

ELECTRIC UNIT HEATER SCHEDULE

TAG	MANUFACTURER & MODEL NO.	AREA SERVED	MOUNTING	INPUT (KW)	OUTPUT (MBH)	ELECTRICAL			NOTES
						V	F	HZ	
EUH-1	MARKEL / F30S27ZDWB	STARWELLS 1ST AND 3RD FLOOR LANDING / WATER HEATER ROOM RISER AND POOL EQUIPMENT	SURFACE	1.0	3.2	208	1	60	1,2,4,6
EUH-2	MARKEL / F30S27ZDWB	STARWELLS 1ST AND 3RD FLOOR LANDING / WATER HEATER ROOM RISER AND POOL EQUIPMENT	SURFACE	2.0	6.4	208	1	60	1,2,4,6

- NOTES:**
- UNITS SHALL BE U.L. LISTED.
 - PROVIDE THERMAL OVERLOAD PROTECTION.
 - PROVIDE REMOTE THERMOSTAT.
 - ACCEPTABLE EQUALS SHALL BE OMARK AND REZNOR.
 - MOUNT UNIT AT 12" A.F.F.
 - PROVIDE INTEGRAL THERMOSTAT.

AIR DISTRIBUTION SCHEDULE

TAG	MANUFACTURER & MODEL NO.	NECK SIZE	FACE SIZE	FRAME TYPE	PATTERN	DAMPER	MATERIAL	SERVICE	FINISH	NOTES
S-1	PRICE / SPD	6" DIA	6x6	SIDEWALL	DBL DEF.	YES	STEEL	SUPPLY	PANT GRP	1,2
S-2	PRICE / SPD	PER PLAN	24x24	PER RCP	4-WAY	YES	STEEL	SUPPLY	OFF WHITE	1,2
R-1	PRICE / 80	PER PLAN	24x24	PER RCP	-	NO	STEEL	RETURN	OFF WHITE	2

- NOTES:**
- PROVIDE OPPOSED BLADE DAMPERS IN HECK OF DIFFUSER OR REGISTER, WITH ACCESS TO DAMPER THROUGH FACE OF DIFFUSER OR REGISTER.
 - ACCEPTABLE EQUALS SHALL BE ANEMOSTAT, CARNES, KRUEGER, NALOR, TITUS AND TUTTLE & BAILEY.

SPLIT SYSTEM HEAT PUMP UNIT SCHEDULE

TAG	MANUFACTURER/ MODEL NO.	AIR HANDLING UNIT DATA										CONDENSING UNIT										WEIGHT (LBS)	NOTES	
		FAN DATA					COOLING		HEAT		ELECTRICAL DATA			GENERAL DATA					ELECTRICAL DATA					
SUPPLY CFM	OA (CFM)	MIN EXT S.P. (IN.WG)	MOTOR HP	FAN RPM	TOTAL (MBH)	SENS (MBH)	TOTAL (MBH)	KW (KW)	VIPH	MCA (A)	MOCP (A)	TAG	MANUFACTURER/ MODEL NO.	NOMINAL TONNAGE	EFF. EER (SEER)	EFF. IEER	HSPF	VIPH	MCA (A)	MOCP (A)	MOCP (A)	MOCP (A)		
AH-1	TRANE/TEMA40830S1SA	1000	150	0.5	1/2	1075	30	23.1	24	3.6	208/1	25	25	HP-1	TRANE/4TWR4030G100A	2.5	(14)	-	8.5	208/1	17	25	150/300	1-15
AH-2	TRANE/TEMA4036S41SA	1200	670	0.5	1/2	1075	36	28	29	3.6	208/1	25	25	HP-2	TRANE/4TWR4036G100A	3.0	(14)	-	8.5	208/1	19	30	150/300	1-15
AH-3/4	TRANE/TEMA4030S1SA	1000	320	0.5	1/2	1075	30	23.1	24	3.6	208/1	25	25	HP-3	TRANE/4TWR4030G100A	2.5	(14)	-	8.5	208/1	17	25	150/300	1-15
AH-5	TRANE/TEMA4036S41SA	1200	710	0.5	1/2	1075	36	28	29	3.6	208/1	25	25	HP-4	TRANE/4TWR4036G100A	3.0	(14)	-	8.5	208/1	19	30	150/300	1-15
AH-6/7	TRANE/TEMA4048S41SA	1600	860	0.5	3/4	1050	48	36.6	38.4	3.6	208/1	30	30	HP-5/6	TRANE/4TWR4048G100A	4.0	(14)	-	8.5	208/1	26	45	150/300	1-15

- NOTES:**
- COOLING CAPACITIES ARE RATED IN ACCORDANCE WITH ARI STANDARD 210/290 AT 95 DEGREE FAHRENHEIT AMBIENT OUTDOOR AIR TEMPERATURE, 80 DEGREE FAHRENHEIT DRY BULB, AND 67 DEGREE FAHRENHEIT WET BULB ENTERING AIR TEMPERATURE, AND NORMAL AIR QUANTITY LISTED.
 - REFRIGERANT PIPING TO BE SIZED PER TOTAL INSTALLATION EQUIVALENT LENGTH. LONG-LINE APPLICATION TO BE PROVIDED WHENEVER MANUFACTURER RECOMMENDED LENGTHS ARE EXCEEDED, INCLUDING LIQUID LINE SOLENOID VALVES, ACCUMULATOR, ETC. MAXIMUM T.E.L. IS 100'
 - PROVIDE SINGLE POINT ELECTRICAL CONNECTION FOR AIR HANDLING UNIT.
 - PROVIDE NEW FILTER IN EACH UNIT AT TURNOVER TO OWNER.
 - PROVIDE ON/OFF AUTO FAN SWITCH AND HEAT/OFF-COOL THERMOSTAT WITH SUBBASE FOR EACH UNIT. PROVIDE WITH OUTSIDE AIR TEMPERATURE SENSOR TO LOCKOUT ELECTRIC HEAT WHEN OUTSIDE AIR TEMPERATURE IS ABOVE 40 DEGREES. PROGRAM FAN SETTING TO BE IN "ON" POSITION DURING PERIODS OF OCCUPATION.
 - DRAIN CONDENSATE TO DRY WELL OR SITE STORM OUTSIDE BUILDING. PIPING SHALL BE FULL SIZE OF EQUIPMENT CONNECTION AND CONDENSATE WATER SHALL NOT DISCHARGE ACROSS WALKWAYS OR PARKING LOTS.
 - DRAIN CONDENSATE TO DRY WELL OR SITE STORM OUTSIDE BUILDING.
 - UNIT SHALL BE UL LISTED AND ARI CERTIFIED. MAINTAIN FACTORY SPECIFIED CLEARANCES ON ALL SIDE OF EQUIPMENT.
 - PROVIDE UNIT WITH INDOOR UNIT WITH VIBRATION ISOLATION. PROVIDE OUTDOOR UNIT WITH PATE EQUIPMENT RAILS WITH VIBRATION ISOLATION.
 - ELECTRICAL CONTRACTOR SHALL PROVIDE SMOKE DETECTORS ON THE RETURN DUCT DISCHARGES TO BE INSTALLED BY MECHANICAL CONTRACTOR. IF BUILDING HAS FIRE ALARM SYSTEM SMOKE DETECTORS SHALL BE BY FIRE ALARM CONTRACTOR.
 - CATALOG NUMBERS AND MANUFACTURERS ARE TO INDICATE TYPE AND QUALITY OF UNIT DESIRED. SUBMIT OUTSHEETS OF THESE AND ALTERNATE MANUFACTURERS FOR ARCHITECT AND OWNER APPROVAL PRIOR TO PURCHASE OF ANY UNITS. INFORMATION ON ALTERNATE UNITS PROPOSED BY THE CONTRACTOR SHALL INCLUDE THE ADD DEDUCT ASSOCIATED WITH ACCEPTANCE OF THAT UNIT (OR THE ALTERNATE PACKAGE AS A WHOLE).
 - PROVIDE FACTORY INSTALLED DRY FILTER SWITCH, BLOWER PROVING SWITCH, AND WATER LEVEL MONITORING DEVICE PER NCMC 307.2.3.4.
 - PROVIDE 1 YEAR PARTS AND LABOR WARRANTY. PROVIDE 5 YEAR PARTS WARRANTY ON COMPRESSORS.
 - ACCEPTABLE ALTERNATE MANUFACTURERS: LENNOX.
 - MECHANICAL CONTRACTOR SHALL PROVIDE A START UP CHECKLIST CONFIRMING ALL UNITS HAVE BEEN PROPERLY STARTED AND CONFIRMED RUNNING PROPERLY.

PACKAGED TERMINAL AIR CONDITIONING UNIT SCHEDULE

TAG	MANUFACTURER/ MODEL NO.	SUPPLY - FAN DATA					COOLING CAPACITY			ELECTRICAL DATA			EFF. EER (SEER)	EFF. IEER	HSPF	UNIT WEIGHT (LBS)	NOTES		
		SUPPLY CFM	OA (CFM)	MIN EXT S.P. (IN.WG)	MOTOR HP	FAN RPM	TOTAL (MBH)	SENS (MBH)	TOTAL (MBH)	VIPH	MCA (A)	MOCP (A)							
PTAC-A	FRIEDRICH / FOH12K	370	PER TABLE 403.3	-	-	-	1.00	9.4	9.4	9.3	-	208/1	4	15	12.1	-	3.5	140	1-7

- NOTES:**
- COOLING CAPACITIES ARE RATED IN ACCORDANCE WITH ARI STANDARD 210/290 AT 95 DEGREE FAHRENHEIT AMBIENT OUTDOOR AIR TEMPERATURE, 80 DEGREE FAHRENHEIT DRY BULB, AND 67 DEGREE FAHRENHEIT WET BULB ENTERING AIR TEMPERATURE, AND NORMAL AIR QUANTITY LISTED.
 - REFRIGERANT PIPING TO BE SIZED PER TOTAL INSTALLATION EQUIVALENT LENGTH. LONG-LINE APPLICATION TO BE PROVIDED WHENEVER MANUFACTURER RECOMMENDED LENGTHS ARE EXCEEDED, INCLUDING LIQUID LINE SOLENOID VALVES, ACCUMULATOR, ETC. MAXIMUM T.E.L. IS 100'
 - PROVIDE SINGLE POINT ELECTRICAL CONNECTION FOR AIR HANDLING UNIT.
 - PROVIDE UNIT WITH BRAND APPROVED THERMOSTAT AND OUTSIDE AIR TEMPERATURE SENSOR WITH LOCKOUT ON ELECTRIC HEAT WHEN OUTSIDE AIR TEMPERATURE IS ABOVE 40 DEGREES.
 - PROVIDE UNIT WITH PAIRED WALL SLEEVE AND EXTERIOR GRABBER.
 - IF OCCUPANCY SENSORS ARE PRESENT WHEN THERMOSTAT SUBBASE WITH UNIT SHALL BE CAPABLE OF INTERLOCKING WITH OCCUPANCY SENSOR TO SET UNIT INTO SET BACK MODE WHEN ROOM IS UNOCCUPIED.
 - PROVIDE 1 YEAR PARTS AND LABOR WARRANTY. PROVIDE 5 YEAR PARTS WARRANTY ON COMPRESSORS.
 - CATALOG NUMBERS AND MANUFACTURERS ARE TO INDICATE TYPE AND QUALITY OF UNIT DESIRED. SUBMIT OUTSHEETS OF THESE AND ALTERNATE MANUFACTURERS FOR ARCHITECT AND OWNER APPROVAL PRIOR TO PURCHASE OF ANY UNITS. INFORMATION ON ALTERNATE UNITS PROPOSED BY THE CONTRACTOR SHALL INCLUDE THE ADD DEDUCT ASSOCIATED WITH ACCEPTANCE OF THAT UNIT (OR THE ALTERNATE PACKAGE AS A WHOLE).
 - MECHANICAL CONTRACTOR SHALL PROVIDE A START UP CHECKLIST CONFIRMING ALL UNITS HAVE BEEN PROPERLY STARTED AND CONFIRMED RUNNING PROPERLY.

MINI-SPLIT COOLING ONLY UNIT SCHEDULE

TAG	MANUFACTURER/ MODEL NO.	AIR HANDLING UNIT DATA										CONDENSING UNIT										WEIGHT (LBS)	NOTES
		FAN DATA					COOLING		HEAT		ELECTRICAL DATA			GENERAL DATA					ELECTRICAL DATA				
SUPPLY CFM	OA (CFM)	MIN EXT S.P. (IN.WG)	MOTOR HP	FAN RPM	TOTAL (MBH)	SENS (MBH)	TOTAL (MBH)	KW (KW)	VIPH	MCA (A)	MOCP (A)	TAG	MANUFACTURER/ MODEL NO.	NOMINAL TONNAGE	EFF. EER (SEER)	EFF. IEER	HSPF	VIPH	MCA (A)	MOCP (A)	MOCP (A)		
MS-1	MITSUBISHI / MEZ	-	-	-	-	32	28.2	NA	NA	208/1	1	15	MC-1	MITSUBISHI / MLN-D36	3 TONS	14.5	-	208/3	21	25	40/150	1-10	

- NOTES:**
- COOLING CAPACITIES ARE RATED IN ACCORDANCE WITH ARI STANDARD 210/290 AT 95 DEGREE FAHRENHEIT AMBIENT OUTDOOR AIR TEMPERATURE, 80 DEGREE FAHRENHEIT DRY BULB, AND 67 DEGREE FAHRENHEIT WET BULB ENTERING AIR TEMPERATURE, AND NORMAL AIR QUANTITY LISTED.
 - REFRIGERANT PIPING TO BE SIZED PER TOTAL INSTALLATION EQUIVALENT LENGTH. LONG-LINE APPLICATION TO BE PROVIDED WHENEVER MANUFACTURER RECOMMENDED LENGTHS ARE EXCEEDED, INCLUDING LIQUID LINE SOLENOID VALVES, ACCUMULATOR, ETC. MAXIMUM T.E.L. IS 100'
 - PROVIDE SINGLE POINT ELECTRICAL CONNECTION FOR AIR HANDLING UNIT.
 - PROVIDE ON/OFF AUTO FAN SWITCH WITH SUBBASE FOR EACH UNIT. PROGRAM FAN SETTING TO BE IN "ON" POSITION DURING PERIODS OF OCCUPATION.
 - PROVIDE UNIT WITH INTEGRAL CONDENSATE PUMP ROUTE DISCHARGE TO TAILPIECE OF NEAREST SINK.
 - UNIT SHALL BE UL LISTED AND ARI CERTIFIED. MAINTAIN FACTORY SPECIFIED CLEARANCES ON ALL SIDE OF EQUIPMENT.
 - PROVIDE INDOOR UNIT WITH VIBRATION ISOLATION. PROVIDE OUTDOOR UNIT WITH PATE EQUIPMENT RAILS WITH VIBRATION ISOLATION.
 - CATALOG NUMBERS AND MANUFACTURERS ARE TO INDICATE TYPE AND QUALITY OF UNIT DESIRED. SUBMIT OUTSHEETS OF THESE AND ALTERNATE MANUFACTURERS FOR ARCHITECT AND OWNER APPROVAL PRIOR TO PURCHASE OF ANY UNITS. INFORMATION ON ALTERNATE UNITS PROPOSED BY THE CONTRACTOR SHALL INCLUDE THE ADD DEDUCT ASSOCIATED WITH ACCEPTANCE OF THAT UNIT (OR THE ALTERNATE PACKAGE AS A WHOLE).
 - PROVIDE 1 YEAR PARTS AND LABOR WARRANTY. PROVIDE 5 YEAR PARTS WARRANTY ON COMPRESSORS.
 - MECHANICAL CONTRACTOR SHALL PROVIDE A START UP CHECKLIST CONFIRMING ALL UNITS HAVE BEEN PROPERLY STARTED AND CONFIRMED RUNNING PROPERLY.

Building Pressurization Units

Mark	Supply		Cooling				Heating				Supply Fan			Electric Data			Weight (Lbs)	Standard of Performance			
	CFM	ESP (in)	Sensible	Total	DB	WB	DB	WB	Input (MBH)	Output (MBH)	Air Temp Ent	Lvg	HP	RPM	Voltage	RLA			MCA	Max Fuse	Min EER
MAU-1	2900	1.50	81.71	202.93	81.40	76.08	54.88	54.68	292.5	234.0	14.4	89.1	2	1607	208/1	2 x 25	71	90	11.4	2400	Aaon RN-015-8-0-BA02-3GB
MAU-2	3800	1.50	106.62	265.97	81.40	76.08	54.70	54.68	405.0	328.1	14.4	89.1	3	1607	208/3	2 x 30.1	85	110	12.2	3300	Aaon RN-020-8-0-BB02-3BB

- Remarks:**
- Factory assembled, piped, wired and tested as a single package
 - Units shall include total 100% outside air opening with 2 position damper
 - Units shall include dual circuit compressors for cooling, minimum 4-row interlocked DX coil (Horizontal split not acceptable)
 - Units shall include MINIMUM 10:1 turndown modulating natural gas heating with stainless steel heat exchanger and 25 year non-prorated heat exchanger parts warranty
 - Units shall include MODULATING hot gas reheat coils for dehumidification (2-position modulating reheat, no circuit not acceptable)
 - Units shall include stainless steel drain pans
 - Units shall include manual reset high pressure switches & auto reset low pressure switches
 - Units shall include VFD condenser fan motors for condenser head pressure control
 - Units shall include 2" MERV 12 filters. Provide metal screens on leaving air side of the coils or synthetic media filters with special supporting structure to prevent moisture laden filter collapse
 - Controls: Wattmaster/Orion VCCX controller with ambient dew point sensor, electronic sequencing of compressors and heating and modulating hot gas re-heating. The intention of this unit is to provide continuous conditioning of outside air while also providing temperature control to the space it serves. If this causes overcooling in the space the modulating hot gas reheat valve shall open to satisfy the conditioned space requirement. Field mounted controls shall include a ceiling mounted leaving air stat and a wall mounted stat (see plans for location). All unit mounted controls for complete operation shall be installed by the equipment manufacturer.
 - 2" foam injected insulated (minimum R13 value) double sheet construction
 - Units shall include integral non-fuse disconnects
 - Units shall include remote safety shutdown terminal
 - Smoke detector to be supplied by electrical contractor, installed by mechanical contractor
 - Units shall include phase protection
 - Units shall include a fully insulated rooftop with spring isolation rails. Height TBD
 - Each entire unit shall be AHR listed and Certified (Coil only certification is not acceptable)
 - Compressors shall have 5 year warranty (parts only)
 - Contact Gorham Engineering, Inc. for information phone: 1-901-345-6100

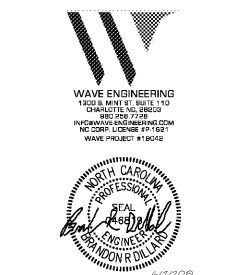
FAN SCHEDULE

TAG	MANUFACTURER & MODEL NO.	AREA SERVED	SERVICE	CFM	S.P. IN. WG	DRIVE TYPE	NOMINAL RPM	FAN TYPE	ELECTRICAL V/PHHZ	MOTOR HP (WATTS)	CONTROL METHOD	NOTES
EF-1	GREENEHECK / SP-A70	GUEST ROOMS	EXHAUST	50	0.25	DIRECT	850	CABINET	120/1/60	(15.9)	A	1-8, 12, 13
EF-2	GREENEHECK / SP-A125	FOOD PREP	EXHAUST	100	0.25	DIRECT	1100	CABINET	120/1/60	(22.5)	A	1-12
EF-3	GREENEHECK / SP-A110	ICE	EXHAUST	75	0.25	DIRECT	950	CABINET	120/1/60	(16.4)	A	1-12
EF-4	GREENEHECK / SP-A190	LAUNDRY	EXHAUST	150	0.25	DIRECT	1400	CABINET	120/1/60	(54.4)	A	1-12
EF-5	GREENEHECK / SP-A125	ELECTRICAL/MECHANICAL ROOM	EXHAUST	100	0.25	DIRECT	1100	CABINET	120/1/60	(22.5)	B	1-12
EF-6	GREENEHECK / SP-A125	MARKET	EXHAUST	100	0.25	DIRECT	1100	CABINET	120/1/60	(22.5)	D	1-12
EF-7	GREENEHECK / SP-A200	PUBLIC RESTROOMS	EXHAUST	225	0.25	DIRECT	90	CABINET	120/1/60	(66.1)	A	1-12
EF-8	GREENEHECK / SP-A700	FITNESS	EXHAUST	670	0.25	DIRECT	1100	CABINET	120/1/60	(390)	A	1-12
EF-9	GREENEHECK / SP-A125	POOL EQUIP	EXHAUST	100	0.25	DIRECT	1100	CABINET	120/1/60	(22.5)	D	1-12
EF-10	GREENEHECK / SP-A360	PUBLIC RESTROOMS	EXHAUST	300	0.25	DIRECT	1350	CABINET	120/1/60	(135)	D	1-12

- NOTES:**
- SCREEN
 - BACKDRAFT DAMPER
 - GRILLE COLOR SELECTED BY ARCHITECT
 - INTEGRAL DISCONNECT SWITCH
 - PROVIDE UNIT WITH VIBRATION ISOLATION.
 - UNIT SHALL BE UL LISTED AND AMCA CERTIFIED.
 - PROVIDE MOTOR WITH THERMAL OVERLOAD PROTECTION.
 - PROVIDE UNIT WITH INSULATED HOUSING FOR SOUND ATTENUATION.
 - GRILLE WITH MANUFACTURER'S PAIRED WALL CAP
 - PROVIDE MOTOR STARTER AS REQUIRED
 - SPEED CONTROLLER NEAR FAN
 - ACCEPTABLE EQUALS SHALL BE ACME, BREIDERT, CARNES, COOK, AND PENN.
 - PROVIDE WITH MANUFACTURER'S PAIRED ROOF CAP.
- CONTROL METHOD:**
A) W/ ROOM LIGHTS B) W/ THERMOSTAT C) W/ SWITCH D) CONTINUOUS OPERATION E) W/ CLOCK



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WAVE PROJECT #1902



HOME 2 SUITES BELMONT
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KEY PLAN

Revisions
Date Description

Project Number: 18021
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DRAWING TITLE
MECHANICAL SCHEDULES

SHEET NUMBER
M.002