	1
	LEGEND
\boxtimes	SUPPLY DUCT TURNED UP
\boxtimes	SUPPLY DUCT TURNED DN
	RETURN DUCT TURNED UP
	RETURN DUCT TURNED DN
	EXHAUST DUCT
	FLEXIBLE DUCT
	INSULATED DUCTWORK
	AIR SUPPLY DIFFUSER
	AIR RETURN REGISTER
	AIR EXHAUST REGISTER/FAN
→	AIR SUPPLY FLOW INDICATOR
→ √-	AIR RETURN OR EXHAUST INDICATOR
BD	BACKDRAFT DAMPER
FD	FIRE DAMPER
VD	VOLUME DAMPER
•	THERMOSTAT
\otimes	CONNECT TO EXISTING
A.F.F.	ABOVE FINISHED FLOOR
CD	CEILING DIFFUSER
CFM	CUBIC FEET PER MINUTE
CR	CEILING RETURN
EF	EXHAUST FAN
ER	EXHAUST REGISTER
NTS	NOT TO SCALE
OA	OUTSIDE AIR
RAR	RETURN AIR REGISTER
SAR	SUPPLY AIR REGISTER
VTR	VENT THRU ROOF

ALL OF THE SYMBOLS AND ABBREVIATIONS INCLUDED ON THIS SHEET MAY OR MAY NOT BE USED IN THIS SET OF DRAWINGS.

SPLIT SYSTEM AIR CONDITIONING UNIT SCHEDULE INDOOR UNIT (AHU) OUTDOOR UNIT (ACU) COOLING CAP. FAN E.S.P. OUTSIDE FAN FAN ELECTRICAL MIN. CIR. MIN. CIR. ELECTRICAL COMP. LOCATION MARK CFM | (°W.C.) | MODEL |MOCP|REMARKS MODEL REMARKS FLA HP TOTAL (MBH) | FLA | LRA | RLA | PH | HZ | V | AMPS FUSE PH HZ V AMPS SERVES (CFM) ACU-1 25HCB636A003 AHU-1 LOBBY FV4CWF002L00 50 15 LOW AMBIENT CONTROLS 60 208 23.0 40 SEE NOTES 1/2 | 1 | 60 | 208 | 5.4 35.63 600 ACU-2 25HCB624A003 AHU-2 OFFICE/BOH FV4CWF002L00 LOW AMBIENT CONTROLS 58.3 | 12.5 | 60 208 16.2 25 SEE NOTES 60 | 208 | 5.4 23.48

NOTES:

1. MODEL NUMBER AND PERFORMANCE BASED ON CARRIER CO. UNITS, WITH LOW AMBIENT COOLING CAPABILITIES. REF. WILL BE R410-A.

2. PROVIDE AIR HANDLING UNITS WITH FILTERS AND FILTER RACK SIZED AT 500 FPM VELOCITY. 3. PROVIDE ACCESS FOR AIR HANDLING UNITS SIZED FOR MAINTENANCE AND REMOVAL OF UNITS.

4. PROVIDE INFINITY CONTROLS PROGRAMABLE THERMOSTAT. LABEL T'STATS AS TO UNIT WHICH THEY SERVE. PROVIDE W/ TAMPER PROOF BOX.

5. ALL DX SPLIT SYSTEM FAN COILS/REMOTE CONDENSING UNITS WITH REFRIGERATION LINES EXTENDING OVER 50 FT IN LENGTH INSTALL AND ADJUST REFRIGERATION AND OIL CHARGE PER MANUFACTURERS RECOMMENDATIONS.

6. DUCT SMOKE DETECTOR BY ELECTRICAL CONTRACTOR. THIS CONTRACTOR SHALL INSTALL DUCT SMOKE DETECTORS IN S.A. AT FAN UNITS, FANS SHALL SHUT DOWN IN EVENT SMOKE IS DETECTED.

7. DISCONNECTS PROVIDED BY ELECTRICIAN. 8. RUN PUMPED CONDENSATE PIPING TO FLOOR DRAIN OR JAN. SINK (COORDINATE WITH PLUMBER).

N	MAKE-UP AIR UNIT SCHEDULE (#)																						
MARK	SERVICE	MODEL	SUPPLY CFM	OUTSIDE AIR CFM	S.P. iwg.	TOTAL COOLING MBH	SENSIBLE COOLING MBH	FAN RPM	FAN HP	L	COMI LRA		COND.			URNACE OUTPUT MBH	COMB. FAN FLA		CTRI HZ		MIN. CIR. AMPS	моср	REMARKS
DOAS-1	CORRIDOR	RV-50-25	3360	3360	.75	301.7	153.3	1587	3	2	125	18.6	3 1.34	1.6	350	280	1.3	3	60	460	51.9	60	SEE NOTES

1.) MODEL NUMBER AND PERFORMANCE BASED ON GREENHECK CO. FACTORY BUILT ROOF TOP UNITS.

2.) UNIT DOUBLE WALL W/ R8 INSULATION. 3.) FANS VFD DRIVE

4.) PROVIDE WITH INSULATED MATCHING ROOF CURB. 5.) PROVIDED UNIT WITH DISCHARGE SMOKE DETECTOR FAN SHUTDOWN. LOCATE THERMOSTAT ON FOURTH FLOOR.

6.) UNIT TO BE FURNISHED WITH PROGRAMMABLE T-STAT WITH OCCUPIED/UNOCCUPIED CYCLE AND PROTECTIVE GUARD.

7.) 4" PLEATED 30% EFF. FILTERS.

8.) NON FUSED DISCONNECT SWITCH W/115 VOLT SERVICE OUTLET AT UNIT.

			Ť																				
WALL MOUNTED COOLING UNIT SCHEDULE INDOOR UNIT (#)									OUTDOOR UNIT (CU)														
MARK	SERVICE	MODEL	CFM	COOLING CAP.	FAN WATT	EL PH	ECTRICAL HZ V	FLA	MIN. CIR. AMPS	REMARKS	MARK	SERVICE	MODEL	CAP. MBH	<u> </u>	CTRIC HZ		FAN FLA	COM RLA	ИР LRA	MIN. CIR. AMPS	FUSE SIZE	REMARKS
AC-1	ELEVATOR MACHINE ROOM	PKA-A12HA	380	12,000	30	1	60 120	.33	1	CONTINUOUS OPERATION	CU-1	ELEVATOR MACHINE ROOM	PUY-A12NHA3	12,000	1	60	208	.35	8.9	29	13	15	SEE NOTES
AC-2	LAUNDRY	PKA-A36KA	920	34,200	56	1	60 120	.57	1	CONTINUOUS OPERATION	CU-2	LAUNDRY	PUZ-A36NHA3	34,200	1	60	208	.75	_	1	25	30	SEE NOTES

1.) UNIT SELECTION AND PERFORMANCE BASED ON MITSUBISHI ELECTRIC

2.) OUTDOOR UNIT CAPABLE OF LOW AMBIENT OPERATION.

2.) ALL DX SPLIT SYSTEM FAN COILS REMOTE CONDENSING UNIT WITH REFRIGERATION LINES EXTENDING OVER 25ft IN LENGTH INSTALL AND ADJUST REFRIGERATION & OIL CHARGE PER MANUFACTURERS RECOMMENDATIONS. 3.) WEATHERPROOF DISCONNECTS FOR OUTSIDE CONDENSING UNIT PROVIDED BY ELECTRICIAN.

4.) RUN PUMPED CONDENSATE PIPING TO FLOOR DRAIN OR JAN. SINK (COORDINATE WITH PLUMBER).

VER	VERT-I-PAK UNIT SCHEDULE (VP)																
MARK	SERVICE	MODEL	COOLING	НЕ	HEATING		сомр.	OUTDOOR FAN		CFM	O.A.	MAX	MIN	ELECTRIC		AL	REMARKS
IVIAIXIX	SLIVICE	WOBLE	BTU/HR	INPUT	OUTPUT	RLA	LRA	RPM	HP	CI W	CFM	FUSE	CIR. AMPS	PH	HZ V REMARKS	REMARKS	
VP-1	BREAKFAST	60MGE4-09-361	36,000	60,000	48,000	17.9	112	1075	1/4	1200	200	40	27	1	60	208	SEE NOTES
VP-2	FITTNESS	48MGE4-10-241P	24,000	48,000	38,400	13.5	58	1075	1/8	800	100	30	21	1	60	208	SEE NOTES
VP-3	KITCHEN	36MGE4-09-121P	12,000	36,000	28,800	6.8	45	1075	1/8	400	50	15	12	1	60	208	SEE NOTES

1.) MODEL NUMBER AND PERFORMANCE BASED ON MAGIC PAK VERTIPAK UNITS. PROVIDE UNIT WITH WALL SLEEVE, RETURN GRILLE, & REMOTE TSTAT.

2.) MOUNT T-STAT 54" A.F.F. UNITS SHALL BE INTERLOCKED WITH OWNER'S BUILDING ENERGY MANAGEMENT SYSTEM.

3.) REFRIGERANT R410-A W/ FREEZE PROTECTION. 4.) MOTORIZED FRESH AIR INTAKE DAMPER TO OPERATE IN OCCUPIED MODE.

5.) FILTER IN R.A. GRILLE

6.) CONNECTIONS TO UNIT SHALL HAVE PLUG INS ON QUICK DISCONNECTS FOR EASY OF MAINTENANCE.

MECHANICAL GENERAL NOTES

- 1. DRAWINGS ARE DIAGRAMMATIC, DETERMINE EXACT LOCATIONS OF SYSTEMS AND COMPONENTS IN FIELD.
- 2. COORDINATE WORK OF THIS SECTION WITH THAT OF OTHER SECTIONS.
- 3. MECHANICAL CONTRACTOR TO OBTAIN PERMITS FOR HIS OR HER WORK.
- 4. MECHANICAL CONTRACTOR TO PROVIDE CERTIFICATES OF INSURANCE PRIOR TO COMMENCEMENT OF ANY WORK.
- 5. MECHANICAL CONTRACTOR TO GUARANTEE ALL WORK FOR ONE YEAR FROM DATE OF ACCEPTANCE BY OWNER.
- 6. MECHANICAL CONTRACTOR TO FURNISH AT COMPLETION (3) SETS OF O&M MANUALS FOR ALL EQUIPMENT FURNISHED, ONE SET SHALL BE RETAINED BY THE ENGINEER AND (2) SETS WILL BE FURNISHED TO THE OWNER.
- 7. MECHANICAL CONTRACTOR TO PROVIDE (2) SETS OF AS-BUILT DRAWINGS IN REPRODUCIBLE MEDIA.
- 8. READ SPECIFICATIONS FOR REQUIREMENTS PERTAINING TO THESE DOCUMENTS.

9. PROVIDE INFORMATION AND HARDWARE AS NECESSARY TO COORDINATE CONCRETE PADS AND STEEL PLATFORMS REQUIRED FOR MECHANICAL WORK.

10. COORDINATE ROOF PENETRATIONS WITH WORK OF OTHER SECTIONS AND WITH FLASHING REQUIREMENTS.

11. SHEETMETAL FITTINGS SHOWN ARE TO BE PROVIDED. NO SUBSTITUTES SHALL BE ALLOWED WITHOUT PRIOR CONSENT FROM ARCHITECT OR ENGINEER.

12. RUN DUCTWORK AND PIPING CONCEALED, UNLESS SPECIFIED OTHERWISE, AND CLEAR OF CEILING INSERTS. ALL DUCTWORK SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO WALL AND UNDERSIDE OF BEAMS AND JOISTS.

- 13. REFER TO SMACNA STANDARDS FOR DUCTWORK CONSTRUCTION CLASSES, SEAL, AND LEAKAGE CLASSES.
- 14. INSTALL THERMOSTATS 5 FEET, 6 INCHES ABOVE FINISHED FLOOR OR AS DIRECTED OTHERWISE BY ARCHITECT.

15. EXTERIOR LOUVERS ARE INDICATED FOR INFORMATION ONLY. DETAILED DESCRIPTIONS ARE PROVIDED IN ARCHITECTURAL SPECIFICATIONS.

16. ALL WORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN PIPING AND DUCTS (INCLUDING DIVIDED DUCTS) AND TRANSITIONS AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO

17. VERIFY ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS. VERIFY AND PROVIDE DUCT TRANSITIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DIMENSIONS BEFORE FABRICATION.

18. ACCESS PANELS SHALL BE PROVIDED TO CLEAN COILS AND SERVICE DAMPERS, HEATERS, VALVES AND ALL CONCEALED MECHANICAL EQUIPMENT.

19. SUPPORT ALL EQUIPMENT, PIPING AND DUCTWORK FROM BUILDING STRUCTURE TO PROVIDE A VIBRATION FREE INSTALLATION. NOTIFY ARCHITECT AND INFORM STRUCTURAL ENGINEER ON ALL EQUIPMENT WEIGHTS. OBTAIN APPROVAL FROM STRUCTURAL ENGINEER FOR METHODS OF SUPPORT OF ALL EQUIPMENT.

- 20. SMOKE DETECTORS SHALL BE FURNISHED AND WIRED TO THE FIRE ALARM SYSTEM UNDER THE ELECTRICAL SECTION. UNDER THE MECHANICAL SECTION, THIS CONTRACTOR SHALL MOUNT THE DETECTORS IN DUCTWORK, WHERE REQUIRED BY CODE, AND SHALL WIRE THE DETECTORS TO THE ATC SYSTEM AND RESPECTIVE FAN STARTERS FOR SHUTDOWN.
- 21. ALL CONTROL WIRE AND CONDUIT SHALL COMPLY WITH NEC AND DIVISION 16 OF SPECIFICATIONS.
- 22. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF AIR TERMINAL DEVICES.

23. INTERNAL AIR FLOW DIMENSIONS ARE SHOWN FOR DUCTS. CONTRACTOR SHALL INCREASE SIZE FOR INTERNAL LINER IF APPLICABLE.

24. ALL MATERIALS AND EQUIPMENT SHALL BE NEW.

DUCTWORK ABOVE 2" CLASS BEFORE INSULATING.

25. DIFFUSER SIZES SHOWN ARE NECK SIZES; REGISTER AND GRILLE SIZE ARE NOMINAL.

26. PROVIDE FIRE DAMPERS AND ASSOCIATED ACCESS PANELS WHERE SHOWN ON DRAWINGS AND WHERE REQUIRED BY STATE OF MARYLAND FIRE CODE & 2015 IFC. FOR DUCTS THAT PENETRATE FIRE WALLS, FLOORS, AND PARTITIONS. PROVIDE SLEEVES WHERE PENETRATIONS ARE NOT PERPENDICULAR TO SURFACE PENETRATED. ENCLOSE DAMPERS IN 10 GAUGE STEEL SLEEVE AND WALL OR FLOOR FLANGES TO MEET SMACNA AND STATE OF MARYLAND FIRE CODE STANDARDS.

27. PROVIDE FLEXIBLE CONNECTIONS ON ALL DUCTS CONNECTING TO FANS AND AIR HANDLING UNITS. ALL DUCTS TO BE GROUNDED ACROSS FLEXIBLE CONNECTION WITH FLEXIBLE COPPER GROUNDING STRAPS.

28. THE INSIDE OF ALL UNLINED DUCTWORK VISIBLE THROUGH A GRILLE OR DIFFUSER SHALL BE PAINTED FLAT BLACK. 29. INSULATE PIPING AND DUCTWORK TO MEET 2015 IBC & IMC. PERFORM PRESSURE TESTS ON PIPING AND

30. PROVIDE HANGERS, CLAMPS, OFFSETS, EXPANSION JOINTS, ANCHORS AND GUIDES AS NECESSARY TO PREVENT STRESS ON PIPING.

- 31. PROVIDE VENTS AT HIGH POINTS IN PIPING SYSTEMS AND DRAIN VALVES AT LOW POINTS.
- 32. PROVIDE AT LEAST THREE-ELBOW SWING FOR PIPE TAKEOFFS TO RISERS.
- 33. PITCH PIPING 1 INCH IN 20 FEET IN DIRECTION OF FLOW, TO ALLOW FOR DRAINING.
- 34. ALL CONDENSATE DRAIN LINES SHALL BE PIPED FULL SIZE OF THE HVAC UNIT DRAIN OUTLET, WITH "P" TRAP, CONNECTED TO PLUMBING AS INDICATED ON DRAWINGS.

35. UPON COMPLETION OF HVAC INSTALLATION MECHANICAL CONTRACTOR SHALL EMPLOY INDEPENDENT AIR BALANCING CONTRACTOR TO TEST AND ADJUST SYSTEM(S) AND PREPARE AN AIR BALANCING REPORT ON SYSTEMS PERFORMANCE. AIR BALANCING REPORT SHALL CONFORM TO REQUIREMENTS OF THE ASSOCIATION AIR BALANCING COUNCIL STANDARDS. SIX COPIES OF THE REPORT SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.

36. ALL EXISTING GUESTROOM TOILET EXHAUST CEILING GRILLES SHALL BE REPLACED WITH NEW GRILLES.

	NEW FAN SO	CHEDULE	- E	#							
MARK	SERVICE	FAN TYPE	CFM	E.S.P. (IN. W.G.)	FAN RPM	FAN MOTOR AMPS	FAN WATTS	ELEC PH	TRICAL HZ	- V	REMARKS
CF-11	ELEVATOR MACH RM	SP-A250	200	.25	1000	.77	83	1	60	120	OPERATED BY THERMOSTAT
CF-12	ICE MACH 1st FL	SP-B150	154	.25	1050	1.7	129	1	60	120	CONTINUOUS RUNNING
CF-13	GUEST LAUNDRY	SP-B70	57	.25	675	.53	45	1	60	120	OPERATED BY LIGHT SWITCH
CF-14	LINEN STORAGE	SP-B70	57	.25	675	.53	45	1	60	120	OPERATED BY LIGHT SWITCH
CF-15	ICE MACH 2nd FL	SP-B80	80	.10	900	.60	54	1	60	120	CONTINUOUS RUNNING
CF-16	ICE MACH 3rd FL	SP-B80	80	.10	900	.60	54	1	60	120	CONTINUOUS RUNNING
CF-17	ICE MACH 4th FL	SP-B80	80	.10	900	.60	54	1	60	120	CONTINUOUS RUNNING
CF-18	STORAGE ROOM	SP-B80	80	.10	900	.60	54	1	60	120	OPERATED BY LIGHT SWITCH
EF-1	KITCHEN	CSP-A200	200	.25	900	.43	57.9	1	60	120	CONTINUOUS RUNNING
RF-1	GUEST TOILETS	GB-101-6	800	.375	1245	1/6 HP	.11 BHP	1	60	120	SEE NOTES
RF-2	GUEST TOILETS	GB-101-6	1120	.375	1450	1/6 HP	.17 BHP	1	60	120	SEE NOTES
RF-3	GUEST TOILETS	GB-101-6	800	.375	1245	1/6 HP	.11 BHP	1	60	120	SEE NOTES
RF-4	GUEST TOILETS	GB-101-6	800	.375	1245	1/6 HP	.11 BHP	1	60	120	SEE NOTES
RF-5	GUEST TOILETS	GB-101-6	780	.375	1245	1/6 HP	.11 BHP	1	60	120	SEE NOTES
RF-6	GUEST TOILETS	GB-101-6	800	.375	1245	1/6 HP	.11 BHP	1	60	120	SEE NOTES
RF-7	GUEST TOILETS	GB-018-6	400	.375	1315	1/6 HP	.09 BHP	1	60	120	SEE NOTES
RF-8	GUEST TOILETS	-	400	_	_	_	_	_	-	_	EXISTING FAN TO REMAIN
WF-10	LAUNDRY	SS118420B6	2150	.2	1160	1/6 HP	.20 BHP	1	60	120	OPERATED BY LIGHT SWITCH

CONDENSATE PUMP SCHEDULE (F)

AIR HANDLING UNIT | LITTLE GIANT

MANUFACTURER | MODEL NO. |

VCMA-15 | 1/50 | 1 | 60 | 115 | 1

MARK

LOCATION

1.) 1/2 GALLON COLLECTION TANK.

2.) AUTOMATIC START STOP OPERATION.

1.) MODEL NUMBER AND PERFORMANCE BASED ON GREENHECK CO.

2.) CEILING FANS TO HAVE INTEGRAL BACKDRAFT DAMPER. 3.) SUPPORT CEILING FANS WITH VIBRATION ISOLATORS AND PROVIDE FLEX DUCT AT EACH FAN.

4.) ROOF FANS SHALL BE FURNISHED WITH MATCHING INSULATED ROOF CURB AND INTEGRAL BACKDRAFT DAMPER.

5.) ROOF FAN TO HAVE ELECTRICAL DISCONNECT UNDER HOOD.

6.) LIGHT SWITCH SHALL HAVE RED INDICATING LIGHT.

ELECTRICAL HEAT SCHEDULE (**)												
MARK	LOCATION	MANUFACTURER	MODEL NO.	EI PH	LECTRI HZ	CAL V	AMPS	KW	NOTES			
WH-1	ENTRIES / STAIRS	QMARK	AWH4408F	1	60	208	19.2	4.0	SEE NOTES			

1.) INTEGRAL THERMOSTAT. 2.) SEMI-RECESSED.

INNS & SUITES

PORTLAND LaQUINTA INN & SUITES - LQ #2049 RENOVATION

340 Park Ave, Portland, ME 04102

Project Owner:

WATTS NOTES

60 SEE NOTES

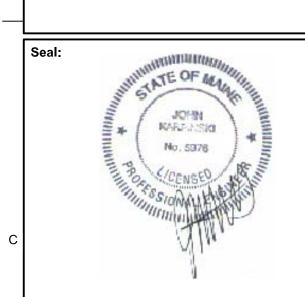
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ENGINEER:



Δ MECH. DESIGN Δ ENERGY MGT. △ INDOOR AIR QUALITY

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REVISIONS

Job Number: Drawn By: CLB

Checked By: **Lobby and ADA Documents**

Drawing Title:

MECHANICAL LEGEND, SCHEDULES, & NOTES

SHEET NUMBER: