

AIR HANDLING UNIT (COOLING/HEATING)																																												
DESIGNATION	LOCATION / SERVICE	MODEL NUMBER	TOTAL AIRFLOW CFM	MINIMUM OUTSIDE AIR CFM	SUPPLY FAN					HYDRONIC COOLING COIL										HYDRONIC HEATING COIL								ELECTRICAL DATA		EMERGENCY POWER (Y/N)	VAR SPEED (Y/N)	FAN SOUND POWER								OPERATING WEIGHT (LBS)	NOTES			
					CFM	EWT S.P. (IN.WG.)	RPM	QUANTITY	MOTOR HP	MIXED EAT		LAT		CAPACITY		GPM	EWT (°F)	LWT (°F)	P.D. AIR (IN.WG.)	P.D. WATER (FT. H2O)	AIR VELOCITY (FPM)	MIXED EAT (°F)	LAT (°F)	CAPACITY (MBH)	GPM	EWT (°F)	LWT (°F)	P.D. AIR (IN.WG.)	P.D. WATER (FT. H2O)			AIR VELOCITY (FPM)	VOLTAGE/ PHASE	FLA (AMPS)	OCTAVE BAND 1	2	3	4	5			6	7	8
										DB (°F)	WB (°F)	DB (°F)	WB (°F)	TOTAL (MBH)	SENSIBLE (MBH)																													
AHU-A-B1-1	TOWER-A BOILER 012 / TOWER-A B AMENITY	V3-ERB-3-0-26HB-12L	8500	1500	8500	2.7	2450	2	8	78	61	50	50	243	192	40	42	54	1.5	9.5	484	57	88	151	18	120	103	0.2	1.6	321	460/3	8.3	N	Y	72/77	75/80	89/90	83/90	82/93	82/88	79/84	77/79	850	
AHU-A-B1-2	TOWER-A BOILER 012 / TOWER-A LVL-1 AMENITY	V3-ERB-3-0-26HA-12P	9500	2000	9500	2.9	2600	2	8	77	61	49	49	281	219	45	42	55	1.2	11.0	541	48	90	206	45	120	103	0.2	2.7	322	460/3	8.3	N	Y	74/78	77/81	92/91	85/92	83/95	84/90	82/87	81/82	850	
AHU-A-1-1	TOWER-A LVL-P2 / TOWER-A LVL-1 DINING	V3-ERB-3-0-26HC-12M	6500	1500	6500	3.6	2250	1	8	78	61	54	54	170	127	73	42	49	1.2	8.3	370	57	89	155	16	120	100	0.1	5.4	322	460/3	17	N	Y	72/77	75/80	86/88	81/88	79/90	79/84	72/78	66/73	850	
AHU-A-1-X	TOWER-A P213 / TOWER-A KITCHEN EX MAKEUP	SCS3H-50mm TTB-AH100-EC	10000	10000	10000	3.1	2250	2	12	85	65	58	57	220	220	53	42	54	0.9	12.8	489.0	-7.0	67.0	677	69	120	100	0.3	2.4	489	460/3	18	Y	Y	70/73	83/84	81/82	75/83	78/89	78/85	78/81	72/76	3750	
AHU-L-1-1	TOWER-A / B LOBBY / TOWER-A / B LOBBY	V3-ERB-3-0-24HA	6000	450	6000	1.0	2040	2	4	76	62	54	53	138	110	20	42	56	1.4	3.2	341	64	97	251	34	120	105	0.2	4.1	523	460/3	10	N	Y	78/82	80/84	85/89	80/86	75/86	75/81	72/77	69/72	850	
AHU-B-B-1	TOWER-B P1 / TOWER-B LVL-B AMENITY	V3-CRB-3-0-24HC-12R	2500	450	2500	1.5	1920	1	4	76	61	53	53	50	48	8	42	54	0.4	1.2	346	64	92	60	5	120	96	---	2.1	346	460/3	5	N	Y	80/83	82/85	87/92	79/85	74/86	73/79	69/74	66/69	845	
AHU-B-P1-1	TOWER-B P1 / TOWER-B LVL-1 AMENITY	DB SCS3H-50MM TTB-AH150-EC	14750	1600	14750	2.4	2250	4	5	77	60	53	53	341	245	73	42	56	1.4	19.2	449	54	93	424	25	120	85	0.1	7.7	449	460/3	(21.8)	N	Y	75/77	92/92	84/84	78/84	78/89	78/84	73/78	71/75	3750	
AHU-C-1-1	TOWER-C / LVL-1 AMENITY	H3-ERB-3-0-24QC-12K	5900	1100	5900	2.0	2325	2	3	77	61	48	48	183	139	26	42	56	1.5	62.1	341	58	87	145	16	120	102	0.2	1.2	341	460/3	7	N	Y	92/92	92/92	94/94	94/94	89/89	85/85	83/83	78/78	1245	
GENERAL NOTES: A. ALL EQUIPMENT TO BE SELECTED AT 7,000 FT ELEVATION. B. ALL COILS TO BE SELECTED ASSUMING 40% PROP. GLYCOL. C. LINE SUPPLY AND RETURN OF DUCTWORK FOR 12'-0" FROM THE UNIT WITH 1" INTERNAL AL.																																												
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AIR SOURCE HEAT PUMP																																												
DESIGNATION	LOCATION/ SERVICE	MANUF. MODEL NUMBER	COOLING DATA										HEATING DATA										ELECTRIC DATA			FAN		COMPRESSOR					EER/ COP	FAN SOUND POWER								EMERGENCY POWER (Y/N)	OPER. WEIGHT (LBS)	NOTES
			CAPACITY (TONS)	EAT		EWT (°F)	LWT (°F)	GPM	P.D. (FT H2O)	CAPACITY (MBH)	EAT		EWT (°F)	LWT (°F)	GPM	P.D. (FT H2O)	MCA	MOP	VOLTAGE/ PHASE	CFM	QTY	TYPE	QTY	REFRIGERANT	OCTAVE BAND 1	2	3	4	5	6	7	8												
				DB (°F)	RH (%)						DB (°F)	RH (%)																																
ASHP-A-R-1	TOWER-A ROOF	HECOCLIMA VHA-2084(46)-4T-EC-BP-54B	49.2	87.0	40.4	56.0	42.0	92.8	12.3	587.0	35.0	72.8	102.0	120.0	71.2	6.5	133.0	160.0	460/3	46165	4	SCROLL	4	R454B	10.7 / 2.8	65	67	73	80	83	81	74	70	N	5009									
ASHP-A-R-2	TOWER-A ROOF	HECOCLIMA VHA-2142(46)-4T-EC-BP-54B	81.7	87.0	40.4	56.0	42.0	154.2	10.4	972.0	35.0	72.8	102.0	120.0	117.9	5.5	215.0	260.0	460/3	93546	8	SCROLL	4	R454B	11.1 / 2.9	69	71	77	84	87	85	78	74	N	8874									
ASHP-B-R-1	TOWER-B ROOF	HECOCLIMA VHA-2084(46)-4T-EC-BP-54B	49.2	87.0	40.4	56.0	42.0	92.8	12.3	587.0	35.0	72.8	102.0	120.0	71.2	6.5	133.0	160.0	460/3	46165	4	SCROLL	4	R454B	10.7 / 2.8	65	67	73	80	83	81	74	70	N	5009									
ASHP-B-R-2	TOWER-B ROOF	HECOCLIMA VHA-2142(46)-4T-EC-BP-54B	81.7	87.0	40.4	56.0	42.0	154.2	10.4	972.0	35.0	72.8	102.0	120.0	117.9	5.5	215.0	260.0	460/3	93546	8	SCROLL	4	R454B	11.1 / 2.9	69	71	77	84	87	85	78	74	N	8874									
ASHP-C-R-1	TOWER-C ROOF	HECOCLIMA VHA-2182(46)-4T-EC-BP-54B	101.3	87.0	40.4	56.0	42.0	191.1	11.8	1204	35.0	72.8	102.0	120.0	146.0	6.2	265	320	460/3	93291	8	SCROLL	4	R454B	10.5 / 2.9	70	72	78	85	88	86	79	75	N	9864									
GENERAL NOTES: A. ALL EQUIPMENT TO BE SELECTED AT 7.00 FT ELEVATION. ALL EQUIPMENT TO BE SELECTED FOR 40% POLYPROPYLENE GLYCOL. B. EER/COP IS QUOTED AT DESIGN CONDITIONS. REFER TO SPECIFICATIONS FOR MINIMUM VALUES AT ARI CONDITIONS.																																												
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NOTES:

GARAGE EXHAUST FAN CFM VALUES						
EXHAUST FAN DESIGNATIONS	LOCATION/ SERVICE	CO CONCENTRATION				NOTES
		< 25 PPM	BETWEEN 25-50 PPM	> 50 PPM < SINGLE ZONE	> 50 PPM > DUAL ZONE	
GEF-A-P2-1, 2, 3	TOWER-A P2	500	2500	6400	7500	1, 2, 3
GEF-B-P1-1	TOWER-B P2	1000	7500	14325	12700	1, 2
GEF-B-P1-2, 3, 4, 5	TOWER-B P1	800	6800	11325	N/A	1
GEF-C-P1-1	TOWER-C P1	400	1600	5800	N/A	1

NOTES:

1. SEE SPEC 209 63 CARBON MONOXIDE AND FAN CONTROL SYSTEMS FOR MORE INFORMATION.
2. # 0 BOTH TOWER-A P2 and TOWER-B P2 ARE ABOVE 50-PPM USE THE DUAL ZONE.
3. THESE FANS ALSO CONTROLLED VIA THERMOSTAT SHOWN ON SHEET M2.2A.02 G/L E/J. WHEN THERMOSTAT IS ABOVE 95-F OPERATE FANS AT 6400-CFM UNTIL THERMOSTAT REACHES 85-F.

NOTES:
1. SEE SPEC 23 09 63 CARBON MONOXIDE AND FAN CONTROL SYSTEMS FOR MORE INFORMATION
2. IF BOTH TOWER-A P2 AND TOWER-B P2 ARE ABOVE 50-PPM USE THE DUAL ZONE CFM VALUE
3. THESE FANS ALSO CONTROLLED VIA THERMOSTAT SHOWN ON SHEET M2.2A.02 GL E/7. WHEN THERMOSTAT IS ABOVE 95-F OPERATE FANS AT 6400-CFM UNTIL THERMOSTAT REACHES 85-F.

GLYCOL PUMP SUPPLY UNIT SCHEDULE												
DESIGNATION	LOCATION	TYPE	MANUF- MODEL NUMBER	SERVICE	PUMP				TANK VOLUME (GALLONS)	OPERATING WEIGHT (LBS)	NOTES	
					FLOWRATE	PRESSURE	MOTOR					
					(GPM)	(PSIG)	(HP)	VOLTAGE/ PHASE				
GPS-A-B-1	LEVEL B	DUPLEX	JOHN WOOD JWDP-53-055	CHILLED/HOT WATER SYSTEM	3.2	54	1/3 X (2)	120/1	55	190	1	
GPS-B-P1-1	LEVEL P1	SIMPLEX	JOHN WOOD JWGP-53-055	CHILLED WATER SYSTEM	3.2	54	1/3 X (2)	120/1	55	160	1	
GPS-B-P1-2	LEVEL P1	DUPLEX	JOHN WOOD JWDP-53-055	HOT WATER/SNOWMELT SYSTEM	3.2	54	1/3 X (2)	120/1	55	190	1	
GPS-C-1-1	LEVEL 1	DUPLEX	JOHN WOOD JWDP-53-055	CHILLED/HOT WATER SYSTEM	3.2	54	1/3 X (2)	120/1	55	190	1	
NOTES: 1. TANK FILLED WITH A 40% PROPYLENE GLYCOL MIXTURE(PREMIEXED).												

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UNIT HEATER - GAS																	
DESIGNATION	MANUFACTURER MODEL NUMBER	LOCATION / SERVICE	GAS HEATING			DISTRIBUTION FAN			EXHAUSTER FAN			VOLTAGE/ PHASE	FLA AMPS	MOP (AMPS)	EMERG. POWER (Y/N)	OPER. WEIGHT (LBS)	NOTES
			CAPACITY (MBH)	INPUT MBH	GAS PIPE SIZE (IN)	CFM	EXTERNAL SP INCHES	HP	COMBUSTION (CFM)	HP	FLUE SIZE						
UH-A-P2-1	APPLIED AIR MODEL 65	TOWER-A GARAGE / TOWER-A GARAGE INTAKE	650	815	1.25	8,500	1.0	10	110	0.3	10	460/3	14.4	50	N	2,600	1
UH-B-P1-1	APPLIED AIR MODEL 40	TOWER-B GARAGE / TOWER-B GARAGE INTAKE	400	500	1.00	6,000	0.3	2	110	0.3	8	460/3	6.7	20	N	1,750	
UH-C-P1-1	STERLING NEXUS 150	TOWER-C GARAGE / TOWER-C GARAGE INTAKE	143	150	1.00	2,650	0.2	2 @ 1/2	---	---	2	120/1	17.6	25	N	120	
UH-C-P1-2	STERLING NEXUS 150	TOWER-C GARAGE / TOWER-C GARAGE DOOR	143	150	1.00	2,650	0.2	2 @ 1/2	---	---	2	120/1	17.6	25	N	120	
GENERAL NOTES: A) PROVIDE BASE INLET DAMPER FOR HORIZONTAL UNIT																	
NUMBERED NOTES: 1. PROVIDE FLUE BOOSTER FAN FOR 1" EXT SP.																	

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A) PROVIDE BASE INLET DAMPER FOR HORIZONTAL UNIT
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