FAN COIL UNIT SCHEDULE

DESIGNATION	MODEL	SIZE	AREA SERVED	FAN CHARACTERISTICS: CFM	FAN CHARACTERISTICS: OUTSIDE AIR CFM	FAN CHARACTERISTICS: ESP (IN H_2O)	FAN CHARACTERISTICS: HP	ELECTRICAL: VOLTS/Ø	ELECTRICAL: FLA/MCA	ELECTRICAL: MOCP	COOLING CHARACTERISTICS: TOTAL CAP. (BTUH)	COOLING CHARACTERISTICS: SENS. CAP. (BTUH)	COOLING CHARACTERISTICS: EAT (DB/WB)	COOLING CHARACTERISTICS: LAT (DB/WB)	COOLING CHARACTERISTICS: EWT/LWT	COOLING CHARACTERISTICS: PD (FT. H_2O)	COOLING CHARACTERISTICS: NO. OF ROWS/FPI	COOLING CHARACTERISTICS: FLOW RATE (GPM)	HEATING CHARACTERISTICS: SENS. CAP. (BTUH)	HEATING CHARACTERISTICS: EAT/LAT (DB)	HEATING CHARACTERISTICS: EWT/LWT	HEATING CHARACTERISTICS: PD (FT. H_2O)	HEATING CHARACTERISTICS: NO. OF ROWS/FPI	HEATING CHARACTERISTICS: FLOW RATE (GPM)	FILTER DATA: TYPE
FCU-1A	BCHE	12	REFER TO PLANS	400	65	0.75	½	208/3	2.4/3.0	15	9,010	7,500	71.90/61.70	54.84/53.91	45.0/55.0	0.64	6/10	1.9	14,920	67/100.49	200/151.87	0.10	1/10	0.59	NA
FCU-2A	BCHE	24	REFER TO PLANS	600	310	0.75	½	208/3	2.4/3.0	15	15,430	11,910	71.90/61.70	53.81/52.70	45.0/55.0	2.21	6/10	3.3	22,650	67/101.94	200/139.40	0.16	1/10	0.75	NA
FCU-2B	BCHE	24	REFER TO PLANS	600	140	0.75	½	208/3	2.4/3.0	15	15,430	11,910	71.90/61.70	53.81/52.70	45.0/55.0	2.21	6/10	3.3	22,650	67/101.94	200/139.40	0.16	1/10	0.75	NA
FCU-3A	BCHE	24	REFER TO PLANS	700	340	0.75	½	208/3	2.40/3.0	15	17,570	13,380	72.0/61.90	54.58/53.18	45.0/55.0	2.90	6/10	3.9	26,790	67/102.45	200/144.08	0.25	1/10	0.9	NA
FCU-3B	BCHE	24	REFER TO PLANS	700	360	0.75	½	208/3	2.40/3.0	15	17,570	13,380	72.0/61.90	54.58/53.18	45.0/55.0	2.90	6/10	3.9	26,790	67/102.45	200/144.08	0.25	1/10	0.9	NA
FCU-3C	BCHE	24	REFER TO PLANS	700	375	0.75	½	208/3	2.40/3.0	15	17,570	13,380	72.0/61.90	54.58/53.18	45.0/55.0	2.90	6/10	3.9	26,790	67/102.45	200/144.08	0.25	1/10	0.9	NA
FCU-3D	BCHE	24	REFER TO PLANS	700	145	0.75	½	208/3	2.40/3.0	15	17,570	13,380	72.0/61.90	54.58/53.18	45.0/55.0	2.90	6/10	3.9	26,790	67/102.45	200/144.08	0.25	1/10	0.9	NA
FCU-4A	BCHE	36	REFER TO PLANS	900	410	0.75	½	208/3	2.40/3.0	15	22,560	16,810	72.20/62.60	55.20/54.04	45.0/55.0	3.90	4/10	4.8	33,580	67/101.50	200/124.82	0.29	1/10	0.9	NA
FCU-5A	BCHE	36	REFER TO PLANS	950	500	0.75	½	208/3	2.40/3.0	15	21,540	17,510	71.90/61.70	55.11/53.86	45.0/55.0	3.66	4/10	4.6	35,530	67/101.59	200/126.48	0.33	1/10	0.9	NA
FCU-5B	BCHE	36	REFER TO PLANS	950	435	0.75	½	208/3	2.40/3.0	15	21,540	17,510	71.90/61.70	55.11/53.86	45.0/55.0	3.66	4/10	4.6	35,530	67/101.59	200/126.48	0.33	1/10	0.9	NA
FCU-6A	BCHE	36	REFER TO PLANS	1000	500	0.75	½	208/3	2.40/3.0	15	22,510	18,230	72.0/61.80	55.39/54.03	45.0/55.0	4.00	4/10	4.9	37,540	67/101.73	200/128.23	0.38	1/10	1.0	NA
FCU-6B	BCHE	36	REFER TO PLANS	1000	460	0.75	½	208/3	2.40/3.0	15	22,510	18,230	72.0/61.80	55.39/54.03	45.0/55.0	4.00	4/10	4.9	37,540	67/101.73	200/128.23	0.38	1/10	1.0	NA
FCU-7A	BCHE	36	REFER TO PLANS	1100	505	0.75	1	208/3	4.60/5.75	15	24,410	19,890	72.20/61.90	55.73/54.27	45.0/55.0	4.66	4/10	5.3	41,360	67/101.79	200/131.93	0.49	1/10	1.2	NA

NOTES:

1. 4-PIPE FAN COIL UNITS SHALL BE BASED ON TRANE.
2. ALL FAN COIL UNITS SHALL BE UL LISTED AND LABELED.
3. FAN COIL UNIT CONTROLS SHALL BE BY AUTOMATIC TEMPERATURE CONTROLS CONTRACTOR.
4. MECHANICAL CONTRACTOR TO CONFIRM COIL SIDE CONNECTIONS IN FIELD PRIOR TO ORDERING.
5. EACH FAN COIL UNIT SHALL BE PROVIDED WITH: DISCONNECT SWITCH, INLET/OUTLET FLEXIBLE CONNECTIONS, RUBBER-IN SHEAR VIBRATION ISOLATORS, 1-INCH MATTE FACED INSULATION, STAINLESS STEEL DRAIN PAN, STAINLESS STEEL AUXILIARY DRAIN PAN, AND ELECTRONICALLY COMMUTATED MOTORS .
6. HOT WATER COILS SHALL BE IN THE REHEAT POSITION.

MINIMUM HANGER SIZES FOR RECTANGULAR DUCT

MINIMUM HALF OF DUCT PERIMETER	PAIR AT 10Ft SPACING: STRAP	PAIR AT 10Ft SPACING: ROD	PAIR AT 8Ft SPACING: STRAP	PAIR AT 8Ft SPACING: ROD	PAIR AT 5Ft SPACING: STRAP	PAIR AT 5Ft SPACING: ROD	PAIR AT 4Ft SPACING: STRAP	PAIR AT 4Ft SPACING: ROD
P/2 = 30"	1" x 22ga	¼"	1" x 22ga	¼"	1" x 22ga	¼"	1" x 22ga	¼"
P/2 = 72"	1" x 18ga	⅜"	1" x 20ga	¼"	1" x 22ga	¼"	1" x 22ga	¼"
P/2 = 96"	1" x 16ga	⅜"	1" x 18ga	⅜"	1" x 20ga	⅜"	1" x 22ga	⅜"
P/2 = 120"	1½" x 16ga	½"	1" x 16ga	⅜"	1" x 18ga	⅜"	1" x 20ga	⅜"
P/2 = 168"	1½" x 16ga	½"	1" x 16ga	½"	1" x 16ga	⅜"	1" x 18ga	⅜"
P/2 = 192"	-	-	1" x 16ga	½"	1" x 16ga	⅜"	1" x 18ga	⅜"

WHEN STRAPS ARE LAP JOINED USE THESE MINIMUM FASTENERS:

1" x 18, 20, 22ga - ON ¼" BOLT
1" X 16ga - TWO ¼" Dia.
1" X 16ga - TWO ⅜" Dia.

PLACE FASTENERS IN SERIES, NOT SIDE BY SIDE.

SINGLE HANGER MAXIMUM ALLOWABLE LOAD

STRAP	ROD (Dia.)
1" x 22ga - 260Lbs.	¼" - 270Lbs.
1" x 20ga - 32Lbs.	⅜" - 680Lbs.
1" x 18ga - 420Lbs.	½" - 1250Lbs.
1" x 16ga - 700Lbs.	⅝" - 2000Lbs.
1½" x 16ga - 1100Lbs.	¾" - 3000Lbs.

NOTES:

1. DIMENSIONS OTHER THAN GAUGE ARE IN INCHES.
2. TABLES ALLOW FOR DUCT WEIGHT, 1 LB./SF. INSULATION WEIGHT AND NORMAL REINFORCEMENT AND TRAPEZE WEIGHT, BUT NO EXTERNAL LOADS.
3. STRAPS ARE GALVANIZED STEEL.
4. ALLOWABLE LOADS FOR P/2 ASSUME THAT DUCTS ARE 16 GA. MAXIMUM, EXCEPT WHEN MAXIMUM DUCT DIMENSION (W) IS OVER 60" THEN P/2 MAXIMUM IS 1.25 W.

PIPE HANGER SCHEDULE

PIPE SIZE (INCHES)	MAXIMUM HORIZONTAL SPACING (FEET): COPPER TUBE	MAXIMUM HORIZONTAL SPACING (FEET): STEEL PIPE	MAXIMUM HORIZONTAL SPACING (FEET): PVC PIPE	SINGLE STEEL ROD HANGER SIZE (INCHES): TUBING	SINGLE STEEL ROD HANGER SIZE (INCHES): PIPING	HANGER TYPE STEEL	MAXIMUM VERTICAL SPACING (FEET): COPPER TUBE	MAXIMUM VERTICAL SPACING (FEET): STEEL PIPE	MAXIMUM VERTICAL SPACING (FEET): PVC PIPE
½"	6	8	4	¼"	⅜"	BAND	10	15	10
¾"	6	8	4	¼"	⅜"	BAND	10	15	10
1"	6	8	4	¼"	⅜"	BAND	10	15	10
1¼"	6	9	4	¼"	⅜"	CLEVIS	10	15	10
1½"	6	9	4	¼"	⅜"	CLEVIS	10	15	10
2"	10	10	4	¼"	⅜"	CLEVIS	10	15	10
2½"	10	12	4	⅜"	½"	CLEVIS	10	15	10
3"	10	12	4	⅜"	½"	CLEVIS	10	15	10
4"	—	12	4	½"	⅝"	CLEVIS OR ROLLER	—	15	10
6"	—	12	—	—	¾"	CLEVIS OR ROLLER	—	15	—

NOTES:

1. INSTALL HANGER OR SUPPORT CLOSE TO THE POINT OF CHANGE OF DIRECTION IN ALL PIPE RUNS.
2. INSTALL ADDITIONAL HANGERS ON SUPPORTS AT CONCENTRATED LOADS.
3. SUPPORT ALL BRANCH PIPING OVER 5'-0" IN LENGTH.
4. USE ROLLER TYPE HANGERS (MSS TYPE 41) WHERE PIPING IS SUBJECT TO MOVEMENT CAUSED BY EXPANSION AND CONTRACTION.
5. HANGERS AND ANCHORS SHALL BE ATTACHED TO THE BUILDING CONSTRUCTION IN AN APPROVED MANNER.
6. PIPING SHALL BE SUPPORTED AT DISTANCES NOT EXCEEDING THE SPACING SPECIFIED IN SCHEDULE OR IN ACCORDANCE WITH MSS SP-69.

MECHANICAL PIPING MATERIAL SCHEDULE

SERVICE	SIZE (IN)	MATERIAL	TYPE/WEIGHT	STANDARD
HOT & CHILLED WATER	3" & DOWN	COPPER	HARD DRAWN TYPE L TUBING	ASTM B 88
HOT & CHILLED WATER	4" & UP	BLACK STEEL	SCHEDULE 40	ASTM A 53
INTERIOR CONDENSATE & CONDENSATE PUMP DISCHARGE	ALL	COPPER	HARD DRAWN TYPE L TUBING	ASTM B 88
CONDENSATE DRAIN (EXTERIOR)	ALL	PVC	SCHEDULE 40 DWV	ASTM D 2665
REFRIGERANT	ALL	COPPER	HARD OR ANNEALED TYPE ACR	ASTM B 280

MECHANICAL PIPING FITTING SCHEDULE

SERVICE	SIZE (IN)	MATERIAL	TYPE/WEIGHT	STANDARD
HOT & CHILLED WATER	3" & DOWN	WROUGHT COPPER	LEAD-FREE SOLDER ASTM B828	ASME B 16.22
HOT & CHILLED WATER	4" & UP	CARBON STEEL	BUTT WELDED OR FLANGED	ASME B 16.9 / ASME 234
INTERIOR CONDENSATE & CONDENSATE PUMP DISCHARGE	ALL	WROUGHT COPPER	SOLDER	ASME B 16.22
CONDENSATE DRAIN (EXTERIOR)	ALL	PVC	SCHEDULE 40 DWV SOLVENT CEMENT	ASTM D 3034 ASTM D 2855
REFRIGERANT	ALL	COPPER	SILVER SOLDER 300 PSI	ANSI B 16.22

NOTES:

1. ALL WORK ASSOCIATED WITH AUTOMATIC TEMPERATURE CONTROLS SHALL BE PERFORMED BY THE AUTOMATIC TEMPERATURE CONTROLS CONTRACTOR DIRECT TO THE SCHOOL DISTRICT. AUTOMATIC TEMPERATURE CONTROLS CONTRACTOR SHALL SUPPLY AND TURNOVER CONTROLS ELEMENTS REQUIRED TO BE INSTALLED IN PIPING AND/OR DUCTWORK TO THE MECHANICAL CONTRACTOR WHO SHALL BE RESPONSIBLE FOR INSTALLING THE CONTROL ELEMENTS. MECHANICAL CONTRACTOR SHALL COORDINATE.
2. VERIFY ALL FINISH COLORS WITH ARCHITECT PRIOR TO ORDERING FOR ALL EQUIPMENT VISIBLE WITHIN SPACE OR FROM EXTERIOR OF BUILDING. ALL EQUIPMENT SHALL BE FINISHED USING MANUFACTURER'S FULL RANGE OF STANDARD AND CUSTOM COLORS/FINISHES UNLESS OTHERWISE NOTED.
3. MECHANICAL CONTRACTOR SHALL PROVIDE A DELEGATED DESIGN FOR WIND RESTRAINT OF ALL ROOF MOUNTED MECHANICAL EQUIPMENT. REFER TO WIND DESIGN DATA ON DRAWING S001.

MECHANICAL EQUIPMENT SCHEDULE

SYMBOL	MANUFACTURER	CATALOG #	DESCRIPTION
CD-A	KRUEGER	1400	STEEL HIGH PERFORMANCE CEILING DIFFUSER. MAXIMUM CORE VELOCITY: 550 FPM. MAXIMUM NOISE CRITERIA: 15 NC. SURFACE MOUNTED WITH FRAMES AND BORDERS SUITABLE FOR THE CONSTRUCTION IN WHICH THEY WILL BE INSTALLED, CONTRACTOR TO COORDINATE. BAKED ENAMEL FINISH, COLOR SELECTED BY ARCHITECT. 4-WAY DEFLECTION. 24" x 24" MODULE SIZE. ALL DIFFUSERS SHALL BE EQUIPPED WITH OPPOSED BLADE VOLUME DAMPER. CFM RANGE: → NECK SIZE: 0-100 → 6"Ø 101-200 → 8"Ø 201-300 → 10"Ø 301-450 → 12"Ø 451-650 → 14"Ø
SD	RUSKIN	SD60	CONSTRUCTED AND INSTALLED ACCORDING TO NFPA90A AND UL LABELS. UL 555S OPPOSED AIRFOIL BLADE DAMPER, HIGH PERFORMANCE AND LOW LEAKAGE CLASS 1. DAMPER SHALL BE RATED FOR DYNAMIC AIRFLOW CONDITIONS OF 4,000 FPM AND 8.0" SP. FURNISH UL RATED ELECTRIC DAMPER ACTUATOR AND CONTROL SWITCHES AS REQUIRED. FURNISH WITH FACTORY WELDED INTEGRAL WALL SLEEVE, FRAME MOUNTING ANGLES, G STYLE WITH ¾" MOUNTING FLANGE, AND EITHER DUCTMATE OR SLIP DRIVE BREAK AWAY CONNECTIONS. 120V/1Ø/60Hz; 0.25 AMPS; 23 WATTS. COORDINATE ROTATION IN FIELD. PROVIDE DISCONNECT, DAMPER TEST SWITCH, AND END SWITCH. SMOKE DETECTOR PROVIDED BY OTHERS, INSTALLED BY MECHANICAL CONTRACTOR IN DUCTWORK.
ER-A RR-A	KRUEGER	S80H	STEEL RETURN REGISTER WITH ¾" FIXED BLADE SPACING. MAXIMUM CORE VELOCITY: 500 FPM. MAXIMUM NOISE CRITERIA: 25 NC. SURFACE MOUNTED 35° FIXED DEFLECTION BLADES. BLADES PARALLEL TO LONG DIMENSION UNLESS OTHERWISE NOTED. BAKED ENAMEL FINISH, COLOR SELECTED BY ARCHITECT. REGISTERS SHALL HAVE FRAMES AND BORDERS SUITABLE FOR THE CONSTRUCTION IN WHICH THEY WILL BE INSTALLED, CONTRACTOR TO COORDINATE. REGISTERS SHALL BE PROVIDED WITH OPPOSED BLADE VOLUME DAMPERS. UNLESS OTHERWISE NOTED ON PLANS REGISTERS AND GRILLES SHALL BE SIZED PER SCHEDULE. CFM RANGE: → NECK SIZE: 0-150 → 8"x8" 151-250 → 10"x10" 251-360 → 12"x12" 361-725 → 18"x18" 726-1125 → 24"x24"
RR-B	KRUEGER	S580H	ALUMINUM RETURN GRILLE WITH 3/4" BLADE SPACING. MAXIMUM CORE VELOCITY: 350 FPM. MAXIMUM NOISE CRITERIA: 25NC. GRILLE SHALL HAVE 2" FILTER FRAME WITH 1/4 TURN FASTENER. FINISH, COLOR SELECTED BY ARCHITECT. 4-WAY DEFLECTION. 23.75" x 23.75 MODULE SIZE WITH 20" x 20" NOMINAL DUCT SIZE. ALL REGISTERS SHALL BE EQUIPPED WITH OPPOSED BLADE VOLUME DAMPER. PROVIDE (2) 2" MERV 11 FILTERS PER RETURN REGISTER.
FD	RUSKIN	DIBD2	1-1/2 HOUR UL555 RATED, SUITABLE FOR INSTALLATION IN WALL AND FLOOR PARTITIONS WITH FIRE RATINGS OF LESS THAN 3 HOURS. DAMPER SHALL BE A COMPLETE FACTORY PACKAGE INCLUDING UL APPROVED ANGLES, WALL SLEEVE, AND BREAKAWAY CONNECTIONS. DAMPER SHALL BE RATED FOR DYNAMIC AIRFLOW CONDITIONS OF 2,000 FPM AND 4.0" ESP. 165°F FUSIBLE LINK.
LD-A	KRUEGER	PTBS	PLENUM, HIGH FLOW, SLOT DIFFUSER WITH GASKETED ALUMINUM BLADE, EASILY ROTATED FOR ADJUSTMENT FROM HORIZONTAL TO VERTICAL FLOW. MAXIMUM NOISE CRITERIA: 25 NC. DIFFUSERS SHALL BE 4'-0" LONG WITH (1) 1" SLOT, INTERNALLY INSULATED PLENUM WITH 10" OVAL INLET. FINISH COLORS TO BE SELECTED BY ARCHITECT. FRAME SHALL BE F23A-CN. PROVIDE ADJUSTABLE PATTERN CONTROLLERS.
M	RUSKIN	CD450	HIGH PERFORMANCE CONTROL DAMPER. UNLESS PROVIDED WITH A SPECIFIC PIECE OF EQUIPMENT MOTORIZED DAMPERS SHALL BE CONSTRUCTED OF: 4"x1" EXTRUDED ALUMINUM FRAME, 6" WIDE EXTRUDED ALUMINUM AIRFOIL DAMPER BLADES, SANTOPRENE BLADE EDGE AND JAMB SEALS, LEXAN WITH ACETAL COPOLYMER BEARINGS. CLASS 1A LEAKAGE (3 CFM/FT² AT 1"WC). DAMPER SHALL HAVE OPPOSED BLADES, MOTOR AND LINKAGE. PROPORTIONAL DAMPER ACTUATORS SHALL BE 24VAC/60Hz., MAXIMUM 6 WATTS RUNNING AND 2 WATTS HOLDING POWER CONSUMPTION, COMPLETE WITH DISCONNECT SWITCH, TRANSFORMER AND END SWITCH KITS, SIMILAR TO BELIMO NF24-SR.
CIRCUIT SETTER	BELL AND GOSSETT	CB	HEAVY DUTY, CALIBRATED BALANCE VALVE, CAST-IRON CONSTRUCTION WITH FLANGED CONNECTIONS, BRASS DISC, STAINLESS STEEL STEM, 175 PSIG @ 250°F RATING.
EXPANSION COMPENSATOR	METRAFLEX	HP2	COMPENSATOR SHALL ACCOMMODATE ½" OF EXPANSION AND 2" OF COMPRESSION. 175 PSI WORKING PRESSURE. COMPENSATOR CONSTRUCTION: CARBON STEEL WITH MULTI-PLY 304 STAINLESS STEEL BELLOWS.
HIGH PERFORMANCE BUTTERFLY VALVE	BRAY CONTROLS	HIGH PERFORMANCE	• HIGH PERFORMANCE BUTTERFLY VALVES, ANSI CLASS 150. • VALVES SHALL PROVIDE ABSOLUTE SHUT-OFF (ZERO LEAKAGE) TO FULL ANSI CLASS RATING WITH PRESSURE IN EITHER DIRECTION. • BODY SHALL BE FULL LUG STYLE. VALVE SHALL PROVIDE DRIP-TIGHT-SHUT-OFF ON DEAD END SERVICE, WITH PRESSURE IN EITHER DIRECTION TO ALLOW FOR PIPING CHANGES OR EQUIPMENT REMOVAL. EXTENDED NECK SHALL ALLOW FOR PIPING INSULATION AND ACCESS TO PACKING ADJUSTMENT AND OPERATOR MOUNTING. • VALVE BODY AND SEAT RETAINER RING SHALL BE CARBON STEEL, ASTM A216 GR WCB / A516 GR 70. DISC SHALL BE STAINLESS STEEL ASTM A351 GR CF8M, FOR LONG TERM CORROSION RESISTANCE. DISC SHALL BE DOUBLE OFFSET DESIGN. SEAT SHALL BE LIVE LOADED RPTFE. SHAFT SHALL BE ONE-PIECE CONTSRUCTION, 17-4PH STAINLESS STEEL. • VALVES SHALL COMPLY WITH PED 97/23/EC. • FOR MANUAL VALVES, PROVIDE LEVER OPERATORS UP TO 6" SIZE, AND GEAR OPERATORS FOR VALVES LARGER THAN 6".
EQUIPMENT SUPPORT RAILS	THYBAR	TEMS-3	24" HIGH EQUIPMENT SUPPORT RAIL CONSTRUCTED OF WELDED 18 GAUGE GALVANIZED STEEL SHELL, BASE PLATE AND COUNTER FLASHING WITH FACTORY INSTALLED 2"x4" WOOD NAILERS AND INTERNAL BULKHEAD REINFORCEMENT. RAIL LENGTH TO EXTEND 6" ON BOTH ENDS OF EQUIPMENT. EQUIPMENT SUPPORT RAILS SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR AND INSTALLED BY THE GENERAL CONTRACTOR.
CONDENSATE PUMP	LITTLE GIANT	VCCA-20-P	HARDWIRED AUTOMATIC CONDENSATE PUMP WITH FLOAT ACTIVATED AUXILIARY HIGH LEVEL SWITCH. ELECTRICAL: 115V/1Ø/60Hz, 1.5 AMPS, 93 WATTS, ⅓ HP. SHUT-OFF HEAD 20 FEET. PERFORMANCE: 70 GALLONS PER HOUR AT 5 FEET OF HEAD. PUMP SHALL BE COMPLETE WITH DISCONNECT SWITCH. PROVIDE AT ALL FAN COIL UNITS.
AC-A	MITSUBISHI	MSY-GL09NA	WALL MOUNTED DUCTLESS INDOOR UNIT. 9,000 BTUH RATED COOLING CAPACITY. ELECTRICAL CHARACTERISTICS: 208V/1Ø/60HZ., 1.0 AMPS MCA, 15 AMPS MOCP. 24.6 SEER AND 15.4 EER. UNIT SHALL BE COMPLETE WITH WALL MOUNTED WIRELESS CONTROLLER WITH LOCK DOWN BRACKET, DISCONNECT SWITCH, CONDENSATE PUMP, AND DRAIN PAN LEVEL SENSOR.
ACCU-A	MITSUBISHI	MUY-GL09NA	AIR COOLED CONDENSING UNIT. ELECTRICAL CHARACTERISTICS: 208V/1Ø/60HZ., 7 AMPS MCA, 15 AMPS MOCP. UNIT SHALL BE COMPLETE WITH: NEMA 3R DISCONNECT SWITCH AND WIND BAFFLE. R-410A REFRIGERANT. FULL CAPACITY LOW AMBIENT COOLING OPERATION DOWN TO O°F.
AC-B	MITSUBISHI	MSY-GL12NA	WALL MOUNTED DUCTLESS INDOOR UNIT. 12,000 BTUH RATED COOLING CAPACITY. ELECTRICAL CHARACTERISTICS: 208V/1Ø/60HZ., 1.0 AMPS MCA, 15 AMPS MOCP. 24.6 SEER AND 15.4 EER. UNIT SHALL BE COMPLETE WITH WALL MOUNTED WIRELESS CONTROLLER WITH LOCK DOWN BRACKET, DISCONNECT SWITCH, CONDENSATE PUMP, AND DRAIN PAN LEVEL SENSOR.
ACCU-B	MITSUBISHI	MUY-GL12NA	AIR COOLED CONDENSING UNIT. ELECTRICAL CHARACTERISTICS: 208V/1Ø/60HZ., 7 AMPS MCA, 15 AMPS MOCP. UNIT SHALL BE COMPLETE WITH: NEMA 3R DISCONNECT SWITCH AND WIND BAFFLE. R-410A REFRIGERANT. FULL CAPACITY LOW AMBIENT COOLING OPERATION DOWN TO O°F.
AC-1	TRANE	TPLFY008FM140A	2'x2' CEILING CASSETTE, 4-WAY AIRFLOW PATTERN, INDOOR UNIT WITH BUILT-IN CONDENSATE PUMP AND FRESH AIR INTAKE KNOCKOUT. UNITS SHALL BE COMPLETE WITH FRESH AIR INTAKE DUCT FLANGE KIT, DISCONNECT SWITCH, SPRING TYPE VIBRATION ISOLATORS, AND TAC-YT53CRAU-J REMOTE CONTROLLER AND PAC-UKPR BACNET INTERFACE. EACH UNIT SHALL HAVE 20 CFM OUTSIDE AIR. PERFORMANCE: 315 CFM, 8,000 BTUH COOLING CAPACITY AT 80°F DB/67°F WB EAT AND 95°F AMBIENT, 9,000 BTUH HEATING CAPACITY AT 70°F DB/60°F WB EAT AND 5° AMBIENT. ELECTRICAL: 208V/1ϕ/60Hz, .28 AMPS.
AC-2	TRANE	TPLFY012FM140A	2'x2' CEILING CASSETTE, 4-WAY AIRFLOW PATTERN, INDOOR UNIT WITH BUILT-IN CONDENSATE PUMP AND FRESH AIR INTAKE KNOCKOUT. UNITS SHALL BE COMPLETE WITH FRESH AIR INTAKE DUCT FLANGE KIT, DISCONNECT SWITCH, SPRING TYPE VIBRATION ISOLATORS, AND TAC-YT53CRAU-J REMOTE CONTROLLER AND PAC-UKPR BACNET INTERFACE. REFER TO VENTILATION SCHEDULE FOR OUTSIDE AIR. PERFORMANCE: 335 CFM, 12,000 BTUH COOLING CAPACITY AT 80°F DB/67°F WB EAT AND 95°F AMBIENT, 13,500 BTUH HEATING CAPACITY AT 70°F DB/60°F WB EAT AND 5° AMBIENT. ELECTRICAL: 208V/1ϕ/60Hz, .29 AMPS.
AC-3	TRANE	TPLFY015FM140A	2'x2' CEILING CASSETTE, 4-WAY AIRFLOW PATTERN, INDOOR UNIT WITH BUILT-IN CONDENSATE PUMP AND FRESH AIR INTAKE KNOCKOUT. UNITS SHALL BE COMPLETE WITH FRESH AIR INTAKE DUCT FLANGE KIT, DISCONNECT SWITCH, SPRING TYPE VIBRATION ISOLATORSAND TAC-YT53CRAU-J REMOTE CONTROLLER AND PAC-UKPR BACNET INTERFACE. EACH UNIT SHALL HAVE 165 CFM OUTSIDE AIR. PERFORMANCE: 390 CFM, 15,000 BTUH COOLING CAPACITY AT 80°F DB/67°F WB EAT AND 95°F AMBIENT, 17,000 BTUH HEATING CAPACITY AT 70°F DB/60°F WB EAT AND 5° AMBIENT. ELECTRICAL: 208V/1ϕ/60Hz, .35 AMPS.
HP-1	TRANE	TURYH1203AN40AN	10.0 TON OUTDOOR VRF HEAT RECOVERY SYSTEM COMPLETE WITH NEMA 3R DISCONNECT SWITCH, BC CONTROLLER, TCMBG0108 BRANCH BOX, BRANCH JOINTS, BALL VALVES AND REDUCERS. 22.05 SEER, 12.65 EER, AND 3.8 HSPF. R-410A. RATED COOLING PERFORMANCE: 120,000 BTUH. RATED HEATING PERFORMANCE: 135,000 BTUH. SYSTEM ELECTRICAL: 208V/3ϕ/60Hz, 47 MCA, AND 70 AMPS MOCP.
EH-A	BERKO	FRC1512F	ARCHITECTURAL, HEAVY-DUTY, FAN FORCED WALL HEATER. CAPACITY: 1500 WATTS, 5120 BTUH, 100 CFM. ELECTRICAL: 120V/1Ø, 12.5 AMPS. FINISH SHALL BE NORTHERN WHITE. HEATER SHALL HAVE: CONCEALED TAMPER-PROOF THERMOSTAT, MANUAL RESET THERMAL CUT-OUT, CONCEALED POWER ON/OFF SWITCH, BACK BOX, SURFACE MOUNTING FRAME, DISCONNECT SWITCH, AND 14 GAUGE SECURITY FRONT COVER.
EH-B	BERKO	FRC4024F	ARCHITECTURAL, HEAVY-DUTY, FAN FORCED WALL HEATER. CAPACITY: 3000 WATTS, 10235 BTUH, 100 CFM. ELECTRICAL: 208V/1Ø, 14.4/7.2 AMPS. FINISH SHALL BE NORTHERN WHITE. HEATER SHALL HAVE: CONCEALED TAMPER-PROOF THERMOSTAT, MANUAL RESET THERMAL CUT-OUT, CONCEALED POWER ON/OFF SWITCH, BACK BOX, SURFACE MOUNTING FRAME, DISCONNECT SWITCH, AND 14 GAUGE SECURITY FRONT COVER.
UH	VULCAN	HV-125A	HOT WATER UNIT HEATER. HEATING CAPACITY: 24.8 MBH, 580 CFM, 2.5 GPM, 2.2 FT WATER PRESSURE DROP, AND 102°F FINAL AIR TEMPERATURE. RATINGS BASED ON 200° EWT AND 60°F EAT. ELECTRICAL: 2 SPEED MOTOR, 120V/1Ø, 1.2 AMPS. COMPLETE WITH: MOUNTING BRACKET, OSHA FAN GUARD, NON-FUSED DISCONNECT SWITCH, "AUTO/OFF/FAN SWITCH" LINE VOLTAGE THERMOSTAT, STRAP-ON AQUASTAT, AND AIR DEFLECTION LOUVER.
P-1A P-1B	BELL AND GOSSET	ecocirc XL 70-145	HIGH EFFICIENCY LARGE WET ROTOR CIRCULATOR WITH ELECTRONIALLY COMMUTATED PERMENANT MAGNET MOTOR. PUMP SHALL HAVE CAPACITY OF 85.0 GPM. PUMP SHALL HAVE TOTAL DYNAMIC HEAD OF 42'. PREMIUM EFFICIENCY MOTOR SHALL BE 2 HP. ELECTRICAL: 208V/1ϕ/60Hz. PUMP SHALL BE FURNISHED WITH A NEMA 1 DISCONNECT SWITCH. DISCONNECT SWITCH SHALL BE PURCHASED BE MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR.
P-2A P-2B	BELL AND GOSSET	ecocirc XL 65-130	HIGH EFFICIENCY LARGE WET ROTOR CIRCULATOR WITH ELECTRONIALLY COMMUTATED PERMENANT MAGNET MOTOR. PUMP SHALL HAVE CAPACITY OF 20.0 GPM. PUMP SHALL HAVE TOTAL DYNAMIC HEAD OF 35'. PREMIUM EFFICIENCY MOTOR SHALL BE 1 HP. ELECTRICAL: 208V/1ϕ/60Hz. PUMP SHALL BE FURNISHED WITH A NEMA 1 DISCONNECT SWITCH. DISCONNECT SWITCH SHALL BE PURCHASED BE MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR.

ORANGE-ULSTER BOCES

ARDEN HILL - MAIN BUILDING ALTERATIONS TO NORTH WING

4 HARRIMAN DRIVE
GOSHEN, NY 10924

KG+D . ARCHITECTS PC
285 MAIN STREET MOUNT KISCO . NEW YORK . 10549
P:914.666.5900 KGDARCHITECTS.COM

GERARD ASSOCIATES
CONSULTING ENGINEERS, D.P.C.
223 MAIN STREET, GOSHEN, NY 10924
(845) 291 1272 GerardAssociates.com

GA23012

NY SED PROJECT CONTROL NO:
44-90-00-00-8-035-009

CONSTRUCTION DOCUMENTS

Professional Seal

No.	Date	Issue
3	04/24/24	BID ISSUE
1	08/21/23	CON DOCS - NYSED

Sheet Title

MECHANICAL:
EQUIPMENT SCHEDULES

Job No.	Date
2023-1011	02/03/2023

Scale	Drawn / Checked
AS NOTED	DC/RL SZ/WH

Sheet Number

M702