

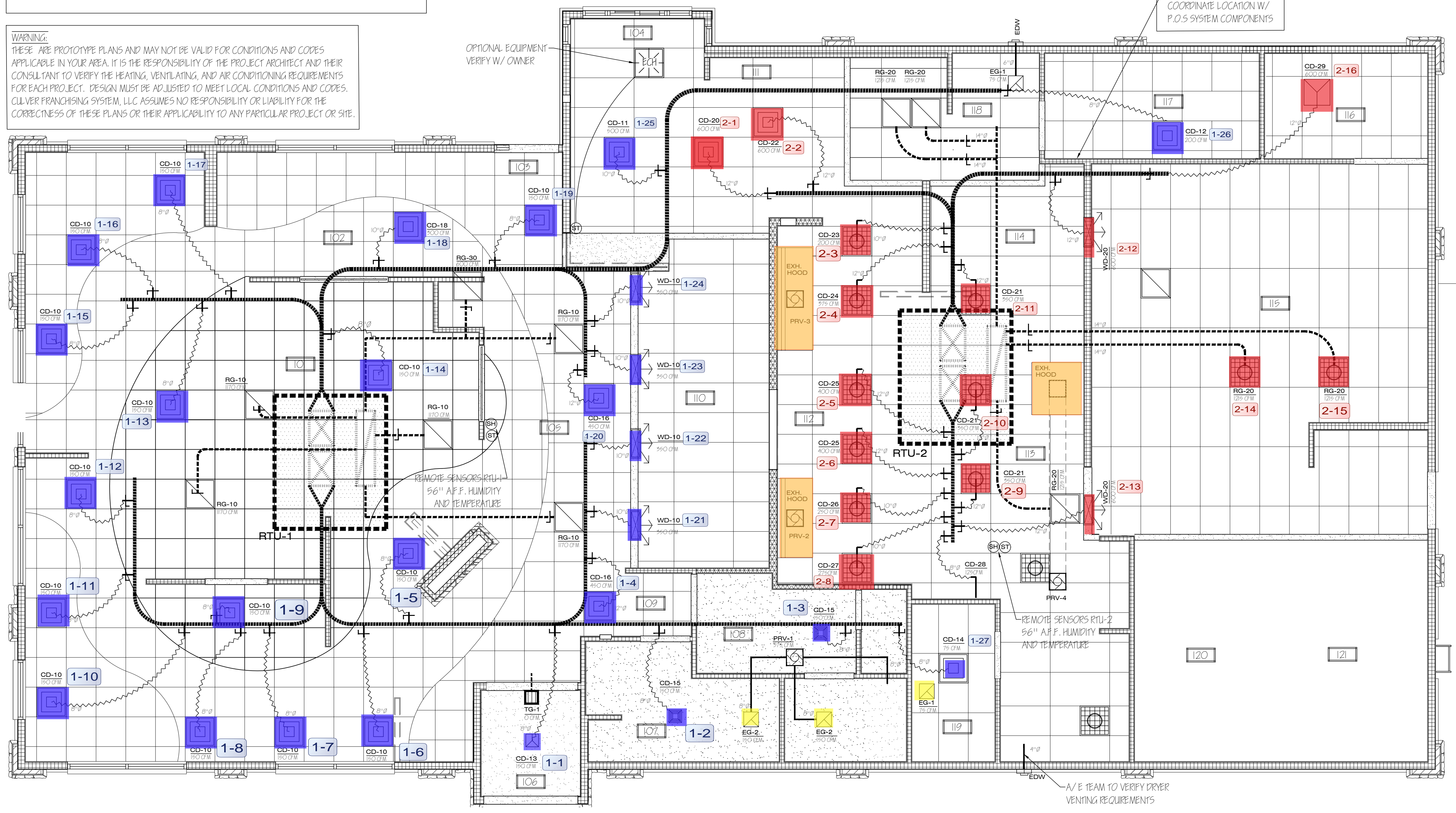
H.V.A.C. LEGEND:

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

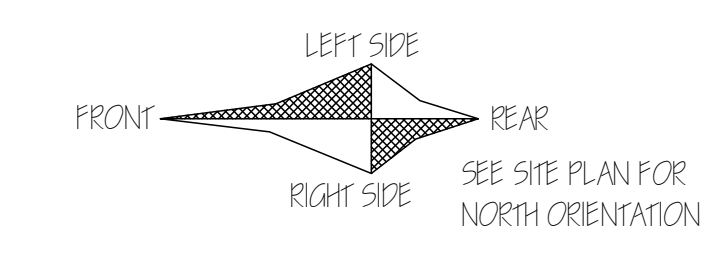
- GENERAL NOTES:**
1. VERIFY ALLOWABLE FLEX DUCT LENGTHS WITH LOCAL CODES AND MODIFY ACCORDINGLY. ATTACH FLEXIBLE AIR CONNECTOR TO RIGID DUCT W/ STEEL DRAW BANDS N-ONLY. CLASS I FLEXIBLE AIR CONNECTOR PER UL 181 - MAX LENGTH 8'-0". PROVIDE SUPPORT AT 4'-0" O.C.
 2. VENTING OF ANY COMBUSTIBLE BY-PRODUCTS 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°

WARNING:
 THESE ARE PROTOTYPE PLANS AND MAY NOT BE VALID FOR CONDITIONS AND CODES APPLICABLE IN YOUR AREA. IT IS THE RESPONSIBILITY OF THE PROJECT ARCHITECT AND THEIR CONSULTANT TO VERIFY THE HEATING, VENTILATING, AND AIR CONDITIONING REQUIREMENTS FOR EACH PROJECT. DESIGN MUST BE ADJUSTED TO MEET LOCAL CONDITIONS AND CODES. CULVER FRANCHISING SYSTEM, LLC ASSUMES NO RESPONSIBILITY OR LIABILITY FOR THE CORRECTNESS OF THESE PLANS OR THEIR APPLICABILITY TO ANY PARTICULAR PROJECT OR SITE.



HVAC PLAN - METRO M - 2021 PROTOTYPE
 SCALE: 1/4" = 1'-0"



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 WATER HEATER 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 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/ 14" 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 A-6 AND A-8.1 DRAWING.
- 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 EMERGENGE 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 MOPP & 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 GFCl, 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 EMERGENGE 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 MOPP & 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 GFCl, 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 1.918" 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 **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 1.27 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)**

AIR BALANCE TABLE			
Mark	Vent. Air CFM	Exh. Air CFM	Net Balance
RTU-1	+1900	--	+1900
RTU-2	+1900	--	+3800
PRV-1	--	-300	+3500
PRV-2	--	-1500	+2000
EF1-A	--	-1500	+500
PRV-4	--	-350	+150
EF-1	--	-75	+75

NATIONAL ACCOUNT PROGRAM

1. 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

2. 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

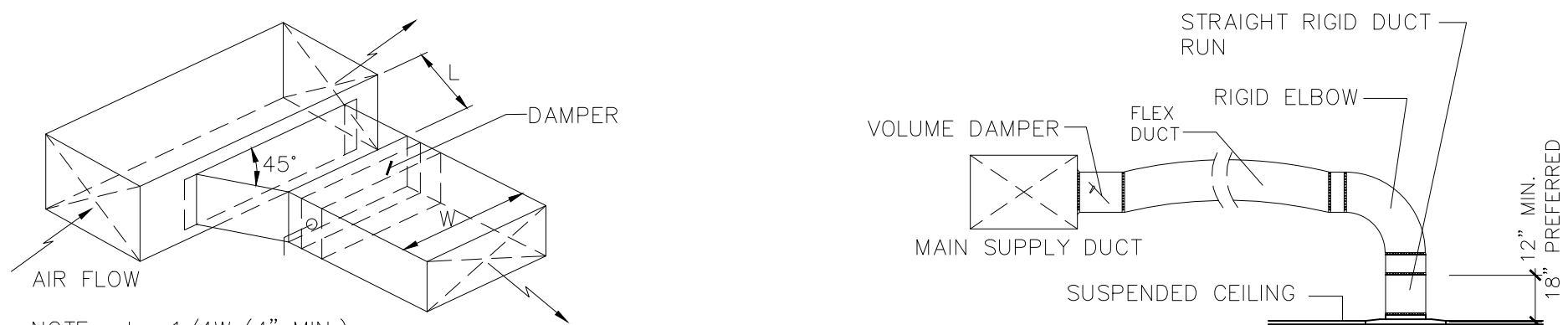
Secondary contact Sara Block @ 1-877-377-2548

3. 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.

DIFFUSER/GRILLE SCHEDULE

QNTY	Mark	Manuf.	Model	Type	Mounting	Diffuser	Neck	CFM	Zone	Notes
14	CD-10	CARNES	SFTB24	SUPPLY	GRID	4-WAY	8"	150	RTU-1	2
1	CD-11	CARNES	SJTB24	SUPPLY	GRID	4-WAY	10"	500	RTU-1	1
1	CD-12	CARNES	SJTB24	SUPPLY	GRID	4-WAY	8"	200	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	12"	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
2	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	12" x 12"	6"	75	RTU-1	
2	EG-2	CARNES	RTLAH	EXHAUST	CEILING	12" x 12"	6"	150	RTU-1	4
5	RG-10	CARNES	RAPMF	RETURN	GRID	RETURN	12 x 12"	1170	RTU-1	8
5	RG-20	CARNES	RAPMF	RETURN	GRID	RETURN	14"	1240	RTU-2	8
1	RG-30	CARNES	RAPMF	RETURN	GRID	RETURN	10"	600	RTU-1	6,8
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
- 5 OF THE CD-10 DIFFUSERS ARE TO BE FLAT BLACK. SEE REFLECTED CEILING PLAN FOR LOCATIONS. ALL OTHERS TO BE WHITE
- 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 & 89 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 & 89 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)

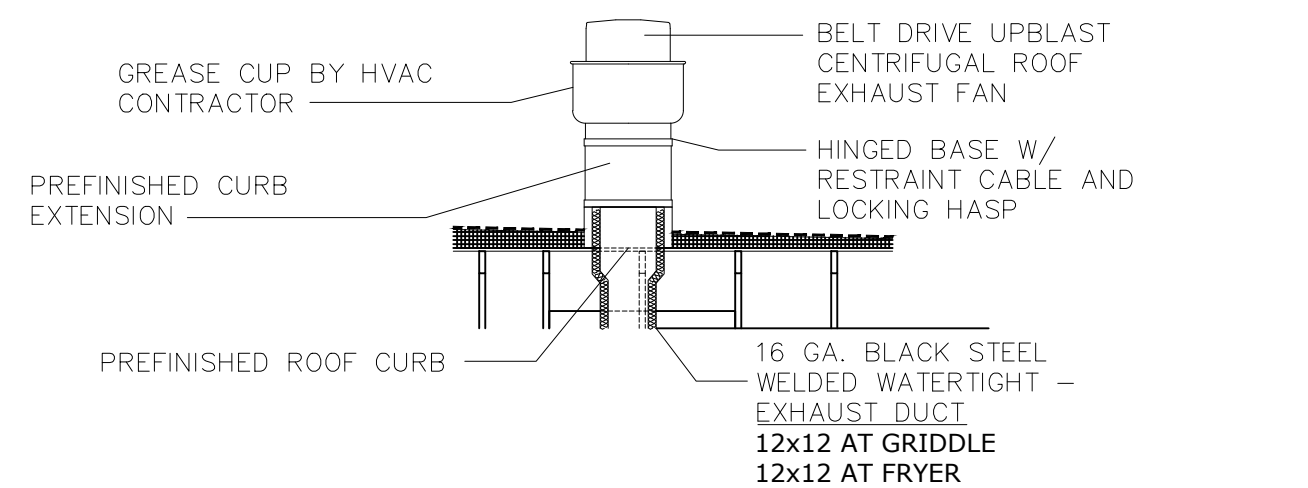
OTHER PARAMETERS THAT WE DIDN'T SET, BUT ARE PART OF START-UP:

- ROOM SET POINT
- REMOTE SENSOR OPERATION
- TEMP DEADBANDS

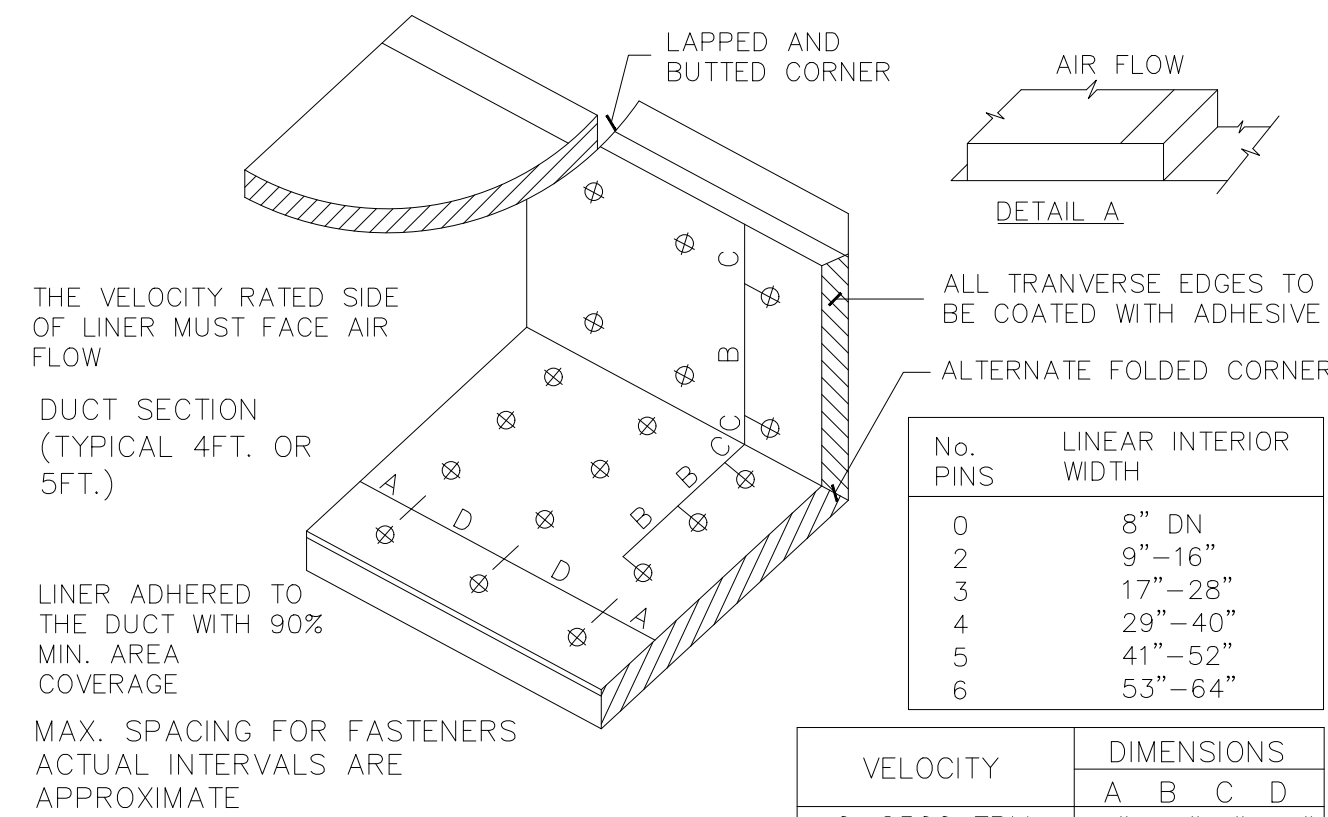
CHECK FOR CORRECT OPERATION AND WIRING OF ALL SENSORS.

TEST AND BALANCE NOTE:

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

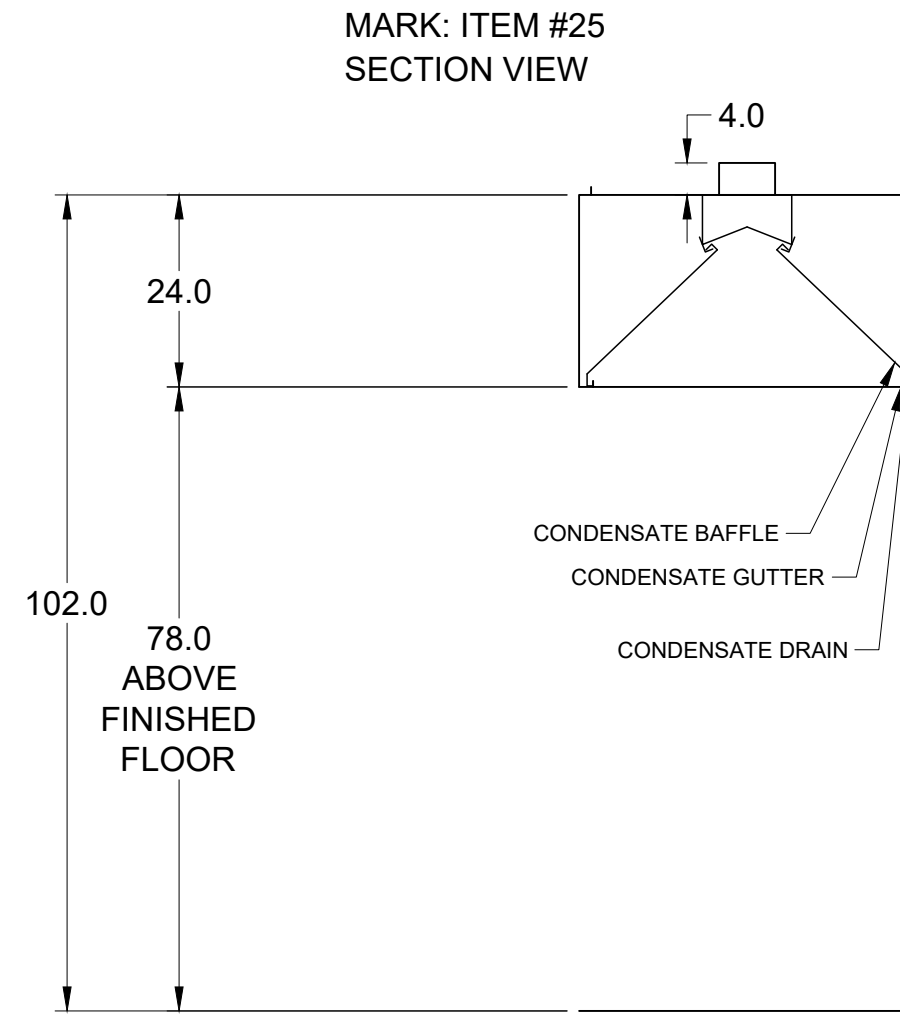
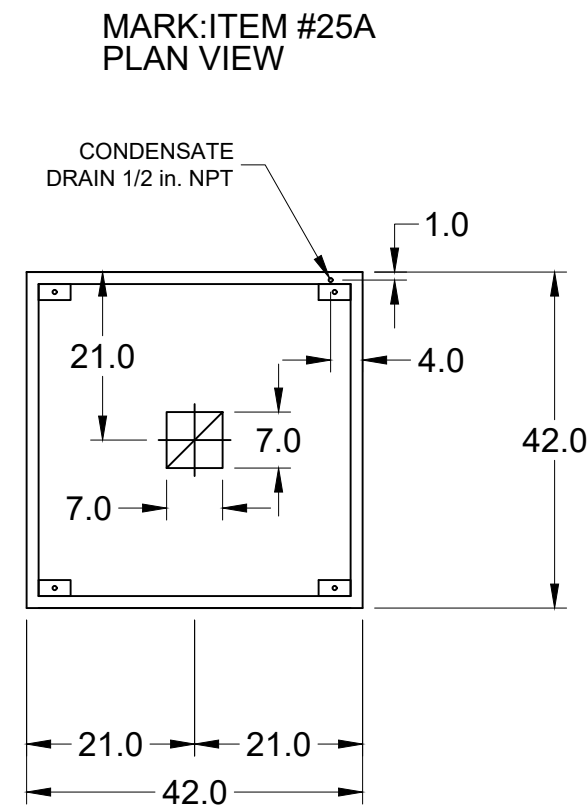
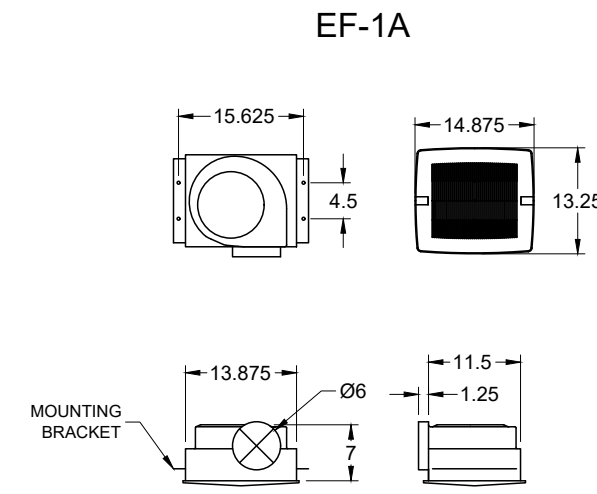
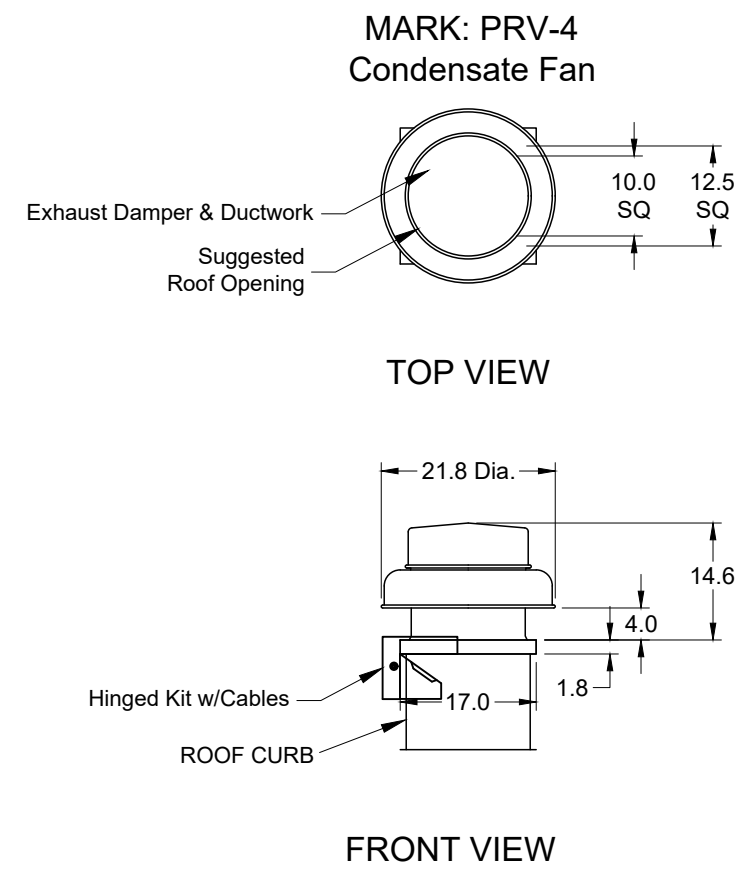
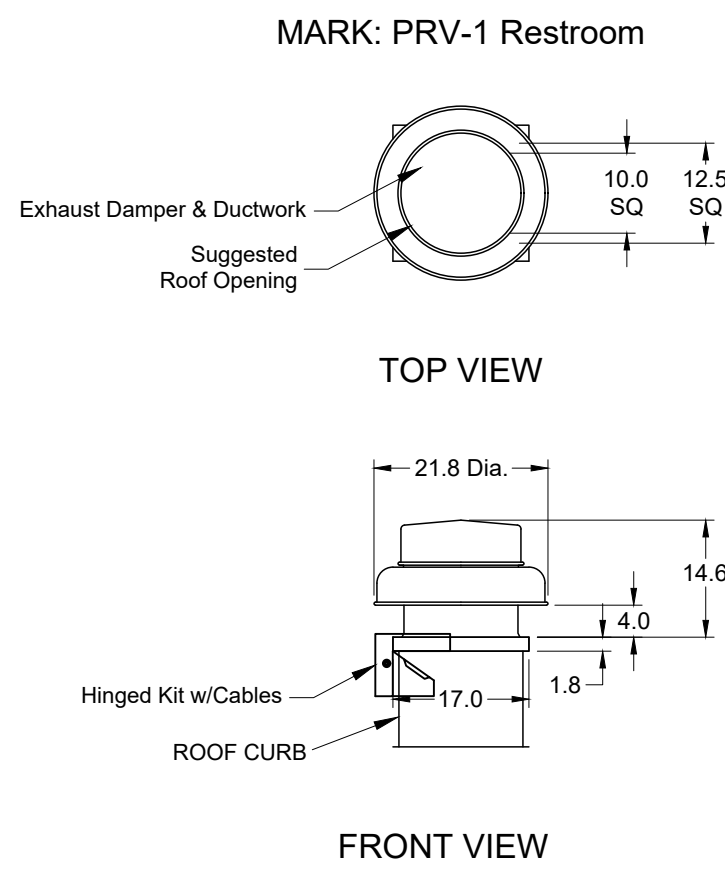


KITCHEN HOOD EXHAUST FAN DETAIL N.T.S.



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.

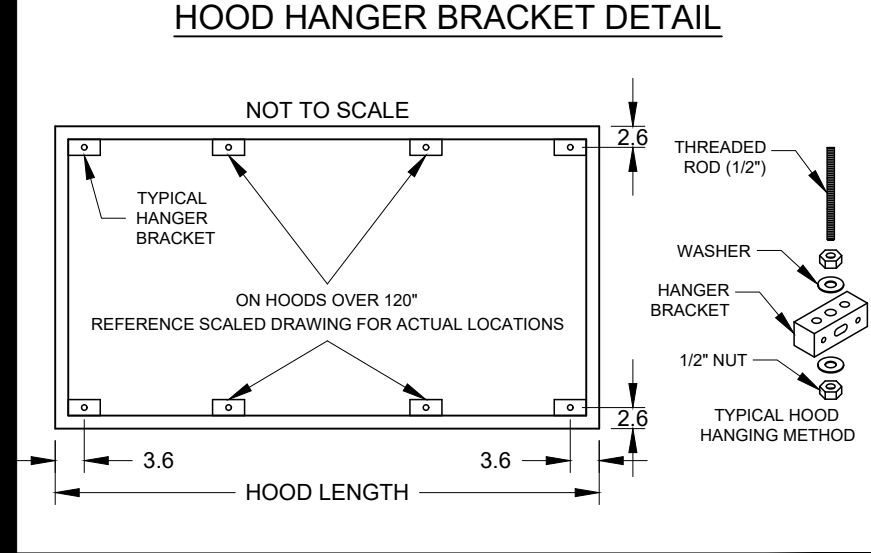
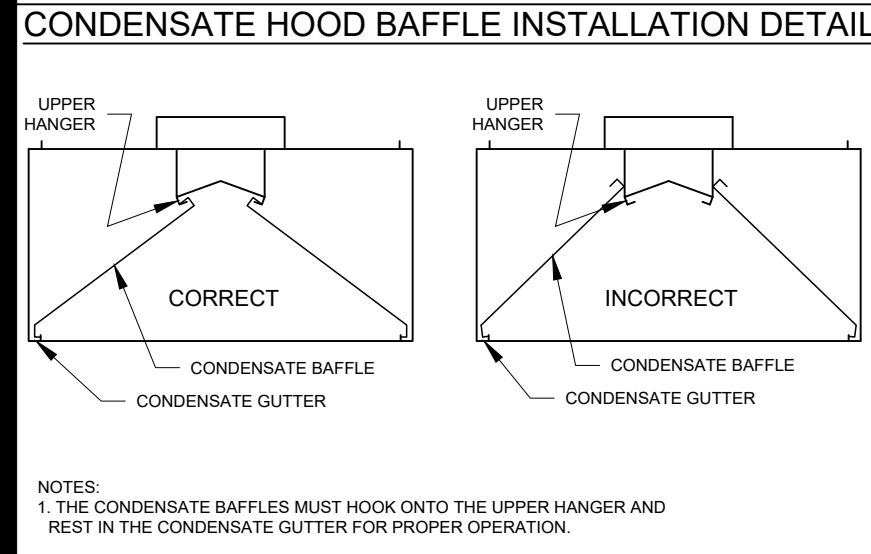


ELECTRICAL CONTROL BOX		MARK: KFCC	
DESCRIPTION / ACCUREX MODEL	EXHAUST FAN QTY	SUPPLY FAN QTY	POWER FREQUENCY
KITCHEN FAN CONTROL CENTER / XFCC SHIP LOOSE / SHIP LOOSE FOR REMOTE MOUNTING	2	0	60 CYCLE
CONTROL PANEL ENCLOSURE - 16 GA 304 STAINLESS STEEL ENCLOSURE (NEMA-1) - DIMENSIONS 12 X 18 X 6			
WIRING DIAGRAM # 1100-2-20			
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 #852883, WIRING DIAG. #Z3905336			
TYPE 2 KITCHEN HOOD		MARK: ITEM #25	
HOOD NO.	ACCUREX MODEL	HOOD DIMENSIONS	GREASE CUP OR DRAIN
1	XD3-42-S	SECTION LENGTH 42.0 IN. WIDTH 42 IN. HEIGHT 24 IN.	RIGHT NA
CONDENSATE HOOD - DOUBLE BAFFLE		TOTAL WEIGHT	SECTION LOCATION
		224.0 LBS.	NA
EXHAUST PLENUM COLLARS		VELOCITY	
HOOD SECTION #	COLLAR #	DISTANCE TO END (IN.)	WIDTH (IN.)
1/1	21	7	7
TOTAL EXHAUST CFM - SECTION 1		DIA. (IN.)	VOLUME (CFM)
		350	0.127
		350.0	100.0 CFM / FT
OPTIONS AND ACCESSORIES			
304 STAINLESS STEEL 100% CONSTRUCTION			
FACTORY MOUNTED EXHAUST COLLAR(S)			

EQUIPMENT SCHEDULE		MARK: PRV-1 Restroom	
Qty	Accurex Model	Volume (CFM)	SP (in wg)
1	XRED-095-D	375	0.5
		FRPM	Operating Power (hp)
		1479	0.060
		Weight (Lb.)	Size (hp)
		43	0.0667
		V/C/P	End: Motor RPM
		11560/1	OP
		1550	1
		WINDINGS	FLA
		1	NA
OPTIONS AND ACCESSORIES			
ULCUL 705 Listed - "Power Ventilators"			
Switch, NEMA-1, Toggle, Shipped with unit			
Hinged Curb Cap Kit w/Cables (PN 851018) (Shipped Loose)			
Curb Seal (Attached)			
Damper, WD-100-P8-10X10, Gravity Operated (Loose)			
Solid State Speed Control, Mounted and Wired (PN SWSSC)			
Roof Curb-Galv., GPI-17-10-G12, Undersized 1.5" total			

EQUIPMENT SCHEDULE		MARK: PRV-4 Condensate Fan	
Qty	Accurex Model	Volume (CFM)	SP (in wg)
1	XRED-095-D	350	0.5
		FRPM	Operating Power (hp)
		1455	0.07
		Weight (Lb.)	Size (hp)
		43	0.0667
		V/C/P	End: Motor RPM
		11560/1	OP
		1550	1
		WINDINGS	FLA
		1	NA
OPTIONS AND ACCESSORIES			
ULCUL 705 Listed - "Power Ventilators"			
Switch, NEMA-1, Toggle, Shipped with unit			
Hinged Curb Cap Kit w/Cables (PN 851018) (Shipped Loose)			
Curb Seal (Attached)			
Damper, WD-100-P8-10X10, Gravity Operated (Loose)			
Solid State Speed Control, Mounted and Wired (PN SWSSC)			
Roof Curb-Galv., GPI-17-10-G12, Undersized 1.5" total			

EQUIPMENT SCHEDULE		MARK: EF-1 Condensate Fan	
Qty	Accurex Model	Volume (CFM)	SP (in wg)
2	XCR-880	75	0.125
		FRPM	Operating Power (hp)
		885	0.01
		Weight (Lb.)	Size (hp)
		10	0.0
		V/C/P	End: Motor RPM
		11560/1	OP
		900	1
		WINDINGS	FLA
		1	NA
OPTIONS AND ACCESSORIES			
ULCUL 705 Listed - Electric fan			
Solid State Speed Control, 6.0 amp, mounted and wired			
Round Hooded Wall cap, (PN WC-6) Shipped loose			
Designer Galle			
Round duct connection			
Polypropylene Wheel Material			
Energy Star Rated			



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.

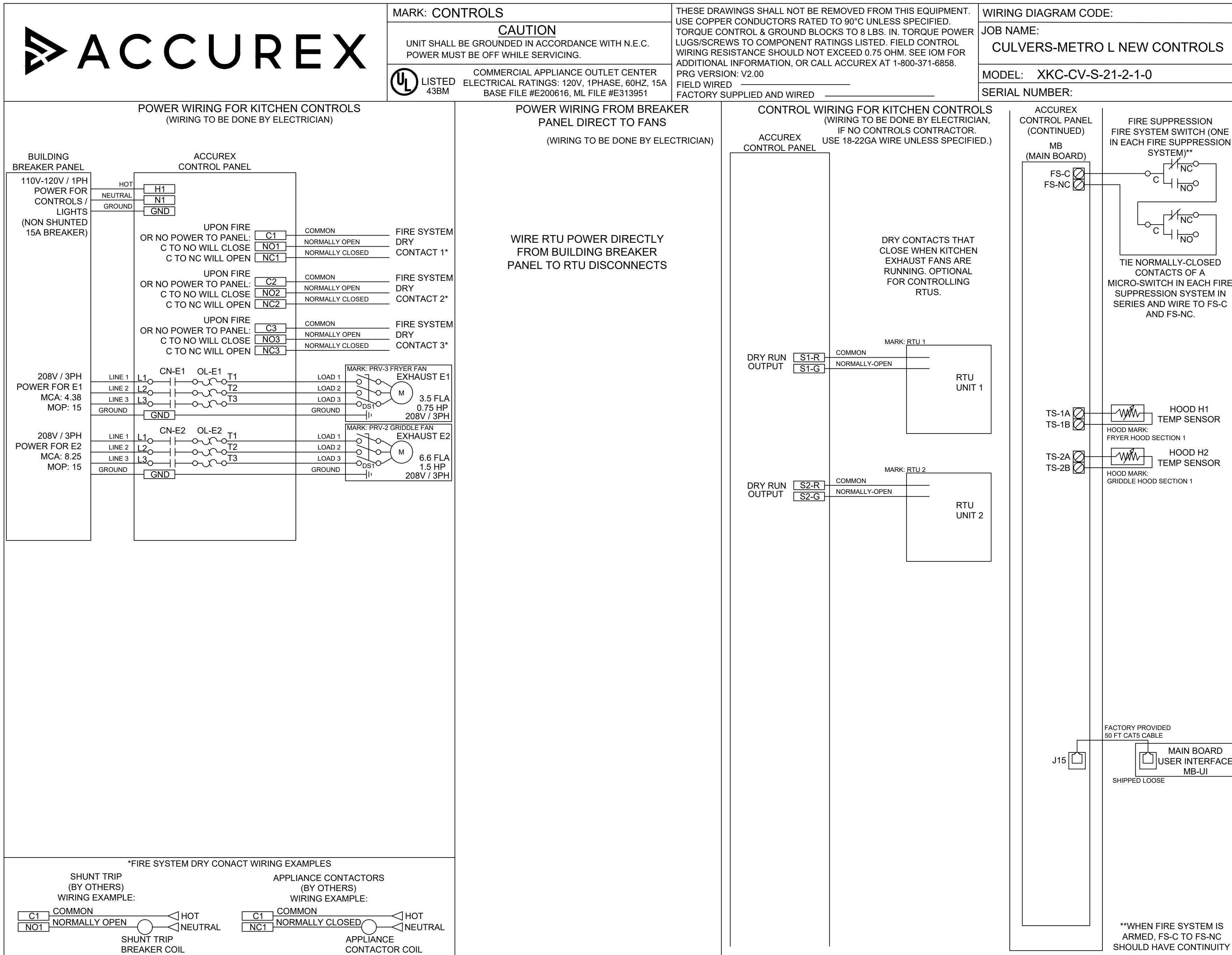
Exhaust and supply air volumes are to be maintained within -5% to +10% tolerance of values indicated. Static pressure(s) indicated are for the ventilator at the duct connection(s) only.

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

HENRICKSON ARCHITECTURE + PLANNING
 2325 Belmont Center Dr., Ste. B
 Belmont, MI 49306
 616.458.5554

WOLVERINE BUILDING GROUP
 4045 Bardon SE, Grand Rapids, MI 49512
 616.940.3360

Metro M - 2021 - Customized
 BROWN AVE
 LAKE ORION, MICHIGAN

Culver's

REVIEW • 10.27.21

NOT FOR CONSTRUCTION

DRAWN BY: • ...
 CHECKED: • DSH

HVAC HOOD, FAN & FIRE SUPPRESSION

PROJECT No. • 210303

M-5

