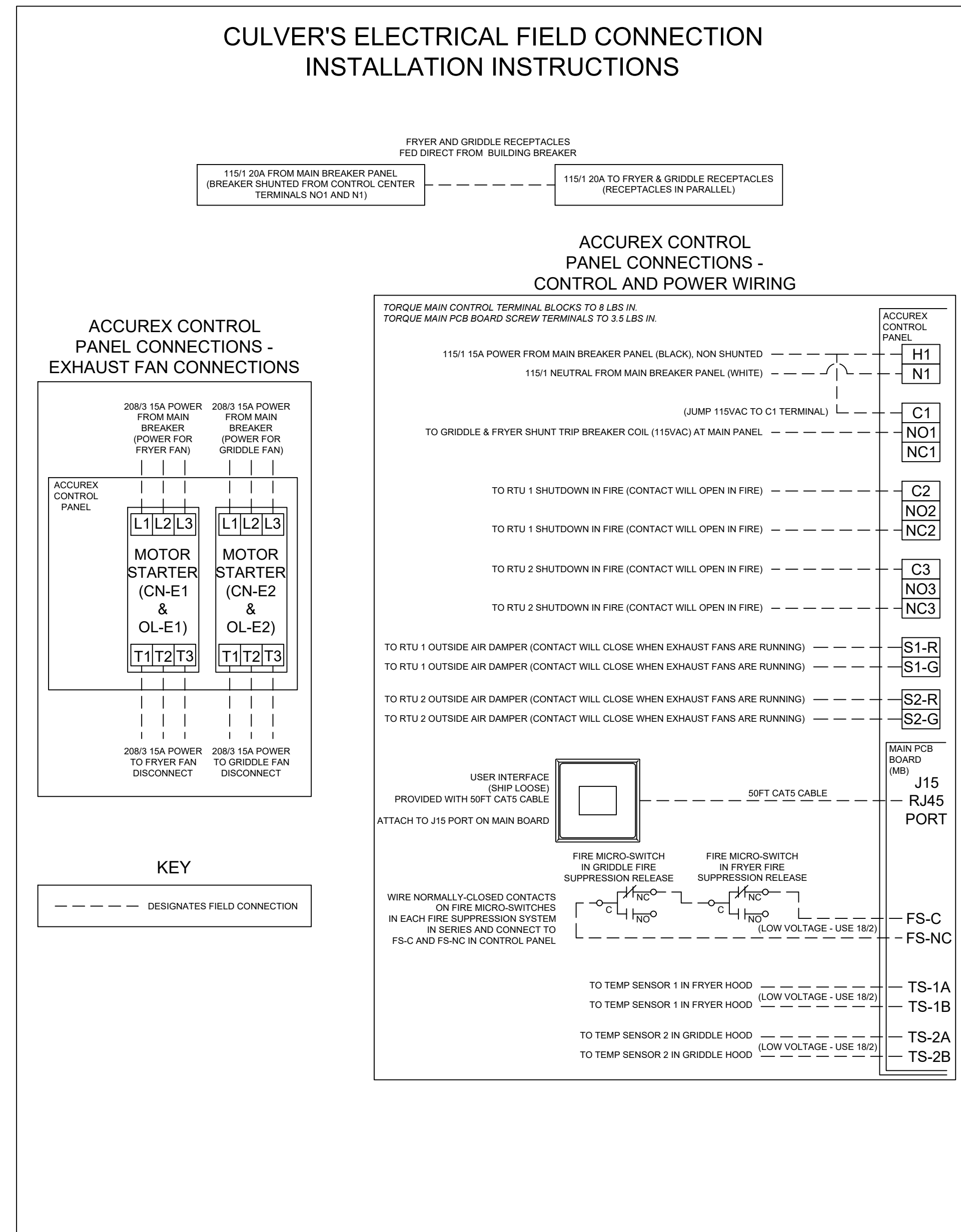


**SUBMITTAL**

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 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 two receptacles, one for the fryer 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 stated "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.

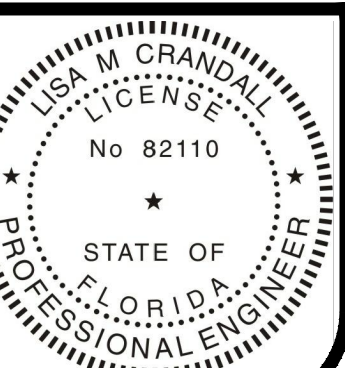
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Date	Revision	By
9/22/2021	1: REV PER POLK COUNTY COMMENTS	
11/15/2021	2: ISSUE FOR BID	
12/01/2021	3: REVISE PER CULVER'S COMMENTS	

Culver Franchising System, LLC  
 1240 Water Street  
 Prairie du Sac, WI 53578  
 608-643-7980



**CUSTARD QUEENS, INC.**  
 333 W 4th STREET, MARION, IN 46952  
**METRO L + 2' - 2021 PLANS**  
 Lakeland Florida



*Lisa Crandall*  
 12-01-2021

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**M-6**