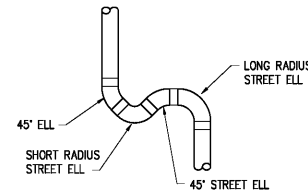


TONS	0-80 EQUIVALENT FEET		81-150 EQUIVALENT FEET		REMARKS FOR 81-150 EQ.FT.
	SUCTION	LIQUID	SUCTION	LIQUID	
1.5	3/8"	3/4"	3/8"	3/4"	PROVIDE CRANKCASE HEATER TRY VALVE HARD START ASSIST VIBRATION ISOLATION FOR SECURING LINES
2.0	3/8"	3/4"	3/8"	7/8"	
2.5	3/8"	3/4"	3/8"	7/8"	
3.0	3/8"	7/8"	3/8"	1-1/8"	
3.5	3/8"	1-1/8"	3/8"	1-1/8"	
4.0	3/8"	1-1/8"	3/8"	1-1/8"	
5.0	3/8"	1-1/8"	3/8"	1-1/8"	

NOTES:
EQUIVALENT FEET = LENGTH (HORIZ) + LENGTH (VERT) + 10 FEET (LOSSES)
USE ONLY LONG SWEEP ELBOWS
MAXIMUM EQUIVALENT FEET SHALL NOT EXCEED 150 FEET



REFRIGERANT OIL TRAP DETAIL
1
M-11 NOT TO SCALE

FOR USE WHEN HEIGHT DIFFERENCE BETWEEN THE CONDENSER (HIGHER) AND THE EVAPORATOR (LOWER) IS GREATER THAN 15 FEET

FANS										
MARK	SERVICE	TYPE	CFM	WATTS	ESP IN WC	DRIVE	SONES	UNIT WT (LBS)	BASIS OF DESIGN	REMARKS
EF-A	PRIVATE RR	CABINET	50	16	0.15	DIRECT	1.5	8	DELTA BREEZE ASSO	①②③
EF-B	KITCHEN	CABINET	100	80	0.25	DIRECT	2.0	8	GREENHECK SP-B110	①② ⑤⑥
EF-C	DOG WASH	PROP FAN	350	1/25 HP	0.125	DIRECT	5.9	12.5	DAYTON 1HLAZA	①② ④ ⑥

- ① BACKDRAFT DAMPER ② DISCONNECT SWITCH ③ CONTROLLED W/LIGHTS ④ SHUTTER/WEATHERHOOD
⑤ RADIATION DAMPER ⑥ SEPARATE SWITCH

AIR HANDLING UNITS											HEAT PUMP UNITS								
MARK	SERVICE	TONS	CFM	OA CFM	COOLING CAPACITIES (MBH)		HEATING CAPACITY	MAX TON	ELECTRICAL 208/230/1 MVA	UNIT WT (LBS)	BASIS OF DESIGN GOODMAN	REMARKS	MARK	ELECTRICAL 208/230/1 MVA		UNIT WT (LBS)	SEER	BASIS OF DESIGN GOODMAN	REMARKS
					TOTAL	SENS.								MCA	MOCP				
AHU-A	UNITS	1.5	600	②	24	1/5	23/27	25/30	85	AWUF-180316B	①	HPU-A	11.8	20	199	14	GSZ14-018	①②③	
AHU-B	UNITS	2.0	800	②	5 KW	1/5	25/27	25/30	85	AWUF-240316B	①	HPU-B	17.5	30	207	14	GSZ14-024	①②③	
AHU-C	UNITS	2.5	1,000	②	8 KW	1/5	34/39	35/40	85	AWUF-300316B	①	HPU-C	18.7	30	219	14	GSZ14-030	①②③	

- ① DISCONNECT ② HEAT STRIP LOCK-OUT ③ LOCKING FREON CAP

THRU-WALL HEAT PUMP																	
MARK	SERVICE	TONS	CFM	EXTERNAL SP	OA CFM	RETURN CFM	COOLING CAP.		HEAT CAP. KW	ELECTRICAL			UNIT WT (LBS)	COOLING EFFICIENCY	HEATING EFFICIENCY	BASIS OF DESIGN	REMARKS
							TOTAL MBH	SENS. MBH		MCA	MOCP	VOLT					
THP-A	DOG WASH	0.75	330	N/A	N/A	330	9.0	9.0	3.5	19.5	20	230/208/1	150	EER 12.0	COP = 3.4	AMANA PTH093G335	① ③ ④

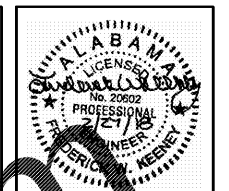
- ① DISCONNECT ② WALL SLEEVE, SUB-BASE AND ARCHITECTURAL GRILLE ③ EXTERIOR DRAIN KIT

MECHANICAL NOTES AND SPECIFICATIONS

- THE CONTRACTOR SHALL PROVIDE A COMPLETE HVAC SYSTEM TO INCLUDE ALL LABOR, MATERIALS, TOOLS, AND EQUIPMENT FOR A COMPLETE AND FUNCTIONAL SYSTEM INCLUDING ALL NECESSARY APPURTENANCES CUSTOMARILY INCLUDED IF NOT SPECIFICALLY CALLED OUT.
- DEVIATION FROM MATERIALS, METHODS AND PROCEDURES SET FORTH HEREIN MUST BE APPROVED IN WRITING. APPROVAL WILL NOT BE GIVEN UNLESS THE PROPOSED SYSTEM IS EQUAL IN PERFORMANCE, DURABILITY, LONGEVITY, AND RELIABILITY TO THAT SPECIFIED.
- ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH ALL LOCAL, STATE, AND FEDERAL CODES, LAWS, AND ORDINANCES.
- THE CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY FAMILIARIZE HIMSELF WITH ALL DETAILS OF THE WORK AND THE CONDITIONS AND SHALL VERIFY DIMENSIONS AND CLEARANCES AND BE ASSURED THAT THE EQUIPMENT PURCHASED WILL FIT INTO THE AVAILABLE SPACE.
- SUBMISSION OF A BID OR PROPOSAL SHALL BE CONSTRUED AS EVIDENCE THAT THE CONTRACTOR HAS FAMILIARIZED HIMSELF WITH THE PLANS, SPECIFICATIONS, AND BUILDING SITE. CLAIMS MADE SUBSEQUENT TO BIDS FOR MATERIALS AND/OR LABOR DUE TO DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED, UNLESS DIFFICULTIES WERE NOT HAVE BEEN FORESEEN EVEN THOUGH PROPER EXAMINATION HAD BEEN MADE.
- THE CONTRACTOR SHALL REVIEW STRUCTURAL DRAWINGS BEFORE FABRICATING OR INSTALLING DUCTWORK OR EQUIPMENT TO AVOID ANY CONFLICTS.
- ALL HARD DUCTWORK SHALL BE FABRICATED OF GALVANIZED STEEL THICKNESS AND GAUGE TO CONFORM TO SMACNA DUCT CONSTRUCTION STANDARDS. (RECTANGULAR OR EQUIVALENT ROUND)
- DUCTWORK SHALL BE AIRTIGHT, FREE OF LEAKS, AND SHALL BE INSPECTED FOR LEAKS PRIOR TO INSTALLATION. FINISHED CEILING SYSTEM.
- DUCTWORK, DAMPERS, LOUVERS, DIFFUSERS, AND OTHER DISTRIBUTION EQUIPMENT AND MATERIALS SHALL CONFORM TO THE FOLLOWING:
A. ASHRAE/ANSI E. ASHRAE STANDARD HANDBOOK 99
B. SMACNA F. AIR DIFFUSION COUNCIL TEST
C. SMACNA CODE 1062R3
D. NFPA G. ANY LOCAL CODES NOT COVERED ABOVE
- ALL DUCT SIZES ARE CLEAR NET INSIDE DIMENSIONS.
- ALL LOW PRESSURE ROUND DUCT AND FLEXIBLE DUCT SHALL BE CONNECTED TO LOW PRESSURE DUCT WITH SPIN-IN FITTINGS AND MANUAL DAMPERS.
- LOW PRESSURE INSULATED FLEXIBLE DUCT SHALL BE SIZED AS SHOWN. USE R-6 IN CONDITIONED AREAS AND R-8 IN UNCONDITIONED AREAS.
- ALL SUPPLY AND RETURN AIR DUCTWORK SHALL BE LINED WITH 1", 1-1/2" DENSITY FIBERGLASS 5'-0" DOWNSTREAM FROM UNIT. (AHU-1,2,3,4 ONLY)
- ALL SUPPLY AND RETURN DUCTWORK NOT LINED SHALL BE INSULATED WITH 1-1/2", 3/4" DENSITY FOIL BACKED EXTERNAL INSULATION.
- ALL THERMOSTATS SHALL BE INSTALLED 4'-0" AFF AND SHALL HAVE CLEAR LOCKING COVERS. (CLUBHOUSE UNITS ONLY)
- ALL MITERED SUPPLY DUCT ELBOWS SHALL BE PROVIDED WITH TURNING VANES.
- CEILING DIFFUSERS (CD) SHALL BE 24" TITUS MODEL TMS OR APPROVED EQUAL. SIZED AS PER DRAWINGS.
- SUPPLY REGISTER (SR) SHALL BE RUSKIN MODEL 272RL OR APPROVED EQUAL. SIZED AS PER DRAWINGS.
- SIDEWALL RETURN AIR GRILLE (SRAG) SHALL BE RUSKIN MODEL 25RL OR APPROVED EQUAL. SIZED AS PER DRAWINGS.
- RETURN AIR GRILLES (RAG) SHALL BE TITUS 50" EGG-CRATE TYPE, 24" x 24" UNLESS OTHERWISE NOTED.
- REFRIGERANT PIPING SHALL BE SIZED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR LIQUID, VAPOR HORIZONTALS AND VAPOR RISERS. JOINTS SHALL BE MADE WITH SILVER SOLDER.
- INSULATE REFRIGERANT SUCTION LINES WITH ARMAFLEX OR EQUAL. INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. RUN IN WALLS AND ABOVE CEILING AS MUCH AS POSSIBLE.
- MANUAL DAMPERS SHALL BE INCLUDED IN OUTSIDE AIR INTAKE DUCTS TO REGULATE OUTSIDE AIR TO THE AIR HANDLING UNITS.
- UNDERCUT RESTROOM DOORS 3/4" FOR EXHAUST MAKE-UP.
- CONDENSATE DRAIN MUST TERMINATE AT AN APPROVED POINT. VERIFY AT SITE.
- ALL LOW VOLTAGE CONTROL WIRING SHALL BE UNDER THIS CONTRACTOR.
- ALL INSULATING MATERIALS SHALL HAVE A COMPOSITE FLAME SPREAD OF 25 AND SMOKE DEVELOPED OF 50 (ASTM E-84, NFPA 255 & UL 723).
- THERMOSTATS AND OTHER CONTROL ITEMS SHALL BE A PRODUCT OF THE EQUIPMENT MANUFACTURER. (THERMOSTATS SHALL BE EQUAL TO PROGRAMMABLE HONEYWELL T7300).
- PROVIDE SMOKE DETECTORS IN ALL SUPPLY AIR DUCTS, OF UNITS SERVING EGRESS CORRIDORS OR GREATER THAN 2,000 CFM, ARRANGED TO SHUT DOWN UNIT BLOWER AND ACTIVATE BUILDING ALARM.
- FIRE DAMPERS SHALL BE RUSKIN MODEL D-1802 STYLE "B" OR APPROVED EQUAL WITH A 1-1/2 HOUR RATING.
- RADIATION DAMPERS SHALL BE RUSKIN MODEL CFD(R)2 OR APPROVED EQUAL WITH A 1-1/2 HOUR RATING.
- PROVIDE AIR EXTRACTORS AT DUCT TAKE-OFFS AS REQUIRED FOR AIR BALANCING. (CLUBHOUSE UNITS ONLY)
- BALANCE ALL AIR SYSTEMS TO PRODUCE THE VOLUMES AND QUANTITIES SHOWN ON THE DRAWINGS OR SPECIFIED.
- THE CONTRACTOR SHALL VERIFY ALL ELECTRICAL CHARACTERISTICS WITH ELECTRICAL DRAWINGS BEFORE PURCHASING EQUIPMENT.

MECHANICAL EQUIPMENT

- ELECTRIC BASEBOARD HEATER (EBBH-A) SHALL BE MARKEL SERIES 2100 CAPABLE OF 500 WATTS. SUPPLIED WITH THERMOSTAT.
- ALL MECHANICAL EQUIPMENT WHICH HAVE ELECTRICAL CONNECTIONS SHALL BE SUPPLIED WITH DISCONNECT (PROVIDED BY ELECTRICAL CONTRACTOR.)
- LOUVERS SHALL BE RUSKIN MODEL ELF8110-55 OR APPROVED EQUAL. SIZED AS ON DRAWINGS.
- INTAKE BACKDRAFT DAMPERS SHALL BE RUSKIN MODEL B02A1 OR APPROVED EQUAL, SELECTED TO FIT INTAKE LOUVERS. DAMPER BLADES BEGIN TO OPEN AT 0.03" W.G. AND ARE FULLY OPEN AT 0.10" W.G. SIZED AS ON DRAWINGS.



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Legacy at Jones Farm Phase 2
HUNTSVILLE, ALABAMA
AN APARTMENT COMMUNITY FOR
RBJ BAILEY, LLC

MECHANICAL SCHEDULES/NOTES

SHEET NO.
M-9