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AIR HANDLING UNIT SCHEDULE

MARK	LOCATION	NOMINAL CAPACITY (TONS)	OUTDOOR AMBIENT TEMP (°F)		REFRIGERANT TYPE	EER	SUPPLY AIRFLOW (CFM)	MINIMUM OUTSIDE AIR (CFM)	FILTER	COOLING			HEATING			FAN			ELECTRICAL			HOT GAS REHEAT			WEIGHT (LB)	MANUFACTURER	MODEL	NOTES	
			SUMMER	WINTER						TOTAL (MBH)	SENSIBLE (MBH)	EAT DB/WB (°F)	LAT DB/WB (°F)	CAPACITY (KW)	EAT DB (°F)	LAT DB (°F)	ESP (IN. W.G.)	FAN RPM	BHP	MCA (AMPS)	MOCP (AMPS)	V/Ph/Hz	CAPACITY (MBH)	TEMP RISE (°F)					LAT (°F)
AHU-1	OUTDOOR	5	105 DB/93 WB	5	R-401A	11.9	1600	150	MERV 13	53.24	34.64	74.1/64.1	54.05/52.55	12	60.6	84.19	1.0	1139	0.91	22	25	460/3/60	36.46	21	75.05	1025	TRANE	THC060E4REA	ALL

- NOTES:
- REVIEW REFRIGERANT TYPE WITH EOR IF R-410A IS NOT AVAILABLE.
 - PROVIDE FACTORY-MOUNTED BACNET DDC UNIT CONTROLLER.
 - PROVIDE WITH ZONE TEMPERATURE AND HUMIDITY SENSOR.
 - PROVIDE 115 V POWERED CONVENIENCE OUTLET.
 - PROVIDE COMPARATIVE ENTHALPY ECONOMIZER WITH BAROMETRIC RELIEF DAMPER.
 - PROVIDE HOT GAS REHEAT AND DEHUMIDIFICATION CYCLE.
 - PROVIDE CLOGGED FILTER SWITCH.
 - CONDENSATE OVERFLOW SWITCH.
 - CONTRACTOR TO PROVIDE CONCRETE EQUIPMENT PAD ON GRADE. HEIGHT OF PAD TO PROVIDE CLEARANCE FOR P-TRAP ABOVE GRADE.
 - PROVIDE WITH MERV 13 FILTER.
 - PROVIDE HAIL GUARD.
 - PROVIDE MINIMUM OF 2500 HOUR SALT SPRAY TEST IN ACCORDANCE WITH ASTM B117.

HP FAN COIL UNIT SCHEDULE

MARK	LOCATION	UNIT TYPE	WEIGHT (LBS)	MANUFACTURER	MODEL	INDOOR AIR TEMPERATURE °F		V/Ph/Hz	MCA (AMPS)	NOTES
						COOLING (DB/WB)	HEATING (DB)			
FC-1	IT ELECTRICAL 105	WALL MOUNTED	46	TRANE	TPKA0A0241KA80A	75/62.54	60	208/1/60	1.0	ALL

- ITEMS TO BE PROVIDED BY MANUFACTURER:
- PROVIDE DISCONNECT SWITCH.
 - PROVIDE WALL MOUNTING BRACKET
 - PROVIDE FACTORY INSTALLED LIQUID AND SUCTION LINE SERVICES VALVE.
 - PROVIDE A HARD WIRED PROGRAMMABLE ELECTRONIC ROOM THERMOSTAT.
 - ELECTRICAL SERVICE IS VIA SINGLE POWER FEED FROM THE OUTDOOR UNIT.

OIL LESS RECIPROCATING AIR COMPRESSOR SCHEDULE

MARK	DESCRIPTION	LOCATION	SERVICE	COMPRESSOR CAPACITY (SCFM)	DISCHARGE PRESSURE (PSIG)	MAXIMUM PRESSURE (PSIG)	TANK CAPACITY (GAL)	HP	V/PH/Hz	MANUFACTURER	MODEL NUMBER	NOTES
COMP 1	OIL LESS COMPRESSOR	TEST STAND	MULTI EQUIPMENT	38.5	100	145	70	10	460/3/60	ATLAS COPCO	LF-10	ALL

- NOTES:
- PROVIDE DISCONNECT SWITCH

COMPRESSED AIR DRYER SCHEDULE

MARK	DESCRIPTION	LOCATION	SERVICE	COMPRESSED AIR CAPACITY (SCFM @ 100 PSIG)	MIN OUTLET PRESSURE DEW POINT (DEG F) @ 95°F OPERATION AMBIENT	MAX INLET TEMP (°F)	V/PH/Hz	MOP (AMPS)	APPROXIMATE WEIGHT (LB)	MANUFACTURER	MODEL NUMBER	NOTES
DRYER 1	HIGH TEMPERATURE REFRIGERATED DRYER	TEST STAND	COMP 1	45	50	180	120/1/60	18.5	119	KAESER	HTRD51	ALL

- NOTES:
- PROVIDE DISCONNECT SWITCH

HP CONDENSING UNIT SCHEDULE

MARK	MANUFACTURER	MODEL	SYSTEM SERVED	TOTAL CAPACITY (MBH)		OUTSIDE AMBIENT TEMP (°F) DB		REFRIGERANT TYPE	WEIGHT (LBS)	SEER @ AHRI	HSPF @ AHRI	V/PH/Hz	MCA (AMPS)	MOCP (AMPS)	NOTES
				COOLING	HEATING	COOLING	HEATING								
CU-1	TRANE	TRUZA0241HA70NA	FC-1	20.7	15.8	105	5	R-410A	153	21.3	9.3	208/1/60	19	26	ALL

- ITEMS TO BE PROVIDED BY MANUFACTURER:
- PROVIDE DISCONNECT SWITCH
 - LOW AMBIENT WIND BAFFLE

GRILLES, REGISTERS, AND DIFFUSERS (GRD) SCHEDULE

TYPE MARK	SERVICE	FACE		NECK SIZE (IN)	MAX NC	MATERIAL	BORDER TYPE	DEFLECTION	BLADE SPACING	MANUFACTURER	MODEL	NOTES
		LENGTH (IN)	WIDTH (IN)									
RG-A	RETURN	28	20	20x28	25	ALUMINUM	SURFACE MOUNT	SINGLE (0 DEG)	3/4	PRICE	600	1, 2
SG-A	SUPPLY	18	18	18x8	25	ALUMINUM	EXPOSED DUCT	DOUBLE (45 DEG)	3/4	PRICE	22	1, 2, 3

- NOTES:
- GRILLES, REGISTERS, AND DIFFUSERS SHALL COMPLY WITH THE SOUND RATING OF THE AIR CONDITIONING AND REFRIGERATION INSTITUTE (ARI) OR AIR MOVEMENT CONTROL ASSOCIATION (AMCA) .
 - FINISH SHALL BE COORDINATED AND APPROVED BY ARCHITECT.
 - PROVIDE ALUMINUM OPPOSED BLADE DAMPER.

THE FCU SHALL RUN WHEN CALLED FOR BY THERMOSTAT AND SHALL MAINTAIN:

- A 77 °F (ADJ.) COOLING SETPOINT
- A 60 °F (ADJ.) HEATING SETPOINT.

ALARMS SHALL BE PROVIDED AS FOLLOWS:

HIGH ZONE TEMP: IF THE ZONE TEMPERATURE IS GREATER THAN THE COOLING SET POINT BY 5°F (ADJ)

LOW ZONE TEMP: IF THE ZONE TEMPERATURE IS LESS THAN THE HEATING SET POINT BY 10°F (ADJ)

ZONE SETPOINT ADJUST:

THE OCCUPANT SHALL BE ABLE TO ADJUST THE ZONE TEMPERATURE AND COOLING SETPOINTS AT THE ZONE SENSOR.

FAN:

THE FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN, UNLESS SHUTDOWN ON SAFETIES.

THE CONTROLLER SHALL MEASURE THE ZONE TEMPERATURE AND CYCLE THE COMPRESSOR TO MAINTAIN ITS COOLING OR HEATING SETPOINT. THE COMPRESSOR SHALL RUN SUBJECT TO ITS OWN INTERNAL SAFETIES AND CONTROLS.

COOLING SHALL BE ENABLED WHENEVER:

- THE ZONE TEMPERATURE IS ABOVE COOLING SETPOINT.
- AND THE FAN IS ON.

HEATING SHALL BE ENABLED WHENEVER:

- THE ZONE TEMPERATURE IS BELOW SETPOINT.
- AND THE FAN IS ON.

A3 FCU SEQUENCE OF OPERATION

THE UNIT SHALL RUN CONTINUOUSLY AND SHALL MAINTAIN:

- A 73 °F (ADJ.) COOLING SETPOINT
- A 68 °F (ADJ.) HEATING SETPOINT.

ALARMS SHALL BE PROVIDED AS FOLLOWS:

HIGH ZONE TEMP: IF THE ZONE TEMPERATURE IS GREATER THAN THE COOLING SET POINT BY 5°F (ADJ)

LOW ZONE TEMP: IF THE ZONE TEMPERATURE IS LESS THAN THE HEATING SET POINT BY 10°F (ADJ)

ZONE SETPOINT ADJUST:

THE OCCUPANT SHALL BE ABLE TO ADJUST THE ZONE TEMPERATURE AND COOLING SETPOINTS AT THE ZONE SENSOR.

THE RTU SHALL OPERATE THE SUPPLY FAN CONTINUOUSLY AND STAGE COMPRESSORS, STAGE HEAT, AND/OR ENABLE AIRSIDE ECONOMIZING TO MAINTAIN ZONE TEMPERATURE AT SETPOINT. THE OA DAMPER SHALL OPEN TO BRING IN THE REQUIRED AMOUNT OF VENTILATION.

FILTER DIFFERENTIAL PRESSURE MONITOR:

THE CONTROLLER SHALL MONITOR THE DIFFERENTIAL PRESSURE ACROSS THE FILTER.

ALARMS SHALL BE PROVIDED AS FOLLOWS:

FILTER CHANGE REQUIRED: FILTER DIFFERENTIAL PRESSURE EXCEEDS 0.5 INCH WATER GAUGE (ADJ.).

MIXED AIR TEMPERATURE:

THE CONTROLLER SHALL MONITOR THE MIXED AIR TEMPERATURE.

ALARMS SHALL BE PROVIDED AS FOLLOWS:

HIGH MIXED AIR TEMP: IF THE MIXED AIR TEMPERATURE IS GREATER THAN 90°F (ADJ.).

LOW MIXED AIR TEMP: IF THE MIXED AIR TEMPERATURE IS LESS THAN 45°F (ADJ.).

DEHUMIDIFICATION:

THE CONTROLLER SHALL MEASURE THE ZONE AIR HUMIDITY. THE DEHUMIDIFICATION SEQUENCE SHALL MAINTAIN ZONE AIR HUMIDITY AT OR BELOW 60 % RH (ADJ.). DEHUMIDIFICATION SHALL BE ENABLED WHENEVER ZONE HUMIDITY IS ABOVE SETPOINT AND THE ZONE TEMPERATURE IS SATISFIED.

ALARMS SHALL BE PROVIDED AS FOLLOWS:

HIGH RETURN AIR HUMIDITY: IF THE ZONE AIR HUMIDITY IS GREATER THAN 70% (ADJ.).

LOW RETURN AIR HUMIDITY: IF THE ZONE AIR HUMIDITY IS LESS THAN 35% (ADJ.).

RETURN AIR TEMPERATURE:

THE CONTROLLER SHALL MONITOR THE RETURN AIR TEMPERATURE. ALARMS SHALL BE PROVIDED AS FOLLOWS:

HIGH RETURN AIR TEMP: IF THE RETURN AIR TEMPERATURE IS GREATER THAN 90°F (ADJ.).

LOW RETURN AIR TEMP: IF THE RETURN AIR TEMPERATURE IS LESS THAN 45 °F (ADJ.).

SUPPLY AIR TEMPERATURE:

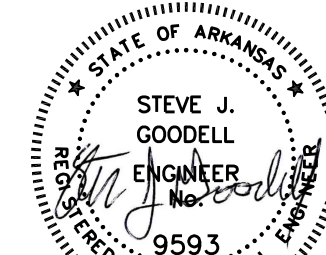
THE CONTROLLER SHALL MONITOR THE SUPPLY AIR TEMPERATURE.

ALARMS SHALL BE PROVIDED AS FOLLOWS:

HIGH SUPPLY AIR TEMP: IF THE SUPPLY AIR TEMPERATURE IS GREATER THAN 120°F (ADJ.).

LOW SUPPLY AIR TEMP: IF THE SUPPLY AIR TEMPERATURE IS LESS THAN 45°F (ADJ.).

A4 AHU SEQUENCE OF OPERATION



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Calhoun County, Arkansas
Aerojet Rocketdyne

Jacobs **MABIOZ**
MECHANICAL
SCHEDULES

SHEET NO	
M-701	
SCALE	NTS
DATE	09/18/2024
PROJ	D3754502
DWG	CNDN-OSD_Test Stand_M-701