

AIR DEVICE SCHEDULE						
MARK	TYPE	MATERIAL	FINISH	MANUFACTURER	MODEL No.	NOTES
AD-1	CEILING SUPPLY, 24x24	ALUMINUM	WHITE	PRICE	ASCD	1, 2, 3, 4, 5
AD-2	CEILING SUPPLY, 12x12	ALUMINUM	WHITE	PRICE	ASCD	1, 2, 3, 4, 5
AD-3	LOUVERED EXHAUST/ RETURN, 24x24	ALUMINUM	WHITE	PRICE	630	1, 2, 3, 6

NOTES:  
1. NOISE CRITERIA NOT TO EXCEED 25.  
2. CONTRACTOR TO COORDINATE BORDER WITH CEILING TYPE (LAY-IN OR PLASTER).  
3. REFER TO FLOOR PLAN FOR CFM.  
4. AIR DEVICES ARE FOUR WAY THROW UNLESS NOTED OTHERWISE ON DRAWINGS.  
5. AIR DEVICES ARE TO BE SUPPLIED WITH OPPOSED BLADE DAMPER.  
6. PROVIDE INSULATED PLENUM BACK.

VARIABLE AIR VOLUME SCHEDULE															
MARK	MAKE/MODEL	SIZE	MAXIMUM PRIMARY CFM	MINIMUM PRIMARY CFM	HEAT/FAN CFM	EAT °F	LAT °F	EH CAP KW	STEPS	HTR VOLT	PHASE	MCA/MOCP AMPS	INLET SP IN WG	DIS NC	RAD NC
VAV-1	CARRIER / 35E	7	575	140	460	55	85.9	4.5	SCR	208	3	15.6/20	1	21	16
VAV-2	CARRIER / 35E	4	200	55	160	55	84.6	1.5	SCR	208	3	5.2/15	1	25	20
VAV-3	CARRIER / 35E	14	2700	580	2080	55	87.21	14	SCR	208	3	36.43/40	1	27	21

NOTES:  
1. DDC CONTROLS TO BE PROVIDED TO VAV BOX MANUFACTURER FOR FACTORY MOUNTING.  
2. PROVIDE HEATER WITH AUTO RESET PRIMARY TEMPERATURE LIMIT, SECONDARY HIGH LIMITS, AIRFLOW SWITCH, 80/20 NICKEL-CHROMIUM ELEMENTS, AND FUSING PER UL AND NEC.  
3. PROVIDE FUSED DOOR INTERLOCKING DISCONNECT.  
4. PROVIDE 3/4-INCH FOIL FACED INSULATION.  
5. PROVIDE SINGLE POINT POWER CONNECTION.  
6. NOISE CRITERIA RAIED IN ACCORDANCE WITH ARI STANDARD 880 AT 1.0" STATIC PRESSURE AT TERMINAL INLET.

CHILLED WATER AIR HANDLING UNIT SCHEDULE				
AHU UNIT NO.	AREA SERVED	MANUFACTURER	MODEL NO.	UNIT TYPE
AHU-1	DAYROOM / KITCHEN	CARRIER	39S-07	CENTRAL STATION
AHU-2	QUARTERS AREAS	CARRIER	39L-09	CENTRAL STATION
AHU-3	TRAINING	CARRIER	39L-05	CENTRAL STATION

		AHU-1	AHU-2	AHU-3		
DIMENSIONS	LxWxH	2'10" X 4'2" X 5'8"	2'10" X 4'2" X 5'8"	2'2" X 3'4" X 4'5"		
WEIGHT	LBS	840	890	580		
NOMINAL CAPACITY	TONS	6	10	5		
FAN	SUPPLY AIRFLOW	CFM	2400	3400	1800	
	OUTSIDE AIRFLOW	CFM	350	475	180	
	EXTERNAL STATIC PRESSURE	IN. H <sub>2</sub> O	1.5	1.5	1	
	TOTAL STATIC PRESSURE		2.07	2.21	1.67	
	MAXIMUM FAN SPEED	RPM	1037	1122	1423	
	FAN MOTOR	BHP/HP	1.4/1.5	2.5/3.0	1.2/1.5	
	FAN MOTOR AMPERAGE (FLA)	AMPS	4.6	8.6	4.6	
	FAN TYPE		FORWARD CURVE	FORWARD CURVE	FORWARD CURVE	
	RETURN AIR COILS	AIRFLOW	CFM	2400	3400	1800
		TOTAL CAPACITY	MBH	82.89	102.63	67.06
SENSIBLE CAPACITY		MBH	61.16	80.17	47.97	
ENTERING AIR TEMPERATURE		DB°F/WB°F	77.0/65.00	77.0/65.00	77.0/65.00	
LEAVING AIR TEMPERATURE		DB°F/WB°F	53.12/53.01	44.9/54.83	52.00/51.92	
CHILLED WATER FLOW RATE		G.P.M.	13.8	17.1	12.1	
CHILLED WATER TEMPERATURE		ENTERING °F / LEAVING °F	44/56	44/56	44/56	
COOLING COIL		ROWS/FPI	6/10	6/10	6/10	
COOLING COIL FACE		FT <sup>2</sup>	6.64	8.33	5.21	
COIL FACE VELOCITY		FPM	349	408.2	345.5	
COIL AIR PRESSURE DROP	IN. H <sub>2</sub> O	.5	.65	.52		
WATER PRESSURE DROP	FT. H <sub>2</sub> O	4.6	3.4	5.1		
FILTER TYPE		2" MERV 8	2" MERV 8	2" MERV 8		
ELECTRIC	V/φ/HZ	208/3/60	208/3/60	208/3/60		
ELECTRIC HEAT CAPACITY	KW/STAGES	9/2	NA/NA/NA	7.5/2		
HEATER FLA	AMPS	25.1	NA	20.9		
MCA/MOCP	AMPS	31.3/35	10.8/15	26.1/30		
NOTES		ALL	ALL	1-6		

NOTES:  
1. VERTICAL DRAW-THRU ARRANGEMENT.  
2. INTERNAL SPRING VIBRATION ISOLATION.  
3. PROVIDE SECONDARY DRAIN PAN WITH FLOAT SWITCH.  
4. PROVIDE STAINLESS STEEL DRAIN PAN.  
5. DIVISION 16 (ELECTRICAL) TO PROVIDE STARTER/DISCONNECT.  
6. ALL MOTORS TO BE PREMIUM EFFICIENT, PROVIDE 1.5 DRIVE SERVICE FACTOR.  
7. PROVIDE VFD COMPATIBLE MOTOR.  
8. PROVIDE SMOKE DETECTORS IN THE SUPPLY AND RETURN DUCT.  
9. PROVIDE MOTORIZED OUTSIDE AIR DAMPERS.

ASHRAE 62.1-2007 OUTSIDE AIR CALCULATION COMMERCIAL												
SPACE	AREA (FT <sup>2</sup> )	OCCUPANTS (#)	VENTILATION AIR CFM PER FT <sup>2</sup>	VENTILATION AIR CFM PER PERSON	EXHAUST CFM PER FT <sup>2</sup>	TOILET FIXTURES	DIVERSITY-INTERMITTENT OCCUPANCY	VENTILATION AIR CFM REQUIRED	VENTILATION AIR CFM SPECIFIED	EXHAUST CFM REQUIRED	EXHAUST CFM SPECIFIED	CFM FOR BUILDING PRESSURIZATION
100 ENTRY, 101 ACTIVITY AREA, 102 KITCHEN	1096	11	0.06	5.0	0.00	0	-	121		0		
103 OFFICE	93	1	0.06	5.0	0.00	0	-	11		0		
104 NITE ROOM	100	1	0.06	5.0	0.00	0	-	11		0		
105 ADA REST ROOM	94	0	0.00	0.0	0.00	1	-	0		50	50	
106 BUNKER ROOM	176	0	0.00	0.0	0.00	0	-	0		0	200	
AHU-1	1559	13						142	350	50	250	100
116 BATH	147	0	0.00	0.0	0.00	1	-	0		50		
117 RESTROOM	237	0	0.00	0.0	0.00	4	-	0		200		
118 BATH	104	0	0.00	0.0	0.00	1	-	0		50		
122 CORRIDOR	510	0	0.06	0.0	0.00	0	-	31				
114 CHIEF'S QUARTERS	162	1	0.06	5.0	0.00	0	-	15		0		
115 CAPTAIN'S QUARTERS	303	2	0.06	5.0	0.00	0	-	28		0		
120a CREW QUARTERS	119	1	0.06	5.0	0.00	0	-	12		0		
120b CREW QUARTERS	124	1	0.06	5.0	0.00	0	-	12		0		
120c CREW QUARTERS	117	1	0.06	5.0	0.00	0	-	12		0		
120d CREW QUARTERS	119	1	0.06	5.0	0.00	0	-	12		0		
120e CREW QUARTERS	121	1	0.06	5.0	0.00	0	-	12		0		
120f CREW QUARTERS	119	1	0.06	5.0	0.00	0	-	12		0		
120g CREW QUARTERS	119	1	0.06	5.0	0.00	0	-	12		0		
120h CREW QUARTERS	128	1	0.06	5.0	0.00	0	-	12		0		
AHU-2	2429	11						147	475	300	300	175
127 TRAINING	748	20	0.06	5.0	0.00	0	-	145		0		
126 MECHANICAL	180	0	0.06	0.0	0.00	0	-	11		0		
125 HALL	210	0	0.06	0.0	0.00	0	-	13		0		
123 MENS	79	0	0.00	0.0	0.00	0	-	0		50		
124 WOMENS	74	0	0.00	0.0	0.00	1	-	0		50		
AHU-3	1291	20						168	180	100	100	80

AIR COOLED CHILLER SCHEDULE		
MARK	MANUFACTURER	MODEL No.
AS-1	CARRIER	39S-07
DIMENSIONS	LxWxH INCHES	41x79
WEIGHT	LBS	3846
COMPRESSOR		DIGITAL SCROLL
REFRIGERANT TYPE		R-410A
EFFICIENCY	EER/SEER	10.2/-
EFFICIENCY PART LOAD	IPLV EER	16.27
CAPACITY	TONS	23.39
WATER TEMPERATURE	DB°F	95
CHILLED WATER TEMPERATURE	ENTERING °F / LEAVING °F	56/44
CHILLED WATER FLOW RATE	G.P.M.	46.62
PRESSURE DROP	FT. H <sub>2</sub> O	19.4
FLUID TYPE		WATER
EVAPORATOR FOULING FACTOR		0.00010
EVAPORATOR CONNECTION SIZE	INCHES	2
COMPRESSORS / CIRCUITS	NO./NO.	1/1
COMPRESSOR POWER	NO./KW	1/24.57
INPUT POWER	KW	28.5
PUMP MOTOR	KW	1.071
PUMP FLA	AMPS	8.2
CONDENSER FANS	NO.	2
ELECTRIC	V/φ/HZ	208/3/60
MCA/MOCP	AMPS	131.7/175
NOTES		ALL

NOTES:  
1. PROVIDE WITH FACTORY INSTALLED HYDRONIC PUMP PACKAGE.  
2. PROVIDE WITH FACTORY INSTALLED LOW AMBIENT PROTECTION PACKAGE.  
3. PROVIDE WITH FACTORY INSTALLED ENERGY MANAGEMENT MODULE.  
4. PROVIDE WITH FACTORY INSTALLED MINIMUM LOAD CONTROL.  
5. PROVIDE WITH FACTORY INSTALLED COIL PROTECTION GRILLES.  
6. PROVIDE WITH FACTORY INSTALLED CONDENSER COIL CORROSION PROTECTION-MILD COASTAL AL FINIS, PRECOATED  
7. PROVIDE WITH FIELD INSTALLED CONTROL DISPLAY ACCESS DOOR.  
8. PROVIDE WITH FIELD INSTALLED CHILLED WATER STORAGE TANK.  
9. PROVIDE WITH FIELD INSTALLED VIBRATION ISOLATION.  
10. PROVIDE WITH DIGITAL SCROLL COMPRESSOR FOR CAPACITY CONTROL.

AIR SEPARATOR SCHEDULE		
MARK	MANUFACTURER	MODEL No.
AS-1	BELL & GOSSETT	RL-2N
WATER FLOW RATE	GPM	46.62
PRESSURE DROP	FT. H <sub>2</sub> O	1.0
INLET	INCHES	2
OUTLET	INCHES	2
CONNECTIONS	TYPE	SCREW
STRAINER	YES/NO	NO



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DPW FILE NUMBER

DPW NUMBER  
17-C-00037

ISSUE DATE  
07-28-2017

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