

MECHANICAL NOTES

1. THIS CONTRACTOR SHALL EXAMINE ALL OTHER SPECIFICATIONS, DRAWINGS, AND ALL FEATURES ON SITE OF CONSTRUCTION WHICH MAY AFFECT HIS WORK AND SHALL BE GOVERNED BY THESE OTHER SPECIFICATIONS, INCLUDING THE GENERAL CONDITIONS AND PARTICULAR INSTRUCTIONS TO ALL BIDDERS AND SUPPLIERS.
2. ALL WORK SHALL BE EXECUTED AND INSPECTED IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND/OR STATE CODES, LAWS, ORDINANCES, RULES AND REGULATIONS APPLICABLE TO THIS PARTICULAR CLASS OF WORK, & EACH CONTRACTOR SHALL INCLUDE IN HIS PRICE ALL APPLICABLE MATERIAL, TOOLS, LABOR, CHARGES, FEES, PERMITS, ROYALTIES, TAXES AND OTHER SIMILAR COSTS IN CONNECTION THEREWITH.
3. PRIOR TO FABRICATION OF DUCTWORK, CONTRACTOR SHALL EXAMINE AND VERIFY ALL CONDITIONS ABOVE AND BELOW THE CEILING WHICH MAY INTERFERE WITH THE DUCT SYSTEM AND NOTIFY THE ARCHITECT OF ANY CONFLICT ENCOUNTERED. CONTRACTOR SHALL PROVIDE ALL OFFSETS, ETC. WHICH MAY BE REQUIRED, WITHOUT ADDITIONAL COST TO THE OWNER.
4. ALL SHEETMETAL DUCT CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH "SMACNA" LOW PRESSURE DUCT CONSTRUCTION STANDARDS FOR DUCT DOWN STREAM OF BOXES & MEDIUM PRESSURE CONSTRUCTION STANDARDS FOR PRIMARY AIR DUCT.
5. ALL DUCTS SHALL BE SUPPORTED WITH 1" WIDE, 16 GAUGE NON-PERFORATED GALVANIZED STEEL BANDS.
6. MAXIMUM LENGTH OF FLEXIBLE ROUND DUCT SHALL NOT EXCEED 3'-0" HORIZONTALLY, AT DIFFUSERS ONLY.
7. ALL DUCT DIMENSIONS SHOWN ON PLANS ARE NET FREE AREA, INCREASE SHEETMETAL SIZE AS REQUIRED FOR INTERNAL INSULATION.
8. ALL RECTANGULAR DUCTWORK SHALL BE INSULATED WITH CLOSED CELL ELASTOMERIC INSULATION w/MINIMUM 1/2" 1 1/2 LB. DENSITY INTERNAL DUCT LINER. (FIBERGLASS DUCT LINER IS NOT PERMITTED.) ALL ROUND DUCTWORK SHALL HAVE MINIMUM 2" BLANKET TYPE INSULATION w/FOIL BACK & ALL JOINTS LAPPED AND TAPED.
9. ALL METAL DUCT SHALL BE GALVANIZED SHEET STEEL. ALUMINUM IS NOT ACCEPTABLE. GAUGE OF METAL AND CONSTRUCTION OF DUCT SHALL BE IN ACCORDANCE WITH SMACNA MEDIUM & LOW VELOCITY DUCT STANDARDS.
10. ALL WORK SHALL BE WARRANTED FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM DATE OF FINAL ACCEPTANCE BY ARCHITECT. LOSS OF REFRIGERANT SHALL BE DEEMED DUE TO DEFECTIVE MATERIAL OR WORKMANSHIP.
11. CONTRACTOR SHALL PROVIDE FLEXIBLE CONNECTIONS AT ALL DUCT CONNECTIONS TO HEATING AND AIR CONDITIONING EQUIPMENT AND SHALL PROVIDE VIBRATION ISOLATION ON ALL MECHANICAL EQUIPMENT PER EQUIPMENT MANUFACTURERS' RECOMMENDATIONS.
12. CONTRACTOR SHALL COORDINATE LOCATION OF ALL SUPPLY AND RETURN AIR REGISTERS, DUCTS, GRILLES AND DIFFUSERS WITH LIGHTING AND CEILING PATTERNS.
13. INSULATE TOP OF DIFFUSERS/REGISTERS WITH 3-1/2" THICK CLOSED CELL ELASTOMERIC BATT INSULATION. SECURE INSULATION TO DIFFUSERS IN SIMILAR FASHION AS ROUND DUCT INSULATION.
14. ALL FIRE DAMPERS SHALL BE U.L. LISTED. PROVIDE ACCESS PANELS AS REQUIRED FOR SERVICE.
15. PROVIDE ARCHITECT WITH COMPLETE SET OF TEST AND BALANCE OF AIR DISTRIBUTION SYSTEM DOCUMENTATION UPON COMPLETION OF INSTALLATION.
16. CONTRACTOR SHALL FIRE STOP ALL PIPING PENETRATIONS OF FIRE, SMOKE, OR COMBINATION WALLS/PARTITIONS TO MEET THE LATEST NATIONAL BUILDING CODE REQUIREMENTS, SEE ARCH. SHT. A611.
17. CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO BIDDING TIME AND SHALL FAMILIARIZE HIMSELF W/ ALL EXISTING CONDITIONS.
18. THERMOSTATS AND ALL CONTROL DEVICES SHALL BE MOUNTED 48" A.F.F.
19. PAINT INSIDE OF RETURN AIR DUCTS BLACK BEHIND ALL RETURN AIR GRILLES.
20. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ARCHITECTURAL DRAWINGS ALL FIRE RATED WALLS & CEILINGS AND SHALL FURNISH ALL FIRE DAMPERS/RADIATION DAMPERS REQUIRED.
21. ALL DETAILS AND NOTES ON THESE DRAWINGS SHALL BE APPLIED TO ALL OF THE DRAWINGS FOR THIS PROJECT.
22. COORDINATE WITH ELECTRICAL ALL OF THE POWER NEEDS, WIRING DEVICES ETC. AND FURNISH ALL ITEMS NOT FURNISHED UNDER THE ELECTRICAL.
23. SEISMIC MECHANICAL SUPPORTS TO BE DESIGNED BY AN ENGINEER EMPLOYED BY THE CONTRACTOR AND SUBMITTED FOR APPROVAL. COMPLY WITH SEISMIC BRACING REQUIREMENTS OF INTERNATIONAL BUILDING CODE. SEISMIC BRACING DEVICES SHALL BE SUBMITTED TO ENGINEER FOR REVIEW. CONTRACTORS SHALL EMPLOY A REGISTERED PROFESSIONAL ENGINEER TO DESIGN SEISMIC RESTRAINTS FOR EQUIPMENT PURCHASED. SHOP DRAWINGS SHALL BEAR SEAL OF A PROFESSIONAL ENGINEER, LICENSED IN STATE, WITH MIN. 5 YEARS EXPERIENCE IN DESIGN OF SEISMIC BRACING SYSTEMS. SEISMIC DRAWINGS SHALL BE SUBMITTED TO LOCAL CODE ENFORCEMENT FOR APPROVAL PRIOR TO INSTALLATION. REFER TO STRUCTURAL ENGINEERING DOCUMENTS FOR ACCELERATION, BUILDING STRUCTURE, ETC.
24. ALL SYSTEMS SHALL COMPLY WITH HILTON WORLDWIDE, HOME2 STANDARDS, MOST CURRENT EDITION.

MAKE-UP AIR UNIT SCHEDULE

	MFR. & MODEL	TOTAL CFM	COOLING						HEATING				SUPP FAN									WEIGHT
			CAPACITY (MBH)		ENT AIR		LVG AIR		CAPACITY (MBH)		AIR TEMP		H.P.	FRPM	E.S.P.	VOLTAGE	COMP	EVAP FAN FLA	COND FAN FLA	M.C.A.	MOCP	(LBS)
			SENSIBLE	TOTAL	DB	WB	DB	WB	INPUT	OUTPUT	ENT	LVG					RLA					
MUA-1 MUA-2	AAON RN-020-8-0-BA02-349 OR APPROVED EQUAL	2,900	92,930	251,650	85.40	80.18	54.82	54.62	270,000	218,700	19.90	89.7	2.0	827	1"	208/3/60	(2)@30.1	7.5	(2)@7.0	89.0	110	3,700

NOTES:

1. FACTORY ASSEMBLED, PIPED, WIRED AND TESTED AS A SINGLE PACKAGE.
2. MANUAL RESET HIGH PRESSURE SWITCHES, AUTO RESET LOW PRESSURE SWITCHES.
3. R410A REFRIGERANT
4. MODULATING GAS HEATING(MINIMUM 10:1 TURNDOWN), WITH 304 SERIES STAINLESS HEAT EXCHANGER W/ A 25 YEAR WARRANTY (PARTS ONLY),.
5. 100% OUTSIDE AIR HOOD WITH 2 POSITION MOTORIZED DAMPER AND METAL MESH PRE-FILTER.
6. 4" MERV 12 FILTERS AND A 2" MERV 7 PRE-FILTERS.
7. HOT GAS HOT GAS BY-PASS ON FIRST REFRIGERATION CIRCUIT. (FROST-STAT COMPRESSOR CYCLING NOT ACCEPTABLE).
8. MODULATING HOT GAS RE-HEAT COIL FOR DE-HUMIDIFICATION (2-POSITION OR DEDICATED HEAT PUMP CIRCUIT NOT ACCEPTABLE).
9. MANUAL RESET HIGH PRESSURE SWITCHES & AUTO RESET LOW PRESSURE SWITCHES.
10. 2-STAGE COOLING, 2 COMPRESSOR CIRCUITS WITH INTERLACED-CIRCUIT DX COIL. (HORIZONTAL SPLIT NOT ACCEPTABLE).
11. SIGHT GLASS AND STAINLESS STEEL DRAIN PAN.
12. INTEGRAL NON-FUSED DISCONNECT.
15. CONTROLS: WATMASTER/ORION VCMX CONTROLLER WITH AMBIENT DEWPOINT SENSOR; ELECTRONIC SEQUENCING OF COMPRESSORS, HEATING AND MODULATING HOT GAS RE-HEATING. THE INTENTION OF THIS UNIT IS TO PROVIDE CONTINUOUS DEHUMIDIFICATION OF OUTSIDE AIR WHILE ALSO PROVIDING TEMPERATURE CONTROL TO THE SPACE IT SERVES. IF THIS CAUSES OVER-COOLING IN THE SPACE, THE MODULATING HOT GAS REHEAT VALVE SHALL OPEN TO SATISFY THE CONDITIONED SPACE REQUIREMENT. FIELD MOUNTED CONTROLS INCLUDE A DUCT MOUNTED LEAVING AIR STAT AND A WALL MOUNTED STAT. ALL UNIT MOUNTED CONTROLS FOR COMPLETE OPERATION SHALL BE INSTALLED BY THE EQUIPMENT MANUFACTURER.
16. ECM CONDENSER FAN MOTORS FOR CONDENSER HEAD PRESSURE CONTROL.
17. 2" FOAM INJECTED INSULATED (MINIMUM R13 VALUE) DOUBLE WALL CABINET CONSTRUCTION
18. SINGLE POINT POWER CONNECTION.
19. UNIT SHALL BE AHRI LISTED AND CERTIFIED. (COIL ONLY CERTIFICATION IS NOT ACCEPTABLE)
20. 30" HIGH FACTORY ASSEMBLED AND INSULATED ROOF CURB/PLENUM.
21. COMPRESSORS SHALL HAVE 5 YEAR WARRANTY. (PARTS ONLY).
22. DUCT MOUNTED SMOKE DETECTOR PROVIDED BY ELECTRICAL, INSTALLED BY MECHANICAL.
19. THIS IS AN AAON/HILTON NATIONAL ACCOUNT. FOR PRICING, PHONE: 1-901-345-6100.

FAN SCHEDULE

MARK	DESCRIPTION
EF-1	GREENHECK MODEL SP-A90, CEILING MOUNTED EXHAUST FAN, WITH CEILING RADIATION DAMPER, 50 CFM @ .25" SP, 29.4 WATTS @ 120 VOLT. INDIVIDUAL WALL SWITCHES.
EF-2	GREENHECK MODEL SP-B90, CEILING MOUNTED EXHAUST FAN, & WALL CAP, 75 CFM @ .25" SP, 50 WATTS @ 120 VOLT.
EF-3	GREENHECK MODEL SP-A410 CEILING MOUNTED EXHAUST FAN, 350 CFM @ .25" ESP, 121 WATTS @ 120 V. COMPLETE W/ WALL CAP, BIRDSCREEN, BACKDRAFT DAMPER, & DISCONNECT. WL WALL LOUVER.
EF-3A	GREENHECK MODEL SP-A200 CEILING MOUNTED EXHAUST FAN, 200 CFM @ .25" ESP, 48.2 WATTS @ 120 V. COMPLETE W/ BIRDSCREEN, BACKDRAFT DAMPER, & DISCONNECT. WL WALL LOUVER.
EF-4	GREENHECK MODEL SP-A700 CEILING MOUNTED EXHAUST FAN, 600 CFM @ .25" ESP, 359 WATTS @ 120 V. COMPLETE W/ WALL CAP, BIRDSCREEN, BACKDRAFT DAMPER, & DISCONNECT. THERMOSTAT CONTROLLED.
EF-5	GREENHECK MODEL SP-A290 CEILING MOUNTED EXHAUST FAN, 225 CFM @ .375" ESP, 88.7 WATTS @ 120 V.
EF-6	COMPLETE W/ WALL CAP, BIRDSCREEN, BACKDRAFT DAMPER, & DISCONNECT. WL WALL LOUVER.

- * ALL EXHAUST DUCT SHALL BE METAL PUCT. NO FLEX PERMITTED.
- * ALL EXTERIOR WALL CAPS TO BE PVC.

PTAC AIR CONDITIONER SCHEDULE

MARK	TOTAL CFM	O.S.A. CFM	COOLING COIL DATA			AMB	ELECTRIC HEATER		ELECTRICAL DATA (MCA)	EER	MAX FUSE	REMARKS
			ENT. AIR DB F	WB F	TOTAL CAPACITY		KW	VOLTAGE				
PTAC	340	50	80°F	67°F	8.900	95°F	3.5 @ 240V. 2.63 @ 208V.	230/208V. /1/60	14.78 208/1/60	11.2	20 AMP	ISLANDAIRE DR PTAC DEHUMIDIFICATION UNIT, MODEL E24209A-31N44AB, DIGITAL UNIT MOUNTED CONTROLS AND ELECTRONIC REMOTE WALL MOUNTED THERMOSTATS, WITH 2-SPEED FAN CONTROL, 50 CFM CONDITIONED O.S.A. 2-STAGE HEAT. WALL SLEEVE. NO ACCEPTABLE ALTERNATES.

ACCESSORIES: (1) ELECTRICAL SUBBASE, (2) CONDENSATE REMOVAL KIT, AND SECONDARY DRAIN KIT, EXTEND AND CONNECT TO DRAIN PIPE PROVIDED BY PLUMBER, COORDINATE WITH PLUMBER. (3) CONTROLS SHALL PREVENT OPERATION OF COMPRESSOR AND ELECTRIC HEAT AT THE SAME TIME, (4) ARCHITECTURAL DECORATIVE LOUVER, AS MANUFACTURED BY RELIABLE PRODUCTS. LOUVERS SHALL BE CONSTRUCTED OF ALUMINUM WITH CUSTOM FINISH AS DIRECTED BY THE ARCHITECT, (5) WIRED ELECTRONIC DIGITAL REMOTE MOUNTED THERMOSTAT. (6) ELECTRICAL SUB-BASE KIT. (7) FRESH AIR DAMPER.

NOTE: IF DR PTAC'S ARE NOT USED, THEN MUA UNITS WILL NEED TO INCREASE IN SIZE AND SYSTEM REDESIGN.

HEATING AND AIR CONDITIONING SCHEDULE

AIR HANDLING UNIT											CONDENSING UNIT					REMARKS
	MFR. & MODEL	TOTAL CFM	O.S.A. CFM	TOTAL COOLING	SENSIBLE COOLING	E.S.P.	VOLTAGE	H.P.	ELEC HT KW	SINGLE POINT CONNECTION MCA	MFG & MODEL	M.C.A.	COMP. R.L.A.	FAN F.L.A.	VOLTAGE	
AHU-1	TRANE 4TEH3F24B	800	160	24,500	17,400	.5"	208/1/60	1/3	3.6	25	CU-1 TRANE 4TTB3024A1	12.0	8.8	0.7	208/1/60	COMPLETE W/ WALL MOUNTED T'STAT WITH TIME DELAY AND HARD START KIT.
AHU-2	TRANE 4TEH3F60B	2000	250	59,700	43,400	.6"	208/3/60	1.0	7.20	37	CU-2 TRANE 4TTA3060A3	24.0	18.1	1.3	208/3/60	COMPLETE W/ WALL MOUNTED T'STAT WITH TIME DELAY AND HARD START KIT.
AHU-3	TRANE 4TEH3F36B	1200	240	35,700	25,800	.6"	208/1/60	1/2	5.76	40	CU-3 TRANE 4TTA3036A3	15.0	11.5	0.7	208/3/60	COMPLETE W/ WALL MOUNTED T'STAT WITH TIME DELAY AND HARD START KIT.
AHU-4	TRANE 4TEH3F48B	1400	270	41,800	29,500	.7"	208/1/60	3/4	5.76	42	CU-4 TRANE 4TTA3042A3	18.0	13.5	1.3	208/3/60	COMPLETE W/ WALL MOUNTED T'STAT WITH TIME DELAY AND HARD START KIT.
AHU-5	MITSUBISHI PKA-A12HA4	290	0	12,000	9,720	.1"	115/1/60	30W			CU-5 MITSUBISHI PUY-A12NH44	12.0	0.35		115/1/60	COMPLETE W/ WALL MOUNTED T'STAT, WITH TIME DELAY AND HARD START KIT.
AHU-6	MITSUBISHI PKA-A12HA4	290	0	12,000	9,720	.1"	115/1/60	30W			CU-6 MITSUBISHI PUY-A12NH44	12.0	0.35		115/1/60	COMPLETE W/ WALL MOUNTED T'STAT, WITH TIME DELAY AND HARD START KIT.
AHU-7	TRANE 4TEH3F60B	2000	375	59,700	43,400	.6"	208/3/60	1.0	7.20	37	CU-7 TRANE 4TTA3060A3	24.0	18.1	1.3	208/3/60	COMPLETE W/ WALL MOUNTED T'STAT WITH TIME DELAY AND HARD START KIT.

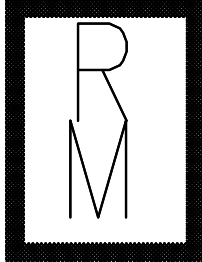
NOTE:

1. CONTRACTOR SHALL EXAMINE AND COORDINATE WITH ALL COMPONENTS OF BUILDING CONSTRUCTION PRIOR TO LOCATING & SETTING OF H.V.A.C. EQUIPMENT AND NOTIFY ARCHITECT OF ANY CONFLICT.
2. ALL AHU'S SHALL HAVE SMOKE DETECTORS IN THE RETURN AIR DUCT TO SOUND AN AUDIBLE ALARM AND SHUT DOWN UNIT.
3. ALL AHU'S TO BE SET ON RAISED PLATFORMS/PLENUMS OR HAVE THE RA DUCT TIED INTO THE AHU'S, DO NOT USE MECH ROOM FOR PLENUM.
4. ALL THERMOSTATS TO HAVE SECURITY COVERS. 5. AHU-5 & AHU-6 RECEIVE POWER FROM OUTDOOR UNITS THROUGH FIELD- SUPPLIED INTERCONNECTED WIRING.
5. ALL AHU'S SHALL HAVE A MINIMUM MERV 8 FILTERS, FULLY SYNTHETIC MEDIA WITHOUT PAPER FRAMES.
6. PROVIDE UV PROTECTIVE COATING ON ALL REFRIGERANT PIPE INSULATION EXPOSED TO SUNLIGHT.

GRILLES, REGISTERS AND DIFFUSERS

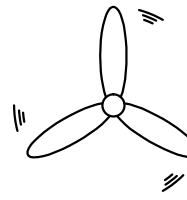
TYPE	MFR. & MODEL	REMARKS
CD LAY-IN	PRICE ASCDA	ADJUSTABLE LOUVERED FACE, ALUMINUM CONSTRUCTION WITH 4 CONES, LAY-IN T-BAR FRAME (TYPE 3) AND OPPOSED BLADE DAMPERS.
CD SURFACE	PRICE ASCDA	ADJUSTABLE LOUVERED FACE, ALUMINUM CONSTRUCTION WITH 4 CONES, SURFACE MOUNTING FRAME (TYPE 3), 12x12 OR 24x24 AMF FRAME FOR SURFACE MOUNTING, AND VCR9 OPPOSED BLADE DAMPERS.
RAG/EAG CEILING	PRICE APDDR	FLUSH PERFORATED FACE, ALUMINUM FACEPLATE WITH MAXIMUM SQUARE NECK FOR PLENUM RETURN AND FRAME FOR LAY-IN CEILING OR SURFACE MOUNTING WITH 12x12 OR 24x24 AMF FRAME.
SAR	PRICE 620-S	DOUBLE DEFLECTION SIDEWALL, ALUMINUM CONSTRUCTION, 3/4" BLADE SPACING WITH FRONT BLADES PARALLEL TO THE SHORT DIRECTION, SURFACE MOUNTING FRAME AND VCS3 OPPOSED BLADE DAMPER.
RAG/EAG SIDEWALL	PRICE 635D	FIXED LOUVERS (FULL FACE, NO FILLER PANELS) ½" SPACING AT 45° DEFLECTION, ALUMINUM CONSTRUCTION, FRAME FOR SURFACE MOUNTING.
DG	PRICE ATG1-BF	HEAVY DUTY ALUMINUM DOOR GRILLE WITH SIGHT PROOF APPEARANCE AND FLAT BORDER FRAME BOTH SIDES. FURNISHED WITH AND INSTALLED BY THE DOOR MANUCATURER.
DG-FR	A-J MFG. 1900	FIRE RATED DOOR GRILLE FOR 1-3/4" THICK DOORS. FURNISHED WITH AND INSTALLED BY THE DOOR MANUFACTURER.

CONTRACTOR SHALL VERIFY CEILING TYPES AND FURNISH FRAME STYLES ACCORDINGLY.



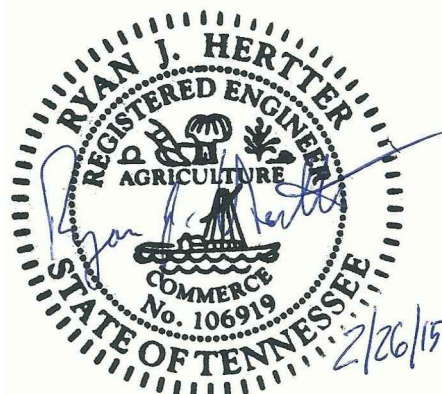
Richard Molenaar

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PROJECT NAME:

HOME
SUITES BY HILTON

W Mane Street West Monroe, Louisiana

SHEET TITLE:

SCHEDULES & DETAILS

PROJECT NO.

13010

LATEST REVISION:

02-26-15

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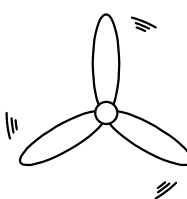
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