

PIPING SYMBOLS



CONVECTOR OR RADIATOR (RECESSED)



E IN COMPLIANCE WITH THE MOST STRINGENT OF FEDERAL,

FD	FIRE DAMPER
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100	100

<u>INETYPE</u>	<u>DESCRIPTION</u>
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<u>INETYPE</u>	<u>DESCRIPTION</u>
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<u>LINETYPE</u>	<u>DESCRIPTION</u>
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25. CONTRACTOR SHALL BE RESPONSIBLE FOR PRESSURE TESTING OF DUCTS SERVING

MEP PROJECT NO.: N08.11.03



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HVAC DESIGN DATA												
DESIGN CONDITIONS	SUMMER				WINTER					LOWEST AVERAGE ANNUAL DEWPOINT		
	TEMP		WET BULB TEMP		% HUMIDITY	TEMP		DEWPOINT TEMP				% HUMIDITY
	°F	°C	°F	°C		°F	°C	°F	°C			
OUTDOOR DESIGN CONDITIONS	88.2	[31]	72.2	[22]	46	-10.7	[-24]	-15	[-26]	NA	30	[-1]
INDOOR AREA DESIGN CONDITIONS												
BLOOD DRAW	75	[24]	65.3	[19]	60	70	[21]	28.5	[-2]	20		
CLASS ROOM	75	[24]	65.3	[19]	60	70	[21]	28.5	[-2]	20		
CLEAN UTILITY / STORAGE ROOM	N/A		N/A		N/A	N/A		N/A		N/A		
COMPUTER LAB ROOM	75	[24]	65.3	[19]	60	70	[21]	28.5	[-2]	20		
CONFERENCE ROOM	75	[24]	65.3	[19]	60	70	[21]	28.5	[-2]	20		
CORRIDOR	75	[24]	65.3	[19]	60	70	[21]	28.5	[-2]	20		
HISTOLOGY	75	[24]	65.3	[19]	60	70	[21]	28.5	[-2]	20		
LIBRARY	75	[24]	65.3	[19]	60	70	[21]	28.5	[-2]	20		
LOUNGE	75	[24]	65.3	[19]	60	70	[21]	28.5	[-2]	20		
MICROBIOLOGY	75	[24]	65.3	[19]	60	70	[21]	28.5	[-2]	20		
OFFICE	75	[24]	65.3	[19]	60	70	[21]	28.5	[-2]	20		
TOILET PATIENT INTERIOR	N/A		N/A		N/A	N/A		N/A		N/A		
TOILET PUBLIC PERIMETER	N/A		N/A		N/A	68		N/A		N/A		
SOILED UTILITY AND STORAGE	N/A		N/A		N/A	N/A		N/A		N/A		
WALK-IN COOLER	36	[2]	N/A		N/A	36	[2]	N/A		N/A		

AIR TERMINAL UNIT SIZING SCHEDULE																
SIZE	MIN ALLOWABLE AIR FLOW		MAX ALLOWABLE AIR FLOW		DUCT INLET SIZE		MAX APD		MAXIMUM SOUND POWER LEVEL (Re: 10 ⁻¹² WATTS) FOR BOX DISCHARGE AT MAXIMUM INLET DUCT							REMARKS
									OCTAVE BANDS							
	CFM	[L/s]	CFM	[L/s]	IN	[mm]	IN WG	[Pa]	2	3	4	5	6	7		
A	60	[28]	170	[80]	4	[100]	0.4	[100]	69	65	58	52	51	47	----	
B	90	[42]	260	[120]	5	[130]	0.4	[100]	69	63	59	52	51	47	----	
C	130	[61]	380	[180]	6	[150]	0.4	[100]	69	67	61	55	52	49	----	
D	160	[76]	490	[230]	7	[180]	0.4	[100]	70	68	63	57	53	49	----	
E	230	[110]	680	[320]	8	[200]	0.4	[100]	71	68	59	53	51	47	----	
F	270	[130]	790	[370]	9	[230]	0.4	[100]	71	69	60	54	51	47	----	
G	350	[170]	1050	[500]	10	[250]	0.4	[100]	74	68	61	57	54	52	----	
H	500	[240]	1500	[710]	12	[300]	0.4	[100]	73	69	64	59	57	53	----	
I	750	[350]	2250	[1100]	14	[350]	0.4	[100]	73	68	65	61	61	59	----	
J	1000	[470]	3000	[1400]	16	[400]	0.4	[100]	73	68	66	60	58	55	----	

- NOTES
1. INLET STATIC BASED ON ARI 885-98.
 2. THIS SCHEDULE IS USED WITH THE TERMINAL UNIT SCHEDULE.
 3. CONTROL SEQUENCE SHALL BE AS INDICATED ON THE AIR TERMINAL UNIT SCHEDULE.
 4. PROVIDE SOUND ATTENUATION AFTER-SECTION AS REQUIRED TO MEET ROOM NC LEVEL.

ROOM AIR BALANCE SCHEDULE - AHU-11 (EXISTING)																													
ROOM NO	ROOM NAME	AIR HANDLING UNIT NO	TERMINAL UNIT	INDIVIDUAL ROOM TEMP CONTROL	SUPPLY				RETURN AND/OR EXHAUST								ROOM AIR FLOW	ROOM AIR BALANCE	NET INFILTRATION		NET EXFILTRATION		SUPPLY AIR						REMARKS
					ROOM AIR FLOW	# OF AIR DEVICES	AIR DEVICE MARK	SUPPLY FAN	RETURN, TRANSFER, OR EXHAUST (R/T/E)	ROOM AIR FLOW		# OF AIR DEVICES	AIR DEVICE MARK	RETURN OR EXHAUST FAN	CFM	[L/s]			CFM	[L/s]	CU FT	ACH	ACH	ACH	ACH	VA HVAC DESIGN MANUAL 2011 REFERENCE			
										CFM	L/S																CFM	[L/s]	
6101	WOMENS TOILET	1-AHU-11	N/A	Y	0	[]	0	N/A		T/E	270	[130]	2	EG-1, TG-1	ERU-2	X		(-)	270	[130]	0	[]	1600	10	-10	0	0	6-98	270 CFM TRANSFER FROM CORR
6105	CPAC	1-AHU-11	1-TU-11-15	Y	415	[200]	5	SD-1, CD-1		R	415	[200]	1	RG-1		X	0	0	[]	0	[]	2840	4	9	2	6	6-98		
6105A	OFFICE	1-AHU-11	1-TU-11-14	Y	125	[59]	3	SD-1		R	125	[59]	1	RG-1		X	0	0	[]	0	[]	864	4	9	2	2	6-98		
6106	C UNION	1-AHU-11	1-TU-11-18	Y	130	[61]	1	SD-314		R	130	[61]	1	RG-1		X	0	0	[]	0	[]	968	4	8	2	2	6-98		
6107	VOLUNTEERS	1-AHU-11	1-TU-11-13	Y	285	N/A	2	SD-1, CD-1		R	285	[130]	1	RG-1		X	0	0	[]	0	[]	1616	4	11	2	3	6-98		
6107A	OFFICE	1-AHU-11	1-TU-11-11	Y	125	[59]	4	SD-1		R	125	[59]	1	RG-1		X	0	0	[]	0	[]	864	4	9	2	2	6-98		
6109	DRIVER LOUNGE	1-AHU-11	1-TU-11-12	Y	105	N/A	1	CD-1		R	105	[50]	1	RG-1		X	0	0	[]	0	[]	680	4	9	2	2	6-96		
6110	DSS	1-AHU-11	1-TU-11-16	Y	245	N/A	3	SD-1, CD-1		R	245	[120]	1	RG-1		X	0	0	[]	0	[]	1520	4	10	2	2	6-98		
6112	ESCORTS	1-AHU-11	1-TU-11-6	Y	135	[64]	1	CD-1		R/T	60	[28]	1	RG-1		X	0	0	[]	75	[35]	1008	4	8	2	2	6-96	75 CFM TRANSFER TO 6112A	
6112A	STORAGE	1-AHU-11	N/A	Y	0	[]	0	N/A		T/E	75	[35]	1	EG-1	ERU-2	X		-	75	[35]	0	[]	728	6	-6	0	0	6-100	75 CFM TRANSFER FROM 6112
6113	NURSE EDUCATION	1-AHU-11	1-TU-11-10	Y	325	[150]	4	SD-1, CD-1		R	325	[150]	1	RG-1		X	0	0	[]	0	[]	2080	4	9	2	2	6-95		
6114	PRIVACY	1-AHU-11	1-TU-11-8	N	130	[61]	1	CD-1		R	130	[61]	1	RG-1		X	0	0	[]	0	[]	960	4	8	2	2	6-98		
6116	ISO	1-AHU-11	1-TU-11-6	Y	120	[57]	1	CD-1		R	120	[57]	1	RG-1		X	0	0	[]	0	[]	880	4	8	2	2	6-98		
6119	NURSE EDUCATION	1-AHU-11	1-TU-11-9	Y	165	[78]	2	SD-1, CD-1		R	165	[78]	1	RG-1		X	0	0	[]	0	[]	1072	4	9	2	2	6-95		
6120	HOME & COMMUNICATION BASED CARE	1-AHU-11	1-TU-11-1, 1-TA-11-4A, 1-TA-11-4B, 1-TU-11-5	Y	1630	[770]	19	SD-1, SD-2, CD-1		R	1630	[770]	2	RG-1		X	0	0	[]	0	[]	10936	4	9	2	2	6-95		
6120A	OFFICE	1-AHU-11	1-TU-11-2	Y	220	[100]	3	SD-1		R	220	[100]	1	RG-1		X	0	0	[]	0	[]	1080	4	12	2	3	6-98		
6120B	EQUIPMENT STORAGE	1-AHU-11	1-TU-11-8	N	100	[47]	1	CD-1		R	100	[47]	1	RG-1		X	0	0	[]	0	[]	672	6	9	0	2	6-100		
6122	PHONE/DATA	1-AHU-11	1-TU-11-7	Y	80	[38]	1	CD-2		R	80	[38]	1	RG-2		X	0	0	[]	0	[]	280	0	17	0	4	6-101		
6124	CLEAN SUPPLY	1-AHU-11	1-TU-11-8	N	90	[42]	1	CD-1		T	0	[]	1	TG-2		X		+	0	[]	90	[42]	984	4	5	0	1	6-100	40 CFM TRANSFER TO CORR.
6125	HOUSEKEEPING	1-AHU-11	N/A	N	0	[]	0	N/A		T/E	60	[28]	1	EG-2	ERU-2	X		-	60	[28]	0	[]	968	10	-11	0	0	6-103	60 CFM TRANSFER FROM CORR.
6126	HOUSEKEEPING	1-AHU-11	N/A	N	0	[]	0	N/A		T/E	60	[28]	1	EG-2	ERU-2	X		-	60	[28]	0	[]	264	10	-14	0	0	6-103	60 CFM TRANSFER FROM CORR.
6201	MENS TOILET	1-AHU-11	N/A	Y	0	[]	0	N/A		T/E	270	[130]	2	EG-1, TG-1	ERU-2	X		(-)	270	[130]	0	[]	1528	10	-11	0	0	6-98	270 CFM TRANSFER FROM CORR.
6205	CONFERENCE	1-AHU-11	1-TU-11-22	Y	355	[170]	5	SD-1, CD-1		R	355	[170]	1	RG-1		X	0	0	[]	0	[]	2568	4	8	2	2	6-95		
6206	LIBRARY	1-AHU-11	1-TU-11-19	Y	200	[94]	1	CD-1		R	200	[94]	1	RG-1		X	0	0	[]	0	[]	1488	4	8	2	2	6-96		
6206A	CCTV	1-AHU-11	1-TU-11-3	Y	220	[100]	2	SD-1		R	220	[100]	1	RG-1		X	0	0	[]	0	[]	544	4	24	2	6	6-98		
6206B	LIBRARY OFFICE & TMS	1-AHU-11	1-TU-11-21	Y	265	[130]	2	SD-1		R	265	[130]	1	RG-1		X	0	0	[]	0	[]	1320	4	12	2	3	6-98		
6206C	COMPUTER TRAINING	1-AHU-11	1-TU-11-17	Y	750	[350]	3	CD-1		R	750	[350]	1	RG-1		X	0	0	[]	0	[]	3056	4	15	2	4	6-100		
6206D	PATIENT EDUCATION & RESOURCE CENTER	1-AHU-11	1-TU-11-20	Y	295	[140]	4	SD-1		R	295	[140]	1	RG-1		X	0	0	[]	0	[]	1256	4	14	2	4	6-95		
CORR.	CORRIDOR	1-AHU-11	1-TU-11-8	Y	1280	[600]	2	CD-1		T/R	710	[340]	3	RG-1, TG-1		X		-	90	[42]	750	[350]	9520	4	8	2	2	6-95	90 CFM TRANSFER FROM 6124, 660 TOTAL CFM TRANSFER TO 6101(270), 6125(60), 6126(60), 6201(270)

NOTE

ROOMS OR AREAS DO NOT HAVE INDIVIDUAL HUMIDITY CONTROL UNLESS NOTED.

SUPPLY CFM BASED ON MINIMUM 25% OUTSIDE AIR.

ROOM AIR BALANCE SCHEDULE - AHU-29 (NEW)		
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ROTARY AIR TO AIR HEAT RECOVERY WHEEL SCHEDULE																																
MARK	LOCATION	SYSTEM AND/OR SERVICE	MODE	SUPPLY AIR												EXHAUST AIR												ROTOR MOTOR				REMARKS
				SUPPLY AIR FLOW		APD		EAT				LAT				AIR FLOW		APD		EAT				LAT								
								Db		Wb		Db		Wb						Db		Wb		Db		Wb						
				CFM	[L/s]	IN	[Pa]	*F	[°C]	*F	[°C]	*F	[°C]	*F	[°C]	*F	[°C]	CFM	[L/s]	IN	[mm]	*F	[°C]	*F	[°C]	*F	[°C]	*F	[°C]	HP	[kW]	
RAHX-29	B1200	AHU-29	SUMMER	6500	[3100]	0.8	[75]	92	[33]	76	[24]	80	[27]	68	[20]	6500	[3100]	0.8	[20]	75	[24]	62	[17]	87	[31]	71	[22]	0	[]	3	208	UNIT TO BE BALANCED TO 5310 CFM SA AND 3890 CFM EXHAUST AIR. NOTES 1-4
			WINTER	6500	[3100]	0.8	[20]	-20	[-29]	-20	[-29]	28	[-2]	28	[-2]	6500	[3100]	0.8	[20]	70	[21]	53	[12]	22	[-6]	22	[-6]					UNIT TO BE BALANCED TO 5310 CFM SA AND 3890 CFM EXHAUST AIR. NOTES 1-4.
NOTES: 1. UNIT MOUNTED ENERGY RECOVERY WHEEL CONTROLLER WITH FROST CONTROL, ROTATION FAILURE OUTPUT FOR ECC, COMMUNICATION PROTOCOL FOR SIEMENS P1 NETWORK. 2. UNIT MOUNTED ENERGY RECOVERY WHEEL VFD WITH COMMUNICATION CARD FOR SIEMENS P1 NETWORK. 3. BASIS OF DESIGN ANNEXAIR CUSTOM AIR HANDLING UNIT. THERMO-DYNE - 763-557-4900. 4. PROVIDE CUSTOM CURB FOR AIR HANDLING UNIT. SEE DETAIL 3/M.503. BASIS OF DESIGN - THYBAR CORPORATION.																																

FAN SCHEDULE																											
MARK	LOCATION	AREA AND/OR BLDG SERVED	SYSTEM AND/OR SERVICE	AIR FLOW		TSP		FAN										MOTOR ELECTRICAL								CONTROL SEQUENCE	REMARKS
								TYPE	WHEEL	CLASS	ARRANGEMENT, ROTATION AND DISCHARGE	DIAMETER		MIN % EFF	DRIVE	FAN MAX RPM	NOMINAL POWER			PHASE	VOLT	RPM	SPEED CONTROL				
				CFM	[L/s]	IN	[Pa]					IN	[mm]				BHP	HP	[kW]								
EF-13	ROOF	6TH EAST LAB	AHU-29	161	[76]	1.25	[310]	UTILITY	CENTR.	II	BOTTOM ANGLE UP/CW ARRANGMENT 10 SWSI		[]	85%	DIRECT	4,500	NA	0.50	[]	3	208	1725	CONSTANT	CONTINUOUS	1,2,3		
EF-14	ROOF	6TH EAST LAB	AHU-29	810	[380]	1	[250]	UTILITY	CENTR.	II	BOTTOM ANGLE UP/CW ARRANGMENT 10 SWSI		[]	85%	DIRECT	4,270	NA	0.50	[]	3	208	1725	CONSTANT	CONTINUOUS	1,2,3		
EF-17	ROOF	6TH EAST LAB	AHU-29	450	[210]	0.75	[190]	UTILITY	CENTR.	II	BOTTOM ANGLE UP/CW ARRANGMENT 10 SWSI		[]	85%	DIRECT	4,500	NA	0.50	[]	3	208	1725	CONSTANT	CONTINUOUS	1,2,3		
SF-29	AHU-29	6TH EAST LAB	AHU-292	6500	[3100]	5.4	[1400]	PLUG	AIRFOIL	II	VERTICAL DISCHARGE		[]	85%	DIRECT		NA	0.50	[]	3	208		VARIABLE	CONTINUOUS	---		
EF-29	AHU-29	6TH EAST LAB	AHU-29	5080	[2400]	2.7	[680]	PLUG	AIRFOIL	II	VERTICAL DISCHARGE		[]	85%	DIRECT		NA	0.50	[]	3	208		VARIABLE	CONTINUOUS	---		
NOTE: 1. INVERTER DUTY MOTOR FOR FUTURE VFD. 2. PROVIDE SPARK RESISTANT FAN. 3. PROVIDE EXPLOSION PROOF MOTOR. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.																											


VIBRATION ISOLATION SCHEDULE						
MARK	LOCATION	EQUIPMENT AND/OR SERVICE	TYPE BASE	TYPE ISOLATOR	MIN STATIC DEFLECTION IN	REMARKS
5-VI1	ROOF	EF13	B	S	1.1	[28]
5-VI1	ROOF	EF14	B	S	1.1	[28]
5-VI1	ROOF	EF17	B	S	1.1	[28]

MAKE-UP AIR HEATING AND VENTILATING UNIT SCHEDULE																	
MARK	LOCATION	AREA AND/OR BLDG SERVED	TYPE	MAX CAPACITY		MIN AIR FLOW		SUPPLY FAN MARK	EXHAUST FAN MARK	PREFILTER MARK	AFTER FILTER MARK	PREHEAT COIL MARK	TEMPERATURES				REMARKS
				MBH	[kW]	CFM	[L/s]						EAT		LAT		
													°F	[°C]	°F	[°C]	
AHU-29	7TH PENTHOUSE	6TH LAB	MAKEUP		[]	6500	[3100]	1-SF5	1-EF5	1-PF5	1-AF5	1-PHC5	-20	[-29]	65	[18]	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11

- ROTARY AIR TO AIR HEAT RECOVERY WHEEL SEE SCHEDULE
- CHILLED WATER COIL - CCOW29.
- STEAM HUMIDIFIER SEE SCHEDULE
- UNIT MOUNTED AIRFLOW CONTROLLER WITH SUPPLY AND EXHAUST AIRFLOW MEASURING STATIONS, COMMUNICATION PROTOCOL FOR SIEMENS P1 NETWORK. SUPPLY AND EXHAUST FANS CONTROLLED TO MAINTAIN DUCT STATIC PRESSURE (ADJUSTABLE).
- UNIT MOUNTED SUPPLY AND EXHAUST FAN VFDs (ABB OR PRE-APPROVED EQUAL) WITH COMMUNICATION CARD FOR SIEMENS P1 NETWORK.
- UNIT MOUNTED DISCONNECTS.
- UNIT MOUNTED ENERGY RECOVERY WHEEL CONTROLLER WITH FROST CONTROL, ROTATION FAILURE OUTPUT FOR ECC, COMMUNICATION PROTOCOL FOR SIEMENS P1 NETWORK.
- UNIT MOUNTED ENERGY RECOVERY WHEEL VFD WITH COMMUNICATION CARD FOR SIEMENS P1 NETWORK.
- SIEMENS UNIT CONTROLLER PROVIDED BY CONTROLS CONTRACTOR.
- BASIS OF DESIGN ANNEXAIR CUSTOM AIR HANDLING UNIT. THERMO-DYNE - 763-557-4900.
- PROVIDE CUSTOM PLENUM CURB FOR AIR HANDLING UNIT. SEE DETAIL 3/M.503. BASIS OF DESIGN - THYBAR CORPORATION.

EXISTING AIR HANDLING UNIT SCHEDULE																						
MARK	LOCATION	AREA AND/OR BLDG SERVED	TYPE	AIR FLOW	AIR FLOW						SUPPLY FAN MARK	RETURN OR RELIEF FAN MARK	EXHAUST FAN MARK	PREFILTER MARK	AFTER FILTER MARK	FINAL FILTER MARK	HEAT RECOVERY MARK	PREHEAT COIL MARK	COOLING COIL MARK	REHEAT COIL	HUMIDIFIER MARK	REMARKS
					SUPPLY		MIN OA		RETURN													
					CFM	[L/s]	CFM	[L/s]	CFM	[L/s]												
AHU-11	6122A 6TH PENTHOUSE	6TH WEST	CUSTOM	VAV	60000	[28000]	12500	[5900]	47500	[22000]	1-SF11A, 1-SF11B	1-RF11A, 1-RF11B	1-	N/A	1-PF5	1-AF11A, B	1-PF5	N/A	1-PHC11A, B, C, D	1-CC11A, B, C, D	1-H11	1, 2, 3, 4

- SCHEDULED AIRFLOWS ARE MAXIMUM DESIGN, ORIGINAL SELECTION PROVIDED ADDITIONAL CAPACITY FOR ADDING MORE SERVED SPACE SUCH AS 6TH FLOOR WEST OFFICES.
- EXISTING UNIT, REBALANCE (SUPPLY, RETURN, AND OUTSIDE AIRFLOW) AND ADJUST AIR HANDLING UNIT TO ADDRESS ADDITIONAL 6TH FLOOR WEST SERVED SPACES, AS MAY BE NECESSARY, CHANGE SHEAVES.
- CONTROLS CONTRACTOR TO WORK WITH TEST AND BALANCE AND MECHANICAL CONTRACTORS TO ADJUST CONTROL SETPOINTS TO ADDRESS ADDITIONAL SERVED SPACES.
- SEE AIR BALANCE SCHEDULE FOR ADDITIONAL SUPPLY AIRFLOWS AND OUTDOOR AIR REQUIREMENTS.



AIR FLOW MEASURING DEVICE SCHEDULE														
MARK	LOCATION	SYSTEM AND/OR SERVICE	AIR FLOW				DUCT SIZE				APD		REMARKS	NOTES
			MIN		MAX		WIDTH		HEIGHT					
			CFM	[L/s]	CFM	[L/s]	IN	[mm]	IN	[mm]	IN	[mm]		
1	MECH ROOM	AHU-29	3890	[1800]	4300	[2000]	32	[800]	75	[1900]	0.05	[11]	EXHAUST AIR	1,3
2	MECH ROOM	AHU-29	5310	[2500]	5190	[2400]	48	[1200]	75	[1900]	0.05	[11]	SUPPLY AIR	1,3
3	6218	EF-17	450	[210]	450	[210]		[]		[]	0.05	[11]	12" ROUND	2,3
4	6212	EF-13	160	[76]	160	[76]		[]		[]	0.05	[11]	8" ROUND	2,3
5	6212	RETURN AIR	435	[210]	435	[210]	14	[350]	8	[200]	0.05	[11]	ROOM PRESSURIZATION	2,3
6	6210	RETURN AIR	75	[35]	75	[35]	6	[150]	6	[150]	0.05	[11]	ROOM PRESSURIZATION	2,3
NOTES: 1. FAN DIFFERENTIAL PRESSURE. 2. AIRFLOW THERMAL DISPERSION TYPE. 3. INSTALL PER MANUFACTURES RECOMMENDATION FOR DUCT LENGHS UPSTEAM AND DOWNSTREAM.														

AIR FILTER SCHEDULE																	
MARK	LOCATION	AREA AND/OR BLDG SERVED	SYSTEM AND/OR SERVICE	MERV RATING	AIR FLOW		APD				HOUSING TYPE	#	CARTRIDGES			REMARKS	
							INITIAL		CHANGEOVER				SIZE	ARRANGEMENT			
					CFM	[L/s]	IN	[mm]	IN	[mm]					IN		[mm]
1-PF1	MER PENTHOUSE	3 NORTH (BONE MARROW TRANSPLANT)	1-AHU1	8	30000	[14000]	0.25	[6]	0.5	[13]	SIDE	18	24 x 24 x 2	[600 x 600 x 50]	6 WIDE BY 3 HIGH	----	
1-FF1	MER PENTHOUSE	3 NORTH (BONE MARROW TRANSPLANT)	1-AHU1	14	30000	[14000]	0.65	[16]	1.3	[33]	SIDE	18	24 x 24 x 12	[600 x 600 x 300]	6 WIDE BY 3 HIGH	----	
1-FF1	MER PENTHOUSE	3 NORTH (BONE MARROW TRANSPLANT)	1-AHU1	17	30000	[14000]	1	[25]	2	[50]	SIDE	18	24 x 24 x 12	[600 x 600 x 300]	6 WIDE BY 3 HIGH	----	
1-PF2	MER PENTHOUSE	4 NORTH (INTENSIVE CARE UNIT)	1-AHU2	8	16000	[7600]	0.25	[6]	0.5	[13]	SIDE	10	24 x 24 x 2	[600 x 600 x 50]	5 WIDE BY 2 HIGH	----	

FUME HOOD EXHAUST SCHEDULE										
MARK	LOCATION	SYSTEM AND/OR SERVICE	HOOD TYPE	HOOD SIZE (WIDTH)		EXHAUST				REMARKS
						AIR FLOW		APD HOOD ONLY		
				IN	[mm]	CFM	[L/s]	IN WG	[Pa]	
1-HD1	6218	EF-14	H7	48	[1200]	810	[380]	0.4	[100]	BENCHTOP FUME HOOD
1-HD2	6218	EF-17	BACKDRAFT	SEE DETAIL	#VALUE!	455	[210]	0.4	[100]	GROSSING TABLE
NOTE										
1. THE HOOD DATA (EXHAUST AIR VOLUME AND PRESSURE DROP) IS BASED ON A REPRESENTATIVE MAKE AND MODEL NUMBER. IN THE EVENT THE HOOD SELECTED AND FURNISHED BY THE CONTRACTOR HAS DIFFERENT HOOD DATA, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING NECESSARY MODIFICATIONS TO THE DESIGN AND CONSTRUCTION WITHOUT ANY ADDITIONAL COST TO THE GOVERNMENT.										
2. HOOD PROVIDED BY GENERAL CONTRACTOR, DUCT CONNECTIONS BY MECHANICAL CONTRACTOR, MECHANICAL TO COORDINATE FOR DUCT SIZE AND HEIGHT ABOVE FLOOR, SEE DETAILS										
3. PROVIDE FUME HOOD AIRFLOW MONITOR.										

BIOLOGICAL SAFETY CABINET EXHAUST SCHEDULE										
MARK	LOCATION	SYSTEM AND/OR SERVICE	HOOD TYPE	HOOD SIZE (WIDTH)		EXHAUST				REMARKS
						AIR FLOW		APD HOOD ONLY		
				IN	[mm]	CFM	[L/s]	IN WG	[Pa]	
I-HD3	6212	I-EF-13	CLASS II TYPE A2	36	[900]	161	[76]	1	[250]	-----