OUTDOOR HEAT RECOVERY UNIT SCHEDULE

	System Tag	System 1
	Tag Reference	
Nominal Data	M-NET Address	51, 52
	Model Number	TURYE2403BN40AN
	Modules	P120, P120
	Nominal Cooling Capacity (BTU/h)	240,000
	Nominal Heating Capacity (BTU/h)	270,000
	Cooling Efficiency (I)EER [SEER]	23.6 / 11.95
	Heating COP @ 47°F [HSPF]	3.520
Design Conditions	Design Cooling Outdoor Temp DB (°F)	95.0
	Design Heating Outdoor Temp WB (°F)	43.0
Performance Data	Corrected Cooling Total Capacity (BTU/h)	240,548.7
	Corrected Heating Capacity (BTU/h)	269,803.9
Electrical Data	Voltage / Phase	208/230V / 3-phase 3-wire
	MCA 208/230	41/38, 41/38
	Recommended Fuse Size (RFS)	60/60, 60/60
	MOCP	60/60, 60/60
Notes / Options	Applicable System Notes - See Notes Below	1, 2, 3, 4, 5

Notes & Options:
1 Nominal cooling capacities are based on indoor coil EAT of 80/67°F (DB/WB), 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 Added field charge listed in in addition to factory charge, this must be updated based upon final as-built piping layout.

BRANCH CONTROLLER SCHEDULE

	System Tag	System 1	System 1
	Tag Reference	BC-1	BC-2
Nominal Data	M-NET Address	53	67
	Model Number	TCMBM1016JA11N4	TCMBS0108KB11N4
	Type (double / Main / Sub)	Main	Sub
	Number of Ports	16	8
	Connected Capacity to BC	222,000.0	86,000.0
Electrical Data	Voltage / Phase	208/230V / 1-phase	208/230V / 1-phase
	MCA 208/230	1.57/1.82	0.74/0.87
Notes / Options	Applicable System Notes - See Notes Below	1	1

Notes & Options:
1 Include Diamondback Ball Valves BV-Series, 700PSIG working pressure, full port, 410A rated.
2 For sub BC controller CMB-P-NU-GB1 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

ABBREVIATIONS

ABBREV.	DESCRIPTION
AFF	ABOVE FINISHED FLOOR
AP	ACCESS PANEL
AC	AIR CONDITIONING
ARCH	ARCHITECT
BDD	BACK DRAFT DAMPER
CFF	CAP FOR FUTURE CONNECTION
CLG	CEILING
CTE	CONNECT TO EXISTING
CFM	CUBIC FEET PER MINUTE
CU	CONDENSING UNIT
DET.	DETAIL
EF	EXHAUST FAN
(E)	EXISTING
FLR	FLOOR
GA	GAUGE
GC	GENERAL CONTRACTOR
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING
HP	HORSE POWER
MAX	MAXIMUM
MIN	MINIMUM
MCA	MINIMUM CIRCUIT AMPACITY
MFR.	MANUFACTURER
MECH.	MECHANICAL
(N)	NEW
OSA	OUTSIDE AIR
TYP.	TYPICAL
UON	UNLESS OTHERWISE NOTED
WT	WEIGHT
W/	WITH
W/O	WITHOUT

MECHANICAL LEGEND

SYMBOL	ABBREV.	DESCRIPTION
	SA	SUPPLY AIR DUCT
	RA	RETURN AIR DUCT
	EA	EXHAUST AIR DUCT
	CSD	CEILING SUPPLY DIFFUSER
	CRG	CEILING RETURN GRILLE
	CEG	CEILING EXHAUST GRILLE
	EF	CEILING EXHAUST FAN
	V.D.	MANUAL VOLUME DAMPER
	–	LOW PRESSURE FLEXIBLE DUCT
OR	–	DUCT RISER, ROOF PENETRATION
T S	–	THERMOSTAT/SENSOR
S MD		MOTORIZED DAMPER WALL SWITCH
AC	–	EQUIPMENT TAG / EQUIPMENT NUMBER
	–	SQUARE-TO-ROUND TRANSITION
	–	ACOUSTICALLY LINED DUCT
FD	FD	FIRE DAMPER
FSD	FSD	FIRE SMOKE DAMPER
	V.D.	MANUAL VOLUME DAMPER
M	MD	MOTORIZED DAMPER
	C.F.F.	CAP FOR FUTURE
	–	FLEXIBLE CONNECTION
	–	POINT OF CONNECTION

ADDITIONAL CONSTRUCTION NOTES

1. PROVIDE A REMOTE CONTROLLER THERMOSTAT MODEL TAR-40MAAU FOR EACH OF THE WALL MOUNTED FAN COIL UNITS.
2. PROVIDE A MAIN SYSTEM CONTROLLER MODEL TE-200A.
3. FC-15, FC16 & FC-22 SHALL BE CONTROLLED BY A DUCT MOUNTED SENSOR LOCATED IN THE SUPPLY AIR PLENUM.
4. WALL MOUNTED FAN COIL UNITS SHALL BE EQUIPPED WITH A CONDENSATE DRAIN PUMP TO LIFT THE DRAIN UP THROUGH THE ROOF.
5. ALL REFRIGERATION PIPES SHALL HAVE PIPE INSULATION WITH UV PROTECTION RATING.
6. ALL CONTROL WIRING SHALL BE INSTALLED IN A CONDUIT.
7. MECHANICAL CONTRACTOR SHALL HIRE AN ELECTRICAL CONTRACTOR FOR ALL LINE VOLTAGE WIRING. ELECTRICAL DESIGN OF THIS PROJECT SHALL BE BASED ON A "DESIGN/BUILD" APPROACH.
8. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR ALL CUTTING AND PATCHING OF THE BUILDING FOR THE PROPER INSTALLATION OF THE MECHANICAL EQUIPMENT.

DRAWING INDEX

GENERAL NOTES

1. HEATING, VENTILATING AND AIR CONDITIONING SYSTEMS SHALL COMPLY WITH CALIFORNIA MECHANICAL CODE 2022.
2. ALL MECHANICAL EQUIPMENT SHALL BE ANCHORED OR STRAPPED TO STRUCTURE TO RESIST EARTHQUAKE MOTION.
3. DUCT TRANSVERSE JOINTS AND LONGITUDINAL SEAMS SHALL BE SEALED IN ACCORDANCE WITH CMC SECTION 603.10 AND SMACNA DUCT CONSTRUCTION STANDARDS.
4. DUCT CONSTRUCTION: DUCT CONSTRUCTION SHALL BE IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARD FOR 2"W.G. STATIC TABLE 1–5. PERFORM A DUCT LEAKAGE TEST PER CMC SECTION 603.10.1.
5. INSULATION APPLIED TO THE EXTERIOR SURFACE OF DUCTS LOCATED IN BUILDING SHALL HAVE A FLAME SPREAD OF NOT MORE THAN 25 AND A SMOKE–DEVELOPED RATING OF NOT MORE THAN 50 WHEN TESTED AS A COMPOSITE INSTALLATION INCLUDING INSULATION, FACING MATERIALS, TAPES AND ADHESIVES AS NORMALLY APPLIED.
   5.1. FACTORY–MADE AIR DUCTS: SHALL BE CLASS 0 OR CLASS 1, DO NOT USE CLASS 2 DUCTS.
   5.2. DUCT LINING MATERIAL OWENS/CORNING 1" THICK AEROMAT DUCT LINER. MATERIAL SHALL HAVE A MOLD, HUMIDITY, AND CORROSION RESISTANCE SURFACE.
6. DUCTWORK, PLENUMS AND CASING CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH HVAC METAL DUCT STANDARDS MANUAL (LOW PRESSURE DUCT, 2" STATIC), LATEST EDITION AS ISSUED BY SMACNA AND SHALL CONFORM TO UNIFORM MECHANICAL CODE. MATERIAL SHALL BE GALVANIZED SHEET METAL.
7. SHEET METAL ROUND AND FLAT OVAL DUCT SHALL BE GALVANIZED SHEET METAL CONSTRUCTED PER SMACNA STANDARD.
8. FLEXIBLE DUCTWORK SHALL BE J.P. GENEFLEX, OR EQUAL, INSULATED FLEXIBLE DUCT RATED TO APPROXIMATELY 2" OPERATING PRESSURE FLEXIBLE DUCT SHALL COMPLY WITH UL–181 STANDARDS. USE WITH MANUFACTURER'S APPROVED BAND AND TAPE MATERIALS ONLY. MAXIMUM ALLOWABLE LENGTH SHALL NOT EXCEED 5' TO CONNECT THE DUCTWORK TO THE AIR TERMINAL DEVICES AND SHALL NOT BE USED IN LIEU OF RIGID ELBOW AND FITTING. SUPPORT FLEXIBLE DUCT AT 4 FEET INTERVALS. DUCT HANGERS SHALL BE A MINIMUM OF 1–1/2 INCH WIDE; OTHERWISE, PROVIDE SHEET METAL SADDLE TO COVER ONE–HALF OF DUCT CIRCUMFERENCE.
9. PROVIDE U.L. WALL PENETRATION ASSEMBLY FOR RATED WALLS FOR DUCTWORK PER U.L. SYSTEM NO. W–L–7042 & W–L–7040
10. COORDINATE EXACT LOCATION OF CUTTING OF FLOOR SLAB, ROOF OR WALLS WITH THE GENERAL CONTRACTOR.
11. ALL CONTROL SYSTEM WIRING, CONDUCTORS, TERMINATION FOR ALL MECH., SHALL BE PROVIDED AND INSTALLED BY MECH. CONTRACTOR. ALL LINE VOLTAGE WIRING, CONDUIT, BREAKERS, AND ROUGH–IN SHALL BE PERFORMED BY ELECTRICAL CONTRACTOR.
12. ALL AIR SYSTEMS SHALL BE BALANCED BY A QUALIFIED MECHANICAL CONTRACTOR, USING AABC, SMACNA, OR NEBB PROCEDURES. TESTING AND BALANCING SHALL BE PER REQUIREMENTS OF CMC SECTION 5.410.4.
13. PROVIDE PERMANENT ENGRAVED PLASTIC NAME PLATE FOR ALL EQUIPMENT'S INSTALLED, INDICATING THE PLAN DESIGNATION OF THE UNIT AND THE BUILDING AREA SERVED.
14. CONTRACTOR SHALL VERIFY ALL WORK CONDITIONS PRIOR TO COMMENCING WORK, INCLUDING, BUT NOT LIMITED TO DIMENSIONS, EQUIPMENT, STRUCTURAL ELEMENTS AND MATERIALS INDICATED AS EXISTING, AS WELL AS THE COORDINATED INSTALLATION OF ALL NEW WORK, MATERIALS, EQUIPMENT, ETC. COORDINATE THE LOCATION OF ALL ROOF MOUNTED EQUIPMENT WITH THE STRUCTURAL ENGINEER.
15. ALL EXTERIOR LOUVERS SHALL HAVE CORROSION RESISTANT PROTECTIVE SCREENS HAVING NOT LESS THAN 1/4" OPENINGS AND NOT MORE THAN 1/2" OPENINGS. CLOTHES DRYER VENTS ARE EXCLUDED.
16. ALL DUCTED FAN COIL UNITS AND ROOFTOP PACKAGED UNITS SHALL HAVE A MINIMUM OF MERV 13 (80% EFFICIENT) FILTERS.

2022 CAL Green Non-Residential Mandatory Measures

TESTING & ADJUSTING OF THE HVAC SYSTEM, SEC 5.410.4: PERFORM THE FOLLOWING TEST ON AC UNITS:

1. CHECK THE SUPPLY FAN AND VERIFY THE THE PROPER ROTATION ON THE FAN.
2. SET THE MOTOR RPM TO THE FULL CAPACITY AND VERIFY THAT THE MOTOR'S AMP DRAW DOES NOT EXCEED THE SPECIFIED VALUE BY THE MANUFACTURER.
3. CHECK THE REFRIGERANT SYSTEM AND VERIFY THAT THE REFRIGERANT CHARGE IS AT THE ACCEPTABLE LEVEL BY THE MANUFACTURER'S RECOMMENDATION. RUN THE UNIT AND VERIFY THE OPERATION OF THE ECONOMIZER AND ALL OTHER COMPONENTS.
4. THE SYSTEM SHALL BE BALANCED IN ACCORDANCE WITH THE PROCEDURES DEFINED BY THE TESTING ADJUSTING AND BALANCING BUREAU NATIONAL STANDARDS; THE NATIONAL ENVIRONMENTAL BALANCING BUREAU PROCEDURAL STANDARDS; OR ASSOCIATED AIR BALANCE COUNCIL NATIONAL STANDARDS.
5. AFTER COMPLETION OF TESTING, ADJUSTING AND BALANCING, PROVIDE A FINAL REPORT OF TESTING SIGNED BY THE INDIVIDUAL RESPONSIBLE FOR PERFORMING THESE SERVICES.
6. PROVIDE THE BUILDING OWNER WITH DETAILED OPERATING AND MAINTENANCE INSTRUCTIONS AND COPIES OF GUARANTIES/WARRANTIES FOR EACH SYSTEM.

COVERING OF DUCT OPENINGS, SEC 5.504.3:

1. AT THE TIME OF ROUGH INSTALLATION, OR DURING THE STORAGE ON THE CONSTRUCTION SITE AND UNTIL FINAL STARTUP OF THE HEATING AND COOLING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, OR SHEETMETAL.

FILTERS, SEC 5.504.5.3:

1. IN MECHANICALLY VENTILATED BUILDINGS, PROVIDE REGULARLY OCCUPIED AREAS OF THE BUILDING WITH AIR FILTRATION MEDIA FOR OUTSIDE AND RETURN AIR PRIOR TO OCCUPANCY THAT PROVIDES AT LEAST A MINIMUM EFFICIENCY REPORTING VALUE (MERV) OF 13.

FAN COIL UNIT SCHEDULE

	System Tag	System 1	System 1	System 1	System 1	System 1	System 1	System 1	System 1	System 1	System 1	System 1	System 1	System 1	System 1	System 1	System 1	System 1	System 1	System 1	System 1	System 1
	Tag Reference	FC-1	FC-2	FC-3	FC-4	FC-5	FC-6	FC-7	FC-8	FC-9	FC-10	FC-11	FC-12	FC-13	FC-14	FC-15	FC-16	FC-17	FC-18	FC-19	FC-20	FC-21	FC-22
Nominal Data	Room Name	Payroll	Payroll	Accounting	Training	SDS Coordinator	Accounts Payable	Accounts Recievable	Main Entrance	Superintendent	Admin.	Finance Director	Business Rm	Ass. Superintendent	Mail/Kitchenette	DOAS South/East	DOAS North/East	Employee Lounge	Dir. Student Services	Office 1	Office 2	Student Services	DOAS North/West
	Model	TPKFYP004LM140A	TPKFYP004LM140A	TPKFYP004LM140A	TPKFYP004LM140A	TPKFYP004LM140A	TPKFYP004LM140A	TPKFYP004LM140A	TPKFYP024KM142A	TPKFYP018LM140A	TPKFYP004LM140A	TPKFYP004LM140A	TPKFYP018LM140A	TPKFYP006LM140A	TPKFYP004LM140A	TPEFYP018MH142A	TPEFYP015MH142A	TPKFYP018LM140A	TPKFYP018LM140A	TPKFYP004LM140A	TPKFYP004LM140A	TPKFYP024KM142A	TPEFYP018MH142A
	Type	Wall -Mounted	Wall -Mounted	Wall -Mounted	Wall -Mounted	Wall -Mounted	Wall -Mounted	Wall -Mounted	Wall -Mounted	Wall -Mounted	Wall -Mounted	Wall -Mounted	Wall -Mounted	Wall -Mounted	Wall -Mounted	Ceiling-Concealed (Ducted)	Ceiling-Concealed (Ducted)	Wall -Mounted	Wall -Mounted	Wall -Mounted	Wall -Mounted	Wall -Mounted	Ceiling-Concealed (Ducted)
	Nominal Cooling Capacity (BTU/h)	4,000	4,000	4,000	4,000	4,000	4,000	4,000	24,000	18,000	4,000	4,000	18,000	6,000	4,000	18,000	15,000	18,000	18,000	4,000	4,000	24,000	18,000
	Nominal Heating Capacity (BTU/h)	4,500	4,500	4,500	4,500	4,500	4,500	4,500	27,000	20,000	4,500	4,500	20,000	6,700	4,500	20,000	17,000	20,000	20,000	4,500	4,500	27,000	20,000
Design Conditions	Cooling Design Entering Temp DB/WB (°F)	80.0/67.0	80.0/67.0	80.0/67.0	80.0/67.0	80.0/67.0	80.0/67.0	80.0/67.0	80.0/67.0	80.0/67.0	80.0/67.0	80.0/67.0	80.0/67.0	80.0/67.0	80.0/67.0	80.0/67.0	80.0/67.0	80.0/67.0	80.0/67.0	80.0/67.0	80.0/67.0	80.0/67.0	80.0/67.0
	Heating Design Entering Temp DB/WB (°F)	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
	Cooling Diversity Full/Partial (See Note 5, 6)	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND
	Heating Diversity Full/Partial (See Note 5, 6)	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND	FULL DEMAND
	Refrig Pipe Dim Liquid/Suction (inch)	1/4 / 1/2	1/4 / 1/2	1/4 / 1/2	1/4 / 1/2	1/4 / 1/2	1/4 / 1/2	1/4 / 1/2	3/8 / 5/8	1/4 / 1/2	1/4 / 1/2	1/4 / 1/2	1/4 / 1/2	1/4 / 1/2	1/4 / 1/2	1/4 / 1/2	1/4 / 1/2	1/4 / 1/2	1/4 / 1/2	1/4 / 1/2	1/4 / 1/2	3/8 / 5/8	1/4 / 1/2
Performance Data	Cooling Total Capacity (BTU/h)	4,009.1	4,009.1	4,009.1	4,009.1	4,009.1	4,009.1	4,009.1	24,054.9	18,041.1	4,009.1	4,009.1	18,041.1	6,013.7	4,009.1	18,041.1	15,034.3	18,041.1	18,041.1	4,009.1	4,009.1	24,054.9	18,041.1
	Cooling Sensible Capacity (BTU/h)	2,905.9	2,905.9	2,905.9	2,905.9	2,905.9	2,905.9	2,905.9	19,630.8	12,131.2	2,905.9	2,905.9	12,131.2	4,259.6	2,905.9	12,122.5	10,724.3	12,131.2	12,131.2	2,905.9	2,905.9	19,630.8	12,122.5
	Heating Capacity (BTU/h)	4,496.7	4,496.7	4,496.7	4,496.7	4,496.7	4,496.7	4,496.7	26,980.4	19,985.5	4,496.7	4,496.7	19,985.5	6,695.1	4,496.7	19,985.5	16,987.6	19,985.5	19,985.5	4,496.7	4,496.7	26,980.4	19,985.5
Fan / Water Flow Data	Fan Speed Setting	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
	Fan Airflow (cfm)	148	148	148	148	148	148	148	918	438	148	148	438	191	148	494	494	438	438	148	148	918	494
	Max Fan ESP Setting 208V/230V (IN WG)															1.0/1.0	1.0/1.0						1.0/1.0
Electrical Data	Voltage / Phase	208/230V/1-phase	208/230V/1-phase	208/230V/1-phase	208/230V/1-phase	208/230V/1-phase	208/230V/1-phase	208/230V/1-phase	208/230V/1-phase	208/230V/1-phase	208/230V/1-phase	208/230V/1-phase	208/230V/1-phase	208/230V/1-phase	208/230V/1-phase	208/230V/1-phase	208/230V/1-phase	208/230V/1-phase	208/230V/1-phase	208/230V/1-phase	208/230V/1-phase	208/230V/1-phase	208/230V/1-phase
	Electrical MCA/MFS	0.24/0.24/15	0.24/0.24/15	0.24/0.24/15	0.24/0.24/15	0.24/0.24/15	0.24/0.24/15	0.24/0.24/15	0.63(208V)/0.63(230V)/15	0.24/0.24/15	0.24/0.24/15	0.24/0.24/15	0.24/0.24/15	0.24/0.24/15	0.24/0.24/15	1.63(208V)/1.50(230V)/	1.63(208V)/1.50(230V)/	0.24/0.24/15	0.24/0.24/15	0.24/0.24/15	0.24/0.24/15	0.63(208V)/0.63(230V)/15	1.63(208V)/1.50(230V)/
Notes / Options	Applicable System Notes - See Notes Below	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4

Notes & Options:
1 Nominal cooling capacities are based on indoor coil EAT of 80/67°F (DB/WB), 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 See outdoor unit schedule for outdoor ambient conditions, connected capacity, and other factors associated with corrected capacities
4 See schematic piping/control diagram for indication of required indoor unit remote controllers, system controllers, and integration devices.
5 Full demand corrected capacity includes de-rate associated with indoor vs. outdoor connected capacity indicated on outdoor unit schedule for associated system.
Partial corrected capacity assumes sufficient diversity exists such that the connected capacity de-rate does not apply.
It is the designer's responsibility to ensure "Diamond System Builder" is set in the appropriate output capacity setting (full demand/partial demand) prior to generating this schedule.
6 It is recommended to always base heating corrected capacity on full demand.

REVISIONS	BY

ENGINEERING NETWORK
· CONSULTING ENGINEER ·
18 JULIE HIGHLANDS CT. LAFAYETTE, CA 94549
PH. (925) 370-6191

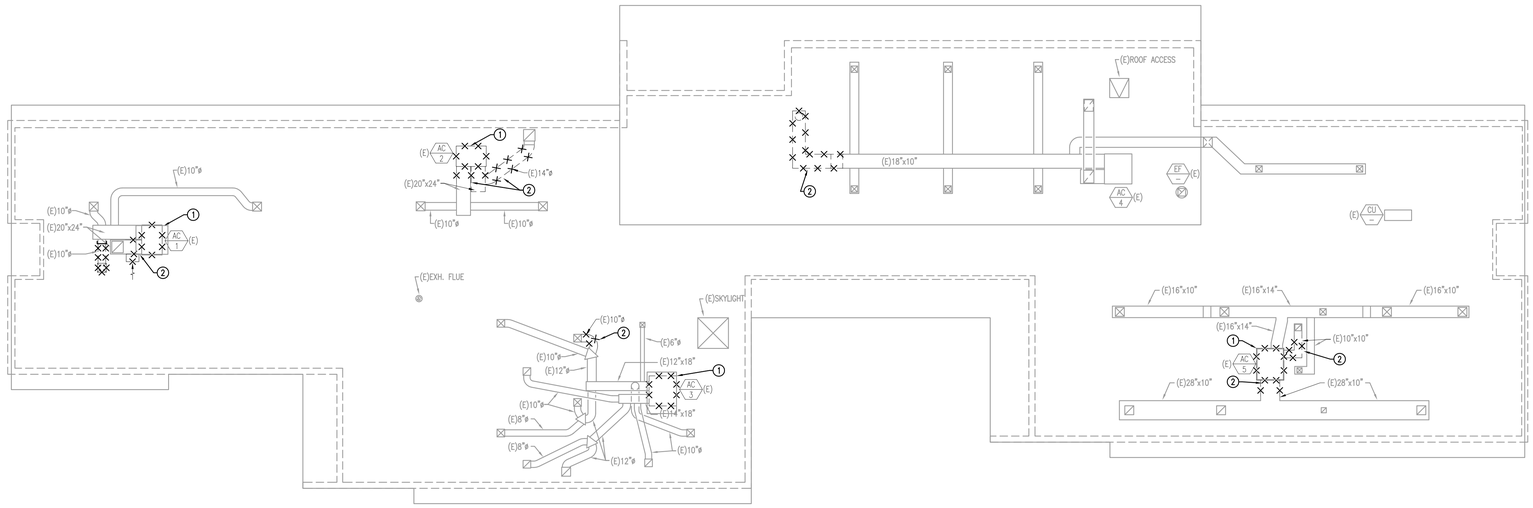
REGISTERED PROFESSIONAL ENGINEER
MARQUIS T INDUZAN
No. M26662
Exp. 9-30-24
MECHANICAL
STATE OF CALIFORNIA

Sheet Title: MECHANICAL NOTES, LEGEND, SCHEDULES, and DETAILS

Project: PITTSBURG UNIFIED SCHOOL DISTRICT
ADMINISTRATIVE OFFICES HVAC UPGRADE
2000 RAILROAD AVE.
PITTSBURG, CALIFORNIA

Date	01/31/24
Scale	AS SHOWN
Drawn	TCD
Job	24005

Sheet No. M1.0
Of Sheets

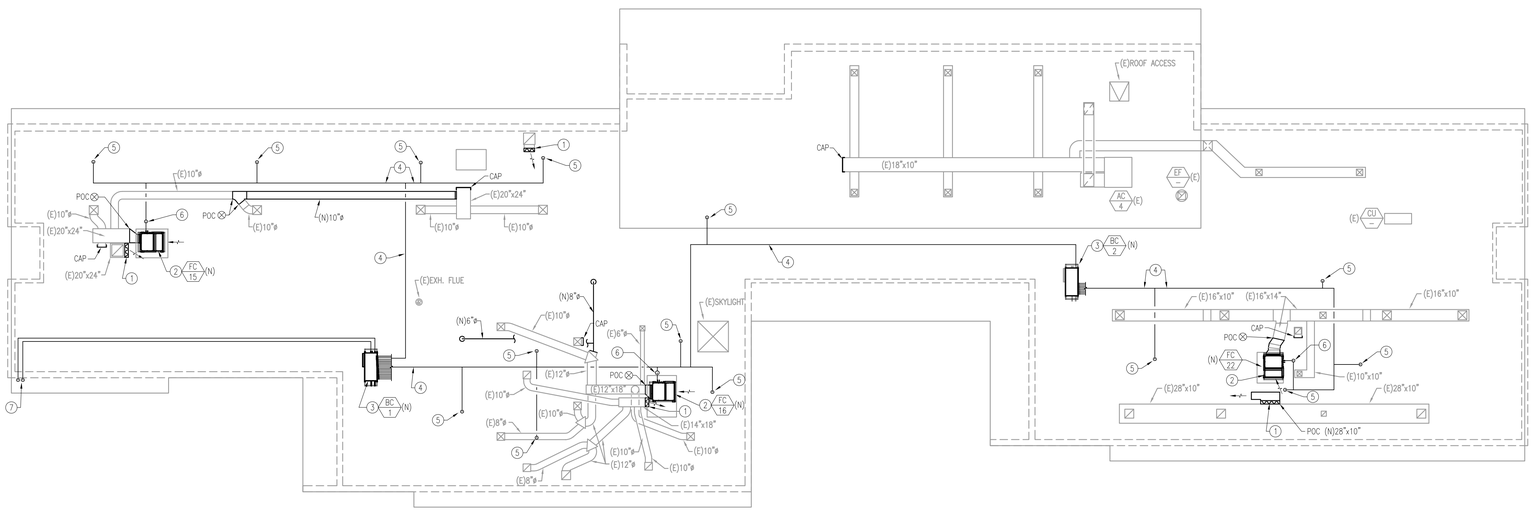


DEMO SHEET NOTES:

1. DEMOLISH EXISTING ROOFTOP MECHANICAL UNIT.
2. DEMOLISH EXISTING DUCTWORK WHERE INDICATED

1 MECHANICAL ROOF PLAN - DEMO

SCALE: 1/8" = 1'-0"



NEW SHEET NOTES:

1. INSTALL BACKDRAFT DAMPER INSIDE THE EXISTING DUCT WITH A GOOSENECK AT THE DUCT DISCHARGE. SEE DETAIL 9 SHEET M4.0
2. INSTALL NEW MECHANICAL EQUIPMENT ON EXISTING PLATFORM. SEE DETAILS 3, 4, & 5 ON SHEET M4.0
3. NEW MECHANICAL EQUIPMENT. SEE DETAILS 3, 7, & 8 ON SHEET M4.0
4. PROPOSED ROUTING FOR THE REFRIGERANT PIPES.
5. EXTEND REFRIGERANT PIPES DOWN INTO THE WALL CAVITY BELOW AND CONNECT TO FAN COIL UNIT. EXTEND CONDENSATE DRAIN PIPE FROM FAN COIL UNIT UP THROUGH THE ROOF AND TERMINATE INTO THE NEAREST ROOF DRAIN.
6. EXTEND REFRIGERANT PIPES UP INTO THE ENCLOSURE AND CONNECT TO FAN COIL UNIT. EXTEND CONDENSATE PIPE FROM FAN COIL UNIT AND TERMINATE INTO THE NEAREST ROOF DRAIN.
7. REFRIGERANT PIPES DOWN. SEE SHEET M3.0 FOR CONTINUATION

2 MECHANICAL ROOF PLAN - NEW

SCALE: 1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
0 4' 8' 16'
NORTH

REVISIONS	BY

ENGINEERING NETWORK
· CONSULTING ENGINEER ·
18 JULIE HIGHLANDS CT. LAFAYETTE, CA 94549
PH: (925) 370-6191

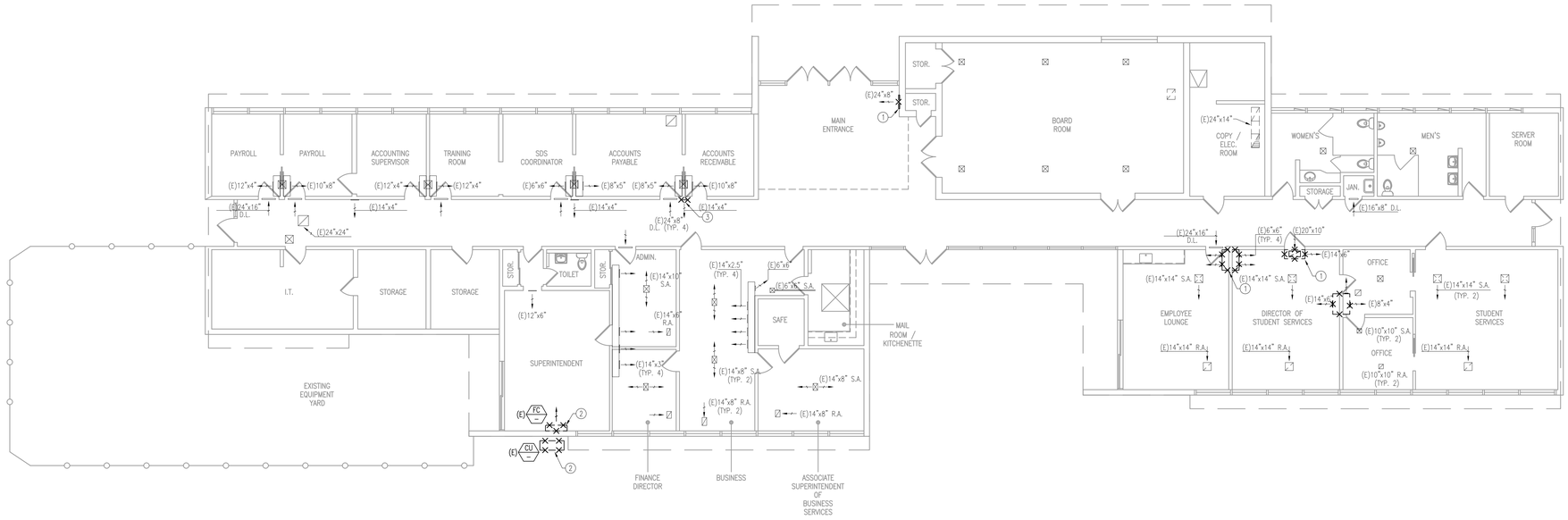
REGISTERED PROFESSIONAL ENGINEER
MARIQUE T. IRIGOYEN
No. M26662
Exp. 9-30-24
MECHANICAL
STATE OF CALIFORNIA

Sheet Title:
MECHANICAL ROOF PLANS

Project:
PITTSBURG UNIFIED SCHOOL DISTRICT
ADMINISTRATIVE OFFICES HVAC UPGRADE
2000 RAILROAD AVE.
PITTSBURG, CALIFORNIA

Date	01/31/24
Scale	AS SHOWN
Drawn	TCD
Job	24005

Sheet No.
M2.0
Of Sheets

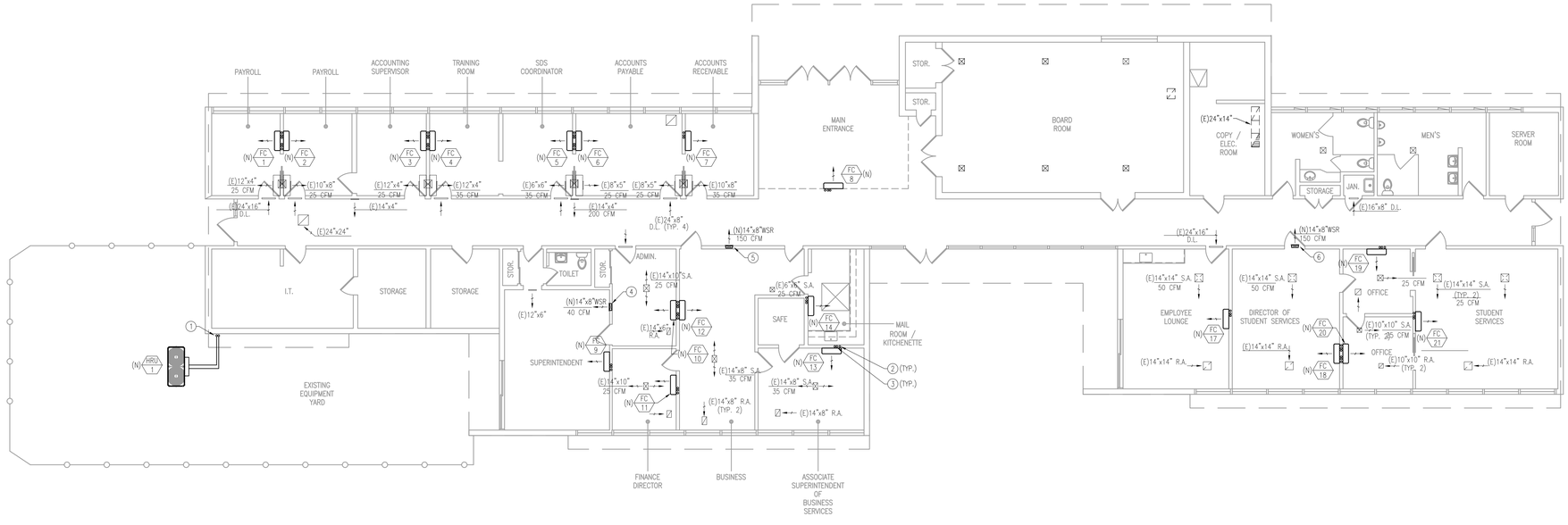


1 MECHANICAL FLOOR PLAN - DEMO

SCALE: 1/8" = 1'-0"

DEMO SHEET NOTES:

1. DEMOLISH EXISTING DUCTWORK.
2. DEMOLISH EXISTING EQUIPMENT
3. CAP EXISTING SUPPLY DIFFUSER



2 MECHANICAL FLOOR PLAN - NEW

SCALE: 1/8" = 1'-0"

NEW SHEET NOTES:

1. REFRIGERATION PIPES UP THROUGH ROOF. SEE SHEET M2.0 FOR CONTINUATION
2. REFRIGERATION PIPES FROM ROOF DOWN INSIDE THE WALL CAVITY. CONNECT TO FC.
3. 3/4" CONDENSATE DRAIN PIPE UP THROUGH THE ROOF.
4. NEW 4"x14" TRANSITION TO 6" ROUND UP TO ROOF. SEE SHEET M2.0 FOR CONTINUATION.
5. NEW 4"x14" TRANSITION TO 8" ROUND UP TO ROOF. SEE SHEET M2.0 FOR CONTINUATION.
6. CONNECT NEW WALL MOUNTED SUPPLY DIFFUSER TO THE EXISTING SUPPLY AIR DUCT.

SCALE: 1/8" = 1'-0"
0 4' 8' 16'

NORTH

REVISIONS	BY

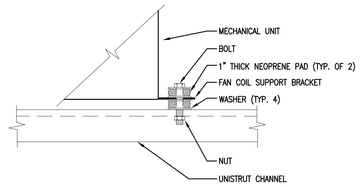
ENGINEERING NETWORK
· CONSULTING ENGINEER ·
18 JULIE HIGHLANDS CT., LAFAYETTE, CA 94549
PH: (925) 370-6191

REGISTERED PROFESSIONAL ENGINEER
MARQUIS T. IRIZARRY
No. M29662
Exp. 9-30-24
MECHANICAL
STATE OF CALIFORNIA

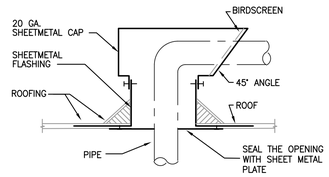
Sheet Title: MECHANICAL FLOOR PLANS

Project: PITTSBURG UNIFIED SCHOOL DISTRICT
ADMINISTRATIVE OFFICES HVAC UPGRADE
2000 RAILROAD AVE.
PITTSBURG, CALIFORNIA

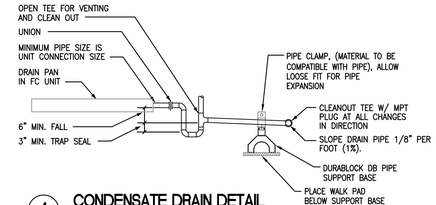
Date	01/31/24
Scale	AS SHOWN
Drawn	TCD
Job	24005
Sheet No.	M3.0
Of	Sheets



3 MECHANICAL UNIT ATTACHMENT DETAIL
NOT TO SCALE



2 PIPE THRU ROOF DETAIL
NOT TO SCALE



1 CONDENSATE DRAIN DETAIL
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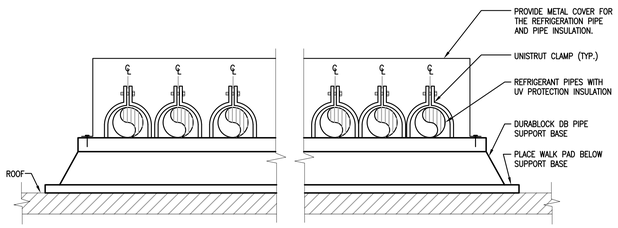
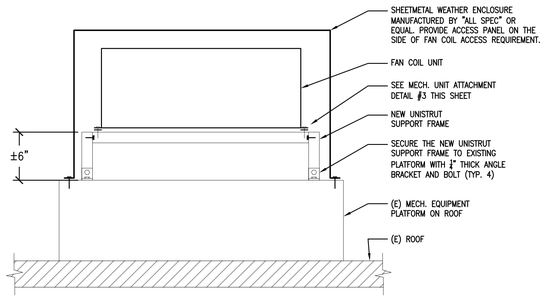
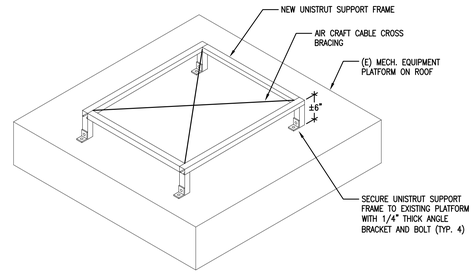


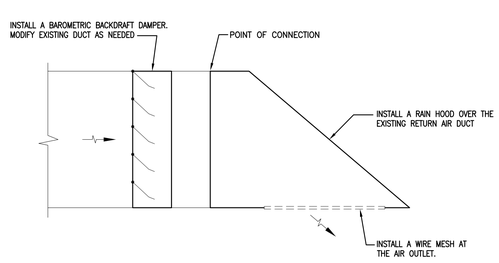
6 PIPE SUPPORT ON ROOF DETAIL
NOT TO SCALE



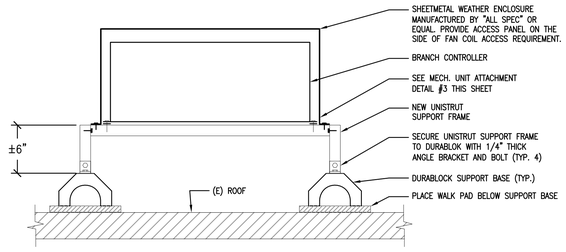
5 OUTSIDE AIR FAN COIL PLATFORM DETAIL
NOT TO SCALE



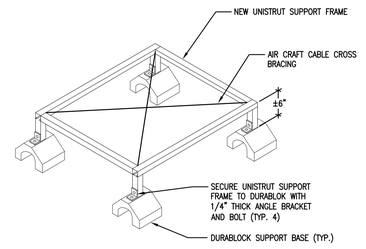
4 OUTSIDE AIR FAN COIL PLATFORM DETAIL
NOT TO SCALE



9 RAIN HOOD DETAIL
NOT TO SCALE



8 OUTSIDE AIR FAN COIL PLATFORM DETAIL
NOT TO SCALE



7 BRANCH CONTROLLER SUPPORT DETAIL
NOT TO SCALE

REVISIONS	BY

ENGINEERING NETWORK
· CONSULTING ENGINEER ·
18 JULIE HIGHLANDS CT. LAFAYETTE, CA 94549
PH. (925) 370-6191

REGISTERED PROFESSIONAL ENGINEER
MARQUIS T. INOUYE
No. M26662
Exp. 9-30-24
MECHANICAL
STATE OF CALIFORNIA

Sheet Title: MECHANICAL DETAILS

Project: PITTSBURG UNIFIED SCHOOL DISTRICT
ADMINISTRATIVE OFFICES HVAC UPGRADE
2000 RAILROAD AVE.
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Date	01/31/24
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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

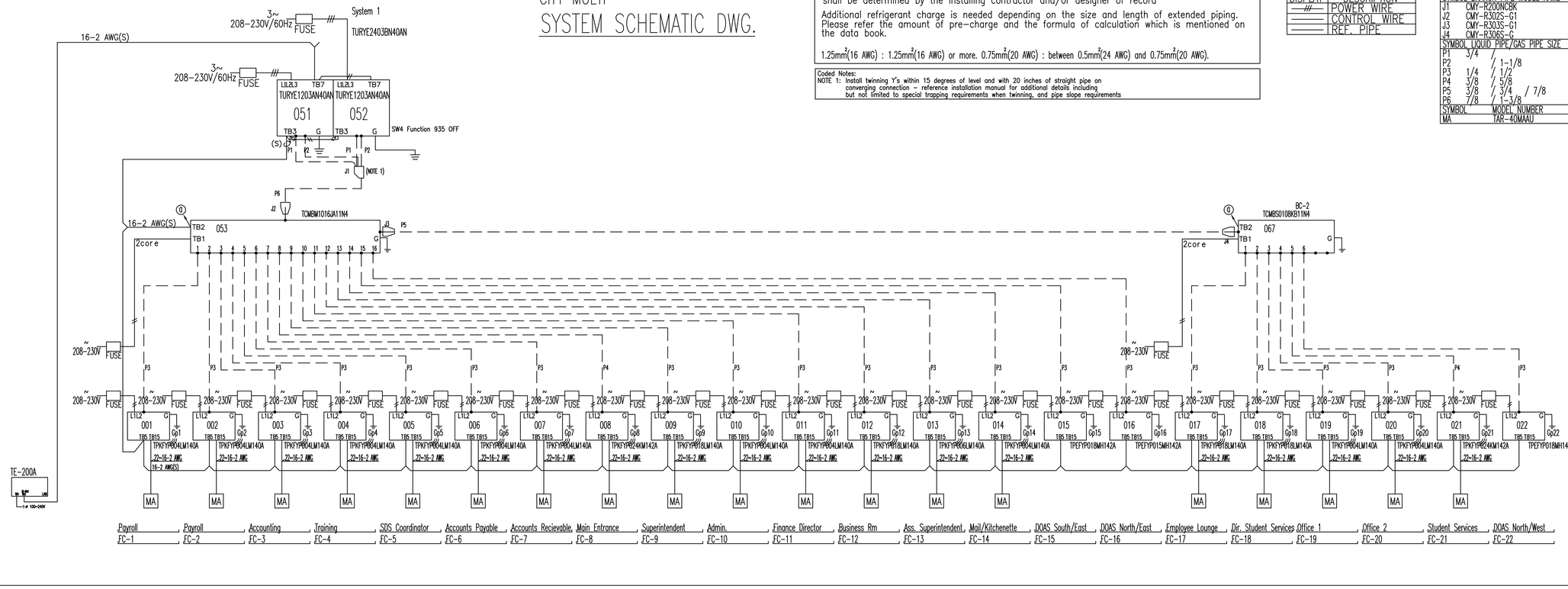
Additional refrigerant charge is needed depending on the size and length of extended piping. Please refer the amount of pre-charge and the formula of calculation which is mentioned on the data book.

1.25mm²(16 AWG) : 1.25mm²(16 AWG) or more. 0.75mm²(20 AWG) : between 0.5mm²(24 AWG) and 0.75mm²(20 AWG).

Coded Notes:
NOTE 1: Install twinning Y's within 15 degrees of level and with 20 inches of straight pipe on converging connection – reference installation manual for additional details including but not limited to special trapping requirements when twinning, and pipe slope requirements

DIAGRAM SYMBOL LEGEND	
DISPLAY	DESCRIPTION
///	POWER WIRE
———	CONTROL WIRE
———	REF. PIPE

PIPING AND CONTROLS	
SYMBOL	BRANCH PIPE MODEL NAME
J1	CMY-R200NCBK
J2	CMY-R302S-G1
J3	CMY-R303S-G1
J4	CMY-R306S-G
SYMBOL	LIQUID PIPE/GAS PIPE SIZE
P1	3/4 /
P2	/ 1-1/8
P3	1/4 / 1/2
P4	3/8 / 5/8
P5	3/8 / 3/4 / 7/8
P6	7/8 / 1-3/8
SYMBOL	MODEL NUMBER
MA	TAR-40MAAU



1 MECHANICAL SYSTEMS PIPING AND WIRING DIAGRAM

NOT TO SCALE

REVISIONS	BY

ENGINEERING NETWORK
· CONSULTING ENGINEER ·
18 JULIE HIGHLANDS CT. LAFAYETTE, CA 94549
PH: (925) 370-6191

REGISTERED PROFESSIONAL ENGINEER
MARQUIS T. IRONZAPE
No. M26662
Exp. 9-30-24
MECHANICAL
STATE OF CALIFORNIA

Sheet Title: MECHANICAL SYSTEMS PIPING AND WIRING DIAGRAM

Project: PITTSBURG UNIFIED SCHOOL DISTRICT
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Sheet No. M5.0
Of Sheets