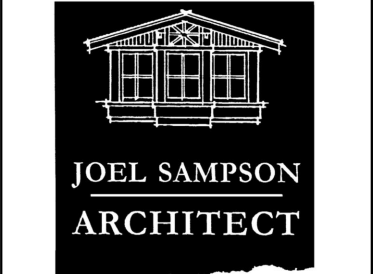


ABBREVIATIONS			DUCTWORK SYMBOLS			PIPING SYMBOLS			MISC SYMBOLS		
A/E ARCHITECT / ENGINEER AAHX AIR TO AIR HEAT EXCHANGER AB AIR BLENDER AAV AUTOMATIC AIR VENT ACC AIR COOLED CONDENSER ACCH AIR COOLED CHILLER ACCU AIR-COOLED CONDENSING UNIT ACU AIR CONDITIONING UNIT ACD AUTOMATIC CONTROL DAMPER/MODULATING ACD-TP AUTOMATIC CONTROL DAMPER TWO POSITION AD ACCESS DOOR AF AFTER FILTER AFCV AIR FLOW CONTROL VALVE AFF ABOVE FINISHED FLOOR AFMD AIR FLOW MEASURING DEVICE AFW AIR FOIL WHEEL (FAN) AHU AIR-HANDLING UNIT AMP AMPERAGE AP ACCESS PANEL APD AIR PRESSURE DROP ARV AIR CONDITIONING AND REFRIGERATION INSTITUTE AS AIR SEPARATOR ASME AMERICAN SOCIETY OF MECHANICAL ENGINEERS AW AIR WASHER AXF AXIAL FLOW B BOILER BD BUTTERFLY DAMPER BDD BACKDRAFT DAMPER BDR BASE BOARD RADIATOR BFP BACKFLOW PREVENTER BFT BOILER PLANT FIRE TUBE BG BOTTOM GRILLE BHP BRAKE HORSEPOWER BHW HOT WATER HEATING BOILER BHX BOILER BLOWDOWN HEAT EXCHANGER BIW BACKWARD INCLINED WHEEL (FAN) BMT BONE MARROW TRANSPLANT BR BOTTOM REGISTER BSC BIOLOGICAL SAFETY CABINETS BT BLOWOFF TANK BTC BLOWOFF TANK CONTROL VALVE BTU BRITISH THERMAL UNIT BTUH BRITISH THERMAL UNIT PER HOUR BWT BOILER PLANT WATER TUBE C CENTIGRADE (CELCIUS) CC COOLING COIL CCD COOLING COIL CONDENSATE DRAIN CD CEILING DIFFUSER CD-S-1 CONSTRUCTION DOCUMENTS (SUBMISSION1) CD-S-2 CONSTRUCTION DOCUMENTS (SUBMISSION2) CENT CENTRIFUGAL CFH CUBIC FEET PER HOUR CFM CUBIC FEET PER MINUTE CFT CUBIC FEET CFP CHEMICAL FEED PUMP CG CEILING GRILLE CH CHILLER CHP CHILLED WATER PUMP CHW CHILLER WATER CHR CHILLED WATER RETURN CHS CHILLED WATER SUPPLY CI CAST IRON CM CARBON MONOXIDE CM CUBIC METER CMS CUBIC METER PER SECOND CO CLEAN OUT or CARBON MONOXIDE CO2 CARBON DIOXIDE COMP COMPRESSOR UNIT COP COEFFICIENT OF PERFORMANCE CP CONDENSATE PUMP CR CEILING REGISTER CS CONDENSATE STORAGE TANK CSG CLEAN STEAM GENERATOR CT COOLING TOWER CUS CONDENSING UNIT CUH CABINET UNIT HEATER CV CONSTANT VOLUME CW COLD WATER (POTABLE) CWCC CHILLED WATER COOLING COIL CWP CONDENSER WATER PUMP CWR CONDENSER WATER RETURN (TO COOLING TOWER) CWS CONDENSER WATER SUPPLY (FROM COOLING TOWER) D DAMPER - AUTOMATIC D-1 OUTDOOR AIR DAMPER D-2 RETURN AIR DAMPER D-3 RELIEF AIR DAMPER DB DECIBELS D6 DRY-BULB TEMPERATURE DD-1 DESIGN DEVELOPMENT (SUBMISSION1) DD-2 DESIGN DEVELOPMENT (SUBMISSION2) DDC DIRECT DIGITAL CONTROLS DEG DEGREE DF DIFFUSER DA DIAMETER DW DEIONIZED WATER DP DEW POINT TEMPERATURE DP DIFFUSER PLATE DPA DIFFERENTIAL PRESSURE ASSEMBLY DPS DIFFERENTIAL PRESSURE SENSOR DX DIRECT EXPANSION DXCC DIRECT EXPANSION COOLING COIL DXCC DIRECT EXPANSION COOLING COIL DOAS DEDICATED OUTSIDE AIR SYSTEM EAT ENTERING AIR TEMPERATURE EC EVAPORATIVE COOLER ECG ENGINEERING CONTROL CENTER ECU EVAPORATIVE CONDENSER UNIT EDH ELECTRIC DUCT HEATER EER ENERGY EFFICIENCY RATIO EF EXHAUST FAN EG EXHAUST GRILLE EGS EMERGENCY GAS SHUTOFF EGT ENTERING GLYCOL TEMPERATURE EH EXHAUST HOOD EJ EXPANSION JOINT EMD END OF MAIN DRIP (STEAM) ENT ENTERING	ER EXHAUST REGISTER ERC ELECTRIC REHEAT COIL ERP ELECTRIC RADIANT PANEL ESP EXTERNAL STATIC PRESSURE ET EXPANSION TANK ETO ETHYLENE OXIDE EUH ELECTRIC UNIT HEATER EWC EVAPORATIVE WATER COOLER EWIT ENTERING WATER TEMPERATURE EX EXISTING F FAHRENHEIT F&T FLOAT AND THERMOSTATIC FSDPR COMBINATION FIRE SMOKE DAMPER FA FREE AREA FC FLEXIBLE CONNECTION FCU FAN COIL UNIT (4 PIPE) FCUC FAN COIL UNIT COOLING ONLY FCUH FAN COIL UNIT HEATING ONLY FCW FORWARD CURVED WHEEL (FAN) FD FLOOR DRAIN FD FIRE DAMPER FF FINAL FILTER FFH FLUE GAS/FEEDWATER HEAT EXCHANGER FM FLOW METER FOP FUEL OIL PUMP FOT FUEL OIL TANK FOHX FUEL OIL HEAT EXCHANGER PPM FEET PER MINUTE FPS FEET PER SECOND FTTU FAN POWERED TERMINAL UNIT FR FLOOR REGISTER FRP FIBER REINFORCED POLYESTER FS FLOW SWITCH FSTAT FREEZE/STAT FT FEET FT-LB FOOT-POUND FTR FIN TUBE RADIATION FV FACE VELOCITY GA GAUGE GAL GALLONS GH GRAVITY HOOD GPD GALLONS PER DAY GPH GALLONS PER HOUR GM GALLONS PER MINUTE GPR GAS PRESSURE REGULATOR GS GALVANIZED STEEL H HUMIDIFIER H&CW HOT & COLD WATER H&C HOUSEKEEPING AID CLOSET HB HOSE BIBB HC HEATING COIL HD HEAD HD HOOD HFC HORIZONTAL FAN COIL HGA HAND/OFF/AUTOMATIC HP HEAT PUMP HP HORSEPOWER HPDT HIGH PRESSURE DRIP TRAP HPR HIGH PRESSURE RETURN (STEAM CONDENSATE) HPS HIGH PRESSURE SUPPLY (STEAM) HRC HEAT RECOVERY COIL HRD HEAT RECOVERY DEVICE HRP HYDRONIC RADIANT (CEILING) PANEL HRW HEAT RECOVERY WHEEL HSFP HEATING SYSTEM PERFORMANCE FACTOR HSTAT HUMIDISTAT HTM HUMIDIFIER TERMINAL HUM HUMIDIFIER UNIT MOUNTED HVU HEATING AND VENTILATING UNIT HW HOT WATER HWC HOT WATER COIL HWHC HOT WATER HEATING COIL HWP HEATING HOT WATER PUMP HWHR HEATING HOT WATER RETURN HWS HEATING HOT WATER SUPPLY HWHU HOT WATER UNIT HEATER HVD HOISTWAY VENT DAMPER HK HEAT EXCHANGER HZ HERTZ IO INPUT/OUTPUT IAQ INDOOR AIR QUALITY IBT INVERTED BUCKET TRAP ICF IN-LINE CENTRIFUGAL FAN ICU INTENSIVE CARE UNIT ID INSIDE DIAMETER IEER INTEGRATED ENERGY EFFICIENCY RATIO IFB INTEGRAL FACE AND BYPASS IN INCHES IN HG INCHES OF MERCURY IN WC INCH WATER COLUMN IN WG INCH WATER GAUGE IN-LB INCH-POUND IPLV INTEGRATED PART LOAD VALUE IRH INTRARED HEATER IS INSECT SCREEN IU INDUCTION UNIT IV INLET VANES J INTENTIONALLY LEFT BLANK kg KILOGRAM kgHR KILOGRAM PER HOUR kPa KILOPASCAL KW KILOWATT KWh KILOWATT HOUR L LITER Lh LITERS PER HOUR (OR LITERS/HOUR) Lm LITERS PER MINUTE (OR LITERS/MINUTE) L/s LITERS PER SECOND (OR LITERS/SECOND) LAT LEAVING AIR TEMPERATURE LBSHR POUNDS PER HOUR LF LINEAR FOOT (FEET) LGT LEAVING GLYCOL TEMPERATURE LH LATENT HEAT LPG LIQUID PROPANE GAS LPR LOW PRESSURE RETURN (STEAM CONDENSATE) LPRC LOW PRESSURE STEAM RETURN (CLEAN) LUXK LIQUID TO LIQUID HEAT EXCHANGER LPS LOW PRESSURE STEAM LPSOC LOW PRESSURE STEAM (CLEAN) LSD LINEAR SLOT DIFFUSER LTCP LOCAL TEMPERATURE CONTROL PANEL LVG LEAVING	LVR LOUVER LWT LEAVING WATER TEMPERATURE M METER, S UNIT M/s METERS PER SECOND (OR METERS/SECOND) MA MIXED AIR MAT MIXED AIR TEMPERATURE MAU MAKE-UP AIR UNIT MAV MANUAL AIR VENT MAX MAXIMUM MB MIXING BOX MBH 1000 BTUH MCA MINIMUM BRANCH CIRCUIT AMPACITY MER MECHANICAL EQUIPMENT ROOM MERV MINIMUM EFFICIENCY REPORTING VALUE MH MANHOLE MHP MOTOR HORSEPOWER MIN MINIMUM MM MILLIMETER MOV MOTOR OPERATED VALVE MPR MEDIUM PRESSURE RETURN (STEAM CONDENSATE) MPS MEDIUM PRESSURE STEAM MRI MAGNETIC RESONANCE IMAGING MTD MEAN TEMPERATURE DIFFERENCE MVD MANUAL VOLUME DAMPER MZ MULTI-ZONE NA NOT APPLICABLE NC NOISE CRITERIA NC NORMALLY CLOSED NG NATURAL GAS NGFM NATURAL GAS FLOWMETER NO NORMALLY OPEN NOAA NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION NOM NOMINAL NPSH NET POSITIVE SUCTION HEAD NTS NOT TO SCALE OA OUTSIDE AIR OAG OUTSIDE AIR GRILLE OAI OUTSIDE AIR INTAKE OD OUTSIDE DIAMETER OFM OIL FLOWMETER OR OPERATING ROOM P PUMP PA PASCAL PC PUMPED CONDENSATE PCF POUNDS PER CUBIC FOOT (FEET) PD PRESSURE DROP PEF PROPELLER (TYPE) EXHAUST FAN PF PRE-FILTER PG PRESSURE GAGE PGW PROPYLENE GLYCOL-WATER (SOLUTION) PHC PREHEAT COIL PHM PARTS PER MILLION PRV PRESSURE REGULATING (VALVE) STATION PRS PRESSURE REGULATING VALVE PSI POUNDS PER SQUARE INCH PSIA POUNDS PER SQUARE INCH- ABSOLUTE PSIG POUNDS PER SQUARE INCH- GAGE PSS PRIMARY SECONDARY SYSTEM PSV PRESSURE SAFETY VALVE PTAC PACKAGED TERMINAL AIR CONDITIONER R/E RETURN OR EXHAUST RAI RETURN AIR RAO REFRIGERANT AIR DRYER RAF RADIO FREQUENCY RAHX ROTARY AIR HEAT EXCHANGER RAT RETURN AIR TEMPERATURE RCOH REMOTE CONDENSER CHILLER RCU RECIRCULATING CHILLER UNIT RO REFRIGERANT DISCHARGE RDS ROOM DATA SHEETS REA RELIEF AIR RF RETURN FAN RG RETURN GRILLE RH RELATIVE HUMIDITY RHC REHEAT COIL RHG REFRIGERANT HOT GAS RHP RADIANT HEAT PANEL (ELECTRIC) RL REFRIGERANT LIQUID LINE RLA RUN LOAD AMPERE RO REVERSE OSMOSIS RPM REVOLUTIONS PER MINUTE RR RETURN REGISTER RS REFRIGERANT SUCTION RTU ROOF TOP UNIT RV RELIEF VALVE SA SUPPLY AIR SAD SOUND ATTENUATING DEVICE SAT SUPPLY AIR TEMPERATURE SC SHADING COEFFICIENT SCFM STANDARD CUBIC FEET PER MINUTE SCI SERIAL CODE NUMBER SCR SILICON CONTROLLED RECTIFIER SD SMOKE DETECTOR SD SUPPLY AIR DIFFUSER SD-1 SCHEMATIC DESIGN (SUBMISSION1) SD-2 SCHEMATIC DESIGN (SUBMISSION2) SDPR SMOKE DAMPER SDR SMOKE DAMPER (RETURN) SDS SMOKE DAMPER (SUPPLY) SEN SENSIBLE HEAT SF SUPPLY FAN SG SUPPLY AIR GRILLE SH STEAM HUMIDIFIER SHC STEAM HEATING COIL SI SQUARE INCHES SP STATIC PRESSURE SP GR SPECIFIC GRAVITY SPD SUPPLY PROCESS AND DISTRIBUTION SPRV STEAM PRESSURE REDUCING VALVE SPS STATIC PRESSURE SENSOR SQ FT SQUARE FOOT (FEET) SR SUPPLY AIR REGISTER SS STAINLESS STEEL SSHX STEAM TO STEAM HEAT EXCHANGER SSR SOLID SEPARATOR ST STEAM TRAP SUH STEAM UNIT HEATER SV STEAM PRESSURE REDUCING VALVE SVS STEAM VENT SILENCER SWHX STEAM TO WATER HEAT EXCHANGER	T & PCV TEMPERATURE AND PRESSURE CONTROL VALVE TAB TESTING, ADJUSTING, BALANCE TD TEMPERATURE DIFFERENCE TDH TOTAL DYNAMIC HEAD TDS TOTAL DISSOLVED SOLIDS TG TRANSFER GRILLE TP TRAP TR TOP REGISTER TSP TOTAL STATIC PRESSURE TSTAT THERMOSTAT TU TERMINAL UNIT TWU THRU-WALL UNIT UC UNDER CUIT UC UNIT COOLER UH UNIT HEATER UL UNDERWRITERS LABORATORY URV UPLAST UNIT VENTILATOR V VALVE VAF VANE-AXIAL FAN VAV VARIABLE AIR VOLUME VD VOLUME DAMPER (MANUAL OPPOSED BLADE) VFD VARIABLE FREQUENCY DRIVE VHA VETERANS HEALTH ADMINISTRATION VI VIBRATION ISOLATOR VIV VARIABLE INLET VANES VOC VOLATILE ORGANIC COMPOUND VP VACUUM PUMP VPS VARIABLE PRIMARY SYSTEM VR VACUUM (STEAM CONDENSATE) RETURN VSD VARIABLE SPEED DRIVE VUH VERTICAL UNIT HEATER W WATTS WAG WASTE ANESTHESIA GAS Wb WET-BULB (TEMPERATURE) WC WATER COOLED WCOW WATER COOLED CHILLER WCOW WATER COOLED CONDENSING UNIT WCWP WATER COOLED HEAT PUMPS WCPU WATER COOLED PACKAGED UNIT WEF WALL EXHAUST FAN WF WATER FILTER WCFW WATER FLOW CONTROL VALVE WFM WATER FLOWMETER WFMD WATER FLOW MEASURING DEVICE WG WATER GAGE WPD WATER SIDE PRESSURE DROP YR YEAR	UP SUPPLY DUCT (UP & DOWN) DN EXHAUST DUCT (UP & DOWN) UP RETURN DUCT (UP & DOWN) ROUND AND SQUARE 4-WAY CEILING DIFFUSERS SQUARE 3-WAY CEILING DIFFUSERS SQUARE 2-WAY CEILING DIFFUSERS SQUARE 1-WAY CEILING DIFFUSERS LINEAR SLOT DIFFUSER SUPPLY TOP REGISTER OR GRILLE (WALL TYPE) EXHAUST OR RETURN CEILING REGISTER OR GRILLE EXHAUST OR RETURN BOTTOM REGISTER OR GRILLE (WALL TYPE) EXHAUST OR RETURN REGISTER OR TOP GRILLE (WALL TYPE) VANED ELBOW & AIR SPLIT TYPE DUCT TAKE-OFF CONNECT NEW DUCT TO EXISTING DUCT INCLINED RISE, IN DIRECTION OF AIR FLOW INCLINED DROP, IN DIRECTION OF AIR FLOW LIMIT OF DEMOLITION FLEXIBLE CONNECTION, EQUIPMENT, VIBRATION, OR SEISMIC VANED ELBOW (PROVIDE ALL SQUARE OR RECTANGULAR ELBOWS WITH AIR FOIL TYPE VANES EVEN IF SYMBOL IS MISSING) VANED ELBOW (SHORT RADIUS) STANDARD RADIUS ELBOW (LONG RADIUS) NEW SUPPLY, EXHAUST or OUTSIDE AIR DUCT (INSIDE DIMENSIONS: WIDTH x DEPTH) NEW RETURN AIR DUCT (INSIDE DIMENSIONS: WIDTH x DEPTH) FABRIC AIR "ALL-IN-ONE" DUCT MATERIAL EXISTING DUCT-EQUIPMENT TO BE REMOVED LOUVER (LOUVER SPECIFIED IN ARCHITECTURAL SECTION.) FLEXIBLE DUCTWORK (INSULATED) 6 FEET MAX LENGTH RATED AT 2550 PER UL DUCT WITH ARMACELL ELASTOMERIC CLOSED CELL FOAM MANUAL VOLUME DAMPER RUSKIN NET FREE UL APPROVED FIRE DAMPER WITH RATED ACCESS DOOR BACK DRAFT DAMPER (SPRING TYPE) NET FREE UL APPROVED RUSKIN FIRE/SMOKE DAMPER IN DC CURRENT PER UL555 & UL555-1 WITH RATED ACCESS DOOR (SEE DETAILS & SPECS FOR ADDITIONAL REG'TS) FLEXIBLE DUCT CONNECTOR AT FAN, AHU, DOAS, RTU, PAC, PHP, ETC.	POINT OF CHANGE IN DUCT CONSTRUCTION BY STATIC PRESSURE CLASS. THE NUMBER ASSIGNS PRESSURE CLASS (IN. OF WATER) WHICH WILL ACCOMMODATE MAXIMUM OPERATING PRESSURE IN THE DUCT SUBSECTION. THE SYMBOL CONTINUES THE ASSIGNMENT UNTIL THE DUCT TERMINATES OR ANOTHER SYMBOL APPEARS. A "N" SUPERSCRIPT INDICATES NEGATIVE PRESSURE. AUTOMATIC CONTROL DAMPER MODULATING AUTOMATIC CONTROL DAMPER TWO POSITION STAINLESS STEEL DUCT MANUAL SPLITTER DAMPER STANDARD BRANCH SUPPLY OR RETURN, NO SPLITTER (45° TAP) DUCT MOUNTED COIL (HOT OR CHILLED WATER COIL) DUCT MOUNTED COIL (ELECTRIC) 45° ELBOW WITH AIR FOIL TYPE TURNING VANES 90° ELBOW WITH AIR FOIL TYPE TURNING VANES RECTANGULAR BRANCH DUCT OFF RECTANGULAR MAIN TRUNK DUCT WITH ADJUSTABLE AIR FOIL EXTRACTOR WITH ROD RECTANGULAR BRANCH DUCT OFF RECTANGULAR MAIN TRUNK DUCT WITH VOLUME DAMPER (OPPOSED BLADE TYPE). RECTANGULAR OR ROUND DUCT TRANSITION PER SMACNA (2005) 3RD EDITION FOR DUCT CONSTRUCTION MITSUBISHI CEILING FAN-COIL CASSETTE with FACTORY BUILT-IN CONDENSATE PUMP, 4-WAY THROW & CHECK VALVE; SEE PLANS, DETAILS & SCHEDULES MITSUBISHI CEILING FAN-COIL CASSETTE with FACTORY BUILT-IN CONDENSATE PUMP, 1-WAY THROW & CHECK VALVE; SEE PLANS, DETAILS & SCHEDULES MITSUBISHI DUCTED FAN-COIL CASSETTE with FACTORY BUILT-IN CONDENSATE PUMP & CHECK VALVE; SEE PLANS, DETAILS & SCHEDULES MITSUBISHI OUTSIDE HEAT PUMP CONDENSOR with INVERTER TECHNOLOGY INSTALLED PER PIPING SCHEMATICS, DETAILS & SCHEDULES UL RATED RUSKIN ACCESS DOOR PER DETAIL WITH HINGE FOR FIRE-SMOKE DAMPER DEVICE; MIN 12"x12" SIZE or AS INDICATED	HPS HIGH PRESSURE STEAM (60 PSIG AND ABOVE) HPR HIGH PRESSURE STEAM CONDENSATE RETURN MPS MEDIUM PRESSURE STEAM (16 PSIG THRU 59 PSIG) MPR MEDIUM PRESSURE STEAM CONDENSATE RETURN LPS LOW PRESSURE STEAM (15 PSIG AND BELOW) LPR LOW PRESSURE STEAM CONDENSATE RETURN PC CONDENSATE PUMP DISCHARGE HWS HOT WATER HEATING SUPPLY HWR HOT WATER HEATING RETURN GHS GLYCOL-WATER HEATING SUPPLY GHR GLYCOL-WATER HEATING RETURN SWWS SOLAR WATER SUPPLY SWR SOLAR WATER RETURN REF REFRIGERANT LIQUID & SUCTION RSRL REFRIGERANT SUCTION or LIQUID RHG REFRIGERANT HOT GAS CHWS CONDENSER WATER SUPPLY (FROM TOWER) CHWR CONDENSER WATER RETURN (TO TOWER) CWS CHILLED WATER SUPPLY CWR CHILLED WATER RETURN GCS CHILLED GLYCOL-WATER SUPPLY GCR CHILLED GLYCOL-WATER RETURN MW MAKE-UP WATER CD CONDENSATE DRAIN LINE V VENT LINE GRS GLYCOL-WATER RUN AROUND SUPPLY GRR GLYCOL-WATER RUN AROUND RETURN X EXISTING PIPE TO BE REMOVED FWPD FEEDWATER PUMP DISCHARGE FWPS FEEDWATER PUMP SUCTION CTPD CONDENSATE TRANSFER PUMP DISCHARGE CTPS CONDENSATE TRANSFER PUMP SUCTION VR VACUUM CONDENSATE RETURN TC TUBE CLEANER WATER SUPPLY BO BOILER BLOWOFF CBD CONTINUOUS BLOWDOWN BWS BOILER WATER SAMPLE FWS FEEDWATER SAMPLE (FROM DEAEATOR) CF OVERFLOW A COMPRESSED AIR G NATURAL GAS MAIN FUEL GI() NATURAL GAS IGNITER FUEL LPGI() LIQUEFIED PETROLEUM GAS IGNITER FUEL FOS FUEL OIL SUPPLY FOR FUEL OIL RETURN CW COLD WATER (CITY WATER) SW SOFTENED WATER HW HOT WATER RH ROLLER-TYPE HANGER SH VARIABLE SPRING-TYPE HANGER (TYPE 51") SCH SPRING CUSHION-TYPE HANGER (TYPE 48 OR 49") TH CLEVIS-TYPE HANGER TRAPEZE HANGER (PROVIDE U-BOLT PIPE ATTACHMENT TO TRAPEZE EXCEPT WHERE RH ARE INDICATED) FLOOR-SUPPORTED PIPE STAND RC RISER CLAMP (TYPE 42") WB WALL BRACKET (TYPE 31, 32, 33") CSH CONSTANT SUPPORT HANGER (TYPE 54, 55, 56") SS SLIDING SUPPORTS (TYPE 35") * TYPE NUMBERS REFER TO MANUFACTURERS STANDARDIZATION SOCIETY STANDARD PRACTICE SP-68	EXHAUST FAN (CEILING/CABINET TYPE) EXHAUST SUPPLY AIR FAN (IN LINE TYPE) SIDE VIEW OF WALL OR ROOF MOUNTED EXHAUST AIR FAN EXHAUST/SUPPLY AIR FAN (WALL PROP. MOUNTED TYPE) ROOF MOUNTED EXHAUST AIR FAN WITH FACTORY INSULATED OR VENTED CURB. VERIFY PITCH, CURB HEIGHT, TYPE & HURRICANE TIE-DOWN REQUIREMENTS ROOF MOUNTED SUPPLY OR MAKE-UP FAN WITH FACTORY INSULATED OR VENTED CURB. VERIFY PITCH, CURB HEIGHT, TYPE & HURRICANE TIE-DOWN REQUIREMENTS SOLER & PALAU IN-LINE VENTILATION OR SUPPLY AIR FAN WITH CONTROLS, BALANCING DAMPER, FLEXIBLE DUCT CONNECTOR & HANGERS CEILING RETURN GRILLE/REGISTER WITH 18" OPEN-END BOOT INSULATED WITH 1/2" ELASTOMERIC CLOSED CELL FOAM INTERNALLY CEILING DIFFUSER WITH RIGID INSULATED ELBOW & FLEXIBLE DUCT; FLEXIBLE DUCT RATED AT 2550 SHALL NOT EXCEED 6 FEET IN LENGTH DRAWING REVISION CLOUD TO REFLECT CHANGES; MUST REFERENCE ADDENDUM NO. OR SUPPLEMENTAL INSTRUCTION NO. WITH DATE VAV BOX TAG NUMBER DETAIL NUMBER SHEET ON WHICH DETAIL IS SHOWN SUPPLEMENTAL INSTRUCTION REFERENCE, DATE REQUIRED ADDENDUM ITEM REFERENCE WITH DATE REQUIRED DRAWING INFORMATION NOTES DIGITAL WALL THERMOSTAT WITH 24 VOLT ZONE DAMPER, TRANSFORMER & LOGIC CONTROLLER DEVICE EQUAL TO CARRIER "INFINITY" SYSTEM RUSKIN 24 VOLT LOW LEAKAGE TWO POSITION DAMPER. SEE DRAWING INFORMATION NOTES FOR DAMPER SEQUENCE OF OPERATION EQUIPMENT TYPE (EF, AHU, RTU, ETC.) SEE SCHEDULES FOR INFORMATION UNIT NUMBER H DIGITAL HUMIDISTAT CONTROL MOUNTED AT 48" TO 54" AFF PER ANSI/ASHRAE-A117.1 T DIGITAL ROOM THERMOSTAT MOUNTED AT 48" TO 54" AFF PER ANSI/ASHRAE-A117.1 C TELAIRE DIGITAL ROOM CARBON DIOXIDE DETECTOR SET AT 700PPM (54" AFF) S SMOKE DETECTOR (IN-LINE TO ALARM SYSTEM); SEE DETAIL & SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS V BAPI MODEL BA/BS3-STAT 3 WALL MOUNTED VOC DETECTOR WITH VERIFICATION KIT GPS GLOBAL PLASMA SOLUTIONS AIR PURIFICATION DEVICE; SEE DRAWING INFORMATION NOTES FOR MODEL				
212 NORTH ADAMS ST QUINCY, FLORIDA 32351 FLA LIC NO AA26000893 850-875-4348											
MUTUAL AID STAGING & COORDINATION FACILITY FOR TALQUIN ELECTRIC COOPERATIVE, INC. 30270 BLUE STAR HIGHWAY GADSDEN COUNTY, FLORIDA											
DATE: 7-7-25 REV: JOB NO: 23-002											
SHEET NO.											
SPECIAL NOTE: PLEASE NOTE, SOME SYMBOLS & ABBREVIATIONS MAY NOT BE USED ON THESE DRAWINGS OR CONSTRUCTION DOCUMENTS. SEE PROJECT DRAWING INFORMATION NOTES FOR ADDITIONAL DIRECTION & CLARIFICATION.											
Mo.o											
the Design Group of Florida inc. division of The Design Group, Inc.											
P.O. BOX 9384 DOTHAN, ALABAMA 36304 (334) 646-3243 thedesigngroup@gmail.com Mechanical-Electrical Consulting Engineers Fl. License No. 31813 confidential--this document & the information contained herein is confidential & may not be disclosed, copied, altered or reproduced in any person's except as permitted in writing by The Design Group, Inc.											
I KYLE COX LICENSE NO 62881 STATE OF FLORIDA PROFESSIONAL ENGINEER											



212 NORTH ADAMS ST
QUINCY, FLORIDA 32351
FLA LIC NO. AA26000893
850-875-4348

MUTUAL AID STAGING & COORDINATION FACILITY
FOR
TALQUIN ELECTRIC COOPERATIVE, INC.
30270 BLUE STAR HIGHWAY GADSDEN COUNTY, FLORIDA

DATE: 7-7-25
REV:

JOB NO: 23-002

SHEET NO.

SPECIAL NOTE:
PLEASE NOTE, SOME SYMBOLS & ABBREVIATIONS MAY NOT BE USED ON THESE DRAWINGS OR CONSTRUCTION DOCUMENTS. SEE PROJECT DRAWING INFORMATION NOTES FOR ADDITIONAL DIRECTION & CLARIFICATION.

P.O. BOX 9394
DOTHAN, ALABAMA 36304
(334) 446-3243
thedesigngroupinc@gmail.com

MECHANICAL/ELECTRICAL
CONSULTING ENGINEERS
FL LICENSE NO. 31813

confidential-this document & the information contained herein is confidential & may not be disclosed, copied, altered or reproduced in any manner except as permitted in writing by "The Design Group, Inc."

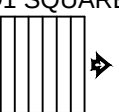
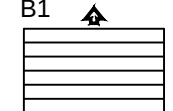
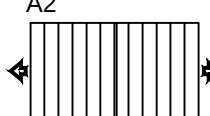
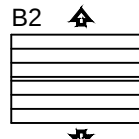
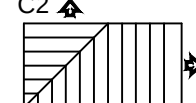
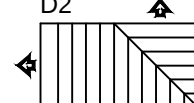
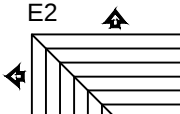
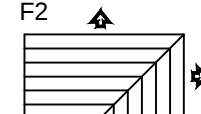
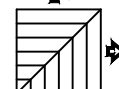
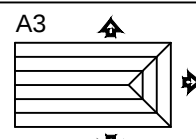
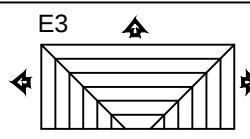
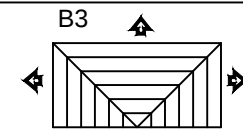
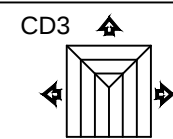
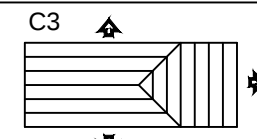
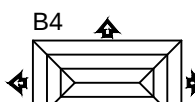
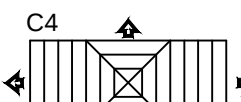
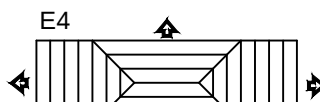
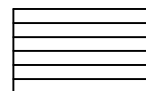
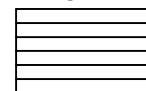
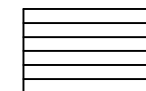
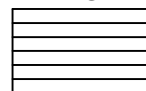
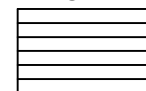
the **Design Group** of **Florida** inc.

division of The Design Group, Inc.

STATE OF FLORIDA
J. KYLE COY
LICENSE
NO. 62881
PROFESSIONAL ENGINEER

AIR DISTRIBUTION DUCTS			REFRIGERANT & CONDENSATE DRAIN PIPING			PIPING INSULATION			PIPE HANGERS			PIPE PENETRATIONS			CHILLED WATER PIPING DATA			CHILLED-HOT WATER PIPING INSULATION DATA			FLEXIBLE DUCTS			EXTERNAL DUCT INSULATION WRAP						INTERNAL DUCT INSULATION ACOUSTIC LINER							
MATERIAL	DUCT SEALER		BELOW FINISHED FLOOR	CONDENSATE DRAIN	ABOVE FINISHED FLOOR	FITTINGS	JACKET	THICKNESS	LOCATION	PIPE HANGERS	PIPE PENETRATIONS	BELOW FINISHED FLOOR	2" UNDER ABOVE FLOOR	2-1/2" & UP ABOVE FLOOR	FITTINGS	JACKET	THICKNESS	LOCATION	MANUF.	SERIES	MAX. LENGTH	R-VALUE	MANUF.	SERIES	THICKNESS DENSITY	MIN. R-VALUE	VAPOR BARRIER	SEALER	LOCATION	MANUF.	SERIES	MIN. THICKNESS	COATING	LOCATION	MANUF.	SERIES	MIN. THICKNESS
CLASS "A" GALVANIZED STEEL OR ROLLED STEEL IN COMPLIANCE WITH SMACNA INSULATION WITH APPROVED UL-181 MARM PRODUCT EQUAL TO MGLH AR SEALER	METAL DUCTS SHALL BE SEALED PRIOR TO EXTERNAL INSULATION WITH APPROVED UL-181 MARM PRODUCT EQUAL TO MGLH AR SEALER	COPPER TUBING TYPE "K" SOFT ANNEALED TEMPER 1" HARD DRAWN TEMPER WITH WROUGHT COPPER FITTINGS & PROGRESS ROUGH CONNECTION METHOD FROM UNIT TO SCHEDULE 80 PVC MAIN	COPPER TUBING TYPE "K" HARD DRAWN TEMPER WITH WROUGHT COPPER FITTINGS & BRAZED JOINTS AT 1100 DEG F. FLUX MATERIAL NOT ALLOWED	ZESTON FITTING COVERS	UNIVERSAL ALUMINUM JACKET	3/4" TO 1"	REFRIGERANT SUCTION & LIQUID LINES	GLYSIS OR UNISTRUT PRODUCTS WITH THREADED RODS IN COMPLIANCE WITH 2023 FLORIDA PLUMBING CODE SECTION 386 PER TABLE 386.5 FOR HORIZONTAL & VERTICAL SPACING	METACALL UL-CA1234 UL-12135	COPPER TUBING TYPE "K" SOFT ANNEALED TEMPER 1" HARD DRAWN TEMPER WITH WROUGHT COPPER FITTINGS & BRAZED JOINTS AT 1100 DEG F. FLUX MATERIAL NOT ALLOWED	SCHEDULE 40 BLACK IRON STEEL AS NOTED IN SPECS	SCHEDULE 40 BLACK IRON STEEL WITH CERTIFIED WELDING, NO THREADED FITTINGS ON SCHEDULE 40 STEEL PIPING	ZESTON FITTING COVERS	ALUMINUM JACKET WITH METALLIC BANDS AT OUTSIDE & EXPOSED JOINTS AS NOTED IN SPECS	2" JOHNS MANVILLE FOAM GLASS HOT WATER LINES	SUPPLY-RETURN CHILLED WATER & HOT WATER LINES	THERMAFLEX	MKE	6 FT	8.0	JOHNS MANVILLE	MICROLITE XL-SP FORMALDEHYDE-HYDRO-FREE PSK FACING	2" .75 PSK	OUT OF THE BOX 6.3 FIELD INSTALLED	PSK	FIRE RATED MASTIC SEAL PER UL-181/AT AT ALL JOINTS-SEAMS, OR APPROVED ACRYLIC SEAL OR APPROVED SQUEEZE PRESSURE SENSITIVE TAPE PER UL-181/AT APPLIED USING SQUEEZE APPROVED METHOD AT JOINTS-SEAMS, RUBBER BASE TAPES ARE NOT APPROVED	SEE NOTE 2	ARMACELL	AP-COLLEX ELASTOMERIC CLOSED CELL FOAM	2.0"	WITH MICROBIAL COATING	ALL SUPPLY, RETURN & EXHAUST AIR DUCTS AT EQUIPMENT	FROM EQUIPMENT OUT TO FT FTT				
CLASS "B" GALVANIZED STEEL OR ROLLED STEEL IN COMPLIANCE WITH SMACNA INSULATION WITH APPROVED UL-181 MARM PRODUCT EQUAL TO MGLH AR SEALER	METAL DUCTS SHALL BE SEALED PRIOR TO EXTERNAL INSULATION WITH APPROVED UL-181 MARM PRODUCT EQUAL TO MGLH AR SEALER	COPPER TUBING TYPE "K" SOFT ANNEALED TEMPER 1" HARD DRAWN TEMPER WITH WROUGHT COPPER FITTINGS & PROGRESS ROUGH CONNECTION METHOD FROM UNIT TO SCHEDULE 80 PVC MAIN	COPPER TUBING TYPE "K" HARD DRAWN TEMPER WITH WROUGHT COPPER FITTINGS & BRAZED JOINTS AT 1100 DEG F. FLUX MATERIAL NOT ALLOWED	ZESTON FITTING COVERS	UNIVERSAL ALUMINUM JACKET	3/4" TO 1"	REFRIGERANT SUCTION & LIQUID LINES	GLYSIS OR UNISTRUT PRODUCTS WITH THREADED RODS IN COMPLIANCE WITH 2023 FLORIDA PLUMBING CODE SECTION 386 PER TABLE 386.5 FOR HORIZONTAL & VERTICAL SPACING	METACALL UL-CA1234 UL-12135	COPPER TUBING TYPE "K" SOFT ANNEALED TEMPER 1" HARD DRAWN TEMPER WITH WROUGHT COPPER FITTINGS & BRAZED JOINTS AT 1100 DEG F. FLUX MATERIAL NOT ALLOWED	SCHEDULE 40 BLACK IRON STEEL AS NOTED IN SPECS	SCHEDULE 40 BLACK IRON STEEL WITH CERTIFIED WELDING, NO THREADED FITTINGS ON SCHEDULE 40 STEEL PIPING	ZESTON FITTING COVERS	ALUMINUM JACKET WITH METALLIC BANDS AT OUTSIDE & EXPOSED JOINTS AS NOTED IN SPECS	2" JOHNS MANVILLE FOAM GLASS HOT WATER LINES	SUPPLY-RETURN CHILLED WATER & HOT WATER LINES	THERMAFLEX	MKE	6 FT	8.0	JOHNS MANVILLE	MICROLITE XL-SP FORMALDEHYDE-HYDRO-FREE PSK FACING	2" .75 PSK	OUT OF THE BOX 6.3 FIELD INSTALLED	PSK	FIRE RATED MASTIC SEAL PER UL-181/AT AT ALL JOINTS-SEAMS, OR APPROVED ACRYLIC SEAL OR APPROVED SQUEEZE PRESSURE SENSITIVE TAPE PER UL-181/AT APPLIED USING SQUEEZE APPROVED METHOD AT JOINTS-SEAMS, RUBBER BASE TAPES ARE NOT APPROVED	SEE NOTE 2	ARMACELL	AP-COLLEX ELASTOMERIC CLOSED CELL FOAM	2.0"	WITH MICROBIAL COATING	ALL SUPPLY, RETURN & EXHAUST AIR DUCTS AT EQUIPMENT	FROM EQUIPMENT OUT TO FT FTT				
CLASS "C" GALVANIZED STEEL OR ROLLED STEEL IN COMPLIANCE WITH SMACNA INSULATION WITH APPROVED UL-181 MARM PRODUCT EQUAL TO MGLH AR SEALER	METAL DUCTS SHALL BE SEALED PRIOR TO EXTERNAL INSULATION WITH APPROVED UL-181 MARM PRODUCT EQUAL TO MGLH AR SEALER	COPPER TUBING TYPE "K" SOFT ANNEALED TEMPER 1" HARD DRAWN TEMPER WITH WROUGHT COPPER FITTINGS & PROGRESS ROUGH CONNECTION METHOD FROM UNIT TO SCHEDULE 80 PVC MAIN	COPPER TUBING TYPE "K" HARD DRAWN TEMPER WITH WROUGHT COPPER FITTINGS & BRAZED JOINTS AT 1100 DEG F. FLUX MATERIAL NOT ALLOWED	ZESTON FITTING COVERS	UNIVERSAL ALUMINUM JACKET	3/4" TO 1"	REFRIGERANT SUCTION & LIQUID LINES	GLYSIS OR UNISTRUT PRODUCTS WITH THREADED RODS IN COMPLIANCE WITH 2023 FLORIDA PLUMBING CODE SECTION 386 PER TABLE 386.5 FOR HORIZONTAL & VERTICAL SPACING	METACALL UL-CA1234 UL-12135	COPPER TUBING TYPE "K" SOFT ANNEALED TEMPER 1" HARD DRAWN TEMPER WITH WROUGHT COPPER FITTINGS & BRAZED JOINTS AT 1100 DEG F. FLUX MATERIAL NOT ALLOWED	SCHEDULE 40 BLACK IRON STEEL AS NOTED IN SPECS	SCHEDULE 40 BLACK IRON STEEL WITH CERTIFIED WELDING, NO THREADED FITTINGS ON SCHEDULE 40 STEEL PIPING	ZESTON FITTING COVERS	ALUMINUM JACKET WITH METALLIC BANDS AT OUTSIDE & EXPOSED JOINTS AS NOTED IN SPECS	2" JOHNS MANVILLE FOAM GLASS HOT WATER LINES	SUPPLY-RETURN CHILLED WATER & HOT WATER LINES	THERMAFLEX	MKE	6 FT	8.0	JOHNS MANVILLE	MICROLITE XL-SP FORMALDEHYDE-HYDRO-FREE PSK FACING	2" .75 PSK	OUT OF THE BOX 6.3 FIELD INSTALLED	PSK	FIRE RATED MASTIC SEAL PER UL-181/AT AT ALL JOINTS-SEAMS, OR APPROVED ACRYLIC SEAL OR APPROVED SQUEEZE PRESSURE SENSITIVE TAPE PER UL-181/AT APPLIED USING SQUEEZE APPROVED METHOD AT JOINTS-SEAMS, RUBBER BASE TAPES ARE NOT APPROVED	SEE NOTE 2	ARMACELL	AP-COLLEX ELASTOMERIC CLOSED CELL FOAM	2.0"	WITH MICROBIAL COATING	ALL SUPPLY, RETURN & EXHAUST AIR DUCTS AT EQUIPMENT	FROM EQUIPMENT OUT TO FT FTT				
CLASS "D" GALVANIZED STEEL OR ROLLED STEEL IN COMPLIANCE WITH SMACNA INSULATION WITH APPROVED UL-181 MARM PRODUCT EQUAL TO MGLH AR SEALER	METAL DUCTS SHALL BE SEALED PRIOR TO EXTERNAL INSULATION WITH APPROVED UL-181 MARM PRODUCT EQUAL TO MGLH AR SEALER	COPPER TUBING TYPE "K" SOFT ANNEALED TEMPER 1" HARD DRAWN TEMPER WITH WROUGHT COPPER FITTINGS & PROGRESS ROUGH CONNECTION METHOD FROM UNIT TO SCHEDULE 80 PVC MAIN	COPPER TUBING TYPE "K" HARD DRAWN TEMPER WITH WROUGHT COPPER FITTINGS & BRAZED JOINTS AT 1100 DEG F. FLUX MATERIAL NOT ALLOWED	ZESTON FITTING COVERS	UNIVERSAL ALUMINUM JACKET	3/4" TO 1"	REFRIGERANT SUCTION & LIQUID LINES	GLYSIS OR UNISTRUT PRODUCTS WITH THREADED RODS IN COMPLIANCE WITH 2023 FLORIDA PLUMBING CODE SECTION 386 PER TABLE 386.5 FOR HORIZONTAL & VERTICAL SPACING	METACALL UL-CA1234 UL-12135	COPPER TUBING TYPE "K" SOFT ANNEALED TEMPER 1" HARD DRAWN TEMPER WITH WROUGHT COPPER FITTINGS & BRAZED JOINTS AT 1100 DEG F. FLUX MATERIAL NOT ALLOWED	SCHEDULE 40 BLACK IRON STEEL AS NOTED IN SPECS	SCHEDULE 40 BLACK IRON STEEL WITH CERTIFIED WELDING, NO THREADED FITTINGS ON SCHEDULE 40 STEEL PIPING	ZESTON FITTING COVERS	ALUMINUM JACKET WITH METALLIC BANDS AT OUTSIDE & EXPOSED JOINTS AS NOTED IN SPECS	2" JOHNS MANVILLE FOAM GLASS HOT WATER LINES	SUPPLY-RETURN CHILLED WATER & HOT WATER LINES	THERMAFLEX	MKE	6 FT	8.0	JOHNS MANVILLE	MICROLITE XL-SP FORMALDEHYDE-HYDRO-FREE PSK FACING	2" .75 PSK	OUT OF THE BOX 6.3 FIELD INSTALLED	PSK	FIRE RATED MASTIC SEAL PER UL-181/AT AT ALL JOINTS-SEAMS, OR APPROVED ACRYLIC SEAL OR APPROVED SQUEEZE PRESSURE SENSITIVE TAPE PER UL-181/AT APPLIED USING SQUEEZE APPROVED METHOD AT JOINTS-SEAMS, RUBBER BASE TAPES ARE NOT APPROVED	SEE NOTE 2	ARMACELL	AP-COLLEX ELASTOMERIC CLOSED CELL FOAM	2.0"	WITH MICROBIAL COATING	ALL SUPPLY, RETURN & EXHAUST AIR DUCTS AT EQUIPMENT	FROM EQUIPMENT OUT TO FT FTT				
CLASS "E" GALVANIZED STEEL OR ROLLED STEEL IN COMPLIANCE WITH SMACNA INSULATION WITH APPROVED UL-181 MARM PRODUCT EQUAL TO MGLH AR SEALER	METAL DUCTS SHALL BE SEALED PRIOR TO EXTERNAL INSULATION WITH APPROVED UL-181 MARM PRODUCT EQUAL TO MGLH AR SEALER	COPPER TUBING TYPE "K" SOFT ANNEALED TEMPER 1" HARD DRAWN TEMPER WITH WROUGHT COPPER FITTINGS &																																			

DIFFUSER, REGISTER, & GRILLE SCHEDULE												
NO.	LOCATION	FUNCTION	SIZE (INCHES)		AIR PATTERN	MANUFACTURER	TYPE MODEL NUMBER	DAMPER	COLOR FINISH	NOISE CRITERIA	AIR VELOCITY RANGE (FPM)	NOTES
			FACE	NECK								
CD4	CEILING	SUPPLY	SEE NOTE 1	SEE DWGS	4-WAY	METALAIRE	5000	OBDR	WHITE	15-20	400-600	1,2,3,4,5,6,7,8,10
CD3	CEILING	SUPPLY	SEE NOTE 1	SEE DWGS	3-WAY	METALAIRE	5000	OBDR	WHITE	15-20	400-600	1,2,3,4,5,6,7,8,10
CD2	CEILING	SUPPLY	SEE NOTE 1	SEE DWGS	2-WAY	METALAIRE	5000	OBDR	WHITE	15-20	400-600	1,2,3,4,5,6,7,8,10
CD1	CEILING	SUPPLY	SEE NOTE 1	SEE DWGS	1-WAY	METALAIRE	5000	OBDR	WHITE	15-20	400-600	1,2,3,4,5,6,7,8,10
CG2	CEILING	SUPPLY	SEE NOTE 1	SEE DWGS	2-WAY	METALAIRE	5000	OBDR	WHITE	15-20	500-600	1,2,3,45,6,7,10
SLT	CEILING	SUPPLY	6"x8" 3/4" SPACING	INSULATED BOOT	1-WAY	METALAIRE	6610	OBDR	WHITE	15-20	500-600	11
CR1 WR1	CEILING OR WALL	RETURN	SEE NOTE 1	SEE DWGS	1-WAY	METALAIRE	RH	OBDR	WHITE	15-20	400-500	1,2,3,4,5,6,7,10
SWR	SIDEWALL	SUPPLY	SEE NOTE 1	SEE DWGS	1-WAY	METALAIRE	VHD	OBDR	WHITE	15-20	500-600	4,7
OAL	WALL *	EXHAUST-INTAKE	SEE NOTE 4	SEE DWGS	1-WAY	METALAIRE	OAL4	OBDR	ALM.	15-20	400-500	4,7,9
DG1	DOOR	INTAKE-RELIEF	12"x12"	12"x12"	1-WAY	METALAIRE	300 DGDF	NONE	ALM.	15-20	400-500	4

AIR DIFFUSER PATTERNS					
 1 WAY	 SWR SIDEWALL	 CD1 SQUARE	 A1	 B1	
 2 WAY	 A2	 CG2 SQUARE	 B2		
 2 WAY CORNER	 C2	 D2	 E2	 F2	 CD2 SQUARE
 3 WAY	 A3	 E3	 B3	 CD3	 C3
 4 WAY	 A4R ROUND	 CD4 SQUARE	 B4	 C4	 E4
 1 WAY	 EAR CEILING EXHAUST	 CR1 CEILING RETURN	 WR1 WALL RETURN	 DG DOOR GRILLE	 OAL OUTSIDE LOUVER

CFM RANGE	DUCT CONNECTION SIZE (INCHES)				CFM RANGE	DUCT CONNECTION SIZE (INCHES)		
	SUPPLY AIR	RETURN AIR	EXHAUST AIR			SUPPLY AIR	RETURN AIR	EXHAUST AIR
25-80	5"Ø	6"Ø	4"Ø		311-400	12"Ø	14"Ø	12"Ø
81-115	6"Ø	8"Ø	6"Ø		401-475	12"Ø	16"Ø	14"Ø
116-130	7"Ø	9"Ø	6"Ø		476-600	14"Ø	16"Ø	14"Ø
131-200	8"Ø	10"Ø	8"Ø		601-800	16"Ø	18"Ø	16"Ø
201-249	9"Ø	10"Ø	8"Ø		801-1000	18"Ø	20"Ø	16"Ø
250-310	10"Ø	12"Ø	10"Ø		1000-1300	20"Ø	20"Ø	18"Ø

SEE DIFFUSER, REGISTER & GRILLE SCHEDULE ABOVE FOR FACE TYPE, EXACT MODEL, AIR PATTERN & FRAME

CD-4

REQUIRED AIR QUANTITY (CFM) 400 cfm

REQUIRED AIR VELOCITY (FPM) 510 fpm

CUBIC FEET PER MINUTE (QUANTITY α VOLUME); SEE RANGE CHART ABOVE FOR BRANCH LINE CONNECTION SIZE IF NOT INDICATED

FEET PER MINUTE (AIR VELOCITY α PRESSURE)

PIPE HANGER SPACING			
PIPING MATERIAL	MAXIMUM HORIZONTAL SPACING (FEET)	MAXIMUM VERTICAL SPACING (FEET)	REMARKS
ABS PIPE	4	10	MIDSTORY GUIDE FOR SIZES 2" INCHES & SMALLER
BRASS PIPE	10	15	
CAST-IRON PIPE	5	15	MAX HORIZONTAL SPACING OF CAST IRON PIPE HANGERS MAYBE INCREASED TO 10 FEET WHERE 10 FOOT LENGTHS OF PIPE ARE INSTALLED
COPPER OR COPPER-ALLOY PIPE	12	10	
COPPER OR COPPER-ALLOY TUBING, 1-1/4" Ø AND SMALLER	6	10	
COPPER OR COPPER-ALLOY TUBING, 1-1/2" Ø AND LARGER	10	15	
CROSS-LINKED POLYETHYLENE (PEX) PIPE	32 INCHES	10	MIDSTORY GUIDE FOR SIZES 2" INCHES & SMALLER
CROSS-LINKED POLYETHYLENE ALUMINUM/CROSS-LINKED POLYETHYLENE (PEX-AL-PEX) PIPE	32 INCHES	4	
CPVC PIPE OR TUBING, 1 INCH & SMALLER	3	10	MIDSTORY GUIDE FOR SIZES 2" INCHES & SMALLER
CPVC PIPE OR TUBING, 1-1/4 INCHES & LARGER	4	10	MIDSTORY GUIDE FOR SIZES 2" INCHES & SMALLER
STEEL PIPE	12	15	
LEAD PIPE	CONTINUOUS	4	
POLYETHYLENE/ALUMINUM/ POLYETHYLENE (PE-AL-PE) PIPE	32 INCHES	4	
POLYPROPYLENE (PP) PIPE OR TUBING 1 INCH & SMALLER	32 INCHES	10	MIDSTORY GUIDE FOR SIZES 2" INCHES & SMALLER
POLYPROPYLENE (PP) PIPE OR TUBING 1-1/4 INCHES & LARGER	4	10	MIDSTORY GUIDE FOR SIZES 2" INCHES & SMALLER
PVC PIPE	4	10	MIDSTORY GUIDE FOR SIZES 2" INCHES & SMALLER
STAINLESS STEEL DRAINAGE SYSTEMS	10	10	MIDSTORY GUIDE FOR SIZES 2" INCHES & SMALLER

[illegible]

DUCT CONSTRUCTION MINIMUM SHEET METAL THICKNESSES			
RECTANGULAR DUCTS			
MAXIMUM SIZE (INCHES)	STEEL (MINIMUM THICKNESS, NOMINAL)	ALUMINUM (MINIMUM THICKNESS, NOMINAL)	
THROUGH 26	0.022 INCH (26 GAGE, GALV.)	0.020 INCH (NO. 24 98AS GAGE)	
27 THROUGH 30	0.026 INCH (24 GAGE, GALV.)	0.026 INCH (NO. 22 98AS GAGE)	
31 THROUGH 38	0.034 INCH (22 GAGE, GALV.)	0.032 INCH (NO. 20 98AS GAGE)	
37 THROUGH 64 OVER 64	0.040 INCH (20 GAGE, GALV.) 0.052 INCH (18 GAGE, GALV.)	0.040 INCH (NO. 18 98AS GAGE) 0.051 INCH (NO. 16 98AS GAGE)	
ROUND DUCTS			
MAXIMUM SIZE (INCHES)	SPIRAL SEAM DUCT	LONGITUDINAL SEAM DUCT	FITTINGS
	STEEL (MINIMUM THICKNESS, NOMINAL)	STEEL (MINIMUM THICKNESS, NOMINAL)	STEEL (MINIMUM THICKNESS, NOMINAL)
THROUGH 12	0.019 INCH (26 GAGE, GALV.)	0.022 INCH (26 GAGE, GALV.)	0.022 INCH (26 GAGE, GALV.)
13 THROUGH 28	0.026 INCH (24 GAGE, GALV.)	0.026 INCH (24 GAGE, GALV.)	0.026 INCH (24 GAGE, GALV.)
16 THROUGH 28	0.034 INCH (22 GAGE, GALV.)	0.034 INCH (22 GAGE, GALV.)	0.034 INCH (22 GAGE, GALV.)
29 THROUGH 36	0.034 INCH (22 GAGE, GALV.)	0.040 INCH (20 GAGE, GALV.)	0.040 INCH (20 GAGE, GALV.)
37 THROUGH 52	0.040 INCH (20 GAGE, GALV.)	0.052 INCH (18 GAGE, GALV.)	0.052 INCH (18 GAGE, GALV.)

(1) TRANSVERSE REINFORCING SIZE IS DETERMINED BY DIMENSION OF SIZE TO WHICH ANGLE IS APPLIED PER 3RD EDITION SMANOA (2005).

(2) DUCTS 24" AND UNDER SHALL USE "DUCTIMATE" TYPE FITTINGS AS SO INDICATED IN MECHANICAL MATERIALS SCHEDULE AND SPECS.

(3) CHART BASED ON U.S. METAL GRADE QUALITY MATERIAL:
 IF METALS USED FROM OTHER COUNTRIES THEN GAGE SIZE SHALL INCREASE BASED ON (ENGINEER) APPROVED THICKNESS PROJECTS REQUIRING COMPLIANCE WITH "BUY AMERICA ACT"
 SHALL NOT USE FOREIGN MADE METAL PRODUCTS.

Sea Level	Sealing Requirements
A	All transverse joints, longitudinal seams, and duct wall penetrations. Pressure-sensitive tape shall not be used as the primary sealing, unless it has been certified to comply with UL-181A or UL-181B by an independent testing laboratory and the tape is used in accordance with that certification.
B	All transverse joints, longitudinal seams, and duct wall penetrations. Pressure-sensitive tape shall not be used as the primary sealing, unless it has been certified to comply with UL-181A or UL-181B by an independent testing laboratory and the tape is used in accordance with that certification.
C*	Transverse joints only (see Special Note below)

*Special Note:
 Although ASHRAE 90.1-2010, 3rd Edition SMACNA 2006 duct standard, in conjunction 2023 FMC mechanical codes do not mandate extensive requirements for ductwork sealing inside conditioned spaces, design-engineer has decided to incorporate this primary sealing method per UL181-A or UL181-B to assist with air delivery, return or exhaust in attempt to limit IAQ concerns.

SYSTEM	MEDIA	PRESS. (*)	PERMISSIBLE PRESS. DROP
BELOW GROUND WATER	WATER	200 PSIG	1 PSIG IN 2 HRS @ 73.4°F
ABOVE GROUND WATER	WATER	200 PSIG	1 PSIG IN 2 HRS
STEAM AND STEAM CONDENSATE	WATER	125 PSIG	1 PSIG IN 2 HRS
LAB VACUUM	AIR	75 PSIG	2 PSIG IN 2 HRS
COMPRESSED AIR	AIR	150 PSIG	2 PSIG IN 2 HRS
NATURAL GAS	AIR	100 PSIG	0 PSIG IN 2 HRS
STORM, WASTE AND VENT	WATER	10 FEET	0 LEAKAGE IN 10 MINUTES**
HVAC CONDENSATE DRAINAGE	WATER	25 PSIG	0 PSIG IN 1 HRS
REFRIGERANT R22/R410A PIPING	REFRIGERANT	200 MICRONS	200 MICRONS VACUUM FOR 24 HOURS***

(*) OR 1-1/2 TIMES OPERATING PRESSURE, WHICHEVER IS GREATER.
 (**) SMOKE TEST FOR WASTE & VENT INSIDE BUILDING PRIOR TO WALL COVER-FINISH.
 (***) VACUUM TEST FOR LOW & HIGH PRESSURE LINES WITH MAX 2% NON-CONDENSABLE & LESS THAN 50 PPM MOISTURE LEVEL PER VENDOR REQUIREMENTS

CONDENSATE DRAIN SIZING SCHEDULE		
	TOTAL EQUIPMENT CAPACITY (TONS)	MINIMUM CONDENSATE INSIDE PIPE DIAMETER
UP TO 20 TONS OF CHILLED WATER OR REFRIGERATION		3/4" DIAMETER
21 TONS TO 40 TONS OF CHILLED WATER OR REFRIGERATION		1" DIAMETER
41 TONS TO 80 TONS OF CHILLED WATER OR REFRIGERATION		1-1/4" DIAMETER
91 TONS TO 125 TONS OF CHILLED WATER OR REFRIGERATION		1-1/2" DIAMETER
126 TONS TO 250 TONS OF CHILLED WATER OR REFRIGERATION		2" DIAMETER
251 TONS & ABOVE SHALL BE SIZED BASED ON ACTUAL FLOW		COMPLY WITH 2023 FMC

NOTES:

- (1) ALL CONDENSATE DRAIN CONNECTIONS TO EQUIPMENT SHALL BE USING PRODUCT BY: BY TRIENT TECHNOLOGY CALL "COSTIGARD" PRODUCTS UNLESS OTHERWISE INDICATED
- (2) ALL LINES SHALL BE INSULATED FROM EQUIPMENT TO APPROVED DISPOSE POINT OR OUTSIDE AT GRADE IN COMPLIANCE WITH 2022 CMPC SECTION 301 & TABLE 307.2.2 OUTSIDE DISPOSED AT EARTH SHALL BE MINIMUM OF 2 FEET AWAY FROM BUILDING STRUCTURE & FOUNDATION
- (3) CONDENSATE DRAIN LINES ROUTED TO BUILDING SANITARY SEWER SHALL BE PROVIDED IN COMPLIANCE WITH DETAIL & REGULATING 2022 CMPC-PP WITH INDIRECT FUNNEL, DRAIN, DEEP SEAL, P-TRAP, TRAP PRIMER, ETC.

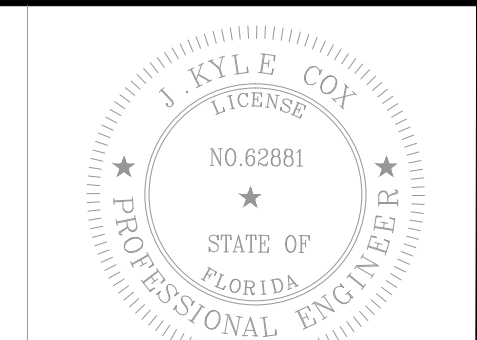
DUCTWORK CONNECTION CHART									
DIMENSION OF LONGEST SIDE, INCHES				TRANSVERSE REINFORCING					
				AT JOINTS					
				MIN. H. IN.	MIN. H. IN.	MIN. H. IN.	MIN. H. IN.	MIN. H. IN.	MIN. H. IN.
SHEET METAL GAGE (ALL FOUR SIDES)				MINIMUM REINFORCING ANGLE SIZE AND MAXIMUM LONGITUDINAL SPACING BETWEEN TRANSVERSE JOINT & FOR INTERMEDIATE REINFORCING					

FOR
N ELECTRIC COOPERATIVE, INC.
30270 BLUE STAR HIGHWAY GADSDEN COUNTY, FLORIDA

JOB NO: 23-002

SHEET NO.

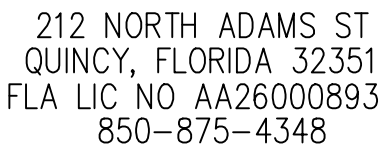
the Design
Group
of
Florida
inc.



[illegible]

- 1 Nominal cooling capacities are based on indoor coil EAT of 80/67°F (DBWB), outdoor of 95°F (DB)
- 2 Nominal heating capacities are based on indoor coil EAT of 70°F (DB), outdoor of 43°F (WB)
- 3 Efficiency values for EER, IEER, COP are based on AHRI 1230 test method for mixture of ducted & non-ducted indoor units.
- 4 For systems with multiple modules, refrigerant pipe dimensions indicate total system combined piping downstream of module twinning.
- 5 For systems with multiple modules, the list of pipe sizes is for the first module only; the list must be updated to reflect the actual piping layout.
- 6 Factory representatives shall review the project prior to and throughout the installation of CITY MULTI equipment
- 7 Factory representatives shall startup and commission CITY MULTI equipment upon completion of equipment installation
- 8 Factory representatives shall provide on-site assistance for the BMS integration of the CITY MULTI equipment
- 9 Factory representatives shall provide end-user training on the CITY MULTI equipment upon completion of the installation of equipment

Ventilation Unit Tag		PEFY-AF1200CFMR-E	PEFY-AF1200CFMR-E
M-NET Address		17	19
Serving IUs		No	No
Zone Supply		Yes	Yes
Fan Speed Setting			
Actual Supply Airflow (CFM)		1200	1200
Zone Airflow (CFM)		1200	1200
Indoor Unit Airflow (CFM)		0	0
Leaving Air Conditions	Dry Bulb Cooling (FDB)	63.0	63.0
	Wet Bulb Cooling (FWB)	63.0	63.0
	Dry Bulb Heating (FDB)	67.3	67.3
Served By Unit Tag			
M-NET Address			
Model			
Type			
Airflow (CFM)			
Mixed Air Conditions	Dry Bulb Cooling (FDB)		
	Wet Bulb Cooling (FWB)		
	Dry Bulb Heating (FDB)		



DATE: 7-7-25
REV:

SHEET NO.

System Tag		HP-A	HP-E	HP-F
Tag Reference		BC-A	BC-D	BC-E
Nominal Data	M-NET Address	52	68	70
	Model Number	TCMBM1012JA21N4	TCMBG0108S311N4	TCMBG0108S311N4
	Type (double / Main / Sub)	Main	Single	Single
	Number of Ports	12	8	8
	Connected Capacity to BC	192,000.0	112,000.0	112,000.0
Electrical Data	Voltage / Phase	208/230V / 1-phase	208/230V / 1-phase	208/230V / 1-phase
	Power Cooling 208V/230V (kW)	0.1980.255	0.1220.157	0.1220.157
	Power Heating 208V/230V (kW)	0.106/0.137	0.061/0.078	0.061/0.078
	MCA 208/230	1.19/1.39	0.74/0.87	0.74/0.87
Notes / Options	Applicable System Notes - See Notes Below	1	1	1

1 Include Diamondback Ball Valves VS-Series, 700PSI working pressure, full port, 410A rated.

2 For sub BC controller CMB-P-NU-G1 or -GB, the total connectable indoor unit capacity can be 126,000 BTUs or less. If two sub BC controllers are used, the total indoor unit capacity connected to BOTH sub BC controllers also cannot exceed 126,000 BTUs. For sub BC controller CMB-P1016NU-HB1, the total connectable indoor unit capacity can be 126,000 BTUs or less. However, if two sub controllers are used, and one of them is CMB-1016NU-HB1, the total indoor unit capacity connected to BOTH sub controllers must NOT exceed 188,000 BTUs.

3 Provide Refrigeration Ball Valve-Braze/Schrader/Insulated - 3/8" size

4 Provide Refrigeration Ball Valve-Braze/Schrader/Insulated - 5/8" size

SHEET NO.

the Design
Group
of
Florida
inc.



FAN SCHEDULE																				
FANS NO.	ROOM NAMES & NOS.	MANUF.	MODEL NO.	ACTUAL FAN LOCATION	FAN TYPE	BLOWER DATA				MOTOR DATA				SONES	BACKDRAFT DAMPER TYPE	FAN SPEED CONTROL	FAN CONTROL	FLEXIBLE DUCT CONNECTOR	FAN SUPPORT	NOTES
						CFM	ESP	TYPE	DRIVE	V-PH	WATTS/HP	AMPS	RPM							
CEF-1	MECH ROOM	GREENHECK	SPA410	CEILING MOUNTED LAY-IN TYPE CABINET FAN	CABINET EXHAUSTER	300	.25"	CTR.	DRT	120-1	121 WATTS	1.74	1000	3.5	SPRING	SOLID STATE CONTROL	ROOM 24 VOLT DIGITAL THERMOSTAT 75°F	OUTLET ONLY	THREADED RODS WITH NEOPRENE ISOLATORS	1.4,8
CEF-2 AND 6	LOCKER & SHOWER	PANASONIC	FV20VQ3	CEILING MOUNTED LAY-IN TYPE CABINET FAN	CABINET EXHAUSTER	100	.25"	CTR.	DRT	120-1	43.7 WATTS	0.34	900	1.3	SPRING	SOLID STATE CONTROL	MOTION SENSOR w- HUMIDITY SENSOR AT 55% RH	OUTLET ONLY	THREADED RODS WITH NEOPRENE ISOLATORS	1.2,4
CEF-3	MEN'S ROOM	PANASONIC	FV11-5VK1	CEILING MOUNTED LAY-IN TYPE CABINET FAN	CABINET EXHAUSTER	140	.25"	CTR.	DRT	120-1	16.8 WATTS	0.17	891	0.7	SPRING	SOLID STATE CONTROL	MOTION SENSOR w- HUMIDITY SENSOR AT 55% RH	OUTLET ONLY	THREADED RODS WITH NEOPRENE ISOLATORS	1.2,4
CEF-4	JANITOR CLOSET	GREENHECK	SPB80	CEILING MOUNTED LAY-IN TYPE CABINET FAN	CABINET EXHAUSTER	50	.25"	CTR.	DRT	120-1	54.3 WATTS	0.60	900	2.0	SPRING	SOLID STATE CONTROL	TIME CLOCK PER NOTES	OUTLET ONLY	THREADED RODS WITH NEOPRENE ISOLATORS	1.3,4
CEF-5	LADIES ROOM	PANASONIC	FV11-15VK1	CEILING MOUNTED LAY-IN TYPE CABINET FAN	CABINET EXHAUSTER	120	.25"	CTR.	DRT	120-1	16.8 WATTS	0.17	891	0.7	SPRING	SOLID STATE CONTROL	MOTION SENSOR w- HUMIDITY SENSOR AT 55% RH	OUTLET ONLY	THREADED RODS WITH NEOPRENE ISOLATORS	1.2,4
FAN NOTES : 1. PROVIDE WITH PERFORATED GRILLE PER DETAIL. 2. CONTROLLED BY ROOM MOTION SENSOR WITH HUMIDITY SENSOR SET 55% RH AND FIVE MINUTE TIME DELAY ON BREAK. 3. CONTROLLED BY QUARTZ TIME CLOCK WITH 24 HOUR 7 DAY FUNCTION & DAY LITE SAVINGS PROGRAMMING; PROVIDE WITH BATTERY BACK-UP 4. PROVIDE UL APPROVED DISCONNECT METHOD PER LATEST NEC 70 & VENDOR REQ'TS 5. CONTROLLED BY WALL MOUNTED SWITCH LOCATED AT 7'-0"OFF WITH LABEL "WALL EXHAUSTER 6. INTERLOCK WITH ROOM INTAKE LOUVER MOTOR; SEE DRAWING INFORMATION NOTES FOR ADDITIONAL REQUIREMENTS 7. PROVIDE FAN WITH OSHA APPROVED FAN GUARD, ADJUSTABLE FAN PULLEY, RAIN-PROOF WALL EXHAUST DISCHARGE LOUVER & SHUTTER (PAINTED TO MATCH SURROUNDING EXTERIOR WALL) 8. CONTROLLED BY WALL MOUNTED 24 VOLT DIGITAL THERMOSTAT SET AT 75°F; PRODUCT TO INCLUDE TRANSFORMER																				

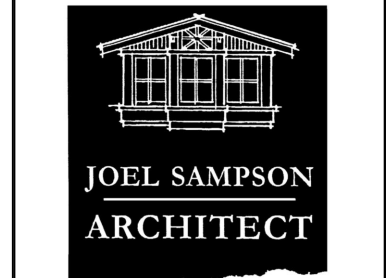
P.O. BOX 9394
DOTHAN, ALABAMA 36304
(334) 446-3243
thedesigngroupinc@gmail.com
Mechanical-Electrical
Consulting Engineers
FL License No. 31813

confidential-this document & the information contained herein is confidential & may not be disclosed, copied altered or reproduced to any persons except as permitted in writing by "The Design Group, Inc."

the Design Group of Florida inc.

division of The Design Group, Inc.

J. KYLE COX
LICENSE
NO. 62881
STATE OF FLORIDA
PROFESSIONAL ENGINEER



JOEL SAMPSON
ARCHITECT

212 NORTH ADAMS ST
QUINCY, FLORIDA 32351
FLA LIC. NO. AA26000893
850-875-4348

MUTUAL AID STAGING & COORDINATION FACILITY

FOR

TALQUIN ELECTRIC COOPERATIVE, INC.

30270 BLUE STAR HIGHWAY GADSDEN COUNTY, FLORIDA

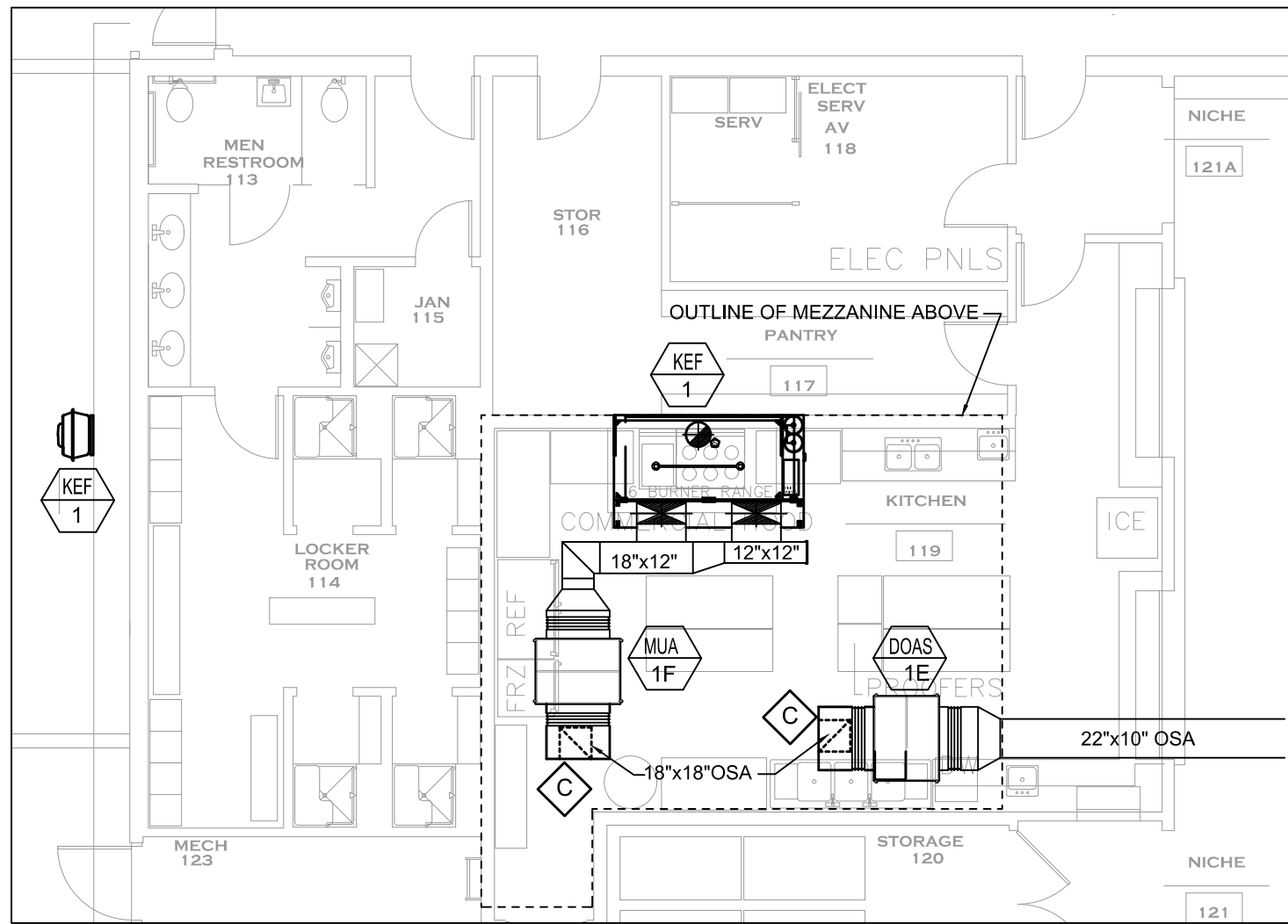
DATE: 7-7-25

REV:

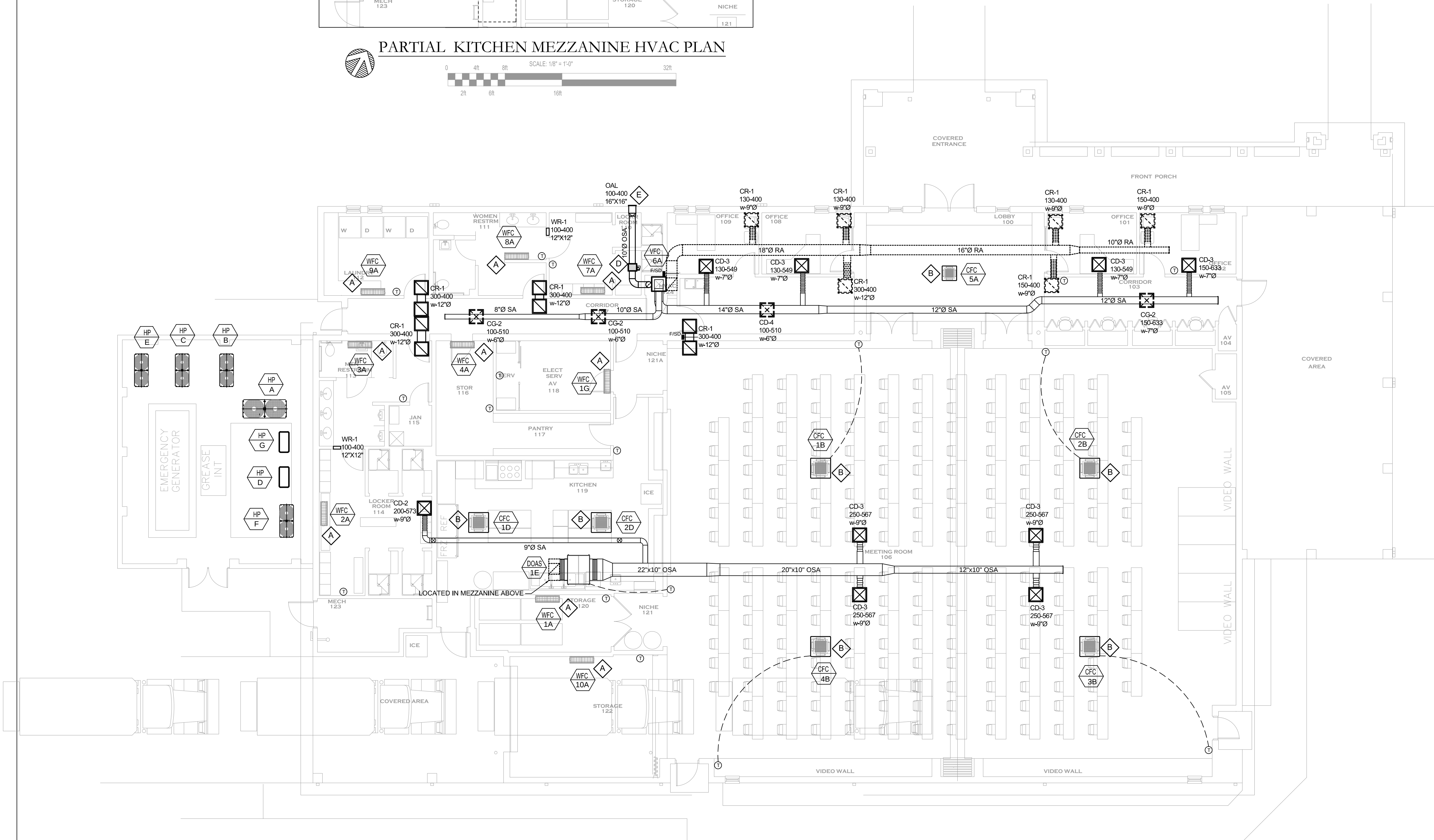
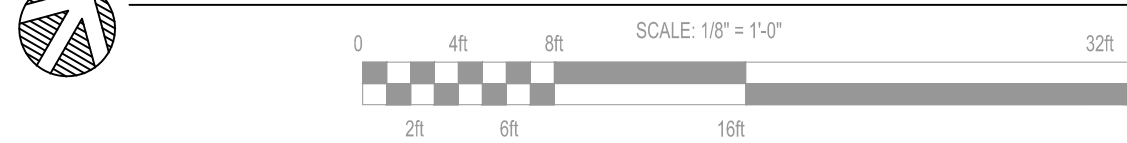
JOB NO: 23-002

Mo.3

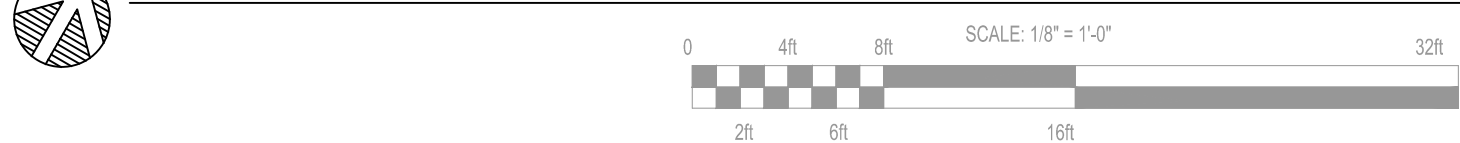
SHEET NO.



PARTIAL KITCHEN MEZZANINE HVAC PLAN



OVERALL BUILDING HEATING, AIR CONDITIONING, & VENTILATION PLAN



DRAWING INFORMATION NOTES

- WALL MOUNTED DUCTLESS UNIT PER DETAIL & SCHEDULES.
- CEILING MOUNTED CASSETTE DUCTLESS UNIT PER DETAIL & SCHEDULES.
- COOKE MODEL PR20 ROOF MOUNTED VENT CAP WITH APPROVED HURRICANE TIE-DOWN PER 2021 FMC; PROVIDE WITH 1/4" BUG/BIRD SCREEN; PRODUCT TO BE INSTALLED TO MATCH ROOF COLOR WITH APPROVED MATERIAL.
- HONEYWELL 24 VOLT ZONE DAMPER INTERLOCKED WITH HP COMPRESSOR FOR OUTSIDE AIR VENTILATION PER ASHRAE 62.1-2010 VENTILATION REQUIREMENTS. SYSTEM OUTSIDE AIR DELIVERY AT MIN 5 CFM/PERSON PER COMPLIANCE WITH ASHRAE 62.1-2010 "IAQ PROCEDURE METHOD" IN LIEU OF "FLAT RATE METHOD". EFFORT REQUIRES AIR PURIFICATION PRODUCT EQUAL TO GLOBAL PLASMA SOLUTIONS MODEL RN-2400 AS REFLECTED IN VENDOR INSTALLATION INSTRUCTIONS.
- INTAKE GRILLE LOCATED IN OVERHANG EQUAL TO GREENHECK MODEL ESD-635D CERTIFIED PER MIAMI-DADE HURRICANE REQUIREMENTS; PRODUCT TO HAVE BUG/BIRD SCREEN; PAINT LOUVER-GRILLE TO MATCH SURROUNDING SURFACE. ITEM SIZED AT 14"x14" BASED ON FRAMING.

SPECIAL PROJECT NOTES

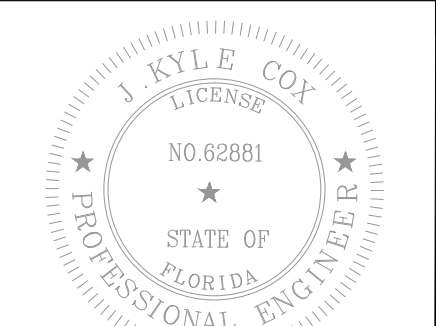
GENERAL PROJECT NOTES

- DRAWINGS ARE DIAGRAMATIC IN NATURE AND INTENDED TO SHOW DESIGN INTENT FOR SCOPE OF WORK. DRAWINGS ARE DIAGRAMATIC IN NATURE AND INTENDED TO SHOW TO BE FURNISHED AND DESIGN INTENT FOR SCOPE OF WORK TO BE FURNISHED AND INSTALLED UNDER THIS CONTRACT. REFER TO ARCHITECTURAL, THIS CONTRACT, REFER TO ARCHITECTURAL, STRUCTURAL, CIVIL AND FOUNDATIONS DOCUMENTS FOR ALL DIMENSIONS. FIELD VERIFIED SHOP DRAWINGS MUST BE PROVIDED BY SUBCONTRACTOR PRIOR TO WORK EFFORT. DRAWINGS OR APPROVAL OF SUCH DOES NOT RELEASE SUB FROM ACCURACY, WORK QUALITY, WARRANTY, OR PERFORMANCE OF INSTALLATION. OF SUCH DOES NOT RELEASE SUB FROM ACCURACY, WORK QUALITY.
- CONTRACTOR TO INSTALL NEEDLEPOINT, BI-POLAR IONIZATION AIR PURIFICATION DEVICE AT EACH DUCTED VFC, DOAS, HFC, CFC, & WFC. DEVICES EQUAL TO GLOBAL PLASMA SOLUTIONS, MODEL GPS-RN-112 OR 2400 w/ POWER SOURCE AS INDICATED IN DETAIL & SCHEDULES FOR COMPLIANCE w/ ASHRAE 62.1-2017 "IAQ PROCEDURE" METHOD FOR VENTILATION.
- ALL CONDENSATE DRAINS FROM UNITS, INCLUDING WALL MOUNTED UNITS, ABOVE CEILING UNITS, CEILING CASSETTES, AND VERTICAL AIR HANDLING UNITS AND FAN COILS SHALL BE ROUTED TO BUILDING SITE STORM DRAIN SYSTEM w/ BACKWATER VALVES AS REFLECTED IN PLUMBING DRAWINGS. GUEST ROOM PTAC UNITS TO BE ROUTED AS SHOWN TO EARTH AREA BY PLUMBING CONTRACTOR OR TO UNDERLOOR CONDENSATE DRAINAGE SYSTEMS PER SHEET P1.3. PROJECT HVAC CONTRACTOR MUST COORDINATE w/ PLUMBING CONTRACTOR TO ASSURE PROPER CONNECTIONS & COMPLIANCE w/ VENDOR INSTALLATION REQUIREMENTS.
- COORDINATE ALL DIFFUSERS & CEILING GRILLES w/ ARCHITECTURAL RCP AND ELECTRICAL LIGHTING PLAN.
- ALL CORRIDOR DIFFUSERS / GRILLES SERVED BY OUTSIDE AIR / VENTILATION SYSTEMS SHALL BE PROTECTED BY SMOKE DAMPERS w/ INTEGRAL DETECTOR, LOCATED AT BRANCH TAKEOFF. REFER TO PLANS & DETAILS FOR ADDITIONAL INFORMATION.
- ALL EXTERIOR WALL LOUVERS SHALL BE PAINTED TO MATCH EXTERIOR WALL COLOR, OR AS DIRECTED BY ARCHITECT. LOUVERS SHALL BE MOUNTED UNIFORMLY AT THE SAME ELEVATION OF ADJACENT LOUVERS. EXHAUST AIR WALL LOUVERS SHALL BE MOUNTED w/ BOTTOM OF LOUVER AT 10'-0" AFF. UNLESS NOTED OTHERWISE. INTAKE AIR WALL LOUVERS SHALL BE MOUNTED w/ BOTTOM OF LOUVER AT 12" AFF, UNLESS NOTED OTHERWISE.
- ALL EXTERIOR WALL LOUVERS SHALL BE PAINTED TO MATCH EXTERIOR WALL COLOR, OR AS DIRECTED BY ARCHITECT. LOUVERS SHALL BE MOUNTED UNIFORMLY AT THE SAME ELEVATION OF ADJACENT LOUVERS. EXHAUST AIR WALL LOUVERS SHALL BE MOUNTED w/ BOTTOM OF LOUVER AT 10'-0" AFF. UNLESS NOTED OTHERWISE. INTAKE AIR WALL LOUVERS SHALL BE MOUNTED w/ BOTTOM OF LOUVER AT 12" AFF, UNLESS NOTED OTHERWISE.
- CONTRACTOR TO INSTALL INSULATED SAFETY PAN UNDER ALL BC CONTROLLERS WITH CONDENSATE DRAINS TO NEARBY STORM DRAIN SYSTEM; COORDINATE WITH PLUMBING CONTRACTOR.

P.O. BOX 9394
DOTHAN, ALABAMA 36304
(334) 446-3243
thedesigngroupinc@gmail.com

Mechanical-Electrical
Consulting Engineers
FL License No. 31813

the Design
Group
of
Florida
inc.



212 NORTH ADAMS ST
QUINCY, FLORIDA 32351
FLA LIC NO. AA26000893
850-875-4348

MUTUAL AID STAGING & COORDINATION FACILITY
FOR
TALQUIN ELECTRIC COOPERATIVE, INC.
30270 BLUE STAR HIGHWAY GADSDEN COUNTY, FLORIDA

DATE: 7-7-25

REV:

JOB NO: 23-002

M1.1

SHEET NO.

DRAWING INFORMATION NOTES

- A. ROUTE REFRIGERANT LINES DOWN INSIDE WALL WITH PENETRATION AT GRADE LEVEL; PROVIDE WITH AIR-WATER TIGHT SEAL PER DETAIL BASED ON WALL TYPE. EXTERIOR PIPING SHALL BE INSULATED WITH 3/4" ARMACELL CLOSED CELL FOAM COVERED WITH ALUMINUM METAL JACKET & BANDS; PIPING TO BE LABELED PER MECHANICAL-PLUMBING SPECS.
- B. REFRIGERANT LINES UP TO BC CONTROLLER IN MEZZANINE. COORDINATE INSULATED LINES INSIDE WALLS AS SHOWN IN ACCORDANCE WITH STRUCTURAL SYSTEM & BUILDING FRAMING. ALL LINES TO BE INSULATED AS INDICATED IN MECHANICAL MATERIAL SCHEDULE & VENDOR REQUIREMENTS.
- C. REFRIGERANT LINES DOWN FROM BC CONTROLLER IN MEZZANINE TO ASSOCIATED OUTDOOR UNIT. COORDINATE INSULATED LINES INSIDE WALLS AS SHOWN IN ACCORDANCE WITH STRUCTURAL SYSTEM & BUILDING FRAMING. ALL LINES TO BE INSULATED AS INDICATED IN MECHANICAL MATERIAL SCHEDULE & VENDOR REQUIREMENTS.
- D. CEILING MOUNTED CABINET FAN WITH CONTROLS, DUCTS, ETC. SEE DETAIL & SCHEDULES FOR REQUIREMENTS.
- E. EXHAUST GRILLE LOCATED HIGH IN WALL EQUAL TO GREENHECK MODEL ESD-635D CERTIFIED PER MIAMI-DADE HURRICANE REQUIREMENTS; PRODUCT TO HAVE BUG/BIRD SCREEN; PAINT LOUVER-GRILLE TO MATCH SURROUNDING SURFACE, ITEM SIZED AT 12"x12" BASED ON FRAMING.
- F. ROUTE 4"Ø RESIDENTIAL DRYER EXHAUST TO WALL CAP w/ BACKDRAFT DAMPER. DISCHARGE LOW ON WALL.

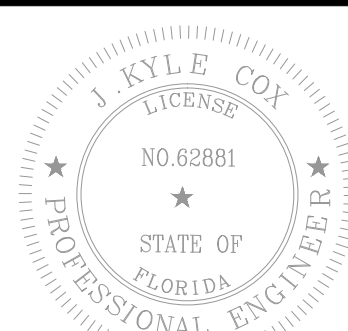
SPECIAL PROJECT NOTES

GENERAL PROJECT NOTES

1. DRAWINGS ARE DIAGRAMATIC IN NATURE AND INTENDED TO SHOW DESIGN INTENT FOR SCOPE OF WORK. DRAWINGS ARE DIAGRAMATIC IN NATURE AND INTENDED TO SHOW TO BE FURNISHED AND DESIGN INTENT FOR SCOPE OF WORK TO BE FURNISHED AND INSTALLED UNDER THIS CONTRACT. REFER TO ARCHITECTURAL, STRUCTURAL, CIVIL AND FOUNDATIONS DOCUMENTS FOR ALL STRUCTURAL, CIVIL AND FOUNDATIONS DOCUMENTS FOR ALL DIMENSIONS. FIELD VERIFIED SHOP DRAWINGS MUST BE PROVIDED BY SUBCONTRACTOR PRIOR TO WORK EFFORT. DRAWINGS OR APPROVAL OF SUCH DOES NOT RELEASE SUB FROM ACCURACY, WORK QUALITY, WARRANTY, OR PERFORMANCE OF INSTALLATION. OF SUCH DOES NOT RELEASE SUB FROM ACCURACY, WORK QUALITY.
2. CONTRACTOR TO INSTALL NEEDLEPOINT, BI-POLAR IONIZATION AIR PURIFICATION DEVICE AT EACH DUCTED VFC, DOAS, HFC, CFC, & WFC. DEVICES EQUAL TO GLOBAL PLASMA SOLUTIONS, MODEL GPS-RV-112 OR 2400 w/ POWER SOURCE AS INDICATED IN DETAIL & SCHEDULES FOR COMPLIANCE w/ ASHRAE 62.1-2017 "IAQ PROCEDURE" METHOD FOR VENTILATION.
3. ALL CONDENSATE DRAINS FROM UNITS, INCLUDING WALL MOUNTED UNITS, ABOVE CEILING UNITS, CEILING CASSETTES, AND VERTICAL AIR HANDLING UNITS AND FAN COILS SHALL BE ROUTED TO BUILDING SITE STORM DRAIN SYSTEM w/ BACKWATER VALVES AS REFLECTED IN PLUMBING DRAWINGS. GUEST ROOM PTAC UNITS TO BE ROUTED AS SHOWN TO EARTH AREA BY PLUMBING CONTRACTOR OR TO UNDERFLOOR CONDENSATE DRAINAGE SYSTEMS PER SHEET P1.3. PROJECT HVAC CONTRACTOR MUST COORDINATE w/ PLUMBING CONTRACTOR TO ASSURE PROPER CONNECTIONS & COMPLIANCE w/ VENDOR INSTALLATION REQUIREMENTS.
4. COORDINATE ALL DIFFUSERS & CEILING GRILLES w/ ARCHITECTURAL RCP AND ELECTRICAL LIGHTING PLAN.
5. ALL CORRIDOR DIFFUSERS / GRILLES SERVED BY OUTSIDE AIR / VENTILATION SYSTEMS SHALL BE PROTECTED BY SMOKE DAMPERS w/ INTEGRAL DETECTOR, LOCATED AT BRANCH TAKEOFF. REFER TO PLANS & DETAILS FOR ADDITIONAL INFORMATION.
6. ALL EXTERIOR WALL LOUVERS SHALL BE PAINTED TO MATCH EXTERIOR WALL COLOR, OR AS DIRECTED BY ARCHITECT. LOUVERS SHALL BE MOUNTED UNIFORMLY AT THE SAME ELEVATION OF ADJACENT LOUVERS. EXHAUST AIR WALL LOUVERS SHALL BE MOUNTED w/ BOTTOM OF LOUVER AT 10'-0" AFF, UNLESS NOTED OTHERWISE. INTAKE AIR WALL LOUVERS SHALL BE MOUNTED w/ BOTTOM OF LOUVER AT 12" AFF, UNLESS NOTED OTHERWISE.
6. ALL EXTERIOR WALL LOUVERS SHALL BE PAINTED TO MATCH EXTERIOR WALL COLOR, OR AS DIRECTED BY ARCHITECT. LOUVERS SHALL BE MOUNTED UNIFORMLY AT THE SAME ELEVATION OF ADJACENT LOUVERS. EXHAUST AIR WALL LOUVERS SHALL BE MOUNTED w/ BOTTOM OF LOUVER AT 10'-0" AFF, UNLESS NOTED OTHERWISE. INTAKE AIR WALL LOUVERS SHALL BE MOUNTED w/ BOTTOM OF LOUVER AT 12" AFF, UNLESS NOTED OTHERWISE.
7. CONTRACTOR TO INSTALL INSULATED SAFETY PAN UNDER ALL BC CONTROLLERS WITH CONDENSATE DRAINS TO NEARBY STORM DRAIN SYSTEM; COORDINATE WITH PLUMBING CONTRACTOR.

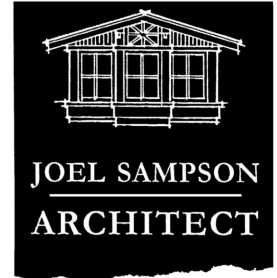
P.O. BOX 9394
DOTHAN, ALABAMA 36304
(334) 446-3243
thedesigngroupinc@gmail.com
Mechanical-Electrical
Consulting Engineers
FL License No. 31813

the Design
Group
of
Florida
inc.



confidential-this document & the information contained herein is confidential & may not be disclosed, copied altered or reproduced to any persons except as permitted in writing by "The Design Group, Inc."

division of The Design Group, Inc.



212 NORTH ADAMS ST
QUINCY, FLORIDA 32351
FLA LIC NO. AA26000893
850-875-4348

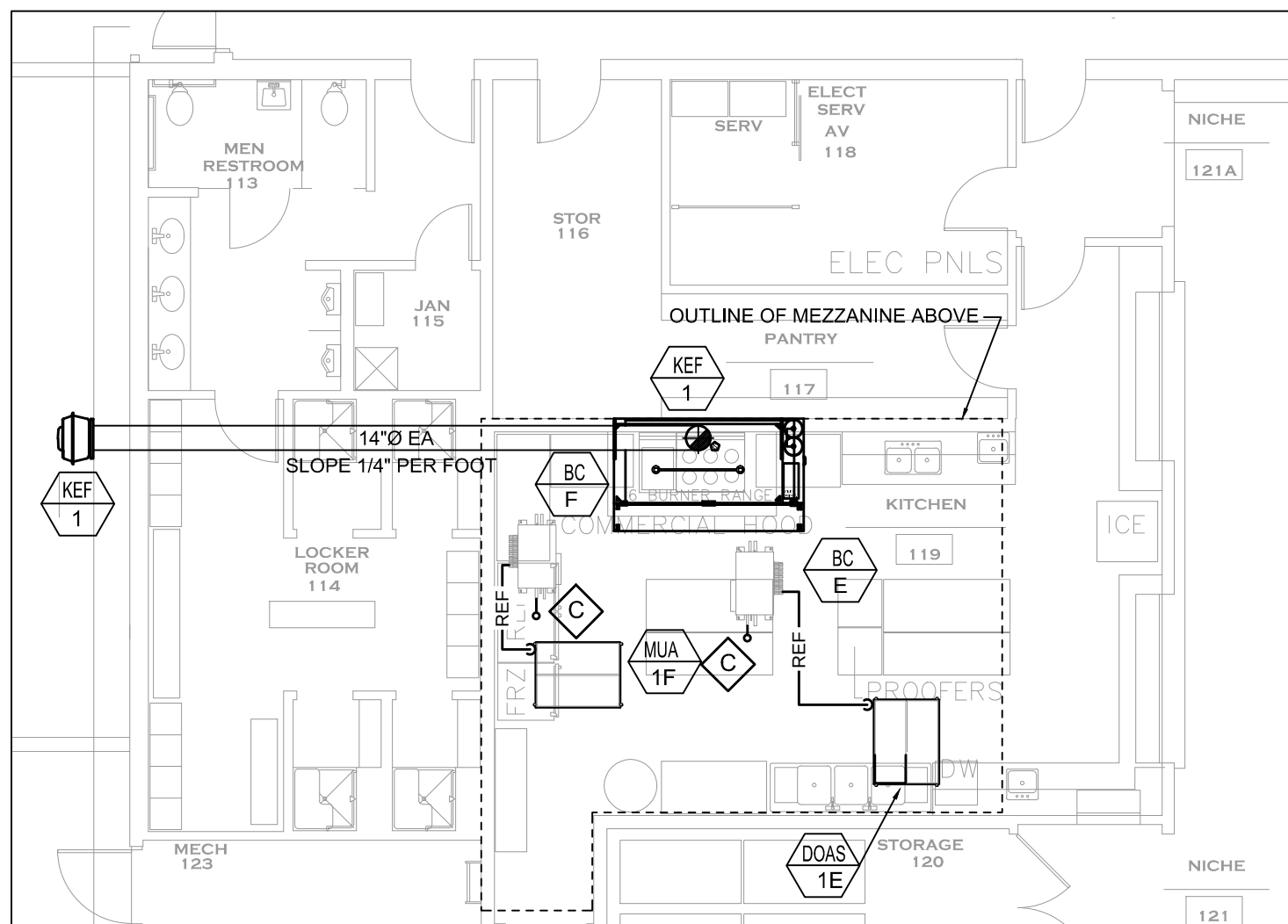
MUTUAL AID STAGING & COORDINATION FACILITY
FOR
TALQUIN ELECTRIC COOPERATIVE, INC.
30270 BLUE STAR HIGHWAY GADSDEN COUNTY, FLORIDA

DATE: 7-7-25
REV:

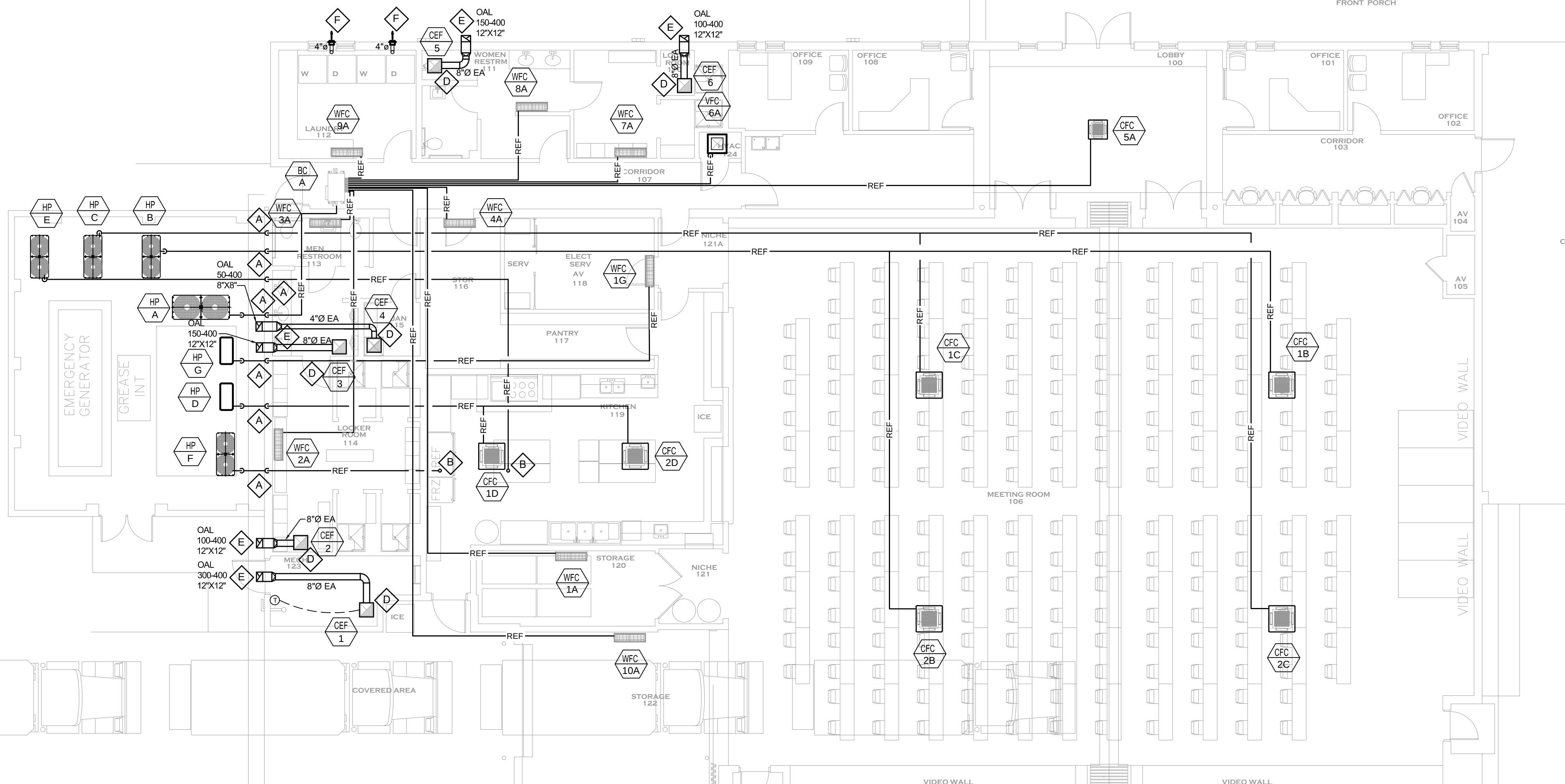
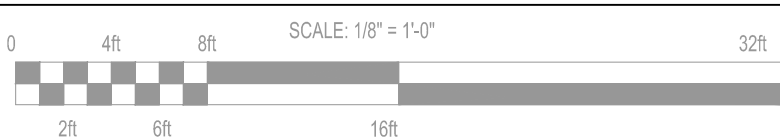
JOB NO: 23-002

M1.2

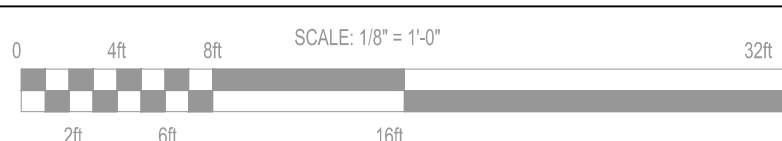
SHEET NO.



PARTIAL KITCHEN MEZZANINE HVAC PIPING PLAN



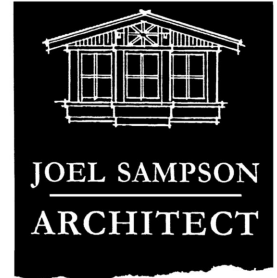
OVERALL BUILDING EXHAUST AIR & HVAC PIPING PLAN





DRAWING INFORMATION NOTES

- ROUTE CONDENSATE DRAIN DOWN INSIDE EXTERIOR WALL TO AREA BELOW FINISHED FOUNDATION TO UNDERGROUND DRY-WELL PER DETAIL.
- UNDERGROUND DRY-WELL PER DETAIL BASED ON VOLUME CONTENT FOR CONDENSATE DRAIN DISCHARGE.
- TYPICAL WALL MOUNTED DUCTLESS UNIT WITH FACTORY CONDENSATE PUMP & CHECK VALVE TO DRAIN SYSTEM ABOVE FINISHED CEILING.
- 3/4" CD DRAIN FROM BC CONTROLLER SAFETY DRAIN PAN PER DRAWING INFORMATION NOTES.
- TYPICAL CEILING MOUNTED CASSETTE DUCTLESS UNIT WITH FACTORY CONDENSATE PUMP & CHECK VALVE TO DRAIN SYSTEM ABOVE FINISHED CEILING.
- 2" CONDENSATE DRAIN LINE TURNED UP AT 18" BFF WITH INDIRECT DEEP SEAL CONNECTION & ZURN FIXED AIR GAP PER DETAIL IN ACCORDANCE WITH 2024 FMC.



212 NORTH ADAMS ST
QUINCY, FLORIDA 32351
FLA LIC NO. AA26000893
850-875-4348

MUTUAL AID STAGING & COORDINATION FACILITY
FOR
TALQUIN ELECTRIC COOPERATIVE, INC.
30270 BLUE STAR HIGHWAY GADSDEN COUNTY, FLORIDA

DATE: 7-7-25
REV:

JOB NO: 23-002

M1.3

SHEET NO.

GENERAL PROJECT NOTES

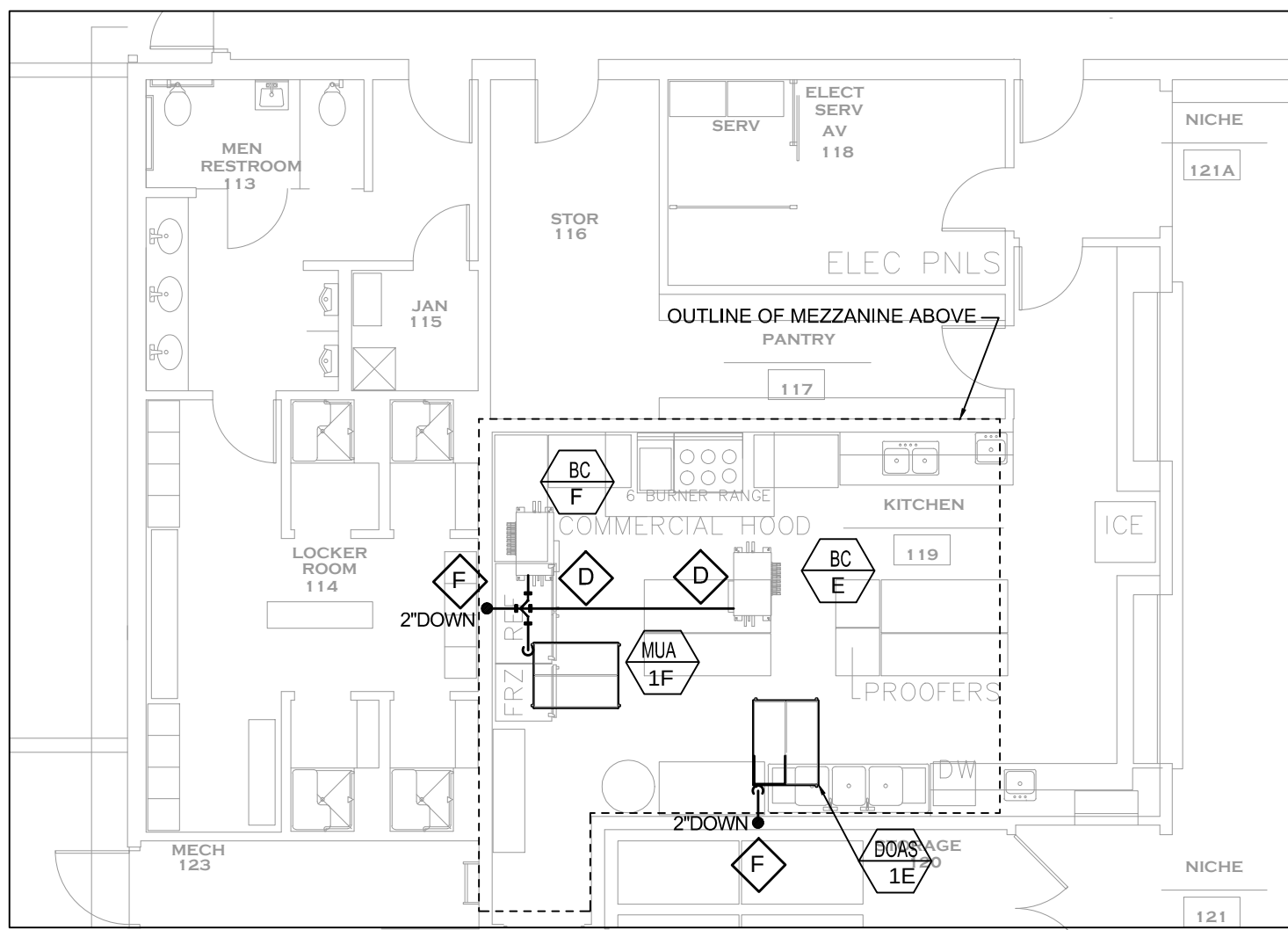
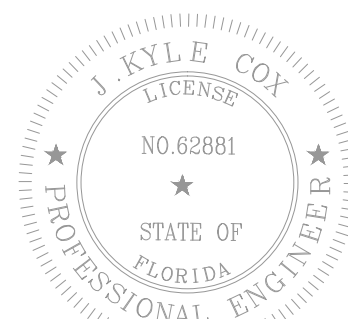
- DRAWINGS ARE DIAGRAMATIC IN NATURE AND INTENDED TO SHOW DESIGN INTENT FOR SCOPE OF WORK. DRAWINGS ARE DIAGRAMATIC IN NATURE AND INTENDED TO SHOW TO BE FURNISHED AND DESIGN INTENT FOR SCOPE OF WORK TO BE FURNISHED AND INSTALLED UNDER THIS CONTRACT. REFER TO ARCHITECTURAL, STRUCTURAL, CIVIL AND FOUNDATIONS DOCUMENTS FOR ALL STRUCTURAL, CIVIL AND FOUNDATIONS DOCUMENTS FOR ALL DIMENSIONS. FIELD VERIFIED SHOP DRAWINGS MUST BE PROVIDED BY DIMENSIONS. FIELD VERIFIED SHOP DRAWINGS MUST BE PROVIDED BY SUBCONTRACTOR PRIOR TO WORK EFFORT. DRAWINGS OR APPROVAL OF SUCH DOES NOT RELEASE SUB FROM ACCURACY, WORK QUALITY, WARRANTY, OR PERFORMANCE OF INSTALLATION. OF SUCH DOES NOT RELEASE SUB FROM ACCURACY, WORK QUALITY.
- CONTRACTOR TO INSTALL NEEDLEPOINT, BI-POLAR IONIZATION AIR PURIFICATION DEVICE AT EACH DUCTED VFC, DOAS, HFC, CFC, & WFC. DEVICES EQUAL TO GLOBAL PLASMA SOLUTIONS, MODEL GPS-RV-112 OR 2400 w/ POWER SOURCE AS INDICATED IN DETAIL & SCHEDULES FOR COMPLIANCE w/ ASHRAE 62.1-2017 "IAQ PROCEDURE" METHOD FOR VENTILATION.
- ALL CONDENSATE DRAINS FROM UNITS, INCLUDING WALL MOUNTED UNITS, ABOVE CEILING UNITS, CEILING CASSETTES, AND VERTICAL AIR HANDLING UNITS AND FAN COILS SHALL BE ROUTED TO BUILDING SITE STORM DRAIN SYSTEM w/ BACKWATER VALVES AS REFLECTED IN PLUMBING DRAWINGS. GUEST ROOM PTAC UNITS TO BE ROUTED AS SHOWN TO EARTH AREA BY PLUMBING CONTRACTOR OR TO UNDERFLOOR CONDENSATE DRAINAGE SYSTEMS PER SHEET P1.3. PROJECT HVAC CONTRACTOR MUST COORDINATE w/ PLUMBING CONTRACTOR TO ASSURE PROPER CONNECTIONS & COMPLIANCE w/ VENDOR INSTALLATION REQUIREMENTS.
- COORDINATE ALL DIFFUSERS & CEILING GRILLES w/ ARCHITECTURAL RCP AND ELECTRICAL LIGHTING PLAN.
- ALL CORRIDOR DIFFUSERS / GRILLES SERVED BY OUTSIDE AIR / VENTILATION SYSTEMS SHALL BE PROTECTED BY SMOKE DAMPERS w/ INTEGRAL DETECTOR, LOCATED AT BRANCH TAKEOFF. REFER TO PLANS & DETAILS FOR ADDITIONAL INFORMATION.
- ALL EXTERIOR WALL LOUVERS SHALL BE PAINTED TO MATCH EXTERIOR WALL COLOR, OR AS DIRECTED BY ARCHITECT. LOUVERS SHALL BE MOUNTED UNIFORMLY AT THE SAME ELEVATION OF ADJACENT LOUVERS. EXHAUST AIR WALL LOUVERS SHALL BE MOUNTED w/ BOTTOM OF LOUVER AT 10'-0" AFF, UNLESS NOTED OTHERWISE. INTAKE AIR WALL LOUVERS SHALL BE MOUNTED w/ BOTTOM OF LOUVER AT 12" AFF, UNLESS NOTED OTHERWISE.
- ALL EXTERIOR WALL LOUVERS SHALL BE PAINTED TO MATCH EXTERIOR WALL COLOR, OR AS DIRECTED BY ARCHITECT. LOUVERS SHALL BE MOUNTED UNIFORMLY AT THE SAME ELEVATION OF ADJACENT LOUVERS. EXHAUST AIR WALL LOUVERS SHALL BE MOUNTED w/ BOTTOM OF LOUVER AT 10'-0" AFF, UNLESS NOTED OTHERWISE. INTAKE AIR WALL LOUVERS SHALL BE MOUNTED w/ BOTTOM OF LOUVER AT 12" AFF, UNLESS NOTED OTHERWISE.
- CONTRACTOR TO INSTALL INSULATED SAFETY PAN UNDER ALL BC CONTROLLERS WITH CONDENSATE DRAINS TO NEARBY STORM DRAIN SYSTEM; COORDINATE WITH PLUMBING CONTRACTOR.

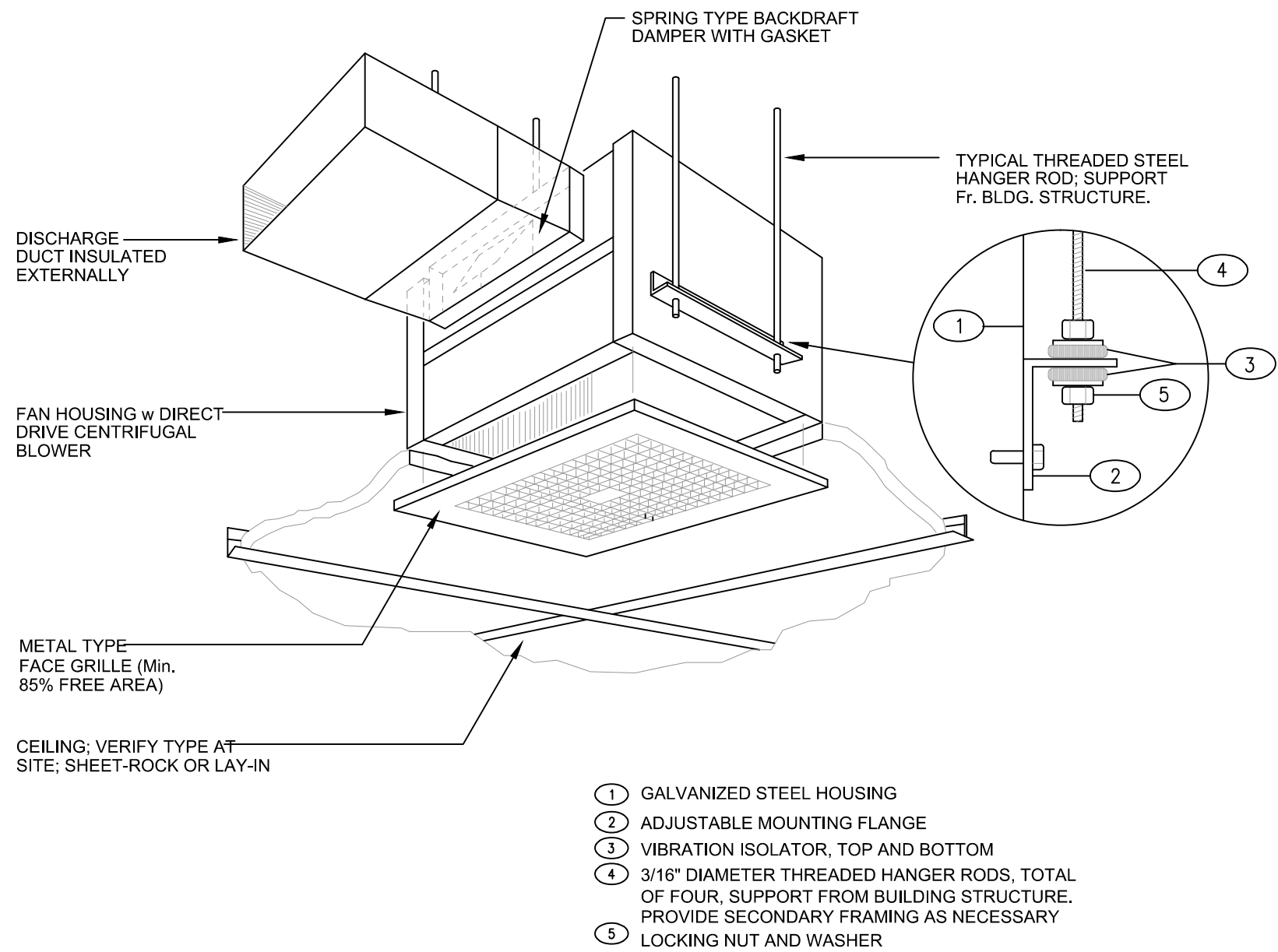
P.O. BOX 9394
DOTHAN, ALABAMA 36304
(334) 446-3243
thedesigngroupinc@gmail.com
Mechanical-Electrical
Consulting Engineers
FL License No. 31813

confidential-this document & the information contained herein is confidential & may not be disclosed, copied, altered or reproduced to any persons except as permitted in writing by "The Design Group, Inc."

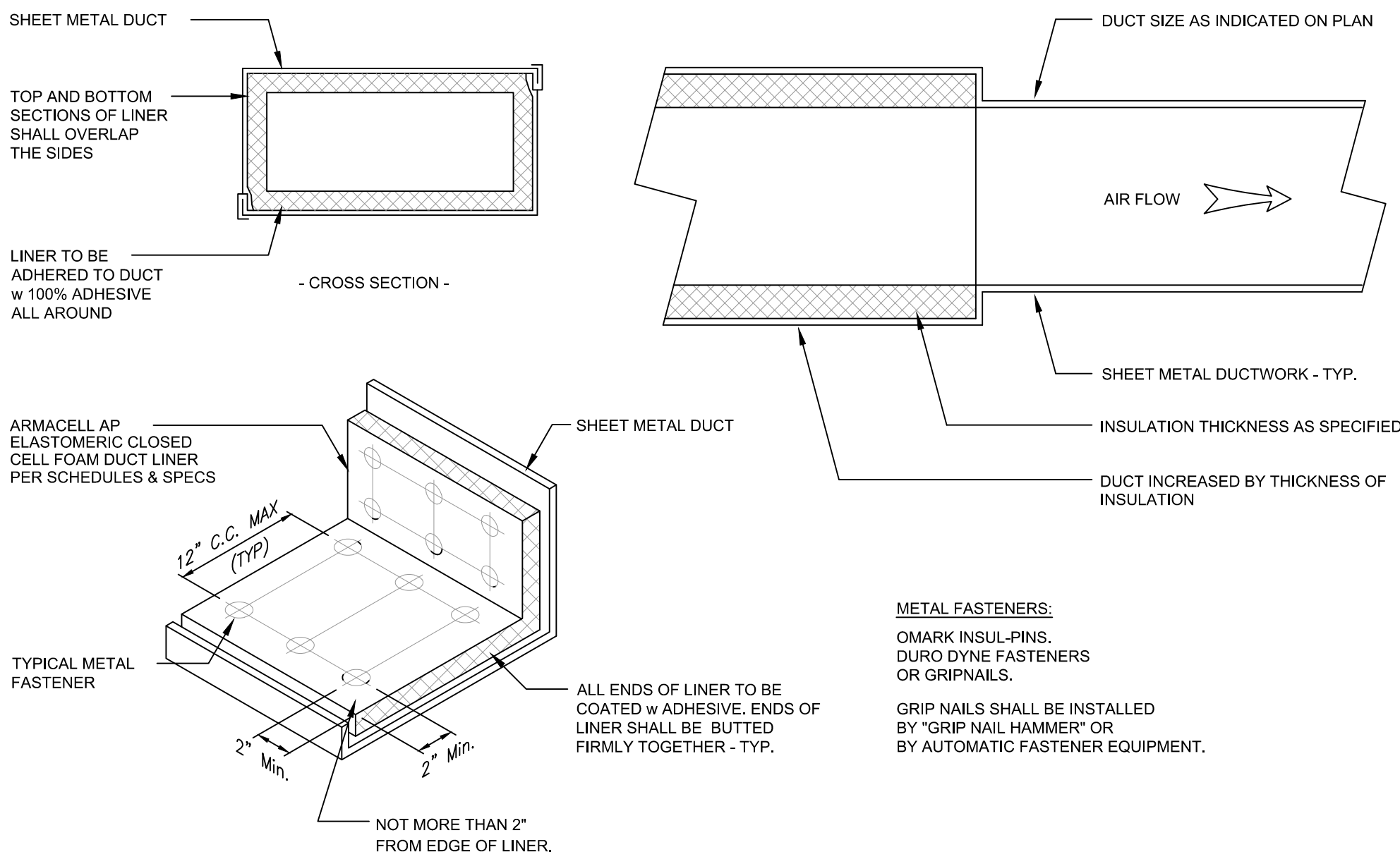
the Design
Group
of
Florida
inc.

division of The Design Group, Inc.

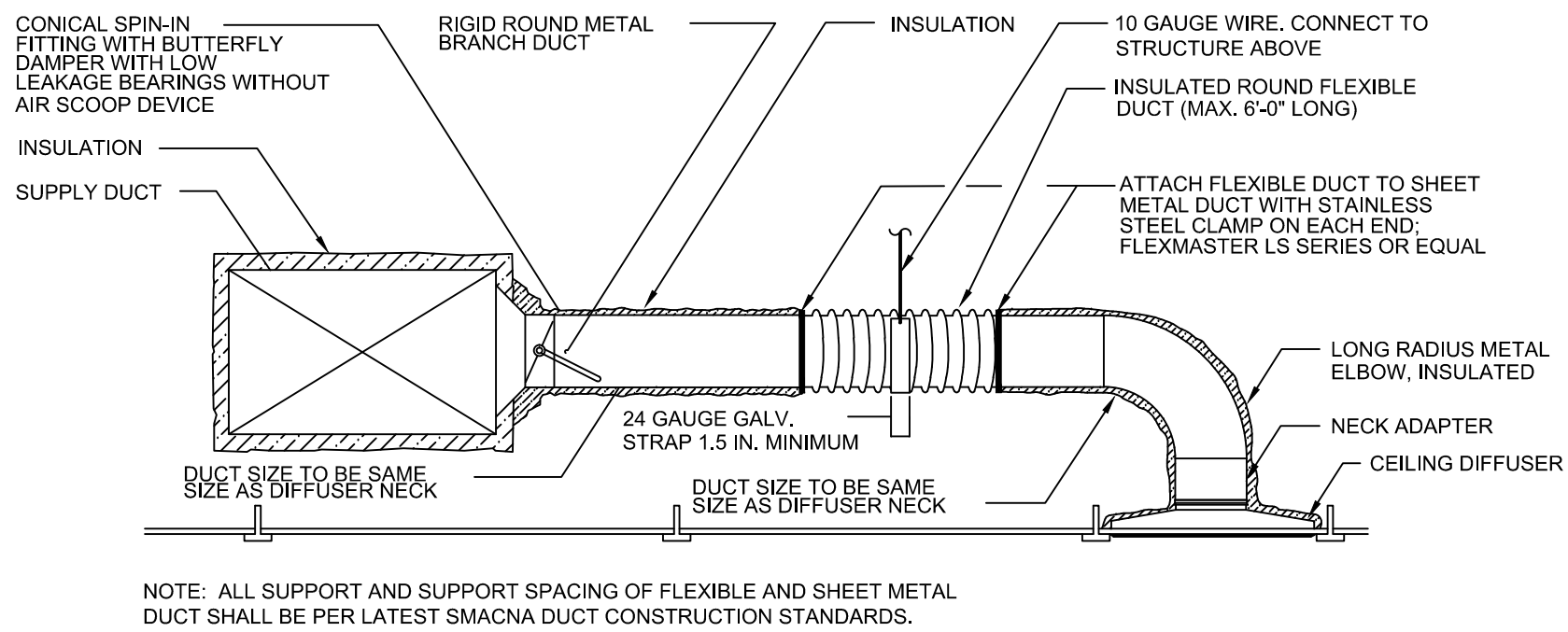




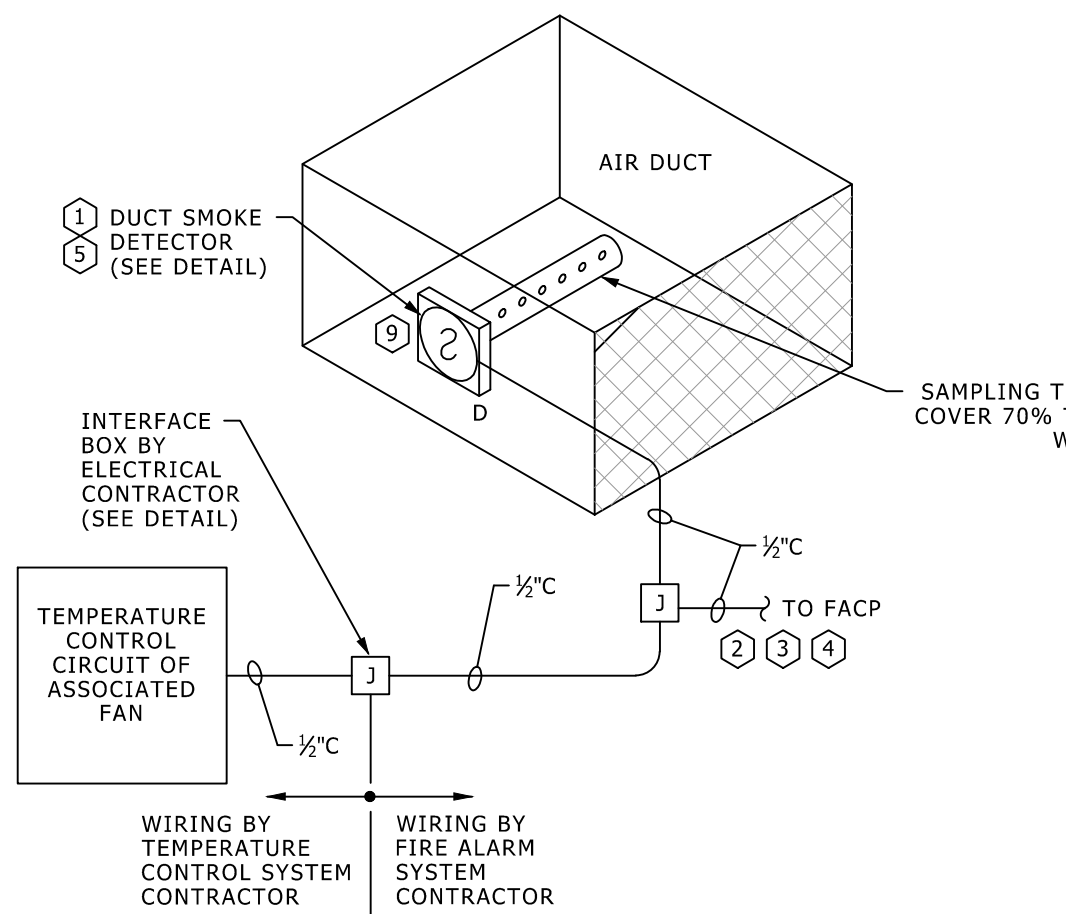
CABINET CEILING EXHAUST FAN DETAIL
NOT TO SCALE



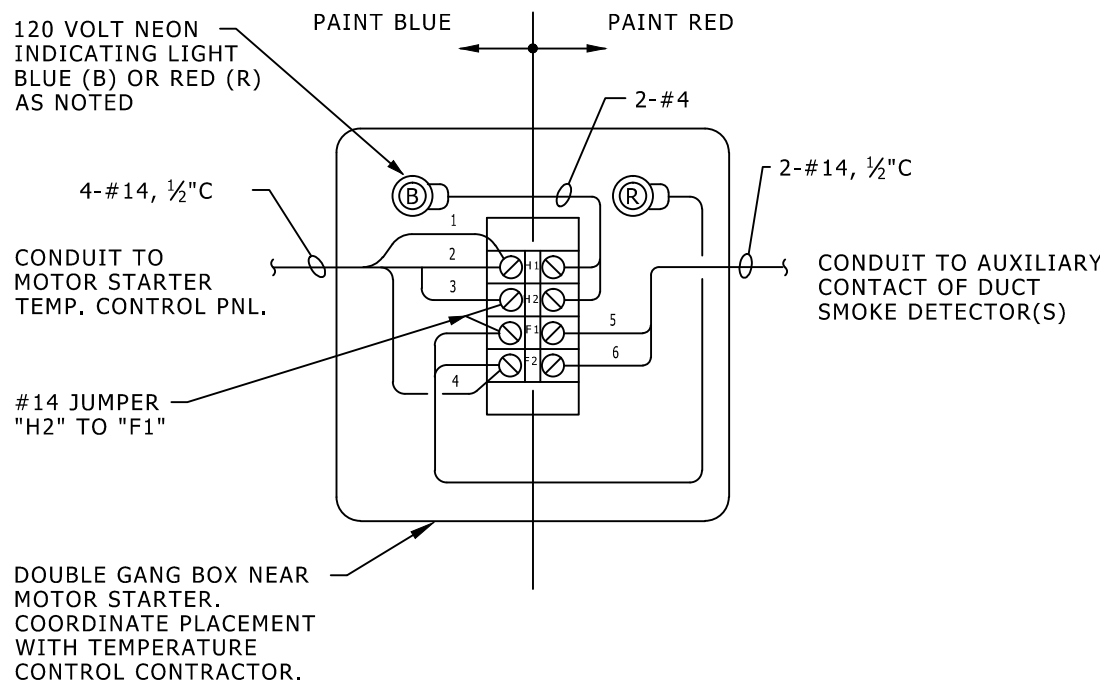
DUCT LINER DETAIL
NOT TO SCALE



CEILING DIFFUSER RUNOUT DETAIL
NOT TO SCALE



INTERFACE CIRCUIT LAYOUT
NO SCALE

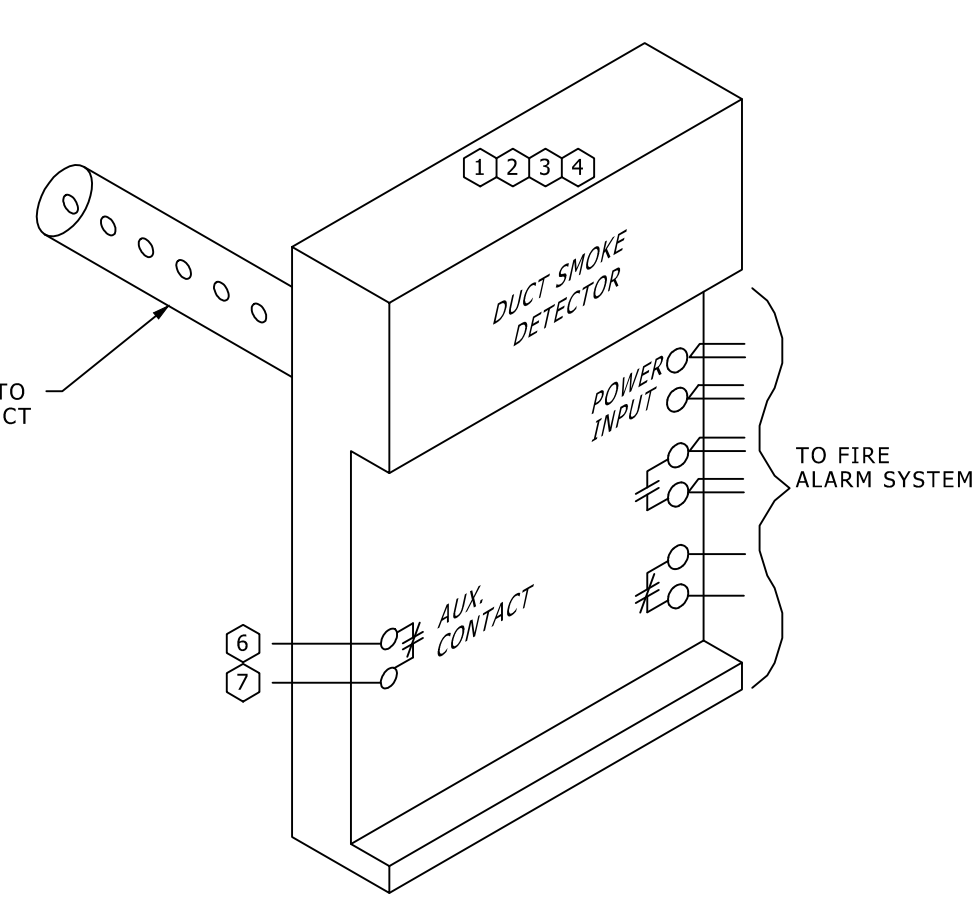


FIRE ALARM TO TEMPERATURE CONTROL
INTERFACE BOX DETAIL
NO SCALE

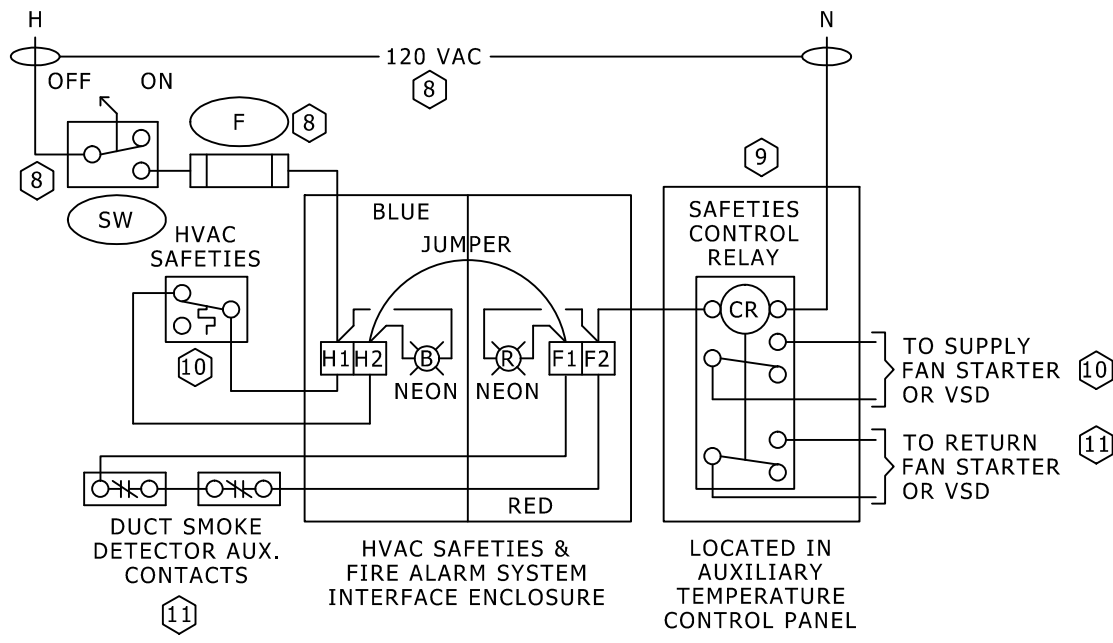
REFERENCE NOTES

1. DETECTOR SHALL BE SUPPLIED BY HVAC CONTRACTOR AND WIRED BY THE FIRE ALARM SYSTEM CONTRACTOR.
2. DETECTOR SHALL BE WIRED TO IT'S OWN ZONE.
3. DETECTOR SHALL BE RESETTABLE FROM THE FIRE ALARM CONTROL PANEL.
4. UPDATE FIRE ALARM SYSTEM ANNUNCIATOR AND ZONE LIST FOR EACH DUCT SMOKE DETECTOR.
5. DETECTOR SHALL HAVE AUXILIARY RELAY WITH NORMALLY CLOSED CONTACT.
6. ROUTE FIRE ALARM TO TEMPERATURE CONTROL BOX.
7. THERE IS TYPICALLY ONLY ONE DUCT SMOKE DETECTOR ON FAN SYSTEM. IF SYSTEM IS INTERLOCKED, RUN CONTACTS OF ASSOCIATED DUCT SMOKE DETECTORS IN SERIES.
8. PART OF MOTOR STARTER.
9. PART OF TEMPERATURE CONTROL PANEL.
10. PART OF TEMPERATURE CONTROL/FAN SYSTEM.
11. PRESENT ONLY WHEN REQUIRED BY HVAC DESIGN.

"HARDWIRED" (DUMB) FIRE ALARM SYSTEM DEVICE INTERCONNECTION DETAIL DUCT SMOKE DETECTOR INTERFACE CONNECTION TO TEMPERATURE CONTROLS



DUCT SMOKE DETECTOR INSTALLATION DETAIL
NO SCALE



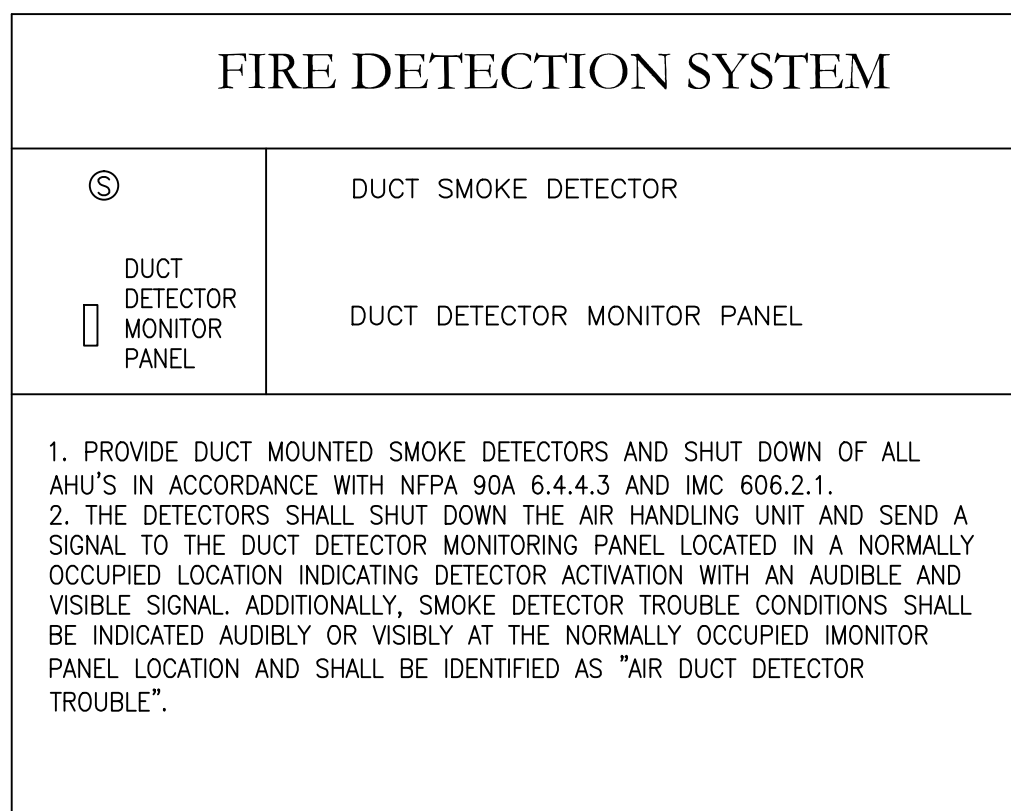
INTERFACE BOX WIRING DETAIL
NO SCALE

GENERAL NOTES

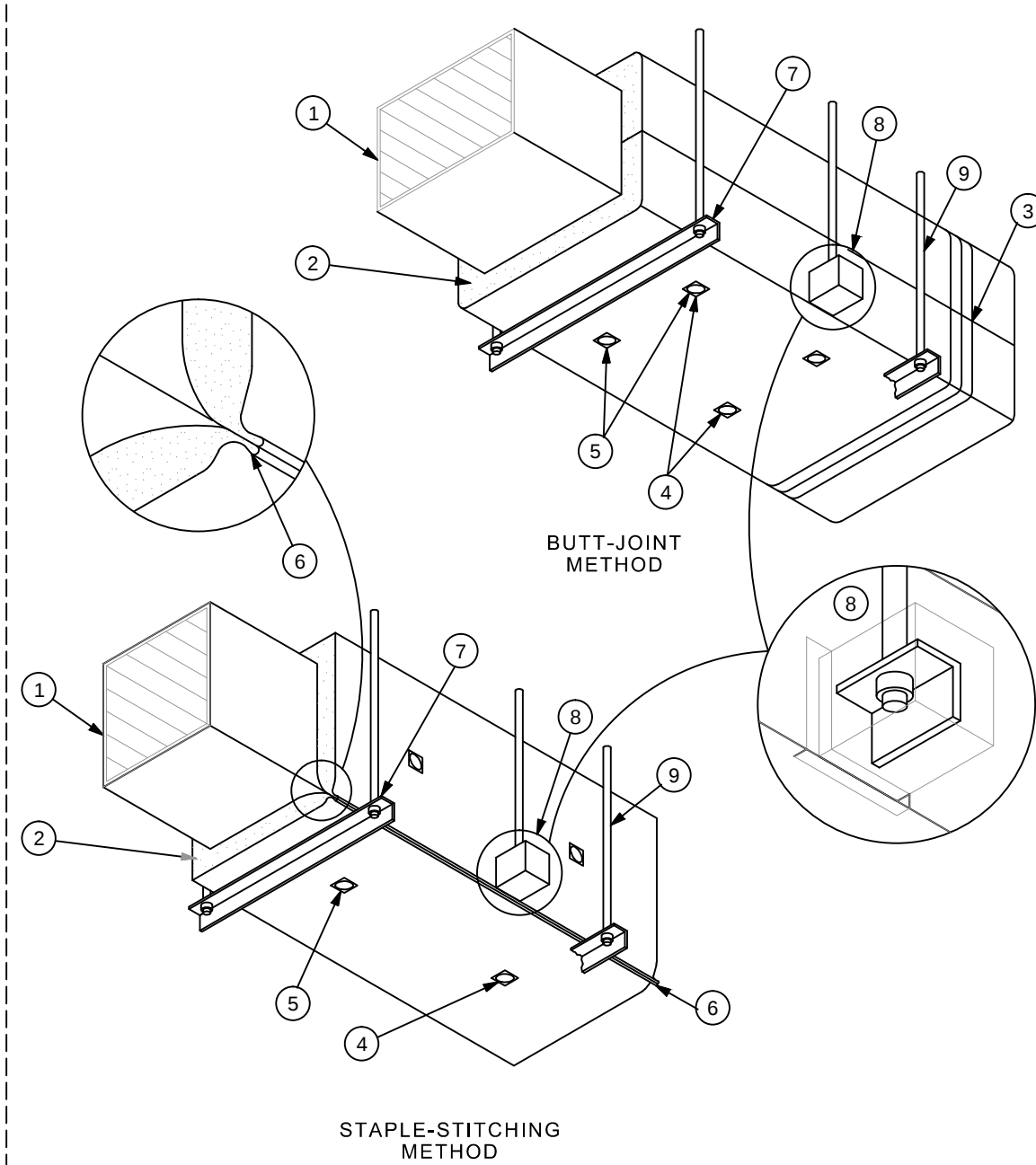
- A. EXACT NUMBER OF CONDUCTORS DEPENDENT OF FIRE ALARM SYSTEM BEING USED. CONFIRM NUMBER AND TYPE REQUIRED AT EACH LOCATION WITH FIRE ALARM SYSTEM SUPPLIER.
- B. USE 4" SQUARE DEEP BOX WITH 4 TERMINAL, TERMINAL STRIP INSTALLED INSIDE. STRIP TO BE 120 OR 24 VOLT RATED (VERIFY).
- C. INTERFACE BOX AND CONTROLLED OUTPUT DEVICE (OF FIRE ALARM SYSTEM) SHOULD BE CLOSE TO MOTOR STARTER OR TEMPERATURE CONTROL PANEL.
- D. PAINT INTERFACE BOX EXTERIOR AND COVER RED AND BLUE; FIRE ALARM SYSTEM HALF IS RED, TEMPERATURE CONTROL SIDE IS BLUE
- E. PLACE AND INSTALL DUCT SMOKE DETECTOR IN AN ACCESSIBLE LOCATIONS, AND IN FULL COMPLIANCE WITH SMOKE DETECTOR MANUFACTURER'S PLACEMENT AND INSTRUCTIONS.
- F. VERIFY FIRE ALARM VOLTAGE REQUIREMENT & SMOKE DETECTOR VOLTAGE & TYPE (AC-DC) PRIOR TO INSTALLATION; SMOKE DETECTOR SHALL BE COMPATIBLE BUILDING FIRE ALARM SYSTEM FOR COMPLETE ALARM SYSTEM CERTIFICATION FOR UL PRODUCT OR LISTING.
- G. INSTALL CEILING MOUNTED LED INDICATOR LIGHT DIRECTLY BELOW IN-LINE DUCT SMOKE DETECTOR LOCATION TO EASILY IDENTIFY PRODUCT LOCATION; VERIFY WITH ALARM VENDOR PRIOR TO EFFORT; IF INSTALLED IN SINGLE ZONE AHU OR DUCTED FAN-COIL LED LIGHT MAY BE MOUNTED ABOVE ZONE WALL THERMOSTAT IN CEILING AS INDICATED.

TYPICAL HVAC DUCT SMOKE DETECTOR DETAIL

NOT TO SCALE



1. PROVIDE DUCT MOUNTED SMOKE DETECTORS AND SHUT DOWN OF ALL AHU'S IN ACCORDANCE WITH NFPA 90A 6.4.4.3 AND IMC 606.2.1.
2. THE DETECTORS SHALL SHUT DOWN THE AIR HANDLING UNIT AND SEND A SIGNAL TO THE DUCT DETECTOR MONITORING PANEL LOCATED IN A NORMALLY OCCUPIED LOCATION INDICATING DETECTOR ACTIVATION WITH AN AUDIBLE AND VISIBLE SIGNAL. ADDITIONALLY, SMOKE DETECTOR TROUBLE CONDITIONS SHALL BE INDICATED AUDIBLY OR VISIBLY AT THE NORMALLY OCCUPIED IMONITOR PANEL LOCATION AND SHALL BE IDENTIFIED AS "AIR DUCT DETECTOR TROUBLE".



BLANKET FIBERGLASS INSULATION DETAIL

NO SCALE

NOTES:

1. GALVANIZED METAL DUCT WITH SEALED SEAMS AND JOINTS USING MCGILL AIR-SEAL "UNI-WEATHER" NON WATER BASE POLYURETHANE PRODUCT.
2. BLANKET INSULATION WITH FACTORY-APPLIED VAPOR-RETARDER JACKET, 3"THICK, 1/4 LB CU.FT. DENSITY; SEE MECHANICAL MATERIAL SCHEDULE.
3. EXPOSED DUCTS (INCLUDING MEZZANINE ROOMS) SHALL BE WRAPPED WITH 1-1/2" TYPE 475 RIGID DUCTBOARD MATERIAL AS INDICATED IN MECHANICAL MATERIAL SCHEDULE WITH FACTORY APPLIED ADHESIVES & STICK CLIPS.
4. FACTORY LAP ALL SEALS (SEALED WITH ADHESIVE AND/OR STAPLES AND VAPOR-RETARDER TAPE). TAPE ALL JOINTS WITH FASON (SMANCA) ALUMINUM REINFORCED PRESSURE SENSITIVE TAPE. COAT EDGES, SEAMS AND JOINTS WITH INSUL-CAUSTIC PRODUCT BY "SURE-COAT M1-110" PRODUCT FIRE RESISTANT MASTIC.
5. MECHANICAL FASTENERS SUPPORTING INSULATION ON UNDERSIDE OF DUCTS OVER 24" WIDE (SPACED 3" MAXIMUM FROM THE BUTT JOINT).
6. VAPOR-RETARDER TAPE OVER TEARS AND PENETRATIONS OF THE VAPOR-RETARDER JACKET TO KEEP AIR TIGHT CONDITION.
7. ALTERNATE METHOD OF LAP SEAL - LONGITUDINAL JOINT LAPPED AND FOLDED, THEN STAPLED SECURELY IN PLACE.
8. HANGER ON EXTERIOR OF INSULATION. ENCAPSULATE EXPOSED END OF ANGLE. SEAL WITH ADHESIVE OR VAPOR-RETARDER TAPE.
9. HANGER EMBEDDED IN INSULATION. ENCAPSULATE EXPOSED END OF ANGLE. SEAL WITH ADHESIVE OR VAPOR-RETARDER TAPE.
10. COMPLETELY ENCAPSULATE HANGER ROD AND ANGLE. SEAL TOP PENETRATION. ENCAPSULATE AND SEAL STRAP HANGERS IN A SIMILAR MANNER.



212 NORTH ADAMS ST
QUINCY, FLORIDA 32351
FLA LIC NO. AA2600893
850-875-4348

MUTUAL AID STAGING & COORDINATION FACILITY
FOR
TALQUIN ELECTRIC COOPERATIVE, INC.
30270 BLUE STAR HIGHWAY
GADSDEN COUNTY, FLORIDA

DATE: 7-7-25

REV:

JOB NO: 23-002

M2.1

SHEET NO.

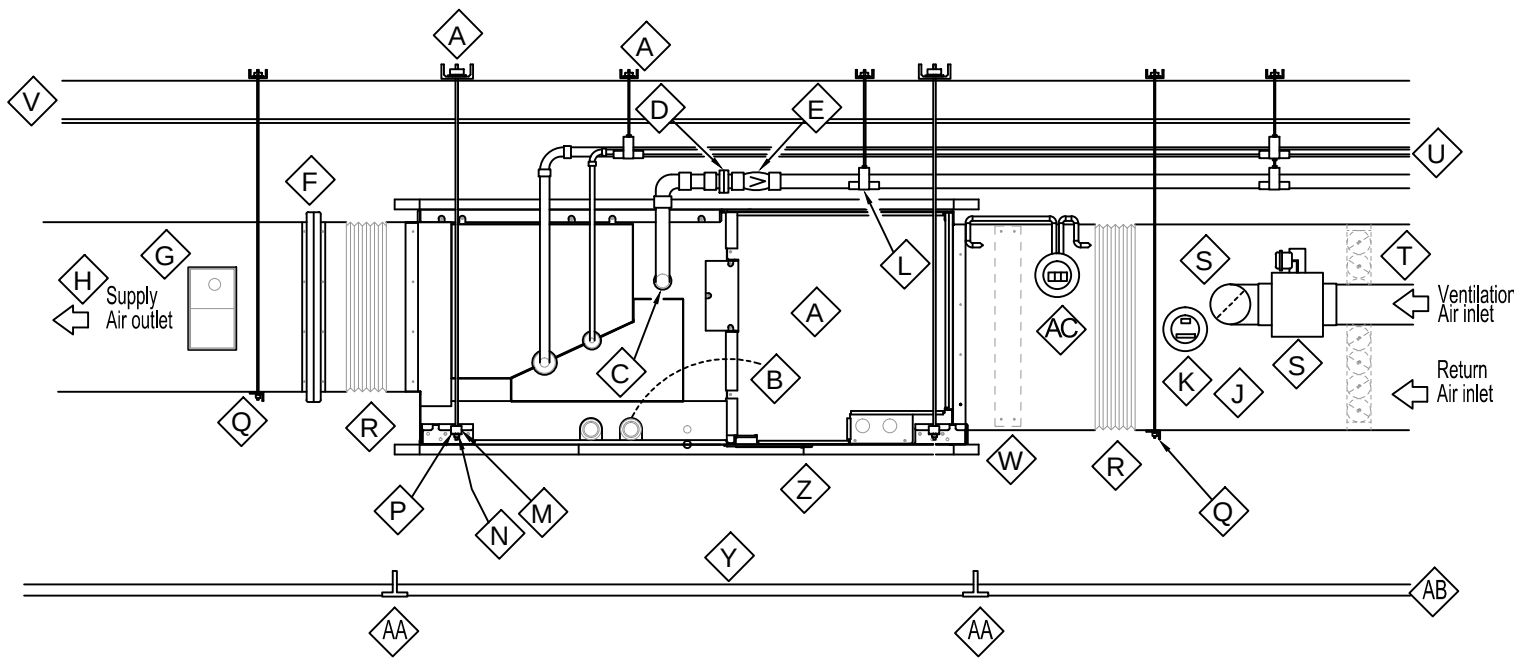
P.O. BOX 9394
DOTHAN, ALABAMA 36304
(334) 446-3243
thedesigngroupinc@gmail.com

confidential-this document & the information contained herein is confidential & may not be disclosed, copied altered or reproduced to any persons except as permitted in writing by "The Design Group, Inc."

the Design Group of Florida inc.

division of The Design Group, Inc.

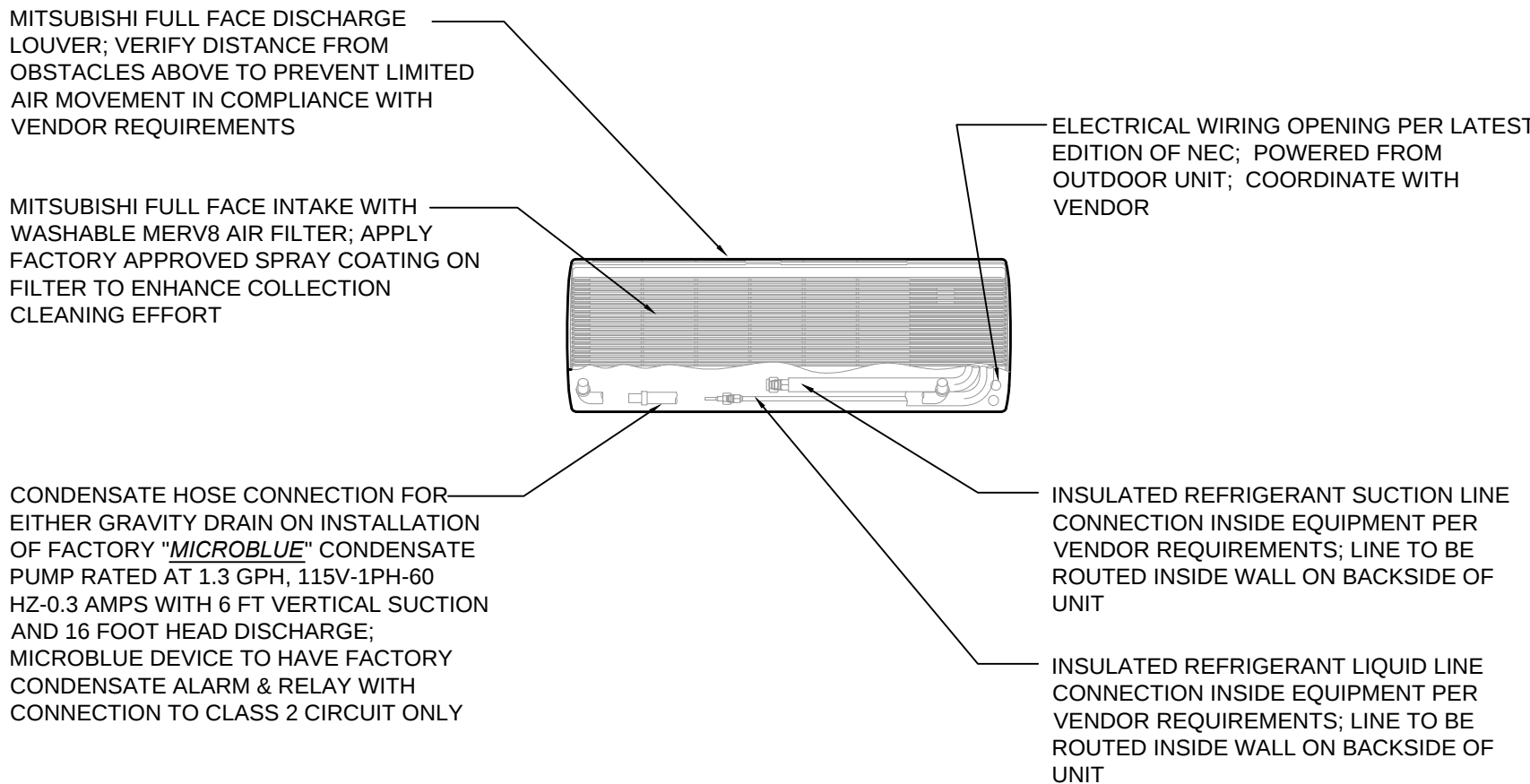
J. KYLE COX
LICENSE
NO. 62881
STATE OF FLORIDA
PROFESSIONAL ENGINEER



- A. MITSUBISHI VARIABLE SPEED DUCTED DX TYPE FAN-COIL UNIT WITH UL APPROVED FACTORY OR FIELD INSTALLED ELECTRICAL DISCONNECT. UNIT TO BE SUPPORTED AS INDICATED IN DETAIL PER FACTORY INSTALLATION INSTRUCTIONS.
- B. LOW VOLTAGE TO MITSUBISHI AHU SECONDARY DRAIN LEVEL SENSOR IN PAN WITH CONTROLLER & ALARM PANEL TO DIS-ENGAGE FAN-COIL UNIT WHEN HIGH WATER IS DETECTED IN CONDENSATE DRAIN PAN PER VENDOR IN COMPLIANCE WITH UL 508 ACCORDING TO GUIDELINES AS SET FORTH IN 2018 IMC SECTION 314.2.3 (4) REGULATIONS.
- C. 3/4" SCHEDULE 80 CPVC CONDENSATE DISCHARGE LINE WITH 3/4" ARMAFLEX UNICELLULAR CLOSED CELL FOAM; LINE TO BE SLOPED AT 1/8" PER FOOT.
- D. SCHEDULE 80 CPVC UNION AS INDICATED FOR LINE DISCONNECT & CLEANING.
- E. CONDENSATE DRAIN CHECK VALVE TO PREVENT BACKFLOW FOR NEARBY DRAIN LINES; VERIFY TYPE WITH MITSUBISHI APPLICATION ENGINEER TO ASSURE COMPLIANCE.
- F. "DUCTMATE" GASKET TYPE FITTING FOR RECTANGULAR DUCTS SIZED AT 24" AND UP. DUCT MAYBE SUPPORTED FROM THIS FITTING PER VENDOR & 2005 SMACNA REQUIREMENTS.
- G. UL APPROVED IN-LINE SMOKE DETECTOR IS NOT REQUIRED FOR THIS UNIT BASED ON CFM DELIVERY; SEE SPEC'S & DETAILS FOR ACTUAL REQUIREMENTS.
- H. SUPPLY AIR GALVANIZED METAL DUCT PER 2005 SMACNA DUCT STANDARDS BASED ON GAUGE THICKNESS IN COMPLIANCE WITH SCHEDULES; DUCT SHALL BE LINED WITH ARMACELL AP-COILFLEX CLOSED CELL FOAM AT 1" THICKNESS FROM UNIT TO NEARLY 5 FEET; MATERIAL SHALL BE APPLIED WITH FACTORY APPROVED ADHESIVES & STCK CLIPS PER DETAIL; DUCT SHALL ALSO BE WRAPPED WITH INSULATED BLANKET PER SPECS, MECHANICAAL MATERIAL SCHEDULES & DETAILS.
- J. SAME AS NOTE ABOVE FOR RETURN AIR DUCT.
- K. AIR PURIFICATION DEVICE EQUAL TO GLOBAL PLASMA SOLUTIONS MODEL GPS-2400 WITH POWER SUPPLY & SELF CLEANING COMPONENTS.
- L. TYPICAL CLEVIS HANGER WITH THREADED ROD, STEEL CHANNEL & METAL SADDLE UNDER INSULATED LINE AS SHOWN. SEE DETAILS FOR ADDITIONAL INFORMATION.
- M. NEOPRENE COMPRESSOR MOUNT BY MASON INDUSTRIES; TYPICAL FOR EACH UNIT BRACKET SHOWN.
- N. FLAT STEEL WASHER SIZED BASED ON NEOPRENE ISOLATOR.
- P. LOCKING NUT FOR ADJUSTMENT; TYPICAL FOR ALL NUTS USED FOR HANGING OR UNIT SUPPORT.
- Q. SUPPORT "L" STEEL SIZED PER 2005 SMACNA DUCT STANDARDS WITH ALL THREAD ROD, STEEL FLAT WASHER & LOCKING NIT.
- R. UL 181 APPROVED FLEXIBLE DUCT CONNECTOR WITH SUPPORT FLANGE & SEALED CONNECTION; DEVICE TO BE PROPERLY SEALED AIR TIGHT AS REQUIRED PER SPECS.
- S. VENTILATION DUCT CONNECTION TO MIXED AIR PLENUM WITH RUSKIN LOW LEAKAGE 24 VOLT DAMPER MOTOR CONTROLLED BY FAN-COIL UNIT OR ROOM VOC DETECTOR; SEE DRAWING INFORMATION NOTES FOR ADDITIONAL INFORMATION. SEE DRAWING INFORMATION NOTES ON PLAN VIEWS PRIOR TO INSTALLATION.
- T. OPPOSED BLADE AIR BALANCING DAMPER AS INDICATED.
- U. ROUTE REFRIGERANT LINES TO/FROM MITSUBISHI SUB OR BC CONTROLLER AS REFLECTED IN PIPING SCHEMATIC DRAWING IN COMPLIANCE WITH VENDOR INSTALLATION INSTRUCTIONS.
- V. ROOF OR STRUCTURE SUPPORT; VERIFY EXACT TYPE, LOCATION, MATERIAL COMPONENT, HEIGHT FROM FINISHED FLOOR, ETC.
- W. MITSUBISHI UNIT AIR FILTER RACK RATED AT MERV 13 WITH ACCESSIBLE GASKET DOOR; UNITS 1000 CFM & ABOVE TO HAVE DWYER DIGITAL MANOMETER FOR FILTER PREVENTATIVE MAINTENANCE (SEE ITEM "AC" BELOW).
- Y. FAN-COIL OR AIR-HANDLING-UNIT ACCESS VIA APPROVED LAY-IN CEILING TILE AS SHOWN; IF HARD SHEET-ROCK TYPE CEILING APPLIED CONTRACTOR MUST USE FIXED TYPE HINGED ACCESS DOOR WITH VANISHING HINGE & LATCH-SCREWS; HATCH MUST BE PAINTED TO MATCH SURROUNDINGS; ACCESSIBLE HATCH TO BE SIZED BASED ON UNIT DIMENSIONS & REQUIRED SERVICE REQUIREMENTS; COORDINATE WITH ARCHITECT-OWNER PRIOR TO INSTALLATION.
- Z. FAN-COIL UNIT TO BE LOCATED ABOVE FINISHED CEILING BASED ON AVAILABLE SPACE & OTHER TRADES; BOTTOM OF UNIT SHALL NOT EXCEED 14'-0" AFF FOR ACCESSIBKLE SERVICE ACCESS IN COMPLIANCE WITH 2018 IMC SECTION.
- AA. TYPICAL LAY-IN CEILING GRID (BY OTHERS) OR SUPPORT FOR FIXED CEILING; VERIFY ACTUAL CONDITIONS PRIOR TO EFFORT.
- AB. FINISHED CEILING MATERIAL; SEE ARCHITCTURAL DRAWINGS FOR ADDITIONAL INFORMATION & REQUIREMENTS.
- AC. DWYER DIGITAL AIR FILTER GAGE (MANOMETER) WITH KIT & RUBBER BOOT; PROVIDE WITH 1/4" STAINLESS STEEL PIOT TUBING AS SHOWN PER VENDOR REQUIREMENTS. DEVICE SHALL BE BATTERY OPERATED WITH CHROME FACEPLATE RING & RED-GREEN LABELS.

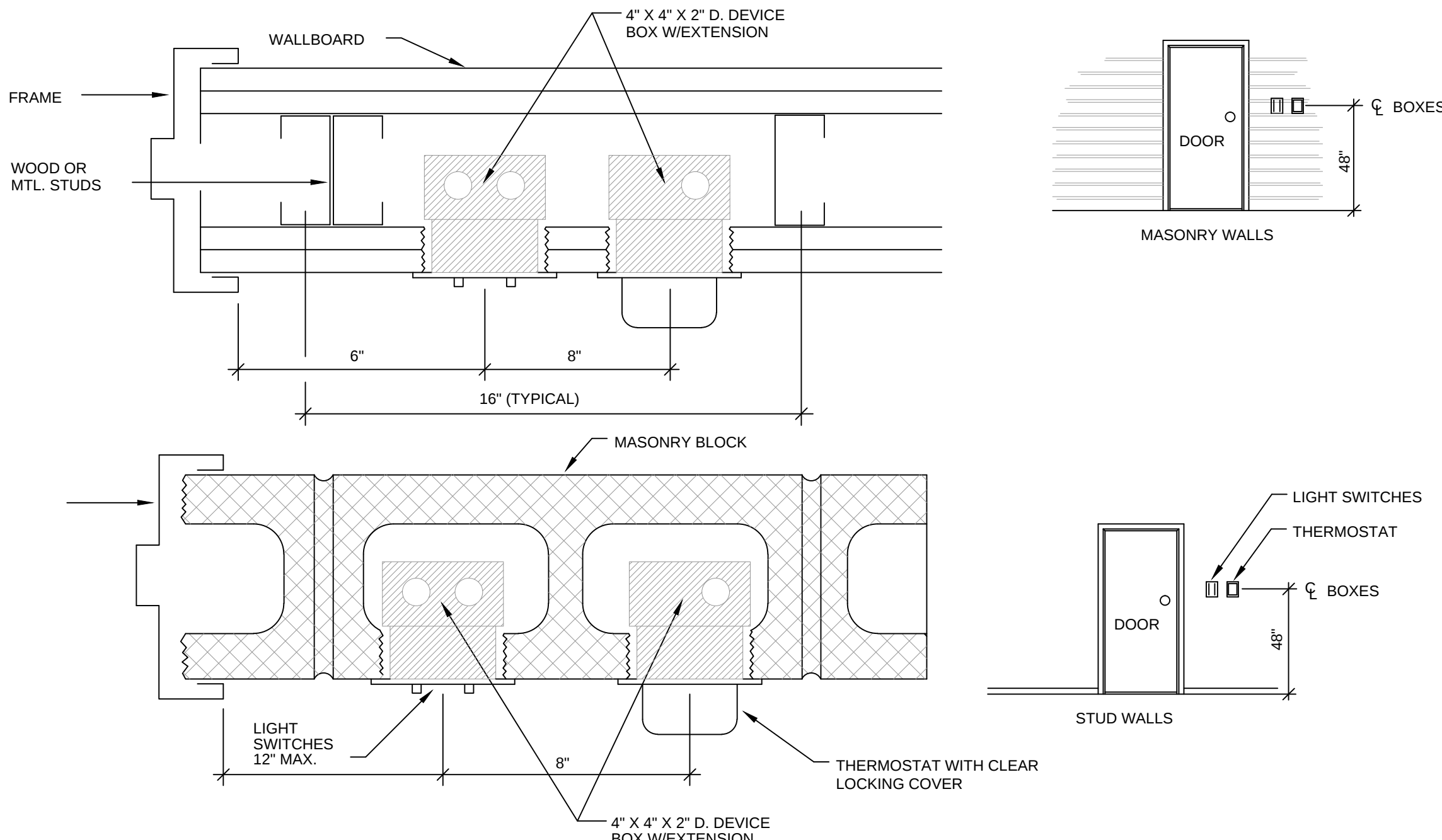
HORIZONTAL DX TYPE FAN-COIL UNIT WITH WITH ATTACHED DUCT SYSTEM DETAIL

N.T.S.



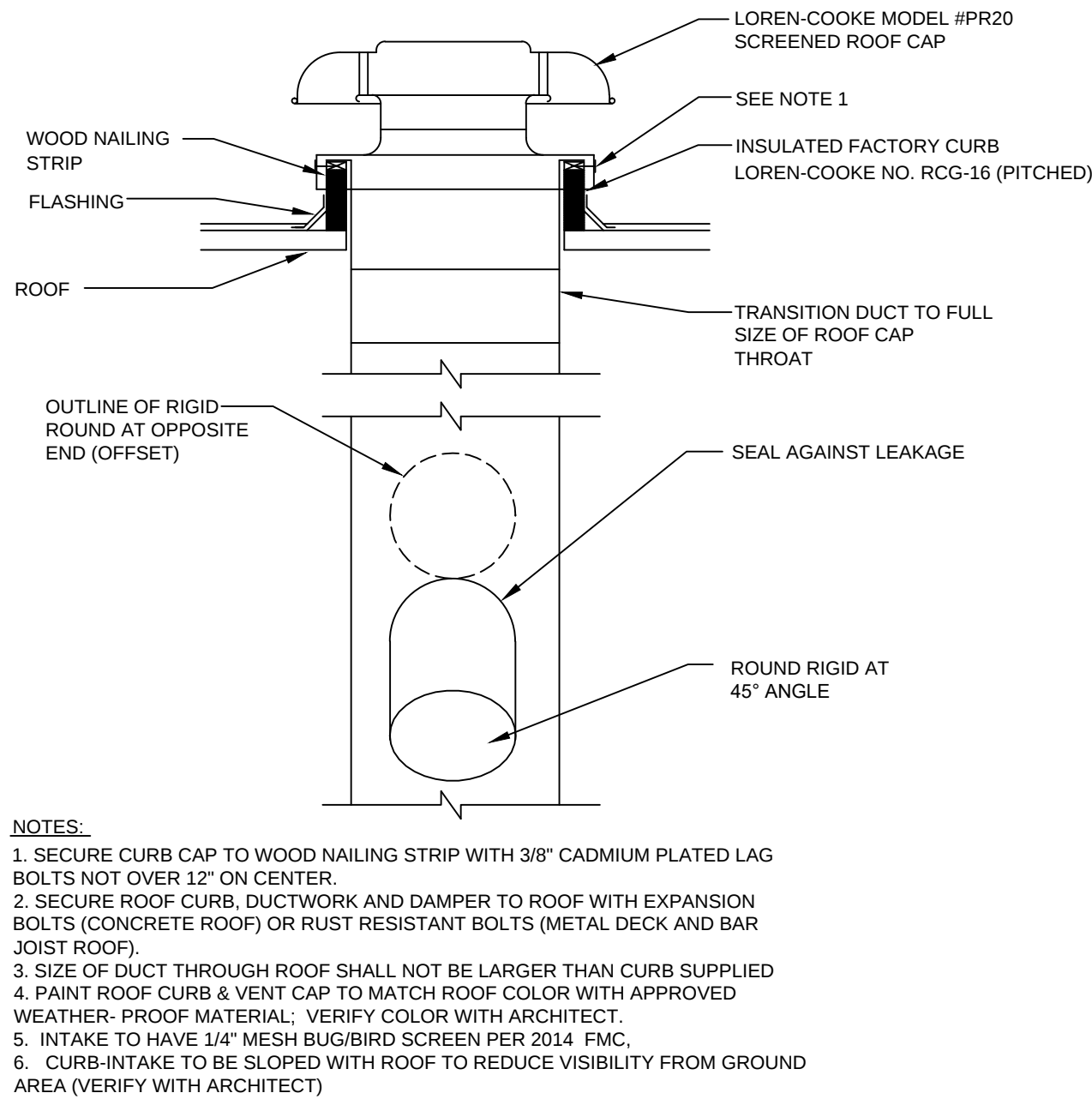
TYPICAL MITSUBISHI WALL MOUNTED DUCTLESS UNIT DETAIL

NOT TO SCALE



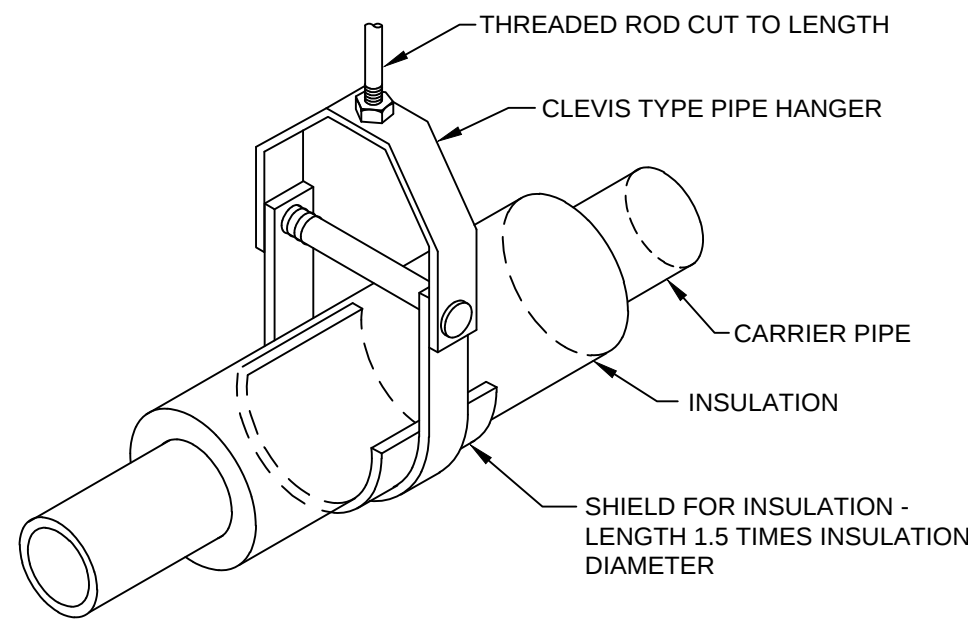
ROOM THERMOSTAT & LIGHT SWITCH MOUNTING DETAIL

NOT TO SCALE



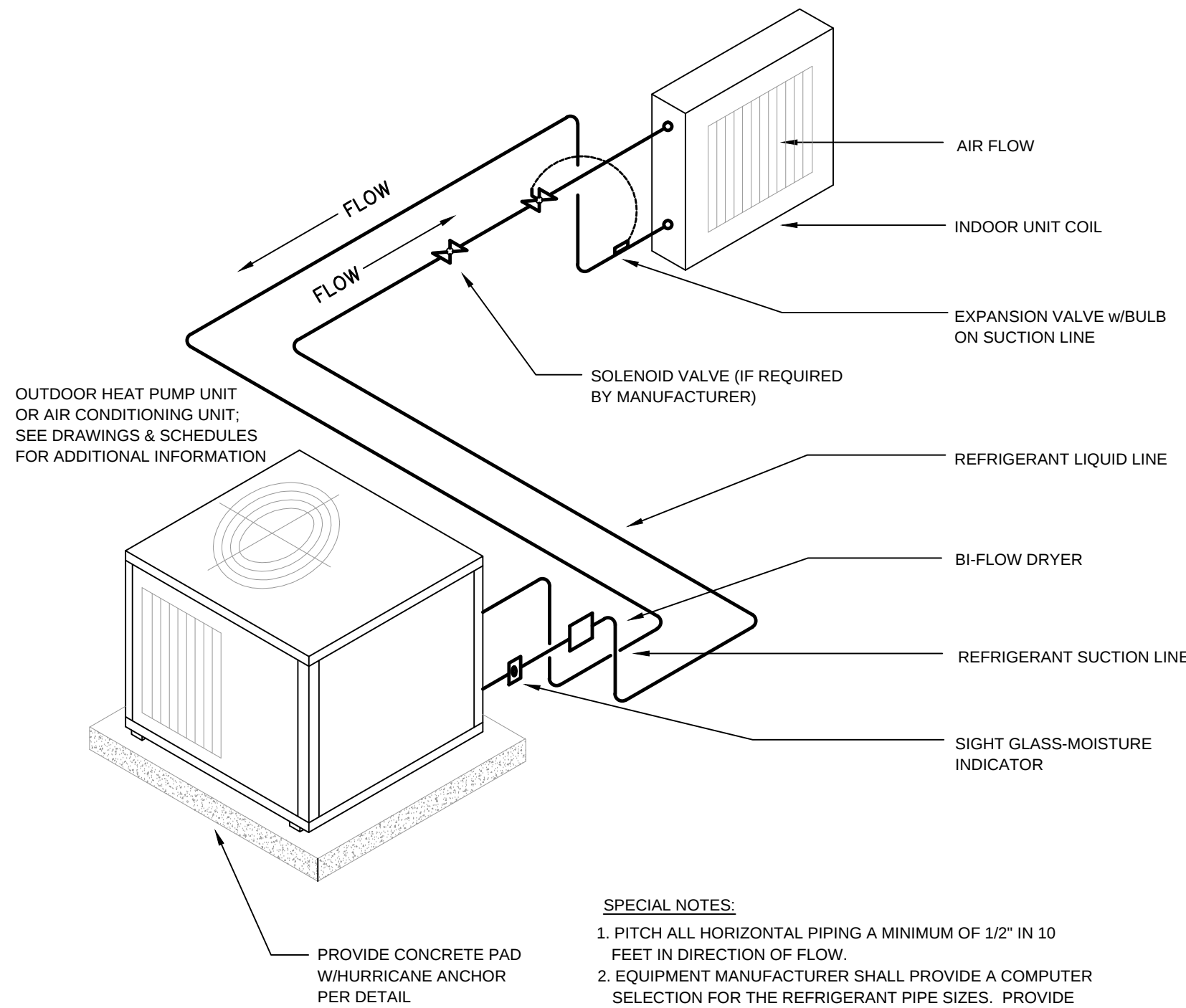
ROOF CAP WITH MULTIPLE INTAKE or EXHAUST VENT DETAIL

NTS



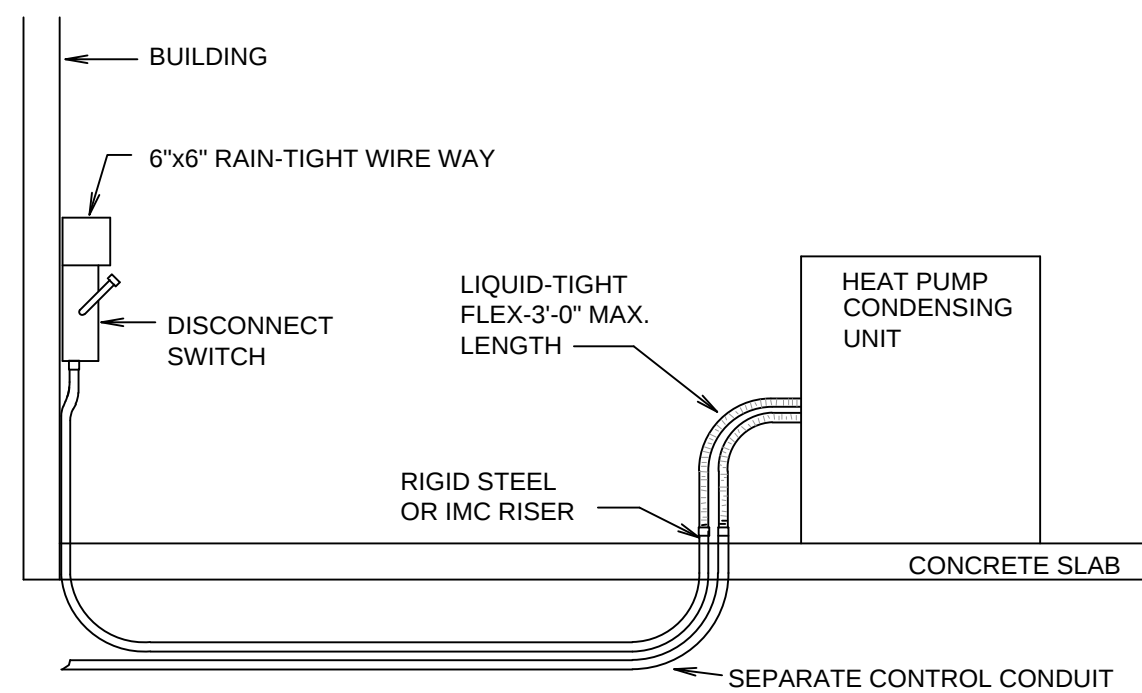
CLEVIS TYPE PIPE HANGER FOR INSULATED PIPE

NTS



REFRIGERANT PIPING SCHEMATIC

NTS



CONDENSING UNIT CONDUIT DETAIL

NO SCALE

P.O. BOX 9394
DOTHAN, ALABAMA 36304
(334) 446-3243
thedesigngroupinc@gmail.com
Mechanical-Electrical
Consulting Engineers
FL License No. 31813

confidential-this document &
the information contained
herein is confidential & may
not be disclosed, copied altered
or reproduced to any persons
except as permitted in writing
by "The Design Group, Inc."

the Design
Group
of
Florida
inc.

division of The Design Group, Inc.

J. KYLE COY
LICENSE
NO. 62881
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

JOEL SAMPSON
ARCHITECT

212 NORTH ADAMS ST
QUINCY, FLORIDA 32351
FLA LIC NO. AA2600893
850-875-4348

MUTUAL AID STAGING & COORDINATION FACILITY

FOR

TALQUIN ELECTRIC COOPERATIVE, INC.

30270 BLUE STAR HIGHWAY GADSDEN COUNTY, FLORIDA

DATE: 7-7-25

REV:

JOB NO: 23-002

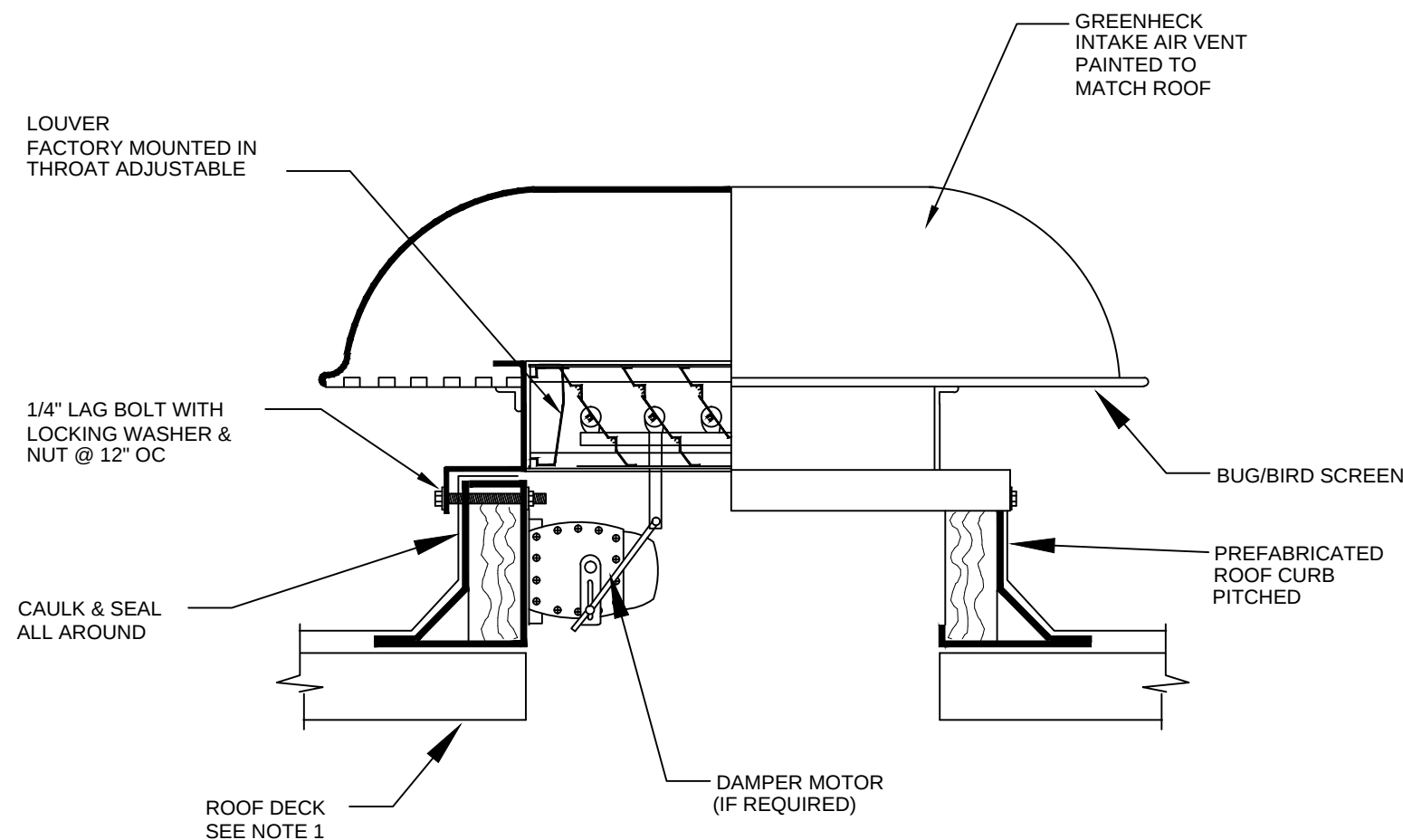
M2.2

SHEET NO.

SPECIAL NOTES:
1. VERIFY ROOF SYSTEM, TYPE, FINISH & PITCH PRIOR TO INSTALLATION.

2. ANCHOR ROOF CURB TO ROOF SYSTEM WITH APPROVED HURRICANE TIE DOWN CLIPS OR WELDED TO STRUCTURAL SYSTEM AS REQUIRED.

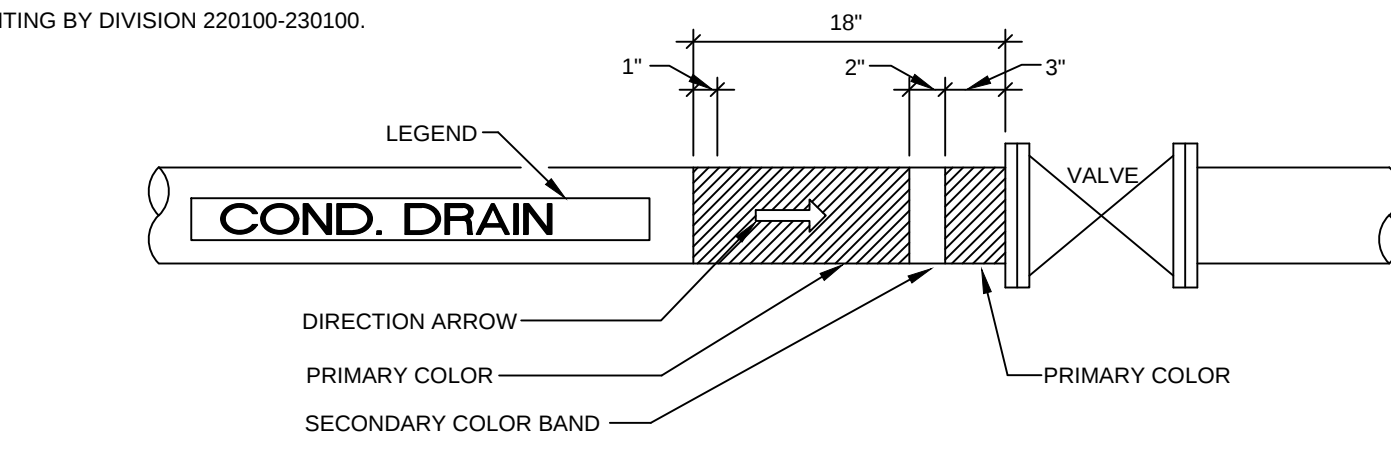
3. MOTORIZED DAMPER (IF REQUIRED) SHALL BE EQUAL TO RUSKIN LOW LEAKAGE TYPE WITH INTERLOCK CONTROL AS NOTED IN DRAWING NOTES AND/OR SCHEDULES; MOTOR TO BE 24 VOLT AC TYPE.



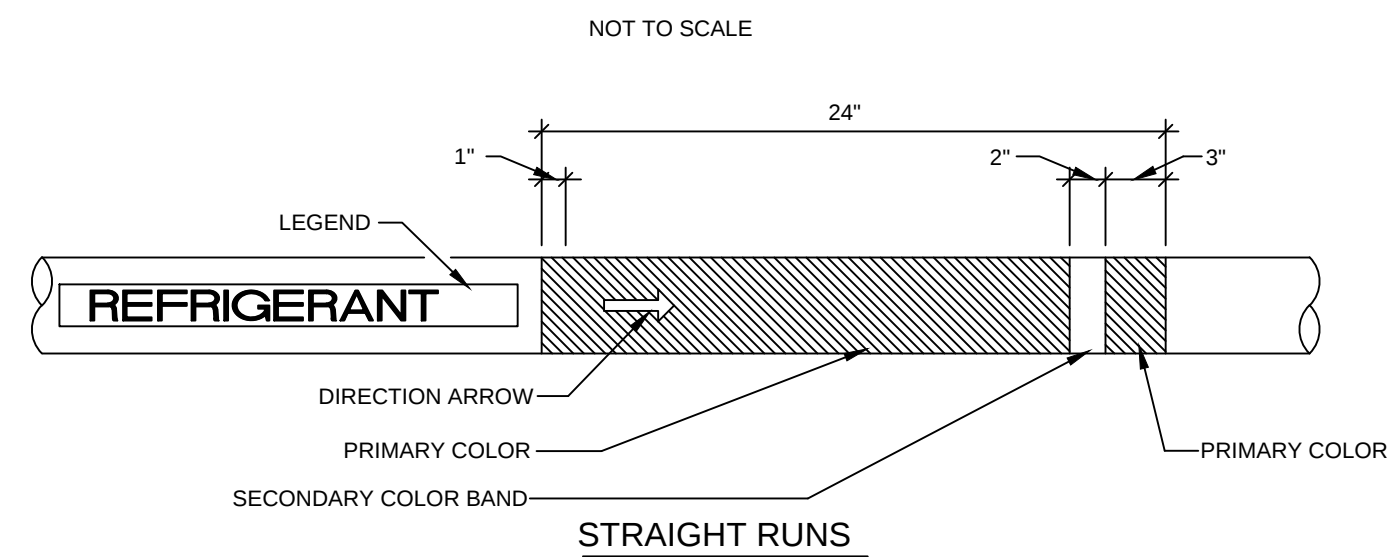
INTAKE AIR HOOD WITH MOTORIZED LOUVER DETAIL

N.T.S.

1. PAINTING OF PRIMARY AND SECONDARY MARKING BANDS FOR INDENTIFICATION OF PIPES BY DIVISION 220100-230100
2. STENCILLING OF DIRECTION ARROWS AND LEGEND BY DIVISION 220100-230100.
3. PIPE PAINTING BY DIVISION 220100-230100.



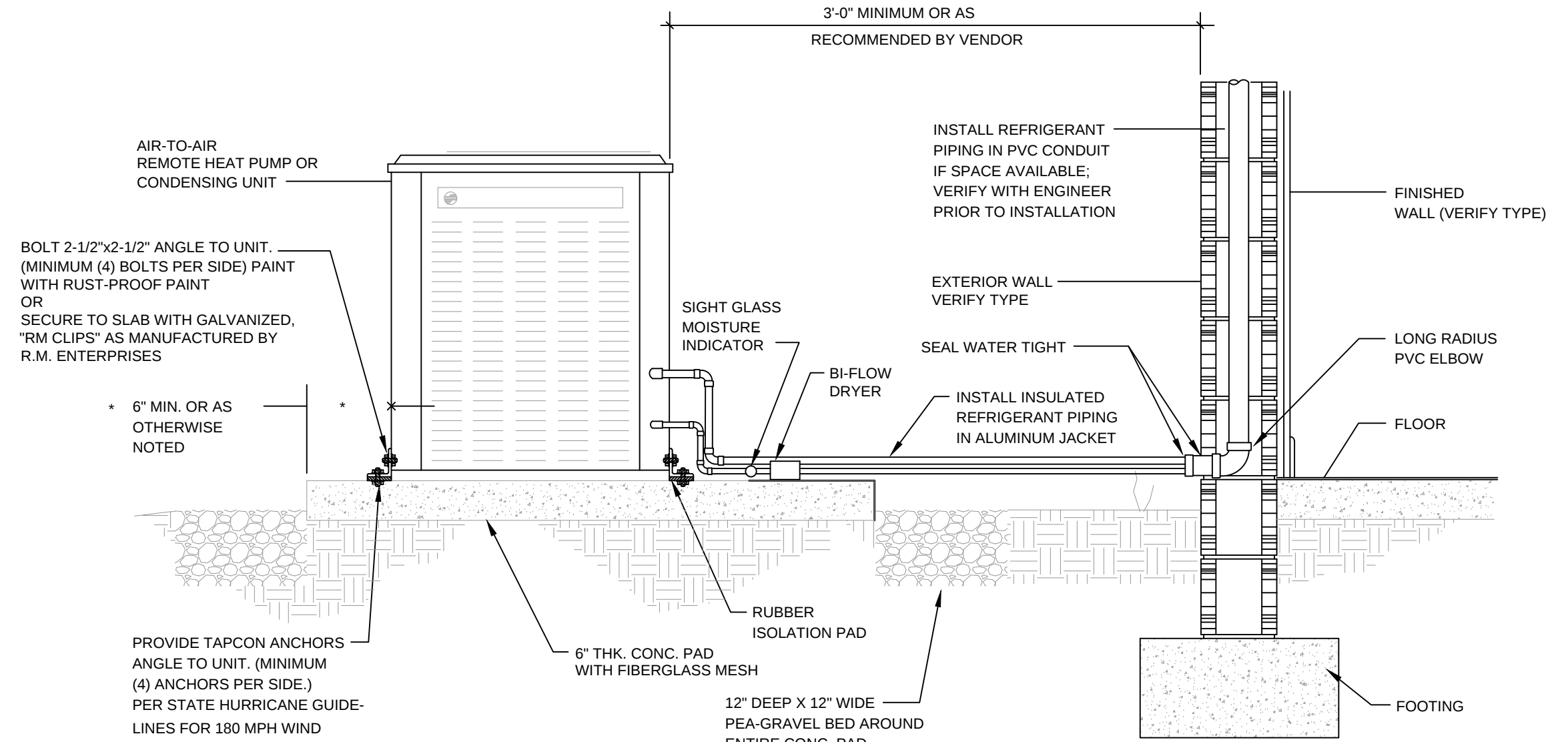
AT FITTINGS AND VALVES



STRAIGHT RUNS

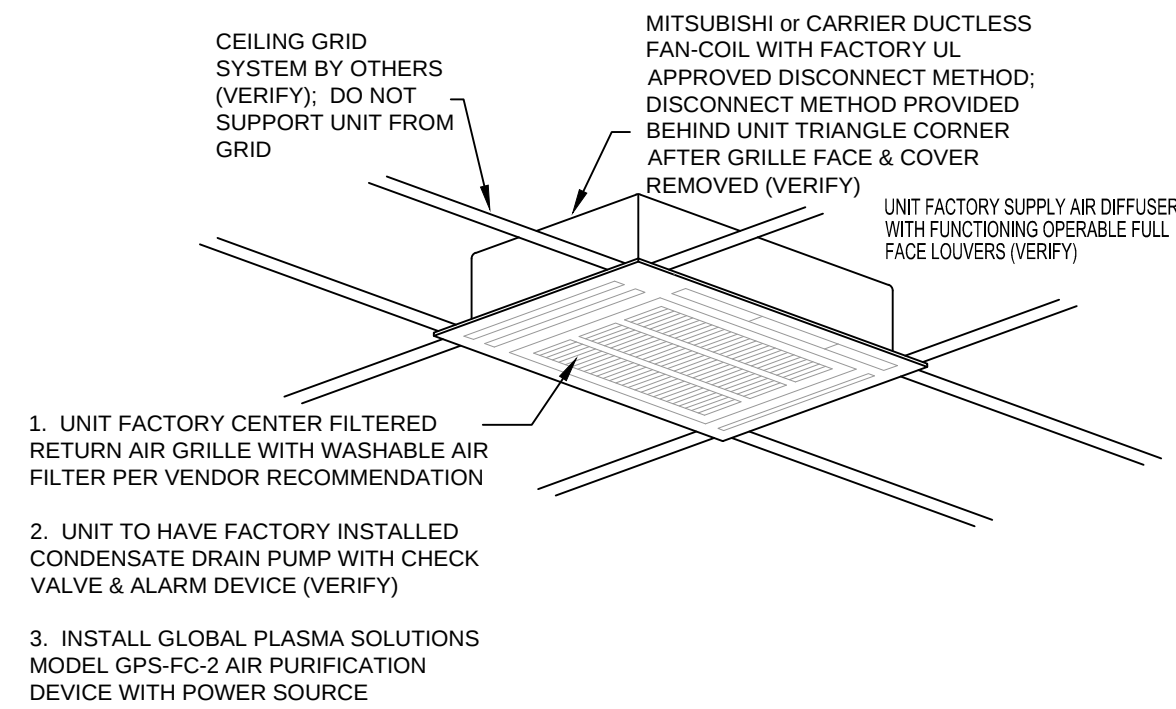
PIPE IDENTIFICATION LABELING DETAIL

N.T.S.



CONDENSING UNIT DETAIL

NOT TO SCALE



TYPICAL DUCTLESS SPLIT FAN-COIL UNIT INSTALLATION DETAIL

N.T.S.

A. LAY-IN TILE TYPE CEILING SYSTEM WITH T-BAR GRIDS.

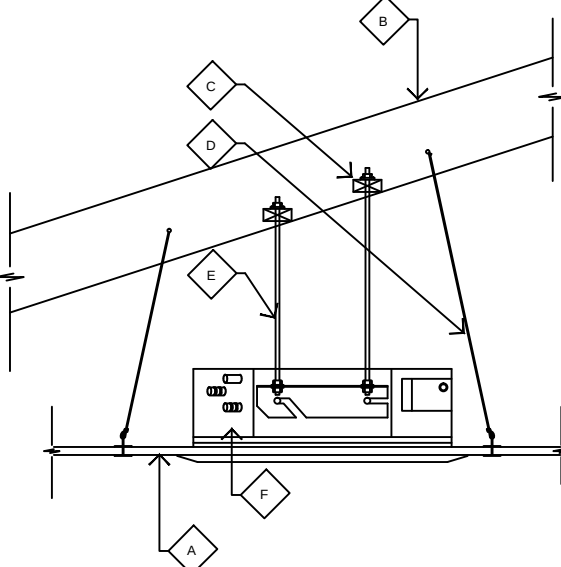
B. BUILDING STRUCTURAL SYSTEM OR ROOF RAFTERS.

C. WOOD BLOCKING OR ANGLE IRON STEEL DEPENDING ON ROOF SYSTEMS & OVERALL UNIT WEIGHT; VERIFY AT SITE PRIOR TO INSTALLATION.

D. LAY-IN CEILING OR SUSPENDED CEILING SYSTEM SUPPORT.

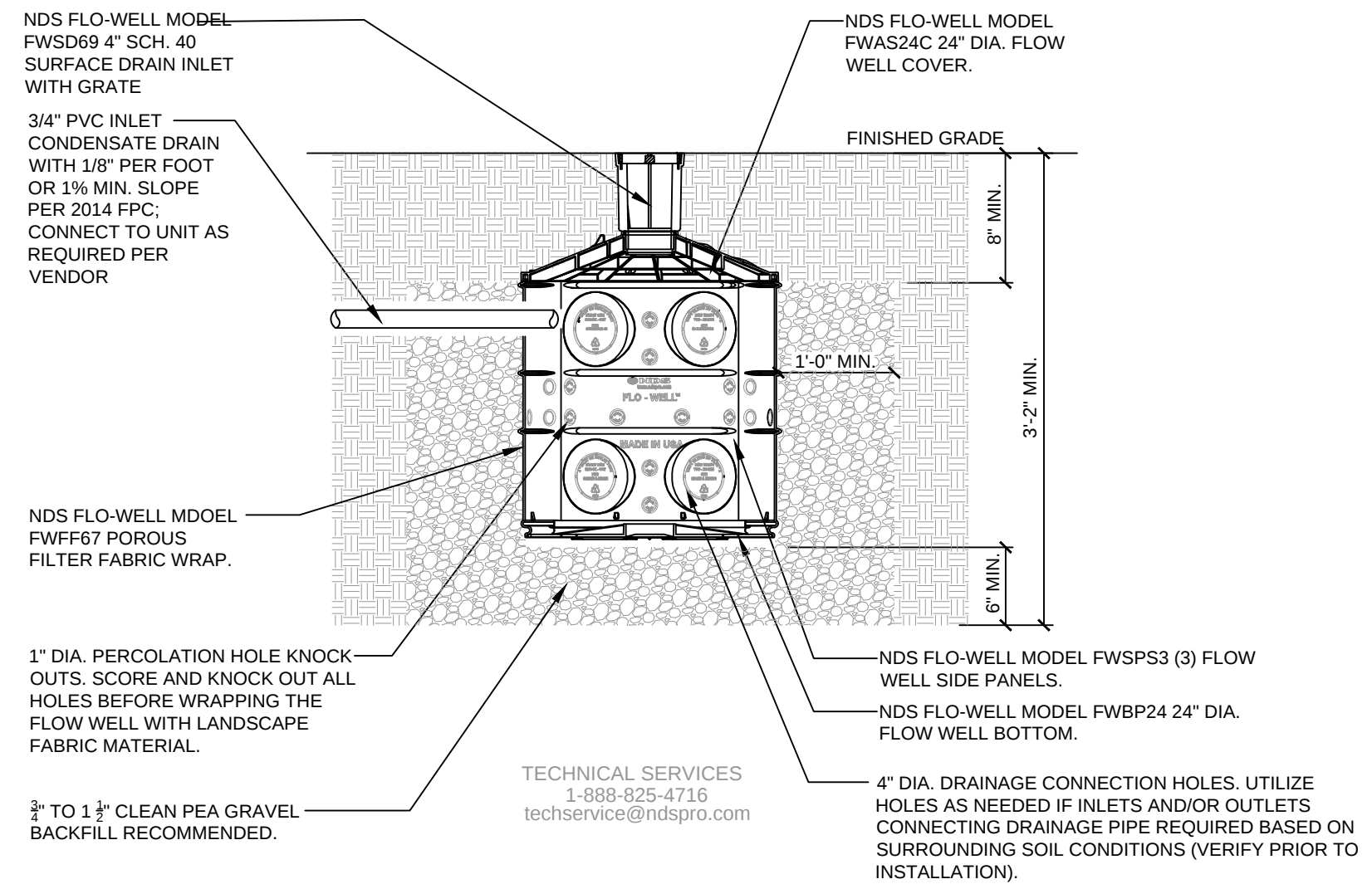
E. THREADED RODS WITH FLAT WASHERS, LOCKING NUTS, & SPRING ISOLATORS (LOCATED AT UNIT).

F. AHU UNIT WITH BUILT-IN CONDENSATE DRAIN REMOVAL PUMP DEVICE & REFRIGERANT PIPING TO MATCHING HP UNIT; CONNECT OUTSIDE AIR DUCT WITH VOLUME DAMPER & BACKDRAFT DAMPER AS SHOWN ON DRAWINGS.



CEILING RECESSED INDOOR CONF. ROOM CFC UNIT DETAIL

N.T.S.



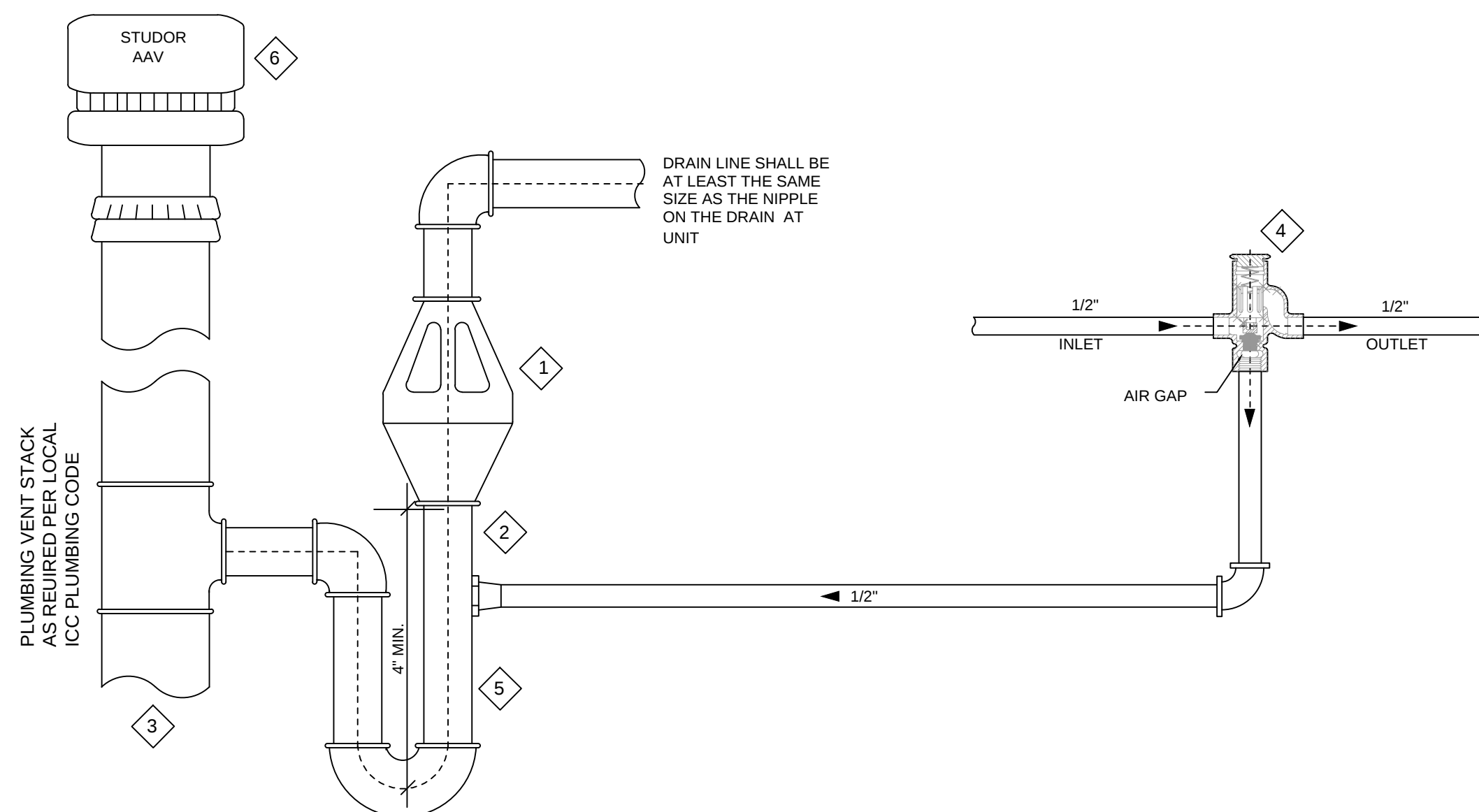
SPECIAL NOTES:

1. DRY-WELL ITEM INSTALLED SHALL BE EQUAL TO "NDS FLO-WELL" FOR NON LOAD BEARING APPLICATION.
2. WELL TO BE MUST BE INSTALLED MINIMUM OF 10'-0" AWAY FROM STRUCTURE OR FOUNDATION.
3. FLO-WELL MODEL FWAS24 KIT DOES NOT INCLUDE REQUIRED FWPB24 BTM. CONTRACTOR SHALL PURCHASE COMPONENT DURING INSTALLATION. CONTACT NDSPRO.COM FOR ADDITIONAL INFORMATION.
4. CONTRACTOR SHALL PERFORM STANDARD PERK TEST TO DETERMINE SOIL CONDITION DRAINAGE RATE TO ASSURE PROPER PERFORMANCE.

TYPICAL DRY-WELL DETAIL

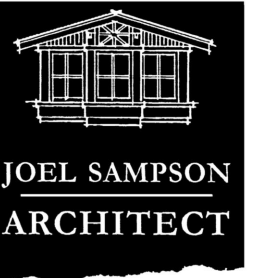
NOT TO SCALE

1. FIXED J.R.SMITH AIR GAP SHALL BE PROVIDED TO PREVENT SEWER GAS ODORS FROM ENTERING CONDENSATE DRAIN.
2. FUNNEL INLET TO BE A MINIMUM OF TWO PIPE SIZES LARGER THAN INCOMING CONDENSATE DRAIN, BUT NO LESS THAT 2" ROUND.
3. CONNECTION TO PLUMBING VENT STACK TO BE COORDINATED WITH PROJECT PLUMBING CONTRACTOR & LOCAL CODE OFFICIALS PRIOR TO INSTALLATION.
4. CONTRACTOR TO PROVIDE TRAP PRIMER EQUAL TO ZURN MODEL Z1022 WITH CONNECTION TO AREA DOMESTIC COLD WATER LINE AS INDICATED.
5. DEPTH OF SEAL SHALL BE SIZED TO OVERCOME OPERATING STATIC PRESSURE AT EQUIPMENT-UNIT.
6. AIR ADMITTANCE VALVE (AAV) SHALL BE STUDOR WITH NO APPROVED EQUAL WITH DEVICE ROUTED ABOVE FINISHED CEILING PER VENDOR REQUIREMENT.



CONDENSATE DRAIN VENT TRAP DETAIL FOR DUCTED OR DUCTLESS AC UNITS

NTS



212 NORTH ADAMS ST
QUINCY, FLORIDA 32351
FLA LIC NO. AA26000893
850-875-4348

MUTUAL AID STAGING & COORDINATION FACILITY
FOR
TALQUIN ELECTRIC COOPERATIVE, INC.
30270 BLUE STAR HIGHWAY GADSDEN COUNTY, FLORIDA

DATE: 7-7-25
REV:

JOB NO: 23-002

SHEET NO.

P.O. BOX 9104
DOTHAN, ALABAMA 36004
(334) 446-3243
thedesigngroupinc@gmail.com
Mechanical-Electrical
Consulting Engineers
FL License No. 31813

the Design
Group
of
Florida
inc.

CONFIDENTIAL-THIS DOCUMENT & THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL & MAY NOT BE DISCLOSED, COPIED, ALTERED OR REPRODUCED TO ANY PERSONS EXCEPT AS PERMITTED IN WRITING BY "THE DESIGN GROUP, INC."

J. KYLE COX
LICENSE
NO. 62881
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

FOR QUESTIONS, CALL THE
Jacksonville Office
REGION 65
PHONE: (904) 463 - 6242
EMAIL: reg65@econair.com

PATENT NUMBERS
AC-PSP (UNITED STATES) - US PATENT 7963830 B2.
AC-PSP WALL (CANADA) - CA PATENT 2820509.
AC-PSP ISLAND (CANADA) - CA PATENT 2520330.

HOOD INFORMATION - JOB#7092261

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM RISER(S)						TOTAL SUPPLY CFM	HOOD CONSTRUCTION	HOOD CONFIG	
										WIDTH	LENG	HEIGHT	DIA	CFM	VEL	SP		END TO END	ROW
1		4824 EX-2-PSP-F	ECON-AIR	8' 0"	600 DEG	I	HEAVY	200	1600		4"	14"	1600	1497	-0.551"	1424	430 SS WHERE EXPOSED	ALONE	ALONE

HOOD INFORMATION

HOOD NO	TAG	FILTER(S)					LIGHT(S)			UTILITY CABINET(S)						FIRE SYSTEM PIPING	HOOD HANGING WEIGHT
		TYPE	QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY	TYPE	WIRE GUARD	LOCATION	SIZE	FIRE SYSTEM		ELECTRICAL	SWITCHES		
												TYPE	SIZE	MODEL #	QUANTITY		
1		CAPTRATE SOLO FILTER	5	20"	16"	85% SEE FILTER SPEC	2	RECESSED ROUND	NO	RIGHT	12"x48"x24"	TANK FS	4.0/4.0	SC-110110MA	1 LIGHT 1 FAN	YES	886 LBS

HOOD OPTIONS

HOOD NO	TAG	OPTION									
		1									
		FIELD WRAPPER 18.00" HIGH FRONT, LEFT, RIGHT.									
		BACKSPLASH 80.00" HIGH X 108.00" LONG 430 SS VERTICAL.									
		RIGHT VERTICAL END PANEL 27" TOP WIDTH, 21" BOTTOM WIDTH, 80" HIGH INSULATED 430 SS.									
		LEFT VERTICAL END PANEL 27" TOP WIDTH, 21" BOTTOM WIDTH, 80" HIGH INSULATED 430 SS.									

PERFORATED SUPPLY PLENUM(S)

HOOD NO	TAG	POS	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S)				
							WIDTH	LENG	DIA	CFM	SP
1		Front	108"	14"	6"	MUA	12"	28"		712	0.165"
						MUA	12"	28"		712	0.165"



GREASE DUCT & CHIMNEY SPECIFICATIONS:

PROVIDE GREASE DUCT EQUAL TO ECON-AIR MODEL "EDW" ROUND 20 GAUGE 430 STAINLESS STEEL DUCTWORK. MODEL "EDW" IS LISTED TO UL-1978 AND IS INSTALLED USING "V" CLAMP LOCKING CONNECTIONS SEALED WITH 3M FIRE BARRIER 2000 PLUS. MODEL "EDW" DOES NOT REQUIRE WELDING PROVIDING IT HAS BEEN INSTALLED PER THE MANUFACTURES INSTALLATION GUIDE. PROVIDE RATED ACCESS DOORS AT EVERY CHANGE IN DIRECTION AND EVERY 12' ON CENTER. PER MANUFACTURES LISTING MODEL "EDW" HORIZONTAL RUNS LESS THAN 75 FT. CAN BE SLOPED 1/16" PER 12", HORIZONTAL RUNS MORE THAN 75 FT. CAN BE SLOPED 3/16" PER 12". DUCT SHOULD BE SLOPED AS MUCH AS POSSIBLE TO REDUCE THE CHANCE OF GREASE ACCUMULATION IN HORIZONTAL RUNS.

IF THE DUCT OR CHIMNEY IS WITHIN 18 INCHES OF COMBUSTIBLE MATERIAL, PROVIDE UL-2221 OR UL-103 HT LISTED DOUBLE WALL GREASE DUCT OR DOUBLE WALL CHIMNEY EQUAL TO ECON-AIR MODEL "EDW- 2R, 2R TYPE HT, 3R, OR 3Z" ROUND 20 GAUGE 430 STAINLESS INNER DUCT INSULATED WITH A 24 GAUGE 430 STAINLESS OUTER SHELL.

ECON-AIR RECOMMENDS THE USE OF LISTED, PRE-FABRICATED ROUND GREASE EXHAUST DUCT TO REDUCE STATIC PRESSURE IN THE SYSTEM, MINIMIZE INSTALLATION AND INSPECTION TIMES, AND ENSURE DUCT IS LIQUID TIGHT

HVAC DISTRIBUTION NOTE

HIGH VELOCITY DIFFUSERS OR HVAC RETURNS SHOULD NOT BE PLACED WITHIN TEN (10) FEET OF THE EXHAUST HOOD. PERFORATED DIFFUSERS ARE RECOMMENDED.

VERIFY CEILING HEIGHT

___' - ___"

HEIGHT REQUIRED TO VERIFY THAT HOOD FITS SPACE AND TO SIZE THE ENCLOSURE PANELS

CUSTOMER APPROVAL TO MANUFACTURE:

APPROVED AS NOTED ☐
APPROVED WITH NO EXCEPTION TAKEN ☐
REVISE AND RESUBMIT ☐
SIGNATURE _____
YOUR TITLE _____ DATE _____

SPECIFICATION: CAPTRATE GREASE-STOP SOLO FILTER

THE CAPTRATE GREASE-STOP SOLO FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE S-Baffle DESIGN IN CONJUNCTION WITH A SLOTTED REAR Baffle DESIGN, TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY.

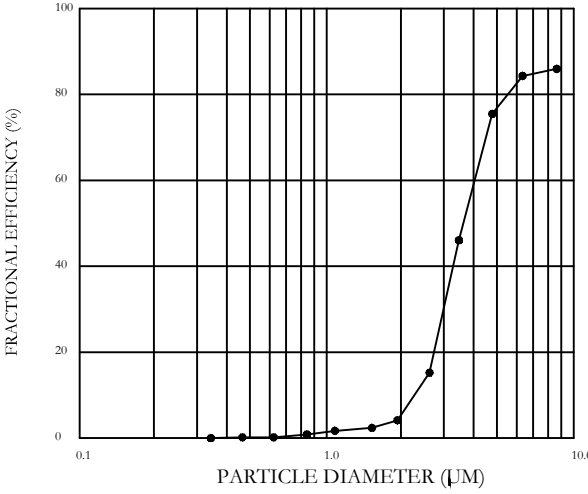
FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

UNITS SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WHEN ASSEMBLED.

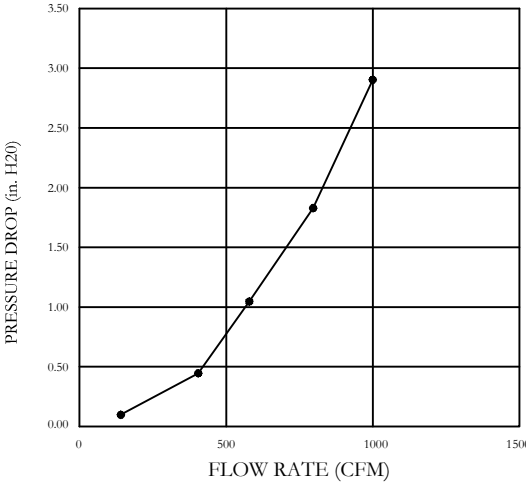
GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 85% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

THE CAPTRATE GREASE-STOP SOLO WAS TESTED TO ASTM STANDARD ASTM F2519-05. MANUFACTURER APPROVED FOR USE IN SOLID FUEL APPLICATIONS AS A SPARK ARRESTER.

EFFICIENCY VS. PARTICLE DIAMETER

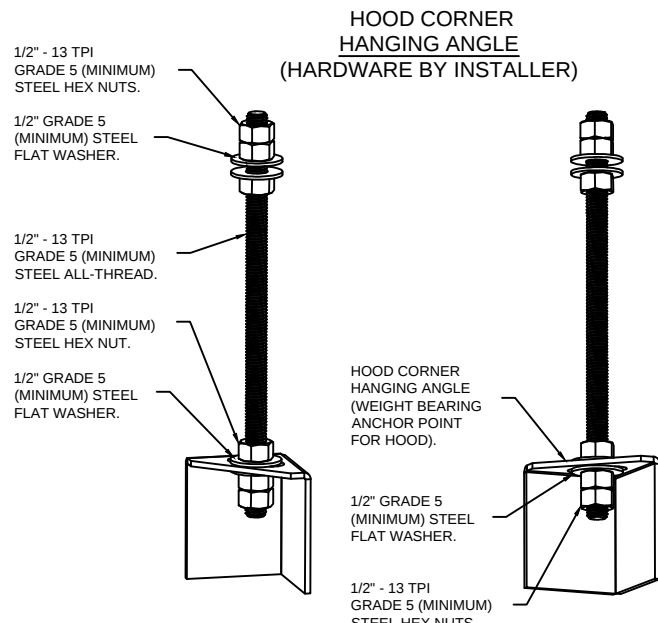


PRESSURE DROP VS. FLOW RATE



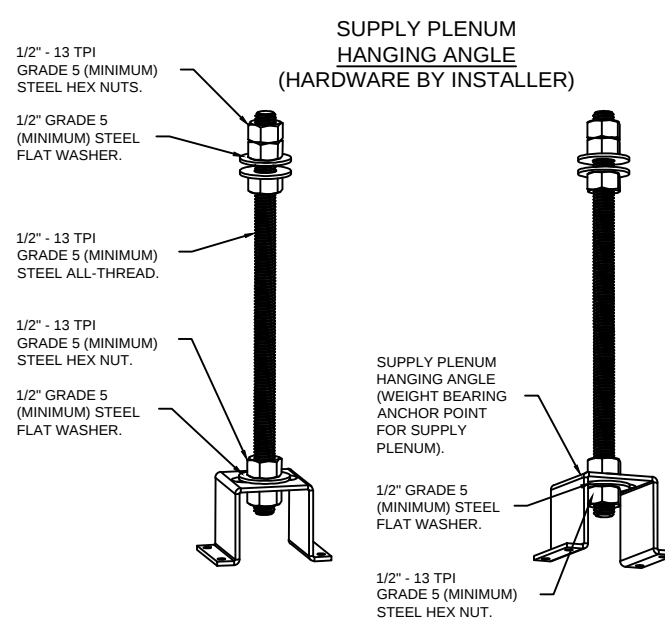
CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH:

NEPA #96
NSF STANDARD #2.
UL STANDARD #1046.
INT. MECH. CODE (IMC).
ULC-S649.



ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION BENEATH HOOD HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.



ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION ABOVE CEILING ANCHORS. SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR PSP THREADED ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

SYSTEM DESIGN VERIFICATION (SDV)

IF ORDERED, CAS SERVICE WILL PERFORM A SYSTEM DESIGN VERIFICATION (SDV) ONCE ALL EQUIPMENT HAS HAD A COMPLETE START UP PER THE OPERATION AND INSTALLATION MANUAL. TYPICALLY, THE SDV WILL BE PERFORMED AFTER ALL INSPECTIONS ARE COMPLETE.

ANY FIELD RELATED DISCREPANCIES THAT ARE DISCOVERED DURING THE SDV WILL BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR AND CORRESPONDING TRADES ON SITE. THESE ISSUES WILL BE DOCUMENTED AND FORWARDED TO THE APPROPRIATE SALES OFFICE. IF CAS SERVICE HAS TO RESOLVE A DISCREPANCY THAT IS A FIELD ISSUE, THE GENERAL CONTRACTOR WILL BE NOTIFIED AND BILLED FOR THE WORK. SHOULD A RETURN TRIP BE REQUIRED DUE TO ANY FIELD RELATED DISCREPANCY THAT CANNOT BE RESOLVED DURING THE SDV, THERE WILL BE ADDITIONAL TRIP CHARGES.

DURING THE SDV, CAS SERVICE WILL ADDRESS ANY DISCREPANCY THAT IS THE FAULT OF THE MANUFACTURER. SHOULD A RETURN TRIP BE REQUIRED, THE GENERAL CONTRACTOR AND APPROPRIATE SALES OFFICE WILL BE NOTIFIED. THERE WILL BE NO ADDITIONAL CHARGES FOR MANUFACTURER DISCREPANCIES.

REVISIONS	
DESCRIPTION	DATE



econ·air
Jacksonville Office
www.econair.com
25 N. Market St., Officer 229, Jacksonville, FL 32202
PHONE: (904) 463 - 6242
FAX: 9192275923
EMAIL: reg65@econair.com

Talquin COOP
Midway, FL, 32343

DATE: 10/9/2024

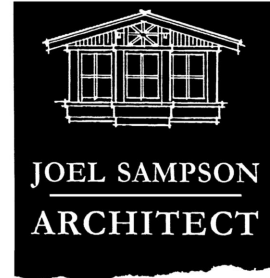
DWG.#:
7092261

DRAWN BY: reg65

SCALE:
3/4" = 1'-0"

MASTER DRAWING

SHEET NO.
1



212 NORTH ADAMS ST
QUINCY, FLORIDA 32351
FLA LIC NO. AA26000893
850-875-4348

MUTUAL AID STAGING & COORDINATION FACILITY
FOR
TALQUIN ELECTRIC COOPERATIVE, INC.
30270 BLUE STAR HIGHWAY GADSDEN COUNTY, FLORIDA

DATE: 7-7-25

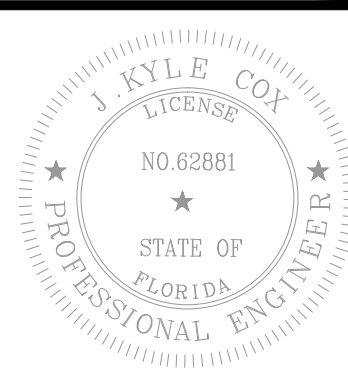
REV:

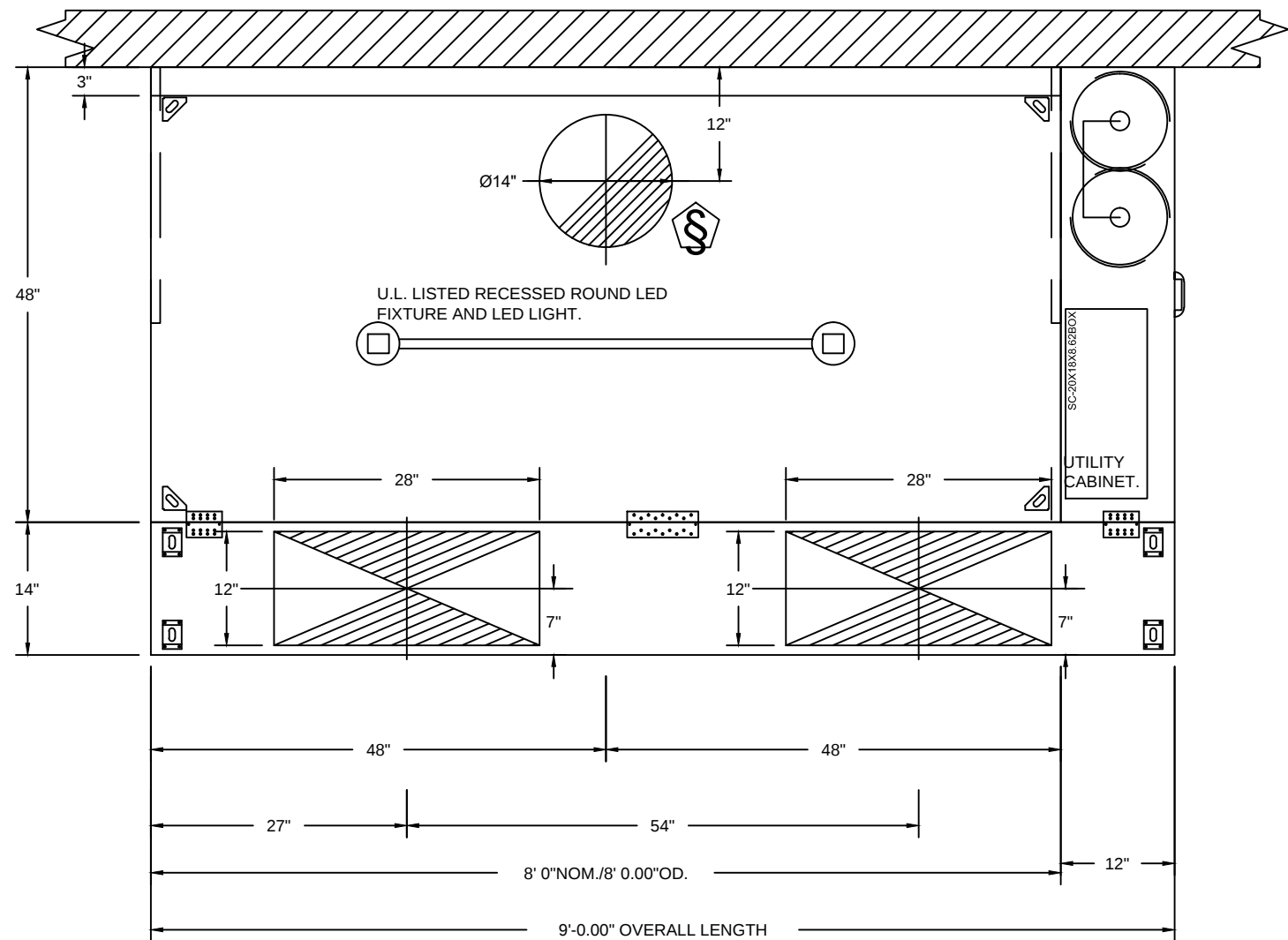
JOB NO: 23-002

SHEET NO.

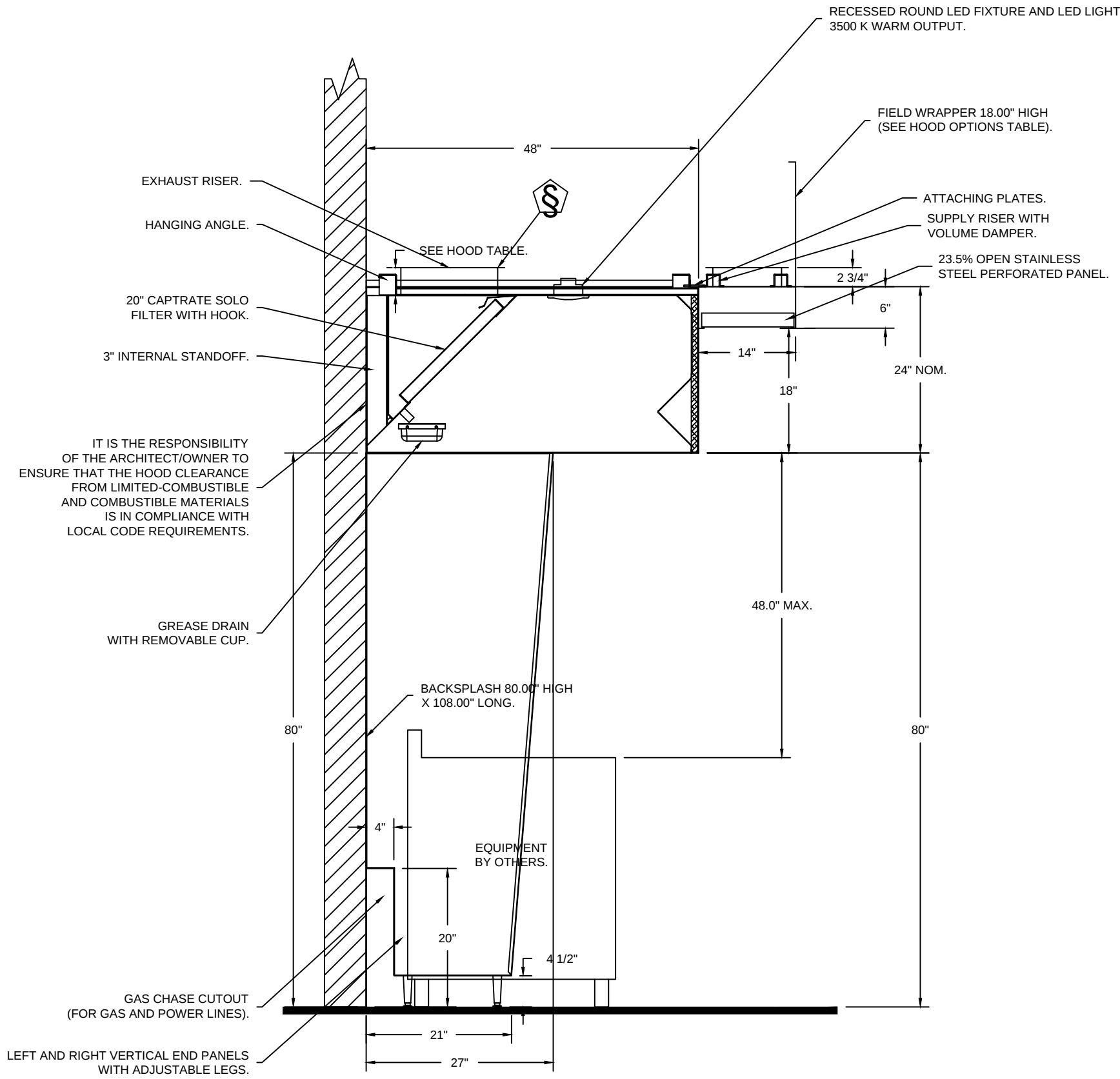
P.O. BOX 9394
DOTYMAN, ALABAMA 36504
(334) 446-3243
thedesigngroupinc@gmail.com
Mechanical-Electrical
Consulting Engineers
FL License No. 31813
confidential-this document & the information contained herein is confidential & may not be disclosed, copied, altered or reproduced to any persons except as permitted in writing by "The Design Group, Inc."

the Design Group of Florida inc.





PLAN VIEW - HOOD #1
8' 0.00\"/>



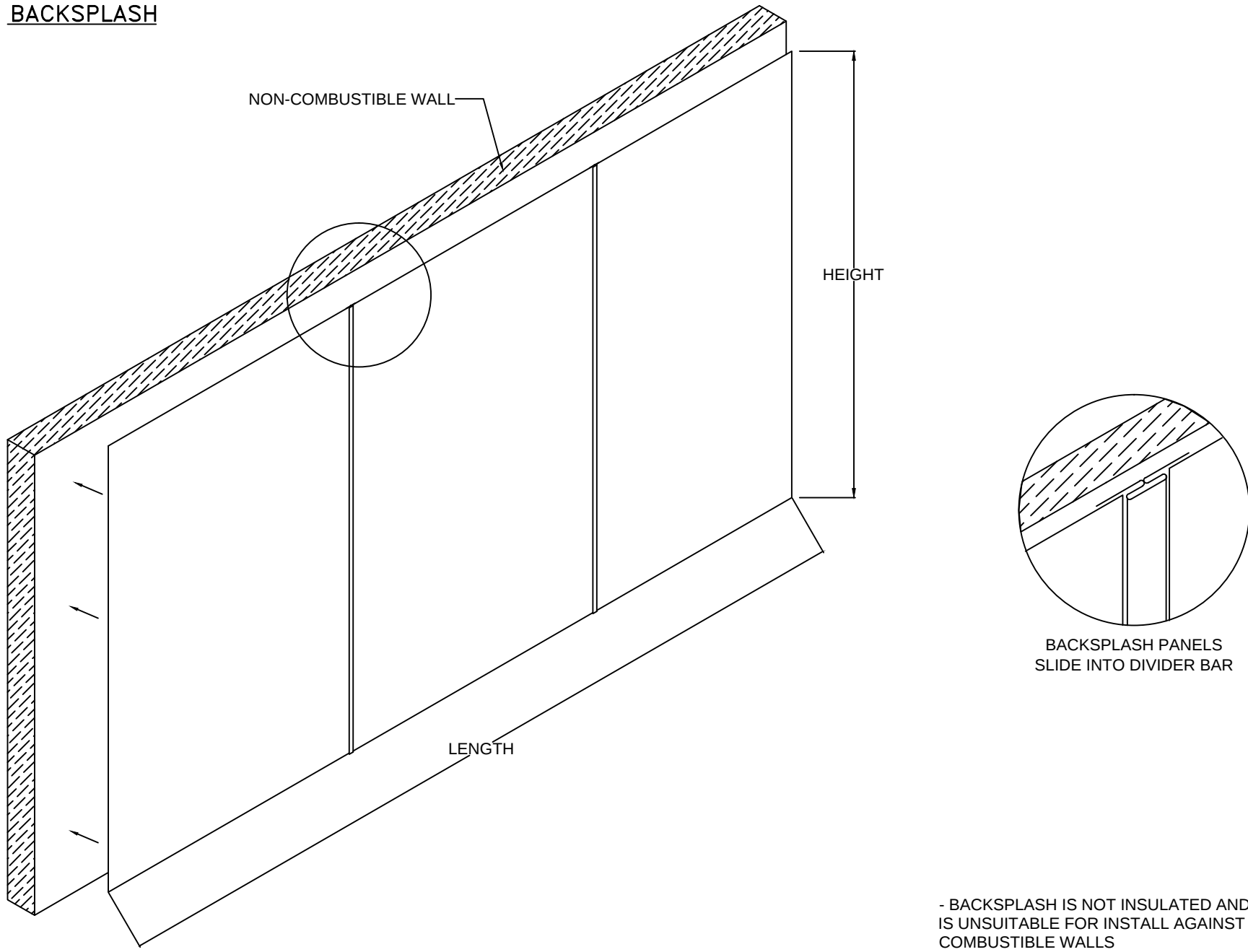
SECTION VIEW - MODEL 4824EX-2-PSP-F
HOOD - #1

CLEARANCE TO COMBUSTIBLES

HOODS #	SURFACE	*CLEARANCE
1	TOP	18"
	FRONT	0"
	BACK	18"
	LEFT	18"
	RIGHT	0"

- 10" CLEARANCE TO COMBUSTIBLES CONFORMS TO UL710 STANDARD.
- HOOD MOUNTED UTILITY CABINETS REQUIRE 36" SERVICE CLEARANCE.

BACKSPLASH



- BACKSPLASH IS NOT INSULATED AND IS UNSUITABLE FOR INSTALL AGAINST COMBUSTIBLE WALLS

REVISIONS	
DESCRIPTION	DATE:

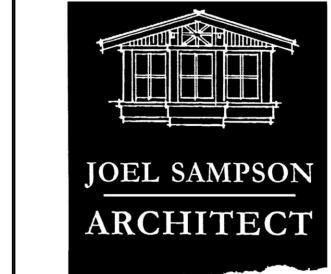
econ·air
Jacksonville Office
www.econair.com

25 N. Market St., Office# 229, Jacksonville, FL 32202 PHONE: (904) 463 - 6242 FAX: 919275932 EMAIL: reg65@econair.com

Talquin COOP
Midway, FL, 32343

DATE: 10/9/2024
DWG.#: 7092261
DRAWN BY: reg65
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO.
2



212 NORTH ADAMS ST
QUINCY, FLORIDA 32351
FLA LIC NO. AA26000893
850-875-4348

MUTUAL AID STAGING & COORDINATION FACILITY
FOR
TALQUIN ELECTRIC COOPERATIVE, INC.
30270 BLUE STAR HIGHWAY GADSDEN COUNTY, FLORIDA

DATE: 7-7-25
REV:

JOB NO: 23-002

SHEET NO.

P.O. BOX 9394
DOTHAN, ALABAMA 36304
(334) 446-3243
thedesigngroupinc@gmail.com
Mechanical-Electrical
Consulting Engineers
FL License No. 31813

confidential-this document &
the information contained
herein is confidential & may
not be disclosed, copied altered
or reproduced to any persons
except as permitted in writing
by "The Design Group, Inc."

the Design
Group
of
Florida
inc.

division of The Design Group, Inc.

J. KYLE COX
LICENSE
NO. 62881
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

M3.2

FIRE SYSTEM INFORMATION – JOB#7092261

FIRE SYSTEM NO	TAG	TYPE	SIZE	MAX FP	DESIGN FP	INSTALLATION	
						SYSTEM	LOCATION ON HOOD
1		TANK FS	4.0/4.0	40	28	FIRE CABINET RIGHT	RIGHT, HOOD 1

GAS VALVE(S)

FIRE SYSTEM NO	TAG	TYPE	SIZE	SUPPLIED BY
1		SC ELECTRICAL	1.000	ECON-AIR

CONFIRM GAS VALVE SIZING WITH PLUMBING CONTRACTOR. 1" SHOWN FOR REFERENCE ONLY.

GAS VALVES AND STRAINERS													
GAS VALVE SIZING							GAS VALVE DIMENSIONS					INSTALLATION	PART NUMBERS
TYPE	SIZE	VOLTAGE	MIN. INLET PRESSURE	MAX. INLET PRESSURE	FLOW AT 1 IN.W.C. DROP NATURAL GAS	FLOW AT 1 IN.W.C. DROP PROPANE	DIM "A"	DIM "B"	DIM "C"	DIM "D"	DIM "E"	DIM "G"	GAS VALVE PART NUMBER
ELECTRICAL	1"	120 VAC	0 PSI (0 IN.W.C.)	5 PSI (138 IN.W.C.)	1,132,300 BTU/HR	734,733 BTU/HR	6-15/16"	5-15/16"	4-7/8"	5-3/16"	12-13/16"	10-11/16"	8214250
												MOUNTING ORIENTATION	STRAINER PART NUMBER
												HORIZONTAL	4417K65
													GAS VALVE/STRAINER KIT
													(SC)EGVA1

ELECTRIC GAS VALVES ONLY:

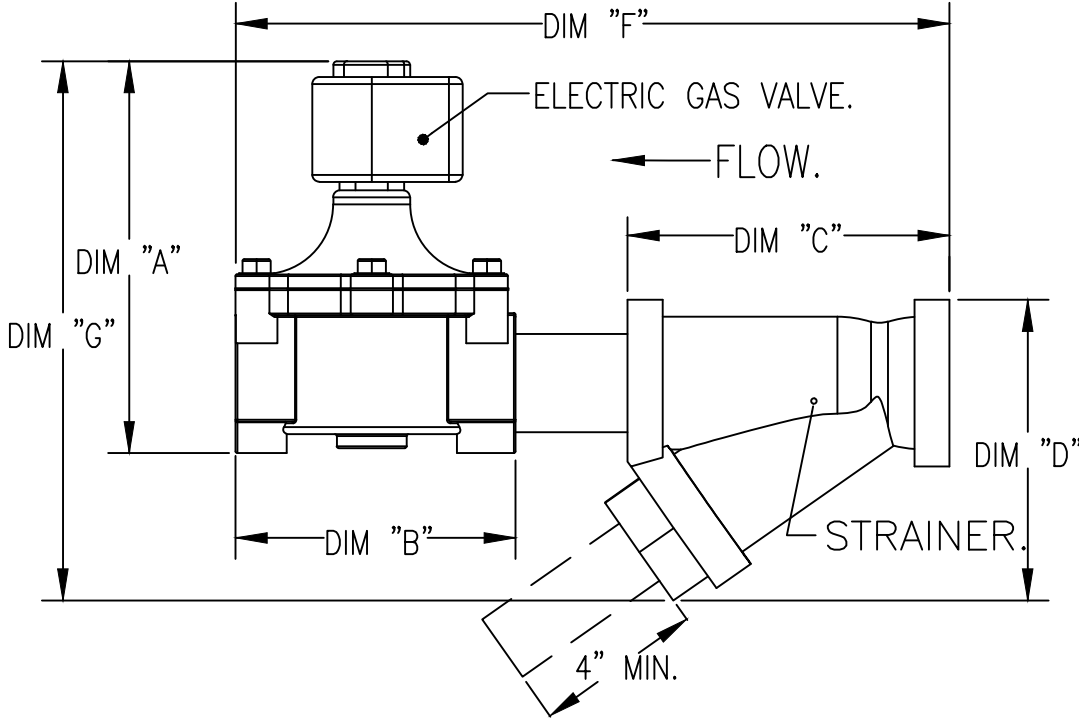
3/4"-2" 120VAC GAS VALVES CAN BE MOUNTED WITH THE SOLENOID IN ANY POSITION ABOVE HORIZONTAL. 2 1/2"-3" 120VAC GAS VALVES MUST BE MOUNTED WITH THE SOLENOID VERTICAL AND UPRIGHT. 24VDC GAS VALVES MUST BE MOUNTED WITH THE SOLENOID VERTICAL AND UPRIGHT.

ALL GAS VALVES/STRAINERS

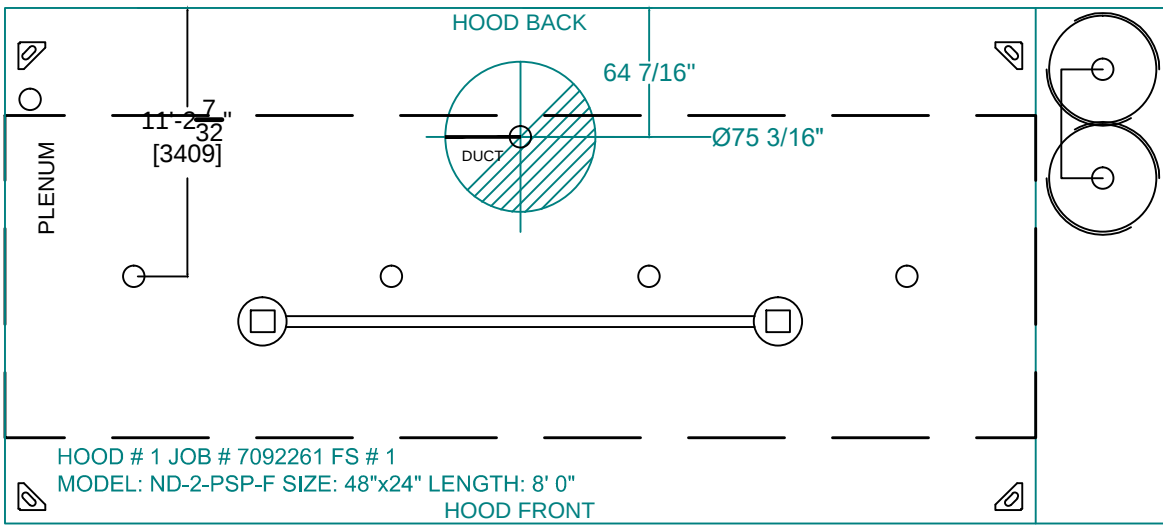
PROPER CLEARANCE MUST BE PROVIDED IN ORDER TO SERVICE THE STRAINERS A MINIMUM OF 4" CLEARANCE DISTANCE MUST BE PROVIDED AT THE BASE OF THE STRAINER. CUSTOMER MUST VERIFY BTU CONSUMPTION AS WELL AS PRESSURE RATING. SPECIFIC GRAVITY OF NATURAL GAS = 0.64, SPECIFIC GRAVITY OF LP = 1.52.

CALCULATIONS

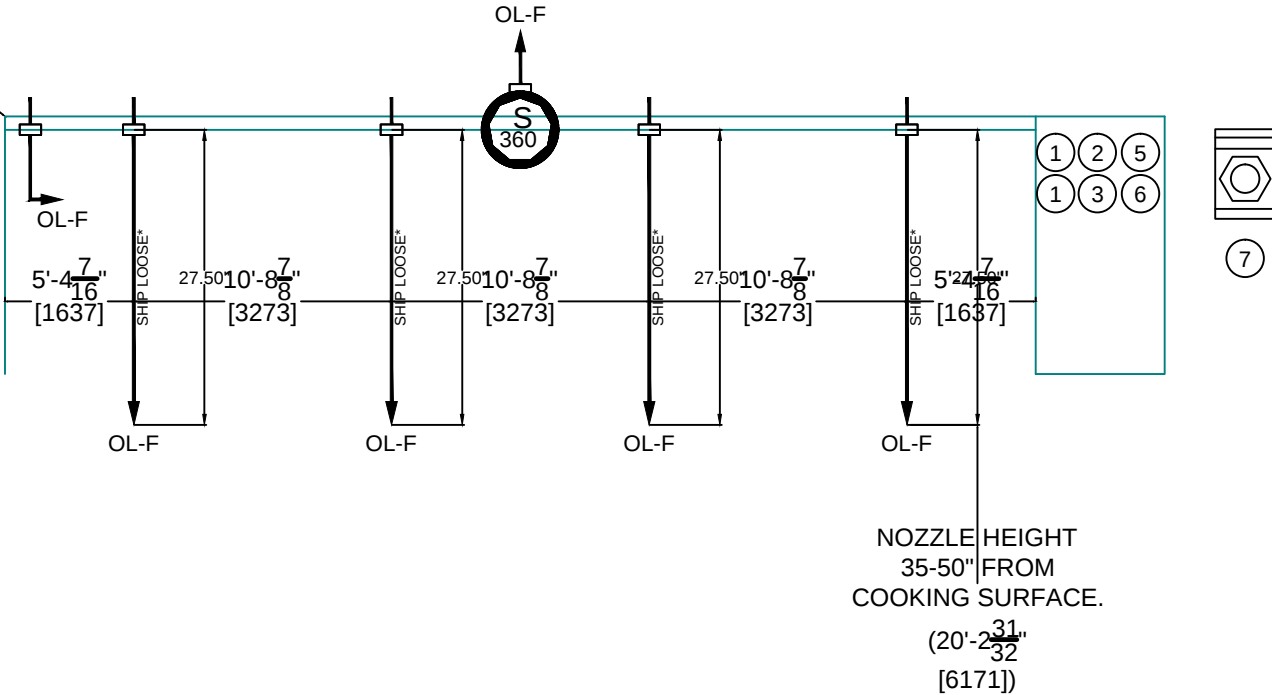
TO CALCULATE GAS FLOW FOR OTHER THAN 1 IN.W.C. PRESSURE DROP
NEW BTU/HR = (BTU/HR AT 1 IN.W.C. PRESSURE DROP) X NEW PRESSURE DROP^{1/2}
TO CALCULATE GAS FLOW FOR OTHER THAN 0.64 SPECIFIC GRAVITY
NEW BTU/HR = (BTU/HR AT 0.64) X (0.64 / NEW SPECIFIC GRAVITY)^{1/2}



SYSTEM REQUIRES A MINIMUM OF 7 FT OF EQUIVALENT PIPE LENGTH BETWEEN TANK AND NEAREST APPLIANCE NOZZLE FOR MOST APPLIANCES. EACH 90 DEGREE ELBOW ADDS 1.3 FT OF EQUIVALENT LENGTH. SEE MANUAL FOR DETAILS



FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.



TANK OVERLAPPING PROTECTION - 30 HIGH PROXIMITY 96.00" L X 30.00" D

NOTES

- FIELD PIPE DROPS AS SHOWN
- PIPING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS.
- FIELD INSTALLED DROP: FACTORY WILL PROVIDE QTY 2 60IN LONG PIECES OF CHROME PLATED PIPING SHIPPED LOOSE TO BE FIELD-INSTALLED.
- SHIP LOOSE DROP: FACTORY WILL PROVIDE THE EXACT CHROME PIPE LENGTH NEEDED SHIPPED LOOSE TO BE FIELD-INSTALLED.
- RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVEING, SALAMANDERS, ETC.
- OVERLAPPING COVERAGE SHALL NOT BE USED ON ANY APPLIANCE WITH AN OBSTRUCTION.
- IF APPLICABLE, EXTENDED PRE-PIPED 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.

- OL-F NOZZLE PART NUMBER REPLACES 3070-3/8H-10-SS

JOB #: 7092261.

JOB NAME: TALQUIN COOP.

SYSTEM SIZE: TANK-SP-2 DESIGN FP: 28. MAXIMUM FP: 40.

HOOD # 1 8' 0.00" LONG x 48" WIDE x 24" HIGH.

RISER # 1 SIZE: 14" DIA.

HOOD # 1 METAL BLOW-OFF CAPS INCLUDED.

- HEAVY-DUTY APPLIANCES (RATED 600°F) WILL REQUIRE AN ADDITIONAL DOWNSTREAM FIRESTAT IN THE EVENT THAT THE DUCTWORK CONTAINS ANY HORIZONTAL RUNS OVER 25 FT IN LENGTH.
- MEDIUM TO LIGHT-DUTY APPLIANCES (RATED 450°F) WILL NOT REQUIRE ANY ADDITIONAL DOWNSTREAM DETECTION.

AGENT DISTRIBUTION PIPING LIMITATIONS	
PIPE SECTION	MAX PIPE LENGTH (FT)
MAX SUPPLY LINE TO FIRST OVERLAPPING NOZZLE	42
OVERLAPPING NOZZLE APPLIANCE BRANCH	10
DEDICATED NOZZLE APPLIANCE BRANCH	10

LEGEND – FIRE CABINET TANK SYSTEM

- 4 GALLON TANK.
- PRIMARY ACTUATOR RELEASE.
- SECONDARY ACTUATOR RELEASE.
- PRESSURE SUPERVISION SWITCH.
- PRIMARY HOSE ASSEMBLY.
- SECONDARY HOSE ASSEMBLY.
- REMOTE MANUAL ACTUATION DEVICE.

REVISIONS

DESCRIPTION	DATE

www.econair.com

Jacksonville Office

25 N. Market St., Office# 229 Jacksonville, FL 32202 PHONE: (904) 463 - 6242 FAX: 9192275923 EMAIL: reg65@econair.com

Talquin COOP

Midway, FL, 32343

DATE: 10/9/2024

DWG.#: 7092261

DRAWN BY: reg65

SCALE: 3/4" = 1'-0"

MASTER DRAWING

SHEET NO. 3



212 NORTH ADAMS ST
QUINCY, FLORIDA 32351
FLA LIC NO. AA26000893
850-875-4348

MUTUAL AID STAGING & COORDINATION FACILITY
FOR
TALQUIN ELECTRIC COOPERATIVE, INC.
30270 BLUE STAR HIGHWAY GADSDEN COUNTY, FLORIDA

DATE: 7-7-25
REV:

JOB NO: 23-002

SHEET NO.

P.O. BOX 9394
DOTHAN, ALABAMA 36304
(334) 446-3243
thedesigngroupinc@gmail.com
Mechanical-Electrical
Consulting Engineers
FL License No. 31813

the Design Group of Florida inc.
division of The Design Group, Inc.

J. KYLE COY
LICENSE
NO. 62881
STATE OF FLORIDA
PROFESSIONAL ENGINEER

EXHAUST FAN INFORMATION - JOB#7092261

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SONES
1		1	EADURSH	ECON-AIR	1600	1.000	1304	TEAO-ECM	1.000	0.4010	1	208	6.9	506 FPM	108	10.8

FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION
1		1	GREASE BOX
		1	FAN BASE CERAMIC SEAL - DU/DR85HFA - INSTALLED AT PLANT - FOR GREASE DUCTS
		1	THROUGH WALL CURB MOUNT INSTALLATION. CURB HEIGHT MUST BE MINIMUM 10" TALLER THAN WALL THICKNESS FOR USE WITH A HINGE KIT
		1	WALL MOUNT CONSTRUCTION FOR FAN
		1	SHIP LOOSE DISCONNECT FOR REMOTE MOUNT
		1	HINGE KIT LOCKING (XHD)- SHIPS LOOSE FOR CURB SUPPLIED BY OTHERS
		1	ECM WIRING PACKAGE - PWM SIGNAL FROM ECPM03 PREWIRE (TELCO MOTOR), CCW ROTATION
		1	2 YEAR PARTS WARRANTY

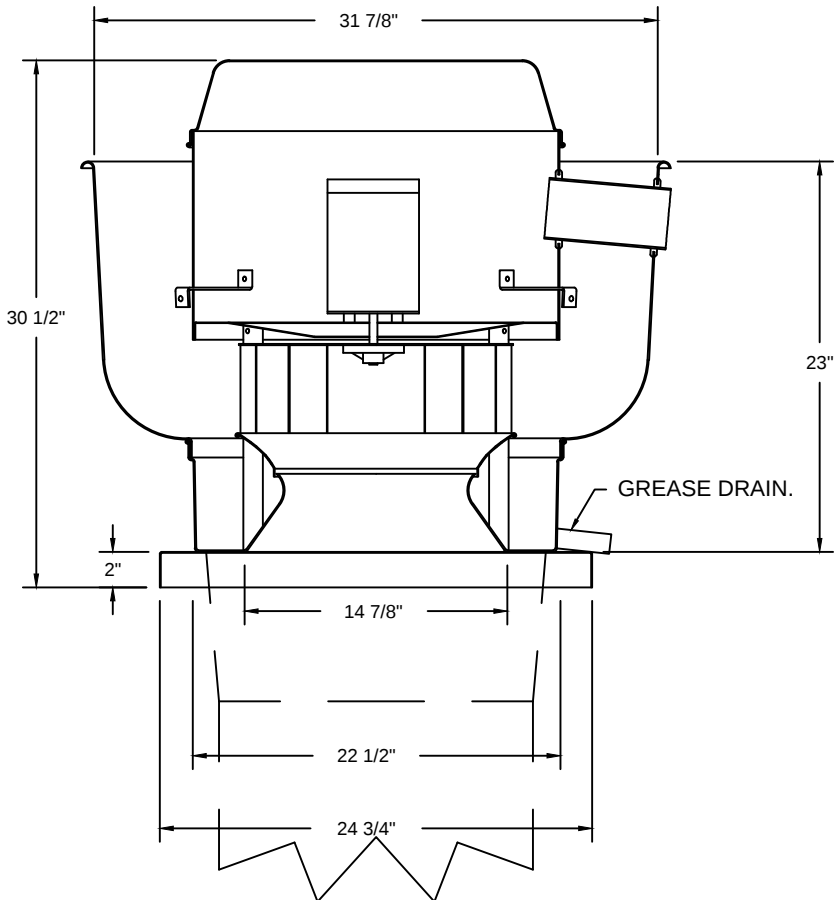
FAN ACCESSORIES

FAN UNIT NO	TAG	EXHAUST				SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT	
1		YES							

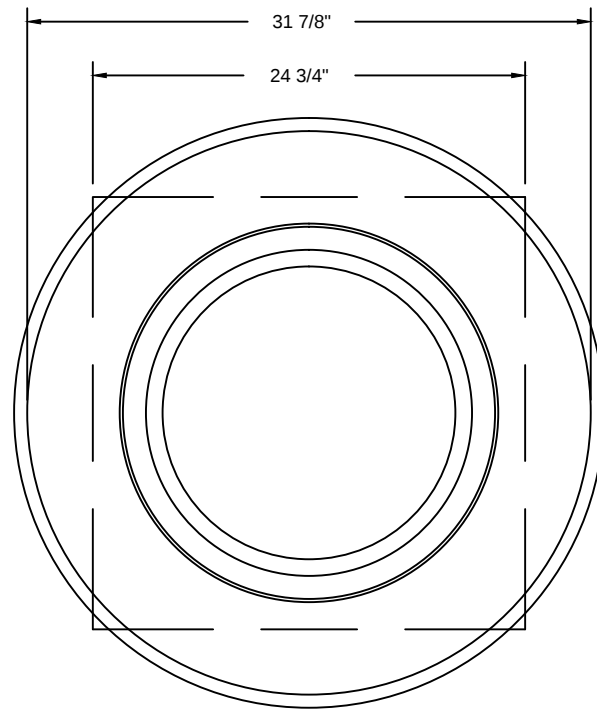
CURB ASSEMBLIES

NO	ON FAN	WEIGHT	ITEM	SIZE
1	# 1	32 LBS	CURB	23.000"W X 23.000"L X 20.000"H VENTED.

FAN #1 EADURSH - EXHAUST FAN



TOP VIEW



FEATURES:

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL705 AND UL782 AND UL-C-5645
- VARIABLE SPEED CONTROL.
- INTERNAL WIRING.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
- HIGH HEAT OPERATION 300°F (149°C).
- GREASE CLASSIFICATION TESTING.
- NEMA 3R SAFETY DISCONNECT SWITCH.

NORMAL TEMPERATURE TEST

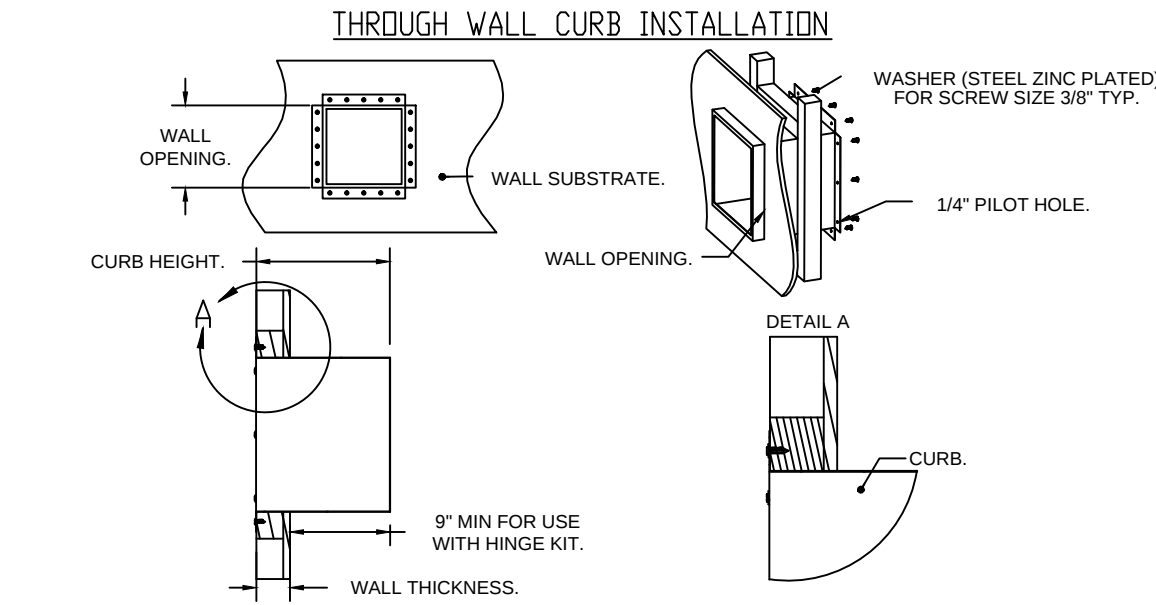
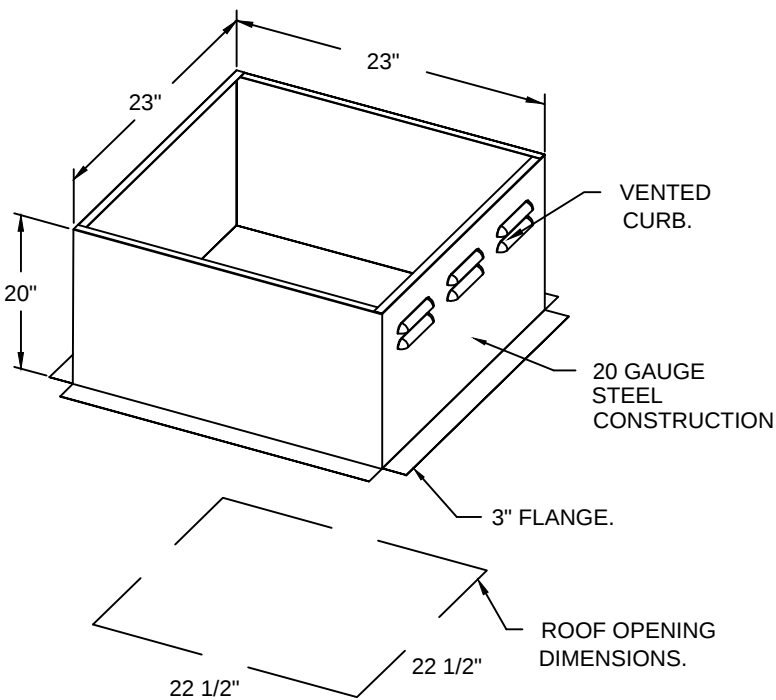
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

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

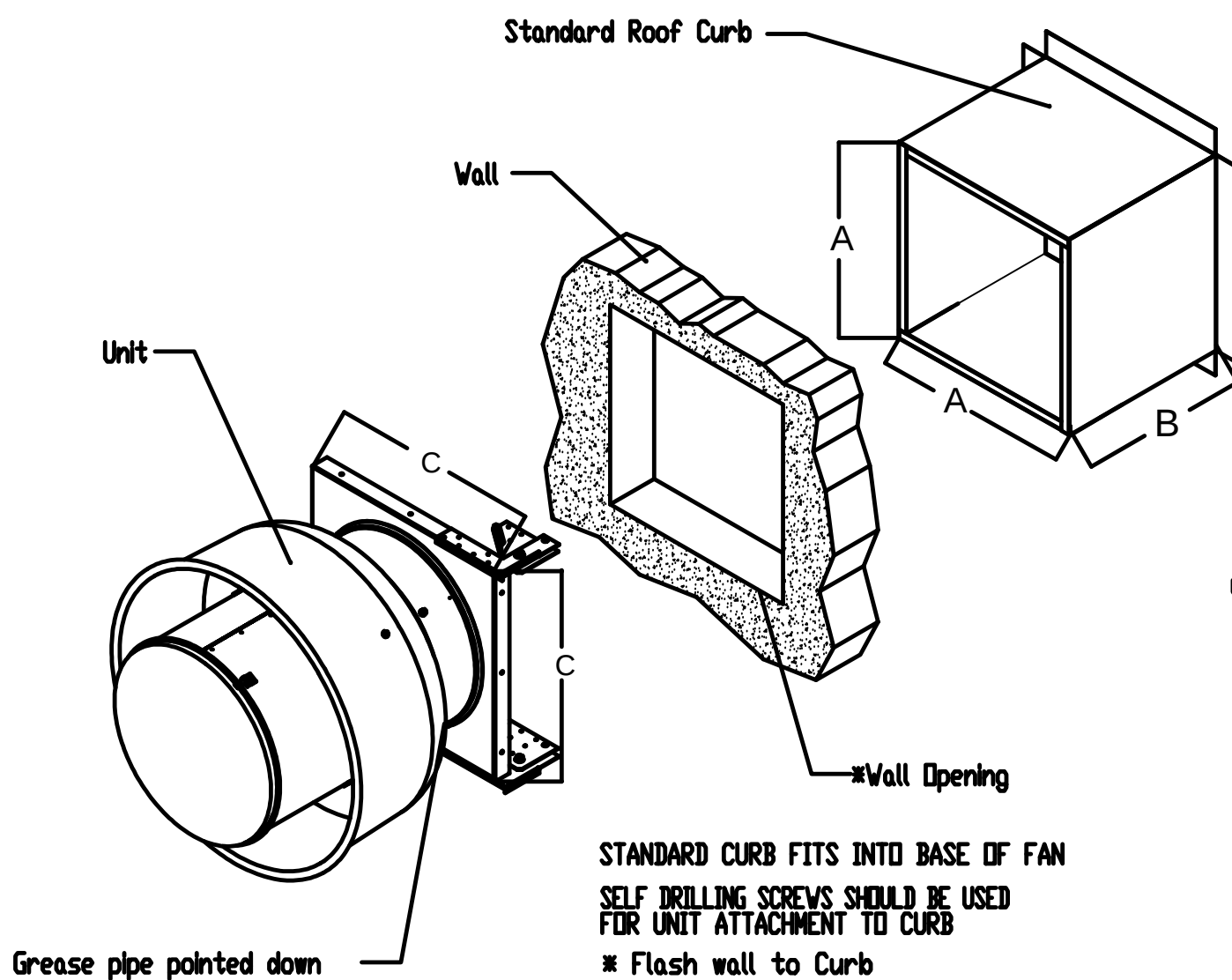
- GREASE BOX.
- FAN BASE CERAMIC SEAL - DU/DR85HFA
- INSTALLED AT PLANT - FOR GREASE DUCTS.
- THROUGH WALL CURB MOUNT INSTALLATION. CURB HEIGHT MUST BE MINIMUM 10" TALLER THAN WALL THICKNESS FOR USE WITH A HINGE KIT.
- WALL MOUNT CONSTRUCTION FOR FAN.
- SHIP LOOSE DISCONNECT FOR REMOTE MOUNT.
- HINGE KIT LOCKING (XHD)- SHIPS LOOSE FOR CURB SUPPLIED BY OTHERS.
- ECM WIRING PACKAGE - PWM SIGNAL FROM ECPM03 PREWIRE (TELCO MOTOR), CCW ROTATION.
- 2 YEAR PARTS WARRANTY.



THROUGH WALL CURB INSTALLATION
REV.#2 02/02/12

Wall Mount w/ Standard Curb

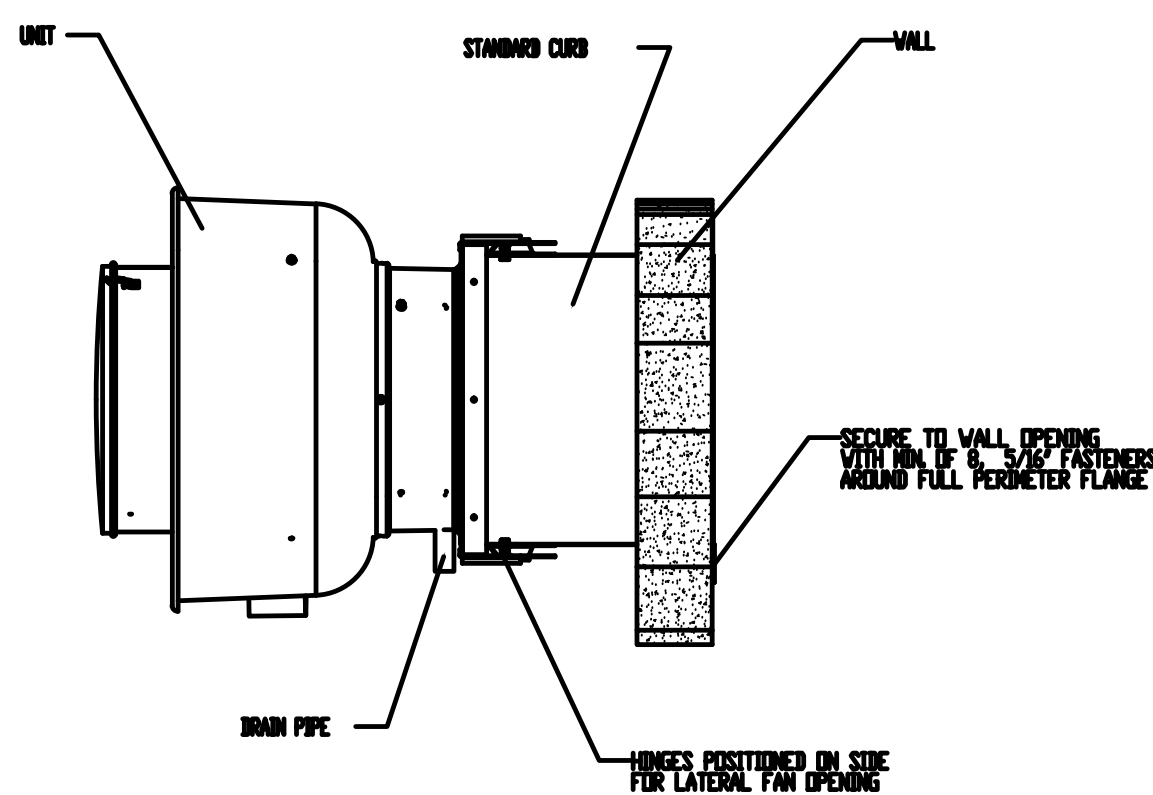
24" WHEEL 2 HP - 1 & 3 PHASE
24" WHEEL 3 HP - 3 PHASE MAXIMUM



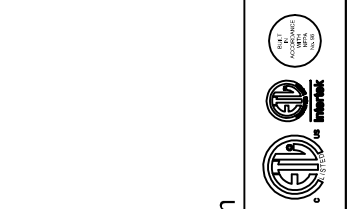
A (IN.)	B (IN.)	C (IN.)
19 1/2	22	21
19 1/2	20	21
23	20	24 3/4
26 1/6	20	28
26 1/2	20	28
31 1/2	20	33

Wall Mount w/ Standard Curb SIDE VIEW

24" WHEEL 2 HP & 3 HP 1 PHASE MAXIMUM



REVISIONS	
DESCRIPTION	DATE:

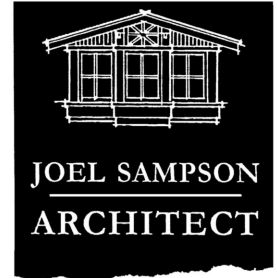


econ·air
www.econair.com
Jacksonville Office
25 N. Market St., Office# 229, Jacksonville, FL 32202 PHONE: (904) 483 - 6242 FAX: (904)275923 EMAIL: reg65@econair.com

Talquin COOP
Midway, FL, 32343

DATE: 10/9/2024
DWG.#: 7092261
DRAWN BY: reg65
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO. 4



212 NORTH ADAMS ST
QUINCY, FLORIDA 32351
FLA LIC NO. AA26000893
850-875-4348

MUTUAL AID STAGING & COORDINATION FACILITY
FOR
TALQUIN ELECTRIC COOPERATIVE, INC.
30270 BLUE STAR HIGHWAY GADSDEN COUNTY, FLORIDA

DATE: 7-7-25
REV:

JOB NO: 23-002

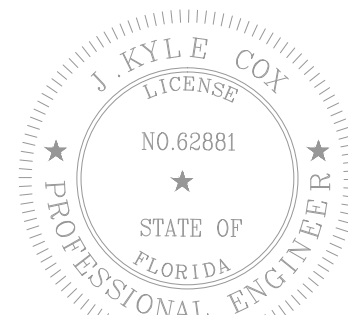
M3.4

SHEET NO.

P.O. BOX 9394
DOTYAN, ALABAMA 36304
(334) 446-3243
thedesigngroupinc@gmail.com
Mechanical-Electrical
Consulting Engineers
FL License No. 31813
confidential-this document & the information contained herein is confidential & may not be disclosed, copied altered or reproduced to any persons except as permitted in writing by "The Design Group, Inc."

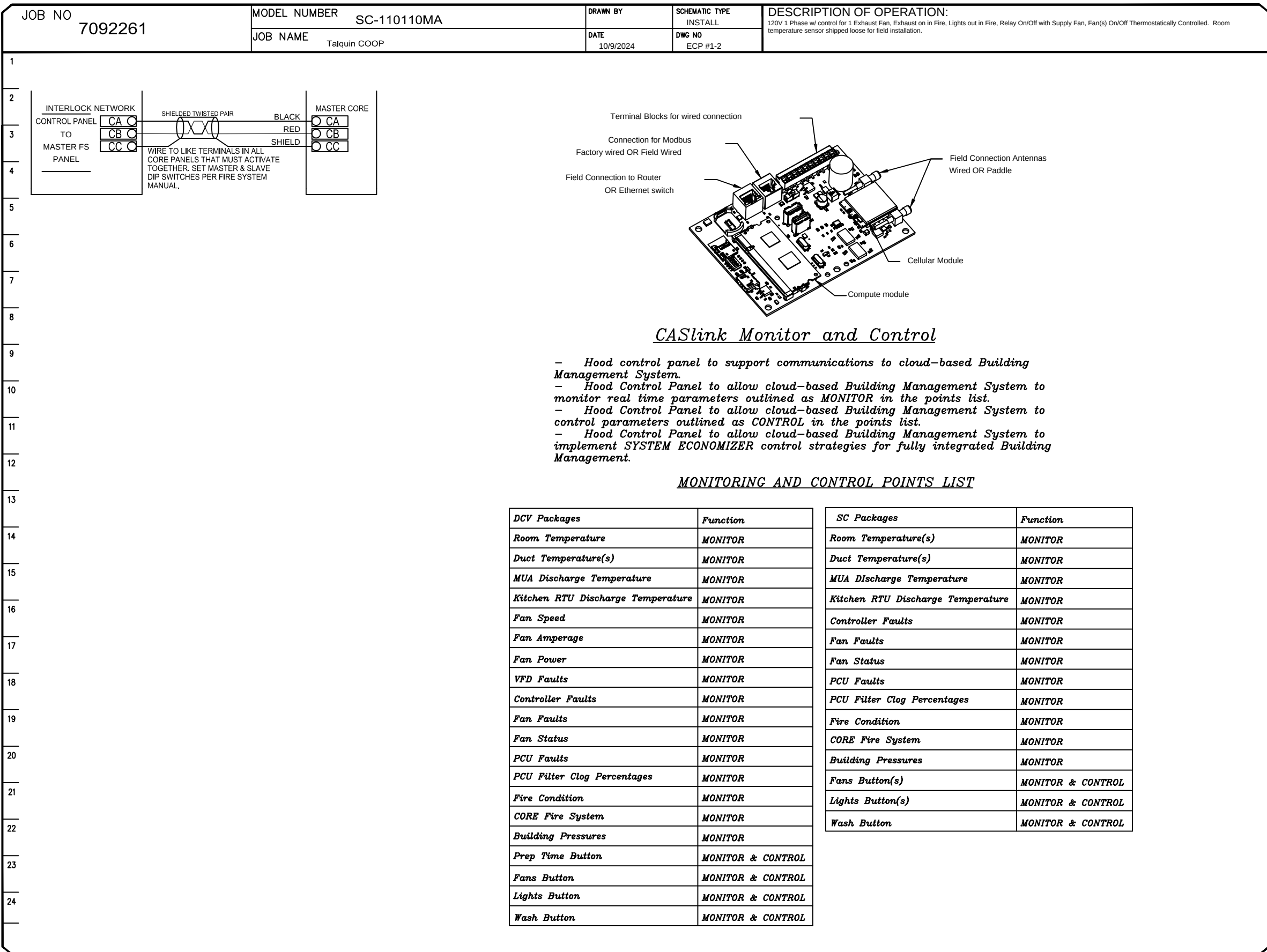
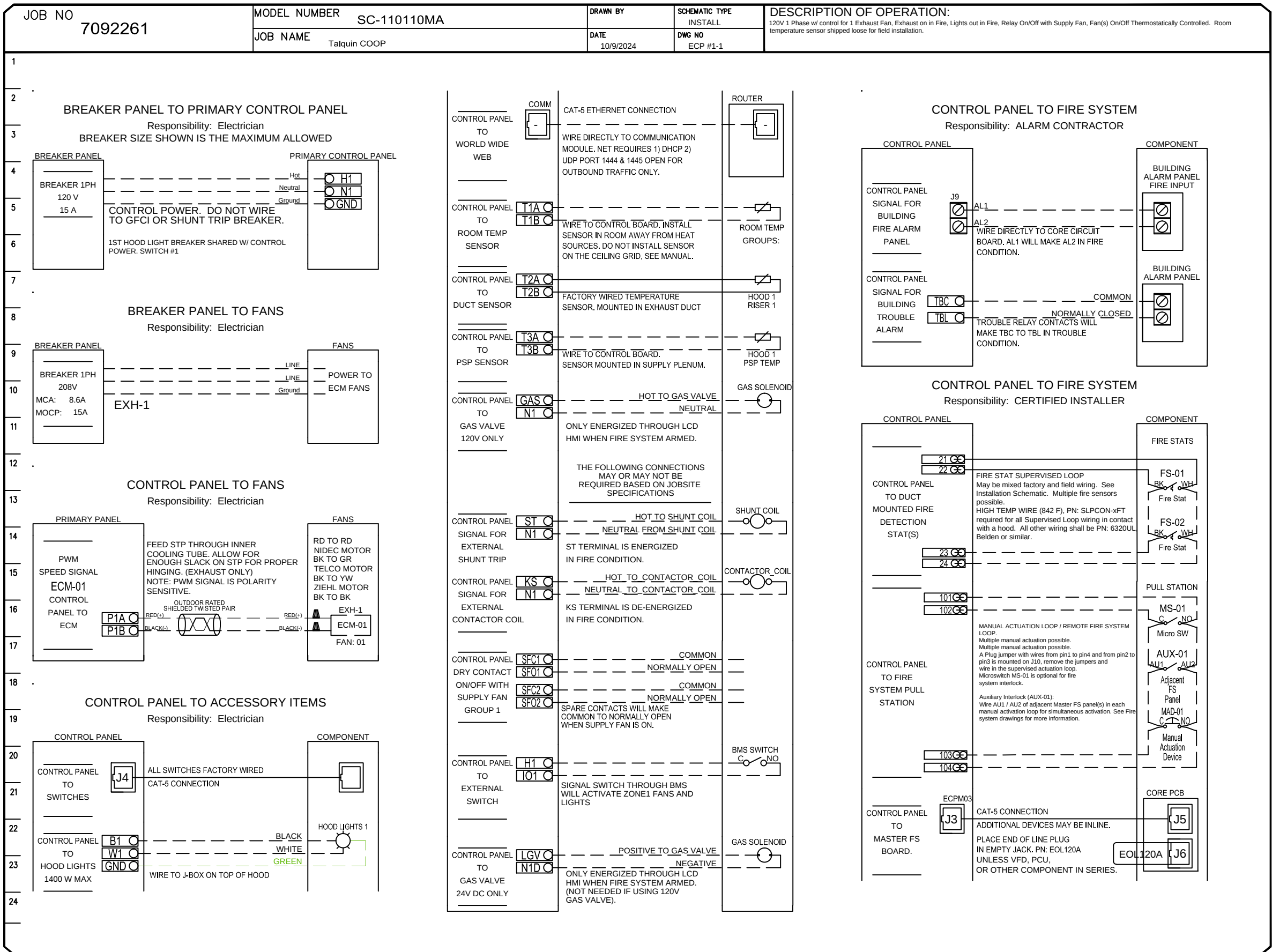
the Design Group of Florida inc.

division of The Design Group, Inc.

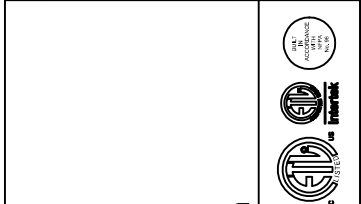


ELECTRICAL PACKAGE – JOB#7092261

NO	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED				
				LOCATION	QUANTITY		TYPE	Φ	HP	VOLT	FLA
1		SC-110110MA	UTILITY CABINET RIGHT	UTILITY CABINET RIGHT	1 LIGHT	SMART CONTROLS THERMOSTATIC CONTROL W/ RELAY ON/OFF WITH SUPPLY	EXHAUST	1	1.000	208	6.9



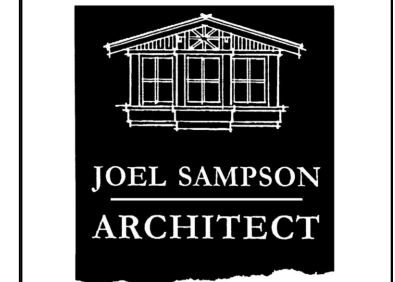
REVISIONS	
DESCRIPTION	DATE



www.econair.com
Econair Office
Jacksonville

Talquin COOP
Midway, FL, 32343

DATE: 10/9/2024
DWG.#: 7092261
DRAWN BY: reg65
SCALE: 3/4" = 1'-0"
MASTER DRAWING
SHEET NO. 5



212 NORTH ADAMS ST
QUINCY, FLORIDA 32351
FLA LIC NO. AA26000893
850-875-4348

MUTUAL AID STAGING & COORDINATION FACILITY
FOR
TALQUIN ELECTRIC COOPERATIVE, INC.
30270 BLUE STAR HIGHWAY GADSDEN COUNTY, FLORIDA

DATE: 7-7-25
REV:

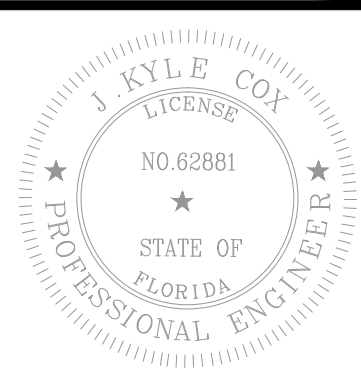
JOB NO: 23-002

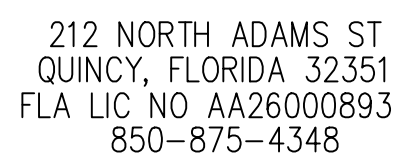
M3.5

SHEET NO.

P.O. BOX 9394
DOTHAN, ALABAMA 36304
(334) 446-3243
thedesigngroupinc@gmail.com
Mechanical-Electrical
Consulting Engineers
FL License No. 31813
confidential-this document & the information contained herein is confidential & may not be disclosed, copied, altered or reproduced to any persons except as permitted in writing by "The Design Group, Inc."

the Design Group of Florida inc.
division of The Design Group, Inc.





MUTUAL AID STAGING & COORDINATION FACILITY
FOR
TALQUIN ELECTRIC COOPERATIVE, INC.
30270 BLUE STAR HIGHWAY GADSDEN COUNTY, FLORIDA

DATE: 7-7-25
REV:

JOB NO: 23-002

SHEET NO.

M3.6

JOB NO 7092261	MODEL NUMBER SC-110110MA	DRAWN BY SCHEMATIC TYPE DATE JUN/01/2024	DESCRIPTION OF OPERATION: INSTALLATION Fire System #1 TANK FS-1 - 424A.D PNC NO. FSC-AL-5
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	JOB NAME Talevian COOP		FS-1: MASTER WIRING CONNECTIONS FOR FIRESTAT LOOP FIGURE 1 WIRING CONNECTIONS FOR MANUAL ACTUATION LOOP FIGURE 1A WIRING CONNECTIONS FOR FIRE ALARM CONTACT FIGURE 2 WIRING CONNECTIONS FOR CORE INTERLOCK FIGURE 3 WIRING CONNECTIONS FOR TROUBLE CONTACT FIGURE 4 ATTENTION: LOW-VOLTAGE DC OR SIGNALING WIRE SHOULD BE ROUTED IN SEPARATE CONDUIT FROM ALL AC SOURCES NOTE: SEE INSTALLATION, OPERATION, AND MAINTENANCE MANUAL FOR FURTHER INSTRUCTIONS

[illegible]

P.O. BOX 9394
DOTHAN, ALABAMA 35934
(334) 446-3443
thedesigngroup@gmail.com

Mechanical - Electrical
Consulting Engineers
FL License No. 31813

the Design Group

of

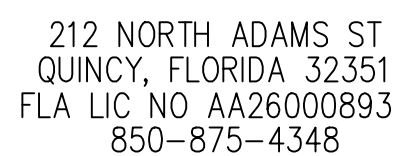
Florida

inc.



confidential - this document & the information contained herein is confidential & may not be disclosed, copied, altered or reproduced to any persons except as permitted in writing by "The Design Group, Inc."

division of The Design Group, Inc.



MUTUAL AID STAGING & COORDINATION FACILITY

FOR

TALQUIN ELECTRIC COOPERATIVE, INC.

30270 BLUE STAR HIGHWAY GADSDEN COUNTY, FLORIDA

DATE: 7-7-25
REV:

JOB NO: 23-002

M3.7

SHEET NO

Talquin COOP
Midway, FL, 32343

DATE: 10/9/2024

DWG.#:

DRAWN reg61

SCALE:

MASTER DRAWING

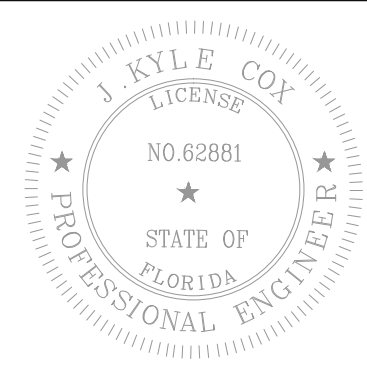
SHEET NO.
7

7

P.O.BOX 9394
DOTHAN, ALABAMA 36304
(334) 446-3243
thedesigntgroupinc@gmail.com
Mechanical-Electrical
Consulting Engineers
FL License No. 31813

confidential—this document & the information contained herein is confidential & may not be disclosed, copied altered or reproduced to any persons except as permitted in writing by "The Design Group, Inc."

the Design
Group
of
Florida
inc.



DUCTWORK #1 PARTS - JOB#7092261 DOUBLE WALL										
TAG	PART #	CFM	GPM	ZONE	COVEREDBY	SP	WEIGHT	VELOCITY	QTY	DESCRIPTION
H1-E1	EDW18DWRISER-2R-S	1600				-0.5505	8.15	0.00	1	DOUBLE WALL RISER COVER - USED ON 14" INNER RISER, 4" LONG - 2 LAYERS REDUCED CLEARANCE - 18" STAINLESS STEEL OUTER RISER SHELL ASSEMBLY. INCLUDES INSULATION & SINGLE V CLAMPS FOR INNER & OUTER CONNECTIONS.
P1	EDW1407DWLT-2R-S	1600				-0.002	9.49	1496.71	1	DOUBLE WALL DUCT - 14" INNER DUCT, 7" LONG - 2 LAYERS REDUCED CLEARANCE - 18" STAINLESS STEEL OUTER SHELL.
P2	EDW1427DWAJD-2R-S	1600				-0.006	52.12	1496.71	1	DOUBLE WALL ADJUSTABLE DUCT - 14" INNER DUCT - 2 LAYERS REDUCED CLEARANCE - 18" STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11" / MAX LENGTH = 24.5" / ADJUSTMENT = 13.5" / ADJUSTABLE SECTION MAY NEED TO BE CUT, INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
P3 ASSEMBLED W/P25	EDW14DWTEASY-2R-S	1600		1		-0.0832	41.37	1496.71	1	DOUBLE WALL DUCT - 14" INNER TEE DUCT - 2 LAYERS REDUCED CLEARANCE - 18" STAINLESS STEEL OUTER SHELL.
P4	EDW1401DWOFFSETASY-2R-S	1600				-0.003	12.97	1496.71	1	DOUBLE WALL DUCT - 14" INNER DUCT RISER & 1 DEGREE OFFSET - 2 LAYERS REDUCED CLEARANCE - 18" STAINLESS STEEL OUTER SHELL.
P5	EDW1417DWLT-2R-S	1600				-0.006	22.79	1496.71	1	DOUBLE WALL DUCT - 14" INNER DUCT, 17" LONG - 2 LAYERS REDUCED CLEARANCE - 18" STAINLESS STEEL OUTER SHELL.
P6	EDW1447DWLT-2R-S	1600				-0.016	62.39	1496.71	1	DOUBLE WALL DUCT - 14" INNER DUCT, 47" LONG - 2 LAYERS REDUCED CLEARANCE - 18" STAINLESS STEEL OUTER SHELL.
P7	EDW1822SADKIT						7.25		1	DUCT - HORIZONTAL SADDLE SUPPORT KIT, USED WITH 18" OD - INCLUDES UNI-STRUT CUT TO LENGTH, DW1822SAD, & HARDWARE BAG 4.
P8	EDW1447DWLT-2R-S	1600				-0.016	62.39	1496.71	1	DOUBLE WALL DUCT - 14" INNER DUCT, 47" LONG - 2 LAYERS REDUCED CLEARANCE - 18" STAINLESS STEEL OUTER SHELL.
P9 ASSEMBLED W/P23	EDW14DWTEASY-2R-S	1600		1		-0.009	41.37	1496.71	1	DOUBLE WALL DUCT - 14" INNER TEE DUCT - 2 LAYERS REDUCED CLEARANCE - 18" STAINLESS STEEL OUTER SHELL.
P10	EDW1423DWLT-2R-S	1600				-0.008	30.75	1496.71	1	DOUBLE WALL DUCT - 14" INNER DUCT, 23" LONG - 2 LAYERS REDUCED CLEARANCE - 18" STAINLESS STEEL OUTER SHELL.
P11	EDW1447DWLT-2R-S	1600				-0.016	62.39	1496.71	1	DOUBLE WALL DUCT - 14" INNER DUCT, 47" LONG - 2 LAYERS REDUCED CLEARANCE - 18" STAINLESS STEEL OUTER SHELL.
P12	EDW1822SADKIT						7.25		1	DUCT - HORIZONTAL SADDLE SUPPORT KIT, USED WITH 18" OD - INCLUDES UNI-STRUT CUT TO LENGTH, DW1822SAD, & HARDWARE BAG 4.
P13	EDW1447DWLT-2R-S	1600				-0.016	62.39	1496.71	1	DOUBLE WALL DUCT - 14" INNER DUCT, 47" LONG - 2 LAYERS REDUCED CLEARANCE - 18" STAINLESS STEEL OUTER SHELL.
P14 ASSEMBLED W/P15	EDW14DWTEASY-2R-S	1600		1		-0.009	41.37	1496.71	1	DOUBLE WALL DUCT - 14" INNER TEE DUCT - 2 LAYERS REDUCED CLEARANCE - 18" STAINLESS STEEL OUTER SHELL.
P15 ASSEMBLED W/P14 O=T	EDW14WACCDOORCOV-2R-S						22.25		1	DOUBLE WALL DUCT - 14" INNER ACCESS DOOR & 18" ACCESS DOOR COVER WITH CLAMPS - 2 LAYERS REDUCED CLEARANCE - 18" STAINLESS STEEL OUTER SHELL.
P16	EDW1447DWLT-2R-S	1600				-0.016	62.39	1496.71	1	DOUBLE WALL DUCT - 14" INNER DUCT, 47" LONG - 2 LAYERS REDUCED CLEARANCE - 18" STAINLESS STEEL OUTER SHELL.
P17	EDW1447DWAJD-2R-S	1600				-0.01	93.18	1496.71	1	DOUBLE WALL ADJUSTABLE DUCT - 14" INNER DUCT - 2 LAYERS REDUCED CLEARANCE - 18" STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11" / MAX LENGTH = 48.5" / ADJUSTMENT = 30.5" / ADJUSTABLE SECTION MAY NEED TO BE CUT. INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
P18	EDW1401DWOFFSETASY-2R-S	1600				-0.003	12.97	1496.71	1	DOUBLE WALL DUCT - 14" INNER DUCT RISER & 1 DEGREE OFFSET - 2 LAYERS REDUCED CLEARANCE - 18" STAINLESS STEEL OUTER SHELL.
P19 ASSEMBLED W/P20	EDW1435DWLTTP-2R-S	1600				-0.012	48.06	1496.71	1	DOUBLE WALL DUCT - 14" INNER DUCT, 35" LONG - 2 LAYERS REDUCED CLEARANCE - 18" STAINLESS STEEL OUTER SHELL - USED WITH TRANSITION PLATE.
P20 ASSEMBLED W/P19 O=B	EDW2314TP	1600					8.49	1496.71	1	DUCT TO CURB TRANSITION, 23" CURB TO 14" DUCT, 16 GA ALUMINIZED. USED ON BDU15, DU75 & 85.
SYSTEM AT P20						-0.7817	0.00			
P21	EDW1822SADKIT						7.25		1	DUCT - HORIZONTAL SADDLE SUPPORT KIT, USED WITH 18" OD - INCLUDES UNI-STRUT CUT TO LENGTH, DW1822SAD, & HARDWARE BAG 4.
P22	EDW1822SADKIT						7.25		1	DUCT - HORIZONTAL SADDLE SUPPORT KIT, USED WITH 18" OD - INCLUDES UNI-STRUT CUT TO LENGTH, DW1822SAD, & HARDWARE BAG 4.
P23 ASSEMBLED W/P9 O=T	EDW14DWACCDOORCOV-2R-S						22.25		1	DOUBLE WALL DUCT - 14" INNER ACCESS DOOR & 18" ACCESS DOOR COVER WITH CLAMPS - 2 LAYERS REDUCED CLEARANCE - 18" STAINLESS STEEL OUTER SHELL.
P24	EDW1822SADKIT						7.25		1	DUCT - HORIZONTAL SADDLE SUPPORT KIT, USED WITH 18" OD - INCLUDES UNI-STRUT CUT TO LENGTH, DW1822SAD, & HARDWARE BAG 4.
P25 ASSEMBLED W/P3 O=S	EDW14DWACCDOORCOV-2R-S						22.25		1	DOUBLE WALL DUCT - 14" INNER ACCESS DOOR & 18" ACCESS DOOR COVER WITH CLAMPS - 2 LAYERS REDUCED CLEARANCE - 18" STAINLESS STEEL OUTER SHELL.
RC1	EDW18DWRISER-2R-S						8.15		1	DOUBLE WALL RISER COVER - USED ON 14" INNER RISER, 4" LONG - 2 LAYERS REDUCED CLEARANCE - 18" STAINLESS STEEL OUTER RISER SHELL ASSEMBLY. INCLUDES INSULATION & SINGLE V CLAMPS FOR INNER & OUTER CONNECTIONS.
	E3M-2000PLUS						0.80		5	DUCT - 3M FIRE BARRIER 2000 PLUS SILICONE - USED AS SEALANT TO SEAL DUCT JOINTS.
	EDW14DWCLASY-2R-S						7.21		11	DUCT - 14" DUCT - 18" DOUBLE "V" CLAMP - 2R INSULATION & SINGLE "V" CLAMP INCLUDED - REDUCED CLEARANCE.
TOTAL WEIGHT							929.49			

DOUBLE WALL FACTORY BUILT DUCTWORK

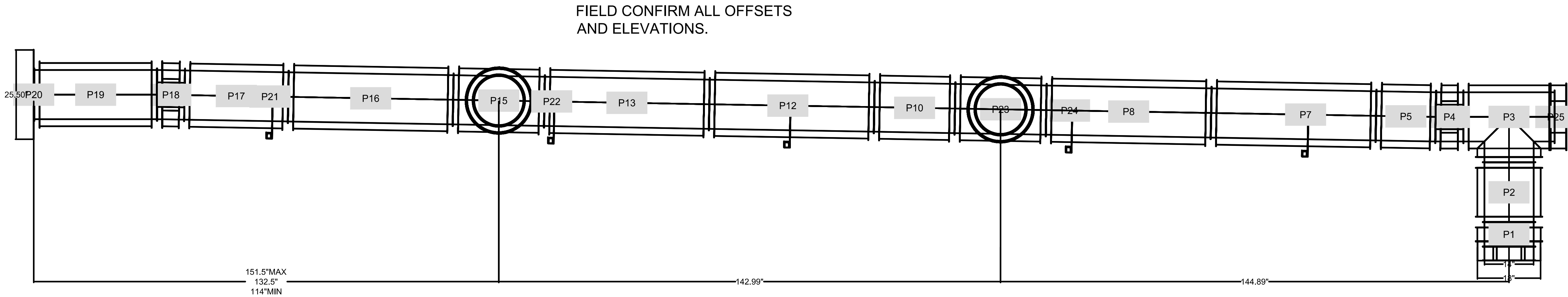
- ALL DUCTWORK IS REQUIRED TO BE INSTALLED WITH THE MAXIMUM SUPPORT SPACING LISTED BELOW.
- FOR A COMPLETE LIST OF APPROVED SUPPORT METHODS, SEE THE ENTIRE INSTALLATION AND OPERATION MANUAL.
- DUCTWORK SHALL SLOPE NOT LESS THAN 1/16" PER LINEAR FOOT TOWARDS THE HOOD OR AN APPROVED GREASE COLLECTION RESERVOIR.
- WHERE HORIZONTAL DUCTS EXCEED 75 FEET IN LENGTH, THE SLOPE SHALL NOT BE LESS THAN 3/16" PER LINEAR FOOT.

HORIZONTAL	
DUCT DIAMETER	SUPPORT SPACING (FT)
5"	7'
6"	7'
7"	7'
8"	7'
10"	7'
12"	7'
14"	7'
16"	7'
18"	5'
20"	5'
22"	5'
24"	5'
26"	5'
28"	5'
30"	5'
32"	5'
34"	5'
36"	5'

VERTICAL			
TYPE	WALL SUPPORT (FT)	CURB SUPPORT (FT)	FLOOR SUPPORT (FT)
2R & 2R HT (5"-16")	20'	24'	24'
2R (18")	18'	24'	24'
3R & 3Z (5"-24")	10'	24'	24'
3Z (26"-36")	10'	20'	20'

DO NOT LEAK TEST USING SMOKE BOMBS CONTAINING CHLORINES/CHLORIDES. CONSULT WITH CAPTIVEAIRE FOR PROPER LEAK TESTING METHODS.

DUCTWORK #1 FRONT VIEW



Talquin COOP
Midway, FL, 32343

DATE: 10/9/2024
DWG.#: 7092261
DRAWN BY: reg65
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO.
8

REVISIONS

DESCRIPTION	DATE

Jacksonville Office

25 N. Market St., Office# 229, Jacksonville, FL 32202 PHONE: (904) 463-6242 FAX: 9162275923 EMAIL: reg65@econair.com

JOEL SAMPSON
ARCHITECT

212 NORTH ADAMS ST
QUINCY, FLORIDA 32351
FLA LIC NO. AA26000893
850-875-4348

MUTUAL AID STAGING & COORDINATION FACILITY

FOR

TALQUIN ELECTRIC COOPERATIVE, INC.

30270 BLUE STAR HIGHWAY GADSDEN COUNTY, FLORIDA

DATE: 7-7-25
REV:

JOB NO: 23-002

M3.8

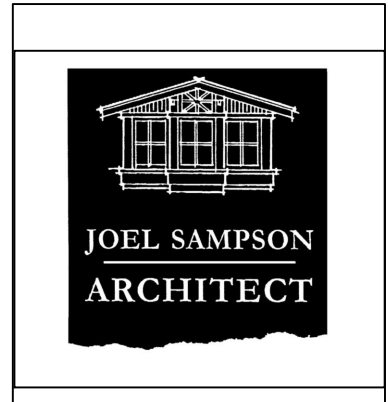
SHEET NO.

P.O. BOX 9394
DOTYHAWK, ALABAMA 36504
(334) 446-3243
thedesigngroupinc@gmail.com
Mechanical-Electrical
Consulting Engineers
FL License No. 31813

confidential-this document & the information contained herein is confidential & may not be disclosed, copied, altered or reproduced to any persons except as permitted in writing by "The Design Group, Inc."

the Design Group of Florida inc.

division of The Design Group, Inc.



212 NORTH ADAMS ST
QUINCY, FLORIDA 32351
FLA LIC NO. AA26000893
850-875-4348

MUTUAL AID STAGING & COORDINATION FACILITY
FOR
TALQUIN ELECTRIC COOPERATIVE, INC.
30270 BLUE STAR HIGHWAY GADSDEN COUNTY, FLORIDA

DATE: 7-7-25
REV:

JOB NO: 23-002

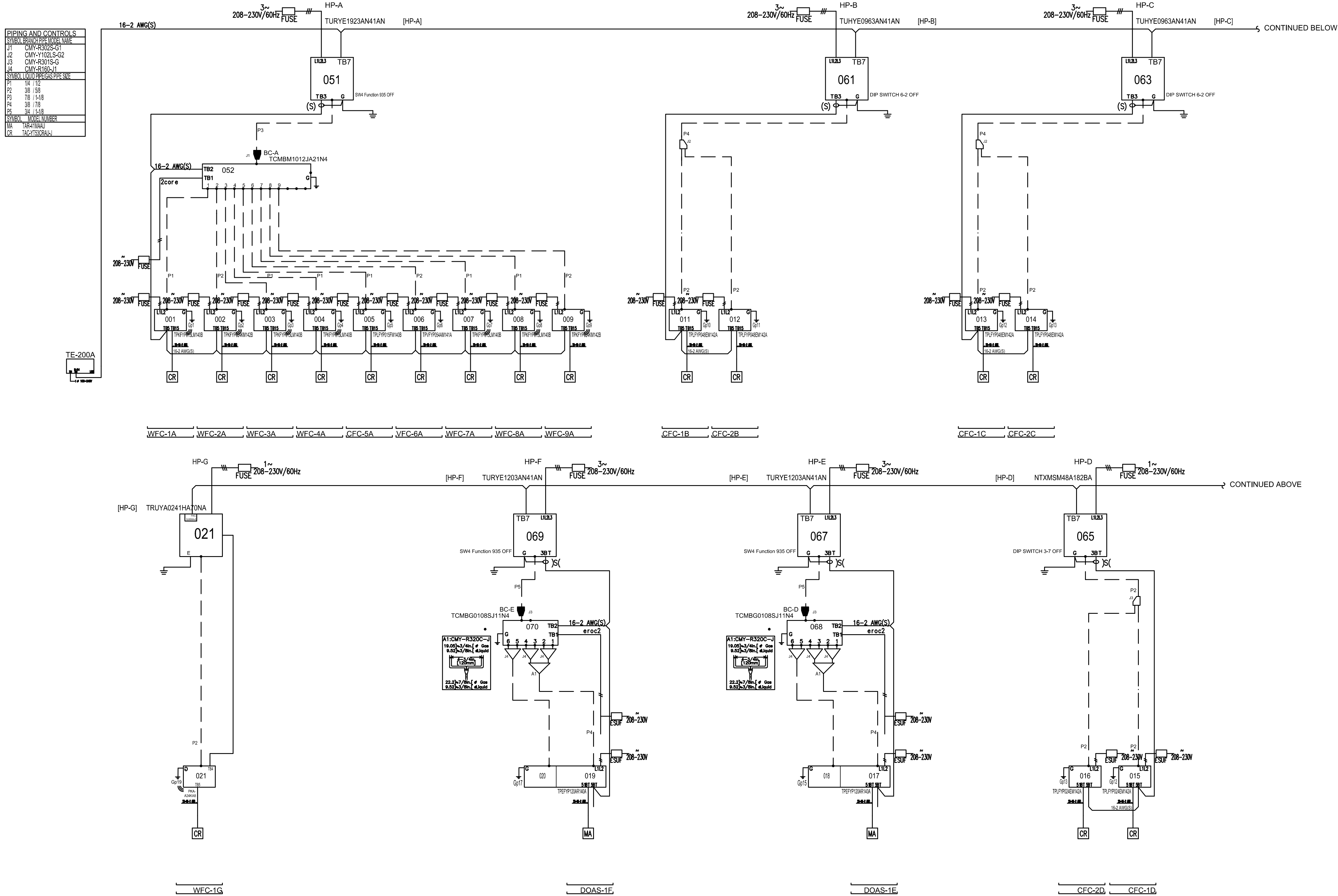
M4.1

SHEET NO.

DIAGRAM SYMBOL LEGEND	CONT. No.	PAGE
DISPLAY		
POWER WIRE		
CONTROL WIRE		
REF. PIPE		

CITY MULTI
SYSTEM SCHEMATIC DWG.

This drawing is schematic in nature. Final routing of piping & wiring shall be determined by the installing contractor and/or designer of record. Additional refrigerant charge is needed depending on the size and length of extended piping. Please refer the amount of pre-charge and the formula of calculation which is mentioned on the data book.
1.25mm(16 AWG) : 1.25mm(16 AWG) or more. 0.75mm(18 AWG) : between 0.5mm(14 AWG) and 0.75mm(20 AWG).



MITTUBISHI CITY-MULTI SYSTEM SCHEMATIC
NTS

P.O. BOX 9394
DOTHAN, ALABAMA 36304
(334) 446-3243
thedesigngroupinc@gmail.com
Mechanical-Electrical
Consulting Engineers
FL License No. 31813

confidential-this document & the information contained herein is confidential & may not be disclosed, copied altered or reproduced to any persons except as permitted in writing by "The Design Group, Inc."

the Design Group of Florida inc.

division of The Design Group, Inc.

J. KYLE COY
LICENSE
NO. 62881
STATE OF FLORIDA
PROFESSIONAL ENGINEER