

GENERAL NOTES

- AHLL-01 HAS BEEN PRE-PURCHASED BY THE OWNER. SCHEDULE IS PROVIDED FOR INFORMATION ONLY.

AIR HANDLING UNIT SCHEDULE

DESIGNATION	SERVICE	SUPPLY FAN	EXHAUST FAN	COOLING COIL	HEATING COIL	ENERGY RECOVERY WHEEL	FILTERS	ELECTRICAL (V/PH/Hz)	WEIGHT (LB)	BASIS OF DESIGN	REMARKS
AHU-L-01	5TH FLOOR	SF-1-1	EF-1-1	CC-1-1	PHC-1-1	--	FIL-1-1, FIL-1-2, FIL-1-3	460/3/60	12529	JCI	

AIR HANDLING UNIT FAN SCHEDULE

DESIGNATION	SERVICE	TYPE	TOTAL CFM	NO. OF FANS	TSP (IN H2O)	ESP (IN H2O)	FAN RPM	MOTOR BHP (PER FAN)	MOTOR HP (PER FAN)	DRIVE	VARIABLE FREQUENCY DRIVE			ELECTRICAL			BASIS OF DESIGN
											REQUIRED	ENCLOSURE	BYPASS	VOLTS	PHASE	HERTZ	
EF-1-1	AHU-L-01	EXHAUST	3420	2	3.46	2.00	2626	1.56	2.0	DIRECT	YES	NEMA-4X	NO	460	3	60	JCI
SF-1-1	AHU-L-01	SUPPLY	5840	2	6.34	3.00	2612	4.39	7.5	DIRECT	YES	NEMA-4X	NO	460	3	60	JCI

COOLING COIL SCHEDULE

DESIGNATION	SERVICE	AIRFLOW		EAT (°F)		LAT (°F)		MBH		GPM @ 12°F ΔT	MAXIMUM H2O PD (FT WG)	MAXIMUM FACE VELOCITY (FPM)	NO. OF COILS	MAX FIN SPACING (FIN/IN)	MAXIMUM AIR PD (IN H2O)	MAX NUMBER OF ROWS	FLUID	BASIS OF DESIGN	REMARKS
		CFM	OA CFM	DB	WB	DB	WB	SENSIBLE	TOTAL										
CC-1-1	AHU-L-01	5840	5840	81.2	76.4	50.0	49.0	199.4	530.2	88.4	4.1	306	2	10	0.41	6	WATER	JCI	

FILTER SCHEDULE

DESIGNATION	SERVICE	APPROXIMATE BANK DIMENSIONS (IN) (WxHxD)	NUMBER OF CARTRIDGES	CARTRIDGE SIZE (IN) (WxHxD)	CFM	MAX FACE VELOCITY (FPM)	MEDIA AREA PER CARTRIDGE (SQ FT)	MAXIMUM INITIAL PD @ 500 FPM (IN H2O)	MERV RATING	REMARKS
FIL-1-1	AHU-L-01	36"X60"	3	24"X24"	5840	415		0.20	8	
FIL-1-2	AHU-L-01	36"X60"	3	24"X24"	5840	415		0.40	13	
FIL-1-3	AHU-L-01	24"X48"	1	24"X24"	3870	484		0.26	8	

EXISTING VAV SCHEDULE

DESIGNATION	AIRFLOW (CFM)				UNOCCUPIED	INLET SIZE	OUTLET SIZE	MINIMUM INLET SP (IN WG)	MAXIMUM NC @ 1.0 INCH WG INLET SP	HEATING COIL PERFORMANCE		COIL KW	ELECTRICAL V/PH/Hz	BASIS OF DESIGN	REMARKS
	COOLING		HEATING							EAT (°F)	LAT (°F)				
	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM											
TU-5-12	1280	770	1280	770	-	16"ø	24"x18"	0.25	30	55	85	8.5	480/3/60	EXISTING	

ELECTRIC HEATING COIL SCHEDULE

DESIGNATION	SERVICE	AIRFLOW (CFM)	EAT (°F)	LAT (°F)	MBH	BASIS OF DESIGN
PHC-1-1	AHU-L-01	5840	22.0	42.0	126.4	JCI

LABORATORY SUPPLY VALVE SCHEDULE

DESIGNATION	AIRFLOW (CFM)				UNOCCUPIED	INLET SIZE	OUTLET SIZE	MINIMUM INLET SP (IN WG)	MAXIMUM NC @ 1.0 INCH WG INLET SP	HEATING COIL PERFORMANCE		COIL KW	ELECTRICAL V/PH/Hz	BASIS OF DESIGN	REMARKS
	COOLING		HEATING							EAT (°F)	LAT (°F)				
	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM											
SAV-L-01	975	345	835	345	345	12"ø	16"x14"	0.30	25	42	80	10.0	480/3/60	PHOENIX/TRACCEL	
SAV-L-02	975	345	835	345	345	12"ø	16"x14"	0.30	25	42	80	10.0	480/3/60	PHOENIX/TRACCEL	
SAV-L-03	975	345	835	345	345	12"ø	16"x14"	0.30	25	42	80	10.0	480/3/60	PHOENIX/TRACCEL	
SAV-L-04	975	345	835	345	345	12"ø	16"x14"	0.30	25	42	80	10.0	480/3/60	PHOENIX/TRACCEL	
SAV-L-05	830	790	790	790	790	12"ø	16"x14"	0.30	25	42	80	9.5	480/3/60	PHOENIX/TRACCEL	
SAV-L-06	760	230	380	230	230	10"ø	14"x12"	0.30	25	42	80	4.6	480/3/60	PHOENIX/TRACCEL	
SAV-L-07	350	145	305	145	145	8"ø	12"x10"	0.30	25	42	80	3.7	480/3/60	PHOENIX/TRACCEL	

LABORATORY EXHAUST VALVE SCHEDULE

DESIGNATION	AIRFLOW (CFM)			INLET SIZE	OUTLET SIZE	MINIMUM INLET SP (INCH WG)	MAXIMUM NC @ 1.0 INCH WG INLET SP	BASIS OF DESIGN	REMARKS
	MAX	OCCUPIED MIN.	UNOCCUPIED MIN.						
CAV-L-01	790	790	790	10"ø	10"ø	0.30	30	PHOENIX/TRACCEL	
CAV-L-02	790	790	790	10"ø	10"ø	0.30	30	PHOENIX/TRACCEL	
CAV-L-03	790	790	790	10"ø	10"ø	0.30	30	PHOENIX/TRACCEL	
CAV-L-04	450	350	350	8"ø	8"ø	0.30	30	PHOENIX/TRACCEL	
EAV-L-01	1260	880	0	12"ø	12"ø	0.30	30	PHOENIX/TRACCEL	
EAV-L-02	1260	880	0	12"ø	12"ø	0.30	30	PHOENIX/TRACCEL	
EAV-L-03	40	0	0	8"ø	8"ø	0.30	30	PHOENIX/TRACCEL	
EAV-L-04	860	450	450	10"ø	10"ø	0.30	30	PHOENIX/TRACCEL	

AIR DEVICE SCHEDULE

NUMBER	DUTY	TYPE	CFM		FACE/MODULE SIZE (IN)	NOMINAL DUCT SIZE (IN)	BLOW	MAX TOTAL AIR PD (IN H2O)	MAX NOISE CRITERIA VALUE	BASIS OF DESIGN		
			MIN	MAX						MANUFACTURER	MODEL	REMARKS
101	SUPPLY	A	151	250	24"X24"	8"ø	4-WAY	0.10	25	TITUS	TDCA	
103	SUPPLY	A	351	450	24"X24"	12"ø	4-WAY	0.10	25	TITUS	TDCA	
201	EXHAUST	B	0	200	24"X24"	6"x6"	-	0.05	20	TITUS	PAR	
202	EXHAUST	B	201	300	24"X24"	8"x8"	-	0.05	20	TITUS	PAR	
203	EXHAUST	B	401	500	24"X24"	12"x12"	-	0.05	20	TITUS	PAR	

FAN SCHEDULE

DESIG	SERVICE	TOTAL CFM	NO. OF FANS	TSP (IN WG)	ESP (IN WG)	FAN RPM	MOTOR BHP	MOTOR HP	DRIVE	VARIABLE FREQUENCY DRIVE			ELECTRICAL (V/PH/Hz)	BASIS OF DESIGN	REMARKS
										REQUIRED	ENCLOSURE	BYPASS			
LEF-01	HOOD EXHAUST	2820	1	2.15	2.00	1656	1.9	2.0	BELT	YES	NEMA 4X	NO	460/3/60	GREENHECK VK-CH	1

- LABORATORY HOOD EXHAUST FAN SHALL HAVE AN INTEGRAL INTAKE PLENUM.

DUCT CONSTRUCTION AND LEAK TEST SCHEDULE

DUCT SYSTEM	MAXIMUM OPERATING PRESSURE (IN WG)	DUCT CONSTRUCTION				DUCT PRESSURE TEST				REMARKS
		PRESSURE CLASS (IN WG)	POSITIVE OR NEGATIVE	SMACNA DUCT SEAL CLASS	TEST REQUIRED (YES/NO)	TEST PRESSURE (IN WG)	DUCT LEAK CLASS			
							RECTANGULAR	ROUND		
SUPPLY AIR	4"	4"	POSITIVE	A	YES	4"	4	2	1, 2	
SUPPLY AIR	2"	2"	POSITIVE	A	NO	2"	4	2	3	
RETURN AIR	-2"	2"	NEGATIVE	A	NO	2"	12	6		
EXHAUST AIR	-2"	2"	NEGATIVE	A	NO	2"	4	2		
LABORATORY EXHAUST AIR	-4"	4"	NEGATIVE	A	YES	4"	4	2	1, 4	

- TEST PER SMACNA HVAC AIT DUCT LEAKAGE TEST MANUAL.
- UPSTREAM OF SUPPLY TERMINAL UNIT (FROM AIR HANDLING UNIT TO TERMINAL UNIT).
- DOWNSTREAM OF SUPPLY TERMINAL UNIT (FROM TERMINAL UNIT TO AIR DEVICE).
- DUCTWORK CONNECTED TO LABORATORY EXHAUST SYSTEM.

BUILDING DESIGN COMMISSIONING DATA

1. OUTSIDE DESIGN CONDITIONS:	SUMMER: DEHUMIDIFICATION: WINTER:	94.9°F DB / 74.8°F WB 81.2°F DB / 76.4°F WB 22.0°F
2. GENERAL BUILDING CRITERIA	WALL U-FACTOR: ROOF U-FACTOR: GLASS U-FACTOR: GLASS SHADING COEFFICIENT:	EXISTING EXISTING EXISTING EXISTING
3. GENERAL BUILDING DESIGN LOAD REQUIREMENTS:	LIGHTING: EQUIPMENT: PEOPLE (SENSIBLE): PEOPLE (LATENT):	1.4 W/SF 5.0 - 20.0 W/SF 250 BTUH/PERSON 200 BTUH/PERSON
4. COMFORT HEATING:	INTERIOR SPACES (OCCUPIED): INTERIOR SPACES (UNOCCUPIED):	70°F ± 2°F 63°F
5. COMFORT COOLING:	INTERIOR SPACES (OCCUPIED): INTERIOR SPACES (UNOCCUPIED):	75°F ± 2°F / 50% RH ± 10% 80°F / 50% RH
6. MINIMUM BUILDING POSITIVE PRESSURE:		0.05" WG
7. LABORATORY FUME HOOD CRITERIA:	6'-0" WIDE, CONST. VOLUME, 18" SASH HEIGHT, 100 FPM	790 CFM @ 0.12" SP
8. AIR CHANGE CRITERIA:	LABORATORY	9 ACH OCCUPIED/4 ACH UNOCCUPIED
10. OCCUPANCY SCHEDULE:	OCCUPIED: UNOCCUPIED:	VARIABLE, PROVIDED BY OWNER VARIABLE, PROVIDED BY OWNER
11. DOOR TRANSFER CRITERIA: (MINIMUM Δ0.01 PSI)	3'-0" DOOR	100 CFM (BASED ON 1/8" CRACK)
12. SPACE PRESSURIZATION CRITERIA:	LABORATORY/LAB PREP	NEGATIVE
13. CODES	REFER TO ARCHITECTURAL CODE SHEET	