

- DEDICATED OUTSIDE AIR UNIT W/ ENERGY RECOVERY SCHEDULE NOTES:**
1. REFER TO SPECIFICATION SECTION 237433 FOR FEATURES.
  2. REFER TO SPECIFICATION SECTION 230900 AND SHEET M701 FOR CONTROLS.
  3. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL CHARACTERISTICS.
  4. ENERGY RECOVERY WHEEL MOTOR TO BE 1/2 HP MINIMUM.
  5. ROOM RETURN AIR CONDITIONS: 75°F DB AT 50% RH.
  6. PROVIDE UNIT INSTALLED FIRE ARM ADDRESSABLE SMOKE DETECTOR ON SUPPLY SIDE OF UNIT.
  7. PROVIDE EACH UNIT WITH AN AIR TREATMENT SYSTEM CONTROLLING CONTAMINANTS OF CONCERN AND MEETING THE REQUIREMENTS OF THE INDOOR AIR QUALITY PROCEDURE OF ASHRAE 62.1-2007. AIR TREATMENT MUST BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS. SYSTEM SHALL BE POWERED BY A 24 VOLT CONNECTION THROUGH UNIT. SUPPLIER SHALL PROVIDE A LETTER STATING THAT THEIR PRODUCT MEETS ALL REQUIREMENTS OF ASHRAE 62.1-2007 FOR REDUCTION OF OUTSIDE AIR, AS WELL AS ALL SUPPORTING DOCUMENTATION AND CALCULATIONS.
  8. PROVIDE THIRD PARTY ECONOMIZER IF REQUIRED TO ALLOW FOR DUCT CONFIGURATION SHOWN ON FLOOR PLAN AND RELIEF.
  9. PROVIDE HOT GAS REHEAT ON ALL UNITS.

**DEDICATED OUTSIDE AIR UNIT W/ ENERGY RECOVERY SCHEDULE**

NUMBER	SUPPLY AIR			EXHAUST AIR			COOLING					HEATING				MANUFACTURER		
	TOTAL CFM	EXT. STATIC PRESS. (IN. W.C.)	MIN. FAN MOTOR HP	TOTAL CFM	EXT. STATIC PRESS. (IN. W.C.)	MIN. FAN MOTOR HP	O.A. EAT (D.B./W.B.)(°F)	WHEEL LAT (D.B./W. B.)(°F)	WHEEL % EFF	COOLING CAPACITY (BTU/H)	COIL LAT (D.B./W.B.)(°F)	HOT GAS REHEAT LAT(D.B./W.B.)(°F)	O.A. EAT (D.B./W.B.)(°F)	WHEEL LAT (D.B./W.B.)(°F)	WHEEL % EFF		OUTPUT CAPACITY (BTU/HR)	GAS BURNER LAT (°F)
ERU - 1	1,530	1.25	3.0	1,300	1.25	1.0	95/75	81.8/67.4	64.1	66,500	53.5/53.2	80.7	20/16.5	52.9/43.4	64.1	80,000	101.3	Greenheck RVE-40-30H-5D-C

**MINI-SPLIT UNIT SCHEDULE NOTES:**

1. REFER TO SPECIFICATION SECTION 238126 FOR FEATURES.
2. REFER TO SPECIFICATION SECTION 230900 AND 230993 FOR CONTROLS.
3. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL CHARACTERISTICS.
4. PROVIDE EACH UNIT WITH AN AIR TREATMENT SYSTEM CONTROLLING CONTAMINANTS OF CONCERN AND MEETING THE REQUIREMENTS OF THE INDOOR AIR QUALITY PROCEDURE OF ASHRAE 62.1-2007. AIR TREATMENT MUST BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS. SYSTEM SHALL BE POWERED BY A 208 VOLT CONNECTION THROUGH UNIT. SUPPLIER SHALL PROVIDE A LETTER STATING THAT THEIR PRODUCT MEETS ALL REQUIREMENTS OF ASHRAE 62.1-2007 FOR REDUCTION OF OUTSIDE AIR, AS WELL AS ALL SUPPORTING DOCUMENTATION AND CALCULATIONS.
5. PROVIDE ALL UNITS WITH TWO (2) SETS OF WASHABLE FILTERS.
6. PROVIDE ALL UNITS WITH WIRED, WALL-MOUNTED THERMOSTATS.

**MINI-SPLIT SCHEDULE**

NUMBER	INDOOR UNIT (MAHU)		OUTDOOR UNIT (MHP)				INDOOR UNIT MODEL	OUTDOOR UNIT MODEL	NOTES		
	AIRFLOW CFM	OUTSIDE AIR CFM	TOTAL CAPACITY (BTU/H)	ENTERING D.B. (°F)	W.B. (°F)	O.A. CONDENSER (°F)				OUTPUT CAPACITY (BTU/H)	O.A. CONDENSER (°F)
MAHU - 1	290	0	9,000	80	67	95	10,000	47	CARRIER 40MAQB09B-3	CARRIER 38MAQB09R-3	WITH LOW AMBIENT COOLING KIT
MAHU - 2	290	0	9,000	80	67	95	10,000	47	CARRIER 40MAQB09B-3	CARRIER 38MAQB09R-3	WITH LOW AMBIENT COOLING KIT

**ELECTRIC HEATER SCHEDULE NOTES:**

1. REFER TO SPECIFICATION SECTION 238216.14 FOR FEATURES.
2. REFER TO SPECIFICATION SECTION 230900 AND 230993 FOR CONTROLS.
3. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL CHARACTERISTICS.

**ELECTRIC HEATER SCHEDULE**

NUMBER	TYPE	KW	MANUFACTURER
EH - 1	CEILING	4	QMARK CDF500
EH - 2	WALL	4	QMARK AWH4408
EH - 3	WALL	2	QMARK AWH4408

**AIR DISTRIBUTION SCHEDULE NOTES:**

1. PROVIDE SQUARE TO ROUND ADAPTERS FOR EXHAUST/RETURN GRILLES AS REQUIRED.
2. ALL SUPPLY AIR DIFFUSERS SHALL BE FACTORY INSULATED, FOIL-BACKED TYPE.
3. SEE WALL HUNG UNIT SCHEDULE FOR ADDITIONAL DEVICES.
4. ALL SIDEWALL MOUNTED DEVICES SHALL BE FACTORY PRIMED FOR FIELD PAINTING TO MATCH THE WALL PER SPECIFICATION SECTION 099123.

**AIR DISTRIBUTION SCHEDULE**

SYMBOL	MAX CFM	FACE SIZE	NECK SIZE	THROW	FUNCTION	MANUFACTURER	DESCRIPTION
E1	750	24"x12"	22" X 10"	---	E/RAG	PRICE 80	W/ SHEET METAL PLENUM, FULL SIZE OF GRILLE FACE
E2	1600	24"x24"	22" X 22"	---	E/RAG	PRICE 80	W/ SHEET METAL PLENUM, FULL SIZE OF GRILLE FACE
E3	1600	24"x24"	22" X 22"	---	E/RAG	PRICE 80FF	W/ SHEET METAL PLENUM AND HINGED GRILLE
S1	210	24"x24"	6"ø	4-WAY	SUPPLY	PRICE SCD	W/ FACTORY INSULATED METAL BACK PAN
S3	400	24"x24"	10"ø	4-WAY	SUPPLY	PRICE SCD	W/ FACTORY INSULATED METAL BACK PAN
SR1	485	16" x 12"	16" X 12"	---	E/RAG	PRICE 630	W/ 45 DEGREE BLADES

**HVAC CONTROL PANELS**

CONTROL PANEL	TYPE	LOCATION
CONTROL PANEL	CUSTODIAL 204	
DDC CONTROL PANEL	CUSTODIAL 204	

**VARIABLE REFRIGERANT FLOW COIL SCHEDULE NOTES:**

1. REFER TO SPECIFICATION SECTION 238129 FOR FEATURES.
2. REFER TO SPECIFICATION SECTIONS 230900, 238129, AND SHEET M701 FOR CONTROLS.
3. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL CHARACTERISTICS.
4. PROVIDE EACH UNIT WITH AN AIR TREATMENT SYSTEM CONTROLLING CONTAMINANTS OF CONCERN AND MEETING THE REQUIREMENTS OF THE INDOOR AIR QUALITY PROCEDURE OF ASHRAE 62.1-2007. AIR TREATMENT MUST BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS. SYSTEM SHALL BE POWERED BY A 208 VOLT/1 PHASE CONNECTION THROUGH UNIT. SUPPLIER SHALL PROVIDE A LETTER STATING THAT THEIR PRODUCT MEETS ALL REQUIREMENTS OF ASHRAE 62.1-2007 FOR REDUCTION OF OUTSIDE AIR, AS WELL AS ALL SUPPORTING DOCUMENTATION AND CALCULATIONS.
5. PROVIDE ALL UNITS WITH AN EXTRA WASHABLE FILTER.
6. EACH VRFC SHALL HAVE AN INTEGRAL CONDENSATE LIFT PUMP.

**VARIABLE REFRIGERANT FLOW COIL SCHEDULE**

NUMBER	TOTAL CFM COOLING	OUTSIDE AIR CFM	EXTERNAL STATIC PRESSURE (IN. WC)	COOLING		HEATING		MANUFACTURER	ASSOCIATED OUTDOOR UNIT (VRHP)	
				TOTAL CAPACITY (BTU/HR)	ENTERING D.B. (°F)	DESIGN AMBIENT DRY BULB (°F)	OUTPUT CAPACITY (BTU/HR)			
VRFC - 101	330	15	0.00	9,000	80	67	47	10,900	CARRIER 40VMF009	VRHP 100
VRFC - 102	330	15	0.00	9,000	80	67	47	10,900	CARRIER 40VMF009	VRHP 100
VRFC - 103	330	20	0.00	9,000	80	67	47	10,900	CARRIER 40VMF009	VRHP 100
VRFC - 104	330	20	0.00	9,000	80	67	47	10,900	CARRIER 40VMF009	VRHP 100
VRFC - 105	330	20	0.00	9,000	80	67	47	10,900	CARRIER 40VMF009	VRHP 100
VRFC - 106	330	10	0.00	9,000	80	67	47	10,900	CARRIER 40VMF009	VRHP 100
VRFC - 107	460	0	0.00	12,000	80	67	47	13,600	CARRIER 40VMF012	VRHP 100
VRFC - 108	330	10	0.00	9,000	80	67	47	10,900	CARRIER 40VMF009	VRHP 100
VRFC - 109	330	10	0.00	9,000	80	67	47	10,900	CARRIER 40VMF009	VRHP 100
VRFC - 110	330	10	0.00	9,000	80	67	47	10,900	CARRIER 40VMF009	VRHP 100
VRFC - 111	330	10	0.00	9,000	80	67	47	10,900	CARRIER 40VMF009	VRHP 100
VRFC - 112	330	10	0.00	9,000	80	67	47	10,900	CARRIER 40VMF009	VRHP 100
VRFC - 113	330	10	0.00	9,000	80	67	47	10,900	CARRIER 40VMF009	VRHP 100
VRFC - 114	330	15	0.00	9,000	80	67	47	10,900	CARRIER 40VMF009	VRHP 100
VRFC - 115	330	15	0.00	9,000	80	67	47	10,900	CARRIER 40VMF009	VRHP 100
VRFC - 116	330	10	0.00	9,000	80	67	47	10,900	CARRIER 40VMF009	VRHP 100
VRFC - 117	1,350	0	0.40	48,000	80	67	47	53,000	CARRIER 40VMM048	VRHP 100
VRFC - 118	306	0	0.00	8,000	80	67	47	10,000	CARRIER 40VMC009	VRHP 100
VRFC - 119	306	0	0.00	8,000	80	67	47	10,000	CARRIER 40VMC009	VRHP 100
VRFC - 120	306	0	0.00	8,000	80	67	47	10,000	CARRIER 40VMC009	VRHP 100
VRFC - 121	306	0	0.00	8,000	80	67	47	10,000	CARRIER 40VMC009	VRHP 100
VRFC - 201	2,800	0	0.25	20,000	80	67	47	108,000	CARRIER 40MVH096	VRHP 200
VRFC - 202	2,800	0	0.25	20,000	80	67	47	108,000	CARRIER 40MVH096	VRHP 200
VRFC - 203	700	0	0.00	19,000	80	67	47	21,500	CARRIER 40VMF018	VRHP 200
VRFC - 204	460	0	0.00	12,000	80	67	47	13,600	CARRIER 40VMF012	VRHP 200
VRFC - 205	306	0	0.00	8,000	80	67	47	10,000	CARRIER 40VMC009	VRHP 200
VRFC - 206	306	0	0.00	8,000	80	67	47	10,000	CARRIER 40VMC009	VRHP 200

**VARIABLE REFRIGERANT HEAT PUMP SCHEDULE NOTES:**

1. REFER TO SPECIFICATION SECTION 238129 FOR FEATURES.
2. REFER TO SPECIFICATION SECTION 230900 AND 230993 FOR CONTROLS.
3. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL CHARACTERISTICS.

**VARIABLE REFRIGERANT HEAT PUMP SCHEDULE**

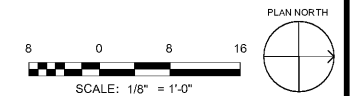
NUMBER	NET COOLING		HEATING		MINIMUM EFFICIENCY (SCHE)	MANUFACTURER
	TOTAL CAPACITY (BTU/HR)	DESIGN AMBIENT TEMP. (°F)	OUTPUT CAPACITY (BTU/HR)	DESIGN AMBIENT TEMP. (°F)		
VRHP - 100	216000	95	243000	47	27.3	CARRIER 38VMA216
VRHP - 200	240000	95	257000	47	26.5	CARRIER 38VMA240

**REFRIGERANT CONTROL UNIT SCHEDULE NOTES:**

1. REFER TO SPECIFICATION SECTION 238129 FOR FEATURES.
2. REFER TO SPECIFICATION SECTION 230900 AND 230993 FOR CONTROLS.
3. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL CHARACTERISTICS.
4. SUSPEND REFRIGERANT CONTROLLER (RC) FROM STRUCTURE USING THREADED RODS.

**REFRIGERANT CONTROL UNIT SCHEDULE**

NUMBER	CONNECTED COOLING CAPACITY (BTU/H)	MANUFACTURER	ASSOCIATED OUTDOOR UNIT
RC - 101	106,000	CARRIER 40VMD016M	VRHP 100
RC - 102	121,000	CARRIER 40VMD010M	VRHP 100
RC - 201	239,100	CARRIER 40VMD006M	VRHP 200



Order Plans @

S&E PROJECT NUMBER	01-615-057
BID PACKAGE / PHASING	BP-1
ISSUED FOR CONSTRUCTION	10/15/2019
<b>Southern AE</b> 7951 Truon Circle Austell, Ga 30168 (770) 819-7777 architects & engineers	REVISIONS
	R # Doc # Date

ADD ALTERNATE #1  
BOARD OF EDUCATION OFFICE FOR:  
**HEARD COUNTY SCHOOLS**  
4647 PEA RIDGE ROAD, FRANKLIN, GA 30217  
**HEARD COUNTY SCHOOL SYSTEM**  
FRANKLIN, GEORGIA

**MECHANICAL EQUIPMENT SCHEDULES**

	DRAWING NUMBER
	<b>M601</b>