

REGISTRATION SEAL

MECHANICAL SYMBOLS & ABBREVIATIONS LEGEND	
	NEW PIPE, DUCTWORK OR EQUIPMENT
	DUCT SIZE, FIRST DIMENSION IS SIDE DRAWN
	FLEXIBLE ROUND DUCTWORK
	FIRE DAMPER, SMOKE DAMPER, SMOKE DETECTOR
	CEILING SUPPLY DIFFUSER
	CEILING RETURN OR EXHAUST AIR
	S.A. DUCT OUT OF TU BOX WITH DUCT LINER FOR THE FIRST FIVE FEET OF DUCT OUT OF TU BOX
	SIDEWALL REGISTER OR GRILLE
	CHANGE IN PIPE OR DUCT SIZE OR SHAPE
	REFRIGERANT PIPING
	CONDENSATE OR OTHER DRAIN PIPING
	ELBOW TURNED DOWN OR TURNED UP IN PIPING
	THERMOSTAT, ARROW SHOWS CONTROL WIRING PATH
	TIME CLOCK
	DIAMETER
	UNDER-CUT DOOR 3/4", UNLESS OTHER SIZE NOTED
	INDICATES EQUIPMENT ON PLANS; TOP ITEM SHOWS TYPE OF EQUIPMENT AND BOTTOM ITEM SHOWS SPECIFIC MARK NUMBER
	ITEM IN HEXAGON SHOWS AIR DEVICE MARK NUMBER, ITEM ABOVE LINE SHOWS NECK SIZE, ITEM BELOW LINE SHOWS AIR FLOW THROUGH DEVICE, AND NUMBER IN FRONT SHOWS QUANTITY IF MORE THAN ONE
	ABOVE FINISHED FLOOR
	AIR HANDLING UNIT
	BYPASS DAMPER
	BRITISH THERMAL UNITS, THOUSAND BRITISH THERMAL UNITS
	CAPACITY
	CUBIC FEET PER MINUTE
	CEILING
	CONDENSING UNIT
	DRY BULB TEMPERATURE, WET BULB TEMPERATURE
	EXHAUST AIR, EXHAUST GRILLE
	EXHAUST FAN
	EXTERNAL STATIC PRESSURE (USUALLY EXPRESSED IN INCHES OF WATER IN GAGE)
	HEAT PUMP UNIT
	MANUAL VOLUME DAMPER
	OUTSIDE AIR
	RETURN AIR, RETURN GRILLE
	PACKAGED ROOFTOP UNIT
	SUPPLY AIR
	SUPPLY FAN FOR SHOP VENTILATION
	VOLTS ALTERNATING CURRENT, NUMBER OF PHASES
	WATTS, KILOWATTS
	UNIT HEATER
	AUDIBLE/VISUAL ALARM DEVICE CONNECTED TO DUCT SMOKE DETECTOR
	ACCESS DOOR
	CONTROL DAMPER-OPPOSED BLADE
	CONTROL DAMPER-PARALLEL BLADE
	BACKDRAFT DAMPER
	RADIUS ELBOW (R=1.5)
	VANED ELBOW
	MANUAL VOLUME DAMPER (MVD), MOTOR OPERATED DAMPER (MOD)
	X INDICATES SECTION NUMBER/XX INDICATES ON WHICH DRAWING SECTION APPEARS
	CONNECT NEW TO EXISTING
	TERMINATION POINT OF DEMOLITION

ENERGY RECOVERY UNIT SCHEDULE																							
SYMBOL	SUPPLY CFM	EXHAUST CFM	MAX. MOTOR HP		TOTAL S.P. IN. H2O		EXT. S.P. IN. H2O		ENTHALPY WHEEL-SUMMER				ENTHALPY WHEEL-WINTER				MAX. DIMENSIONS	WEIGHT LBS	POWER VAC/PH	BASIS OF DESIGN	REMARKS		
			SUPPLY	EXHAUST	SUPPLY	EXHAUST	SUPPLY	EXHAUST	SUPPLY	EXHAUST	SUPPLY		EXHAUST		L (IN)	W (IN)						H (IN)	
											EA DB/WB (°F)	LA DB/WB (°F)	EA DB/WB (°F)	LA DB/WB (°F)									EA DB/WB (°F)
ERV-1	1800	1800	2	1-1/2	1.518	0.951	1.25	0.75	95/76	80.0/67.0	75/62.5	91.6/73.7	23.5/19.6	57.1/46.1	70/54.3	31.2/27.2	62	51	34	732	208/1	GREENHECK ERV-20-30L-A	1:2:3:4
ERV-2	850	650	1/3	1/3	1.467	0.877	1.25	0.75	95/76	80.0/67.0	75/62.5	91.7/73.5	23.5/19.6	53.9/43.7	70/54.3	30.8/27.2	47	34	27	350	208/1	GREENHECK ERV-10-20L	1:2:3:4

1. MIN WHEEL EFFECTIVENESS - 80% FOR ERV-1, AND 80% FOR ERV-2.
 2. PROVIDE MOTORIZED DAMPERS FOR OUTSIDE AIR AND EXHAUST AIR THAT ARE INTERLOCKED WITH ERV TO CLOSE WHEN ERV IS NOT RUNNING.
 3. PROVIDE MERV 8 OUTDOOR AND EXHAUST AIR FILTERS, LOW LEAKAGE SUPPLY AND EXHAUST DAMPERS, INDEPENDENT BLOWER CONTROL, DOUBLE WALL CONST, DUCT FLANGE, AND HINGED ACCESS DOORS.
 4. ERV FANS SHALL BE ON "ON" ALL TIME.
 5. PROVIDE SMOKE DETECTOR IN SUPPLY AIR DUCT AS PER PLAN. SMOKE DETECTOR SHALL BE PROVIDED BY ELECTRICAL AND INSTALLED BY MECHANICAL.

GRAVITY VENTILATOR SCHEDULE					
MARK	THROAT	MAX CFM	INTAKE AREA SF	GREENHECK MODEL	NOTES
GV-1-1	24"	1600	4.95	GRSR 24	1
GV-1-2	24"	1850	4.95	GRSR 24	1
GV-2-1	14"	660	2.57	GRSR 15	1
GV-2-2	16"	850	3.02	GRSR 16	1

1. SPUN ALUMINUM GRAVITY VENTILATOR.

DESIGN CRITERIA	
INSIDE TEMPERATURE	80F DB
INSIDE RELATIVE HUMIDITY	60%RH

DUCTLESS SPLIT AIR CONDITIONING SYSTEM SCHEDULE									
INDOOR UNIT MARK	OUTDOOR UNIT MARK	SERVICE	UNIT SIZE (BTU/HR.)	OUTSIDE AIR	VOLT -PHL-CY.	MANUFACTURER & MODEL	INDOOR UNIT / OUTDOOR UNIT	NOTES	
ACU-1	HPU-1	NEW OFFICE	12,000	20	208/1-60	CARRIER COMECQ1-3/39MA0B12R-3	3/39MA0B12R-3	1:2:3:4:5	
ACU-2	HPU-2	RENOVATED OFFICE	12,000	20	208/1-60	CARRIER COMECQ2-3/39MA0B12R-3	3/39MA0B12R-3	1:2:3:4:5	

1. VERIFY ELECTRICAL POWER REQUIREMENTS WITH ELECTRICAL PLANS WHICH TAKES PRECEDENCE OVER THIS INFORMATION.
 2. PROVIDE THERMOSTAT, DISCONNECT AND ELECTRICAL CONNECTION TO OUTDOOR UNIT PER MANUFACTURER'S INSTRUCTIONS.
 3. ROUTE CONDENSATE DRAIN AS SHOWN ON PLANS. PROVIDE MANUFACTURER'S INTEGRATED CONDENSATE TRAP.
 4. PROVIDE MANUFACTURER'S GRILLE / CEILING PANEL.
 5. 4-WAY CEILING CASSETTE. PROVIDE MANUFACTURER'S AIR INSULATOR TO TOP SURFACE OF INDOOR UNIT.
 6. PROVIDE MANUFACTURER'S WIRE THERMOSTAT K5AC050A.

AIR-COOLED CONDENSING UNIT SCHEDULE									
MARK	AHU SERVED	NOM. CAP. (TONS)	REFRIG.	OA TEMP. SUMMER (DB)	OA TEMP. WINTER (DB)	WEIGHT (LBS)	POWER VAC/PH	BASIS OF DESIGN CARRIER	NOTES
CU-1	ERV-1	5.0	R410A	93	17	300	208/1	24ACC460A003	1: 2: 3: 4: 5: 7
CU-2	ERV-2	2.5	R410A	93	17	300	208/1	24ACC430A003	1: 2: 3: 4: 5: 7

1. PROVIDE WITH DEFROST CONTROLS, LOW AMBIENT HEAD PRESSURE CONTROLS, AND ANTI-SHORT CYCLE TIMER. PROVIDE COIL GUARD.
 2. PROVIDE WIRE CONNECTION TO INDOOR UNIT PER MANUFACTURER'S RECOMMENDATIONS.
 3. VERIFY ELECTRICAL POWER REQUIREMENTS WITH ELECTRICAL PLANS, WHICH TAKE PRECEDENCE OVER THIS INFORMATION.
 4. PROVIDE LIQUID LINE SOLENOID, CRANKCASE HEATER, TXV, START CAPACITOR AND RELAY AS RECOMMENDED BY MANUFACTURER FOR LONG LINE APPLICATIONS.
 5. PROVIDE RAWAL APR-410-2 HOT GAS BYPASS VALVE. REFER TO SPECIFICATION FOR FURTHER INFORMATION.
 6. PROVIDE RAWAL APR-410-1 HOT GAS BYPASS VALVE. REFER TO SPECIFICATION FOR FURTHER INFORMATION.
 7. PROVIDE LONG LINE ACCESSORIES NOTED ON NOTE 4 WHERE REFRIGERANT PIPE LENGTH IS GREATER THAN 80 EQUIVALENT FEET.

DX COOLING COIL SCHEDULE													
MARK	TOTAL CFM	MAX. COIL FPM	COIL ENTERING AIR DESIGN CONDITIONS		COIL LEAVING AIR DESIGN CONDITIONS		DIMENSIONS		AIR PRESSURE DROP (W.G.)	COIL ROWS	FIN SPACING FINS/IN	MANUFACTURER & MODEL	NOTES
			DB F	WB F	DB F	WB F	FACE LENGTH INCHES	FACE HEIGHT INCHES					
CC-1	1800	410	80.0	67.0	58.0	57.0	36.0	17.5	0.48	4	8	COMMERCIAL COILS 40X	1:2:3:4
CC-2	850	430	81.9	68.5	58.0	58.0	21.0	18.5	0.48	4	14	COMMERCIAL COILS 40X	1:2:3:4

1. PROVIDE MANUFACTURER'S SHIP LOOSE DRAIN PAN. DRAIN PAN SHALL BE 18 GA. STAINLESS STEEL.
 2. PROVIDE FLOAT ACTIVATED SWITCH IN DRAIN PAN BELOW TO SHUT ERV-1/CU-1 DOWN IN CASE OF CONDENSATE OVER FLOW.
 3. ROUTE CONDENSATE TO HUB DRAIN PROVIDED BY PLUMBING. REFER TO PLUMBING PLAN FOR LOCATION. COIL CABINET SHALL BE INSULATED. COIL SHALL HAVE TXV MOUNTED.
 4. PROVIDE A COIL OUTLET SWITCH. REFER TO DETAIL PROVIDED. WIRE COIL OUTLET SWITCH IN SERIES WITH FLOAT ACTIVATED SWITCH.

ELECTRIC DUCT HEATER SCHEDULE									
MARK	Kw	DUCT SIZE	No. STAGES	CFM	VOLTS	AMPERAGE	LAY-OUT BASIS: WARREN TECHNOLOGY	NOTES	
DH-1	11.0	18"x18"	2-STAGE	1800	208/1φ	52.9	CBK	1	
DH-2	8.0	14"x14"	2-STAGE	850	208/1φ	38.5	CBK	1	

1. PROVIDE A 2-STAGE DUCT HEATER.

AIR DEVICE SCHEDULE									
MARK	SERVICE	NECK SIZE	SIZE	MATERIAL	TYPE	PATTERN	MOUNTING TYPE	LAYOUT BASIS	NOTES
ST	SUPPLY	SEE PLANS	24" X 24"	STEEL	SQUARE CONE	4-WAY	LAY-IN	TITUS TMS	1:2:3:5
RT	RETURN	SEE PLANS	24" X 24"	ALUMINUM	EGGCRATE	----	LAY-IN	TITUS 50F	1:4

1. PROVIDE STANDARD WHITE FINISH.
 2. INSULATE BACK OF DEVICE.
 3. BALANCE AIRFLOW TO QUANTITY SHOWN.
 4. PROVIDE FULL SIZE FIELD FABRICATED PLENUM ON TOP OF GRILL FOR DUCT CONNECTION.

A NEW ADDITION TO
ROCKDALE COUNTY
ANIMAL CONTROL
 1506 ROCKBRIDGE ROAD, CONYERS, GA 30012

MARK	DATE	DESCRIPTION
Δ	12/17/19	KENNEL LOCATIONS

DATE: 11-01-18 PROJECT NUMBER: 18-059
 DRAWN BY: JWK & KMP CHECK BY: KMP

SHEET TITLE:
 MECHANICAL SCHEDULES

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