ROOFTOP UNITS (NATURAL GAS HEAT)

TAG	MANUF	STATUS	LOCATION	EQUIP SERIES	AREA SERVED	SYSTEM TYPE	SUPPLY FAN						NET COOLING														ACCESSORIES
							AIRFLOW (CFM)			BHP	MAX. MOTOR HP	FAN RPM	ESP (IN WC)	CAPACITY (MBH)			EAT (˚F)		LAT (˚F)		EFFICIENCY			CAPACITY (MBH)		EAT (˚F)	EFFICIENCY		NO. OF CONTROL STAGES	FILTERS		ELECTRICAL INFO					
							TOTAL	OUTSIDE AIR MIN	OUTSIDE AIR MAX					NOM TONS	TOT	SENS	DB	WB	DB	WB	EER/IEER	SEER	SEER2	MAX INPUT	MIN OUTPUT		%	AFUE		PRE-FILTER	FINAL FILTER	VOLTS	PHASE	EMERGENCY	FLA (AMPS)	MCA (AMPS)	
RTU 1	CARRIER	NEW	ROOF	48LCRA20	PATIENT ROOMS	CV	5,975	1,685	1,685	5.36	13 1/2	1130	1.75	17.5	194.7	156.1	82	67	57.3	56.2	11.2/16.6	-	-	310.0	251.0	60	81.0	-	3	7	14	480	3	YES	-	59.7	1 THRU 17, 19
RTU 2	CARRIER	NEW	ROOF	48JCSW06	FITNESS	CV	1,555	390	390	1.71	2 1/2	2535	2.00	5.0	55.4	42.4	62	66	55.6	54.7	-	19.0	-	67.0	54.0	61	81.0	-	FULLY MODULATING	7	14	480	3	-	-	18.0	1 THRU 17, 19
RTU 3	CARRIER	NEW	ROOF	48LCRA24	PATIENT ROOMS	CV	7,655	1,930	1,930	7.71	13 1/2	1220	2.00	20.0	245.0	199.0	82	66	56.8	56.1	10.9/17.1	-	-	310.0	251.0	61	81.0	-	3	7	HEPA	480	3	YES	-	72.2	1 THRU 15, 18, 19
RTU 4	CARRIER	NEW	ROOF	48LCSA12	LOBBY/OFFICES	CV	3,445	850	850	4.21	5	994	2.00	10.0	114.1	89.8	81	66	56.6	55.6	13/20.3	-	-	180.0	146.0	61	81.0	-	3	7	14	480	3	-	-	33.0	1 THRU 16, 19
RTU 5	CARRIER	NEW	ROOF	48LCSA09	OFFICES	CV	3,085	665	665	3.91	5	980	2.00	8.5	99.3	78.6	81	66	56.5	55.6	13.2/19.8	-	-	150.0	120.0	63	81.0	-	3	7	14	480	3	-	-	32.0	1 THRU 16, 19
RTU 6	CARRIER	NEW	ROOF	48LCSA12	DINING	CV	3,540	920	920	4.30	5	1000	2.00	10.0	115.0	92.0	82	67	57.0	56.0	13.0/20.3	-	-	180.0	146.0	61	81.0	-	3	7	14	480	3	-	-	33.0	1 THRU 17, 19
RTU 7	CARRIER	NEW	ROOF	48LCSA14	PATIENT ROOMS	CV	3,750	865	865	2.61	10	1054	2.00	12.5	136.9	101.6	81	66	55.3	54.2	11.8/18.1	-	-	176.0	143.0	62	81.0	-	3	7	14	480	3	YES	-	50.2	1 THRU 17, 19
RTU 8	CARRIER	NEW	ROOF	48LCSA14	PATIENT ROOMS	CV	4,415	970	970	3.09	10	1075	1.75	12.5	141.1	111.4	81	66	56.8	55.7	11.8/18.1	-	-	176.0	143.0	62	81.0	-	3	7	14	480	3	YES	-	50.2	1 THRU 17, 19

NOTES (APPLY TO ALL UNITS):
A. SCHEDULED COOLING CAPACITY IS BASED ON THE FOLLOWING OUTDOOR AMBIENT TEMPERATURE: 100°F DB.
B. ALL RTUS WITH CAPACITIES 7.5 TONS AND HIGHER SHALL BE PROVIDED WITH MULTIPLE COMPRESSORS AND A MINIMUM OF 2 INDEPENDENT REFRIGERANT CIRCUITS.
C. RETURN AND OUTSIDE AIR DAMPERS SHALL BE CLASS 1 LOW-LEAKAGE TYPE.
D. EQUIP ALL UNITS 6 TONS AND LARGER WITH CRANKCASE HEATERS.
E. RTUS SHALL BE PROVIDED WITH 2" PLEATED DISPOSABLE FILTERS, CONDENSATE OVERFLOW SWITCH IN PRIMARY DRAIN PAN, MOTORIZED OUTSIDE AIR DAMPER, STAINLESS STEEL HEAT EXCHANGER WITH DIRECT SPARK IGNITION AND 10 YEAR WARRANTY, COMPRESSOR ANTI-RECYCLE CONTROLS, SINGLE POINT POWER CONNECTION, COOLING OPERATION DOWN TO 40˚F, 14" HIGH INSULATED ROOF CURB WITH BASE SLOPED TO MATCH ROOF PITCH.
F. COORDINATE WITH THE ELECTRICAL DRAWINGS FOR THE CALCULATED AVAILABLE FAULT CURRENT AT THE PANELBOARD SERVING MULTI-MOTOR AND COMBINATION-LOAD EQUIPMENT OR THE CALCULATED AVAILABLE FAULT CURRENT INDICATED AT THE EQUIPMENT. THIS FAULT CURRENT VALUE SHALL BE UTILIZED TO DETERMINE THE CORRECT SHORT CIRCUIT CURRENT RATING (SCCR) FOR THE EQUIPMENT. THE EQUIPMENT NAMEPLATE SHALL BEAR A RATING OF NO LESS THAN THE PANELBOARD RATING OR THE CALCULATED FAULT CURRENT.

ACCESSORIES (THIS LIST IS NOT ALL INCLUSIVE. IN ADDITION, PROVIDE MANUFACTURER RECOMMEND ACCESSORIES FOR SAFE AND PROPER OPERATION):
1. 7-DAY PROGRAMMABLE THERMOSTAT WITH FAN-ON-AUTO CONTROL AND AUTO HEATING/COOLING CHANGEOVER
2. LOCKING THERMOSTAT COVER
3. BAS COMPATIBLE (BACnet) CONTROLLER, PROGRAMABLE DIGITAL DISPLAY THERMOSTAT
4. POWERED EXHAUST
5. CONDENSER COIL HAIL GUARDS
6. UNIT MOUNTED FACTORY DISCONNECT
7. SMOKE DETECTORS. MOUNT IN RETURN AIRSTREAM
8. MODULATING HOT GAS RE-HEAT ADAPTIVE DEHUMIDIFICATION SYSTEM. CONTROLS & WALL MOUNTED HUMIDISTAT
9. HOT GAS BYPASS. INSTALL ON LEADING COMPRESSOR ON 2-STAGE UNITS
10. KINETICS KNM-100B SOUND BARRIER MATERIAL INSIDE OF ROOF CURB AND ON TOP OF ROOF DECK
11. GFCI 15 AMP CONVENIENCE OUTLET POWERED ON LINE SIDE OF DISCONNECT
12. PHASE MONITORING PROTECTION
14. STAGED COOLING AND INVERTER COMPRESSORS
15. ECONOMIZER: INTEGRATED DIFFERENTIAL ENTHALPY TYPE, SIZED FOR 100% SUPPLY AIR CAPACITY, CAPABLE OF SIMULTANEOUS ECONOMIZER AND COMPRESSOR OPERATION, WITH BAROMETRIC RELIEF, UNLESS SPECIFIED WITH POWERED EXHAUST
16. CURB MOUNTED MERV 14 FINAL FILTER BANK INSTALLED.
17. RTU DEMAND CONTROL VENTILATION WIRING AND CONTROLS. PROVIDE WITH ONE WALL MOUNTED CO2 SENSOR AND ADDITIONAL SENSORS WHERE INDICATED
18. CURB MOUNTED HEPA FINAL FILTER BANK INSTALLED.
19.ECONOMIZER FAULT DETECTION AND DIAGNOSTICS

EQUIPMENT SELECTIONS BASED ON PRODUCTS INDICATED. SUBJECT TO COMPLIANCE WITH ALL PRODUCTS, EQUAL PRODUCTS BY: DAIKIN, TRANE, JOHNSON CONTROLS, LENNOX, RHEEM.

SYSTEM DESCRIPTION AND REQUIREMENTS:
PROVIDE THE FOLLOWING FEATURES LISTED BELOW FOR THE SYSTEM TYPES IDENTIFIED FOR EACH RTU:
CV: CONSTANT VOLUME. VARIABLE TEMPERATURE. PROVIDE WITH 7-DAY PROGRAMMABLE AUTO CHANGEOVER THERMOSTAT WITH FAN-ON-AUTO CONTROL AND HOT GAS RE-HEAT ADAPTIVE DEHUMIDIFICATION SYSTEM WITH HG RE-HEAT COIL, SPACE HUMIDISTAT AND CONTROLS.

ECONOMIZER ENERGY COMPLIANCE:
C403.5.3.4 EXCESS OUTDOOR AIR TO BE RELIEVED AND PREVENT OVERPRESSURIZATION THROUGH RTU POWERED EXHAUST
C403.5.3.3 HIGH LIMIT SHUT OFF: OUTDOOR AIR ENTHALPY EXCEEDS RETURN AIR ENTHALPY OR IF OUTDOOR AIR TEMPERATURE EXCEEDS 75°F.
C403.5.3.1 RETURN AND OUTDOOR AIR DAMPERS SHALL BE FULLY MODULATING TO BE ABLE TO PROVIDE 100% OUTSIDE AIR.
C403.5.2 ECONOMIZER OPERATION, BUILDING HEATING ENERGY DOES NOT INCREASE DURING NORMAL OPERATION.

DUCTLESS SPLIT SYSTEM (HEAT PUMP)

TAG	SERIES FAN COIL UNIT/HEAT PUMP UNIT	AREA SERVED	FAN COIL		CAPACITY			VOLTS	PHASE	FLA (amps)	MCA (amps)	OCP (amps)	AVAILABLE FAULT CURRENT	MINIMUM SEER2 RATING	MINIMUM HSPF2 RATING	APPROX. WEIGHT (LBS) FCU/HP	ACCESSORIES
			TYPE	TOTAL CFM	TOTAL COOLING (MBH)	SENSIBLE COOLING (MBH)	HEAT PUMP HEAT 47°F/5°F (MBH)										
AH/HP-VEST1	FFQ15/RX15	FRONT VESTIBULE	C	385	16.2	12.6	16.3/7.2	208	1	-	9.7	15	-	19.6	8.8	36100	1, 2, 3, 4, 5
AH/HP-VEST2	FFQ15/RX15	REAR VESTIBULE	C	385	16.2	12.6	16.3/7.2	208	1	-	9.7	15	-	19.6	8.8	36100	1, 2, 3, 4, 5

NOTES (APPLY TO ALL UNITS):
A. COOLING CAPACITIES ARE BASED ON AN INDOOR EAT OF 80˚F DB/67˚F WB AND 100˚F AMBIENT.
B. HEAT PUMP HEATING CAPACITY BASED ON AN INDOOR EAT OF 70°F DB/60°F WB.
C. SUBMIT AHRI CERTIFIED CAPACITIES FOR ACTUAL EQUIPMENT TO BE INSTALLED.
D. REFER TO HVAC GENERAL NOTES AND DETAILS FOR ADDITIONAL INFORMATION.
E. INDOOR AND OUTDOOR UNITS SHALL BE INSTALLED PER PLANS, MANUFACTURER'S RECOMMENDATIONS, AND LOCAL CODE REQUIREMENTS.
F. DISCONNECT SWITCH FOR OUTDOOR UNIT FURNISHED BY DIV 23, INSTALLED BY DI...
G. UNITS SHALL BE EQUIPPED WITH AN INTERNAL CONDENSATE TRAP OR CHECK...
H. VERIFY MAXIMUM COMPRESSOR LIFT COMPATABILITY WITH MANUFACTURER AND OUTDOOR UNIT LOCATION.

LEGEND
FAN COIL UNIT TYPE:
C - CEILING CASSETTE
W - WALL HUNG

ACCESSORIES (THIS LIST IS NOT ALL INCLUSIVE. IN ADDITION, PROVIDE MANUFACTURER RECOMMEND ACCESSORIES FOR SAFE AND PROPER OPERATION):
1. WIRED WALL MOUNT UNIT CONTROLLER
2. CONDENSATE PUMP AND SAFETY SWITCH
3. COMPRESSOR ANTI-RECYCLE CONTROLS
4. REFRIGERANT LINE-SET (VERIFY LENGTH)
5. BAS CONTROL ADAPTOR

SELECTIONS BASED ON PRODUCTS BY DAIKIN.
EQUAL PRODUCTS BY CARRIER, MITSUBISHI, LG, JCI, TRANE, SAMSUNG, TOSHIBA, PANASONIC, SANYO, BOSCH

MECH/ELEC COORDINATION

THE MECHANICAL CONTRACTOR SHALL COORDINATE THE ELECTRICAL CHARACTERISTICS OF ALL HVAC EQUIPMENT (VOLTAGE, PHASE, MCA, MOCP, ETC.) WITH THE ELECTRICAL CONTRACTOR AND THE ELECTRICAL PLANS PRIOR TO SUBMITTING OR ORDERING ANY MECHANICAL EQUIPMENT. ANY SUBSEQUENT MISMATCH BETWEEN THE MECHANICAL EQUIPMENT ELECTRICAL REQUIREMENTS AND THE ELECTRICAL SERVICE, AS DESIGNED AND PROVIDED, SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR WITH NO ADDITIONS TO THE CONTRACT.

MECHANICAL ELECTRICAL COORDINATION SCHEDULE

IDENTITY MARK	VOLTAGE	PHASE	EMERGENCY COMPONENT	BRAKE HP	MOTOR HP	HEATING ELEMENT POWER (WATTS)	FLA	MCA	MOCP	INTERLOCK IDENTITY MARK	DISCONNECT TYPE	DISCONNECT FURNISHED BY	CONTROL DESCRIPTION	CONTROL FURNISHED BY	CONTROL INSTALLED BY
CU ELEC	208.0 V	1					-	17	20	AH ELEC		DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
CU ELEC2	208.0 V	1					-	7.8	15	AH ELEC2		DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
CU MDF	208.0 V	1					-	17	20	AH MDF		DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
CU MFRM	208.0 V	1					-	17	20	AH MFRM		DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
HP VEST1	208.0 V	1					-	9.7	15	AH VEST1		DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
HP VEST2	208.0 V	1					-	9.7	15	AH VEST2		DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
EF ISO1	208.0 V	1	YES				-	1.6	20			DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
EF ISO2	208.0 V	1	YES				-	1.6	20			DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
EF ELEV	208.0 V	1	YES				-	1.6	20			DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
EF 1	208.0 V	1	YES		0.25		-	3.6	15			DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
EF 2	208.0 V	1	YES		0.25		-	2.2	15			DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
EF 3	208.0 V	1	YES		0.125		-	2.2	15			DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
EF 4	208.0 V	1	YES		0.1		-	2.2	15.0			DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
EF 5	208.0 V	1	YES		0.25		-	3.6	15			DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
EF 6	208.0 V	1	YES		0.125		-	2.2	15			DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
EF 7	208.0 V	1	YES				-	2.2	15			DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
EF 8	208.0 V	1	YES				-	2.2	15			DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
EUH 1	480.0 V	3				5000	-	6.1	20			DIV. 26	INTEGRAL	DIV. 23	DIV. 23
EUH 2	480.0 V	3				5000	-	6.1	20.0			DIV. 26	INTEGRAL	DIV. 23	DIV. 23
EUH 3	480.0 V	3				5000	-	6.1	20.0			DIV. 26	INTEGRAL	DIV. 23	DIV. 23
EWH 1	480.0 V	3				3000	-	3.6	20			DIV. 26	INTEGRAL	DIV. 23	DIV. 23
EWH 2	480.0 V	3				3000	-	3.6	20			DIV. 26	INTEGRAL	DIV. 23	DIV. 23
EWH 3	480.0 V	3				3000	-	3.6	20			DIV. 26	INTEGRAL	DIV. 23	DIV. 23
EWH 4	480.0 V	3				3000	-	3.6	20			DIV. 26	INTEGRAL	DIV. 23	DIV. 23
EWH 5	480.0 V	3				3000	-	3.6	20			DIV. 26	INTEGRAL	DIV. 23	DIV. 23
EWH 6	480.0 V	3				3000	-	3.6	20			DIV. 26	INTEGRAL	DIV. 23	DIV. 23
EWH 7	480.0 V	3				3000	-	3.6	20			DIV. 26	INTEGRAL	DIV. 23	DIV. 23
EWH 8	480.0 V	3				3000	-	3.6	20			DIV. 26	INTEGRAL	DIV. 23	DIV. 23
EWH 9	480.0 V	3				3000	-	3.6	20.0			DIV. 26	INTEGRAL	DIV. 23	DIV. 23
RTU 1	480.0 V	3	YES				-	59.7	90			DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
RTU 2	480.0 V	3					-	18	30			DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
RTU 3	480.0 V	3	YES				-	72.2	80			DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
RTU 4	480.0 V	3					-	33	35			DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
RTU 5	480.0 V	3					-	32	35.0			DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
RTU 6	480.0 V	3					-	33	35.0			DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
RTU 7	480.0 V	3	YES				-	50.2	50.0			DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23
RTU 8	480.0 V	3	YES				-	50.2	50.0			DIV. 26	DIV. 23 - BAS	DIV. 23	DIV. 23

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REVISION SCHEDULE

#	DATE	DESCRIPTION
	04/15/2024	ISSUE FOR PERMIT
C	09/20/2024	REISSUE FOR PRICING
D	11/11/2024	CITY COMMENTS
	02/21/2025	ISSUE FOR CONSTRUCTION

SHEET TITLE
SCHEDULES - MECHANICAL

SHEET NUMBER
M004

ISSUE FOR PERMIT: 04/15/2024

2/21/2025 3:09:17 PM