

VARIABLE REFRIGERANT AIR COOLED OUTDOOR UNIT										
MARK	NOMINAL TONNAGE	AMBIENT EAT (F) DB	COOLING CAPACITY (MBH)	EER	AMBIENT EAT (F) DB	HEATING CAPACITY (MBH)	COP	CONNECTION RATIO (%)	BASIS OF DESIGN	NOTES
VRHR-1	8	95	96.0	14.1	10	108.0	4.0	79.2	mitsubishi PURY-P96	1,2,3,4,5

- NOTES:
- UNIT CONNECTION RATIO SHALL NOT EXCEED 105%.
 - SYSTEM SHALL AUTOMATICALLY RESTART AFTER POWER FAILURE.
 - PROVIDE ALL ACCESSORIES PER SPECIFICATION.
 - SUPPORT PER DETAIL ON BIG FOOT SUPPORT SYSTEM OR EQUAL PER OWNER'S REQUIREMENTS.
 - PROVIDE WITH HAIL GUARDS.

VARIABLE REFRIGERANT BRANCH SELECTOR BOX					
MARK	TOTAL PORTS USED	UNUSED PORTS	OUTDOOR UNIT	BASIS OF DESIGN	NOTES
BS-1	13	1	VRHR-1	mitsubishi CMB-P1013 MAIN	1,2,3

- NOTES:
- PROVIDE FULL PORT ISOLATION BALL VALVE ON REFRIGERANT PIPING BOTH LEAVING AND ENTERING UNIT.
 - "UNUSED PORTS" COLUMN REFERS TO NUMBER OF SPARE PORTS WHICH SHALL BE PROVIDED FOR EACH BOX.
 - SUPPORT FROM STRUCTURE WITH ALL-THREAD SIZED PER MANUFACTURER'S RECOMMENDATIONS.

ELECTRIC HEATER SCHEDULE					
MARK	KW	CFM	LOCATION	BASIS OF DESIGN	NOTES
EH-101	5.0	425	100 VESTIBULE	MARKEL 3480 SERIES	1,2
EH-102	5.0	425	100 VESTIBULE	MARKEL 3480 SERIES	1,2
EH-103	5.0	425	130 LOBBY	MARKEL 3480 SERIES	1,2
EH-104	5.0	425	130 LOBBY	MARKEL 3480 SERIES	1,2

- NOTES:
- PROVIDE WITH INTEGRAL THERMOSTAT.
 - CONTROLLED BY INTERLOCK WITH BUILDING AUTOMATION SYSTEM INTERLOCKER WITH THERMOSTAT.

VARIABLE REFRIGERANT SPLIT SYSTEM SCHEDULE 1												
MARK	CFM	E.S.P. (W.G.)	COOLING			HEATING REV. CY.	LOCATION	OUTDOOR UNIT	B.S. BOX	BASIS OF DESIGN	NOTES	
			EAT DB/WB (F)	TOT. Mbh	SEN. Mbh							
VR-1	230	N/A	80/67	5.0	3.5	5.6	351 OFFICE	VRHR-1	BS-1	mitsubishi PLEY_P05 2X2	1,2,3,4,5,6,7	
VR-2	230	N/A	80/67	5.0	3.5	5.6	352 OFFICE	VRHR-1	BS-1	mitsubishi PLEY_P05 2X2	1,2,3,4,5,6,7	
VR-3	230	N/A	80/67	5.0	3.5	5.6	353 OFFICE	VRHR-1	BS-1	mitsubishi PLEY_P05 2X2	1,2,3,4,5,6,7	
VR-4	280	N/A	80/67	5.0	3.5	5.6	354 OFFICE	VRHR-1	BS-1	mitsubishi PLEY_P05 2X2	1,2,3,4,5,6,7	
VR-5	230	N/A	80/67	5.0	3.5	5.6	355 OFFICE	VRHR-1	BS-1	mitsubishi PLEY_P05 2X2	1,2,3,4,5,6,7	
VR-6	230	N/A	80/67	5.0	3.5	5.6	356 OFFICE	VRHR-1	BS-1	mitsubishi PLEY_P05 2X2	1,2,3,4,5,6,7	
VR-7	230	N/A	80/67	5.0	3.5	5.6	357 OFFICE	VRHR-1	BS-1	mitsubishi PLEY_P05 2X2	1,2,3,4,5,6,7	
VR-8	230	N/A	80/67	5.0	3.5	5.6	358 OFFICE	VRHR-1	BS-1	mitsubishi PLEY_P05 2X2	1,2,3,4,5,6,7	
VR-9	230	N/A	80/67	5.0	3.5	5.6	359 OFFICE	VRHR-1	BS-1	mitsubishi PLEY_P05 2X2	1,2,3,4,5,6,7	
VR-10	370	N/A	80/67	12.0	6.4	13.5	361 OFFICE	VRHR-1	BS-1	mitsubishi PEFY-P15NMAU-E3	1,2,3,4,5,6,7	
VR-11	315	N/A	80/67	8.0	5.6	9.0	362 OFFICE	VRHR-1	BS-1	mitsubishi PLEY_P08 2X2	1,2,3,4,5,6,7	
VR-12	315	N/A	80/67	8.0	5.6	9.0	363 OFFICE	VRHR-1	BS-1	mitsubishi PLEY_P08 2X2	1,2,3,4,5,6,7	

- NOTES:
- PROVIDE FULL PORT ISOLATION BALL VALVE ON REFRIGERANT PIPING BOTH LEAVING AND ENTERING UNIT.
 - REV. CYCLE HEATING AT 47°F.
 - PROVIDE WITH REMOTE THERMOSTAT AND HUMIDISTAT UNITS SERVING CORRIDORS SHALL HAVE THE THERMOSTAT INTEGRAL TO THE UNIT AND THE HUMIDISTAT MOUNTED IN THE CORRIDOR AT 6'-0" AFF UNO. REFER TO PLANS AND SPECIFICATIONS FOR EXACT CONTROL REQUIREMENTS.
 - PROVIDE WITH INTEGRAL CONDENSATE PUMP. REFER TO PLANS FOR CONDENSATE DRAIN LINE ROUTING.
 - SPARE WASHABLE FILTERS SHALL BE INCLUDED WITH EACH UNIT.
 - UNIT SHALL BE SUSPENDED WITH ALL-THREAD ROD SIZED PER MANUFACTURER'S RECOMMENDATIONS.
 - REFER TO SPECIFICATIONS FOR ALL REQUIREMENTS AND ACCESSORIES.

ROOF MOUNTED AIR CONDITIONING UNIT SCHEDULE												
MARK	CFM	OA CFM	E.S.P. (IN. W.G.)	MAX HP	MIN EFF	EAT DB/WB (F)	TOTAL CAP (MBH)	S.C. (BTU/H)	HTG INFL (MBH)	HTG OUTPUT (MBH)	BASIS OF DESIGN	NOTES
RTU-102	3625	725	0.8	3.8	11	80/67	119.1	93	200.0	160.0	TRANE YHC120	1,2,3,4,5,6,7,8,9,10,11
RTU-103	6400	2200	0.8	5.0	11	80/67	248.0	11,810	350.0	280.0	TRANE YHD240	1,2,3,4,5,6,7,8,9,10,11

- NOTES:
- UNITS OVER 2000 CFM TO BE PROVIDED WITH DUCTWORK DETECTED SMOKE DETECTOR IN SUPPLY AND RETURN DUCTS AT UNIT FOR AUTOMATIC UNIT SHUTDOWN PER NFPA CODE 90A. SMOKE DETECTOR SHALL BE INSTALLED IN UNITS SUPPLY DUCT WORK PRIOR TO ANY BRANCH DUCT. MECHANICAL CONTRACTOR SHALL INSTALL DETECTOR & WIRE TO UNIT. DETECTOR SHALL BE PROVIDED BY & INTERLOCKED WITH ALARM SYSTEM BY DIV. 23.
 - COOLING CAPACITIES BASED ON 95°F AMBIENT. HEATING CAPACITIES ARE BASED ON 95°F OUTDOOR TEMPERATURE AND 80°F DB / 67°F WB RETURN.
 - DE-HUMIDIFICATION CYCLE SHALL BE PROVIDED WITH UNIT (HOT GAS HEAT).
 - UNIT SHALL BE PROVIDED WITH MINIMUM STAGES OF COOLING.
 - UNIT SHALL BE PROVIDED WITH HAIL GUARDS.
 - UNIT SHALL BE PROVIDED WITH DEMAND CONTROL VENTILATION.
 - SEE SPECIFICATIONS FOR CONTROLS.
 - UNIT COMPONENTS SHALL BE AS OUTLINED IN THE SPECIFICATIONS.
 - NATURAL GAS HEATING CAPACITY SHALL BE MINIMUM 80% CAPACITY.
 - UNIT SHALL BE PROVIDED WITH 100% MODULATING ECONOMIZER.
 - AFTER SHUT DOWN BY THE ALARM AND AFTER CLEARING OF ALARM, UNIT SHALL AUTOMATICALLY RESTART.

CONTRACTOR SHALL PROVIDE PRICING FOR ALL RTUs TO INCLUDE SINGLE ZONE VAV AND ALL SPECIFIED ACCESSORIES. CONTRACTOR SHALL NOTE IN PRICING WHICH ACCESSORIES AND ITEMS ARE PROVIDED AND WHICH ARE NOT. CONTRACTOR SHALL COORDINATE WITH OWNER'S REP. PRICING DIFFERENCES AND FINAL SELECTION BY OWNER.

FAN SCHEDULE							
MARK	CFM	DRIVE	E.S.P. (IN. W.G.)	HP	TYPE	BASIS OF DESIGN	NOTES
EF-101	800	DIRECT	0.5	0.3	ROOF	GREENHECK G-99-VG	1,2,3
EF-102	800	DIRECT	0.5	0.3	ROOF	GREENHECK G-99-VG	1,2,5
EF-103	800	DIRECT	0.5	0.3	ROOF	GREENHECK G-99-VG	1,2,3
EF-104	680	DIRECT	0.5	0.3	INLINE	GREENHECK SQ-99VG	2,3,4

- NOTES:
- PROVIDE WITH ROOF CURB.
 - PROVIDE WITH BACKDRAFT DAMPER AND SPEED CONTROLLER.
 - CONTROLLED BY INTERLOCK WITH BUILDING AUTOMATION SYSTEM.
 - MOUNT WITH VIBRATION ISOLATION HANGERS AND FLEXIBLE CONNECTORS.
 - PROVIDE WALL MOUNTED 120 VOLT THERMOSTAT SET AT 65 DEGREES F (ADJUSTABLE). INTERLOCK WITH EXHAUST FAN TO TURN ON WHEN ROOM TEMPERATURE EXCEEDS SETPOINT. PROVIDE CONTROL TRANSFORMER AND RELAYS AS REQUIRED BY DIVISION 23. INTERLOCK WITH BUILDING AUTOMATION SYSTEM.

DUCTLESS SPLIT SYSTEM SCHEDULE														
MARK	CFM	OA CFM	E.S.P. (W.G.)	MIN. H.P.	COOLING (95°F OA TEMP.)			HEATING (47°F OA TEMP.)			BASIS OF DESIGN		NOTES	
					E.A.T. DB/WB (F)	TOT. Mbh	SEN. Mbh	SEER	E.A.T. DB/WB (F)	TOT. Mbh	H.S.P.F.	INDOOR UNIT		OUTDOOR UNIT
DS-101 / DSHP-101	425	0	0.00	0	80/67	18.0	12.6	15.0	70/60	25.0	9.5	PKA-A18KA	PUZ-A18NHA4	1,2,3,4,5,6
DS-102 / DSHP-102	920	0	0.00	0	80/67	34.2	23.9	14.0	70/60	25.0	9.3	PKA-A36KA	PUZ-A36NHA4	1,2,3,4,5,6

- NOTES:
- CONDENSING UNIT OR HEAT PUMP UNIT SHALL BE MOUNTED ON BIG FOOT MOUNTING SYSTEM OR EQUAL - SEE PLANS FOR UNIT LOCATION.
 - COOLING CAPACITIES BASED 95°F/77°F AMBIENT. HEATING CAPACITIES BASED ON 17°F/15°F AMBIENT.
 - PROVIDE WITH REMOTE CONDENSATE PUMP LITTLE GIANT OR EQUAL.
 - PROVIDE WITH HARDWIRED WALL MOUNTED THERMOSTAT.
 - PROVIDE INTERFACE TO ALLOW UNIT TO BE ENABLED AND DISABLED VIA BUILDING EMS.
 - PROVIDE WITH HAIL GUARDS.

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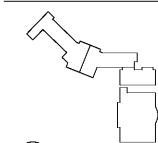


PROJECT

KIPP ATLANTA
COLLEGIATE - Addition
and Renovations

RELEASED FOR CONSTRUCTION 06/07/2019

KEYPLAN



ISSUE CHART

MARK	ISSUE	DATE
Job Number		
Drawn	MSK	
Checked	GC	
Approved	GC	

TITLE

HVAC SCHEDULES

SHEET NUMBER

M21-01

MBA
CONSULTING
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