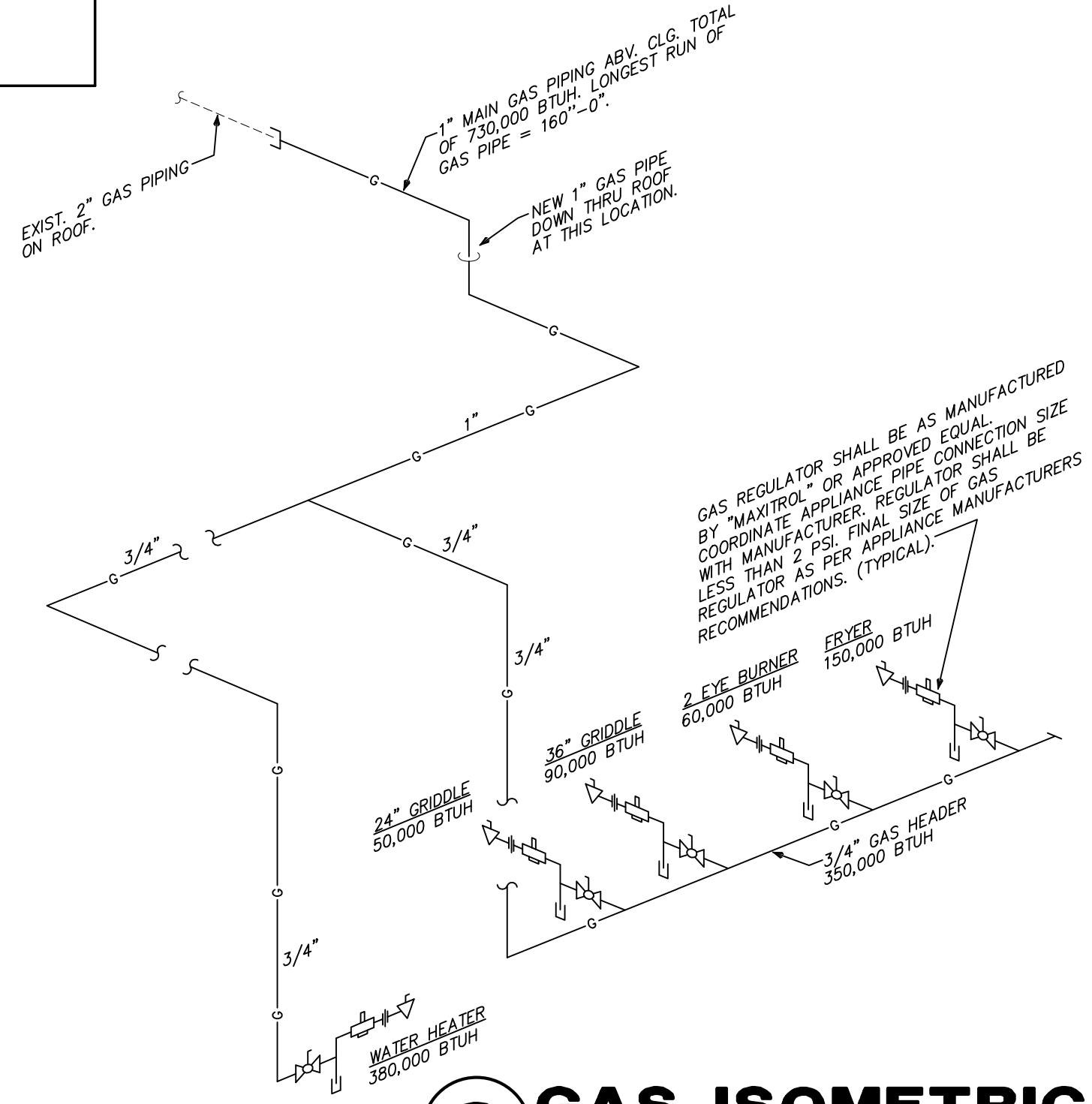


GENERAL GAS PIPING NOTES

1. GAS PIPING AND FITTINGS SHALL BE SCHEDULE 40 BLACK IRON WITH MALLEABLE IRON FITTINGS. SELECTED COUPLERS OR UNIONS SHALL BE UTILIZED WHEN PIPING OF DISSIMILAR METAL IS CONNECTED. EXTERIOR GAS PIPING ON ROOF SHALL BE PAINTED WITH YELLOW "RUSTOLEUM" PAINT. EXPOSED GAS PIPING ON BANK WALL SHALL BE "RUSTOLEUM" PAINTED TO MATCH BUILDING. GAS PIPING CONNECTIONS SHALL BE THREADED UNLESS OTHERWISE REQUIRED BY CODE.
2. GAS PIPING SYSTEM SHALL BE INSTALLED TO THE REQUIREMENTS OF THE AGA PAMPHLET "INSTALLATION OF GAS APPLIANCES AND GAS PIPING" AND THE NFPA STANDARD #54. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS AND PAY ALL FEES WITH THE "LOCAL" GAS COMPANY FOR THE INSTALLATION OF THE GAS METER, GAS SERVICE, AND ITS ACCESSORIES NECESSARY FOR A COMPLETE SYSTEM.
3. GAS PIPING SHALL BE TESTED IN ACCORDANCE WITH THE PROCEDURES DESCRIBED IN NFPA #54, AND ANY OTHER TESTS REQUIRED BY THE LOCAL BUILDING DEPARTMENT AND/OR THE LOCAL GAS UTILITY COMPANY.
4. THE INSTALLING SUBCONTRACTOR SHALL BE LICENSED BY THE STATE FOR THE INSTALLATION OF GAS PIPING.
5. RUNOUT PIPING, FROM THE MAIN PIPING TO APPLIANCES, SHALL BE WITH AN INVERTED TRAP CONNECTION AT THE MAIN.
6. A 12" DIRT LEG, AND A GAS COCK, SHALL BE PROVIDED AT ALL GAS APPLIANCES.
7. ALL EXPOSED GAS PIPING SHALL BE IDENTIFIED BY A YELLOW LABEL, MARKED "GAS" IN BLACK LETTERS. THE MARKERS SHALL BE AT INTERVALS NOT EXCEEDING 6'.
8. ALL GAS BURNING EQUIPMENT SHALL BE INSTALLED PER NFPA #58, NFPA #54 (L.P.G.) OR NFPA #96 (COMMERCIAL COOKING EQUIPMENT).
9. GAS PIPE SIZES 2-1/2" AND GREATER SHALL BE WELDED, IF REQUIRED BY CODE.
10. GAS CONNECTIONS PER ANSI Z21.69.

GAS PIPE LEGEND	
	BALL VALVE
	DRP LEG
	REGULATOR/OPD AS REQUIRED
	UNION
	QUICK DISCONNECT

NOTE:
ALL NATURAL GAS PIPING IS SIZED BASED ON GAS PIPING WITH AN INITIAL PRESSURE OF 2 PSI. GAS PIPING IS SIZED AS PER 2012 NCGC TABLE 402.4(3).
• CONTRACTOR SHALL VERIFY FINAL GAS PRESSURES AND CONNECTIONS IN FIELD WITH LOCAL GAS COMPANY.



3 GAS ISOMETRIC
NO SCALE

AIR DEVICE SCHEDULE (TRANE NATIONAL ACCOUNT)

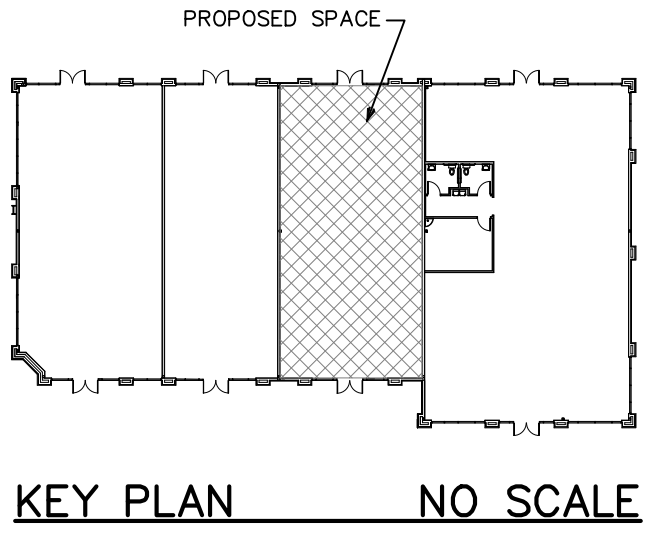
MARK	* TITUS MODEL NO.	MODULE SIZE	FACE SIZE	NECK SIZE	FLEX SIZE	TYPE	NOTES
A	TMSA-3	12"x12"	-	6"	6"	SUPPLY	1,3,5,10,11,12
B	TMSA-AA-3	24"x24"	-	6"	6"	SUPPLY	1,2,3,4,6,11,12
C	TMSA-AA-3	24"x24"	-	8"	8"	SUPPLY	1,2,3,4,6,11,12
D	TMSA-AA-3	24"x24"	-	10"	10"	SUPPLY	1,2,3,4,6,11,12
E	PAR-AA-3	24"x24"	-	22"x22"	14"	SUPPLY	2,3,4,6,7,11,12
F	50FF-3	48"x24"	-	44"x20"	-	RETURN	2,3,4,6,8,9,11,12
G	50FF-3	24"x24"	-	20"x20"	-	RETURN	2,3,4,6,8,9,11,12
H	50F-1	-	14"x14"	12"x12"	-	EXHAUST	3,5,6,9,11,12
I	TMSA-AA-3	24"x24"	-	10"	10"	SUPPLY	2,3,4,6,11,12,16

- NOTES
1. 4-WAY THROW PATTERN UNLESS NOTED OTHERWISE.
 2. FRAME SHALL FIT LAY-IN CEILING MODULE.
 3. PROVIDE AND INSTALL MANUAL VOLUME DAMPER.
 4. DAMPER LOCATED IN DUCTWORK.
 5. FRAME SHALL BE FOR DRYWALL INSTALLATION.
 6. ALUMINUM CONSTRUCTION.
 7. PERFORATED SUPPLY GRILLE. PROVIDE INSULATED PLENUM ABOVE W/ SIDE ENTRY.
 8. HINGED FILTER TYPE GRILLE.
 9. EGGRATE GRILLE.
 10. PROVIDED WITH A TRM RAPID MOUNT PLASTER FRAME.
 11. WHITE FINISH.
 12. G/C (OR FRANCHISE PARTNER) PROVIDED.
 13. DOUBLE DEFLECTION, FRONT BLADES PARALLEL TO LONG DIMENSION.
 14. DIRECT SPIRAL DUCT-MOUNTED REGISTER, AIR SCOOP DAMPER.
 15. 35° DEG FIXED DEFLECTION DUCT MOUNTED.
 16. 3-WAY THROW PATTERN.
- * OR APPROVED EQUAL

AIR BALANCE SCHEDULE

OUTSIDE	OUTSIDE AIR	RETURN AIR	SUPPLY AIR	EXHAUST AIR	RESULTING PRESSURES
RTU #1	993 (33%)	2007	3000		+993
RTU #2	630 (12%)	2370	3000		+630
EF-1 (HOOD 1)				2600	-2600
EF-2 (TLT. RMS.)				200	-200
SF-1 (HOOD 1)	2100				+2100
TOTAL	3723	4377	6000	2800	+923

2 FLOOR PLAN - GAS PIPING
SCALE: 1/4"=1'-0"



HVAC SYMBOLS LEGEND

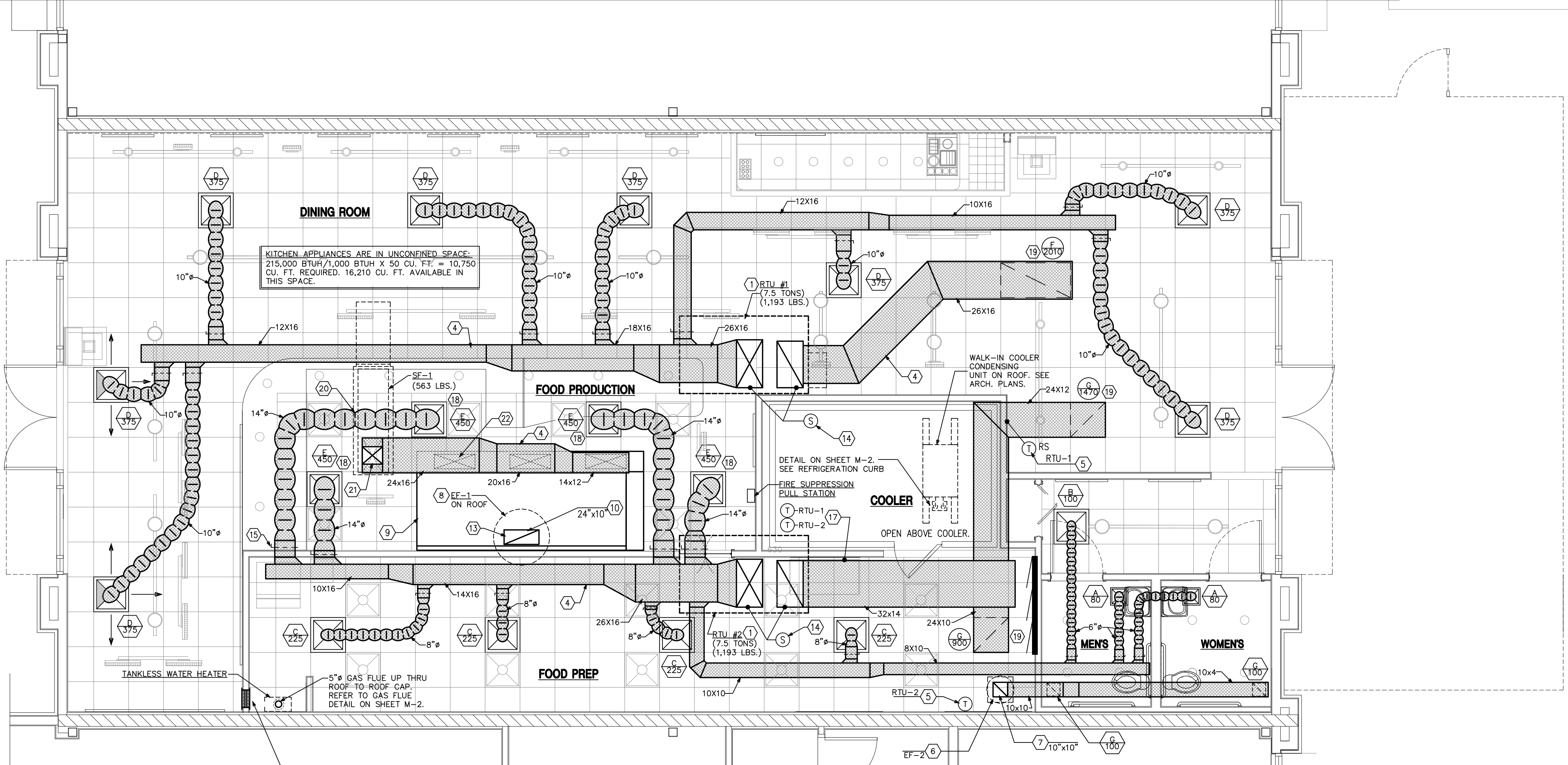
	THERMOSTAT, MTD +60" AFF
	THERMOSTAT REMOTE SENSOR
	EXHAUST FAN
	DUCT SMOKE DETECTOR
	TRANSITION
	TURNING VANE
	45° BRANCH DUCT TAKE-OFF
	FIRE DAMPER
	RETURN REGISTER
	SUPPLY DIFFUSER
	RETURN AIR GRILLE
	SUPPLY REGISTER
	AIR FLOW DIRECTION
	ROOF MTD. EXH. FAN
	DUCT TURN DOWN
	DUCT TURN UP
	FLEXIBLE DUCT

H.V.A.C. ABBREVIATION LEGEND

A/C	AIR CONDITIONER	REV.	REVISION	A.H.U.	AIR HANDLING UNIT
DN.	DOWN	N.T.S.	NOT TO SCALE	D.G.	DOOR GRILLE
EXH.	EXHAUST	MFG.	MANUFACTURER	F.D.	FIRE DAMPER
EXT.	EXTERIOR	R/A	RETURN AIR	DSP.	DISPOSABLE
E.F.	EXHAUST FAN	GR.	GRILLE	V.C.D.	VOLUME CONTROL DAMPER
A.F.F.	ABOVE FINISH FLOOR	C.D.	CEILING DIFFUSER	F/A	FRESH AIR
F.F.	FINISH FLOOR	REG.	REGISTER	S.P.	SAFE PAN
TYP.	TYPICAL	C.U.	CONDENSING UNIT	C.D.	CONDENSATE DRAIN

MECHANICAL PLAN KEY NOTES

1. ROOFTOP UNIT. REFER TO SCHEDULES ON SHEET M-2.
2. NOT USED.
3. NOT USED.
4. DUCTWORK LOCATED ABOVE CEILING. COORDINATE W/ STRUCTURE. EXTERNALLY WRAP W/ DUCT INSULATION.
5. THERMOSTAT REMOTE SENSOR FOR UNIT DESIGNATED. MOUNT ON WALL @ 48" AFF.
6. RESTROOM EXHAUST FAN ON ROOF. CONTROL W/ LIGHTS. COORDINATE W/ ELECTRICAL CONTRACTOR. REFER TO MECHANICAL ROOF PLAN.
7. EXHAUST AIR DUCT UP TO FAN ON ROOF. COORDINATE W/ STRUCTURE.
8. EXHAUST FAN, ON ROOF, FOR TYPE 1 KITCHEN EXHAUST HOOD. REFER TO HOOD DRAWINGS AND SPEC'S ON SHEET M-3 & M-4.
9. TYPE 1 EXHAUST HOOD, FURNISHED BY OWNER, INSTALLED BY MECHANICAL CONTRACTOR. REFER TO HOOD DRAWINGS & SPECIFICATIONS ON SHEET M-3 & M-4.
10. PROVIDE 16 GA. EXTERNALLY WELDED LIQUID TIGHT KITCHEN HOOD EXHAUST DUCT. EXTEND UP TO FAN ON ROOF & DOWN TO HOOD CONNECTION. ENCAPSULATE PER DETAIL 3/M2.0.
11. NOT USED.
12. GAS LINE UP TO ROOF.
13. WELD DUCT TO HOOD COLLAR.
14. FACTORY INSTALLED SMOKE DETECTOR IN SUPPLY & RETURN AIR DUCTS FOR UNIT SHUTDOWN. CONTRACTOR SHALL PROVIDE AUDIBLE AND VISUAL ALARM IN A CONSTANTLY OCCUPIED LOCATION. ALARM SHALL BE LABELED "DUCT TROUBLE". TYPICAL FOR RTU-1 & RTU-2.
15. PROVIDE MANUAL VOLUME CONTROL DAMPER, TYPICAL.
16. NOT USED.
17. THERMOSTATS, COORDINATE WITH OFFICE FURNITURE.
18. PROVIDE INSULATED PLENUM ABOVE AIR DEVICE. TYPICAL FOR THIS TYPE OF DEVICE. PERFORATED DIFFUSERS SURROUNDING HOOD.
19. PROVIDE PLENUM ABOVE RETURN AIR GRILLE, TYPICAL.



1 FLOOR PLAN - MECHANICAL
SCALE: 1/4"=1'-0"

WATER HEATER IS IN CONFINED SPACE. 380,000 BTUH/4,000 BTUH X 50 CU. FT. = 19,000 CU. FT. REQUIRED. ONLY 4,100 CU. FT. AVAILABLE IN THIS SPACE.
WATER HEATER COMBUSTION AIR CALC. TOTAL BTU OF WATER HEATER IS 380,000 BTU. ACCORDING TO NFPA 54, CATEGORY OF EQUIPMENT IN CONFINED SPACE WITH ALL AIR FROM INSIDE THE BUILDING, REQUIRES 150 INCH PER 4,000 BTUH. THIS SPACE HAS 4,100 CU. FT. (380,000 BTUH/4,000 BTUH) = 95 SQ. IN. THE 12X12 LOUVERS HAVE 144 SQ. INCHES W/A 80% FREE AREA FACTOR, OR 115.2 SQ. INCHES AVAILABLE.
PROVIDE:
(2) 12X12 "TITUS" MODEL 355'S TRANSFER GRILLES (1) HIGH 12" BELOW CLG. (1) LOW 12" A.F.F. FOR WATER HEATER COMBUSTION AIR.

OUTSIDE AIR CALCULATIONS										
THE FOLLOWING IS BASED ON 2012 NCMC TABLE 403.3 MINIMUM VENTILATION RATES FOR OUTSIDE AIR REQUIREMENTS					MINIMUM OUTSIDE AIR REQUIRED (CFM)			MAXIMUM OUTSIDE AIR REQUIRED (CFM)		
UNIT LABEL	ROOM	OCCUPANCY CATEGORY	AREA	ESTIMATED MAX. OCCUPANCY	AREA CALC	E _z	TOTAL	PEOPLE + AREA CALC	E _z	TOTAL
RTU #1	DINING	DINING	1,130	70 PEOPLE PER 1,000 S.F./7.5 CFM PER PERSON	(1,130 X .18) = 203 TOTAL AREA	0.8	203/0.8 = 253	(79X7.5) + (1,130 X .18) = 795 TOTAL AREA	0.8	795/0.8 = 993
RTU #2	FOOD PRODUCTION	KITCHEN	180	0.7 CFM PER SQ. FT.	(180 X .70) = 126 TOTAL AREA			(N/A) + (180 X .70) = 126 TOTAL AREA		
RTU #2	FOOD PREP	KITCHEN	350	5 PEOPLE PER 1,000 S.F./ (N/A)	(540 X .70) = 378 TOTAL AREA			(N/A) + (540 X .70) = 378 TOTAL AREA		
					RTU #2 TOTAL = 504	0.8	504/0.8 = 630	RTU #2 TOTAL = 504	0.8	504/0.8 = 630

* E_z (SYSTEM VENTILATION EFFICIENCY) AS PER 2012 NCMC TABLE 403.3.2.3.2

ROOFTOP UNIT SCHEDULE (TRANE NATIONAL ACCOUNT)																
MARK	MANUFACTURER/ MODEL	COOLING			EFFICIENCY	FAN			HEATING		CONDENSER		ELECTRICAL		WEIGHT (AS SPECIFIED)	NOTES
		TOTAL (MBH)	SENSIBLE (MBH)	TONS		CFM	E.S.P.	HP	INPUT (MBH)	OUTPUT (MBH)	TEMP. (°B/°F)	EVAPORATOR (°B/°F)	VOLTAG/PHASE	MCA/MOP		
RTU-1	TRANE YHC092A3	89.99	67.98	7.5	11.5	3000	1.0	2	120.0	97.2	95° F	80°F / 67°F	208V/ 3Ø	36.1/ 50	1193 LBS	1 THRU 13
RTU-2	TRANE YHC092A3	89.99	67.98	7.5	11.5	3000	1.0	2	120.0	97.2	95° F	80°F / 67°F	208V/ 3Ø	36.1/ 50	1193 LBS	1 THRU 7,9 THRU 13
NOTES																
1. FULL PERIMETER NON-INSULATED ROOF CURB. 2. OUTDOOR AIR INTAKE HOOD. 3. ECONOMIZER W/ ENTHALPY CONTROL & BAROMETRIC RELIEF, (EXCEPT IN HIGH HUMID AREAS). 4. THROUGH BASE ELECTRICAL & GAS. 5. DISCONNECT SWITCH (FACTORY MOUNTED). 6. GFI RECEPTACLE (FIELD WIRED). 7. HINGED DOORS. 8. DEHUMIDIFICATION HOT GAS REHEAT COIL AND CONTROLS. (WHERE REQUIRED). 9. DISCHARGING AIR SENSING KIT & CONTROLS. 10. HAIL GUARDS. 11. SUPPLY & RETURN AIR SMOKE DETECTORS. 12. 2" PLEATED AIR FILTERS. 13. CORROSION PROTECTION (WITH-IN 50 MILES OF THE COAST) G.C. (OR FRANCHISE PARTNER) PROVIDED, CALL TRANE NATIONAL ACCOUNTS AT: (800) 229-4178 FOR EQUIPMENT INFORMATION.																

FAN SCHEDULE									
MARK	MANUFACTURER	MODEL NUMBER	CFM	STATIC PRESSURE	RPM	HP OR WATTS	VOLTAGE/PHASE	FLA	CURB SIZE
EF-1	CAPTIVE AIRE	NCA16 FA	2600	1.50"	1274	1.5	208V/ 3Ø	2.3	28"x28"x20"
EF-2	COOK	100C10DH	200	0.25"	905	0.04	115V/ 1Ø	—	17"x17"x12"
SF-1	CAPTIVE AIRE	A1-D.250-G10	2100	0.50"	1069	1.5	208V/ 3Ø	2.3	21"x21"x20"
NOTES									
1. UP-BLAST CENTRIFUGAL. 2. 20 GA. VENTED ROOF CURB. 3. UL 762. 4. VARIABLE SPEED CONTROL. 5. DIRECT DRIVE. 6. WEATHER PROOF DISCONNECT SWITCH. 7. HINGED FAN. 8. FAN & CURB FURNISHED W/ KITCHEN HOOD. 9. DOWN BLAST, DIRECT DRIVE, CENTRIFUGAL. 10. UL 705. 11. DISCONNECT. 12. GAS FIRED TEMPERED MAKE-UP AIR UNIT. (112/781 BTU) 13. BY TRANE.									

- ### MECHANICAL GENERAL NOTES
- ALL RECTANGULAR, ROUND AND FLEXIBLE DUCTS SHALL BE SIZED AS SHOWN ON THESE DRAWINGS. MINIMUM INTERNAL DIMENSIONS ARE GIVEN.
 - ALL SUPPLY, RETURN & OUTSIDE AIR DUCTS ARE SIZED FOR AIR VOLUME AND STATIC PRESSURE DROP WITHOUT INTERIOR INSULATION. SHOULD INTERIOR INSULATION BE USED, THE CONTRACTOR SHALL INCREASE THE DUCT SIZE ACCORDINGLY.
 - ALL SUPPLY, RETURN AND OUTSIDE AIR DUCTS SHALL BE INSULATED. INSULATION SHALL BE USED. INSULATION SHALL BE 2" THICK / 1 POUND PER CUBIC FOOT DENSITY R = 8.0 INSTALLED OR APPROVED EQUAL.
 - FLEXIBLE DUCTWORK SHALL BE SIZED TO MEET UPC #366 UL CLASS / FIBERGLASS SORM REINFORCED METALIZED POLYESTER OUTER JACKET, DOUBLE LAMINATION OF POLYESTER W/ STEEL HELIX, DOUBLE LAYER CORE, R-4.0 INSTALLED.
 - ALL FLEXIBLE DUCTS SHALL BE CONNECTED TO TRUNK OR BRANCH DUCTS WITH A MINIMUM OF THREE SHEET METAL SCREWS AT EACH CONNECTION AND TAPED TO PROVIDE AN AIR TIGHT SEAL.
 - FLEX DUCT HANGER STRIPS SHALL BE 1" WIDE X 16 GAUGE MINIMUM.
 - THE MAXIMUM ALLOWABLE LENGTH OF FLEXIBLE DUCT SHALL BE 6'-0".
 - INSTALL TURNING VANES IN ALL 90° DUCT ELBOWS AND AT ALL DUCT "TEES".
 - INSTALL ADJUSTABLE AIR VOLUME EXTRACTORS AT ALL BRANCH TO MAIN DUCT CONNECTIONS.
 - PROVIDE PAINTED (3" H.) IDENTIFICATION ON ALL RTU'S, FANS & CONDENSING UNITS. IDENTIFICATION SHALL INCLUDE DEVICE NUMBER & AREA SERVED (ie. RTU-1/ DINING).
 - ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED ACCORDING TO THE MOST RECENTLY PUBLISHED ASHRAE AND SMACNA STANDARDS.
 - RECTANGULAR METAL DUCT SHALL BE MILD GALVANIZED STEEL.
 - MANUFACTURERS MINIMUM CLEARANCE RECOMMENDATIONS SHALL BE MAINTAINED ON ALL EQUIPMENT AND DUCTWORK.
 - THE CONTRACTOR SHALL CAREFULLY COORDINATE THE LOCATION OF ALL DUCTS, GRILLES, DIFFUSERS, ETC. WITH THE CEILING GRID AND THE PLUMBING AND FRAMING CONTRACTORS.
 - ALL KITCHEN RETURN AIR GRILLES SHALL BE EASILY REMOVABLE FOR CLEANING.
 - ALL CONTROL WIRING SHALL BE BY THE HVAC CONTRACTOR. CONTROL WIRING SHALL BE SHIELDED CABLE TO PREVENT ANY ELECTRICAL INTERFERENCE.
 - ALL POWER WIRING SHALL BE BY THE ELECTRICAL CONTRACTOR.
 - EXHAUST FANS SHALL BE FURNISHED WITH BIRD SCREENS, BACKDRAFT DAMPERS AND DISCONNECTS WHERE APPLICABLE AND ACCORDING TO THE SCHEDULE.
 - CONTRACTOR SHALL PROVIDE A THIRD PARTY AIR BALANCING CONTRACTOR FOR SYSTEM BALANCING. BALANCING CONTRACTOR SHALL BE CERTIFIED NEBB OR AABC.
 - THE CONTRACTOR SHALL CAREFULLY COORDINATE ALL THERMOSTAT LOCATIONS WITH INTERIOR FINISHES.
 - THE CONTRACTOR SHALL COORDINATE FULLY WITH ALL OTHER TRADES.
 - THE CONTRACTOR SHALL SUPPLY (6) COPIES OF SHOP DRAWINGS TO COMPLETELY IDENTIFY THE QUALITY OF MATERIALS AND/OR EQUIPMENT INTENDED FOR INSTALLATION. THERE WILL BE NO DRAW UNTIL SHOP DRAWINGS HAVE BEEN SUBMITTED AND REVIEWED BY ARCHITECT/ENGINEER.
 - THE SUBMISSION OF A BID OR PROPOSAL WILL BE CONSIDERED AS EVIDENCE THAT THE CONTRACTOR HAS FAMILIARIZED HIMSELF WITH THE PLANS AND BUILDING SITE. CLAIMS MADE SUBSEQUENT TO THE PROPOSAL FOR MATERIALS AND/OR LABOR DUE TO DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED, UNLESS THESE DIFFICULTIES COULD NOT HAVE BEEN FORESEEN EVEN THOUGH PROPER EXAMINATION HAD BEEN MADE.
 - ALL ROUND TAKE-OFFS FROM RECTANGULAR DUCTS SHALL BE A DAMPERS EXPRESS COMMERCIAL AIR TITE SPIN IN MODEL ATCS1-2 W/ DAMPER OR APPROVED EQUAL.
 - ROOFTOP AIR CONDITIONING UNITS SHALL BE INSTALLED ON FULL PERIMETER ROOF CURBS FURNISHED BY THE GENERAL CONTRACTOR AND INSTALLED BY THE GENERAL CONTRACTOR. GENERAL CONTRACTOR SHALL PROVIDE CURB INSULATION.
 - ALL CONDENSATE DRAIN LINES SHALL BE SLOPED MINIMUM 1/8" PER LINEAR FOOT OF RUN. ALL DRAIN EXITS FROM A/C UNITS SHALL INCLUDE A TRAP AND CLEAN-OUT PLUG. REFER TO DETAIL 3/ M3.0.
 - THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL GAS PIPING AND CONDENSATE DRAINS. ALL GAS LINES SHALL BE SCHEDULE 40 BLACK IRON AND INSTALLED I.A.W. THE LATEST EDITION OF NFPA 30-77 FLAMMABLE AND COMBUSTIBLE LIQUIDS CODE), FIRE PREVENTION CODE AND ANY APPLICABLE STATE OR LOCAL CODES. CONDENSATE LINES SHALL BE INSTALLED USING GALVANIZED PIPE, P.V.C. OR A.B.S.
 - ALL ROOF CURBS FOR FANS, ETC. SHALL BE A MINIMUM OF 12" HIGH. KITCHEN HOOD FAN CURBS MAY NEED TO BE HIGHER TO MAINTAIN CORRECT DISCHARGE HEIGHT OF FAN PER NFPA #99.
 - SHEAVE & PULLEY COMBINATION FOR ALL R.T.U.'S SHALL BE SIZED FOR DESIGN FAN R.P.M.
 - ALL KITCHEN HOOD EXHAUST DUCTWORK WELDS SHALL COMPLY WITH THE LATEST APPLICABLE AWS STANDARDS.
 - PROPERLY SECURE ALL FANS TO CURBS & DUCTWORK. PROVIDE NECESSARY GASKET ON CURBS TO PREVENT WATER PREVENTION.
 - THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF A COMPLETE SYSTEM IN ACCORDANCE WITH THESE DRAWINGS, ALL MANUFACTURER'S INSTALLATION INSTRUCTIONS, THE APPLICABLE BUILDING CODE AND ALL OTHER APPLICABLE STATE, COUNTY AND LOCAL ORDINANCES. THE CONTRACTOR SHALL COORDINATE WITH THE PLUMBING CONTRACTOR FOR THE INSTALLATION OF THE FOLLOWING PUBLICATIONS: SMACNA, ASHRAE, NFPA 90A, 90B, 91 & ANSI B-9.1 MECHANICAL 330.2. ALL DUCTWORK SHALL BE FABRICATED, INSTALLED AND SUPPORTED AS PER SMACNA STANDARDS.
 - PROVIDE NEW FILTERS FOR ALL AIR CONDITIONING EQUIPMENT BEFORE STARTING THEM. REPLACE THEM PRIOR TO FINAL ACCEPTANCE BY OWNER.
 - MECHANICAL PLANS IN GENERAL, ARE DIAGRAMMATIC IN NATURE, AND ARE TO BE READ IN CONJUNCTION WITH ARCH. PLUMBING, ELECTRICAL, AND STRUCTURAL PLANS AND SHALL BE CONSIDERED AS ONE SET OF DOCUMENTS. DUCT AND PIPING OFFSETS, BENDS AND TRANSITIONS WILL BE REQUIRED TO PROVIDE AND INSTALL A COMPLETE FUNCTIONAL SYSTEM AND SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
 - IF ANY ERRORS, DISCREPANCIES OR OMISSIONS APPEAR IN THE DRAWINGS, SPECIFICATIONS OR OTHER CONTRACT DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF SUCH ERROR OR OMISSION. IN THE EVENT OF THE CONTRACTOR FAILING TO GIVE SUCH NOTICE BEFORE CONSTRUCTION AND/OR FABRICATION OF THE WORK, HE WILL BE HELD RESPONSIBLE FOR THE RESULTS OF ANY SUCH ERRORS, DISCREPANCIES OR OMISSIONS AND THE COST OF RECTIFYING SAME.

HVAC UNIT SPECIFICATIONS

HVAC UNITS INSTALLED BY MECHANICAL CONTRACTOR SHALL BE TRANE. ALL UNITS SHALL BE SINGLE PACKAGE TYPE, COMBINATION AIR TO AIR COOLING AND GAS HEATING. EACH UNIT SHALL BE MOUNTED ON A FULL PERIMETER ROOF CURB. FILTERS IN ALL HVAC UNITS SHALL BE 2" THICK PLEATED TYPE, FURNISH W/ ECONOMIZER/ BAROMETRIC RELIEF. UNITS SHALL BE INSTALLED ON MOUNTING CURB WITH ALL DUCTWORK PENETRATING INSIDE PERIMETER OF CURB. UNITS SHALL ALSO BE FURNISHED WITH AUTOMATIC ELECTRIC IGNITION SYSTEM. UNITS SHALL BE FURNISHED WITH INTEGRAL STARTERS.

SEQUENCE OF OPERATION

THE MECHANICAL CONTRACTOR SHALL INSTALL ALL REQUIRED COMPONENTS FOR THE FOLLOWING SEQUENCES OF OPERATION FOR EACH HVAC UNIT. DISCONNECTS SHALL BE FURNISHED AND INSTALLED BY THE UNIT MANUFACTURER.

- UNIT SHALL BE STARTED AND STOPPED THROUGH ITS RESPECTIVE THERMOSTAT.
- ROOM THERMOSTATS SHALL ENERGIZE COOLING AND HEATING SYSTEMS TO MAINTAIN DESIRED SPACE TEMPERATURE.
- M.C. SHALL HOLD (3) TRAINING SESSIONS (SUMMER & WINTER) WITH STORE MANAGER TO INSURE THEIR KNOWLEDGE OF PROPERLY USING THE CONTROLS.

CONTROLS

- PROVIDE TRANE PROGRAMMABLE THERMOSTAT W/ REMOTE SENSOR. THERMOSTAT SHALL PROVIDE TWO STAGE HEATING AND TWO STAGE COOLING.
- THERMOSTATS SHALL PROVIDE CONSTANT FAN DURING OCCUPIED PERIODS AND INTERMITTENT FAN DURING UNOCCUPIED PERIODS. * CONTRACTOR SHALL FULLY INSTRUCT OWNER ON HOW TO PROPERLY PROGRAM INSTALLED THERMOSTATS. IT IS RECOMMENDED THAT DURING OCCUPIED HOURS, THE FANS BE SET TO "ON" IN LIEU OF "AUTO".
- ALL POWER WIRING SHALL BE BY THE ELECTRICAL CONTRACTOR. ALL CONTROL WIRING BY M.C.
- PROVIDE PHENOLIC LABEL ON ALL T-STATS & REMOTE SENSORS.
- THE KITCHEN HOOD EXHAUST FAN & ROOFTOP UNITS SHALL BE INTERLOCKED WITH HOOD CONTROLS BY AN ELECTRICAL INTERLOCK SWITCH. TEMPERATURE SENSOR ON HOOD SHALL AUTOMATICALLY ENERGIZE EXHAUST FANS, MAKE-UP AIR UNIT & ROOFTOP UNIT FANS.

TEST AND BALANCE

THE GENERAL CONTRACTOR SHALL SUBCONTRACT TO AN AIR TEST AND BALANCE CONTRACTOR THE TESTING, ADJUSTING AND BALANCING OF ALL ENVIRONMENTAL SYSTEMS SHOWN OR SPECIFIED ON THE CONTRACT DOCUMENTS. THE WORK SHALL BE PERFORMED BY A FIRM CERTIFIED BY EITHER AABC OR NEBB, AND FOUR (4) COPIES OF THE FINAL REPORT, SUBMITTED ON CERTIFYING AGENCY FORMS, SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR APPROVAL. THE REPORT SHALL BEAR THE CERTIFICATION SEAL OF THE TAB SUPERVISOR IN CHARGE. REPORTS SHALL CONTAIN ALL AIR SIDE BALANCING DATA, INSTRUMENTS USED AND THEIR LATEST CALIBRATION DATES, PERSON(S) PERFORMING THE WORK AND A WRITTEN GUARANTEE THAT ALL TAB WORK WAS PERFORMED IN ACCORDANCE WITH THE CERTIFYING AGENCY STANDARDS AND PROCEDURES. AN INDEPENDENT AIR BALANCING CONTRACTOR MAY PERFORM THIS WORK ONLY UPON WRITTEN SUBMISSION OF QUALIFICATIONS AND SUBSEQUENT APPROVAL BY THE PROJECT ENGINEER.

TRANE NATIONAL ACCOUNT - EQUIPMENT PACKAGE

FOCUS BRANDS HAS A NATIONAL ACCOUNT AGREEMENT WITH TRANE FOR BUNDLED SOLUTIONS. THE HVAC PACKAGE IS A GENERAL CONTRACTOR (OR FRANCHISEE) FURNISHED ITEM, ASSIGNED TO THE INSTALLING MECHANICAL CONTRACTOR. THE INSTALLING CONTRACTOR IS RESPONSIBLE FOR PROPER INSTALLATION AND ONE YEAR LABOR WARRANTY.

FOR COMPLETE INFORMATION ON THE FOLLOWING PACKAGE OF EQUIPMENT CONTACT TRANE NATIONAL ACCOUNTS 1-800-229-4178 (mtn) or EMAIL Focus@trane.com or 1-800-832-9315 (atlanta).

ANY CHANGES OR VARIATIONS TO THE ORIGINAL EQUIPMENT PACKAGE DESCRIBED BELOW THAT WOULD AFFECT THE HVAC EQUIPMENT PACKAGE SHOULD BE BROUGHT TO THE ATTENTION OF TRANE NATIONAL ACCOUNTS AT TIME OF QUOTATION.

HEATING AND COOLING EQUIPMENT PACKAGE:

INCLUDES ALL AIR CONDITIONERS AS SPECIFIED ON THE PLANS (INCLUDING CONTROLS), AIR DEVICE PACKAGE:

INCLUDES ALL REGISTERS, GRILLES AND DIFFUSERS PER PLANS.

CONTROLS PACKAGE:

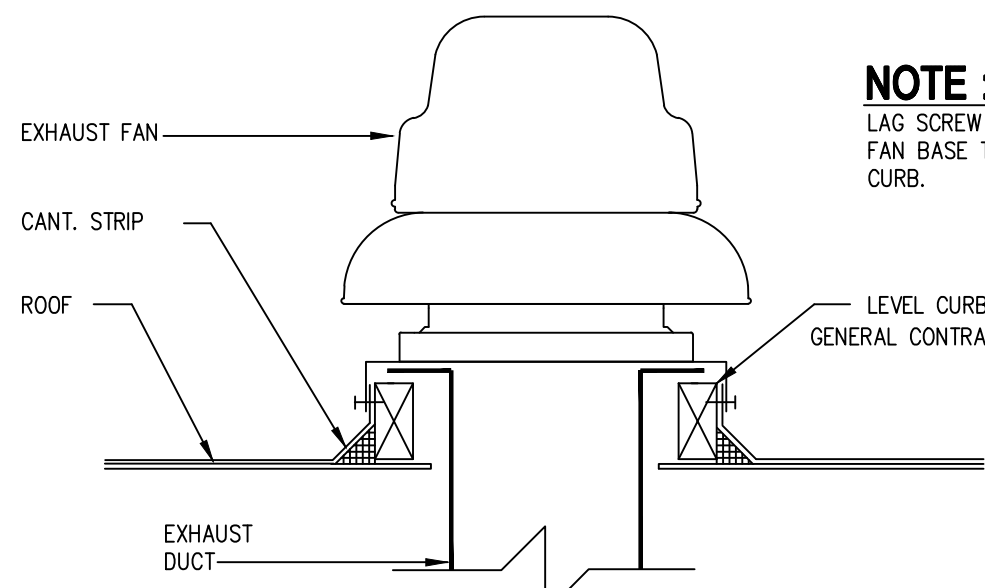
INCLUDES PROGRAMMABLE THERMOSTATS OR DDC CONTROLS FOR EACH HEATING/COOLING UNIT.

NOTE: ORDERING PROCEDURES

TRANE NATIONAL ACCOUNTS DEPARTMENT WILL ORDER EQUIPMENT AND COORDINATE SHIPMENT WITH THE SUCCESSFUL HVAC CONTRACTOR. THE HVAC CONTRACTOR WILL BE RESPONSIBLE FOR EQUIPMENT WARRANTY, DELIVERY COORDINATION, RECEIVING AND INSTALLATION AS DESCRIBED IN THE SPECIFICATIONS.

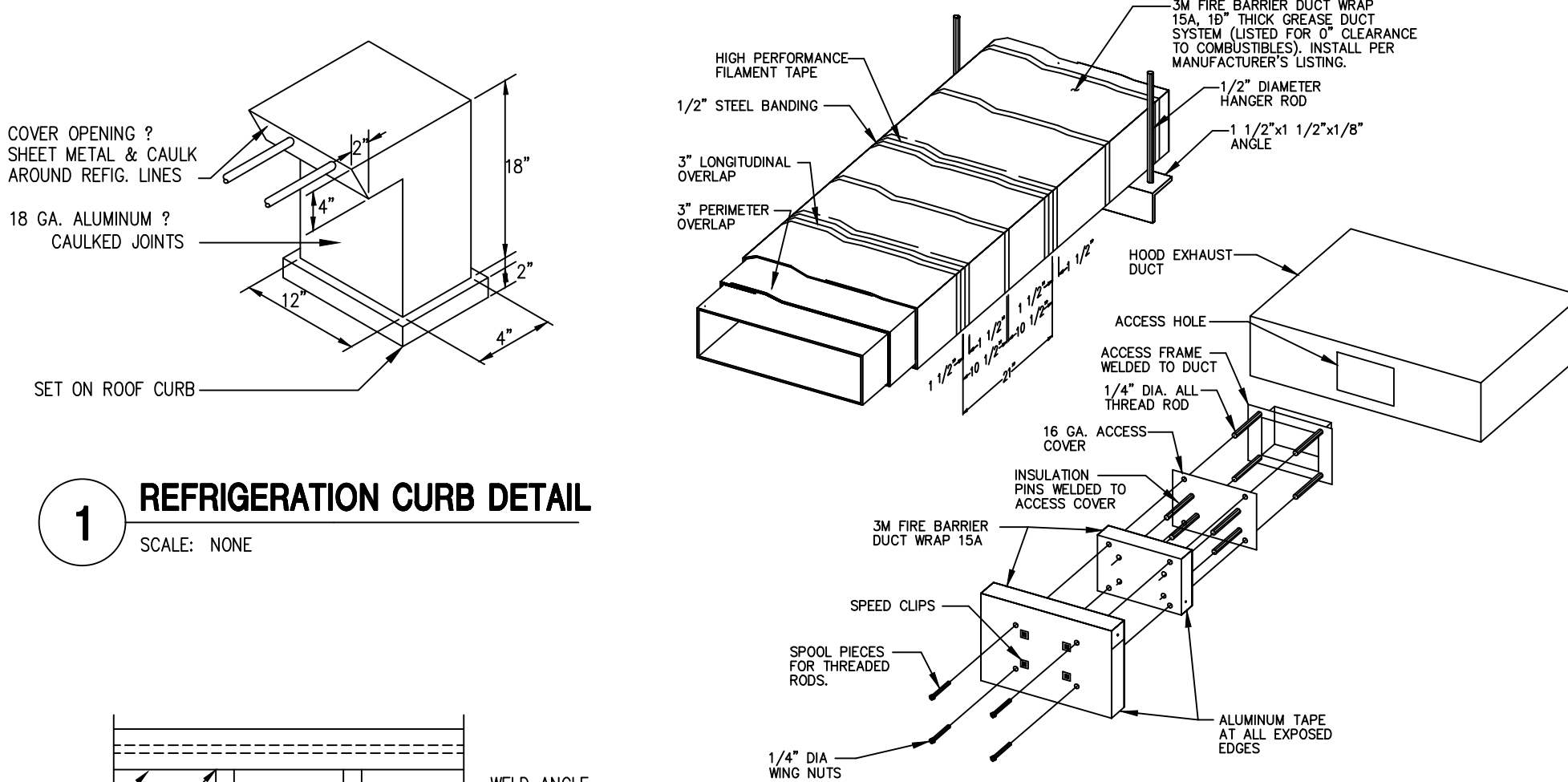
NOTE: EQUIPMENT START-UP INSTRUCTION

INSTALLING CONTRACTOR IS RESPONSIBLE FOR START-UP, RUNNING THE UNITS & MAINTAINING THE AIR FILTERS DURING THE CONSTRUCTION PHASE. ONE WEEK PRIOR TO THE SYSTEM TRAINING, THE CONTRACTOR WILL COORDINATE POST START-UP INSPECTION WITH TRANE. THE CONTRACTOR SHALL PROVIDE ONE SERVICE TECHNICIAN TO WORK WITH TRANE UPON COMPLETION. TRANE WILL PROVIDE A WRITTEN REPORT TO THE GENERAL CONTRACTOR.



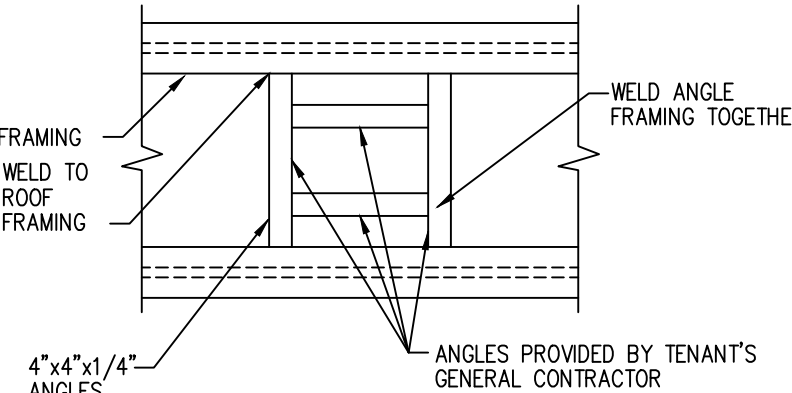
2 RESTROOM FAN EXHAUST DETAIL

SCALE: NONE



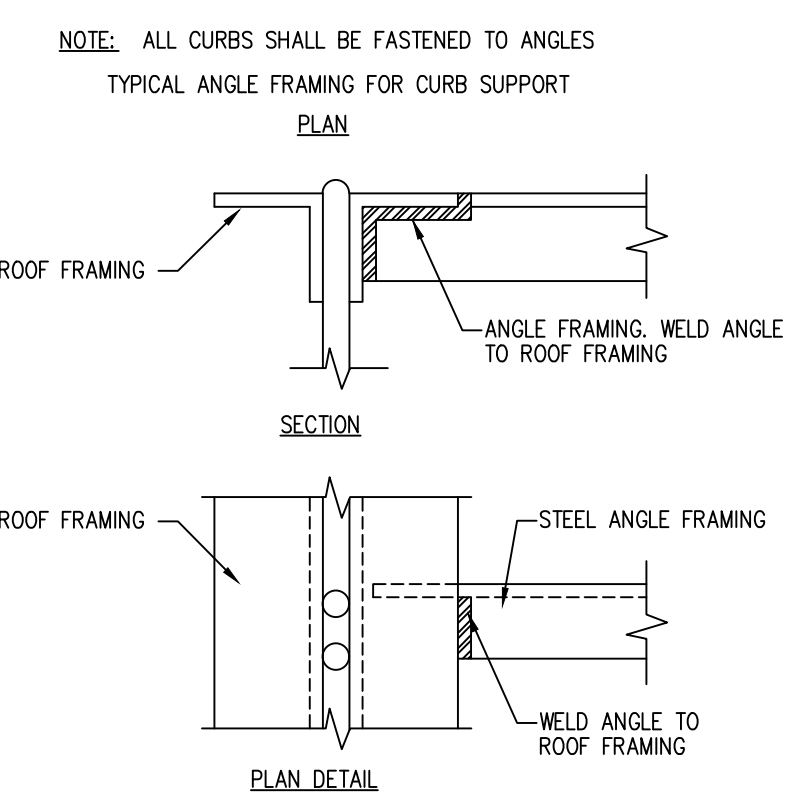
1 REFRIGERATION CURB DETAIL

SCALE: NONE



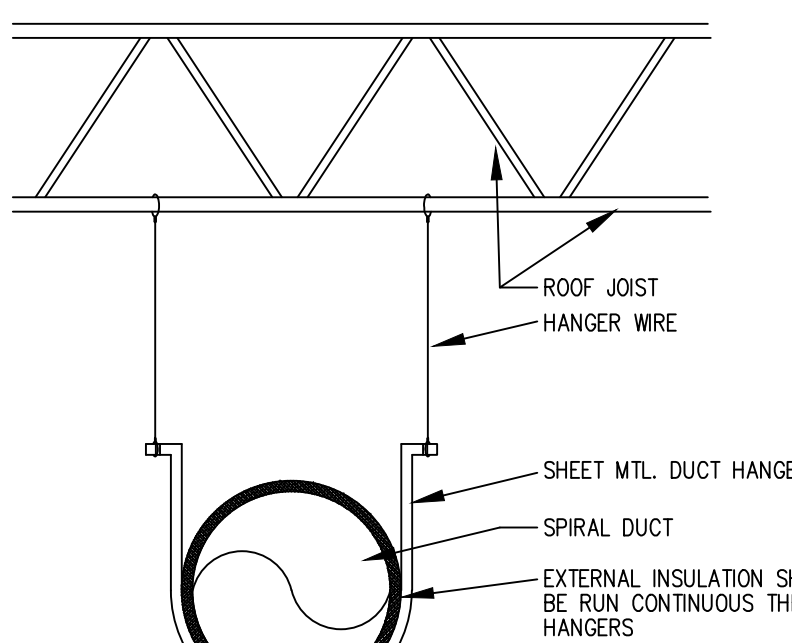
3 HOOD EXHAUST DUCT WRAP DETAIL

SCALE: NONE



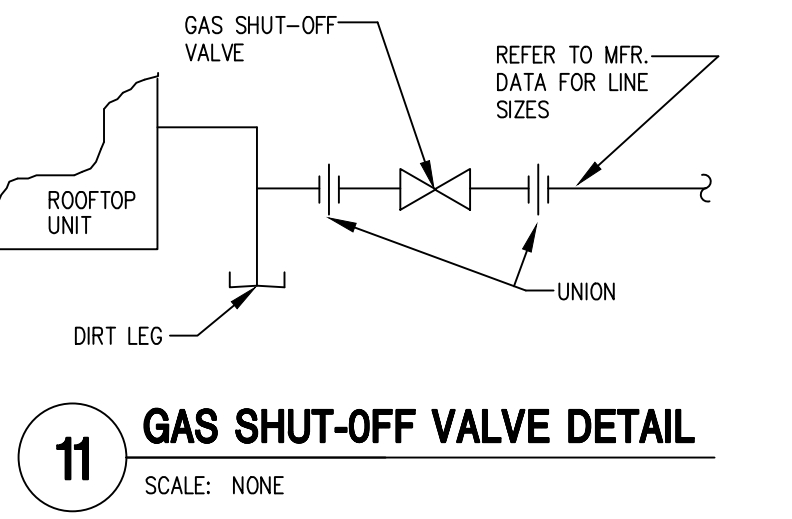
5 TYPICAL RTU ANGLE FRAMING

SCALE: NONE



8 ROUND DUCT HANGER DETAIL

SCALE: NONE

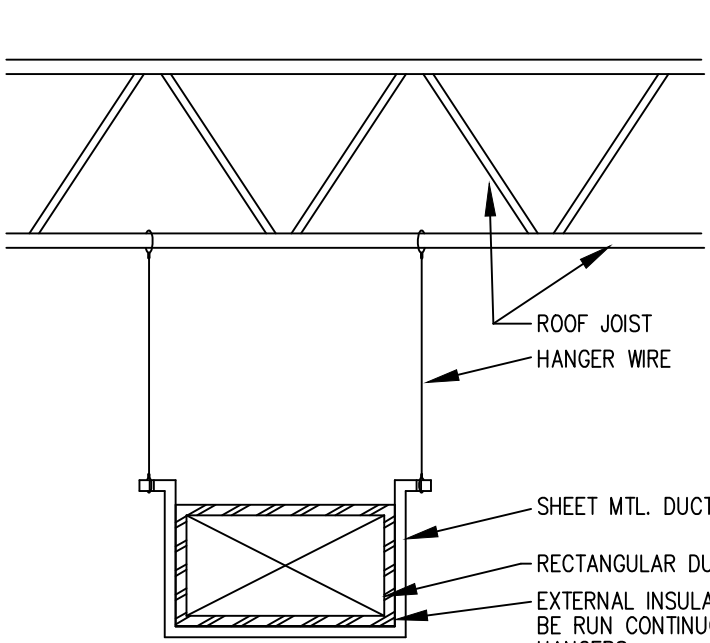


11 GAS SHUT-OFF VALVE DETAIL

SCALE: NONE

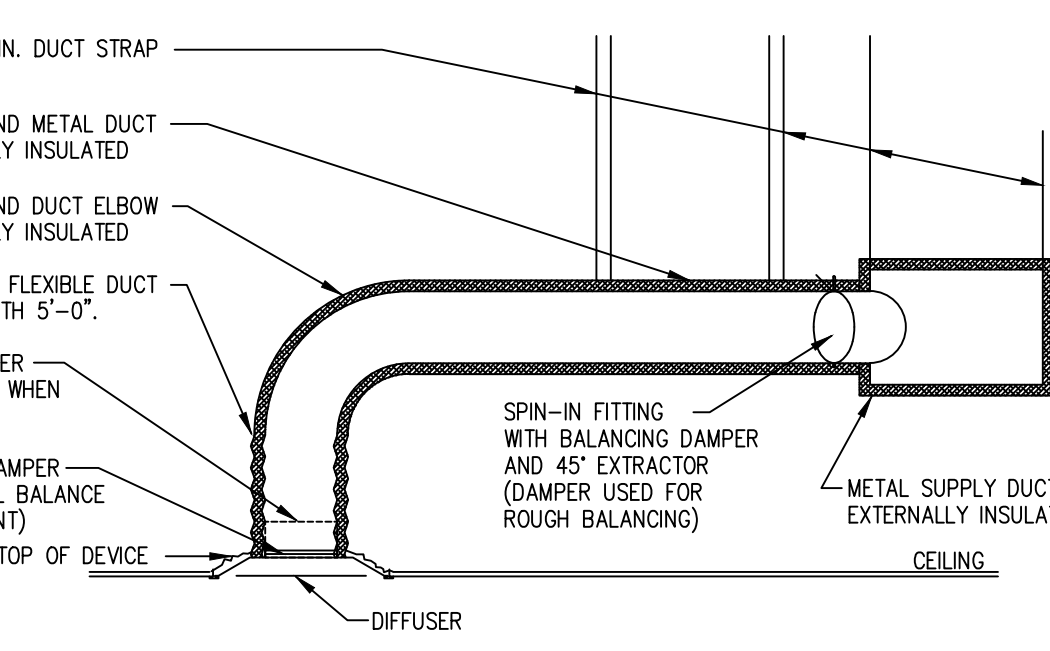
6 ROOF CURB SECTION

SCALE: NONE



9 SQUARE DUCT HANGER DETAIL

SCALE: NONE

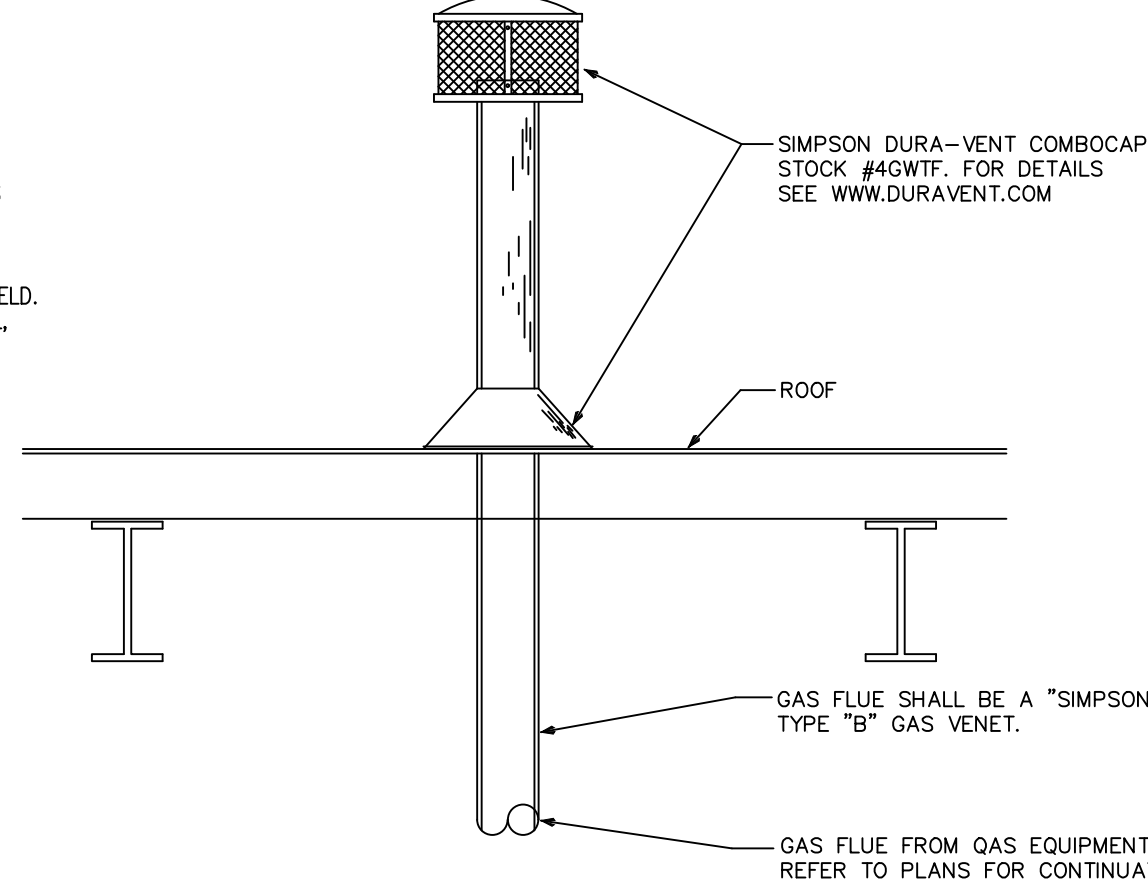


10 PIPE HANGER DETAIL

SCALE: NONE

7 CONDENSATE ROUTING DETAIL

SCALE: NONE



11 GAS FLUE DETAIL

SCALE:

* REFER TO THE MECHANICAL EQUIPMENT SCHEDULE FOR COMPONENT AND DEVICE SPECIFICATIONS.

12 HVAC DUCTWORK DETAIL

SCALE: NONE

APPENDIX B BUILDING CODE SUMMARY (MECHANICAL SUMMARY)	
MECHANICAL SYSTEMS, SERVICE SYSTEMS, AND EQUIPMENT	
METHOD OF COMPLIANCE: Prescriptive [X] Energy Cost Budget []	
Thermal Zone: Zone 4A	
Exterior Design Conditions	
winter dry bulb	20° F
summer dry bulb	97° F
Interior Design Conditions	
winter dry bulb	65° F
summer dry bulb	74° F
relative humidity	52.0%
Building Heating Load	335,923 BTU
Building Cooling Load	179,980 BTU
Mechanical Spacing Conditioning System	
Unitary	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.
Description of unit	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.
heating efficiency	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.
cooling efficiency	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.
heat output of unit	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.
cooling output of unit	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.
Boiler	N/A
total boiler output, if oversized, state reason.	
Chiller	N/A
total chiller capacity, if oversized, state reason.	
List equipment efficiencies	
Equipment schedules with motors (mechanical systems)	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.
motor horsepower	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.
number of phases	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.
minimum efficiency	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.
motor type	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.
# of poles	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.
DESIGNER STATEMENT: ¹	
To the best of my knowledge and belief, the design of this building complies with the mechanical systems, service systems and equipment requirements of the North Carolina Energy Code 2012.	
SIGNED:	
NAME:	TODD W. CASEY
TITLE:	N.C. PROFESSIONAL ENGINEER #9079

NOTE: COMPLIANCE TO NC ENERGY SECTION 506 IS MADE BY HIGH EFFICIENCY H.W. SYSTEM

HOOD INFORMATION - Job#2377419

HOOD NO.	TAG	MODEL	LENGTH	MAX. COOKING TEMP.	EXHAUST PLENUM				TOTAL SUPPLY CFM	HOOD CONSTRUCTION	HOOD CONFIG.	
					TOTAL EXH. CFM	WIDTH	DIA.	CFM			END TO END	ROW
1	KH-1	5424ND-2-PSP-F	12' 0.00"	450 Deg.	2600	10"	24"	2600	-0.753"	2100	430 SS Where Exposed	ALONE

HOOD INFORMATION

HOOD NO.	TAG	TYPE	FILTER(S)			EFFICIENCY @ 9 MICRONS	QTY.	LIGHT(S)			UTILITY CABINET(S)				FIRE SYSTEM PIPING	HOOD HANGING WGT.
			QTY.	HEIGHT	LENGTH			TYPE	TYPE	WIRE GUARD	LOCATION	FIRE SYSTEM		ELECTRICAL		
												TYPE	SIZE	MODEL #	QUANTITY	
1	KH-1	Captrote Solo Filter	9	20"	16"	93% See Filter Spec.	8	Screw In Compact	NO	Left	Ansul R102	3.0	SC-311110FP	1 Light 1 Fan	YES	864 LBS.

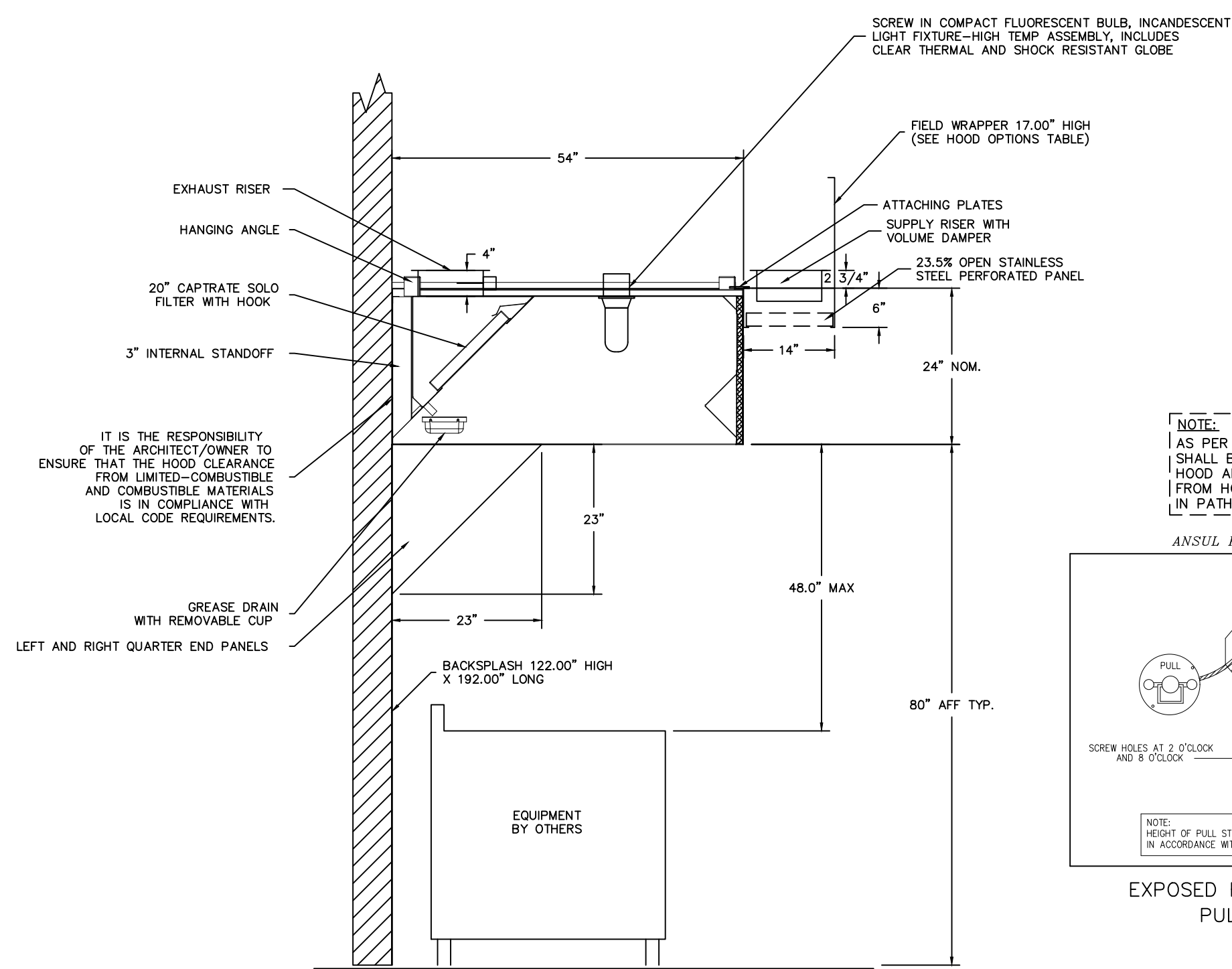
HOOD OPTIONS

HOOD NO.	TAG	OPTION									
1	KH-1	FIELD WRAPPER	17.00"	High	Front, Left, Right						
		BACKSPLASH	120.00"	High	X 24.00"	Long	430 SS	Vertical			
		BACKSPLASH	120.00"	High	X 24.00"	Long	430 SS	Vertical			
		BACKSPLASH	80.00"	High	X 144.00"	Long	430 SS	Vertical			
		LEFT QUARTER END PANEL	23"	Top Width,	0"	Bottom Width,	23"	High	430 SS		
		RIGHT QUARTER END PANEL	23"	Top Width,	0"	Bottom Width,	23"	High	430 SS		
INSULATION FOR BACK OF HOOD											

PERFORATED SUPPLY PLENUM(S)

HOOD NO.	TAG	POS.	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S)		
							WIDTH	LENG.	DIA.
1	KH-1	Front	156"	14"	6"	MUA	10"	28"	700
						MUA	10"	28"	700
						MUA	10"	28"	700

IT IS HIGHLY RECOMMENDED THAT HVAC DIFFUSERS AND/OR RETURNS NOT BE PLACED WITHIN 10' OF THE EXHAUST HOOD. IF DIFFUSERS/RETURNS MUST BE CLOSER THAN 10' TO THE HOOD, THEY SHOULD BE PERFORATED OR 2 WAY DIRECTED AWAY FROM THE HOOD CANOPY. HIGH VELOCITY AIRFLOWS DIRECTED TOWARDS THE HOOD CAN NEGATIVELY IMPACT HOOD PERFORMANCE.



SECTION VIEW - MODEL 5424ND-2-PSP-F
HOOD - #1 (KH-1)

EXHAUST FAN INFORMATION - Job#2377419

FAN UNIT NO.	TAG	FAN UNIT MODEL #	CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	WEIGHT (LBS.)	SONES
1	EF-1	NCA16HPFA	2600	1.250	1287	1.500	1.0170	3	208	5.0	147	14.1

MUA FAN INFORMATION - Job#2377419

FAN UNIT NO.	TAG	FAN UNIT MODEL #	BLOWER	HOUSING	CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	WEIGHT (LBS.)	SONES	BURNER EFFICIENCY(%)
2	SF-1	A1-D.250-G10	G10	A1-D.250	2100	0.550	1120	1.500	0.9270	3	208	5.0	565	19.8	92

GAS FIRED MAKE-UP AIR UNIT(S)

FAN UNIT NO.	TAG	ACTUAL AIR DENSITY	INPUT BTUs	OUTPUT BTUs	TEMP. RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE
2	SF-1	YES	153829	141523	65 deg F	7 in. w.c. - 14 in. w.c.	Natural

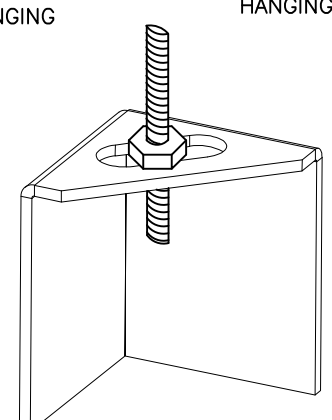
FAN OPTIONS

FAN UNIT NO.	TAG	OPTION (Qty. - Descr.)
1	EF-1	1 - Grease Box
		1 - Low Fire Start
2	SF-1	1 - Inlet Pressure Gauge, 0-35"
		1 - Manifold Pressure Gauge, -5 to 15" wc

CURB ASSEMBLIES

NO.	ON FAN	WEIGHT	ITEM	SIZE
1	# 1	34 LBS	Curb	26.500\"W x 26.500\"L x 24.000\"H Venturi Hinged
2	# 2	63 LBS	Curb	21.000\"W x 71.000\"L x 20.000\"H Insulated

1/2" DIA. ALL THREAD ROD
CONNECTED TO ROOF JOIST
THROUGH ANOTHER HANGING
ANGLE



* ROD AND NUTS TO BE SUPPLIED BY INSTALLING CONTRACTOR
HANGING ANGLE IS PRE-FINISHED AT FACTORY

ND-2 HANGING ANGLE DETAIL

CAPTIVE-AIRE HOODS ARE
BUILT IN COMPLIANCE WITH

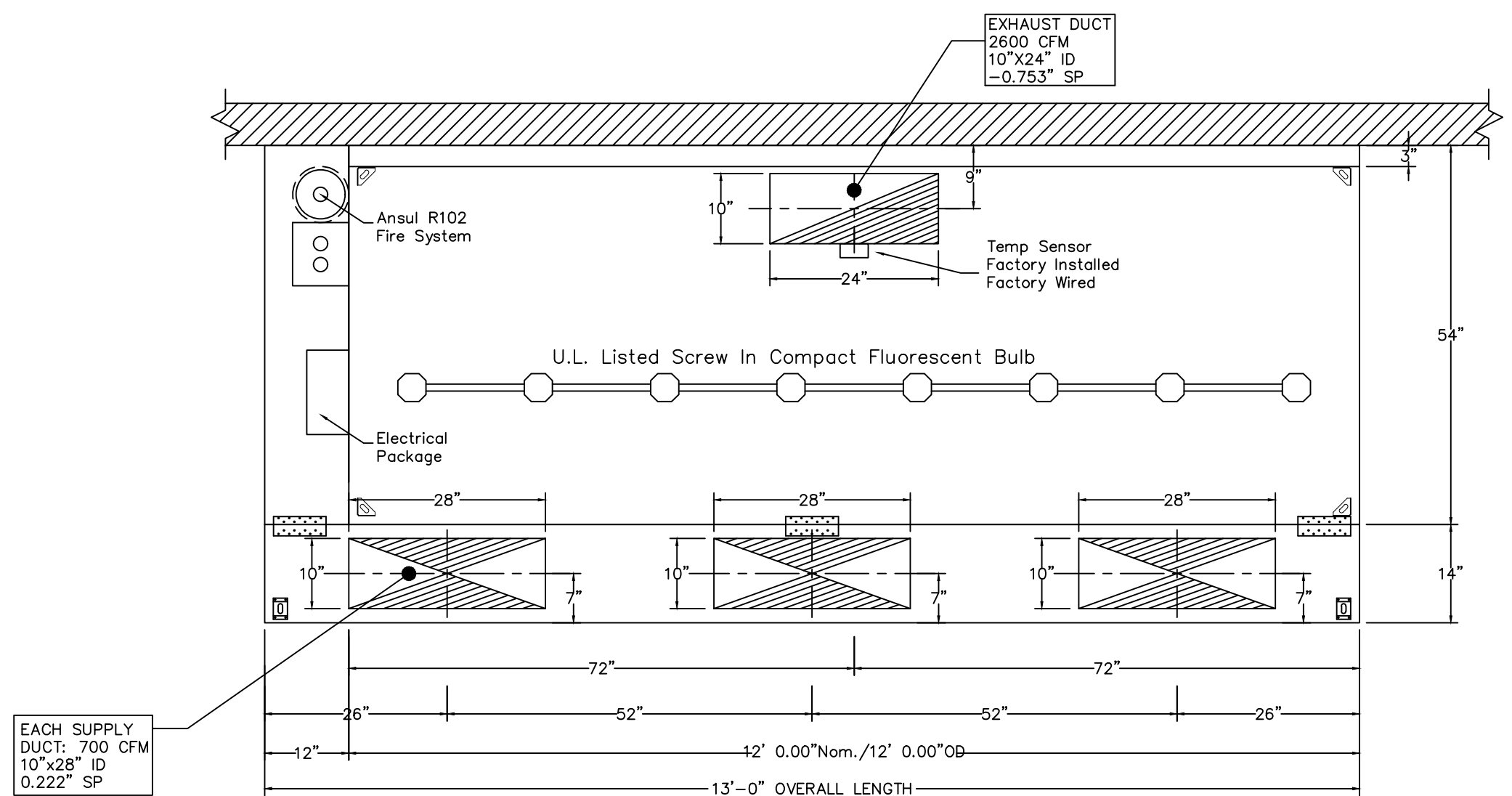


NFPA #96
UL 710 & ULC710 STANDARDS
E.T.L. LISTED 3054804-001

FOR QUESTIONS, CALL THE

CaptiveAire, Inc. commercial kitchen ventilation
4501 Circle 75 Pkwy, Ste E-5280 Atlanta, GA 30339
800.882.6626 | M. 470.232.2948 | F. 919.227.5964

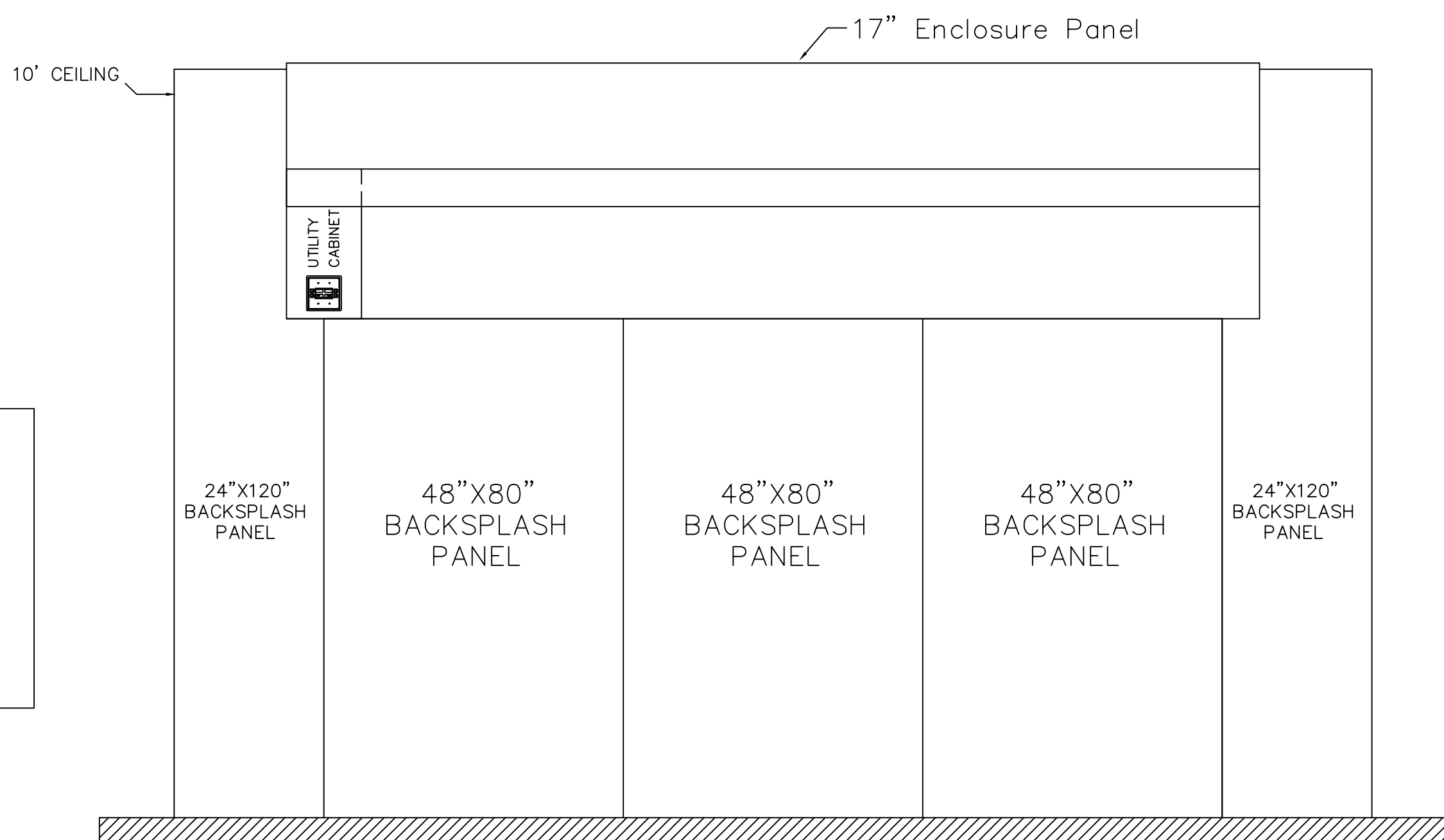
Wes Henson <wes.henson@captiveaire.com>



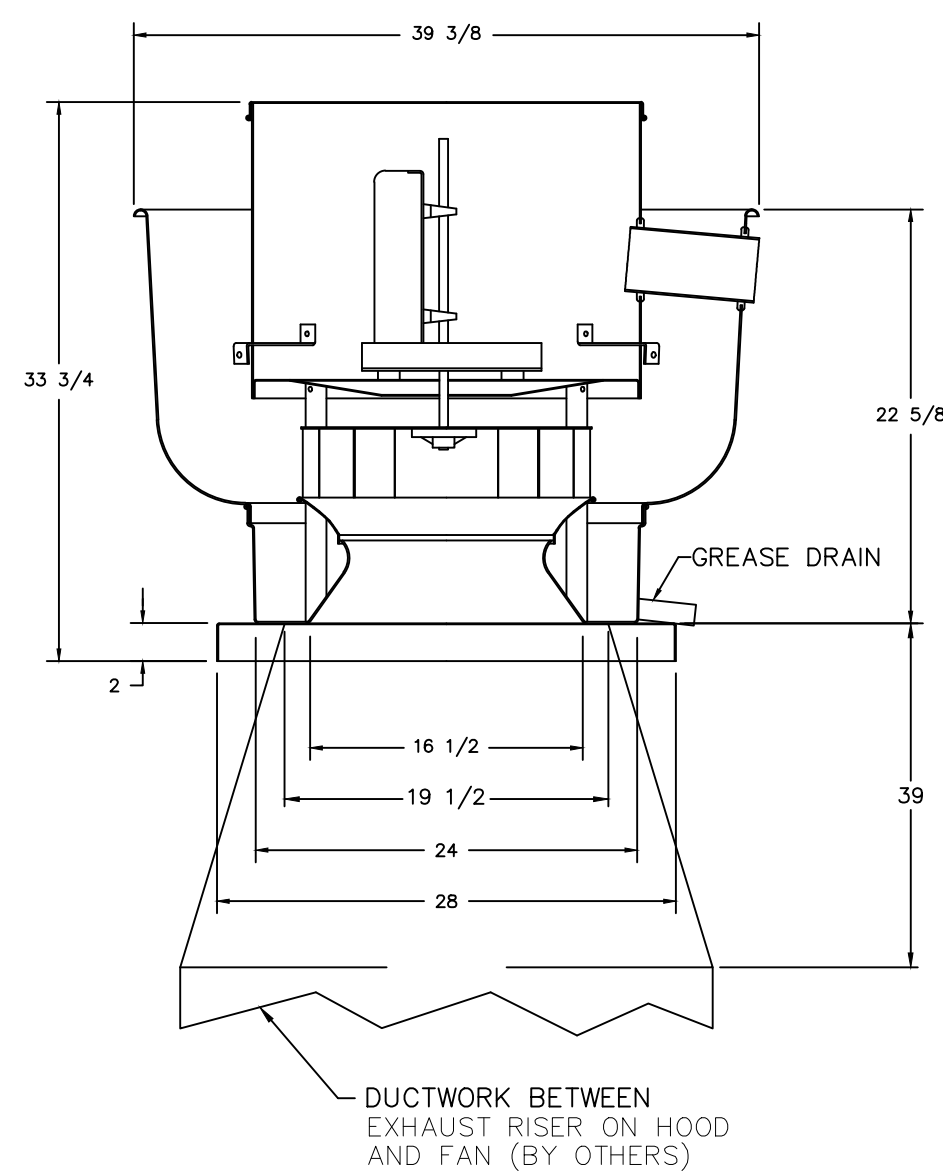
PLAN VIEW - Hood #1 (KH-1)

12' 0.00" LONG 5424ND-2-PSP-F

NOTE: Additional hanging angles provided for hoods 12' and longer.



ELEVATION VIEW AT HOOD



FEATURES:

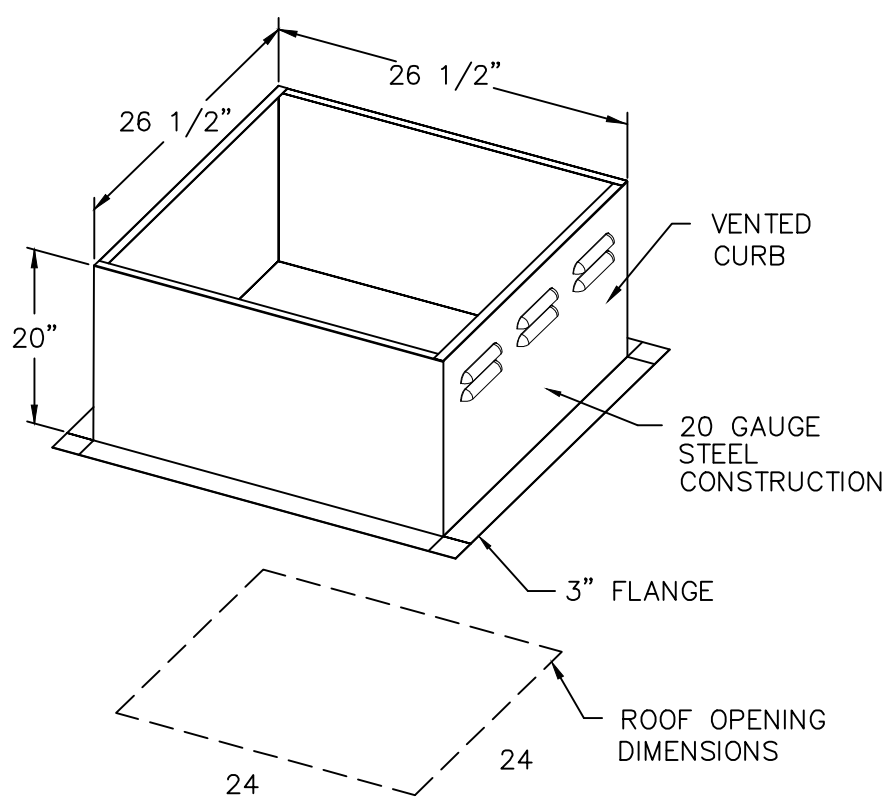
- ROOF MOUNTED FANS
- RESTAURANT MODEL
- UL705 AND UL762
- AMCA SOUND AND AIR CERTIFIED
- WEATHERPROOF DISCONNECT
- HIGH HEAT OPERATION 300°F (149°C)
- GREASE CLASSIFICATION TESTING

NORMAL TEMPERATURE TEST
EXHAUST FAN MUST OPERATE CONTINUOUSLY
WHILE EXHAUSTING AIR AT 300°F (149°C)
UNTIL ALL FAN PARTS HAVE REACHED
THERMAL EQUILIBRIUM AND WITHOUT ANY
DETERIORATING EFFECTS TO THE FAN WHICH
WOULD CAUSE UNSAFE OPERATION.

ABNORMAL FLARE-UP TEST
EXHAUST FAN MUST OPERATE CONTINUOUSLY
WHILE EXHAUSTING BURNING GREASE VAPORS
AT 600°F (316°C) FOR A PERIOD OF
15 MINUTES WITHOUT THE FAN BECOMING
DAMAGED TO ANY EXTENT THAT COULD CAUSE
AN UNSAFE CONDITION.

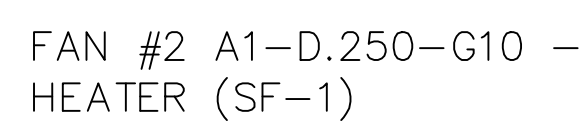
OPTIONS

GREASE BOX



EXHAUST HOOD NOTES

- EXHAUST HOODS SHALL BE CONSTRUCTED OF 18 GAUGE 430 STAINLESS STEEL FOR ALL SURFACES EXPOSED TO THE AIRSTREAM AND 18 GAUGE GALVANIZED STEEL FOR OTHER SURFACES. ALL SEAMS AND JOINTS SHALL HAVE A LIQUID TIGHT U.L. APPROVED CONTINUOUS EXTERNAL WELD.
- ENTIRE SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH NATIONAL SANITATION FOUNDATION STANDARDS, NFPA-96, NFPA-17-A, AND ALL GOVERNING CODES.
- EXHAUST HOODS SHALL BE PROVIDED WITH A ANSUL R-102 AUTOMATIC FIRE EXTINGUISHING SYSTEM FOR PROTECTION OF THE EXHAUST HOOD, PLENUM, GREASE FILTERS, EXHAUST DUCT AND COOKING EQUIPMENT. THE SYSTEM SHALL EMPLOY A LIQUID CHEMICAL EXTINGUISHMENT. THE SYSTEM SHALL BE ARRANGED TO SHUT OFF THE SOURCE OF COOKING HEAT AUTOMATICALLY UPON SYSTEMS OPERATION. THE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH NFPA-96, NFPA-17-A AND ACCORDING TO MANUFACTURERS PRINTED INSTALLATION PROCEDURES. EACH HOOD SHALL HAVE A SEPARATE FIRE EXTINGUISHING SYSTEM WHICH WILL OPERATE EFFECTIVELY WITH OR WITHOUT FANS OPERATING.
- THE INSTALLER OF THE EXHAUST HOOD AUTOMATIC FIRE EXTINGUISHING SYSTEM SHALL BRIEF OWNER IN ITS OPERATION.
- EXHAUST AND SUPPLY FANS OF EACH HOOD SHALL BE INTERLOCKED, PROVIDE ONE LIGHT SWITCH AND ONE FAN SWITCH ON THE FACE OF EACH GREASE HOOD.
- GREASE FILTERS TO BE THE GREASE ELIMINATOR SELF BALANCING TYPE U.L. APPROVED.
- EXHAUST HOOD DUCTWORK OFFSETS TO GREASE EXHAUST FANS FROM HOOD LOCATION SHALL BE MADE WITH (2) - 45° ELBOWS, TRANSITION TO FULL SIZE OF FAN CONNECTION AT CURB.
- U.L. RANGE HOOD: MATERIAL: 18 GAUGE STAINLESS STEEL CONSTRUCTION ON EXPOSED SURFACES 18 GA. GALV. ON EXH. PLENUM ALL CONTINUOUS EXTERNAL LIQUID TIGHT WELDS, POLISHED. FILTERS UL CLASSIFIED BAFFLE TYPE, SET IN HOOD @ 45 DEGREE ANGLE. INCANDESCENT LIGHT FIXTURES UL LISTED FOR USE IN COMMERCIAL COOKING HOODS. GREASE TRAY BELOW FILTERS WITH REMOVE-ABLE GREASE CONTAINER, LIQUID VOLUME LESS THAN 1 QUART. ALL IN COMPLIANCE WITH NFPA #96 AND LOCAL BUILDING CODES.
- RANGE HOOD EXHAUST DUCTS MATERIAL: 16 GAUGE GALVANIZED STEEL, CONSTRUCTION, ALL CONTINUOUS LIQUID TIGHT EXTERNAL WELDS, DUCTS TO SLOPE TOWARD HOOD. CLEANING ACCESS AT CHANGE IN DIRECTION OF DUCT RUN EXCEPT AT HOOD COLLAR.
- RANGE HOOD SUPPLY DUCTS MATERIAL: 22 GALVANIZED SHEET METAL, GAUGES, HANGING AND REINFORCING PER SMACNA STANDARDS.



BIBB COUNTY FACILITIES - 900-2008-04											
NO.	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED				
				LOCATION	QUANTITY		TYPE	#	H.P.	VOLT	FLA
1		SC-31110FP	Utility Cabinet Left	Utility Cabinet Left	1 Light	Smart Controls Thermostatic Control	Exhaust	3	1.500	208	4.7
				Hood # 1	1 Fan		Supply	3	0.750	208	2.7

FIELD WIRING

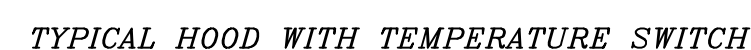
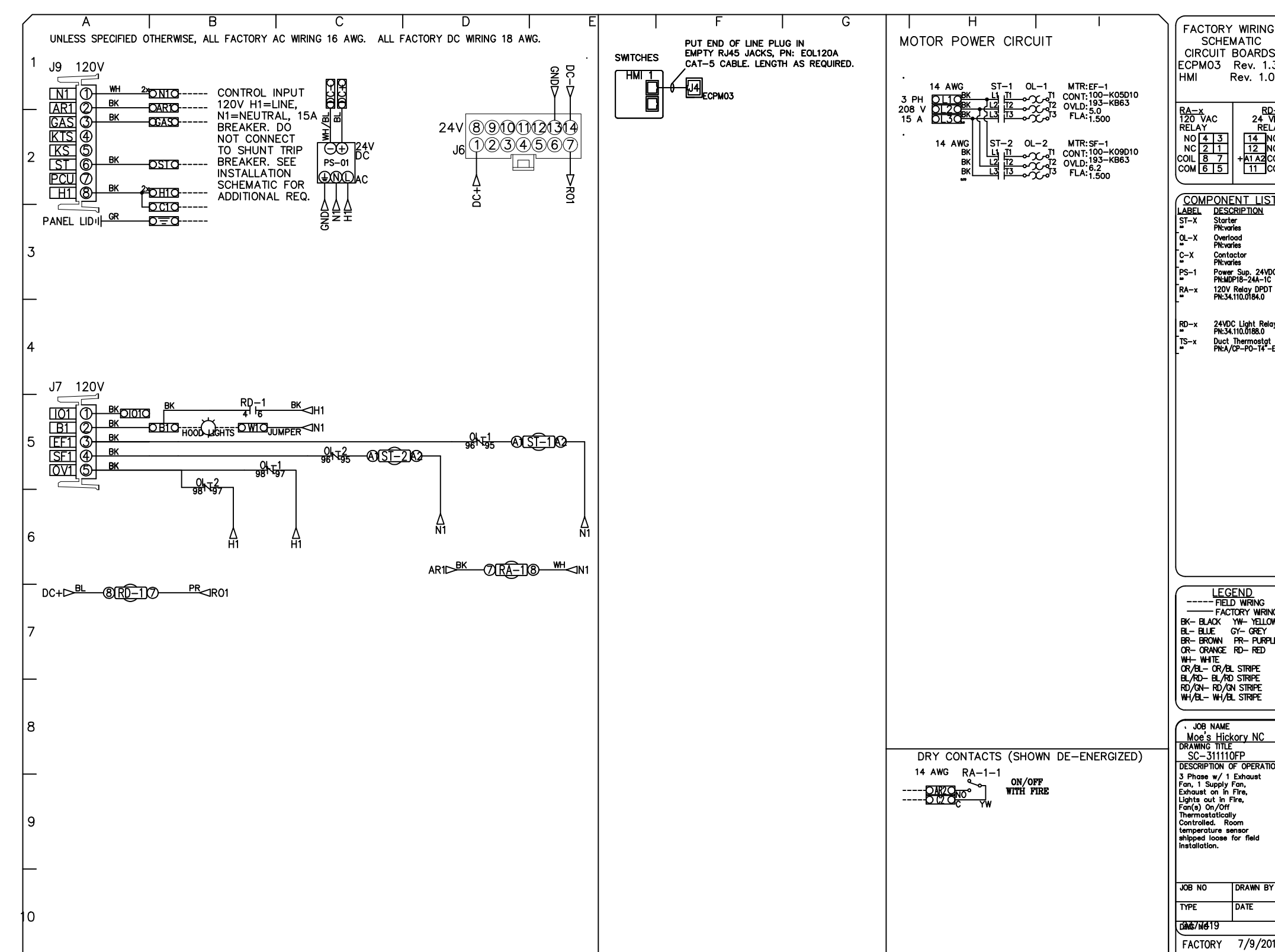
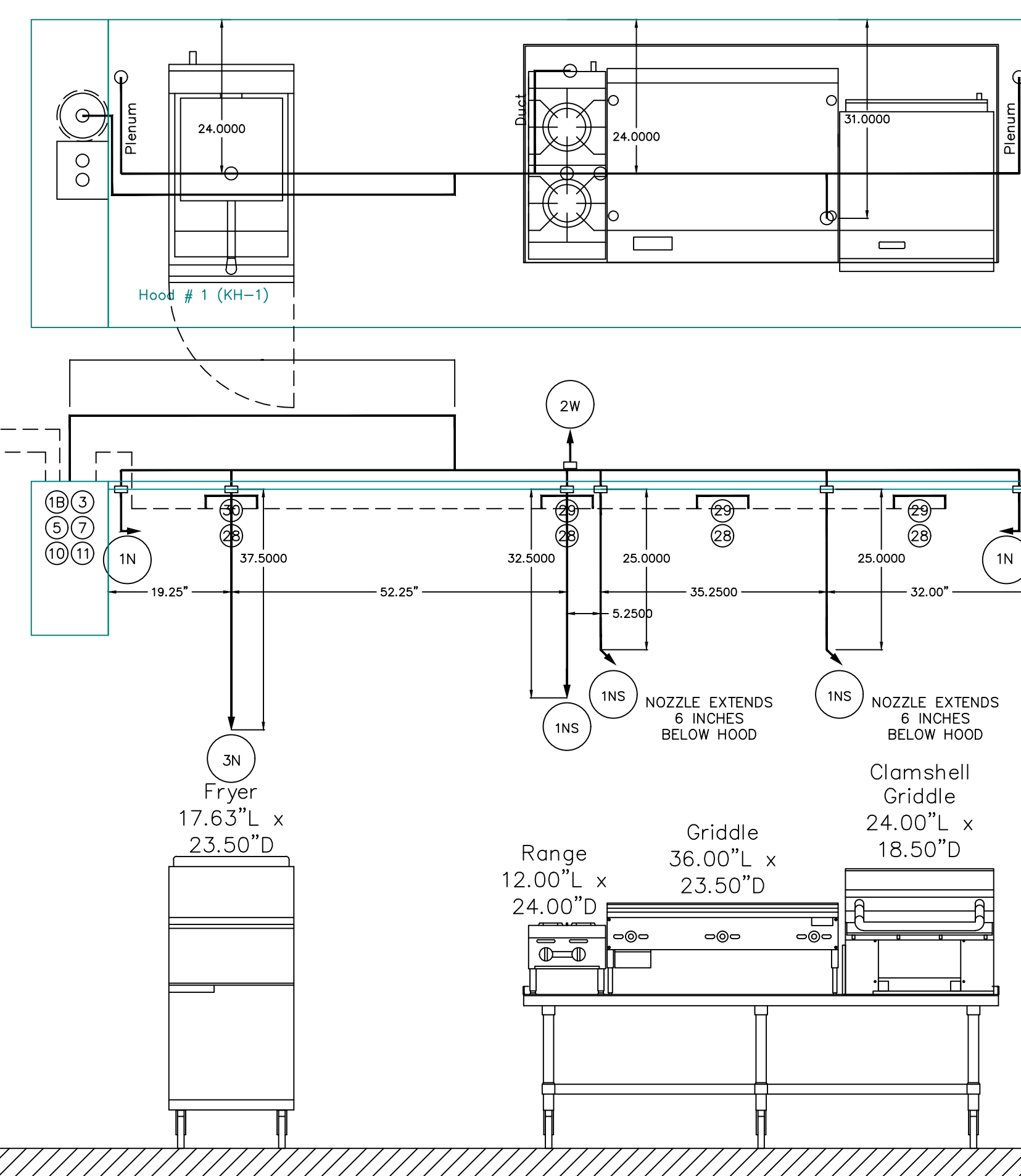


Diagram illustrating the components of the fire alarm control unit, including:

- PLENUM PROTECTION NOZZLE
- DUCT PROTECTION NOZZLE
- DETECTORS
- REMOTE MANUAL PULL STATION
- REMOVABLE STAINLESS STEEL SERVICE DOOR
- AGENT TANK
- OEM RELEASE/
- OPTIONAL PRE-WIRED ELECTRICAL TERMINAL BOX WITH TERMINAL STRIPS, 3-PHASE CONTACTORS AND OVERLOADS (IF APPLICABLE)
- FAN AND LIGHT CONTROL PANEL
- APPLIANCE PROTECTION NOZZLE

TYPICAL ANSUL R-102 SYSTEM LAYOUT



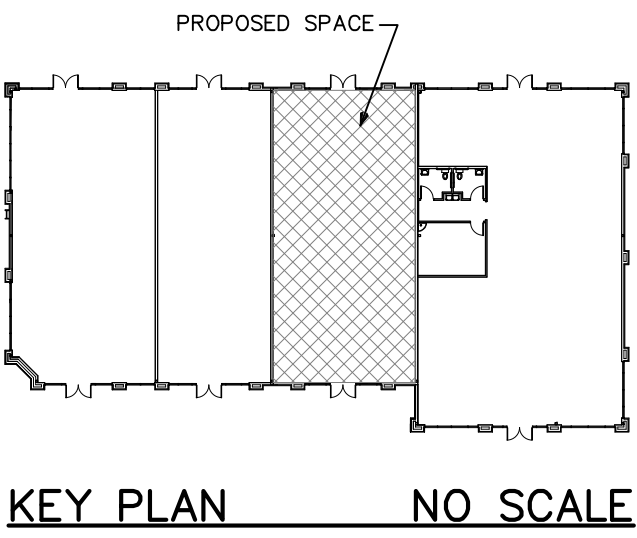
1A	1.5 GALLON TANK
1B	3 GALLON TANK
2	QEW AUTOMAN RELEASE
3	QEW REGULATED RELEASE
4	QEW REGULATED TUNATOR
5	ANUSLEX LIQUID AGENT (3 GAL.)
6	ANUSLEX LIQUID AGENT (1.5 GAL.)
7	CARTRIDGE (101-20)
8	CARTRIDGE (101-30)
9	CARTRIDGE (101-30)
9A	CARTRIDGE (LT-A-101-30)
9B	DOUBLE TANK CARTRIDGE
10	TUN LINK
11	DOUBLE MICROSWITCH
12	HOSE ASSEMBLY
1100	NOZZLE ASSEMBLY (430913)
2W	DUCT NOZZLE (419337)
1W	NOZZLE ASSEMBLY (419336)
1W	NOZZLE ASSEMBLY (419333)
1W	NOZZLE ASSEMBLY (419335)
2N	NOZZLE ASSEMBLY (419341)
3N	NOZZLE ASSEMBLY (419338)
245	NOZZLE ASSEMBLY (419340)
246	NOZZLE ASSEMBLY (419339)
250	NOZZLE ASSEMBLY (419343)
252	NOZZLE ASSEMBLY (419342)
260	NOZZLE ASSEMBLY (419341)
28	DETECTOR BRACKET
10	TEMP FUSIBLE LINK
30	HIGH TEMP FUSIBLE LINK
MGV	MECHANICAL GAS VALVE
EGV	ELECTRIC GAS VALVE
30	RELEASE MANU. FULL STATION
3	SWIVEL ADAPTOR

- FIELD PIPE DROPS AS SHOWN
- SLEEVING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS
- RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVING, SALAMANDERS, ETC
- MAXIMUM 9 ELBOWS IN SUPPLY LINE
- MINIMUM 72 INCHES OF AGENT LINE FROM TANK TO FIRST NOZZLE.
- IF APPLICABLE, PRE-PIPED CHARROLLER DROPS ARE SHIPPED LOOSE.
- FACTORY PIPING EXTENDS A MAXIMUM OF 6' ABOVE THE TOP OF THE HOOD

APPLIANCE DIMENSIONS LISTED REPRESENT THE COOKING SURFACE SIZE, NOT THE OVERALL APPLIANCE SIZE.

- THIS FIRE SYSTEM COMPLIES WITH U.L. 300 REQUIREMENTS

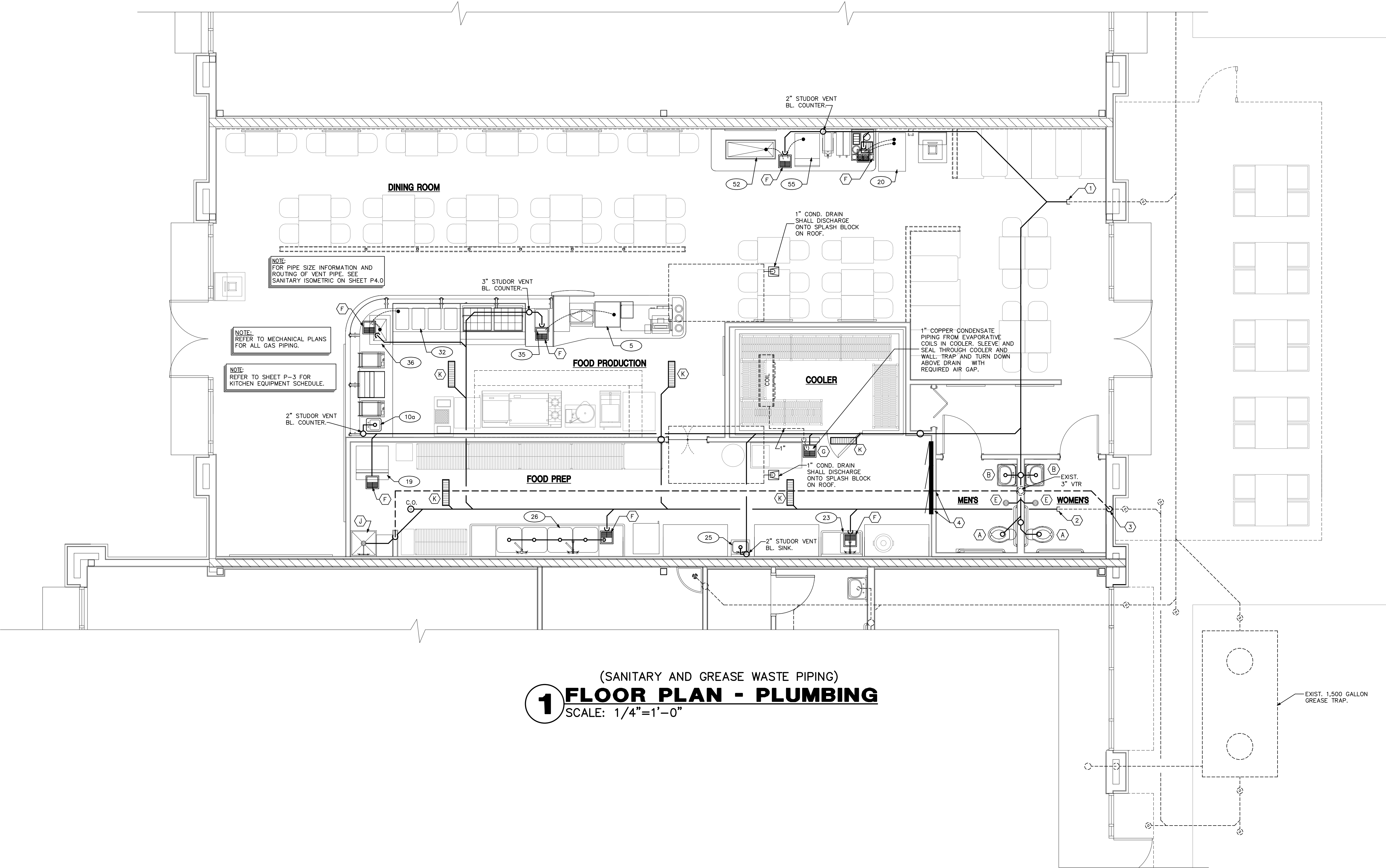
Job Name: Moe's
 Drawn By:
 System Size: ANSUL-3.0 Total FP required: 10
 Hood # 1 12" 0.00" Long x 54" Wide x 24" High
 Range # 1 12" 0.00" x 24"



NOTE:
ALL INDIRECT WASTE OR WASTE PIPING RECEIVING THE DISCHARGE FROM A 4-COMP. SINK, STEAMER OR SIMILAR PIECE OF EQUIPMENT WHICH PRODUCES WATER AT A TEMPERATURE HIGHER THAN 125°F SHALL BE DWV COPPER OR CAST IRON 10'-0" (MIN) DOWNSTREAM FROM THE FROM THE OUTLET PRODUCING SUCH DISCHARGE. COORDINATE WITH EQUIPMENT SUPPLIER.

NOTE: THIS IS AN EXISTING FACILITY WHICH HAS EXISTING SANITARY AND WATER DISTRIBUTION SYSTEMS. ALTERATIONS TO EXISTING WORK BEING OF SUCH NATURE THAT ALL FACETS OF THE WORK ARE IMPOSSIBLE TO DETAIL AND SPECIFY. IT IS THEREFORE THE RESPONSIBILITY OF THE CONTRACTOR TO CAREFULLY EXAMINE THE EXISTING BUILDING AND FAMILIARIZE HIMSELF WITH THE CONDITIONS AND RELATE THESE CONDITIONS TO THE SCOPE OF THE PROPOSED NEW WORK. ALL BIDS ARE EXPECTED TO ENCOMPASS THE TOTAL WORK SCOPE NEEDED TO PLACE THE COMPLETED SYSTEM IN WORKING CONDITION.

- SPECIFIC PLUMBING NOTES**
- 1. CONNECT TO EXISTING SANITARY PIPING BELOW FLOOR IN THIS AREA. CONTRACTOR SHALL VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION.
 - 2. CONNECT TO EXISTING GREASE WASTE PIPING BELOW FLOOR IN THIS AREA. CONTRACTOR SHALL VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION.
 - 3. NEW 3" VENT SHALL CONNECT TO EXISTING GREASE PIPING BELOW FLOOR IN THIS AREA. CONTRACTOR SHALL VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION.
 - 4. CONTRACTOR SHALL COORDINATE SANITARY AND VENT PIPING WITH ELECTRICAL CONDUIT FORM PANELS IN THIS AREA PRIOR TO CONSTRUCTION.



PLUMBING
SYMBOLS LEGEND

	FLOOR DRAIN
	HOSE BIBB
	CLEANOUT
	RELIEF VALVE
	AIR CHAMBER
	UNION
	SOIL OR WASTE LINE
	SANITARY VENT LINE
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC WATER RECIRCULATION
	PRESSURE & TEMP. RELIEF LINE
	CONDENSATE DRAIN LINE
	RAIN WATER LEADER
	GAS LINE
	SEWER LINE
	FIRE PROTECTION
	SHUT OFF VALVE
	SAFEPAN LINE
	FIRE SPRINKLER HEAD
	PIPE TURN UP
	PIPE TURN DOWN
	P-TRAP

PLUMBING ABBREVIATION LEGEND

DN. DOWN	C.C. CENTER TO CENTER	F.U. FIXTURE UNITS
EXT. EXTERIOR	N.T.S. NOT TO SCALE	H.B. HOSE BIBBS
F.D. FLOOR DRAIN	MAN. MANUFACTURER	C.O. CLEANOUT
F.F. FINISH FLOOR	S.O.V. SHUT OFF VALVE	E.W.H. ELECTRIC WATER HEATER
A.F.F. ABOVE FINISH FLOOR	W.C. WATER CLOSET	JAN. SK. JANITOR SINK
V.T.R. VENT THRU ROOF	L.V. LAVATORY	P & T. PRESSURE & TEMPERATURE
TYP. TYPICAL	SK. SINK	RWL. RAIN WATER LEADER
R.D. ROOF DRAIN	D.W. DISH WASHER	
REV. REVISION	E.D.F. ELECTRIC DRINKING FOUNTAIN	
O.C. ON CENTER	UR. URINAL	

Storage Tank Water Heater Sizing Calculator				
Developed by the Plan Review Unit of the Environmental Health Services Section NC Division of Environmental Health				
Facility Name:		Moe's Southwest Grill		
Address:		Hickory, NC		
Type of Facility:		Type of Prep Sink (vegetable, meat, seafood)		Gallons Per Hour (GPH)
Enter the description, and number and size of compartments for each sink below		Description	Number of compartments	(inches) Length Width Depth
Largest Sink #1		4 Comp. Sk.	4	24 24 14
Sink #2				
Sink #3				
Bar sink				
Sinks are calculated at 75% capacity				Total 105
Enter type of prep sink and number of sink compartments for each sink below		Type of prep sink (vegetable, meat, seafood)	Number of compartments	Gallons Per Hour (GPH)
Prep sink #1		Meat Prep	1	5
Prep sink #2				0
Prep sink #3				0
Prep sinks are calculated at 5 gallons per compartment				Total 5
Enter the quantity of equipment below		Quantity		Gallons Per Hour (GPH)
Hand sinks		3		15
Can wash		1		10
Mop sink				0
Hose reel				0
Clothes washer				0
Enter a description and estimated gallon per hour (GPH) usage for other equipment below		Description	Estimated gallons per hour (GPH) usage	
Other Equipment		(3) Lav's	3	3
Other Equipment				0
Other Equipment				0
Hand sinks and mop sinks are calculated at 5 GPH each; can washes at 10 GPH each; hose reels are calculated at 5 GPH; clothes washers at 15 GPH; other equipment at the usage entered		Total		28
Enter the make, model and Final Rinse Usage in gallons per hour (GPH) for dishmachines		Make	Model	Final Rinse Usage (GPH) Found in "Dishmachine Specs" sheet below or in manufacturer's spec sheet
Dishmachine #1				0
Dishmachine #2				0
Enter the quantity of pre-rinse units		Quantity		Gallons Per Hour (GPH)
Pre-rinse		2		90
Dishmachines are calculated at 70% of the final rinse usage specified by the manufacturer.				Total 90
Pre-rinses are calculated at 45 GPH				
Recovery Rate Needed (GPH):				228
Water Heater Input (BTU or kW) Needed:				
Gas Water Heater		Electric Water Heater		
200,000 BTU at 80°F rise		45 kW at 80°F rise		
225,000 BTU at 90°F rise		50 kW at 90°F rise		
250,000 BTU at 100°F rise		58 kW at 100°F rise		

NOTE: THIS IS AN EXISTING FACILITY WHICH HAS EXISTING SANITARY AND WATER DISTRIBUTION SYSTEMS. ALTERATIONS TO EXISTING WORK BEING OF SUCH NATURE THAT ALL FACTS OF THE WORK ARE IMPOSSIBLE TO DETAIL AND SPECIFY. IT IS THEREFORE THE RESPONSIBILITY OF THE CONTRACTOR TO CAREFULLY EXAMINE THE EXISTING BUILDING AND FAMILIARIZE HIMSELF WITH THE CONDITIONS AND RELATE THESE CONDITIONS TO THE SCOPE OF THE PROPOSED NEW WORK. ALL BIDS ARE EXPECTED TO ENCOMPASS THE TOTAL WORK SCOPE NEEDED TO PLACE THE COMPLETED SYSTEM IN WORKING CONDITION.

FIXTURE SCHEDULE NOTES

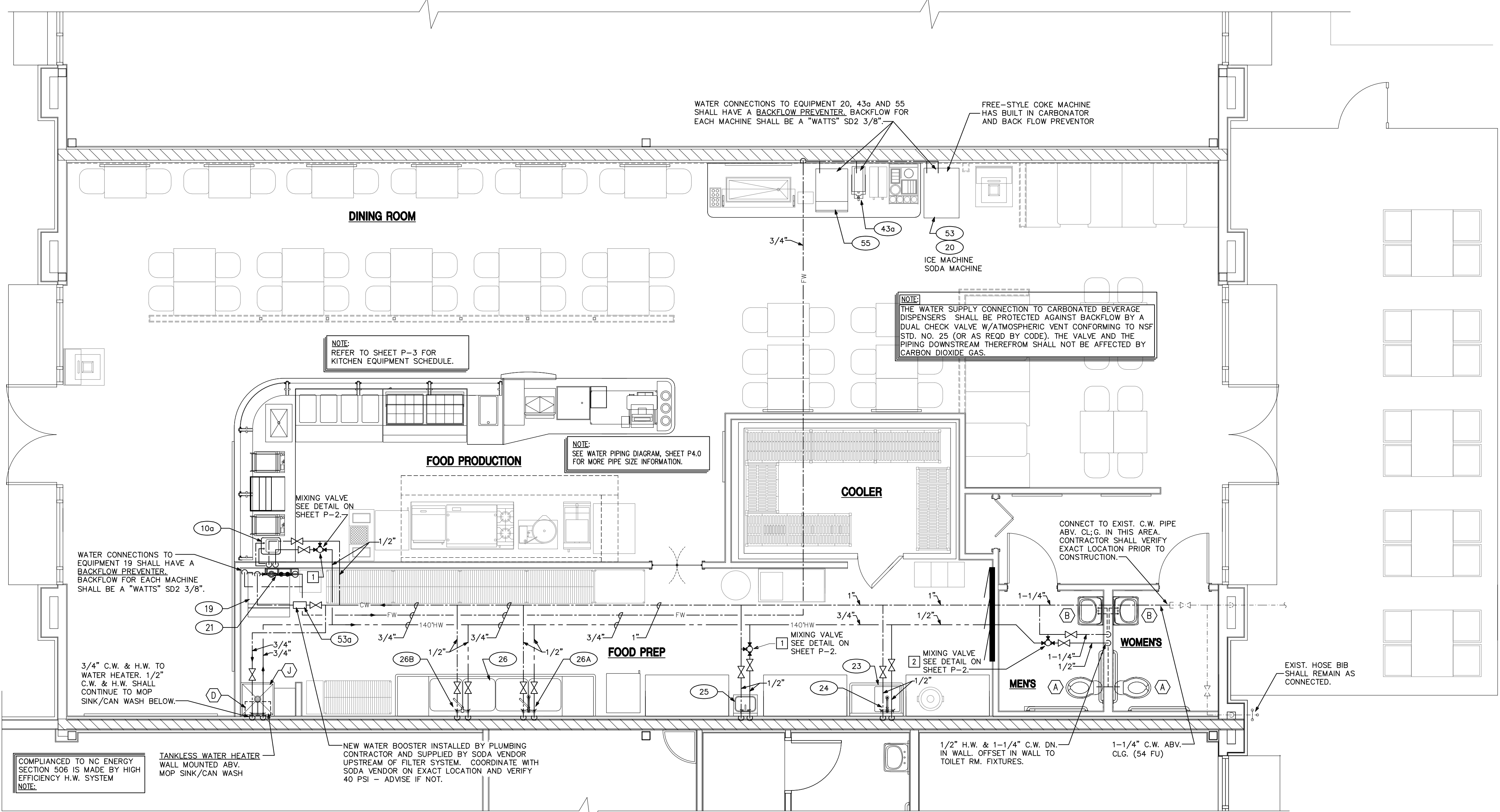
- CONTRACTOR SHALL PROVIDE AND INSTALL A WALL CARRIER FOR EACH FIXTURE WHICH IS WALL HUNG, UNLESS OTHERWISE NOTED. PROVIDE APPROPRIATE CARRIER PER FIXTURE TYPE AND REQUIREMENTS.
- CONTRACTOR SHALL PROVIDE AND INSTALL WATTS, ZURN, P.P.P.I.N.C. (OR EQUAL) TRAP PRIMERS TO SERVE ALL FLOOR DRAINS REQUIRING PROTECTION PER CODE.
- CONTRACTOR SHALL PROVIDE AND INSTALL SHOCK ARRESTORS FOR BRANCH PIPING SERVING FIXTURES WITH QUICK CLOSING VALVES. SHOCK ARRESTORS SHALL BE BY P.P.P., ZURN OR EQUAL, SIZED PER PDI REQUIREMENTS.
- ACCEPTABLE ALTERNATE MANUFACTURERS FOR ITEMS INCLUDING BUT NOT LIMITED TO:
WATER CLOSETS: AMERICAN STANDARD, KOHLER, ELJER, CRANE, MANSFIELD
LAVATORIES: SAME AS WATER CLOSETS
URINALS: SAME AS WATER CLOSETS
FLOOR SINKS, FLOOR DRAINS AND CLEANOUTS: WADE, J.R. SMITH, ZURN.
WATER HEATERS: RINNAI, PALOMA.
HOSE BIBBS/WALL HYDRANTS: WOODFORD, ZURN, CHICAGO FAUCET, T&S BRASS.
- ENCLOSE ALL SUPPLIES AND P-TRAPS OF BARRIER FREE LAVATORIES WITH A PROTECTIVE INSULATING MATERIAL AND A SMOOTH JACKET (TRAP WRAP OR EQUAL).
- WHEN INSTALLING ALTRO SHEET VINYL, IT IS CRITICAL THAT THE CLEANOUTS, FLOOR SINKS, AND TRENCH DRAINS BE A SURFACE MEMBRANE CLAMPING TYPE. USE CERTIFIED ALTRO INSTALLER AND FOLLOW ALL ALTRO DETAILS.

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	MANUFACTURER	CATALOG NO.	COLOR	WASTE SIZE	WATER COLD	WATER HOT	REMARKS
A	WATER CLOSET ADA COMPLIANT	KOHLER	K-4302 HIGHCREST	WHITE	4"	1"	---	WHITE, ELONGATED 16-1/2" HIGH BOWL, PRESSURE ASSIST 1.6 GAL. PER FLUSH, WITH SLOAN #111 "ROYAL" FLUSH VALVE.
B	ADA LAVATORY	KOHLER	K-2032 GREENWICH	WHITE	1-1/2"	1/2"	---	DELTA 541 FAUCET ON 4" CTRS, 0.5 GPM FLOW RESTRICTOR, GRD DRAIN, ADA COMPLIANT.
D	WATER HEATER	NORITZ INSTANTANEOUS	NC-380	---	---	3/4"	3/4"	22500 BTUH MIN, 380,000 BTUH MAX. GAS INPUT: 8.3 GPM DELIVERY @ 75° F RISE. SET UNIT @ 140° F.
E	FLOOR DRAIN	ZURN	ZB415-O-VP-Y	---	3", 4"	---	---	6" DIA. POLISHED BRONZE TYPE "O" STRAINER, SEDIMENT BUCKET. VANDAL PROOF SCREWS. PROVIDE A "TRAP SEAL" IN LIEU OF TRAP PRIMER. TRAP SEAL SHALL BE A "SURE SEAL" MODEL S33000 PREASSEMBLED INLINE FLOOR DRAIN TRAP SEALER. 5 PIECES: COMMERCIAL GRADE ABS PLASTIC HOUSING AND KEEPER PIN, PROPRIETARY NEOPRENE RUBBER DIAPHRAGM, WITH 2 SOFT RUBBER SEALING GASKETS. FLOOR RATING ASSE - 1072 AF-CW.
F	FLOOR SINK	ZURN	ZB 1910	---	3", 4"	---	---	8-1/2" SQ. TOP, 6" DEEP, DOME STRAINER. HALF, 3/4 OR NO GRATE AS INDICATED ON PLANS
G	FUNNEL FLOOR SINK	ZURN	ZB 1910	---	3", 4"	---	---	8-1/2" SQ. TOP, 6" DEEP, W/6" TALL ROUND OR OVAL FUNNEL.
H	WALL CLEANOUT	ZURN	ZB 1446	---	LINE SIZE	---	---	ROUND, POLISHED BRONZE TOP.
J	MOP BASIN/CAN WASH	FLORESTONE	#50	---	3"	1/2"	1/2"	36X36X6" MOLDED MOP BASIN WITH 3" OUTLET. PROVIDE WITH MR-371 THREADED FAUCET WITH WALL BRACE, FILL HOOK AND APPROVED VACUUM BREAKER, MR-370 HOSE & HOSE BRACKET, MR-372 MOP HANGER, MR-373 BUMPER GUARDS AND MR-377 STAINLESS TEEL WALL GUARD.
K	TRENCH DRAIN	ZURN	Z886-US	---	3"	---	---	24"x6" SS TRENCH DRAIN WITH STAINLESS STEEL PERFORATED GRATE AND MEMBRANE CLAMP.

FIXTURE SCHEDULE NOTES

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LAVATORIES: SAME AS WATER CLOSETS
URINALS: SAME AS WATER CLOSETS
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- ENCLOSE ALL SUPPLIES AND P-TRAPS OF BARRIER FREE LAVATORIES WITH A PROTECTIVE INSULATING MATERIAL AND A SMOOTH JACKET (TRAP WRAP OR EQUAL).

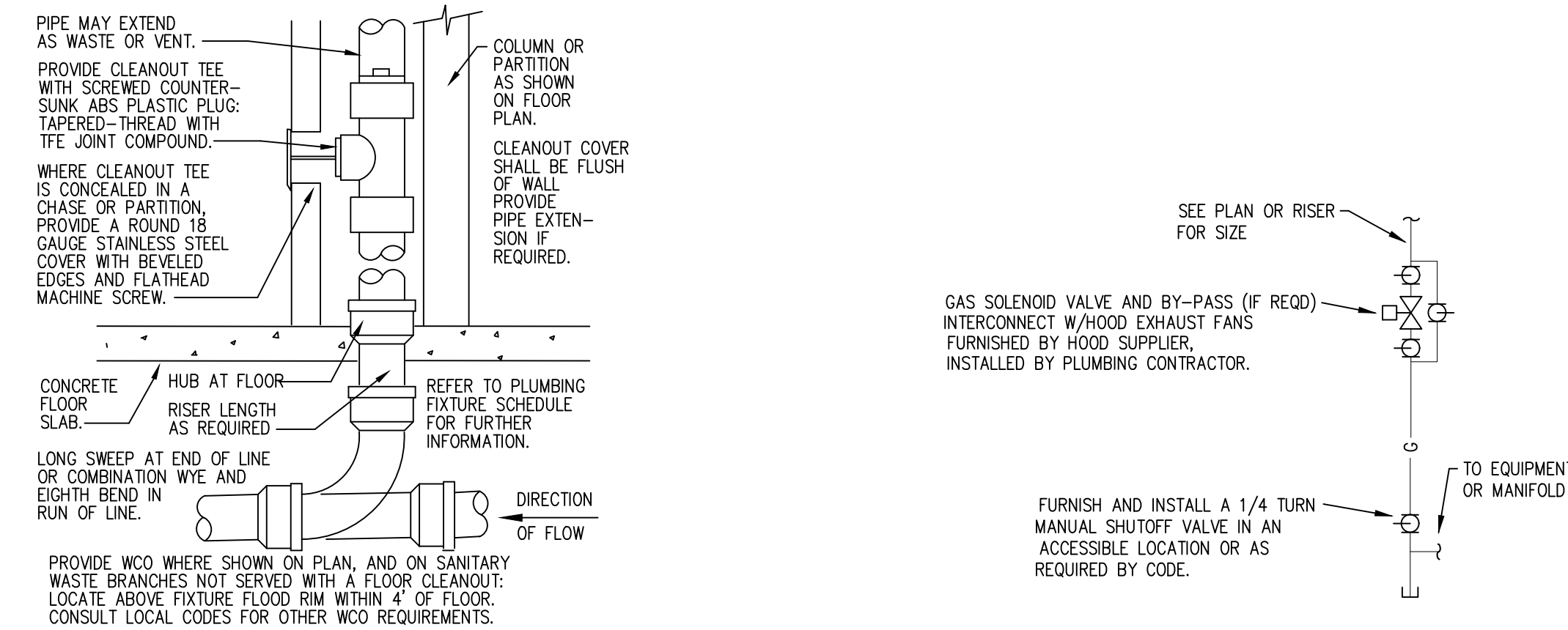


(WATER PIPING)
1 FLOOR PLAN - PLUMBING
SCALE: 1/4"=1'-0"

P-2



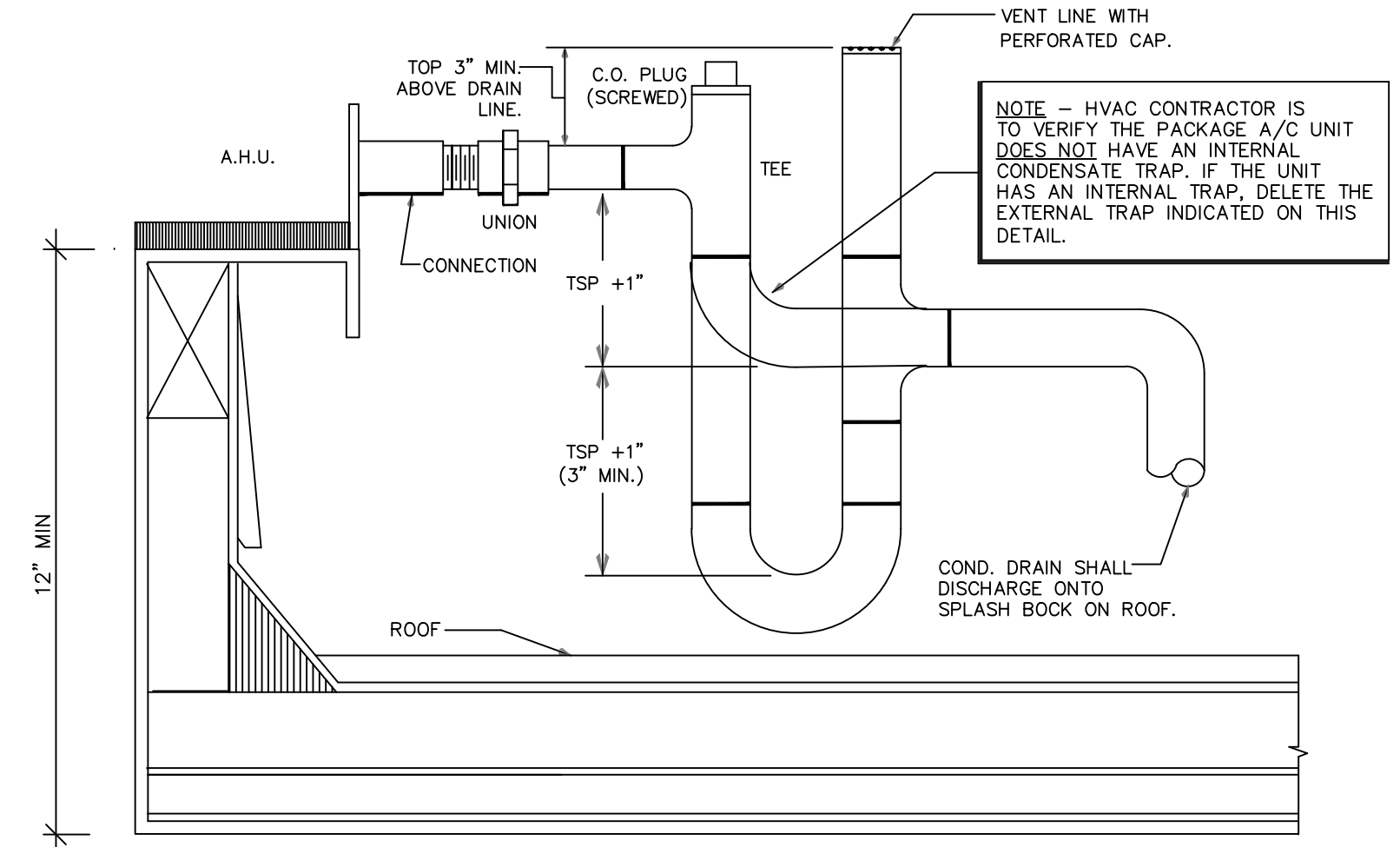
EXTERIOR CLEANOUT
NO SCALE



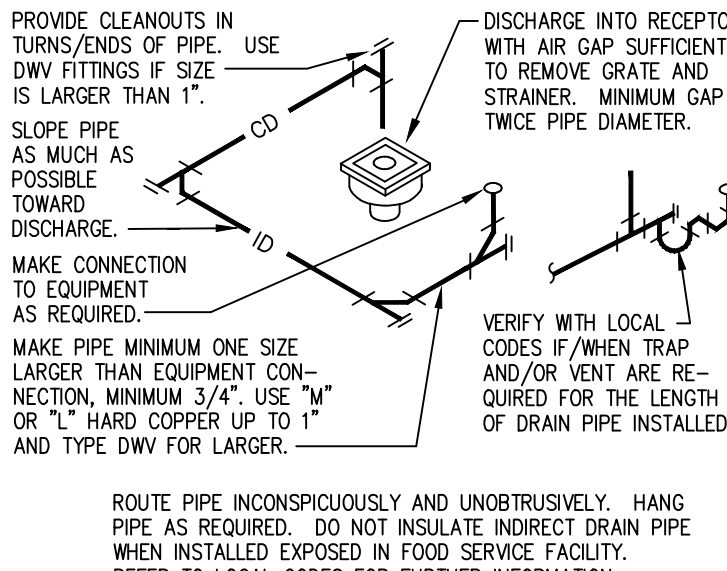
WALL CLEANOUT
NOT TO SCALE

AUTOMATIC GAS SHUTOFF VALVE
NOT TO SCALE

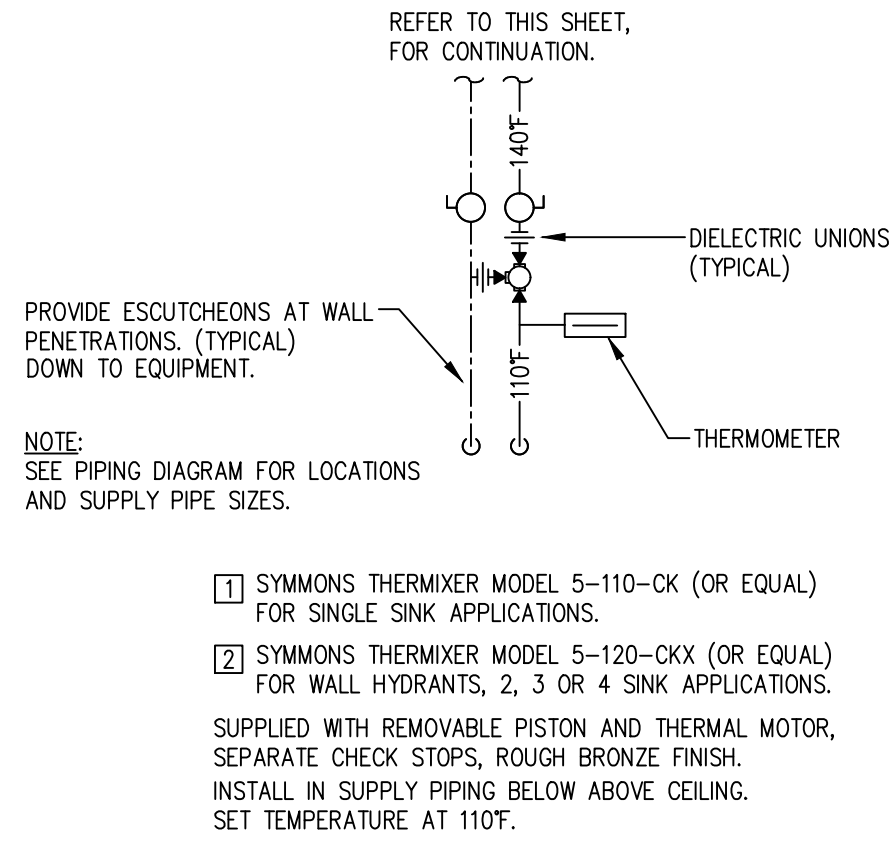
WATER HEATER PIPING SCHEMATIC
NO SCALE



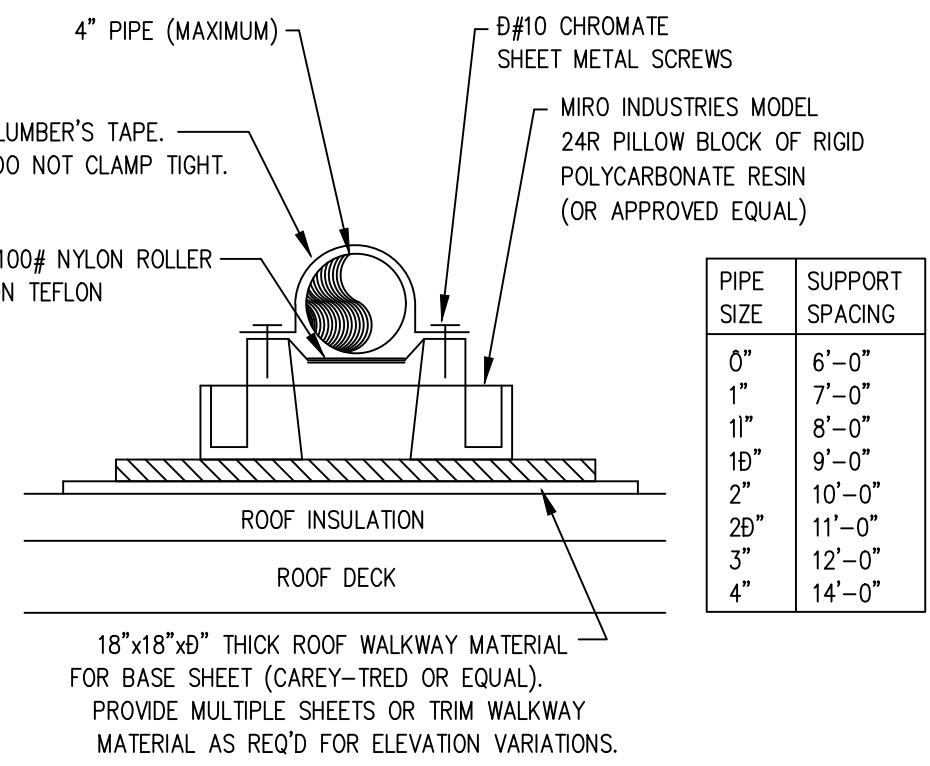
CONDENSATE P-TRAP DETAIL
NO SCALE



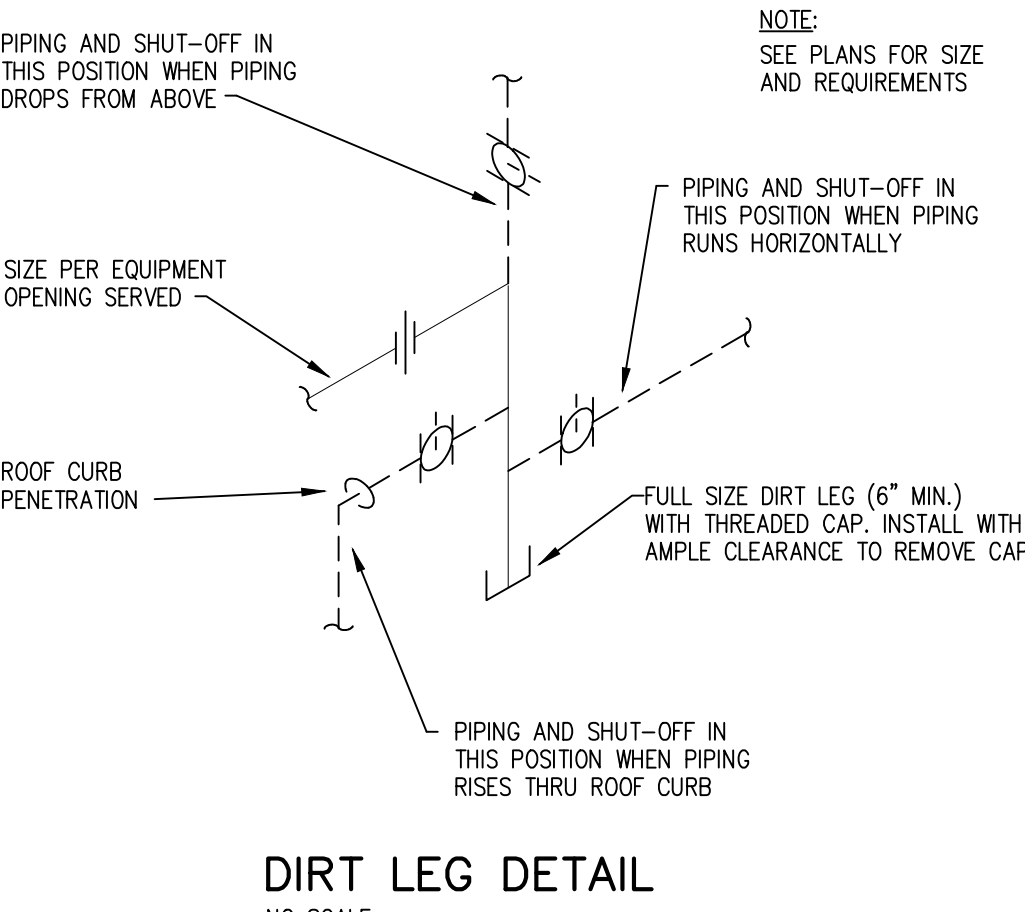
INDIRECT/CONDENSATE DRAIN
NO SCALE



MIXING VALVE PIPING SCHEMATIC
NO SCALE



ROOFTOP PIPING SUPPORT DETAIL
NO SCALE



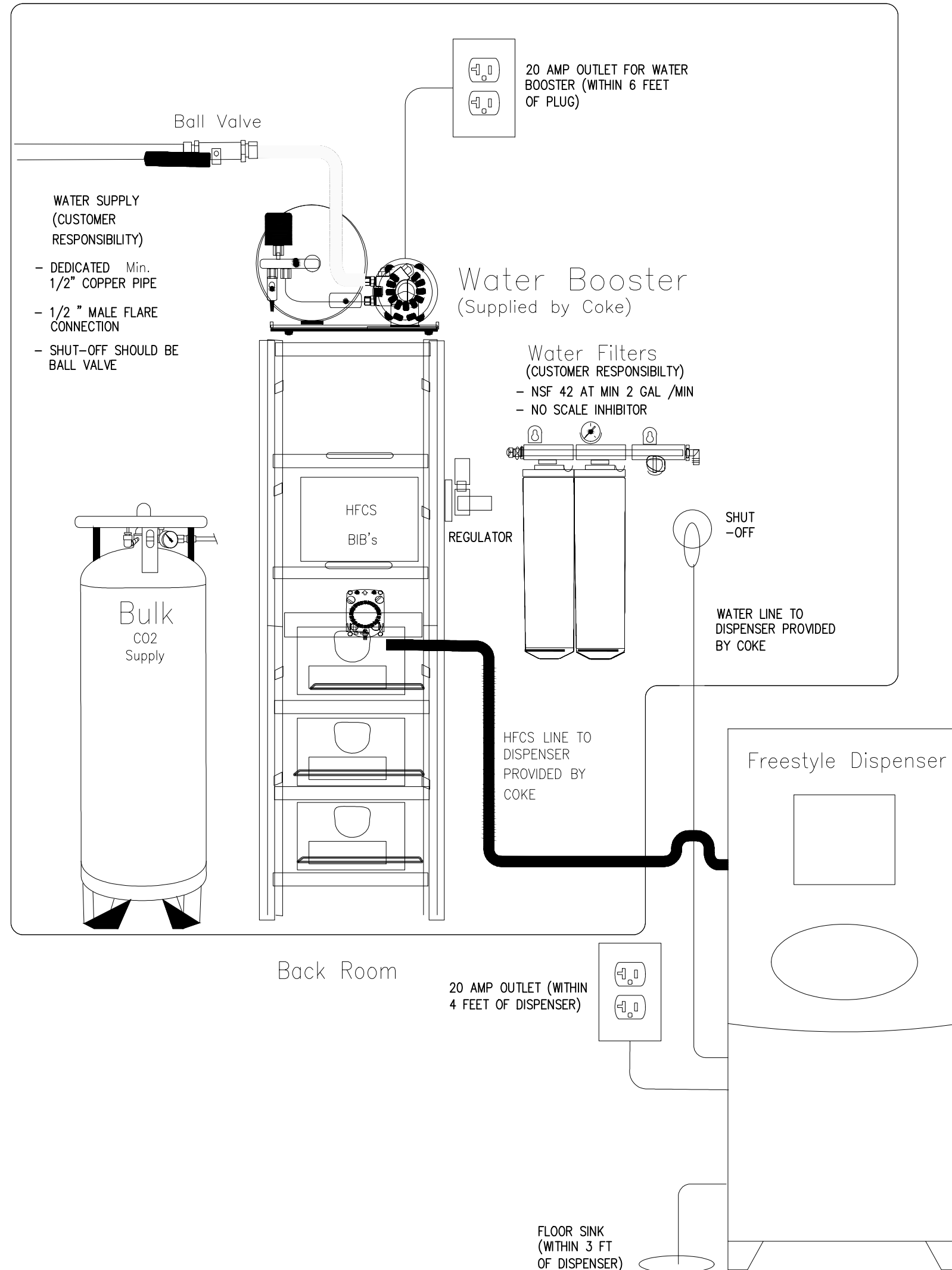
DIRT LEG DETAIL
NO SCALE

PLUMBING GENERAL NOTES

- THE EQUIPMENT ROUGH-IN ITEMS AND THEIR DIMENSIONED LOCATIONS FOR ALL CONNECTIONS ARE ACCURATE TO THE BEST OF OUR KNOWLEDGE. IN SOME INSTANCES THE OWNER OR SUPPLIER MAY MAKE SUBSTITUTIONS OR THE EQUIPMENT ITEMS MAY VARY FROM WHAT IS SHOWN. THEREFORE, THESE ITEMS AND DIMENSIONS SHALL BE VERIFIED WITH THE EQUIPMENT SUPPLIER, OWNER AND/OR EQUIPMENT ROUGH-IN DRAWINGS. THE ARCHITECT/ENGINEER SHALL BE IMMEDIATELY NOTIFIED PRIOR TO CONSTRUCTION OF ANY DEVIATIONS FROM WHAT IS SHOWN OR IMPLIED ON THESE DRAWINGS. FAILURE OF THE APPROPRIATE CONTRACTOR TO VERIFY ROUGH-INS OR THEIR LOCATIONS SHALL PLACE THE RESPONSIBILITY FOR ANY SUBSEQUENT RELOCATION AND/OR ADDITIONAL ROUGH-INS DIRECTLY UPON THE CONTRACTOR.
- CONTRACTOR SHALL SUPPLY TO THE ARCHITECT SIX COPIES OF SHOP DRAWINGS FOR APPROVAL SO THE QUALITY OF INTENDED MATERIALS OR EQUIPMENT CAN BE REVIEWED BEFORE INSTALLATION. THERE WILL BE NO DRAW UNTIL SHOP DRAWINGS HAVE BEEN SUBMITTED AND REVIEWED BY ARCHITECT/ENGINEER.
- DO NOT SCALE THIS DRAWING. REFER TO ARCHITECTURAL FLOOR PLANS FOR BUILDING DIMENSIONS.
- THE SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT THE CONTRACTOR HAS FAMILIARIZED HIMSELF WITH THE PLANS AND BUILDING SITE. CLAIMS MADE SUBSEQUENT TO THE PROPOSAL FOR MATERIALS AND LABOR BECAUSE OF DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED, IF THEY COULD HAVE BEEN FORESEEN HAD PROPER EXAMINATION BEEN MADE.
- VERIFY SERVICE POINTS AND METERING LOCATIONS FOR PROJECT WITH LOCAL UTILITIES AND/OR LANDLORD (DOMESTIC WATER, SANITARY SEWER, GAS, ETC.).
- THE CONTRACTOR SHALL COOPERATE FULLY AMONG THE TRADES.
- ALL ROOF PENETRATIONS FOR ROOF DRAINS AND PLUMBING/GAS/REFRIGERANT PIPING SHALL BE MADE IN ACCORDANCE WITH ROOF SYSTEM MANUFACTURER'S GUIDELINES. COORDINATE WITH ARCHITECTURAL DETAILS AND/OR LANDLORD FOR ROOF SYSTEM USED.
- PLUMBING CONTRACTOR SHALL VERIFY WITH THE LOCAL HEALTH DEPARTMENT AND/OR WATER COMPANY AS TO THE METER AND VALVING ARRANGEMENT OF THE DOMESTIC WATER SERVICE LINE WHICH ENTERS THE BUILDING. SHOULD A BACKFLOW PREVENTER ASSEMBLY AND/OR PRESSURE REDUCING VALVE ASSEMBLY BE REQUIRED, THE PLUMBER SHALL FURNISH AND INSTALL SAME PER LOCAL AND STATE REQUIREMENTS. THE BACKFLOW ASSEMBLY SHALL BE A "WATTS" SERIES RPOR OR APPROVED EQUAL MEETING ASSE STANDARDS 1013, 1015 AND 1020. IF BACKFLOW PREVENTER IS INSTALLED, PROVIDE PROPERLY SIZED THERMAL EXPANSION TANK IN SUPPLY PIPING OF WATER HEATER. IF WATER PRESSURE IS 65 PSI OR GREATER, A PRESSURE REDUCING VALVE ASSEMBLY SHALL BE A "WATTS" SERIES 825AUB-23 OR APPROVED EQUAL SET AT 50 LBS. DELIVERY PRESSURE UNLESS OTHERWISE NOTED.
- THE WATER PIPING SYSTEM SHALL BE FLUSHED AND STERILIZED IN ACCORDANCE WITH LOCAL REGULATIONS.
- THE POTABLE WATER SUPPLY SHALL BE PROTECTED AGAINST BACKFLOW AND SIPHONAGE BOTH NATURAL AND INDUCED. ALL EQUIPMENT CONNECTED TO THE POTABLE WATER SYSTEM BEING CAPABLE OF POLLUTING OR CONTAMINATING THE POTABLE WATER DISTRIBUTION SYSTEM OR ANY PART THEREOF BY MEANS OF A REVERSAL OF FLOW, PRESSURE DROP, PRESSURE LOSS, INDUCED VACUUM OR BY INJECTION BECAUSE OF ANY PRIMARY OR AUXILIARY PUMPING SYSTEM CONNECTED THERETO MUST BE ISOLATED AND CONTAINED BY MEANS OF APPROVED BACKFLOW DEVICES, CHECK VALVES, AIR GAPS OR VACUUM BREAKERS. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL THESE DEVICES PER LOCAL CODE REQUIREMENTS.
- THE HOT AND COLD WATER SUPPLY BRANCHES FOR ALL EQUIPMENT HAVING QUICK CLOSING VALVES OF ANY TYPE SHALL HAVE WATER HAMMER ARRESTORS INSTALLED AT THE HIGH POINT ON THE END OF EACH BRANCH.
- FURNISH AND INSTALL SHUTOFF OR BALL VALVE AND DIELECTRIC UNION ON ALL EQUIPMENT HOT AND COLD WATER LINES. PLUMBING CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO EQUIPMENT. COORDINATE WITH EQUIPMENT SUPPLIER FOR EXACT REQUIREMENTS.
- FURNISH & INSTALL 1/2" (MIN.) FIBERGLASS INSULATION WITH ALL-SERVICE JACKET ON ALL HOT, COLD, RECIRCULATING WATER LINES ABOVE SLAB AND ALL CONDENSATE FROM MECHANICAL UNITS.
- WATER PIPE AND FITTINGS SHALL BE COPPER OR BRASS PER CODE. ABOVE GROUND SHALL BE TYPE L RIGID COPPER. BELOW GROUND SHALL BE TYPE K SOFT COPPER WITH NO JOINTS PERMITTED BELOW GROUND. ALL JOINTS SHALL BE MADE WITH 90-5 SOLDER OR EQUAL.
- BARRIER FREE LAVATORY P-TRAP AND ANGLE STOP ASSEMBLIES SHALL BE INSULATED WITH TRAP WRAP PROTECTIVE KIT S00R BY BROCAR (1-800-827-1207) OR EQUAL. ABRASION RESISTANT EXTERIOR COVER SHALL BE SMOOTH AND HAVE 1/8" MIN. WALL OVER CUSHIONED FOAM INSERT. FASTENERS SHALL REMAIN SUBSTANTIALLY OUT OF SIGHT.
- VERIFY MOUNTING HEIGHTS OF ALL BARRIER FREE FIXTURES WITH ARCH. PLANS
- INSTALL 1" FIBERGLASS INSULATION W/ALL-SERVICE JACKET ON ALL ROOF LEADERS ABOVE CEILING.
- FURNISH AND INSTALL CONDENSATE LINES FROM ANY MECHANICAL EQUIPMENT AS REQUIRED. ANY CONDENSATE LINE RUN ABOVE THE CEILING OR IN A LOCATION WHERE THE PIPE'S SWEATING COULD CAUSE DAMAGE, SHALL BE INSULATED. RUM FILL SIZE TO DRAIN OR AS INDICATED ON PLANS. TURN DOWN WITH REQUIRED AIR GAP.
- PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL COPPER INDIRECT WASTE PIPING REQUIRED FROM EQUIPMENT TO FLOOR DRAINS, OPEN RECEPTACLES, OR FLOOR SINKS. PIPING SHALL COMPLY WITH STATE AND LOCAL CODES. COORDINATE WITH ALL EQUIPMENT SUPPLIERS AND SIZE AS REQUIRED BY PIECE OF EQUIPMENT SERVED. HOLD PIPING TIGHT TO WALL WHERE APPLICABLE. PROPERLY SECURE AS REQUIRED. COORDINATE WITH CASEWORK SUPPLIER FOR MAXIMUM CLEARANCE UNDER CABINETS.
- ALL EXPOSED GAS PIPING SHALL BE PAINTED TO MATCH ADJACENT WALL.
- ALL VENT PIPE TO BE COMPATIBLE WITH STRUCTURE, MECHANICAL EQUIPMENT AND DUCTWORK, ELECTRICAL EQUIPMENT AND LIGHTING.
- THE NATURAL GAS TO THE EQUIPMENT SHALL BE LOW PRESSURE. THE REGULATOR OUTLET PRESSURE SHALL BE 7" WATER COLUMN. IF THE GAS COMPANY IS UNABLE TO PROVIDE THIS PRESSURE, IMMEDIATELY CONTACT THE A/E OR OWNER FOR INSTRUCTIONS. GAS PIPING SHALL BE CONTACTED 40 BLACK STEEL, U.O.N.
- WASTE AND VENT PIPING SHALL BE CAST IRON. CONTRACTOR MAY USE SCHEDULE 40 OR 80, TYPE 1, GRADE 1, POLYVINYL CHLORIDE COMPOUNDS AS DEFINED AND DESCRIBED IN TENTATIVE SPECIFICATIONS FOR RIGID PVC (ASTM DESIGNATION: D 2688 OR 2948, FB81 OR SCHEDULE 40 OR 30 PVC (ASTM DESIGNATION: D 2688-18 BUTADIENE-STYRENE COMPOUND AS DEFINED AND DESCRIBED IN STANDARD SPECIFICATIONS FOR ABS (ASTM DESIGNATION: D2688 OR F 628) IN LIEU OF CAST IRON WASTE AND VENT PIPING IF PERMITTED BY CODE. INSTALL PVC OR ABS PIPING PER CODE. PLUMBING CONTRACTOR SHALL INSTALL 4" SOIL, WASTE AND GREASE WASTE PIPING WITH A MINIMUM SLOPE OF 1/8" PER FOOT OR AS REQUIRED BY CODE.
- HOLD TOP OF FLOOR DRAINS FLUSH WITH FINISHED FLOOR. SEE ARCH. SHEETS FOR FLOOR SLOPES AND DRAIN DRAINS. (IF REQ'D)
- ALL NEW V.T.R.'S SHALL BE EXTENDED TO A MINIMUM OF 12" ABOVE PARAPET HEIGHT AND MAINTAINED 10'-0" MINIMUM FROM ALL OUTSIDE AIR INTAKES.
- MATERIALS, EQUIPMENT, ASSEMBLIES AND SYSTEMS SHALL MEET ALL PERTINENT REQUIREMENTS OF NATIONALLY RECOGNIZED TESTING ORGANIZATION SUCH AS THE U.L. ASTM, ASSE, ANMA, ASA AND NFPA AS WELL AS THE MOST CURRENT VERSION OF THE STATE CODE AND LOCAL AMENDMENTS.
- ALL INSTALLED SYSTEMS, DEVICES AND RELATED ITEMS SHALL BE TESTED IN PLACE ON SITE PER LOCAL CODE REQUIREMENTS. REPLACE ANY AND ALL CONTRACTOR SUPPLIED DEFECTIVE DEVICES, ITEMS OR SYSTEMS AT CONTRACTOR'S OWN EXPENSE BEFORE COMPLETION OF PROJECT.
- WHERE JOB CONDITIONS REQUIRE CHANGES FROM THE CONTRACT DOCUMENTS THAT DO NOT CHANGE THE SCOPE OR NATURE OF THE WORK REQUIRED, THE CONTRACTOR SHALL MAKE SUCH CHANGES WITHOUT ADDITIONAL COST TO THE OWNER. NO OTHER CHANGES MAY BE MADE WITHOUT WRITTEN PERMISSION OF THE OWNER.
- ALL EQUIPMENT, FIXTURES AND MATERIALS SHALL BE NEW AND UNUSED, AND INSTALLED IN STRICT CONFORMANCE TO MANUFACTURER'S RECOMMENDATIONS (U.O.N.). PROVIDE COMPLETE WITH ALL TRIM, STOPS, HANGERS, CARRIERS, SUPPORTS, ETC. INCLUDING PROVISIONS FOR BARRIER FREE USE, IF REQUIRED. WHERE FIXTURES ARE ACCESSIBLE, THEY MUST COMPLY WITH ALL FEDERAL A.D.A. REGULATIONS.
- CONTRACTOR SHALL GUARANTEE ALL WORK FOR WHICH MATERIALS ARE FURNISHED, FABRICATED OR FIELD ERECTED, ALL FACTORY ASSEMBLED EQUIPMENT FOR WHICH NO SPECIFIC MANUFACTURER'S GUARANTEE IS FURNISHED AND ALL WORK IN CONNECTION WITH THE INSTALLATION OF MANUFACTURER'S GUARANTEED EQUIPMENT. THIS CONTRACTOR'S GUARANTEE SHALL EXIST FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL OWNER ACCEPTANCE OF THE WORK AND SHALL APPLY TO ALL DEFECTS IN MATERIALS AND/OR WORKMANSHIP OF ANY KIND.
- BIDDERS SHALL BE LICENSED CONTRACTORS IN ACCORDANCE WITH LOCAL AND STATE LAWS.
- ALL PERMITS AND FEES REQUIRED FOR THE WORK SHALL BE SECURED AND PAID FOR BY THE CONTRACTOR AND INCLUDED IN THE BID PRICE.
- ALL PLUMBING FIXTURES AND PIPING SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF STATE AND/OR LOCAL CODES. COOPERATE AS REQUIRED WITH ALL AUTHORITIES HAVING JURISDICTION TO INSURE THAT PROPER MATERIALS AND WORKMANSHIP ARE USED. REQUIREMENTS OF STATE AND LOCAL CODES AND AUTHORITIES TAKE PRECEDENCE OVER ANY INFORMATION WHICH IS INDICATED OR IMPLIED ON THESE DRAWINGS.
- THIS SYMBOL (C) INDICATES ITEM TO BE FURNISHED BY OWNER OR KITCHEN EQUIPMENT SUPPLIER. COORDINATE INSTALLATION AND FINAL CONNECTION REQUIREMENTS WITH SUPPLIER. FIELD VERIFY SIZES AND LOCATIONS OF ALL SUPPLIER. FIELD VERIFY SIZES AND LOCATIONS OF ALL WATER, WASTE, INDIRECT WASTE, GAS AND/OR ELECTRICAL CONNECTIONS PRIOR TO INSTALLATION (TYPICAL ALL PLUMBING EQUIPMENT).
- SEE PLUMBING ROUGH-IN DRAWINGS PROVIDED BY KITCHEN EQUIPMENT SUPPLIER FOR MORE INFORMATION.
- ALL INDIRECT WASTE, WASTE PIPING OR FIXTURE WHICH RECEIVES THE DISCHARGE FROM A DISHWASHER, STEAMER OR SIMILAR PIECE OF EQUIPMENT WHICH PRODUCES SIMILAR PIECE OF EQUIPMENT WHICH PRODUCES WATER AT A TEMPERATURE HIGHER THAN 125°F SHALL BE DWV COPPER OR CAST IRON A MINIMUM OF 10'-0" DOWNSTREAM FROM THE OUTLET PRODUCING SUCH DISCHARGE. COORDINATE WITH KES.
- ALL INDIRECT WASTE PIPING FROM EQUIPMENT TO ABOVE FLOOR RECEPTOR SHALL BE 1" (MIN.) COPPER UNLESS LARGER SIZE IS INDICATED BY EQUIPMENT OPENING OR KES.

KITCHEN EQUIPMENT SCHEDULE

NO.	QTY.	ITEM	EQUIPMENT	MANUFACTURER	MODEL NUMBER	FURN. BY		INST. BY	FINAL CONNECTION	WATER		WASTE		GAS		ELECTRICAL		REMARKS
						PLUMBING CONTRACTOR	PLUMBING CONTRACTOR	PLUMBING CONTRACTOR	PLUMBING CONTRACTOR	HW	CW	HEIGHT	DR	INSTR	HEIGHT	BTU/HR	HEIGHT	
4a	1	EVAPORATOR COIL - WALK-IN COOLER	KOLPAK	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
4b	1	SELF-SERVE DROP-IN ICE PAN 24" x 24"	KOLPAK	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
5	1	5/8" HAND SINK w/ FAUCET, PEDESTAL	TAS BRASS	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
10a	0	5/8" HAND SINK w/ FAUCET, PEDESTAL	TAS BRASS	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
10b	1	ICE MACHINE 500LB / ICE STORAGE BIN	SCOTTSMAN	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
20	1	ICE MACHINE 500LB (ABOVE DRINK MACHINE)	SCOTTSMAN	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
21	1	FILTERS FOR WATER AND ICE	EVERPURE	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
23	1	5/8" ONE COMPARTMENT SINK w/18" DRIN BOARD (R OR L)	ADVANCE	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
24	1	PRE-RINSE UNIT WITH FAUCET	T & S	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
25	1	5/8" HAND SINK w/ FAUCET, WALL MOUNTED	ADVANCE	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
26	1	5/8" FOUR COMPARTMENT SINK w/24" DRIN BOARDS	ADVANCE	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
26a	1	PRE-RINSE UNIT w/ FAUCET	T & S	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
26b	1	32" SPOUT FAUCET	T & S	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
32	1	FOUR WELL HOT FOOD TABLE W/ CASTERS w/12" CUTTING BOARD AND ADAPTERS	APW WYOTT	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
35	1	DROP-IN HOT FOOD WELL	WELLS	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
36	1	DROP-IN REFRIGERATED COLD FOOD WELL	WELLS	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
40	1	MOP SINK, 24" x 24"10" FLOOR MOUNT	FIAT	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
42	0	ICE SODA DISPENSER	LANCER	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
43a	1	TEA BREWER	BUNN	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
47	1	TANKLESS WATER HEATER (BY G.C.)	NORITZ	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
52	1	SLAM-LINE DROP IN COLD PAN (INDIRECT DRAIN TO FLOOR SINK)	RANDELL	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
53	1	FREESTYLE COKE MACHINE	COKE	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
53a	1	WATER BOOSTER FOR FREESTYLE COKE MACHINE	COKE	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC
55	1	WATER/ICE DISPENSER	SERVINO	ADVANCE	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC	ADVANCE TABC



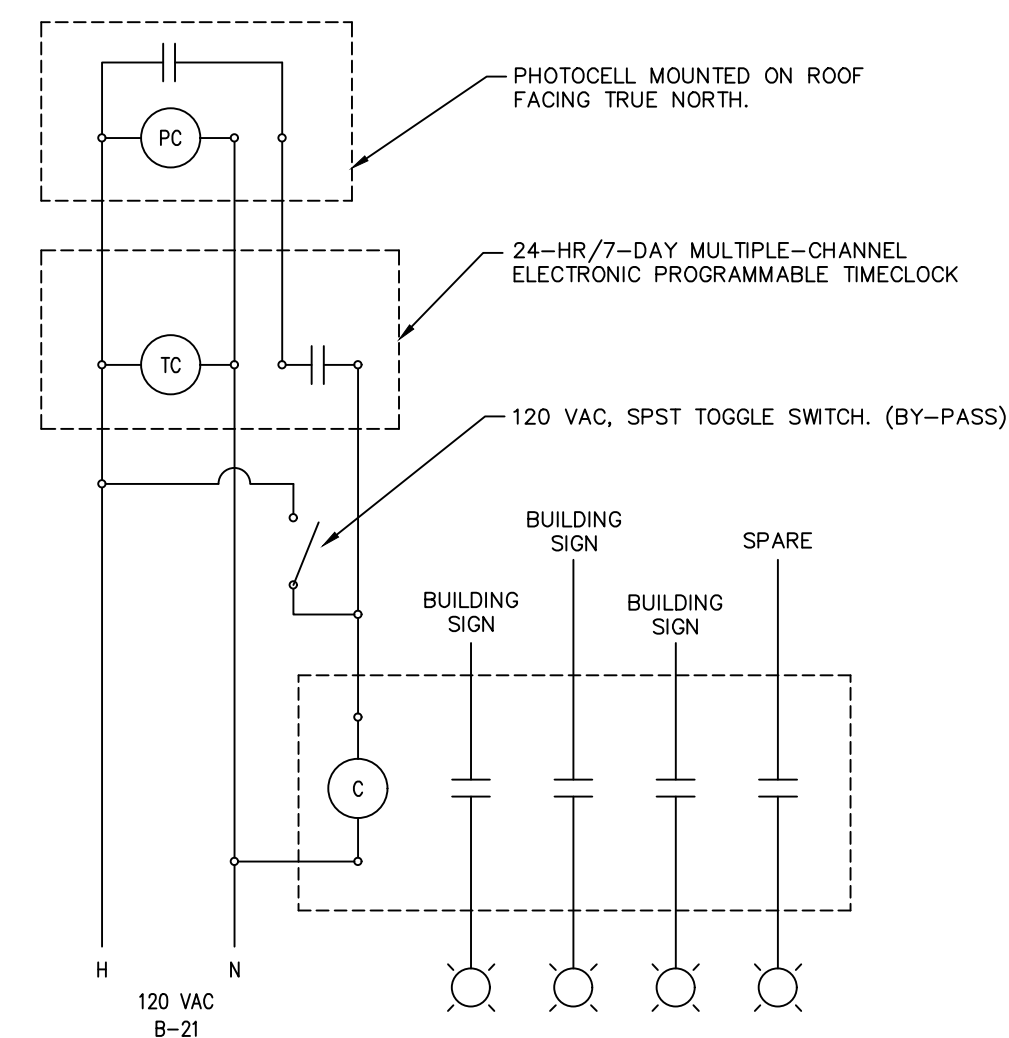
FREESTYLE INSTALLATION REQUIREMENTS
NO SCALE

ELECTRICAL NOTES:

1. GENERAL: ALL WORK SHALL CONFORM TO THE LATEST APPROVED EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL LOCAL ORDINANCES.
2. THE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE DRAWINGS AND ANY APPLICABLE SPECIFICATIONS. IF THERE IS ENDS TO THE SPECIFICATIONS, THIS REQUIREMENT, THE CONTRACTOR SHALL NOTIFY THE OWNER OR HIS REPRESENTATIVE AS SOON AS POSSIBLE AFTER DISCOVERY OF THE PROBLEM, AND SHALL NOT PROCEED WITH THAT PORTION OF THE WORK UNTIL THE OWNER HAS REVIEWED THE CORRECTION.
3. THE CONTRACTOR SHALL COORDINATE THE PROPOSED LOCATIONS OF ALL ELECTRICAL MATERIALS AND EQUIPMENT WITH THE DESIGNER. ANY CHANGES MUST BE INVOLVED BEFORE STARTING INSTALLATION OF THOSE ITEMS.
4. COORDINATE THE INSTALLATION OF REQUIRED SUPPORTING DEVICES, CONDUIT, AND SLEEVES TO BE SET IN CONCRETE OR CONCRETE CURBS AND CURBS AND CURBS COMPONENTS, AS THEY ARE CONSTRUCTED.
5. UNLESS OTHERWISE SPECIFIED ON THE PLANS, ALL SPECS ARE INTENDED TO BE MINIMUMS. THE CONTRACTOR WILL BE ACCEPTABLE FOR EQUAL RATED AND LISTED UNITS.
6. SCOPE: EXCEPT WHERE OTHERWISE SPECIFICALLY INDICATED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR A SIMILAR NOTATION. IT IS THE INTENT THAT THE CONTRACTOR FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND TOOLS NECESSARY TO PROVIDE ALL SYSTEMS IN COMPLETE AND PROPER OPERATION.
7. EXCAVATE AS NECESSARY FOR THE INSTALLATION OF ELECTRICAL MATERIALS AND EQUIPMENT. VERIFY THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES OR RECORDS BEFORE EXCAVATION. TAKE CARE TO AVOID DAMAGE TO SUCH ITEMS DURING EXCAVATION. REMOVE ALL MATERIALS, INCLUDING BRICK, CONCRETE, STONES AND FOREIGN DEBRIS, DEPOSITED IN 6" LAYERS OF FILL TO A MINIMUM OF 18" DEEPER THAN THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
8. MATERIALS: THE MATERIALS AND EQUIPMENT FURNISHED SHALL BE AS INDICATED ON THE DRAWINGS; SUBSTITUTIONS WILL NOT BE MADE. THE CONTRACTOR SHALL BE RESPONSIBLE BY THE OWNER OR HIS REPRESENTATIVE PRIOR TO STARTING INSTALLATION OF MATERIALS AND EQUIPMENT FURNISHED SHALL BE LISTED AND APPROVED UNDERGROUND INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCAL BUILDING AGENCY'S RECOGNIZED TESTING ORGANIZATION, AND SHALL BE RESPONSIBLE FOR THE LOCAL BUILDING AGENCY'S TESTING.
9. GROUNDING: GROUNDING SHALL BE IN ACCORDANCE WITH ARTICLE 250, NEC.
10. SHARED NEUTRAL CONDUCTORS SHALL NOT BE ALLOWED UNLESS INSTALLED IN ACCORDANCE WITH NEC-210.40.
11. CONDUITS: PROVIDE CONDUITS WHERE CALLED FOR ON PANEL SCHEDULES. ELECTRICAL METALLIC TUBING (EMT) SHALL BE INSTALLED ONLY IN DRY LOCATIONS, IN CONCRETE ABOVE GRADE, AND WHERE NOT SUBJECT TO PHYSICAL DAMAGE. CONDUITS INSTALLED UNDERGROUND SHALL BE POLYVINYLCHLORIDE (PVC) AND SHALL NOT BE SMALLER THAN 1/2" TRADE SIZE. EMT OR PVC CONDUIT IS INSTALLED UNDERGROUND, ELBOWS TURNING UP AND CONDUIT EMERGING FROM GRADE SHALL BE CONSIDERED. CONDUITS SHALL NOT BE LESS THAN 24" BELOW FINISHED GRADE. CONDUITS SHALL BE INSTALLED IN CONCRETE OR EMBEDDED IN EARTH SHALL BE: NEMA TYPE 3C TYPE EPC-40 (SCHEDULE 40) CONDUIT WHERE THERE IS NO TRAFFIC, AND TYPE 3C VEHICULAR TRAFFIC. IT SHALL BE NEMA TYPE 3C TYPE EPC-80 (SCHEDULE 80) CONDUIT WHERE THERE IS HEAVY VEHICULAR TRAFFIC. IT SHALL BE NEMA TYPE 3C TYPE EPC-80 (SCHEDULE 80).
12. CABLE: ALL CABLE CLAD CABLE (WIRE) SHALL MEET AND EXCEED ALL NEC, OSHA AND HUD STANDARDS.
13. CONDUCTORS: CONDUCTORS SHALL BE AS SCHEDULED ON PANEL SCHEDULES. ALL POWER CONDUCTORS SHALL BE SMALLER THAN 4/0 AWG (CU) OR 3/0 AWG (AL). ALL SERVICE CONDUCTORS SHALL NOT BE SMALLER THAN #1/0 AWG. CONDUCTORS SHALL BE CONSIDERED TO BE 100% CIRCULAR WITHOUT SPECS EXCEPT WITHIN WIREWAY OR JUNCTION BOXES. CONDUCTORS IN PANELS SHALL BE IDENTIFIED BY TERMINAL STRIP TERMINALS FOR IDENTIFICATION OF CIRCUITS.
14. CONDUCTORS SHALL BE JOINED USING COMPRESSION SPECS, EXCEPT THAT CONDUCTORS #10 AND SMALLER MAY BE JOINED USING WIRE NUT TYPE CONNECTIONS. CONDUCTORS TERMINATED USING COMPRESSION OR PRESSURE TYPE TERMINALS SHALL BE IDENTIFIED BY TERMINAL STRIP TERMINALS. CONDUCTORS #10 AND SMALLER, SHALL BE THE SELF-TERMINATING TYPE. OTHER THAN #10 AND SMALLER, #12 #14 OR #16 PLASTIC TAP. SPECS IN NET LOCATIONS SHALL BE IDENTIFIED BY TERMINAL STRIP TERMINALS OR IDENTIFIED BY SODACATCH OR EXACTLY POTTING COMPOUND.
15. PROVIDE AND INSTALL JUNCTION AND PULL BOXES WHERE INDICATED AND WHERE NECESSARY TO TERMINATE, TAP OFF, OR REDUCE MULTIPLE CONDUCTORS. INDICATED OR AS REQUIRED BY NEC, WHERE FEEDER SPECS ARE TO BE MADE, INSTALL BOXES ENOUGH TO ACCOMMODATE ALL CONDUCTORS.
16. LIGHTING FIXTURES: LIGHTING FIXTURES SHALL BE AS INDICATED ON THE DRAWINGS, AND SHALL BE INSTALLED WITH LAMPS. FIXTURES WITH ADJUSTMENTS AFFECTING LIGHT DISTRIBUTION SHALL BE PROVIDED TO PROTECT UNDESIRABLE LIGHT PATTERNS PRIOR TO THE FINAL DEMONSTRATION TEST.
17. TESTS: AFTER EACH SYSTEM HAS BEEN COMPLETED, A FUNCTIONAL TEST SHALL BE PERFORMED TO DEMONSTRATE THAT THE SYSTEM IS OPERATING ACCORDING TO THE DRAWINGS. THE FUNCTIONAL DRAWINGS THE TEST SHALL BE PERFORMED BY THE CONTRACTOR IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE.
18. TERMINALS: ALL ELECTRICAL EQUIPMENT FURNISHED ON THIS PROJECT IS TO HAVE TERMINALS RATED FOR 75 °C OPERATION.

LUMINAIRE DESIGNATION	PART NUMBER OR DESCRIPTION	COLOR	SYMBOL	DESCRIPTION	REMARKS	VOLTAGE	LAMPING	COLOR TEMP.	CRI	WATTS	SYMBOLS
A	NORA LIGHTING #NH1C-6LMRATNLED-C-62130KWWKBB	WHITE		RECESSED LED DOWN LIGHT, 6" APERTURE	WHITE BAFFLE TRIM W/ GLASS LENS	120	INTEGRAL	3000K		11	
B	JUNO LIGHTING #T832BLR30K90DUO/BK	BLACK		TRACK MOUNTED PENDANT	SPECULAR COVERS AND BLACK FINISH	120	(2) LR30	2700K	86	80	
C	NORA LIGHTING #NRS80-45RFF	FIRE RED		PENDANT	TRACK MOUNTED PENDANT: GLASS FIRE RED SHADE. BOTTOM MTD 5'-6"	120	(1) 8WA19 LED	2900K	86	7	
D	LSI #ASC22-LED-HO-NW-LUE	WHITE		RECESSED 2x2 LAY-IN ACRYLIC LENS	FOR KITCHEN & BEHIND THE LINE AREAS	120	37W LED	3035K	86	37	
DE	LSI #ASC22-LED-HO-NW-LUE-EM	WHITE		RECESSED 2x2 LAY-IN ACRYLIC LENS	FOR KITCHEN & BEHIND THE LINE AREAS	120	37W LED	3500 K	86	37	
EM	BEST LIGHTING #R16HO-B	BLACK		SURFACE DUAL HEAD LOW PROFILE EM FIXTURE	LOW VOLTAGE AND BLACK FINISH	120	FURNISHE D	3500 K	86	10	
EX	BEST LIGHTING #CXTE12RW	BLACK W/RED LETTERS		SURFACE DUAL HEAD COMBO EM FIXTURE	DUAL SIDE WHITE FINISH W/ RED LETTERING	120	FURNISHE D	3500 K	86		
EX2	NORA #NE932	BLACK		SURFACE MOUNTED REMOTE HEAD		120	FURNISHE D	3500 K	86		
F	NATIONAL #NEL10-TRK4BLK	BLACK		TRACK MOUNTED INCANDESCENT PENDANT	CONNECT TO NORA SINGLE CIRCUIT TRACK, BLACK FINISH	120	(1) 7WA19 LED	3500 K	86	8	
F2	NORA LIGHTING #NTH-132B	BLACK		TRACK MOUNTED INCANDESCENT PENDANT	CONNECT TO NORA SINGLE CIRCUIT TRACK, BLACK FINISH FOR CEILINGS <12'	120	LED PAR30	2700K	86	40	
FAN	GUOROM CAPRI 77525-15	BLACK		52" BLADES, NO LIGHT KIT		120					
H	NORA LIGHTING #NTE-5903 BLACK (LED)	BLACK		TRACK HIGH EFFICIENCY LINEAR FL WALL WASHER WITH LED LAMP	EDISON SOCKET WITH LED LAMP	120	LED PAR30	2700K	82	25	
H-W	NORA LIGHTING #NTH-132W	WHITE		LED PAR 30 FOR LINE SNAKE	EDISON SOCKET WITH LED LAMP	120	LED PAR30	2700 K	82	18	
J	HI-LITE MANUFACTURING CO. INC. #H91781225B77-OPCBGCG-MEP	CLEAR ALZAK		WALL CUSTOM WEI- LISTED LASER CUT SCENE	CLOSED TOP & BOTTOM	120	(2) 100W INC 2900K	3500 K	82	18	
L	HI-LITE MANUFACTURING COMPANY #H-18110-915L1-A-9120WLED-BCM-M	BLACK		GOOSENECK LED	WIDE DISTRIBUTION	120	20W	3000 K		10	
2T, 4T, 8T	NORA LIGHTING #NT-302B, NT-304B, NT-310B, NT-316B	BLACK		TRACK W/ DEAD END CAP	BLACK FINISH W/ SUPPLEMENTAL CONNECTORS AS REQUIRED	120	NA	3500 K	82		

ELECTRICAL SYMBOLS LEGEND			NOTE – NOT ALL SYMBOLS MAY BE USED TO REPRESENT PROJECT
SYMBOLS	DESCRIPTION	SYMBOLS	DESCRIPTION
	DUPLEX RECEPTACLE, (MTD, +16" AFF		TRANSFORMER – SIZE AS NOTED
	240 VOLT RECEPTACLE (HT. AS REQ.)		PANEL – 1/2 SIZE AS NOTED
	QUADRUPLER RECEPTACLE, MTD, +18"		MOMENTARY CONTACT PUSH BUTTON
	COUNTERTOP HT. RECEPTACLE +42"		F-FAN, M-MOTOR, P-PUMP
	SINGLE POLE SWITCH, MTD +42"		SPECIAL OUTLET AS – REQUIRED
	THREE-WAY SWITCH, MTD +47"		GFI, HUMERON (B INDICATES PANEL) * S, DESIGATES CIRCUIT NUMBER
	MANUAL STARTER SWITCH		EXIT SIGN, ONE SIZED, OR TWO SIZED
	DIMMER SWITCH, MTD +47"		EMERGENCY LIGHTING
	SWITCH W/ L.L.M. WHEN ON +47"		RECESSED MOUNTED LIGHTING FIXTURE
	THREE-WAY SWITCH W/ GCGU SENSOR WHEN ON +47"		B, DESIGATES FUTURE
	SWITCH W/ GCGU SENSOR WHEN ON +47"		FLUORESCENT LIGHTING FIXTURE
	JUNCTION BOX, FLUSH IF POSSIBLE		FLUORESCENT LIGHTING FIXTURE
	TELEPHONE / DATA OUTLET +18"		FLUORESCENT STRIP LIGHTING FIXTURE
	DED. COMPUTER TERM. OUTLET +18"		ISOLATED GROUND
	DISCONNECT SWITCH W/ STARTER		WEATHER-PROOF
	FLR. MTD. FLUSH DUPLEX RECEPTACLE		BELOW COUNTER
	FLR. MTD. FLUSH QUAD. RECEPTACLE		TIME CLOCK – 24 HOUR
	FLR. MTD. FLUSH PHONE/DATA OUTLET		GROUND FAULT INTERRUPTER
	FLR. MTD. FLUSH COMPUTER OUTLET		ABOVE FINISHED FLOOR
	AREA SMOKE DETECTOR		ELECTRIC WATER COOLER
	HEAT DETECTOR		ABOVE SHOW WINDOW
	DUXT SMOKE DETECTOR		BELOW SHOW WINDOW
	FIRE ALARM MAN. PULL STATION +47"		FIRE ALARM CONTROL PANEL
	HORN WITH STRIKE LIGHT, MTD, +42"		FIRE ALARM ANNUNCIATOR PANEL
	BESID. DEVICE IS CEMELRA RATING STROBE LIGHT ONLY, MTD, +46"		
	BESID. DEVICE IS CEMELRA RATING STROBE LIGHT ONLY, MTD, +46"		



ELECTRICAL SYSTEM AND EQUIPMENT	
METHOD OF COMPLIANCE	
PRESCRIPTIVE <input checked="" type="checkbox"/>	PERFORMANCE <input type="checkbox"/> ENERGY COST BUDGET <input type="checkbox"/>
PROVIDE A STANDARD RISER DIAGRAM WHICH INDICATES DESIGNATED POINTS FOR CHECK METERING. PROVIDE A STANDARD PANEL SCHEDULE DESCRIPTION WHICH IDENTIFIES DIFFERENT ENCLOSE LOADS.	
LIGHTING SCHEDULE	
LAMP TYPE REQUIRED IN FUTURE	SEE SCHEDULE ON DRAWINGS
NUMBER OF LAMPS IN FUTURE	SEE SCHEDULE ON DRAWINGS
BALLAST TYPE USED IN FUTURE	SEE SCHEDULE ON DRAWINGS
NUMBER OF BALLASTS IN FUTURE	SEE SCHEDULE ON DRAWINGS
TOTAL WATTAGE PER FUTURE	SEE SCHEDULE ON DRAWINGS
TOTAL INTERIOR WATTAGE SPECIFIED VS ALLOWED	2400 VS 3287
TOTAL EXTERIOR WATTAGE SPECIFIED VS ALLOWED	N/A
EQUIPMENT SCHEDULES WITH MOTORS (NOT USED FOR MECHANICAL SYSTEMS)	
MOTOR HORSEPOWER	N/A
NUMBER OF PHASES	N/A
MINIMUM EFFICIENCY	N/A
MOTOR TYPE	N/A
NUMBER OF POLES	N/A
DESIGNER STATEMENT:	
TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE ELECTRICAL SYSTEM AND EQUIPMENT REQUIREMENTS OF THE NORTH CAROLINA ENERGY CODE 2012, CHAPTER 5.	
SIGNED: _____	
NAME:	TODD W. CAREY, P.E.
TITLE: NORTH CAROLINA PROFESSIONAL ENGINEER #9079	

NOTE:
COMPLIENCED TO NC ENERGY
SECTION 506 IS MADE BY HIGH
EFFICIENCY H.W. SYSTEM

TE - ALL EXTERIOR LIGHTING,
CLUDING EMERGENCY EGRESS
HTING IS EXISTING FROM THE
ELL CONSTRUCTION.

MOUNTING HEIGHT GUIDE FOR HANGING LIGHT FIXTURES:
 TYPE H-W: HEADS ARE DIRECT MOUNT TO TRACK. MOUNT TRACK ON CEILING.
 TYPE B & H: HEADS ARE DIRECT MOUNT TO TRACK. HANG TRACK AT 12'-0" A.F.F.
 TYPE C: 5'-6" A.F.F. - HANG TRACK AT 12'-0" A.F.F.
 TYPE F: 9'-5" A.F.F. - HANG TRACK AT 12'-0" A.F.F.

LIGHTING KEYED NOTES		4
①	SOUND SYSTEM SPEAKER. PROVIDE SPEAKER WIRING BETWEEN SPEAKER AND JBOX IN KITCHEN FOR MUSAK EQUIPMENT. COORDINATE REQUIREMENTS WITH SUPPLIER.	
②	TO SWITCH LOCATED @ KITCHEN DOOR.	
③	LOCATE LIGHT SWITCHES IN THIS AREA, COORDINATE w/OWNER.	
④	CONNECT TO UNSWITCHED CONDUCTORS	
⑤	CEILING EXHAUST FAN WITH TIME/LOG CONTROL.	
⑥	NIGHT LIGHT, (1) LAMP TO REMAIN ON AT ALL TIMES. PROVIDE SEPARATE UNSWITCHED POWER FEED TO ONE TUBE BALLAST IN FIXTURE.	
⑦	FOR COOLER LIGHTING.	

ALL EMERGENCY LIGHTING IS TO BE WIRED TO BE NON-SWITCHED ON THE CIRCUIT INDICATED.

NOTE - ALL EXTERIOR LIGHTING,
INCLUDING EMERGENCY EGRESS
LIGHTING IS EXISTING FROM THE
SHELL CONSTRUCTION.

EXTG TENANT SIGNAGE
JUNCTION BOX. COORDINATE
ALL WIRING REQUIREMENTS
WITH SIGN VENDOR.

ROOFTOP MOUNTED EF-2
20A/1P/NEMA3R
A=2

1 FLOOR PLAN - LIGHTING

PANEL SCHEDULE B																				
225 AMP, 120/208 VOLT, THREE PHASE, FOUR WIRE, M.L.D., 10000 AMPS MINIMUM A.I.C. BRACING, FLUSH MOUNTED, TYPE NEMA 1 ENCLOSURE																				
#	BKR.	WIRE AND CONDUIT					LOAD DESCRIPTION	NEUT.	LINE A	LINE B	LINE C	LOAD DESCRIPTION	WIRE AND CONDUIT					BKR.	#	
		COND.	NEUTRAL	COND.	C.	KEYS							COND.	NEUTRAL	COND.					
1	20/1	#12	#12	#12	1/2	CHAL	DUCT DETECT/ROOF RECEPT	280	280	-----	-----	BATHROOM CF-2 *	CHAL	1/2	#12	#12	20/1	2		
3	20/1	#12	#12	#12	1/2	CHAL	TV OUTLETS	666	666	-----	-----	COOLER LIGHTS/ROOF HTS	CHAL	1/2	#12	#12	20/1	4		
5	20/1	#12	#12	#12	1/2	CHAL	CASH REGISTER (10)	1232	1232	-----	-----	TENANT STORAGE **	CHAL	1/2	#12	#12	20/1	6		
7	20/1	#12	#12	#12	1/2	CHAL	RECEPTACLES	720	720	-----	-----	TENANT STORAGE **	CHAL	1/2	#12	#12	20/1	8		
9	20/1	#12	#12	#12	1/2	CHAL	RECEPTACLES	1080	1080	-----	-----	TENANT STORAGE **	CHAL	1/2	#12	#12	20/1	10		
11	20/1	#12	#12	#12	1/2	CHAL	MUSAK SYSTEM	1200	1200	-----	-----	KITCHEN/BAR/BATH LIGHTS	CHAL	1/2	#12	#12	20/1	12		
13	20/1	#12	#12	#12	1/2	CHAL	OUTSIDE RECEPTACLES	134	134	-----	-----	TRACK LIGHTING	CHAL	1/2	#12	#12	20/1	14		
15							SPACE	42	42	-----	-----	DOWN LIGHTING	CHAL	1/2	#12	#12	20/1	16		
17							SPACE	126	126	-----	-----	TRACK LIGHTING	CHAL	1/2	#12	#12	20/1	18		
19							SPACE	280	280	-----	-----	TRACK LIGHTING	CHAL	1/2	#12	#12	20/1	20		
21							SPACE	222	222	-----	-----	TRACK LIGHTING	CHAL	1/2	#12	#12	20/1	22		
23							SPACE	256	256	-----	-----	TRACK LIGHTING	CHAL	1/2	#12	#12	20/1	24		
25							SPACE	148	148	-----	-----	TRACK LIGHTING	CHAL	1/2	#12	#12	20/1	26		
27							SPACE	120	120	-----	-----	TRACK LIGHTING	CHAL	1/2	#12	#12	20/1	28		
29							SPACE	0	0	-----	-----	SPACE					30			
31							SPACE	0	0	-----	-----	SPACE					32			
33							SPACE	0	0	-----	-----	SPACE					34			
35							SPACE	0	0	-----	-----	SPACE					36			
37							SPACE	0	0	-----	-----	SPACE					38			
39							SPACE	0	0	-----	-----	SPACE					40			
41							SPACE	0	0	-----	-----	SPACE					42			
WIRE/CONDUIT KEY								TEMP RATING												
1234								L-78-86 Deg. F.								3790 3731 2370				
1-TEMP RATING																PEAK PHASE (A) UNBALANCED NEUTRAL LOAD AMPS = 31.6 AMPS				
2-CONDUIT TYPE																NON DIVERSIFIED LOAD AT 208 VOLT, THREE PHASE = 27.5 AMPS				
3-INSULATION																C-UI WIRE				
4-WIRING TYPE																9.891				
PRINTED ON PANELS PROGRAM SERIAL NUMBER 2001.4001																				
REGISTERED TO - TODD V. CAREY AND ASSOCIATES																				

PANEL SCHEDULE A																		
225 AMP, 120/208 VOLT, THREE PHASE, FOUR WIRE, M.L.D., 10000 AMPS MINIMUM A.I.C. BRACING, FLUSH MOUNTED, TYPE NEMA 1 ENCLOSURE																		
#	BKR.	WIRE AND CONDUIT					LOAD DESCRIPTION					WIRE AND CONDUIT					BKR.	#
		COND.	NEUTRAL	COND.	C.	KEYS	NEUT.	LINE A	LINE B	LINE C	LOAD DESCRIPTION	KEYS	C.	COND.	NEUTRAL	COND.		
1	20/1	#12	#12	#12	1/2	CHAL	GAS INSTA-HOT WATER HTR	200	200	---	---	CHAL	1/2	#12	#12	20/1	2	
3	20/1	#12	#12	#12	1/2	CHAL	CHIP WARMER	640	1650	---	---	CHAL	1/2	#12	#12	20/1	4	
5	20/1	#12	#12	#12	1/2	CHAL	DROP IN COOLD PAN	600	1650	---	---	CHAL	1/2	#12	#12	20/1	6	
7	20/1	#12	#12	#12	1/2	CHAL	TEA BREWER	215	1800	---	---	CHAL	1/2	#12	#12	20/1	8	
9	20/1	#12	#12	#12	1/2	CHAL	WATER/ICE DISPENSER	336	900	---	---	CHAL	1/2	#12	#12	20/1	10	
11	20/2	#12	---	#12	1/2	CHAL	ICE MAKER	0	1560	---	---	CHAL	1/2	#12	#12	20/3	10	
13								750	750	---	---	CHAL	1/2	#12	#12	#12	20/1	12
15	20/1	#12	#12	#12	1/2	CHAL	COKE DISPENSER	1800	1800	---	---	CHAL	1/2	#12	#12	#12	20/1	14
17	20/1	#12	#12	#12	1/2	CHAL	CLAMSHELL GRIDDLE *	240	1800	---	---	CHAL	1/2	#12	#12	#12	20/1	16
19								0	3960	---	---	CHAL	1/2	#12	#12	#12	20/1	18
21	50/3	#8	---	---	#10 3/4	CHAL	BEAN STEAM KETTLE *	1800	1800	---	---	CHAL	1/2	#12	#12	#12	20/1	20
23								0	3960	---	---	CHAL	1/2	#12	#12	#12	20/1	22
25								1800	1800	---	---	CHAL	1/2	#12	#12	#12	20/1	24
27	20/3	#12	---	#12	1/2	CHAL	EXHAUST HOOD FANS	660	660	---	---	CHAL	1/2	#12	#12	#12	20/1	26
29								0	1584	---	---	CHAL	1/2	#12	#12	#12	20/1	28
31	20/1	#12	#12	#12	1/2	CHAL	EXHAUST HOOD CONTROLS	460	200	---	---	CHAL	1/2	#12	#12	#12	20/1	30
33								0	936	---	---	CHAL	1/2	#12	#12	#12	20/2	32
35								0	1500	---	---	CHAL	1/2	#12	#12	#12	20/2	34
37								0	1500	---	---	CHAL	1/2	#12	#12	#12	20/2	36
39								0	620	---	---	CHAL	1/2	#12	#12	#12	20/2	38
41								0	620	---	---	CHAL	1/2	#12	#12	#12	20/2	40
WIRE/CONDUIT KEY								TEMP RATING										
1234								L-78-86 Deg. F.										
1-TEMP RATING								17500 17226 14339								PEAK PHASE (B) UNBALANCED NEUTRAL LOAD AMPS = 63.1 AMPS		
2-CONDUIT TYPE								49.965								NON DIVERSIFIED LOAD AT 208 VOLT, THREE PHASE = 136.3 AMPS		
3-INSULATION																		
4-WIRING TYPE																		
PRINTED ON PANELS PROGRAM SERIAL NUMBER 2001.4001 REGISTERED TO - TODD V. CAREY AND ASSOCIATES																		

PANEL SCHEDULE MDP																				
400 AMP, 120/208 VOLT, THREE PHASE, FOUR WIRE, M.L.D., 10000 AMPS MINIMUM A.I.C. BRACING, FLUSH MOUNTED, TYPE NEMA 1 ENCLOSURE																				
#	BKR.	WIRE AND CONDUIT					LOAD DESCRIPTION	NEUT.	LINE A	LINE B	LINE C	LOAD DESCRIPTION	WIRE AND CONDUIT					BKR.	#	
		COND.	NEUTRAL	COND.	C.	KEYS							COND.	NEUTRAL	COND.					
1							SPACE	0	5410	17500	-----	-----								
3	25/3	#4/0	#4/0	#4	2-1/2	CHAL	PANELBOARD "A"	7576	4524	17226	-----	RTU-1 GAS PAK HVAC	CHAL	3/4	#10	---	#8 50/3	2		
5							SPACE	0	4215	4524	-----	RTU-1 GAS PAK HVAC	CHAL	3/4	#10	---	#8 50/3	4		
7							SPACE	0	3780	3780	-----	RTU-1 GAS PAK HVAC	CHAL	3/4	#10	---	#8 50/3	6		
9	25/3	#4/0	#4/0	#4	2-1/2	CHAL	PANELBOARD "B"	3780	4524	4524	-----	RTU-2 GAS PAK HVAC	CHAL	3/4	#10	---	#8 50/3	8		
11							SPACE	0	2370	4524	-----	RTU-2 GAS PAK HVAC	CHAL	3/4	#10	---	#8 50/3	10		
13							SPACE	0	0	0	-----	SPACE						12		
15							SPACE	0	0	0	-----	SPACE						14		
17							SPACE	0	0	0	-----	SPACE						16		
WIRE/CONDUIT KEY								TEMP RATING												
1234								L-78-86 Deg. F.								30338 30005 25757				
1-TEMP RATING																86.100				
2-CONDUIT TYPE																PEAK PHASE (B) UNBALANCED NEUTRAL LOAD AMPS = 94.2 AMPS				
3-INSULATION																NON DIVERSIFIED LOAD AT 208 VOLT, THREE PHASE = 239.2 AMPS				
4-WIRING TYPE																				
PRINTED ON PANELS PROGRAM SERIAL NUMBER 2001.4001																				
REGISTERED TO - TODD V. CAREY AND ASSOCIATES																				

PANEL MDP DIVERSIFICATION CALCULATIONS

RECEPTILES (19) = 3420 VA TOTAL
FIRST 10 KVA AT 100% = 3420
LIGHTING = 3006
HVAC LOAD AT 100% = 27144
MOTOR LOADS AT 100% = 7667
PLUS 25% OF THE LARGEST MOTOR = 1824
MISC NON-CONTINUOUS LOADS AT 100% = 3542
MISC CONTINUOUS LOADS AT 125% = 3125
2500 X 1.25 = 3125
KITCHEN EQUIPMENT (19) = 25819
29722 X 0.65 = 25819
TOTAL DIVERSIFIED PANEL LOAD = 76447
LOAD AT 120/208V/3-PHASE/4-WIRE = 207.4A

PANEL A DIVERSIFICATION CALCULATIONS

RECEPTILES (19) = 3420 VA TOTAL
FIRST 10 KVA AT 100% = 900
MOTOR LOADS AT 100% = 7667
PLUS 25% OF THE LARGEST MOTOR = 676
MISC NON-CONTINUOUS LOADS AT 100% = 676
MISC CONTINUOUS LOADS AT 125% = 588
108 X 1.25 = 588
KITCHEN EQUIPMENT (19) = 25819
29722 X 0.65 = 25819
TOTAL DIVERSIFIED PANEL LOAD = 35862
LOAD AT 120/208V/3-PHASE/4-WIRE = 99.6A

PANEL B DIVERSIFICATION CALCULATIONS

RECEPTILES (14) = 2820 VA TOTAL
FIRST 10 KVA AT 100% = 2820
LIGHTING = 2400 X 125% = 3006
MISC NON-CONTINUOUS LOADS AT 100% = 2566
MISC CONTINUOUS LOADS AT 125% = 3542
2400 X 1.25 = 3006
TOTAL DIVERSIFIED PANEL LOAD = 11992
LOAD AT 120/208V/3-PHASE/4-WIRE = 30.8A

PANEL A DIVERSIFICATION CALCULATIONS				PANEL B DIVERSIFICATION CALCULATIONS				PANEL B DIVERSIFICATION CALCULATIONS			
RECEPTACLES (19) - 3420 VA TOTAL				RECEPTACLES (3) - 900 VA TOTAL				RECEPTACLES (14) - 2820 VA TOTAL			
FIRST 10 KVA AT 100% - 3420				FIRST 10 KVA AT 100% - 900				FIRST 10 KVA AT 100% - 2820			
LIGHTING - 2400 X 1.25 = 3000				MOTOR LOADS AT 100% - 765				LIGHTING - 1900 X 1.25 = 2375			
MOTOR LOADS AT 100% - 2714				PLUS 25% OF THE LARGEST MOTOR - 675				MISC NON-CONTINUOUS LOADS AT 100% - 2560			
PLUS 25% OF THE LARGEST MOTOR - 675				MISC NON-CONTINUOUS LOADS AT 100% - 675				MISC NON-CONTINUOUS LOADS AT 100% - 2560			
MISC CONTINUOUS LOADS AT 125% - 125				MISC CONTINUOUS LOADS AT 125% - 125				2400 X 1.25 - 3000			
MISC CONTINUOUS LOADS AT 125% - 3125				KITCHEN EQUIPMENT (19) - 25819				PANEL DIVERSIFIED PANEL LOAD - 11092			
KITCHEN EQUIPMENT (19) - 25819				25819 X 0.64 = 16524				LOAD AT 120/208V-3-PHASE-4-WIRE - 30.8A			
25819 X 0.64 = 16524				TOTAL DIVERSIFIED PANEL LOAD - 16524							
LOAD AT 120/208V-3-PHASE-4-WIRE - 99.6A											
25819 X 0.64 = 16524											