

LEGEND	
☒	SUPPLY DUCT TURNED UP
☒	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
⊗	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

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

MECHANICAL GENERAL NOTES

- DRAWINGS ARE DIAGRAMMATIC, DETERMINE EXACT LOCATIONS OF SYSTEMS AND COMPONENTS IN FIELD.
- COORDINATE WORK OF THIS SECTION WITH THAT OF OTHER SECTIONS.
- MECHANICAL CONTRACTOR TO OBTAIN PERMITS FOR HIS OR HER WORK.
- MECHANICAL CONTRACTOR TO PROVIDE CERTIFICATES OF INSURANCE PRIOR TO COMMENCEMENT OF ANY WORK.
- MECHANICAL CONTRACTOR TO GUARANTEE ALL WORK FOR ONE YEAR FROM DATE OF ACCEPTANCE BY OWNER.
- 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.
- MECHANICAL CONTRACTOR TO PROVIDE (2) SETS OF AS-BUILT DRAWINGS IN REPRODUCIBLE MEDIA.
- READ SPECIFICATIONS FOR REQUIREMENTS PERTAINING TO THESE DOCUMENTS.
- PROVIDE INFORMATION AND HARDWARE AS NECESSARY TO COORDINATE CONCRETE PADS AND STEEL PLATFORMS REQUIRED FOR MECHANICAL WORK.
- COORDINATE ROOF PENETRATIONS WITH WORK OF OTHER SECTIONS AND WITH FLASHING REQUIREMENTS.
- SHEETMETAL FITTINGS SHOWN ARE TO BE PROVIDED. NO SUBSTITUTES SHALL BE ALLOWED WITHOUT PRIOR CONSENT FROM ARCHITECT OR ENGINEER.
- 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.
- REFER TO SMACNA STANDARDS FOR DUCTWORK CONSTRUCTION CLASSES, SEAL, AND LEAKAGE CLASSES.
- INSTALL THERMOSTATS 5 FEET, 6 INCHES ABOVE FINISHED FLOOR OR AS DIRECTED OTHERWISE BY ARCHITECT.
- EXTERIOR LOUVERS ARE INDICATED FOR INFORMATION ONLY. DETAILED DESCRIPTIONS ARE PROVIDED IN ARCHITECTURAL SPECIFICATIONS.
- 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 OWNER.
- 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.
- ACCESS PANELS SHALL BE PROVIDED TO CLEAN COILS AND SERVICE DAMPERS, HEATERS, VALVES AND ALL CONCEALED MECHANICAL EQUIPMENT.
- 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.

SPLIT SYSTEM AIR CONDITIONING UNIT SCHEDULE													INDOOR UNIT								OUTDOOR UNIT							
MARK	LOCATION	MODEL	CFM	E.S.P. (W.C.) iwg	OUTSIDE AIR (CFM)	FAN FLA	FAN HP	ELECTRICAL PH	HZ	V	MIN. CIR. AMPS	MOCP	REMARKS	MARK	MODEL	COOLING CAP. TOTAL (MBH)	FAN FLA	COMP. LRA	RLA	ELECTRICAL PH	HZ	V	MIN. CIR. AMPS	MAX. FUSE	REMARKS			
AHU-1	LOBBY	FV4CW002L00	1000	.5	50	4.3	1/2	1	60	208	5.4	15	LOW AMBIENT CONTROLS	ACU-1	25HCB636A003	35.63	.6	85	18.5	1	60	208	23.0	40	SEE NOTES			
AHU-2	OFFICE/BOH	FV4CW002L00	600	.5	50	4.3	1/2	1	60	208	5.4	15	LOW AMBIENT CONTROLS	ACU-2	25HCB624A003	23.48	.6	58.3	12.5	1	60	208	16.2	25	SEE NOTES			

- NOTES:**
- MODEL NUMBER AND PERFORMANCE BASED ON CARRIER CO. UNITS, WITH LOW AMBIENT COOLING CAPABILITIES. REF. WILL BE R410-A.
 - PROVIDE AIR HANDLING UNITS WITH FILTERS AND FILTER RACK SIZED AT 500 FPM VELOCITY.
 - PROVIDE ACCESS FOR AIR HANDLING UNITS SIZED FOR MAINTENANCE AND REMOVAL OF UNITS.
 - PROVIDE INFINITY CONTROLS PROGRAMABLE THERMOSTAT. LABEL T-STATS AS TO UNIT WHICH THEY SERVE. PROVIDE W/ TAMPER PROOF BOX.
 - 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.
 - 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.
 - DISCONNECTS PROVIDED BY ELECTRICIAN.
 - RUN PUMPED CONDENSATE PIPING TO FLOOR DRAIN OR JAN. SINK (COORDINATE WITH PLUMBER).

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	COMP. NO	LRA	RLA	COND. NO	FAN HP	GAS FURNACE INPUT MBH	OUTPUT MBH	COMB. FAN FLA	ELECTRICAL PH	HZ	V	MIN. CIR. AMPS	MOCP	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

- NOTES:**
- MODEL NUMBER AND PERFORMANCE BASED ON GREENHECK CO. FACTORY BUILT ROOF TOP UNITS.
 - UNIT DOUBLE WALL W/ R8 INSULATION.
 - FANS VFD DRIVE
 - PROVIDE WITH INSULATED MATCHING ROOF CURB.
 - PROVIDED UNIT WITH DISCHARGE SMOKE DETECTOR FAN SHUTDOWN. LOCATE THERMOSTAT ON FOURTH FLOOR.
 - UNIT TO BE FURNISHED WITH PROGRAMMABLE T-STAT WITH OCCUPIED/UNOCCUPIED CYCLE AND PROTECTIVE GUARD.
 - 4" PLEATED 30% EFF. FILTERS.
 - NON FUSED DISCONNECT SWITCH W/115 VOLT SERVICE OUTLET AT UNIT.

WALL MOUNTED COOLING UNIT SCHEDULE													INDOOR UNIT								OUTDOOR UNIT							
MARK	SERVICE	MODEL	CFM	COOLING CAP.	FAN WATT	ELECTRICAL PH	HZ	V	FLA	MIN. CIR. AMPS	REMARKS	MARK	SERVICE	MODEL	CAP. MBH	ELECTRICAL PH	HZ	V	FAN FLA	COMP. LRA	RLA	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	-	-	25	30	SEE NOTES				

- NOTES:**
- UNIT SELECTION AND PERFORMANCE BASED ON MITSUBISHI ELECTRIC
 - OUTDOOR UNIT CAPABLE OF LOW AMBIENT OPERATION.
 - 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.
 - WEATHERPROOF DISCONNECTS FOR OUTSIDE CONDENSING UNIT PROVIDED BY ELECTRICIAN.
 - RUN PUMPED CONDENSATE PIPING TO FLOOR DRAIN OR JAN. SINK (COORDINATE WITH PLUMBER).

VERT-I-PAK UNIT SCHEDULE																	
MARK	SERVICE	MODEL	COOLING BTU/HR	HEATING INPUT	HEATING OUTPUT	COMP. RLA	COMP. LRA	OUTDOOR FAN RPM	HP	CFM	O.A. CFM	MAX FUSE	MIN CIR. AMPS	ELECTRICAL PH	HZ	V	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	FITNESS	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

- NOTES:**
- MODEL NUMBER AND PERFORMANCE BASED ON MAGIC PAK VERTIPAK UNITS. PROVIDE UNIT WITH WALL SLEEVE, RETURN GRILLE, & REMOTE TSTAT.
 - MOUNT T-STAT 54" A.F.F. UNITS SHALL BE INTERLOCKED WITH OWNER'S BUILDING ENERGY MANAGEMENT SYSTEM.
 - REFRIGERANT R410-A W/ FREEZE PROTECTION.
 - MOTORIZED FRESH AIR INTAKE DAMPER TO OPERATE IN OCCUPIED MODE.
 - FILTER IN R.A. GRILLE
 - CONNECTIONS TO UNIT SHALL HAVE PLUG INS ON QUICK DISCONNECTS FOR EASY OF MAINTENANCE.

NEW FAN SCHEDULE													
MARK	SERVICE	FAN TYPE	CFM	E.S.P. (IN. W.G.)	FAN RPM	FAN MOTOR AMPS	FAN WATTS	ELECTRICAL PH	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		

- NOTES:**
- MODEL NUMBER AND PERFORMANCE BASED ON GREENHECK CO.
 - CEILING FANS TO HAVE INTEGRAL BACKDRAFT DAMPER.
 - SUPPORT CEILING FANS WITH VIBRATION ISOLATORS AND PROVIDE FLEX DUCT AT EACH FAN.
 - ROOF FANS SHALL BE FURNISHED WITH MATCHING INSULATED ROOF CURB AND INTEGRAL BACKDRAFT DAMPER.
 - ROOF FAN TO HAVE ELECTRICAL DISCONNECT UNDER HOOD.
 - LIGHT SWITCH SHALL HAVE RED INDICATING LIGHT.

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

- NOTES:**
- INTEGRAL THERMOSTAT.
 - SEMI-RECESSED.

CONDENSATE PUMP SCHEDULE										
MARK	LOCATION	MANUFACTURER	MODEL NO.	HP	ELECTRICAL PH	HZ	V	AMPS	WATTS	NOTES
CP-1	AIR HANDLING UNIT	LITTLE GIANT	VCM-15	1/50	1	60	115	1	60	SEE NOTES

- NOTES:**
- 1/2 GALLON COLLECTION TANK.
 - AUTOMATIC START STOP OPERATION.

Project:



PORTLAND LaQUINTA INN & SUITES - LQ #2049 RENOVATION

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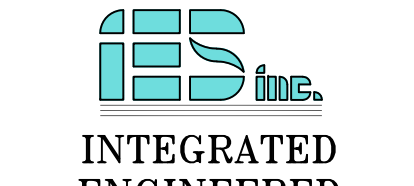
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REVISIONS	

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Phase:	Lobby and ADA Documents

MECHANICAL LEGEND, SCHEDULES, & NOTES

SHEET NUMBER:

M-100

DATE: 10 April 2017