COOLING TOWER SCHEDULE

UNIT NO	SERVICE	LOCATION	TYPE	WATER SIDE			AIR SIDE		FANS/ SPEED	DRIVE TYPE	FAN TYPE	FAN DISCHARGE	TOWER INLET		SUMP OUTLET		ELECTRICAL			VIBRATION ISOLATION		NOMINAL OPERATING WEIGHT LBS	REMARKS
				GPM	ENT DEG F	LVG DEG F	CFM	ENT WB DEG F					SIZE	LOCATION	SIZE	LOCATION	MOTOR HP	SUMP HEATER KW	V/PH/Hz	SPEC TYPE	DEFL (IN)		
CT-1	CH-1&2	SUPPORT BLDG	CROSSFLOW	390	95	85	37000	78	1	BELT	AXIAL	UP	6"	SIDE	6"	BOTTOM	5	(2) 5 KW	460/3/60	SX	3	12500	MAX 80 DBA AT 100 FT. PROVIDE 6" EQUALIZERS AT EACH END OF EACH TOWER SECTION. HEAT TRACE TOWER PIPING.
CT-2	CH-1&2	SUPPORT BLDG	CROSSFLOW	390	95	85	37000	78	1	BELT	AXIAL	UP	6"	SIDE	6"	BOTTOM	5	(2) 5 KW	460/3/60	SX	3	12500	MAX 80 DBA AT 100 FT. PROVIDE 6" EQUALIZERS AT EACH END OF EACH TOWER SECTION. HEAT TRACE TOWER PIPING.

CHILLER SCHEDULE

UNIT NO	SERVICE	LOCATION	TYPE	CAPACITY TONS	EVAPORATOR (30% ETHYLENE GLYCOL)							CONDENSER							ELECTRICAL DATA						VIBRATION ISOLATION		REFRIGERANT	REMARKS
					GPM	PASS	EWT °F	LWT °F	FOULING FACTOR	MAXIMUM PD FT WG	WORKING PRESSURE PSIG	GPM	PASS	EWT °F	LWT °F	FOULING FACTOR	MAXIMUM PD FT WG	WORKING PRESSURE PSIG	TOTAL KW	RL AMPS	OLT AMPS	LRY AMPS	LRD AMPS	V/PH/Hz	SPEC TYPE	DEFL (IN)		
CH-1	DC SCHOOL	CHILLER ROOM B-17 (BASEMENT)	CENTR OR SCREW	100	270	2	45	55	0.00025	15	150	300	2	85	95	0.00075	15	150	82	118	127	331	1035	460/3/60	SX	1	134a, 22 OR 123	PROVIDE TURNDOWN TO 10% CAPACITY AND AN INTEGRAL CHILLER-MOUNTED SOLID STATE STARTER FOR EACH CHILLER (REFRIGERANT SENSOR IF R-123)
CH-2	DC SCHOOL	CHILLER ROOM B-17 (BASEMENT)	CENTR OR SCREW	100	270	2	45	55	0.00025	15	150	300	2	85	95	0.00075	15	150	82	118	127	331	1035	460/3/60	SX	1	134a, 22 OR 123	PROVIDE TURNDOWN TO 10% CAPACITY AND AN INTEGRAL CHILLER-MOUNTED SOLID STATE STARTER FOR EACH CHILLER (REFRIGERANT SENSOR IF R-123)

AIR CONDITIONING UNIT SCHEDULE

UNIT NO	LOCATION	FAN CAPACITY CFM	OUTSIDE AIR		MIN COIL & FILTER AREA SQ FT	MAX. FACE VELOCITY	MINIMUM TOTAL CAPACITY (MBH)	MINIMUM SENSIBLE CAPACITY (MBH)	AIRSIDE					ELECTRICAL						R-22 CHARGE	CONDENSER				SEER	EER	SOUND RATING (BELS)	NOMINAL WEIGHT (LB)	REMARKS
			CFM	TEMP					EAT DB DEG F	EAT WB DEG F	LAT DB DEG F	LAT WB DEG F	ESP IN WG	MAX CIRCUIT AMPS	HEATING KW	NO OF STEPS	FAN MOTOR HP	V/PH/Hz	RPM		MOTOR HP	MOTOR RPM	FAN CFM	FAN DIA					PROVIDE 2'H ROOF CURBS FOR AC-1&2
AC-1	FFT ROOF	2000	100	95	5.5	500	62.0	54.7	76.0	62.4	51.1	51.0	1.0	19.5	11	1	1.5	460/3/60	1250	8-1/4LB	1/3	850	4100	26"	11.9	10.5	8.0	700	PROVIDE LOW AMBIENT CONTROL TO -10°F, FILTERS & O.A. INLET INSECT SCREEN
AC-2	FFT ROOF	2000	100	95	5.5	500	62.0	54.7	76.0	62.4	51.1	51.0	1.0	19.5	11	1	1.5	460/3/60	1250	8-1/4LB	1/3	850	4100	26"	11.9	10.5	8.0	700	PROVIDE LOW AMBIENT CONTROL TO -10°F, FILTERS & O.A. INLET INSECT SCREEN

SHELL AND TUBE HEAT EXCHANGER SCHEDULE

UNIT NO	SERVICE	LOCATION	SHELL SIDE			TUBE SIDE			DIMENSIONS		SURFACE AREA SQ FT	MAXIMUM PD FT WG	TOTAL FOULING FACTOR	DESIGN PRESSURE PSIG TUBE/SHELL	REMARKS
			STEAM PRESS	CAPACITY MBH	CAPACITY LB/HR	GPM (% GLYCOL)	ENT DEG F	LVG DEG F	DIAM IN	LENGTH FT					
HE-1	FFT HEATING	SUPPORT BLDG BSMT	5	9130	9413	325(40)	140	200	20	7	400	10	0.0005	125/150	PROVIDE FLOOR STANDS TO ELEVATE HE MINIMUM 2'-0" ABOVE CONDENSATE RECEIVER
HE-2	FFT HEATING	SUPPORT BLDG BSMT	5	9130	9413	325(40)	140	200	20	7	400	10	0.0005	125/150	PROVIDE FLOOR STANDS TO ELEVATE HE MINIMUM 2'-0" ABOVE CONDENSATE RECEIVER
HE-3	FFT HEATING	SUPPORT BLDG BSMT	5	9130	9413	325(40)	140	200	20	7	400	10	0.0005	125/150	PROVIDE FLOOR STANDS TO ELEVATE HE MINIMUM 2'-0" ABOVE CONDENSATE RECEIVER
HE-4	DC SCHOOL HEATING	SUPPORT BLDG BSMT	5	1000	1030	100(0)	140	180	12	5	45	10	0.0005	125/150	PROVIDE FLOOR STANDS TO ELEVATE HE MINIMUM 2'-0" ABOVE CONDENSATE RECEIVER
HE-5	DC SCHOOL HEATING	SUPPORT BLDG BSMT	5	1000	1030	100(0)	140	180	12	5	45	10	0.0005	125/150	PROVIDE FLOOR STANDS TO ELEVATE HE MINIMUM 2'-0" ABOVE CONDENSATE RECEIVER

PUMP SCHEDULE

UNIT NO	SERVICE	LOCATION	CASING TYPE	GPM (% GLYCOL)	HEAD FT WG	MINIMUM EFFICIENCY %	CASING PRESSURE PSIG	MOTOR DATA				VIBRATION ISOLATION		REMARKS
								BHP	HP	V/PH/Hz	RPM	SPEC TYPE	DEFL (IN)	
CHP-1&2	SUPPORT BLDG CHILLED WATER	SUPPORT BLDG BSMT	END SUCTION	280 (30)	60	70	125	6	7 1/2	460/3/60	1750	I-SV	1	270 GPM + 10 GPM FOR SIDESTREAM FILTER
CTP-1&2	SUPPORT BLDG COOLING TOWER	SUPPORT BLDG BSMT	END SUCTION	400 (0)	50	70	125	8	10	460/3/60	1750	I-SV	1	300 GPM + 90 GPM SPARE + 10 GPM SIDESTREAM FILTER
HWP-1,2,3	HVU, FFT UH, & HC HEATING	SUPPORT BLDG BSMT	END SUCTION	350 (40)	60	70	125	10	15	460/3/60	1750	I-SV	1	325 GPM + 25 GPM SIDESTREAM FILTER
HWP-4	FFT UNIT HEATERS	SUPPORT BLDG BSMT	END SUCTION	150 (40)	60	65	125	4	5	460/3/60	1750	I-SV	1	FOR AFTER-HOURS FFT HEATING
HWP-5&6	SUPPORT BUILDING HEATING	SUPPORT BLDG BSMT	END SUCTION	125 (0)	60	65	125	4	5	460/3/60	1750	I-SV	1	115 GPM + 10 GPM SIDESTREAM FILTER
MP-1 & 2	GLYCOL MAKEUP WATER PUMP	SUPPORT BLDG BSMT	IN-LINE	10 (40)	70	60	125	0.3	1/3	115/1/60	1750	–	–	DUPLEX COMPLETE WITH CONTROL PANEL, 55 GAL ATMOSPHERIC TANK, AND FLOAT VALVE
WTP-1	WATER TREATMENT PANEL/PUMPS	SUPPORT BLDG BSMT	IN-LINE	1 (0)	40	60	125	0.1	1/8	115/1/60	1750	–	–	DERIVE PUMP POWER FROM CONTROL PANEL. BY DIVISION 15

CONDENSATE PUMP AND RECEIVER SCHEDULE

UNIT NO	SERVICE	LOCATION	TYPE	EDR CAPACITY (A)	PUMP DATA (A)			MOTOR DATA			RECEIVER		REMARKS
					GPM EACH	DISCHARGE PSIG	CONDENSATE TEMP (DEGREES F)	HP	RPM	V/PH/Hz	TANK TYPE	CAPACITY GALLONS	
CP-1 & 2	DAMAGE CONTROL SCHOOL	SUPPORT BLDG BSMT	DUPLEX	80000	120	20	210	3	1750	460/3/60	ELEVATED	200	COMPLETE WITH CONTROL PANEL AND ALTERNATOR
CP-3 & 4	PLUMBING WATER HEATERS	TANK ROOM B16	DUPLEX	12000	12	20	210	1/3	1750	115/1/60	ELEVATED	23	COMPLETE WITH CONTROL PANEL AND ALTERNATOR

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DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
SOUTHERN DIVISION
CHARLESTON, S.C.
NAVAL TRAINING CENTER — GREAT LAKES, ILLINOIS

DAMAGE CONTROL SCHOOL
TOWER,CHILLER,PUMP,ACU,HE
HVAC EQUIPMENT SCHEDULES

SIZE	CODE IDENT NO.	NAVFAC DRAWING NO.	DRAWING NO.
F	80091	5276585	M6-1
		CONSTR CONTR NO. N62467-93-C-1143	
SCALE NO SCALE		SPEC 06-93-1143	SHEET 71 OF

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FFT OUTDOOR HEATING AND VENTILATING UNIT SCHEDULE

UNIT NO	SERVICE	LOCATION	SUPPLY FAN								HEATING COIL (40% ETHYLENE GLYCOL)										PRE-FILTER						ELECTRICAL				INTERNAL VIBRATION ISOLATION		REMARKS
			100% OA CFM	SP IN WG	ESP IN WG	WHEEL DIA.	WHEEL TYPE	CLASS	RPM	DRIVE	TOTAL MBH	EAT DB DEG F	LAT DB DEG F	MAX AIR PD IN WG	FACE AREA SQ FT	FACE AREA H x L	GPM	ROWS	EGT DEG F	LGT DEG F	TYPE	EFF %	SQ FT	MAX FACE VELOCITY FPM	CLEAN PD IN WG	DIRTY PD IN WG	BHP	MOTOR HP	V/PH/Hz	MOTOR RPM	SPEC TYPE	DEFL (IN)	
HVU-1	COMPARTMENTS 1 & 5 BURNERS	FFT GRADE	20000	2.5	1	33	AF	1	900	BELT	3024	−20	120	0.4	40.6	(2)39X75	115	2	200	140	2"PLEATED	30	105.5	550	0.3	0.8	14	20	460/3/60	1750	S	1	50°C TEFC AMB MOTOR 2 SPEED, 2 WINDING
HVU-2	COMPARTMENTS 2 & 6 BURNERS	FFT GRADE	20000	2.5	1	33	AF	1	900	BELT	3024	−20	120	0.4	40.6	(2)39X75	115	2	200	140	2"PLEATED	30	105.5	550	0.3	0.8	14	20	460/3/60	1750	S	1	50°C TEFC AMB MOTOR 2 SPEED, 2 WINDING
HVU-3	FFT SOUTH PIT FIRE BURNERS	FFT GRADE	19000	2	1	33	AF	1	800	BELT	2873	−20	120	0.4	40.6	(2)39X75	110	2	200	140	2"PLEATED	30	105.5	550	0.3	0.8	10	15	460/3/60	1750	S	1	50°C TEFC AMB MOTOR 2 SPEED, 2 WINDING
HVU-4	FFT WEST PIT FIRE BURNERS	FFT GRADE	22500	2	1	33	AF	1	900	BELT	3402	−20	120	0.4	40.6	(2)39X75	130	2	200	140	2"PLEATED	30	105.5	550	0.3	0.8	13	20	460/3/60	1750	S	1	50°C TEFC AMB MOTOR 2 SPEED, 2 WINDING
HVU-5	FFT EAST PIT FIRE BURNERS	FFT GRADE	19000	2	1	33	AF	1	800	BELT	2873	−20	120	0.4	40.6	(2)39X75	110	2	200	140	2"PLEATED	30	105.5	550	0.3	0.8	10	15	460/3/60	1750	S	1	50°C TEFC AMB MOTOR 2 SPEED, 2 WINDING
HVU-6	FFT FIRST FLOOR STAGING AREA	FFT ROOF	30000	2.5	1	36.5	AF	1	900	BELT	2592	−20	60	0.4	40.6	(2)39X75	100	2	200	140	2"PLEATED	30	131.8	550	0.3	0.8	21	25	460/3/60	1750	S	1	50°C TEFC AMB MOTOR 2 SPEED, 2 WINDING
HVU-7	COMPARTMENTS 3,4,7,8	FFT GRADE	12000	2.5	1	27.5	AF	1	1050	BELT	1814	−20	120	0.4	29.7	(1)39X75	70	2	200	140	2"PLEATED	30	73.8	550	0.3	0.8	7	10	460/3/60	1750	S	1	50°C TEFC AMB MOTOR 2 SPEED, 2 WINDING

DCT HEAT PUMP SCHEDULE

UNIT NO	SERVICE & LOCATION	SUPPLY FAN						DEHUMIDIFICATION COIL							RETURN AIR FILTER		OUTSIDE AIR FILTER		RETURN/EXHAUST FAN					AUXILIARY CONDENSER (40% GLYCOL)		ELECTRICAL			NOM OPER WT LBS	VIBRATION ISOLATION		REMARKS
		CFM	MIN OA CFM	EXT SP IN WG	RPM	DRIVE	HP	TOTAL MBH	EAT DB DEG F	EAT DP DEG F	ENTER % RH	CONDENSATE REMOVAL LB/HR	FACE AREA SQ FT	REFRI-GERANT TYPE	TYPE	EFFI-CIENCY %	TYPE	EFFI-CIENCY %	CFM	MIN EXH CFM	EXT SP IN WG	DRIVE	HP	MBH	GPM	MIN AMP	V/PH/Hz	MOTOR RPM		SPEC TYPE	DEFL (IN)	
HP-1	DC TRAINER	13500	1350	2	–	BELT	10	450	82	61	50	140	27	R-22	2"PLEATED	30	2"PLEATED	30	13500	0	1	BELT	3	450	110	94	460/3/60	1750	10000	S	1	PROVIDE INTEGRAL GLYCOL PUMP
HP-2	BSMT TANK RM	6500	650	1.5	–	BELT	5	224	82	61	50	70	13	R-22	2"PLEATED	30	2"PLEATED	30	6500	0	1	BELT	2	224	60	52	460/3/60	1750	5000	S	1	PROVIDE INTEGRAL GLYCOL PUMP MAX. 5'-0" HIGH CABINET

AIR FILTER SCHEDULE

UNIT NO	SERVICE	LOCATION	CFM	PRE-FILTER						FINAL FILTER						REMARKS
				TYPE	EFFICIENCY %	SQ FT	MAXIMUM FACE VELOCITY FPM	CLEAN PD IN WG	DIRTY PD IN WG	TYPE	EFFICIENCY %	SQ FT	MAXIMUM FACE VELOCITY FPM	CLEAN PD IN WG	DIRTY PD IN WG	
AF-1	SF-1A & B SUPPORT BUILDING	SUPPORT BLDG BSMT	30000	2"PLEATED	30(ASHRAE)	144 (36)24x24	500	0.3	0.8	CARTRIDGE	85(ASHRAE)	144 (36)24x24	500	0.4	1.0	–
AF-2	SF-2 CHILLER ROOM B17	SUPPORT BLDG BSMT	4000	2"PLEATED	30(ASHRAE)	8	500	0.3	0.8	–	–	–	–	–	–	–
AF-3	SF-3 LAUNDRY ROOM B09	SUPPORT BLDG BSMT	3400	2"PLEATED	30(ASHRAE)	8	425	0.3	0.8	–	–	–	–	–	–	–
AF-4	SF-4 TANK FILL 131	SUPPORT BLDG BSMT	2000	2"PLEATED	30(ASHRAE)	8	250	0.3	0.8	–	–	–	–	–	–	–
AF-5	SF-5 CONF. CHAMBER 234	LAUNDRY STORAGE ROOM	6000	2"PLEATED	30(ASHRAE)	16	400	0.3	0.8	–	–	–	–	–	–	–
AF-6	SF-6 P250 LAB	SUPPORT BLDG RECEIVING	2200	36" BAG	95(ASHRAE)	8	300	0.3	0.8	CARTRIDGE	(95)ASHRAE)	8	250	0.4	1.0	–
AF-7	SF-7 MIN OA SUPPLY	HAZARDOUS MATERIAL RM	12000/ 18000 MAX	2"PLEATED	30(ASHRAE)	36	350/500	0.3	0.8	–	–	–	–	–	–	–
AF-B08	ELECTRICAL ROOM B08	CORRIDOR B12	4500	2"PLEATED	30(ASHRAE)	32 (8)24x24	150	0.1	0.3	–	–	–	–	–	–	–
AF-B09	LAUNDRY EXHAUST B09	CHILLER ROOM B17	3200	INSECT SCREEN	LINT	16 (2)24x48	200	0.1	0.3	–	–	–	–	–	–	–
AF-B10	MECHANICAL ROOM B10	CORRIDOR B12	6000/3000	2"PLEATED	30(ASHRAE)	16 (4)24x24	400/200	0.1	0.3	–	–	–	–	–	–	–
AF-B15	ELEVATOR MACHINE ROOM B15	CORRIDOR B12	2000/1000	2"PLEATED	30(ASHRAE)	16 (4)24x24	150	0.1	0.3	–	–	–	–	–	–	–
AF-104	OBA LOCKERS 104	OBA LOCKERS 104	1000	INSECT SCREEN	–	9 (1)36x36	150	0.1	0.3	–	–	–	–	–	–	–
AF-107	ELECTRICAL ROOM 107	ELECTRICAL ROOM 107	2000	INSECT SCREEN	–	9 (1)36x36	250	0.1	0.3	–	–	–	–	–	–	–
AF-113	ELECTRICAL ROOM 113	ELECTRICAL ROOM 113	2000	INSECT SCREEN	–	9 (1)36x36	250	0.1	0.3	–	–	–	–	–	–	–
AF-116	CORRIDOR 116	ELECTRICAL ROOM 113	1000	INSECT SCREEN	–	9 (1)36x36	150	0.1	0.3	–	–	–	–	–	–	–
AF-131	CO2 TANK FILL RM 131 EXHAUST	CO2 TANK FILL ROOM 131	2000	2"PLEATED	30(ASHRAE)	8 (2)24x24	250	0.3	0.8	CARTRIDGE	95(ASHRAE)	8 (2)24x24	250	–	–	–
AF-201	ELECTRICAL ROOM 201	ELECTRICAL ROOM 201	2000	INSECT SCREEN	–	9 (1)36x36	250	0.1	0.3	–	–	–	–	–	–	–
AF-209	CORRIDOR 209	CORRIDOR 209	1000	INSECT SCREEN	–	9 (1)36x36	150	0.1	0.3	–	–	–	–	–	–	–
AF-210	CORRIDOR 210	CORRIDOR 210	1000	INSECT SCREEN	–	9 (1)36x36	150	0.1	0.3	–	–	–	–	–	–	–
AF-234	CONFIDENCE CHAMBER EXHAUST	TANK ROOM	6000	4"PLEATED	30(ASHRAE)	8	300	0.3	0.8	ADSORBER	90	160	40 THRU CHARCOAL	0.5	0.5	790 LB (13.4 CU FT) ACTIVATED CHARCOAL IN 2" BED
AF-302	REPAIR LOCKER 302	REPAIR LOCKER 302	600	INSECT SCREEN	–	9 (1)36x36	100	0.1	0.3	–	–	–	–	–	–	–
AF-303	REPAIR LOCKER 303	REPAIR LOCKER 303	600	INSECT SCREEN	–	9 (1)36x36	100	0.1	0.3	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

COOLING COIL SCHEDULE

UNIT NO	SERVICE	LOCATION	FACE AREA		MINIMUM ROWS	TOTAL CAPACITY MBH	SENSIBLE CAPACITY MBH	MAXIMUM FACE VELOCITY FPM	AIR SIDE						WATER SIDE(30% ETHYLENE GLYCOL)						REMARKS
			SQ FT	H x L					CFM	EAT DB DEG F	EAT WB DEG F	LAT DB DEG F	LAT WB DEG F	MAX PD IN WG	GPM	EGT DEG F	LGT DEG F	COIL VELOCITY	MAX PD FT WG	FOULING FACTOR	
CC-1	SUPPORT BLDG	BASEMENT	119	(4)42X102	8	2264	1765	505	60000	80.3	65.3	52.8	52.6	1.6	500	45	55	3.5	20	0.00025	250 GPM PER CONTROL CIRCUIT
CC-2	P250 LAB	SF-6 (BASEMENT)	5.5	(1)21X37.5	10	175	85	400	2200	88.5	75.3	52.1	51.1	1.0	40	45	55	3.5	20	0.00025	–

HOT WATER HEATING COIL SCHEDULE

UNIT NO	SERVICE	LOCATION	FACE AREA		MAXIMUM FACE VELOCITY FPM	MINIMUM ROWS	CAPACITY MBH	AIR SIDE				WATER SIDE(40% ETHYLENE GLYCOL)					REMARKS
			SQ FT	H x L				CFM	EAT DEG F	LAT DEG F	MAX PD IN WG	FLOW GPM	EGT DEG F	LGT DEG F	MAX PD FT WG	FOULING FACTOR	
HC-1	SUPPORT BUILDING	BASEMENT	120	(4)42X102	505	2	1296	60000/30000	50/30	70	0.3	50	200	140	5	0.0005	25 GPM PER CIRCUIT
HC-2	SF-2 CHILLER ROOM B-17	CHILLER ROOM B17	8.5	(1)30X40.5	500	2	303	4000	−10	60	0.3	11	200	140	5	0.0005	–
HC-3	SF-3 LAUNDRY ROOM B09	LAUNDRY ROOM B09	7.4	(1)30X35.5	500	2	257	3400	−10	60	0.3	10	200	140	5	0.0005	–
HC-4	SF-4 TANK FILL 131	MECHANICAL B10	5.5	(1)21X37.5	500	2	159	2100	−10	60	0.3	6	200	140	5	0.0005	–
HC-5	SF-5 CONF. CHAMBER 234	MECHANICAL B10	13.65	(1)30X65.5	500	2	518	6000	−10	70	0.3	19	200	140	5	0.0005	–
HC-6	SF-6 P250 LAB	MECHANICAL B10	5.5	(1)21X37.5	400	2	190	2200	−10	70	0.6	7	200	140	5	0.0005	–

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DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
SOUTHERN DIVISION
CHARLESTON, S.C.

NAVAL TRAINING CENTER — GREAT LAKES, ILLINOIS

DAMAGE CONTROL SCHOOL
HVU, HP, FILTER, COIL
HVAC EQUIPMENT SCHEDULES

DSGN KOWALIK DR KSIAZEK CHK RAUCH
SUPV RAUCH CH ENGR
SUBMITTED BY — DATE 8-31-94
FIRM MEMBER TITLE
EIC — BR HD
FPE — DIR
APPROVED — DATE
OFFICER IN CHARGE
APPROVED — DATE 9/13/94
EFD FOR COMMANDER, NAVFAC

STATE OF OHIO — CHRISTOPHER S. RAUCH — E-54727 — REGISTERED PROFESSIONAL ENGINEER
ARCH. & ENGR. SEAL

SIZE	CODE IDENT NO.	NAVFAC DRAWING NO.	DRAWING NO.
F	80091	5276586	M6-2

CONSTR CONTR NO. N62467-93-C-1143
SCALE NO SCALE
SPEC 06-93-1143
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Date&time: 08/22/94 10:36:34 User: AJK Filename: P:\PAPER\JHPS2602

P: TTL-BLCK PS ins=0,0
P: TTL-KNGT PS ins=0,0
P: -JHGHHX22 MS ins=0,0
P: JHPA2602 PS ins=0,0

HIGH TEMPERATURE EXHAUST FAN SCHEDULE

UNIT NO	SERVICE	LOCATION	FAN ACFM	PRESSURE AT 0°F IN WG TP	PRESSURE AT 0°F IN WG SP	FAN RPM (A)	WHEEL DIA IN	FAN TYPE	FAN ARRANGEMENT	WHEEL TYPE (BAU)	OUTLET VELOCITY FPM	STATIC EFF %	TOTAL EFF %	DRIVE	CLASS	MOTOR LOCATION	BHP AT 0°F	MOTOR DATA HP	MOTOR DATA V/PH/Hz	MOTOR DATA RPM	VIBRATION ISOLATION SPEC TYPE	VIBRATION ISOLATION DEFL (IN)	FAN SOUND DATA AT INLET TEMP DEG °F	SOUND POWER BY OCTAVE BAND (REF; 10E-12 WATTS)AT RESPECTIVE INLET TEMPERATURES 1(63)	2(125)	3(250)	4(500)	5(1000)	6(2000)	7(4000)	8(8000)	LWA	DBA	SONES	REMARKS
HTEF-1	COMPARTMENTS 1,4,5,8	THIRD FLOOR ROOF	40500	4.9	4.3	858	49	CENT	1/BAU	AF/SWSI	2146	73	79	BELT	2	Y	40	50	460/3/60	1750	SX-HR	2	600/0	98/105	90/97	87/94	84/91	78/85	74/81	70/77	66/73	85/92	73/80	25/40	PROVIDE 1000°F 316L SS FAN, VFD
HTEF-2	COMPARTMENTS 2,3,6,7	THIRD FLOOR ROOF	40500	4.9	4.3	858	49	CENT	1/BAU	AF/SWSI	1964	75	80	BELT	2	X	40	50	460/3/60	1750	SX-HR	2	600/0	96/103	88/95	85/92	82/89	76/83	73/80	69/76	65/72	84/91	72/79	22/35	PROVIDE 1000°F 316L SS FAN, VFD
HTEF-3	FFT PIT FIRE	FIRST FLOOR ROOF	60000	3.1	2.5	516	66	CENT	1/BAU	AF/SWSI	2372	65	75	BELT	2	X	39	50	460/3/60	1750	SX-HR	2	600/0	97/104	89/96	87/94	84/91	77/84	73/80	69/76	65/72	85/92	73/80	24/38	PROVIDE 1000°F 316L SS FAN, VFD
HTEF-4	FFT PIT FIRE	FIRST FLOOR ROOF	60000	3.1	2.5	516	66	CENT	1/BAU	AF/SWSI	2372	65	75	BELT	2	Y	39	50	460/3/60	1750	SX-HR	2	600/0	97/104	89/96	87/94	84/91	77/84	73/80	69/76	65/72	85/92	73/80	24/38	PROVIDE 1000°F 316L SS FAN, VFD
HTEF-5	COMPARTMENTS 1,4,5,8	THIRD FLOOR ROOF	3000	1.2	1.0	919	24	CENT	1/UB	BI/SWSI	1734	34	49	BELT	1	Y	1.4	2	460/3/60	1750	SX-HR	1	0	88	85	80	77	74	72	70	68	80	68	18	PROVIDE 1000°F 316L SS FAN
HTEF-6	COMPARTMENTS 2,3,6,7	THIRD FLOOR ROOF	3000	1.2	1.0	919	24	CENT	1/UB	BI/SWSI	1734	34	49	BELT	1	X	1.4	2	460/3/60	1750	SX-HR	1	0	88	85	80	77	74	72	70	68	80	68	18	PROVIDE 1000°F 316L SS FAN
HTEF-7	FFT PIT FIRE	FIRST FLOOR ROOF	1500	1.2	1.0	1800	12	CENT	1/BAU	BI/SWSI	1750	53	62	BELT	1	Y	0.5	3/4	460/3/60	1750	SX-HR	1	0	68	63	59	56	54	52	50	49	60	48	6	PROVIDE 1000°F 316L SS FAN
HTEF-8	COMPARTMENTS	THIRD FLOOR ROOF	23000	5.0	4.4	–	36	CENT	1/BAU	AF/SWSI	2146	73	79	BELT	2	Y	25	30	460/3/60	1750	SX-HR	2	600/0	97/104	89/96	87/94	84/91	77/84	73/80	69/76	65/72	85/92	73/80	24/38	PROVIDE 1000°F 316L SS FAN, VFD
HTEF-9	COMPARTMENTS	THIRD FLOOR ROOF	6000	1.2	1.0	–	–	CENT	1/BAU	BI/SWSI	1750	53	62	BELT	1	X	2.4	3	460/3/60	1750	SX-HR	1	0	68	63	59	56	54	52	50	49	60	48	6	PROVIDE 1000°F 316L SS FAN

FAN SCHEDULE

UNIT NO	SERVICE	LOCATION	FAN CAPACITY CFM EACH	TOTAL PRESS IN WG	STATIC PRESS IN WG	EXT STATIC PRESS IN WG	FAN CLASS	FAN DIS-CHARGE	FAN TYPE	WHEEL TYPE	FAN RPM	WHEEL DIAMETER IN	OUTLET VELOCITY FPM	TIP SPEED FPM	DRIVE	BHP	MOTOR DATA HP (EACH)	MOTOR DATA V/PH/Hz	MOTOR DATA RPM	VIBRATION ISOLATION SPEC TYPE	VIBRATION ISOLATION DEFL (IN)	MAX SOUND (5 FT) DBA	MAX SOUND (5 FT) SONES	REMARKS	MAX/MIN SOUND POWER BY OCTAVE BAND (REF; 10E-12 WATTS) 1(63)	2(125)	3(250)	4(500)	5(1000)	6(2000)	7(4000)	8(8000)
SF-1A	DC OFFICE AND CLASSROOMS	MECHANICAL B10	30000	6	5	–	2	HORIZ	AXIAL	VANE	1770	42 OR 45	3100/2700	19500	DIRECT	40	50	460/3/60	1770	SX-HR	2	–	–	VFD, INLET BELL, SCREEN, OUTLET CONE, TEAO MOTOR	99	104	109	112	111	109	104	98
SF-1B	DC OFFICE AND CLASSROOMS	MECHANICAL B10	30000	6	5	–	2	HORIZ	AXIAL	VANE	1770	42 OR 45	3100/2700	19500	DIRECT	40	50	460/3/60	1770	SX-HR	2	–	–	VFD, INLET BELL, SCREEN, OUTLET CONE, TEAO MOTOR	99	104	109	112	111	109	104	98
RF-1A	DC OFFICE AND CLASSROOMS	MECHANICAL B10	30000	2.5	2	–	1	HORIZ	AXIAL	VANE	1170	42 OR 45	3100/2700	12900	DIRECT	15	20	460/3/60	1170	SX-HR	2	–	–	VFD, INLET BELL, SCREEN, OUTLET CONE, TEAO MOTOR	93	96	94	100	100	98	92	87
RF-1B	DC OFFICE AND CLASSROOMS	MECHANICAL B10	30000	2.5	2	–	1	HORIZ	AXIAL	VANE	1170	42 OR 45	3100/2700	12900	DIRECT	15	20	460/3/60	1170	SX-HR	2	–	–	VFD, INLET BELL, SCREEN, OUTLET CONE, TEAO MOTOR	93	96	94	100	100	98	92	87
SF-2	CHILLER ROOM B17	CHILLER ROOM B17	4000	–	3	–	1	HORIZ	CENTR	AF/BI	2400	13.5	1050	–	BELT	3	5	460/3/60	1750	SX-HR	1	–	–	–	106	103	100	95	90	85	78	72
SF-3	CORRIDOR B12 & LAUNDRY B09	LAUNDRY B09	3400	–	3	–	1	HORIZ	CENTR	AF/BI	2200	10.5	890	–	BELT	3	5	460/3/60	1750	SX-HR	1	–	–	–	106	103	100	95	90	85	78	72
SF-4	TANK FILLING 131 & RECEIVING 132	MECHANICAL B10	2100	–	3	–	1	HORIZ	CENTR	AF/BI	2200	9.5	1120	–	BELT	2	3	460/3/60	1750	SX-HR	1	–	–	–	106	103	100	95	90	85	78	72
SF-5	CONFIDENCE CHAMBER 234	MECHANICAL B10	6000	–	4	–	2	TAU	CENTR	AF/BI	1800	15	1250	–	BELT	6	7 1/2	460/3/60	1750	SX-HR	1	–	–	–	106	103	100	95	90	85	78	72
SF-6	P250 LAB 157	MECHANICAL B10	2200	–	4	–	2	HORIZ	CENTR	AF/BI	2550	9.5	1170	–	BELT	3	5	460/3/60	1750	SX-HR	1	–	–	–	106	103	100	95	90	85	78	72
RF-6	P250 LAB 157 RETURN/EXHAUST	MECHANICAL B10	2200	–	1.5	–	1	HORIZ	IN-LINE	CENTR	2200	13	1000	7560	BELT	1.3	1.5	460/3/60	1750	SX-HR	1	–	20	–	–	–	–	–	–	–	–	–
SF-7	SF-1 MINIMUM OA FAN	MECHANICAL B10	12000	–	2	–	1	VERT	CENTR	AF/BI	1700	–	2020	–	BELT	9	10	460/3/60	1750	SX-HR	1	–	–	VFD	106	103	100	95	90	85	78	72
EF-1	FFT OBA LOCKER 104	OBA LOCKER ROOF	1000	–	0.5	–	–	VERT	ROOF	BI	1060	13	890	3630	BELT	0.13	1/4	115/1/60	1750	–	–	–	8	–								
EF-2	FFT ELEC RM 113	ELECTRICAL 113	2000	–	0.5	–	–	HORIZ	WALL	PROP	890	24	395	7020	BELT	0.5	3/4	460/3/60	1750	–	–	–	20	–								
EF-3	FFT ELEC RM 107	ELECTRICAL 107	2000	–	0.5	–	–	HORIZ	WALL	PROP	890	24	395	7020	BELT	0.5	3/4	460/3/60	1750	–	–	–	20	–								
EF-4	FFT ELEC RM 201	ELECTRICAL 201	2000	–	0.5	–	–	HORIZ	WALL	PROP	890	24	395	7020	BELT	0.5	3/4	460/3/60	1750	–	–	–	20	–								
EF-5	FFT ESCAPE TRUNK 202	CORRIDOR 209 WALL	2500	–	0.5	–	–	HORIZ	WALL	BI	1550	14	1750	5930	BELT	0.6	3/4	460/3/60	1750	–	–	–	16	–								
EF-6	FFT REPAIR LOCKER 302	REPAIR LOCKER 302	600	–	0.5	–	–	HORIZ	WALL	PROP	900	24	190	5660	BELT	0.3	1/4	115/1/60	1750	–	–	–	16	–								
EF-7	FFT REPAIR LOCKER 303	REPAIR LOCKER 303	600	–	0.5	–	–	HORIZ	WALL	PROP	900	24	190	5660	BELT	0.3	1/4	115/1/60	1750	–	–	–	16	–								
EF-8	FFT STAIR COMPARTMENT 208	STAIR COMP ROOF	2500	–	0.5	–	1	VERT	UB	CENTR	1070	16	1360	4700	BELT	0.5	3/4	460/3/60	1750	–	–	–	13	OUTLET BIRD SCREEN								
EF-9	FFT STAIR COMPARTMENT 207	STAIR COMP ROOF	2500	–	0.5	–	1	VERT	UB	CENTR	1070	16	1360	4700	BELT	0.5	3/4	460/3/60	1750	–	–	–	13	OUTLET BIRD SCREEN								
EF-10	FFT STAGING AREA 301	STAGING AREA ROOF	10000	–	0.5	–	1	VERT	UB	CENTR	470	36	1340	4400	BELT	2	3	460/3/60	1750	–	–	–	16	OUTLET BIRD SCREEN								
EF-11	FFT WILD HOSE RM 102	WILD HOSE RM ROOF	1000	–	0.5	–	–	VERT	ROOF	BI	1060	13	890	3630	DIRECT	0.13	1/3	115/1/60	1750	–	–	–	8	–								
EF-12	FFT CORRIDOR 210	CORRIDOR 210	1000	–	0.5	–	–	HORIZ	WALL	PROP	1725	20	840	9030	DIRECT	0.4	1/4	460/3/60	1750	–	–	–	26	–								
EF-13	FFT CORRIDOR 209	CORRIDOR 209	1000	–	0.5	–	–	HORIZ	WALL	CENTR	950	14	700	3630	BELT	0.15	1/3	115/1/60	1750	–	–	–	8	–								
EF-14	FFT CORRIDOR 114	FFT ELECTRICAL 104	1000	–	0.5	–	–	HORIZ	WALL	PROP	1725	20	850	9030	DIRECT	0.35	1/4	460/3/60	1750	–	–	–	26	–								
EF-B06A&B	ELECTRICAL ROOM B06	CHILLER ROOM B17	2250	–	0.75	–	–	HORIZ	WALL	PROP	1725	24	1410	10870	DIRECT	1.1	1.5	460/3/60	1750	–	–	–	36	–								
EF-B09	LAUNDRY B09	CHILLER ROOM B17	3200	–	2	–	2	HORIZ	IN-LINE	CENTR	2050	16	890	9000	BELT	2.5	3	460/3/60	1750	–	–	–	29	–								
EF-B10A&B	MECHANICAL ROOM B10	MECHANICAL RM B10	3000	–	0.5	–	–	HORIZ	AXIAL	PROP	750	30	610	5900	BELT	0.6	3/4	460/3/60	1750	–	–	–	23	–								
EF-B15	ELEVATOR MACHINE ROOM B15	CHILLER ROOM B17	2000/1000	–	1	–	1	HORIZ	IN-LINE	CENTR	1880	14	1100	7200	BELT	1.5	2	460/3/60	1750/850	–	–	–	21	2-SPEED 2-WINDING MOTOR								
EF-B16	TANK ROOM B16	MECHANICAL B10	1300	–	1	–	–	HORIZ	IN-LINE	CENTR	1575	13	590	5400	BELT	0.4	3/4	460/3/60	1750	–	–	–	13	–								
EF-B17A	CHILLER ROOM B17	CHILLER ROOM B17	2000	–	0.5	–	–	HORIZ	AXIAL	PROP	1060	24	630	6600	BELT	0.4	1/2	460/3/60	1750	–	–	–	20	–								
EF-B17B	CHILLER ROOM B17	CHILLER ROOM B17	2000	–	0.75	–	–	HORIZ	AXIAL	PROP	1260	24	630	7910	BELT	0.7	1	460/3/60	1750	–	–	–	23	–								
EF-B19	TOILET ROOM B19	CHILLER ROOM B17	200	–	0.62	–	1	HORIZ	IN-LINE	CENTR	1660	7	200	4900	BELT	0.2	1/3	115/1/60	1750	–	–	–	14	–								
EF-121	GEAR ROOM 121	CHILLER ROOM B17	2200/1100	–	1	–	1	HORIZ	IN-LINE	CENTR	2000	13	1000	6900	BELT	1.1	1.5	460/3/60	1750/850	–	–	–	20	2-SPEED 2-WINDING MOTOR, LOW SPEED AFTER HOURS								
EF-127	FIRST FLOOR SOUTH TOILETS	CHILLER ROOM B17	3250	–	1	–	1	HORIZ	IN-LINE	CENTR	1470	16	910	6230	BELT	1.1	1.5	460/3/60	1750	–	–	–	18	–								
EF-131A	CO2 TANK FILL ROOM 131	CHILLER ROOM B17	2000	–	2	–	2	HORIZ	IN-LINE	CENTR	2320	14	740	8850	BELT	1.5	2	460/3/60	1750	–	–	–	23	–								
EF-131B	TANK FILL ROOM CO_2 PURGE	ROOF	2000	–	1	–	–	VERT	UB	CENTR	1725	14	1760	6600	DIRECT	0.9	1	460/3/60	1750	–	–	–	14	–								
EF-137	FIRST FLOOR NORTH TOILETS	MECHANICAL RM B10	2000	–	1	–	–	HORIZ	IN-LINE	CENTR	1900	13	910	6540	BELT	0.8	1	460/3/60	1750	–	–	–	18	–								
EF-138	ELECTRICAL ROOM 138	CHILLER ROOM B17	300	–	0.75	–	1	HORIZ	IN-LINE	CENTR	1970	7	300	5800	BELT	0.3	1/3	115/1/60	1750	–	–	–	19	–								
EF-156	DCT SHOP & STORAGE #56	DTC EAST ROOF	1200	–	0.75	–	–	UB	ROOF	CENTR	–	12	–	–	BELT	0.3	1/3	115/1/60	1750	–	–	–	–	–								
EF-[illegible]	SECOND FLOOR TOILETS	ROOF	1100	–	0.75	–	1	VERT	ROOF	CENTR	1340	12	1190	4590	BELT	0.3	1/2	460/3/60	1750	–	–	–	12	–								
EF-234A&B	CONFIDENCE CHAMBER 234	BASEMENT	3000	–	2	–	–	TAU	CENTR	BISWSI	1720	16	1910	7420	BELT	2	3	460/3/60	1750	–	–	71	–	–								
EF-236	DECON ROOM 236	ROOF	400	–	0.75	–	–	UB	ROOF	CENTR	1100	14	910	4230	BELT	0.1	1/4	115/1/60	1750	–	–	–	10	FAN TO RUN CONTINUOUSLY								
EF-237	CORRIDOR 237	ROOF	1000	–	0.75	–	–	UB	ROOF	CENTR	1240	13	890	4240	BELT	0.2	1/3	115/1/60	1750	–	–	–	11	–								
EF-312	THIRD FLOOR TOILETS	ROOF	1400	–	0.75	–	1	VERT	ROOF	CENTR	1200	14	1060	4500	BELT	0.4	1/2	460/3/60	1750	–	–	–	12	–								
DAC-1,2,3,4	DOOR AIR CURTAINS	RM 232&234 DOORS	1700	–	–	0	–	DB	CENTR	RADIAL	1750	–	2275	–	DIRECT	–	1/2	115/1/60	1750	NM	–	64	–	–								
VF-146,238, 239,242	DAMAGE CONTROL TRAINER	DC TRAINER	600	–	0.375	–	–	HORIZ	AXIAL	PROP	860	20	715	4500	DIRECT	0.2	1/4	115/1/60	1750	–	–	–	10	–								

11850 CFM OA
USE: 15000 CFM MIN OA

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RECORD DRAWING
DATE 06/08/98

DMD 05/26/98

DATE 07-31-97 ISSUE CORRECTED TO AS-BUILT BY MEB INITIAL D.A.W.

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DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
SOUTHERN DIVISION
CHARLESTON, S.C.

NAVAL TRAINING CENTER GREAT LAKES, ILLINOIS

DAMAGE CONTROL SCHOOL SUPPLY AND EXHAUST FANS HVAC EQUIPMENT SCHEDULES

SIZE	CODE IDENT NO.	NAVFAC DRAWING NO.	DRAWING NO.
F	80091	5276587	M6-3

CONSTR CONTR NO. N62467-93-C-1143
SCALE NO SCALE SPEC 06-93-1143 SHEET 173 OF

Date&time: 12/04/97 08:02:07 User: TWhite Filename: P:\PAPER\JHPS2603

TERMINAL UNIT WITH HOT WATER HEATING COIL SCHEDULE

UNIT NO.	SERVICE	LOCATION	TYPE	AIR FLOW MAX CFM	AIR FLOW MIN CFM	INLET SIZE DIA. IN.	CFM RANGE	MIN CFM FAN RANGE (AT 0.2 TO 0.5" ESP)	FAN CFM	HOT WATER HEATING COIL EAT DEG F	LAT DEG F	EWT DEG F	MBH	GPM	ROWS	MAX FPI	WATER PD FT WG	MOTOR HP	MOTOR V/PH/Hz	REMARKS
VAV-121	GEAR ROOM 121	GEAR ROOM 121	VAVRH	1500	500	12	400-1800	–	–	55	75	200	11	2	1	12	5.0	–	–	–
VAV-122	FEMALE STUDENT 122	FEMALE STUDENT 122	CVRH	400	400	6	100-400	–	–	55	75	200	9	1	1	12	5.0	–	–	–
VAV-123	MALE STUDENT 123	MALE STUDENT 123	CVRH	1100	1100	10	300-1200	–	–	55	75	200	25	2	1	12	5.0	–	–	–
VAV-124	MALE STAFF 124	TELEPHONE 161	CVRH	400	400	6	100-400	–	–	55	75	200	9	1	1	12	5.0	–	–	–
VAV-125	FEMALE STAFF 125	ELEC ROOM 138	CVRH	300	300	6	100-400	–	–	55	75	200	7	1	1	12	5.0	–	–	–
VAV-128	OFFICE 128	RECEIVING 132	CVRH	250	250	6	100-400	–	–	55	75	200	6	1	1	12	5.0	–	–	–
VAV-130	FIRST AID 130	FIRST AID 130	VAVRH	250	100	6	100-400	–	–	55	75	200	3	1	1	12	5.0	–	–	–
VAV-133	SECURITY 133	CORRIDOR 140	VAVRH	200	100	6	100-400	–	–	55	75	200	3	1	1	12	5.0	–	–	–
VAV-134	CORRIDOR 134	CORRIDOR 140	VAVRH	2000	500	14	500-2500	–	–	55	75	200	11	1	1	12	5.0	–	–	–
VAV-135	MALE STUDENT 135 & 164	MALE STUDENT 135	CVRH	900	900	10	300-1200	–	–	55	75	200	20	1	1	12	5.0	–	–	–
VAV-136	FEMALE STUDENT 136 & 142	MALE STUDENT 135	CVRH	600	600	8	200-700	–	–	55	75	200	13	1	1	12	5.0	–	–	–
VAV-140A	CORRIDOR 140	CORRIDOR 140	VAVRH	2000	500	14	500-2500	–	–	55	75	200	11	1	1	12	5.0	–	–	–
VAV-140B	CORRIDOR 140	CORRIDOR 140	VAVRH	1800	400	12	400-1800	–	–	55	75	200	9	1	1	12	5.0	–	–	–
VAV-140C	CORRIDOR 140	CORRIDOR 140	VAVRH	1800	400	12	400-1800	–	–	55	75	200	9	1	1	12	5.0	–	–	–
VAV-140D	CORRIDOR 140	CORRIDOR 140	VAVRH	1800	400	12	400-1800	–	–	55	75	200	9	1	1	12	5.0	–	–	–
VAV-214A	CLASSROOM 214	CLASSROOM 214	VAVRH	1400	600	12	400-1800	–	–	55	75	200	13	1	1	12	5.0	–	–	–
VAV-214B	CLASSROOM 214	CLASSROOM 214	VAVRH	1500	450	12	400-1800	–	–	55	75	200	10	1	1	12	5.0	–	–	–
VAV-215	OFFICE 215	OFFICE 218	VAVRH	500	200	8	200-700	–	–	55	75	200	5	1	1	12	5.0	–	–	–
VAV-216	OFFICE 216	OFFICE 218	CVRH	100	100	6	100-400	–	–	55	75	200	3	1	1	12	5.0	–	–	–
VAV-217	OFFICE 220	OFFICE 218	CVRH	100	100	6	100-400	–	–	55	75	200	3	1	1	12	5.0	–	–	–
VAV-218A	OFFICE 218	OFFICE 218	VAVRH	1950	520	14	500-2500	–	–	55	75	200	11	1	1	12	5.0	–	–	–
VAV-218B	OFFICE 218	OFFICE 218	VAVRH	1050	630	10	300-1200	–	–	55	75	200	14	1	1	12	5.0	–	–	–
VAV-219	OFFICE 219	OFFICE 218	CVRH	100	100	6	100-400	–	–	55	75	200	3	1	1	12	5.0	–	–	–
VAV-220	OFFICE 220	OFFICE 218	CVRH	100	100	6	100-400	–	–	55	75	200	3	1	1	12	5.0	–	–	–
VAV-221	LOUNGE 221	LOUNGE 221	VAVRH	1800	900	12	400-1800	–	–	55	75	200	20	1	1	12	5.0	–	–	–
VAV-222	FEMALE STAFF 222	LOUNGE 221	CVRH	250	250	6	100-400	–	–	55	75	200	6	1	1	12	5.0	–	–	–
VAV-223	MALE STAFF 223	MALE STAFF 223	CVRH	350	350	6	100-400	–	–	55	75	200	8	1	1	12	5.0	–	–	–
VAV-227A	CLASSROOM 227	MALE STAFF 223	VAVRH	1500	450	12	400-1800	–	–	55	75	200	10	1	1	12	5.0	–	–	–
VAV-227B	CLASSROOM 227	MALE STAFF 223	VAVRH	1200	500	10	300-1200	–	–	55	75	200	11	1	1	12	5.0	–	–	–
VAV-228A	CORRIDOR 228	CORRIDOR 233	VAVRH	2400	500	14	500-2500	–	–	55	75	200	11	1	1	12	5.0	–	–	–
VAV-228B	CORRIDOR 228	OFFICE 218	VAVRH	2400	500	14	500-2500	–	–	55	75	200	11	1	1	12	5.0	–	–	–
VAV-228C	CORRIDOR 228	CORRIDOR 228	VAVRH	2400	500	14	500-2500	–	–	55	75	200	11	1	1	12	5.0	–	–	–
VAV-228D	CORRIDOR 228	CORRIDOR 228	VAVRH	1800	400	12	400-1800	–	–	55	75	200	9	1	1	12	5.0	–	–	–
VAV-228E	CORRIDOR 228	CORRIDOR 228	VAVRH	2400	500	14	500-2500	–	–	55	75	200	11	1	1	12	5.0	–	–	–
VAV-228F	CORRIDOR 228	CORRIDOR 228	VAVRH	1900	500	14	500-2500	–	–	55	75	200	11	1	1	12	5.0	–	–	–
VAV-231	CLASSROOM 231 & STORAGE 243	CORRIDOR 237	VAVRH	2500	1000	14	500-2500	–	–	55	75	200	22	1	1	12	5.0	–	–	–
VAV-233	MEDIA 233	OFFICE 218	VAVRH	200	100	6	100-400	–	–	55	75	200	3	1	1	12	5.0	–	–	–
VAV-237	CORRIDOR 237	CORRIDOR 237	CVRH	600	600	8	200-700	–	–	55	75	200	13	1	1	12	5.0	–	–	–
VAV-307A	CLASSROOM 307	CLASSROOM 307	VAVRH	1050	600	10	300-1200	–	–	55	75	200	13	1	1	12	5.0	–	–	–
VAV-307B	CLASSROOM 307	CLASSROOM 307	VAVRH	1650	400	12	400-1800	–	–	55	75	200	9	1	1	12	5.0	–	–	–
VAV-308A	CLASSROOM 308	CLASSROOM 308	VAVRH	1050	600	10	300-1200	–	–	55	75	200	13	1	1	12	5.0	–	–	–
VAV-308B	CLASSROOM 308	CLASSROOM 308	VAVRH	1650	400	12	400-1800	–	–	55	75	200	9	1	1	12	5.0	–	–	–
VAV-309	MALE STUDENT 309	MALE STUDENT 309	CVRH	350	350	6	100-400	–	–	55	75	200	8	1	1	12	5.0	–	–	–
VAV-310	FEMALE STUDENT 310	LABORATORY 314	CVRH	350	350	6	100-400	–	–	55	75	200	8	1	1	12	5.0	–	–	–
VAV-314	LABORATORY 314	LABORATORY 314	VAVRH	2500	750	14	500-2500	–	–	55	75	200	17	1	1	12	5.0	–	–	–
VAV-318A	LABORATORY 318	LABORATORY 318	VAVRH	1800	800	12	400-1800	–	–	55	75	200	18	1	1	12	5.0	–	–	–
VAV-318B	LABORATORY 318	LABORATORY 318	VAVRH	1800	500	12	400-1800	–	–	55	75	200	11	1	1	12	5.0	–	–	–
VAV-319A	CORRIDOR 319	CORRIDOR 319	FPVAV	1500	400	12	400-1800	1000-1600	1500	65	90	200	40	4	1	12	5.0	1/2	277/1/60	PROVIDE INDUCED AIR FILTERS
VAV-319B	CORRIDOR 319	CLASSROOM 308	FPVAV	1500	400	12	400-1800	1000-1600	1500	65	90	200	40	4	1	12	5.0	1/2	277/1/60	PROVIDE INDUCED AIR FILTERS
VAV-319C	CORRIDOR 319	CORRIDOR 319	FPVAV	1500	400	12	400-1800	1000-1600	1500	65	90	200	40	4	1	12	5.0	1/2	277/1/60	PROVIDE INDUCED AIR FILTERS
VAV-319D	CORRIDOR 319	CORRIDOR 319	FPVAV	1500	400	12	400-1800	1000-1600	1500	65	90	200	40	4	1	12	5.0	1/2	277/1/60	PROVIDE INDUCED AIR FILTERS
VAV-319E	CORRIDOR 319	LABORATORY 318	FPVAV	1500	400	12	400-1800	1000-1600	1500	65	90	200	40	4	1	12	5.0	1/2	277/1/60	PROVIDE INDUCED AIR FILTERS
VAV-319F	CORRIDOR 319	CORRIDOR 319	FPVAV	1500	400	12	400-1800	1000-1600	1500	65	90	200	40	4	1	12	5.0	1/2	277/1/60	PROVIDE INDUCED AIR FILTERS
VAV-321	CORRIDOR 321	CORRIDOR 321	VAVRH	1200	300	10	300-1200	–	–	55	75	200	7	1	1	12	5.0	–	–	–
VAV-322A	LABORATORY 322	LABORATORY 322	VAVRH	2100	600	14	500-2500	–	–	55	75	200	13	1	1	12	5.0	–	–	PROVIDE DUCT SILENCER
VAV-322B	LABORATORY 322	LABORATORY 322	VAVRH	1400	400	12	400-1800	–	–	55	75	200	9	1	1	12	5.0	–	–	PROVIDE DUCT SILENCER
VAV-322C	LABORATORY 322	LABORATORY 322	VAVRH	2400	1200	14	500-2500	–	–	55	75	200	26	2	1	12	5.0	–	–	PROVIDE DUCT SILENCER

TOTAL: 26,340
USE: 30,000

TOTAL: 778 78

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DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
SOUTHERN DIVISION
CHARLESTON, S.C.

NAVAL TRAINING CENTER — GREAT LAKES, ILLINOIS

DAMAGE CONTROL SCHOOL
VAV TERMINAL UNIT
HVAC EQUIPMENT SCHEDULES

DSGN KOWALIK DR KSIAZEK CHK RAUCH
SUPV RAUCH CH ENGR
SUBMITTED BY — DATE 8-31-94
FIRM MEMBER TITLE
EIC — BR HD
FPE — DIR
APPROVED — DATE
OFFICER IN CHARGE
APPROVED — DATE 9/12/94
EFD FOR COMMANDER, NAVFAC

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HOT WATER UNIT HEATER SCHEDULE

UNIT NO.	SERVICE AND LOCATION	TYPE	CFM	HEATING CAPACITY		WATER SIDE			MOTOR			REMARKS
				MBH	EAT DEG F	GPM (%GLYCOL)	EWT DEG F	LWT DEG F	A HP	V/PH/Hz	RPM	
UH-1 TO 6	FFT BSMT UNDER COMPARTMENTS 5,6,7,8	HORIZONTAL	–	80	–10	4(40)	180	140	1/6	115/1/60	1140	EPOXY-COATED ENCLOSURE
UH-7&7A TO 10 & 10A	FFT BSMT PIT FIRE BURNER ROOM	HORIZONTAL	–	80	–10	4(40)	180	140	1/6	115/1/60	1140	EPOXY-COATED ENCLOSURE
UH-11	STAIR B05	HORIZONTAL	–	50	50	2.5(40)	180	140	1/6	115/1/60	1140	–
UH-12	WILD HOSE ROOM F102	HORIZONTAL	–	30	50	1.5(40)	180	140	1/20	115/1/60	1600	EPOXY-COATED ENCLOSURE
UH-13	STAGING AREA #1 F101	HORIZONTAL	–	50	50	2.5(40)	180	140	1/6	115/1/60	1140	EPOXY-COATED ENCLOSURE
UH-14 AND 15	STAGING AREA #1 F101	HORIZONTAL	–	80	–10	4(40)	180	140	1/5	115/1/60	1140	EPOXY-COATED ENCLOSURE
UH-16	STAGING AREA #1 F101	HORIZONTAL	–	50	50	2.5(40)	180	140	1/6	115/1/60	1140	–
UH-17	ELECTRICAL ROOM F107	HORIZONTAL	–	30	50	1.5(40)	180	140	1/20	115/1/60	1600	–
UH-18	EAST STAIR F118	HORIZONTAL	–	20	–10	4(40)	180	140	1/25	115/1/60	1550	–
UH-19	CORRIDOR F116	HORIZONTAL	–	20	50	1.0(40)	180	140	1/25	115/1/60	1550	–
UH-20	ELECTRICAL ROOM #2 F113	HORIZONTAL	–	20	50	1.0(40)	180	140	1/25	115/1/60	1550	–
UH-21 TO 23	STAGING AREA #1 F101	HORIZONTAL	–	50	50	2.5(40)	180	140	1/6	115/1/60	1140	EPOXY-COATED ENCLOSURE
UH-24	OBA LOCKER F104	HORIZONTAL	–	30	50	1.5(40)	180	140	1/20	115/1/60	1600	EPOXY-COATED ENCLOSURE
UH-25 TO 27	SECOND FLOOR CRAWL SPACE	HORIZONTAL	–	80	50	4(40)	180	140	1/5	115/1/60	1140	EPOXY-COATED ENCLOSURE
UH-28	STAIR #1	HORIZONTAL	–	20	50	1(40)	180	140	1/25	115/1/60	1550	EPOXY-COATED ENCLOSURE
UH-29 TO 31	SECOND FLOOR CRAWL SPACE	HORIZONTAL	–	80	50	4(40)	180	140	1/5	115/1/60	1140	EPOXY-COATED ENCLOSURE
UH-32	FFT 2ND FLR – SOUTH	HORIZONTAL	–	80	50	4(40)	180	140	1/5	115/1/60	1140	EPOXY-COATED ENCLOSURE
UH-33 TO 35	FFT 2ND FLR – SOUTH	HORIZONTAL	–	20	50	1(40)	180	140	1/25	115/1/60	1550	EPOXY-COATED ENCLOSURE
UH-36 AND 37	FFT 2ND FLR – SOUTH	HORIZONTAL	–	20	50	1(40)	180	140	1/25	115/1/60	1550	EPOXY-COATED ENCLOSURE
UH-38	FFT 2ND FLR – SOUTH	HORIZONTAL	–	20	50	1.0(40)	180	140	1/25	115/1/60	1550	EPOXY-COATED ENCLOSURE
UH-39	FFT 3RD FLR – SOUTH	VERTICAL	–	80	50	4(40)	180	140	1/5	115/1/60	1140	EPOXY-COATED ENCLOSURE
UH-40 TO 44	FFT 3RD FLR – SOUTH	HORIZONTAL	–	20	50	1(40)	180	140	1/25	115/1/60	1550	EPOXY-COATED ENCLOSURE
UH-45	FFT 3RD FLR – SOUTH	VERTICAL	–	80	50	4(40)	180	140	1/5	115/1/60	1140	EPOXY-COATED ENCLOSURE
UH-46	FFT 3RD FLR – SOUTH	HORIZONTAL	–	20	50	1(40)	180	140	1/25	115/1/60	1550	EPOXY-COATED ENCLOSURE
UH-B06	NORTH STAIR B06	HORIZONTAL	–	20	50	1(0)	180	140	1/25	115/1/60	1550	–
UH-B07A AND B	STORAGE B07	VERTICAL	–	20	50	1(0)	180	140	1/25	115/1/60	1500	–
UH-B10A, B, C	MECHANICAL B10	HORIZONTAL	–	20	50	1(0)	180	140	1/25	115/1/60	1550	–
UH-B12A, B, C, D	CORRIDOR B125	HORIZONTAL	–	20	50	1(0)	180	140	1/25	115/1/60	1550	–
UH-B13	STAIRWAY B13	HORIZONTAL	–	20	50	1(0)	180	140	1/25	115/1/60	1550	–
UH-B14	CORRIDOR B14	HORIZONTAL	–	20	50	1(0)	180	140	1/25	115/1/60	1550	–
UH-B16A THRU F	DC NORTH BASEMENT (TANK ROOM)	HORIZONTAL	–	20	50	1(0)	180	140	1/25	115/1/60	1550	–
UH-B17A AND B	CHILLER B17	VERTICAL	–	20	50	1(0)	180	140	1/25	115/1/60	1500	–
UH-B17C	CHILLER B17	VERTICAL	–	80	50	4(0)	180	140	1/5	115/1/60	1140	–
UH-B21	DC NORTH STAIRWAY B21	HORIZONTAL	–	20	50	1(0)	180	140	1/25	115/1/60	1550	–
UH-132A AND B	LOADING/STORAGE 132	VERTICAL	–	80	50	4(0)	180	140	1/5	115/1/60	1140	–
UH-143A AND B	DC TRAINING AREA 240	VERTICAL	–	80	50	4(0)	180	140	1/5	115/1/60	1140	–
UH-154	DC TRAINING AREA 240	VERTICAL	–	80	50	4(0)	180	140	1/5	115/1/60	1140	–
UH-232	DC PREP ROOM 232	VERTICAL	–	20	50	1(0)	180	140	1/25	115/1/60	1500	–
UH-234A AND B	DC CONFIDENCE CHAMBER 234	HORIZONTAL	–	20	50	1(0)	180	140	1/25	115/1/60	1550	–
UH-235	DC SECOND FLOOR SOFFIT, AREA 235	HORIZONTAL	–	20	50	1(0)	180	140	1/25	115/1/60	1550	–
UH-309	MALE STUDENT 305 CEILING AREA	HORIZONTAL	–	20	50	1(0)	180	140	1/25	115/1/60	1550	–
UH-310	FEMALE STUDENT 310 CEILING AREA	HORIZONTAL	–	20	50	1(0)	180	140	1/25	115/1/60	1550	–

ELECTRIC UNIT HEATER SCHEDULE

UNIT NO.	SERVICE & LOCATION	TYPE	KW	EAT DEG F	MOTOR RPM	ELECTRICAL	REMARKS
						VOLTS/PH/Hz	
EUH-B06	ELECTRIC ROOM B06	HORIZONTAL	5	50	1500	460/3/60	WITH 24V CONTROL

HOT WATER CABINET HEATER SCHEDULE

UNIT NO.	SERVICE AND LOCATION	MAX WxH	INLET OUTLET	TYPE	CFM	HEATING CAPACITY		WATER SIDE		MOTOR			REMARKS
						MBH	EAT DEG F	GPM	EWT DEG F	A WATTS	V/PH/Hz	RPM	
CUH-120	STAIR #3 120	84x30	SIDE/BOTTOM	INVERTED WALL MTD	1700	50	60	2	200	240	115/1/60	1700	COMPLETE WITH FILTERS
CUH-124 & 125	STAFF 124 & 125	42x26	SIDE/BOTTOM	INVERTED WALL MTD	300	10	60	1	200	60	115/1/60	1100	COMPLETE WITH FILTERS
CUH-134A	CORRRIDOR 134	90x36	SIDE/SIDE	INVERTED RECESSED	1700	50	60	2	200	240	115/1/60	1700	COMPLETE WITH FILTERS
CUH-134B	CORRIDOR 140	42x26	SIDE/BOTTOM	INVERTED WALL MTD	200	20	60	1	200	60	115/1/60	1100	COMPLETE WITH FILTERS
CUH-139	VESTIBULE 139	90x36	SIDE/SIDE	INVERTED RECESSED	1700	50	60	2	200	240	115/1/60	1700	COMPLETE WITH FILTERS
CUH-140A	CORRIDOR 140	48x30	SIDE/BOTTOM	INVERTED WALL MTD	300	20	60	1	200	60	115/1/60	1700	COMPLETE WITH FILTERS
CUH-140B	CORRIDOR 140	84x30	SIDE/BOTTOM	INVERTED WALL MTD	1700	50	60	2	200	60	115/1/60	1700	COMPLETE WITH FILTERS
CUH-141	STAIR #4 141	42x26	SIDE/BOTTOM	INVERTED WALL MTD	300	20	60	1	200	60	115/1/60	1100	COMPLETE WITH FILTERS
CUH-148A	DC STAIR #5 148	84x30	SIDE/BOTTOM	INVERTED WALL MTD	1700	50	60	2	200	240	115/1/60	1700	COMPLETE WITH FILTERS
CUH-148B	DC STAIR #5 148	84x30	SIDE/BOTTOM	INVERTED WALL MTD	1700	50	60	2	200	240	115/1/60	1700	COMPLETE WITH FILTERS
CUH-159	VESTIBULE 159	90x36	SIDE/SIDE	INVERTED RECESSED	1700	50	60	2	200	240	115/1/60	1700	COMPLETE WITH FILTERS
CUH-222	FEMALE STAFF 222	48x30	SIDE/SIDE	INVERTED RECESSED	300	10	60	1	200	60	115/1/60	1100	COMPLETE WITH FILTERS
CUH-228	CORRIDOR 228	48x30	SIDE/SIDE	INVERTED RECESSED	300	10	60	1	200	60	115/1/60	1100	COMPLETE WITH FILTERS
CUH-229	STAIR #4 229	42x26	SIDE/BOTTOM	INVERTED WALL MTD	300	10	60	1	200	60	115/1/60	1100	COMPLETE WITH FILTERS
CUH-230	STAIR #3 230	42x26	SIDE/BOTTOM	INVERTED WALL MTD	300	10	60	1	200	60	115/1/60	1100	COMPLETE WITH FILTERS
CUH-235	DC N STAIR #5 235	48x30	SIDE/SIDE	INVERTED RECESSED	300	10	60	1	200	60	115/1/60	1100	COMPLETE WITH FILTERS
CUH-311	SB N STAIR #3 311	42x26	SIDE/BOTTOM	INVERTED WALL MTD	300	10	60	1	200	60	115/1/60	1100	COMPLETE WITH FILTERS
CUH-320	STAIR #5 320	42x26	SIDE/BOTTOM	INVERTED WALL MTD	300	10	60	1	200	60	115/1/60	1100	COMPLETE WITH FILTERS
CUH-321	SB STAIR #4 321	42x26	SIDE/BOTTOM	INVERTED WALL MTD	300	10	60	1	200	60	115/1/60	1100	COMPLETE WITH FILTERS

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DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
SOUTHERN DIVISION
CHARLESTON, S.C.
NAVAL TRAINING CENTER GREAT LAKES, ILLINOIS

DAMAGE CONTROL SCHOOL
CABINET AND UNIT HEATER
HVAC EQUIPMENT SCHEDULES

SIZE	CODE IDENT NO.	NAVFAC DRAWING NO.	DRAWING NO.
F	80091	5276589	M6-5
		CONSTR CONTR NO. N62467-93-C-1143	
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DUCT SILENCER SCHEDULE

UNIT NO	SERVICE & LOCATION	TYPE	CFM EACH	VELOCITY FPM	D x L W x H x L (IN)	FACE AREA SF	MINIMUM ATTENUATION 63	125	250	500	1K	2K	4K	8K	MAXIMUM SELF-NOISE 63	125	250	500	1K	2K	4K	8K	MAXIMUM PRESSURE DROP (IN WG)	REMARKS
							1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8		
VAV TERMINAL UNITS	DOWNSTREAM OF VAV TERMINAL UNITS INDICATED	RECTANGULAR	1400-2400	+1000	SEE REMARKS	VARIES	6	7	13	21	29	38	19	13	41	33	34	33	37	35	25	20	0.10	18x18x60 & 24x18x60 FOR 12"D & 14"D VAV SIZES
DS-1A	HVU-1 INLET	RECTANGULAR	20000	-540	90x60x60	37	8	12	23	26	25	19	16	13	59	55	58	56	58	62	57	50	0.20	–
DS-1B	HVU-1 OUTLET	RECTANGULAR	20000	+1250	48x48x60	16	6	10	16	24	25	14	11	11	54	48	52	50	52	56	50	43	0.30	–
DS-2A	HVU-2 INLET	RECTANGULAR	20000	-540	90x60x60	37	11	14	25	38	32	17	14	13	59	57	57	57	62	63	57	43	0.30	–
DS-2B	HVU-2 OUTLET	RECTANGULAR	20000	+1250	48x48x60	16	11	14	25	38	32	17	14	13	52	51	51	49	57	58	49	43	0.20	–
DS-3A	HVU-3 INLET	RECTANGULAR	19000	-500	90x60x60	37	7	13	22	36	31	17	13	13	44	37	38	37	41	40	31	26	0.20	–
DS-3B	HVU-3 OUTLET	RECTANGULAR	19000	+1550	42x42x60	12	4	7	13	16	16	10	9	8	40	35	37	37	40	39	30	23	0.10	–
DS-4A	HVU-4 INLET	RECTANGULAR	22500	-600	90x60x60	37	8	11	18	32	42	33	22	11	61	60	60	60	65	66	58	38	0.20	–
DS-4B	HVU-4 OUTLET	RECTANGULAR	22500	+1600	48x42x60	14	6	10	18	30	42	34	23	14	65	55	56	54	51	52	50	43	0.30	–
DS-5A	HVU-5 INLET	RECTANGULAR	19000	-500	90x60x60	37	8	11	18	32	42	33	22	11	63	62	61	62	66	67	60	42	0.20	–
DS-5B	HVU-5 OUTLET	RECTANGULAR	19000	+1550	42x42x60	12	6	10	18	30	42	34	23	14	65	55	56	54	51	52	50	43	0.30	–
DS-6A	HVU-6 INLET	RECTANGULAR	30000	-600	90x84x60	52	9	13	18	32	29	19	16	11	57	57	57	57	55	55	44	37	0.10	–
DS-6B	HVU-6 OUTLET	RECTANGULAR	30000	+1200	60x60x60	25	8	12	17	32	29	23	19	16	56	52	50	50	49	47	45	33	0.10	–
DS-7A	HVU-7 INLET	RECTANGULAR	12000	-400	90x48x60	30	9	13	18	32	29	19	16	11	57	57	57	57	55	55	44	37	0.10	–
DS-7B	HVU-7 OUTLET	RECTANGULAR	12000	+1500	48x24x60	8	8	12	17	32	29	23	19	16	56	52	50	50	49	47	45	33	0.10	–
DS-8	HTEF-1 INLET	RECTANGULAR	40500	-1600	60x60x60	25	8	12	17	32	29	20	17	12	53	53	53	53	51	51	44	36	0.10	PROVIDE 316L SS AND 1000°F DESIGN
DS-9	HTEF-2 INLET	RECTANGULAR	40500	-1600	60x60x60	25	7	11	16	31	28	25	20	17	58	54	52	52	51	48	45	32	0.10	PROVIDE 316L SS AND 1000°F DESIGN
DS-10	HTEF-3 INLET	RECTANGULAR	60000	-1200	120x60x60	50	8	12	17	32	29	20	17	12	47	47	47	47	45	45	37	29	0.10	PROVIDE 316L SS AND 1000°F DESIGN
DS-11	HTEF-4 INLET	RECTANGULAR	60000	-1200	120x60x60	50	7	11	16	31	29	25	20	17	52	48	46	46	45	42	38	27	0.10	PROVIDE 316L SS AND 1000°F DESIGN
DS-12	HTEF-7 INLET	RECTANGULAR	23000	-1650	42x48x60	14	5	8	15	29	34	28	21	13	54	54	54	54	52	52	45	37	0.10	PROVIDE 316L SS AND 1000°F DESIGN
DS-13A AND 13B	SF-1A AND 1B INLET	RECTANGULAR	30000	-420	108x96x60	72	4	7	13	27	34	30	23	17	59	55	53	53	52	49	46	33	0.10	–
DS-14A AND 14B	SF-1A AND 1B OUTLET	RECTANGULAR	30000	+1200	60x60x60	25	6	9	14	27	35	23	18	13	40	40	40	39	38	38	29	25	0.10	–
DS-15	RF-1A AND 1B INLET (IN PLENUM BELOW RISER)	RECTANGULAR	60000	-840	108x96x60	72	5	8	13	26	34	25	22	18	46	42	39	39	38	34	30	23	0.10	–
DS-16A AND 16B	RF-1A AND 1B OUTLET	RECTANGULAR	30000	+1200	60x60x60	25	5	8	15	29	34	28	21	13	48	47	49	47	44	45	43	37	0.10	–
DS-234	EF-234A&B CONF CHAMBER EXHAUST	RECTANGULAR	6000	-300	48x60x60	20	4	7	13	27	34	30	23	17	54	52	48	48	48	48	39	29	0.10	–
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AIR DIFFUSER, GRILLE, REGISTER SCHEDULE

TYPE	DESCRIPTION	FINISH	REMARKS
AG	ALUMINUM GRILLE	CLEAR ANODIZED	–
AR	ALUMINUM REGISTER	CLEAR ANODIZED	WITH OPPOSED BLADE DAMPER
EG	EXHAUST GRILLE (STEEL)	WHITE BAKED ENAMEL	WITH VOLUME DAMPER AT DUCT TAKE-OFF
ER	EXHAUST REGISTER (STEEL)	WHITE BAKED ENAMEL	–
LD	LOUVERED DIFFUSER (STEEL)	WHITE BAKED ENAMEL	WITH OPPOSED BLADE DAMPER
PD	PERFORATED DIFFUSER (STEEL)	WHITE BAKED ENAMEL	WITH BUTTERFLY DMPR, RADIAL BLADE FOR SHORT NECK
RD	ROUND DIFFUSER (STEEL)	WHITE BAKED ENAMEL	WITH RADIAL BLADE DAMPER
RG	RETURN GRILLE (STEEL)	WHITE BAKED ENAMEL	–
RR	RETURN REGISTER (STEEL)	WHITE BAKED ENAMEL	WITH OPPOSED BLADE DAMPER
SR	SUPPLY REGISTER (STEEL)	WHITE BAKED ENAMEL	WITH OPPOSED BLADE DAMPER
TD	T-BAR DIFFUSER (2) 1" SLOTS	VISIBLE SURFACES BLACK	WITH VOLUME DAMPER AT DUCT TAKE-OFF
TG	TRANSFER GRILLE (STEEL)	WHITE BAKED ENAMEL	PROVIDE FIRE DAMPER AT RATED WALLS

NECK SIZE	6	8	10	12	14	16	18	20	24
PD CFM	0-150	151-250	251-350	351-450	451-550	551-700	–	–	–
RD & TD CFM	0-180	181-300	301-400	401-600	601-800	801-1000	1001-1300	1301-1600	1601-2400

HOT WATER FIN TUBE BASEBOARD SCHEDULE

UNIT NO.	LOCATION	ELEMENT SIZE NO. ROWS HEATING ELEMENTS	TUBE IN.	FIN IN. x IN.	FINS/FT	WATER SIDE BTUH/ LIN. FT.	GPM	EWT DEG F	ENCLOSURE TYPE	WIDTH x HEIGHT	REMARKS MFR: RITTLING
ROOM NO. BXXX LENGTH-TYPE IN-1	DC SCHOOL	1	3/4 COPPER	4.2x3.6 ALUM	40 OR 50	700	1	200	WALL-HUNG SLOPED TOP	5x11 FSOL (A)	6" AFF
ROOM NO. BXXX LENGTH-TYPE IN-2	DC SCHOOL	2 WIDE	3/4 COPPER	4.2x3.6 ALUM	40 OR 50	1500	1	200	FLAT TOP FLOOR CABINET	10x10.5 CUSTOM	FIRST FLOOR EAST SEE DET ON M3-9
ROOM NO. BXXX LENGTH-TYPE IN-3	DC SCHOOL	2 HIGH	3/4 COPPER	4.2x3.6 ALUM	40	1000	1	200	FLAT TOP FLOOR CABINET	6x15.5 CUSTOM	SECOND FLOOR EAST SEE DET ON M3-9
ROOM NO. BXXX LENGTH-TYPE IN-4	DC SCHOOL	1	3/4 COPPER	4.2x3.6 ALUM	40 OR 50	700	1	200	WALL-HUNG SLOPED TOP	5x5 CUSTOM (A)	6'-7" AFF (ABOVE LOCKERS) SEE DET ON M3-9

DIAPHRAGM TYPE COMPRESSION TANK SCHEDULE

UNIT NO.	SERVICE	LOCATION	TYPE (A)	CAPACITY GALLONS	SIZE DIAMETER INCHES	SIZE LENGTH INCHES	DESIGN WORKING PRESSURE PSIG	REMARKS
T-1	HEATING	BASEMENT	VERTICAL DIAPHRAGM	240	30	84	ASME 125	PAINTED FINISH
T-2	HEATING	BASEMENT	VERTICAL DIAPHRAGM	120	24	65	ASME 125	PAINTED FINISH
T-3	COOLING	BASEMENT	VERTICAL DIAPHRAGM	80	20	62	ASME 125	PAINTED FINISH
T-4	HP-1	BASEMENT	VERTICAL DIAPHRAGM	30	14	48	ASME 125	PAINTED FINISH, MOUNTED INDOORS NEAR HP-1
T-5	HP-2	BASEMENT	VERTICAL DIAPHRAGM	15	12	33	ASME 125	PAINTED FINISH, MOUNTED INDOORS NEAR HP-2

PRESSURE REDUCING AND RELIEF VALVE SCHEDULE

TAG NO.	STAGE TYPE	INLET PSIG	OUTLET PSIG	CAPACITY LBS/HR	VALVE SIZE (IN)	REMARKS
PRV-1	STEAM SUPPLY	60	15	9000	4	–
PRV-2	STEAM SUPPLY	60	15	21000 (A)	6	–
PRV-3	STEAM RELIEF	25	0	30000	6x8xR	(R = 16 SQ IN)

AIR SEPARATOR SCHEDULE

UNIT NO.	SERVICE	LOCATION	GPM	PIPE SIZE IN
AS-1	DC SCHOOL HEATING	BASEMENT	975	8
AS-2	DC SCHOOL HEATING	BASEMENT	230	4
AS-3	DC SCHOOL COOLING	BASEMENT	540	6

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DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
SOUTHERN DIVISION
CHARLESTON, S.C.
NAVAL TRAINING CENTER GREAT LAKES, ILLINOIS

DAMAGE CONTROL SCHOOL
SILENCER, GR, REG, DIFF, BASEBOARD
HVAC EQUIPMENT SCHEDULES

SIZE	CODE IDENT NO.	NAVFAC DRAWING NO.	DRAWING NO.
F	80091	5276590	M6-6

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SCALE NO SCALE SPEC 06-93-1143 SHEET 76 OF

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