



OUTDOOR AIR VENTILATION SCHEDULE: RTU-1

ROOM NAME	ROOM NUMBER	GROSS FL AREA (SQ. FT.)	NET AREA (MULT.)	NET FL AREA (SQ. FT.)	BREATHING ZONE (FEET)	OCCUPANCY CATEGORY	MAX. NO. OF OCCUPANTS (PER 1000 SF)	OUTSIDE AIR PER OCC. CFM	OUTSIDE AIR PER FL AREA CFM/SQ. FT.	DESIGN NUMBER OF PEOPLE	SHORT TERM OCCUPANT DIVERSITY	ACTUAL NUMBER OF PEOPLE	AIR SYSTEM EFFECTIVENESS	INITIAL ZONE OUTSIDE AIR CFM	SYSTEM OCCUPANT DIVERSITY	UNCORRECTED OUTSIDE AIR CFM	DESIGN SUPPLY AIR CFM	MIN DESIGN SUPPLY AIR CFM	OUTSIDE AIR PRIMARY AIR RATIO (Z p)	ACTUAL OA CFM	ACTUAL OUTDOOR AIR %	EXHAUST REQUIREMENTS				ACTUAL EXHAUST		
																						NO. OF FIXTURES	CFM PER FIXTURE	CFM PER SQ. FT.	REQUIRED CFM	CONTINUOUS CFM	INTERMITTENT CFM	
CORRIDOR	A201	940	1	940	6.0	CORRIDORS	0	0	0.06	0	100%	0	80%	71	100%	56	1055	300	0.24	804	60.0%							
CORRIDOR	A201.1	80	1	80	6.0	OFFICE SPACE	5	5	0.08	1	100%	1	80%	12	100%	10	75	30	0.25	57	60.0%							
OPEN OFFICE	A202	859	1	859	6.0	OFFICE SPACE	5	5	0.08	5	100%	5	80%	62	100%	74	800	400	0.23	610	60.0%							
RECEPTION	A204	118	1	118	6.0	RECEPTION AREA FOR OFFICES	30	5	0.08	4	100%	4	100%	27	100%	27	150	100	0.34	114	60.0%							
OFFICE	A205	118	1	118	6.0	OFFICE SPACE	5	5	0.06	1	100%	1	80%	15	100%	12	150	75	0.20	114	60.0%							
OFFICE	A206	134	1	134	6.0	OFFICE SPACE	5	5	0.06	1	100%	1	80%	16	100%	13	150	75	0.22	114	60.0%							
OFFICE	A207	132	1	132	6.0	OFFICE SPACE	5	5	0.06	1	100%	1	80%	16	100%	13	150	75	0.22	114	60.0%							
LOCKERS	A208	127	1	127	6.0	LOCKER ROOMS	0	0	0	0	100%	0	80%	0	100%	0	150	100	0.00	114	60.0%	1	100	0.25	132	150		
UNISEX	A209	57	1	57	6.0	TOILET ROOM	0	0	0	0	100%	0	80%	0	100%	0	0	0	0.00	0	60.0%	1	70	0	70	75		
UNISEX	A210	57	1	57	6.0	TOILET ROOM	0	0	0	0	100%	0	80%	0	100%	0	0	0	0.00	0	60.0%	1	70	0	70	75		
JANITOR	A211	34	1	34	6.0	JANITOR CLOSET	0	0	0	0	100%	0	80%	0	100%	0	0	0	0.00	0	60.0%	0	0	1	34	50		
CLASSROOM	A212	1555	1	1,555	6.0	CLASSROOMS (AGES 9 PLUS)	35	10	0.12	55	100%	55	80%	921	100%	737	2400	1600	0.58	1820	60.0%							
STORAGE	A213	80	1	80	6.0	OFFICE SPACE	5	5	0.06	1	100%	1	80%	12	100%	10	50	50	0.25	38	60.0%							
CORRIDOR	A301	782	1	782	6.0	CORRIDORS	0	0	0.06	0	100%	0	80%	57	100%	46	600	200	0.29	457	60.0%							
SUITE	A302	372	1	372	6.0	CONFERENCE/MEETING	50	5	0.06	19	100%	19	80%	147	100%	117	600	250	0.59	457	60.0%							
MEBA	A305	94	1	94	6.0	OFFICE SPACE	5	5	0.08	1	100%	1	80%	13	100%	11	200	75	0.18	152	60.0%							
VISITOR	A306	110	1	110	6.0	CONFERENCE/MEETING	50	5	0.06	3	100%	3	80%	27	100%	22	175	75	0.38	133	60.0%							
OPERATION	A308	195	1	195	6.0	CONFERENCE/MEETING	50	5	0.06	10	100%	10	80%	33	100%	27	300	100	0.33	229	60.0%							
OPERATION	A309	162	1	162	6.0	CONFERENCE/MEETING	50	5	0.06	9	100%	9	80%	31	100%	25	250	100	0.31	190	60.0%							
HOME	A310	179	1	179	6.0	CONFERENCE/MEETING	50	5	0.06	9	100%	9	80%	32	100%	25	250	100	0.32	190	60.0%							
HOME	A311	179	1	179	6.0	CONFERENCE/MEETING	50	5	0.06	9	100%	9	80%	38	100%	31	275	100	0.38	210	60.0%							
SUITE	A313	492	1	492	6.0	CONFERENCE/MEETING	50	5	0.06	25	100%	25	80%	62	100%	50	750	150	0.41	571	60.0%							
TOTALS		4,721		4,721						146		98		1406		1125	6300	3050	98.7%	4800								

NOTE: 1. The design number of people shown for each room is the estimated maximum for each room per ASHRAE 62.1 in accordance to IMC Section 403.2. The actual number of people is based on either the estimated actual occupancy or the short term occupancy.
2. The ventilation calculations for this schedule are based on ASHRAE Standard 62 in accordance to IMC Section 403.2.

Sum of Room Peak Occupancies = 98
Peak System Occupancy = 98
Occupant Diversity Factor (D) = 100%

Sum of Room Supply Air Quantities = 6300
Supply Fan Diversity Factor = 91%
Actual Total System Supply Air Flow = 8000

Uncorrected Outdoor Air Flow Ventilation Efficiency Required OA Flow Actual Final Outdoor Air Flow

V_{out} = 1.25 CFM
E_v = 0.96 (Per ASHRAE 62.1-2007, Table 6-3)
V_{ot} = 1997 CFM
4800 CFM

DOAS/RTU FAN SCHEDULE

DESIGNATION	AREA SERVED	UNIT LBS	FAN DATA				ELECTRICAL				COOLING INFORMATION						REHEAT INFORMATION				GAS HEAT INFORMATION				MANUFACTURER	MODEL	NOTES							
			RETURN AIR CFM	MAX OUTSIDE AIR CFM	TOTAL CFM	ESP IN. WG	HP	PHASE	VOLT	MCA (AMPS)	MOCP (AMPS)	OUTSIDE AIR		MIXED AIR		LEAVING AIR TEMP		CAPACITY		DISCHARGE		CAPACITY		MOISTURE REMOVAL LBS/HR				GAS TYPE	INPUT BTUH	OUTPUT BTUH	TEMP. RISE DEG. F	REQUIRED GAS PRESSURE IN. WC		
												DB DEG. F	WB DEG. F	DB DEG. F	WB DEG. F	DB DEG. F	WB DEG. F	DP DEG. F	TOTAL MBH	SENSIBLE MBH	IEER	DB DEG. F	WB DEG. F	DESIRED MBH									MAX MBH	DB DEG. F
ERV-1	FIRST FLOOR WEST	6.617	0.5000	5.0000	5.0000	1.5	10	3	460	58.1	60	88.6	77.7	79.0	67.6	52.0	52.0	52.1	229.3	141.5	18.1	70.0	59.2	99.1	260	80.5	NATURAL	366,489	286,856	50	10-14	VENTILATION DIRECT	VXRTU4-1500-24-Z2T-ERV	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,18
ERV-2	FIRST FLOOR EAST	6.617	0.5000	5.0000	5.0000	1.5	10	3	460	58.1	60	88.6	77.7	79.0	67.6	52.0	52.0	52.1	229.3	141.5	18.1	70.0	59.2	99.1	260	80.5	NATURAL	366,489	286,856	50	10-14	VENTILATION DIRECT	VXRTU4-1500-24-Z2T-ERV	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,18

NOTES:

- INVERTER SCROLL COMPRESSOR WITH INTEGRATED OIL SENSOR, DIGITAL OR STAGED SCROLL NOT AN APPROVED EQUAL.
- DIRECT DRIVE PLENUM BLOWER, BELT DRIVE BLOWERS ARE NOT ACCEPTABLE
- INTEGRATED MONITORING VIA CELLULAR CONNECTION BY MANUFACTURER
- REFRIGERATION PRESSURE MONITORING ON HIGH AND LOW PRESSURE SIDE OF SYSTEM INCLUDED THROUGH DIGITAL INTERFACE.
- EC MOTOR CONDENSING FANS
- ELECTRONIC EXPANSION VALVE, TXV NOT ACCEPTABLE.
- SUCTION LINE ACCUMULATOR
- FACTORY COMMISSIONING WITH 5 YEAR PARTS WARRANTY ON STAINLESS STEEL HEAT EXCHANGER.
- AVERAGING INTAKE, EVAP AND DISCHARGE AIR TEMPERATURE SENSORS (DISCHARGE TEMP SENSOR TO BE MOUNTED IN UNIT)
- 2" EXTERNAL DUAL-WALL CONSTRUCTION W/13 INSULATION MINIMUM 20GA EXTERIOR W/ 14 GA BASE.
- TOTAL ENERGY RECOVERY WHEEL WITH SPEED CONTROLS FOR FROST PROTECTION AND MODULATION TO CAPACITY, INCLUDES SUPPLY AND EXHAUST FILTER & WHEEL MONITORING.
- 81% EFFICIENT FURNACE, WITH MODULATING INDUCER TO MAINTAIN CONSTANT COMBUSTION EFFICIENCY ACROSS FIRING RANGE, 6:1 TURNDOWN WITH NAT. GAS.
- EXHAUST CFM MONITORING INTEGRAL TO UNIT WITH CFM MEASUREMENT INCLUDED THROUGH DIGITAL INTERFACE.
- FILTERED SUPPLY AND EXHAUST AIR STREAMS WITHIN ENERGY RECOVERY VENTILATOR MODULE.
- SUPPLY CFM MONITORING INTEGRAL TO UNIT WITH CFM MEASUREMENT INCLUDED THROUGH DIGITAL INTERFACE.
- FULLY MODULATING HOT GAS REHEAT.
- BAROMETRIC RELIEF DAMPER
- STATIC PRESSURE CONTROLLED BLOWER

DOAS/RTU ERV SCHEDULE

DESIGNATION	AREA SERVED	EXHAUST AIR FAN				SUPPLY AIR SUMMER								SUPPLY AIR WINTER									
		CFM	ESP IN. WC	MOTOR HP	VPHZ	ENTERING AIR		LEAVING AIR		RETURN AIR TEMP		CAPACITY		ENTERING AIR		LEAVING AIR		RETURN AIR TEMP		CAPACITY			
						DB DEG. F	WB DEG. F	DB DEG. F	WB DEG. F	DB DEG. F	WB DEG. F	TOTAL MBH	SENSIBLE MBH	LATENT MBH	DB DEG. F	WB DEG. F	DB DEG. F	WB DEG. F	DB DEG. F	WB DEG. F	TOTAL MBH	SENSIBLE MBH	LATENT MBH
ERV-1	FIRST FLOOR WEST	5,000	0.5	4.8	460/360	88.6	77.7	79.0	67.6	75.0	62.0	194	48.8	145.3	10.0	7.5	50.3	42.7	69.0	55.0	303.3	216.2	87.1
ERV-2	FIRST FLOOR EAST	5,000	0.5	4.8	460/360	88.6	77.7	79.0	67.6	75.0	62.0	194	48.8	145.3	10.0	7.5	50.3	42.7	69.0	55.0	303.3	216.2	87.1

ROOFTOP UNIT SCHEDULE

TAG	AREA SERVED	Weight (lbs)	Qty	Model	Unit										Energy Recovery										Cooling										Gas Heating									
					Electrical		Efficiency		Supply Fan		Exhaust Fan		Filters		Recovery Capacity		Mixed Air LAT		Effectiveness		EAT		LAT		Total Capacity		Sensible Capacity		Ambient		Compressor		Type		Size		Stages		Total Capacity (Btu/hr)		EDB (°F)		LDB (°F)	
Voltage	MCA (A)	MROPD (A)	EER	SEER2 / IEER	Airflow (CFM)	ESP (inH2O)	TSP (inH2O)	Motor Size (HP)	Airflow (CFM)	ESP (inH2O)	Face Area (ft²)	Efficiency	Cooling (Btu/hr)	Heating (Btu/hr)	Cooling (°F)	Heating (°F)	APD (inH2O)	Total Cooling	Sensible Cooling	Total Heating	Sensible Heating	EDB (°F)	EWB (°F)	LDB (°F)	LWB (°F)	Total Capacity	Sensible Capacity	DB (°F)	Stages	Qty	Compressor Power (kW)	Refrigerant	Type	Size	Stages	Total Capacity (Btu/hr)	EDB (°F)	LDB (°F)						
RTU-1	SECOND & THIRD FLOORS	4859	1	DPS228B	460/603	76.9	90	10.7	20.3	8000	3	6.71	15	8000	1	27	COMBO RACK-2" MERV8 & 4" MERV14 from factory	119331	202620	80.4	51.6	1.06	0.52	0.54	0.52	0.53	80.4	66.1	53.7	53.7	286124	222299	95	Modulating Control with Inverter Compressors	2	20.1	R32	Gas	450 MBH	Modulating 12:1 Turndown	364500	51.6	83.6	

EXHAUST FAN SCHEDULE

DESIGNATION	SERVES	FAN TYPE	AIR FLOW CFM	ESP IN. WG	WEIGHT LBS	DRIVE TYPE	RPM	BHP	SONES	ELECTRICAL DATA		MOTOR EFFICIENCY	VARIABLE SPEED DRIVE	INTEGRAL DISCONNECT	DDC OUTPUT CONTACT	CONTROL METHOD	BASIS OF DESIGN		COMMENTS
										VOLTS/PH/Hz	MOTOR HP						MANUFACTURER	MODEL NO.	
KEF-1	CONCESSION A101	ROOF MOUNTED CENTRIFUGAL - UP BLAST	2625	1.0	112	DIRECT	1,286	0.79	N/A	208 / 3 / 60	2	STANDARD	NO	YES	YES	DDC SYSTEM CONTROL - INTERLOCK WITH KITCHEN HOOD AND MAU-1	ACCUREX	XCLE-160A	ROOF CURB & BACKDRAFT DAMPER
EF-3	SECOND FLOOR RESTROOM AND LOCKER EXHAUST	ROOF MOUNTED CENTRIFUGAL - DOWN BLAST	300	5	40	DIRECT	1,675	0.07	8.3	115 / 1 / 60	1/10	STANDARD	ECM	YES	YES	DDC SYSTEM CONTROL - CONTINUOUS OPERATION DURING OCCUPIED MODE	GREENHECK	G-380-VG	ROOF CURB & BACKDRAFT DAMPER
EF-4	THIRD FLOOR RESTROOM EXHAUST	ROOF MOUNTED CENTRIFUGAL - DOWN BLAST	220	5	40	DIRECT	1,675	0.07	8.3	115 / 1 / 60	1/10	STANDARD	ECM	YES	YES	DDC SYSTEM CONTROL - CONTINUOUS OPERATION DURING OCCUPIED MODE	GREENHECK	G-380-VG	ROOF CURB & BACKDRAFT DAMPER
EF-5	LOCKER ROOM D100	INLINE CABINET FAN	1000	825	35	DIRECT	1,556	0.19	9.1	115 / 1 / 60	1/4	STANDARD	ECM	YES	YES	DDC SYSTEM CONTROL - CONTINUOUS OPERATION DURING OCCUPIED MODE	GREENHECK	SG-100-VG	VIBRATION ISOLATION HANGERS
EF-6	RESTROOM D100A & JANITORS CLOSET D101	INLINE CABINET FAN	200	5	34	DIRECT	1,545	0.12	8.4	115 / 1 / 60	1/8	STANDARD	ECM	YES	YES	DDC SYSTEM CONTROL - CONTINUOUS OPERATION DURING OCCUPIED MODE	GREENHECK	SG-80-VG	VIBRATION ISOLATION HANGERS
MMF-1	LOCKER ROOM D100	INLINE CABINET FAN																	

UNIT DESIGNATION	SERVES ROOM #	UNIT TYPE	SIZE L x W x D (IN)	AIR FLOW CONFIGURATION				FLOW								ELECTRICAL REQUIREMENTS			BASIS OF DESIGN		ACCESSORIES
				RETURN AIR	SUPPLY AIR	NOMINAL CFM	CAPACITY BTU/HR	CFM (HIGH/LOW)	CFM	WPD (FT. WG.)	EWT (DEG. F)	EAT (DEG. F)	LWT (DEG. F)	LAT (DEG. F)	HP	AMPS	VPHHZ	ELEC. DISC.	MANUFACTURER	MODEL	
CUH1	CONCESSION A107	HORIZONTAL	14.625 x 7.3125 x 9.375	REAR	INTEGRAL GRILLE - FRONT	450	17,400	450	15	0.014	180	60	180.0	96.2	16 WATTS	0.8	115/180	YES	STERLING	HS-0248	REMOTE 24V WALL MOUNTED THERMOSTAT
CUH2	CONCESSION A107	HORIZONTAL	14.625 x 7.3125 x 9.375	REAR	INTEGRAL GRILLE - FRONT	450	17,400	450	15	0.014	180	60	180.0	96.2	16 WATTS	0.8	115/180	YES	STERLING	HS-0248	REMOTE 24V WALL MOUNTED THERMOSTAT 3 WAY TCV
CUH3	MECHANICAL A108	HORIZONTAL	15 x 18 x 9.5	REAR	INTEGRAL GRILLE - FRONT	245	8,000	245	8.8	0.8	180	60	180.0	96.2	16 WATTS	0.8	115/180	YES	STERLING	HS-106A	REMOTE 24V WALL MOUNTED THERMOSTAT
CUH4	RESTROOM A107	CEILING	35 x 18.25 x 9.5	INTEGRAL GRILLE - BOTTOM	INTEGRAL GRILLE - BOTTOM	230	16,200	230 / 185	15	0.02	180	60	184.4	95.5	16 WATTS	0.8	115/180	YES	STERLING	C-1170-02	REMOTE 24V WALL MOUNTED THERMOSTAT
CUH5	RESTROOM A108	CEILING	35 x 18.25 x 9.5	INTEGRAL GRILLE - BOTTOM	INTEGRAL GRILLE - BOTTOM	230	16,200	230 / 185	15	0.02	180	60	184.4	95.5	16 WATTS	0.8	115/180	YES	STERLING	C-1170-02	REMOTE 24V WALL MOUNTED THERMOSTAT
CUH6	WOMEN A109	CEILING	35 x 18.25 x 9.5	INTEGRAL GRILLE - BOTTOM	INTEGRAL GRILLE - BOTTOM	230	16,200	230 / 185	15	0.02	180	60	184.4	95.5	16 WATTS	0.8	115/180	YES	STERLING	C-1170-02	REMOTE 24V WALL MOUNTED THERMOSTAT
CUH7	LOBBY A110	SURFACE FLOOR MOUNTED	35 x 28.5 x 9.5	INTEGRAL GRILLE - BOTTOM	INTEGRAL GRILLE - TOP	230	16,200	230 / 185	15	0.02	180	60	184.4	95.5	115	0.8	115/180	YES	STERLING	FS-1005-02	STANDARD CAPACITY COOL EXTRA FILTER & INTEGRAL THERMOSTAT
CUH8	STAR AS-2	SURFACE FLOOR MOUNTED	35 x 28.5 x 9.5	INTEGRAL GRILLE - BOTTOM	INTEGRAL GRILLE - TOP	230	16,200	230 / 185	15	0.15	180	60	184.4	95.5	115	0.8	115/180	YES	STERLING	FS-1005-02	STANDARD CAPACITY COOL EXTRA FILTER & INTEGRAL THERMOSTAT
CUH9	STAR AS-1	SURFACE FLOOR MOUNTED	35 x 28.5 x 9.5	INTEGRAL GRILLE - BOTTOM	INTEGRAL GRILLE - TOP	230	16,200	230 / 185	15	0.15	180	60	184.4	95.5	115	0.8	115/180	YES	STERLING	FS-1005-02	STANDARD CAPACITY COOL EXTRA FILTER & INTEGRAL THERMOSTAT
CUH10	MEN A118	CEILING	35 x 18.25 x 9.5	INTEGRAL GRILLE - BOTTOM	INTEGRAL GRILLE - BOTTOM	230	16,200	230 / 185	15	0.02	180	60	184.4	95.5	16 WATTS	0.8	115/180	YES	STERLING	C-1170-02	REMOTE 24V WALL MOUNTED THERMOSTAT
CUH11	RESTROOM A117B	CEILING	35 x 18.25 x 9.5	INTEGRAL GRILLE - BOTTOM	INTEGRAL GRILLE - BOTTOM	230	16,200	230 / 185	15	0.2	180	60	184.4	95.5	16 WATTS	0.8	115/180	YES	STERLING	C-1170-02	REMOTE 24V WALL MOUNTED THERMOSTAT
CUH12	EQUIPMENT ROOM A119	HORIZONTAL	14.625 x 7.3125 x 9.375	REAR	INTEGRAL GRILLE - FRONT	450	17,400	450	15	0.014	180	60	180.0	96.2	16 WATTS	0.8	115/180	YES	STERLING	HS-0248	REMOTE 24V WALL MOUNTED THERMOSTAT 3 WAY TCV
CUH13	TRAINER 105	CEILING	35 x 18.25 x 9.5	INTEGRAL GRILLE - BOTTOM	INTEGRAL GRILLE - BOTTOM	230	16,200	230 / 185	15	0.02	180	60	184.4	95.5	16 WATTS	0.8	115/180	YES	STERLING	RC-1200-02	REMOTE 24V WALL MOUNTED THERMOSTAT

DESIGNATION (FLOOR-ZONE)	AREA SERVED ROOM NUMBER(S)	AREA SERVED ROOM NAME(S)	INLET SIZE	MAX COOL CFM	MIN COOL CFM	HEATING CFM	CAPACITY BTU/HR	COOL TYPE	HEATING FLUID	FLOW GPM	MAX. AIR PRESS DROP (IN. WG.)	NO. OF ROWS	MAX WPD (FT. WG.)	EAT (Deg. F)	LAT (Deg. F)	EWT (Deg. F)	LWT (Deg. F)	TCV TYPE	BASIS OF DESIGN	
																			MFR	MODEL NO.
VAV-2-1	A201	CORRIDOR	10	660	300	400	17300	STANDARD	WATER	1.74	0.50	2	7.0	55	95.0	180	160.0	2 WAY	PRICE	DESV-14
VAV-2-2	A201	CORRIDOR	10	660	300	400	17300	STANDARD	WATER	1.74	0.50	2	7.0	55	95.0	180	160.0	2 WAY	PRICE	DESV-14
VAV-2-3	A203	OPEN OFFICE	10	800	400	800	26000	STANDARD	WATER	2.80	0.50	2	7.0	55	95.0	180	160.0	2 WAY	PRICE	DESV-14
VAV-2-4	A204	RECEPTION	6	150	75	100	4425	STANDARD	WATER	0.43	0.50	2	7.0	55	95.0	180	159.8	2 WAY	PRICE	DESV-6
VAV-2-5	A205	OFFICE	6	150	75	100	4340	STANDARD	WATER	0.43	0.50	2	7.0	55	95.0	180	159.8	2 WAY	PRICE	DESV-6
VAV-2-6	A206	OFFICE	6	150	75	100	4340	STANDARD	WATER	0.43	0.50	2	7.0	55	95.0	180	159.8	2 WAY	PRICE	DESV-6
VAV-2-7	A207	OFFICE	6	150	75	100	4340	STANDARD	WATER	0.43	0.50	2	7.0	55	95.0	180	159.8	3 WAY	PRICE	DESV-6
VAV-2-8	A208	LOCKERS	6	150	75	100	4340	STANDARD	WATER	0.43	0.50	2	7.0	55	95.0	180	159.8	2 WAY	PRICE	DESV-6
VAV-2-9	A212	CLASSROOM	16	150	75	100	1800	STANDARD	WATER	7.81	0.50	2	7.0	55	95.0	180	160.0	2 WAY	PRICE	DESV-6
VAV-3-1	A301	CORRIDOR	10	660	300	375	12375	STANDARD	WATER	1.83	0.50	2	7.0	55	95.0	180	160.0	2 WAY	PRICE	DESV-10
VAV-3-2	A302	SUITE	8	600	300	400	17300	STANDARD	WATER	1.74	0.50	2	7.0	55	95.0	180	160.0	3 WAY	PRICE	DESV-10
VAV-3-3	A305	MEDIA	8	200	75	150	6510	STANDARD	WATER	0.66	0.50	2	7.0	55	95.0	180	160.0	2 WAY	PRICE	DESV-8
VAV-3-4	A306	VISITOR	6	175	75	150	6510	STANDARD	WATER	0.66	0.50	2	7.0	55	95.0	180	160.0	2 WAY	PRICE	DESV-8
VAV-3-5	A308	OPERATION	8	300	100	200	8880	STANDARD	WATER	0.87	0.50	2	7.0	55	95.0	180	160.0	2 WAY	PRICE	DESV-8
VAV-3-6	A309	OPERATION	8	250	100	175	7595	STANDARD	WATER	0.78	0.50	2	7.0	55	95.0	180	160.0	2 WAY	PRICE	DESV-8
VAV-3-7	A310	HOME	8	250	100	175	7595	STANDARD	WATER	0.78	0.50	2	7.0	55	95.0	180	160.0	2 WAY	PRICE	DESV-8
VAV-3-8	A311	HOME	8	275	100	175	7985	STANDARD	WATER	0.78	0.50	2	7.0	55	95.0	180	160.0	2 WAY	PRICE	DESV-8
VAV-3-9	A314	SUITE	10	750	300	500	21700	STANDARD	WATER	3.17	0.50	2	7.0	55	95.0	180	160.0	3 WAY	PRICE	DESV-10

SCHEDULE OF CONVECTORS									
DESIGNATION ON PLAN	AREA SERVED	MOUNTING	TYPE	SIZE W X H X D	HEAT OUTPUT @ 180 DEG F (BTUH)	WATER TEMP (DEG F)	FLOW RATE (GPM)	MANUFACTURER	MODEL
CONV-1	RESTROOM A105A	SURFACE WALL HUNG	SW-A	36" X 32" X 4"	4,100	180	0.41	STERLING	432-36
CONV-2	CORRIDOR A103	SURFACE WALL HUNG	SW-A	36" X 32" X 4"	4,100	180	0.41	STERLING	432-36
CONV-3	VESTIBULE A107A	SURFACE WALL HUNG	SW-A	36" X 32" X 4"	4,100	180	0.41	STERLING	432-36
CONV-4	VESTIBULE A108A	SURFACE WALL HUNG	SW-A	36" X 32" X 4"	4,100	180	0.41	STERLING	432-36
CONV-5	FAMILY A115	SURFACE WALL HUNG	SW-A	36" X 32" X 4"	4,100	180	0.41	STERLING	432-36
CONV-6	JANITOR A111	SURFACE WALL HUNG	SW-A	36" X 32" X 4"	4,100	180	0.41	STERLING	432-36
CONV-7	VESTIBULE A117A	SURFACE WALL HUNG	SW-A	36" X 32" X 4"	4,100	180	0.41	STERLING	432-36
CONV-8	VESTIBULE A117C	SURFACE WALL HUNG	SW-A	36" X 32" X 4"	4,100	180	0.41	STERLING	432-36
CONV-9	RESTROOM A120A	SURFACE WALL HUNG	SW-A	36" X 32" X 4"	4,100	180	0.41	STERLING	432-36
CONV-10	RESTROOM A107B	SURFACE WALL HUNG	SW-A	36" X 32" X 6"	7,700	180	0.77	STERLING	632-36
CONV-11	UNISEX 210	SURFACE WALL HUNG	SW-A	36" X 32" X 4"	4,100	180	0.41	STERLING	432-36
CONV-12	RESTROOM A108B	SURFACE WALL HUNG	SW-A	36" X 32" X 4"	4,100	180	0.41	STERLING	432-36

OUTDOOR AIR VENTILATION SCHEDULE: ERV-1&2 (100% OUTSIDE AIR)																					
ROOM NAME	ROOM NUMBER	GROSS FL AREA (SQ. FT.)	NET AREA MULT.	NET FL AREA (SQ. FT.)	BREATHING ZONE (FEET)	OCCUPANCY CATEGORY	MAX NO. OF OCCUPANTS (PER 1000 SF)	OUTSIDE AIR PER OCC (CFM)	OUTSIDE AIR PER FL AREA (CFM/SQ. FT.)	DESIGN NUMBER OF PEOPLE	SHORT TERM OCCUPANT DIVERSITY	ACTUAL NUMBER OF PEOPLE	AIR SYSTEM EFFECTIVENESS	INITIAL ZONE OUTSIDE AIR CFM	SYSTEM OCCUPANT DIVERSITY	ACTUAL OA CFM	NO. OF FIXTURES	EXHAUST REQUIREMENTS CFM PER FIXTURE	REQUIRED CFM	CONTINUOUS CFM	INTERMITTENT CFM
CONCESSION	A101	874	1	874	6.0	KITCHEN - COMMERCIAL COOKING	20	7.5	0.12	20	100%	20	100%	267	100%	700		0.7	862	700	
CONCESSION STORAGE	A102	180	1	180	6.0	STORAGE ROOMS	0	0	0.12	0	100%	0	100%	27	100%	100		0	0	100	
UNISEX	A105A	54	1	54	6.0	TOILET ROOM	0	0	0	0	100%	0	100%	75	100%	75	1	50	0	50	75
TRAINER	A105	421	1	421	6.0	OFFICE SPACE	5	5	0.08	3	100%	3	100%	40	100%	425		0	0	425	
FLEX LOCKER	A107	681	1	681	6.0	LOCKER ROOM - SPORTS	0	0	0	0	100%	0	100%	0	100%	700		0.5	341	700	
VESTIBULE	A107A	39	1	39	6.0	CORRIDORS	0	0	0.06	0	100%	0	100%	2	100%	30		0	0	0	
RESTROOM	A107B	272	1	272	6.0	TOILET ROOM	0	0	0	0	100%	0	100%	0	100%	275	4	50	0	200	275
FLEX LOCKER	A108	706	1	706	6.0	LOCKER ROOM - SPORTS	0	0	0	20	100%	0	100%	700	100%	700		0.5	333	700	
VESTIBULE	A108A	38	1	38	6.0	CORRIDORS	0	0	0.06	0	100%	0	100%	2	100%	50		0	0	0	
RESTROOM	A108B	205	1	205	6.0	TOILET ROOM	0	0	0	0	100%	0	100%	0	100%	200	3	50	0	150	200
WOMEN	A109	915	1	915	6.0	TOILET ROOM	0	0	0	0	100%	0	100%	0	100%	1000	20	50	0	1000	1000
LOBBY	A110	425	1	425	6.0	LOBBIES/RECEPTION	30	7.5	0.08	13	100%	13	100%	123	100%	425		0	0	425	
JANITOR	A111	75	1	75	6.0	JANITOR CLOSET	0	0	0	0	100%	0	100%	0	100%	80		0	0	80	
OFFICE	A114	137	1	137	6.0	OFFICE SPACE	5	5	0.08	1	100%	1	100%	13	100%	150		0	0	150	
FAMILY	A115	115	1	115	6.0	TOILET ROOM	0	0	0	0	100%	0	100%	0	100%	120	1	50	0	50	120
MEN	A116	470	1	470	6.0	TOILET ROOM	0	0	0	0	100%	0									



LOUVER SCHEDULE (PHASE ONE)															
DESIGNATION	FUNCTION	MOUNTING TYPE	BLADE TYPE	DIMENSIONS INCHES			FREE AREA SQ.FT.	DESIGN AIR FLOW (CFM)	DESIGN VELOCITY (FPM)	PRESSURE DROP AT DESIGN AIRFLOW (IN. WC.)	FINISH	BASIS OF DESIGN		ACCESSORIES	COMMENTS
				W	H	D						MANUFACTURER	MODEL NO.		
QAL-1	BUILDING D INTAKE	CHANNEL FRAME	EXTRUDED 45 DEGREE STATIONARY DRAINABLE	24	24	4	1.8	1000	554	0.08	OWNER SPECIFIED	GREENHECK	ESD-435 24X24	BACKCRAFT DAMPER AND BIRD SCREEN	ALUMINUM CONSTRUCTION
EAL-2	BUILDING D EXHAUST	CHANNEL FRAME	EXTRUDED 45 DEGREE STATIONARY DRAINABLE	24	24	4	1.8	1150	637	0.08	OWNER SPECIFIED	GREENHECK	ESD-435 24X24	BACKCRAFT DAMPER AND BIRD SCREEN	ALUMINUM CONSTRUCTION

ELECTRIC UNIT HEATER SCHEDULE																
DESIGNATION	AREA SERVED	ENCLOSURE DIMENSIONS			AIR FLOW DATA		HEATER PERFORMANCE DATA				ELECTRICAL DATA		BASIS OF DESIGN		ACCESSORIES	COMMENTS
		WIDTH INCHES	HEIGHT INCHES	DEPTH INCHES	AIR FLOW CFM	MOTOR SIZE, HP	HEATING CAPACITY MBH	HEATING CAPACITY WATTS	EAT, DEG F	LAT, DEG F	NUMBER OF STAGES	VOLT/PHZ	FLA	MANUFACTURER		
EUH-1	LOCKER ROOM D100	14	16	7.5	350	N/A	17	5000	60	105	1	208/60/1	21.0	BERKO	HUHAAS24-PRO	WALL MOUNTING BRACKET, INTEGRAL DISCONNECT SWITCH & REMOTE LOW VOLTAGE THERMOSTAT
EUH-2	LOCKER ROOM D100	14	16	7.5	350	N/A	17	5000	60	105	1	208/60/1	21.0	BERKO	HUHAAS24-PRO	WALL MOUNTING BRACKET, INTEGRAL DISCONNECT SWITCH & REMOTE LOW VOLTAGE THERMOSTAT
EUH-3	LOCKER ROOM D100	14	16	7.5	350	N/A	17	5000	60	105	1	208/60/1	21.0	BERKO	HUHAAS24-PRO	WALL MOUNTING BRACKET, INTEGRAL DISCONNECT SWITCH & REMOTE LOW VOLTAGE THERMOSTAT
EUH-4	RESTROOM D100A	15-3/4	19-5/16	3-13/16	N/A	N/A	13.6	4000	60	108.4	2	208/60/1	16.7	BERKO	FRCA424F	INTEGRAL DISCONNECT SWITCH & INTEGRAL THERMOSTAT
EUH-5	JANITOR D101	15-3/4	19-5/16	3-13/16	N/A	N/A	13.6	4000	60	108.4	2	208/60/1	16.7	BERKO	FRCA424F	INTEGRAL DISCONNECT SWITCH & INTEGRAL THERMOSTAT

AIR DEVICE SCHEDULE									
TYPE	MODULE SIZE	CONSTRUCTION	MOUNTING	FINISH	BASIS OF DESIGN		ACCESSORIES	COMMENTS	
					MFR	MODEL NO.			
SQUARE PLAZA DIFFUSER	24 X 24	STEEL	LAY-IN	WHITE	PRICE	80	INTEGRAL BALANCING DAMPER		
EGGCRATE EXHAUST GRILLE	SEE PLANS	ALUMINUM	LAY-IN	WHITE	PRICE	80	INTEGRAL BALANCING DAMPER		
AIRFOIL SUPPLY GRILLE	SEE PLANS	ALUMINUM	DUCT MOUNTED	COORDINATE WITH ARCH.	PRICE	22	INTEGRAL ALUMINUM BALANCING DAMPER	DOUBLE DEFLECTION	
EGGCRATE EXHAUST GRILLE	SEE PLANS	ALUMINUM	DUCT MOUNTED	COORDINATE WITH ARCH.	PRICE	80SR	INTEGRAL ALUMINUM BALANCING DAMPER	DOUBLE DEFLECTION	

AIR CONDITIONING UNIT SCHEDULE													
DESIGNATION	AREA SERVED	CONFIGURATION	WEIGHT (LBS)	SUPPLY AIRFLOW (CFM)	FAN MOTOR SPEED	COOLING CAPACITY		ELECTRICAL DATA		BASIS OF DESIGN		REMARKS	
						ENTERING AIR DB	TOTAL BTU/HR	MCA	MOCP	MANUFACTURER	MODEL NO.		
AC-1	DF ROOM	WALL MOUNTED	28	375	HIGH	80	12,000	16	27	208/100	1	1	POWERED BY OUTDOOR UNIT
AC-2	DF ROOM	WALL MOUNTED	28	375	HIGH	80	12,000	16	27	208/100	1	1	POWERED BY OUTDOOR UNIT
AC-3	DF ROOM	WALL MOUNTED	28	375	HIGH	80	12,000	16	27	208/100	1	1	POWERED BY OUTDOOR UNIT

1. UNIT TO COME WITH BACKNET AND MODBUS INTERFACE, DELUXE WIRED REMOTE CONTROLLER, AND LINESET.

AIR COOLED CONDENSING UNIT SCHEDULE												
SYMBOL	SERVES	CAPACITY (TONS)	WEIGHT (LBS)	REFRIGERANT	EAT (°F)	ELECTRICAL DATA				BASIS OF DESIGN		REMARKS
						QUANTITY	FANSCOMPR	MCA	MOCP	VPH/PHZ	MANUFACTURER	
ACCU-1	DF ROOM	1	99	R454B	95	1/1	16	27	208/100	MTSUBISHI	PUY-AK12NL	1
ACCU-2	DF ROOM	1	99	R454B	95	1/1	16	27	208/100	MTSUBISHI	PUY-AK12NL	1
ACCU-3	DF ROOM	1	99	R454B	95	1/1	16	27	208/100	MTSUBISHI	PUY-AK12NL	1

REMARKS:
1. CONDENSING UNIT TO COME WITH FRONT, REAR, AND SIDE WIND BAFFLES FOR LOW AMBIENT CONDITIONS.

ELECTRIC DUCT HEATER									
DESIGNATION	SERVES	DIMENSIONS		KW	STAGES	AMPS	POWER FUSING	VOLTAGE/ PHASE /HZ	ACCESSORIES
		WIDTH (INCHES)	HEIGHT (INCHES)						
DH-1	LOCKER ROOM D100	14	14	14	SCR	38.86	YES	208/3/60	HEATER TO BE PROVIDED WITH THE FOLLOWING ACCESSORIES: AIRFLOW SWITCH, MAGNETIC CONTACTOR, CONTROL TRANSFORMER, DISCONNECT SWITCH, AND REMOTE DUCT MOUNTED THERMOSTAT

SCHEDULE OF EXPANSION TANKS									
DESIGNATION	SYSTEM SERVED	INSTALLATION	VOLUME (GAL.)	ACC. VOLUME (GAL.)	WORKING PRESSURE	QUANTITY	BASIS OF DESIGN		REMARKS
EXP-1	HOT WATER	BOILER ROOM	10.0	2.9	125.0	1	MFR. / MODEL NO. BELL & GOSSETT B35		PRECHARGE TO WATER FILL PRESSURE OF 25 PSI.

PUMP SCHEDULE																	
DESIGNATION	SERVES	TYPE	FLUID MEDIA	FLOW GPM	HEAD, FEET	RPM	BHP	MOTOR HP	MECHANICAL EFFICIENCY	VOLTAGE/ PHASE /HZ	MOTOR TYPE	VARIABLE SPEED DRIVE	CONNECTION SIZES		BASIS OF DESIGN		ACCESSORIES
													SUCTION	DISCHARGE	MANUFACTURER	MODEL NO.	
HWP-1	HOT WATER PUMP	INLINE	WATER	80	35	1800	849	1.5	62.2%	208/100	ODP	YES	1.5"	1.5"	BELL & GOSSETT	E-90 15AB	
HWP-2	HOT WATER PUMP	INLINE	WATER	80	35	1800	849	1.5	62.2%	208/100	ODP	YES	1.5"	1.5"	BELL & GOSSETT	E-90 15AB	

ELECTRIC UNIT HEATER SCHEDULE - BUILDING B & C																
DESIGNATION	AREA SERVED	ENCLOSURE DIMENSIONS			AIR FLOW DATA		HEATER PERFORMANCE DATA				ELECTRICAL DATA		BASIS OF DESIGN		ACCESSORIES	
		WIDTH INCHES	HEIGHT INCHES	DEPTH INCHES	AIR FLOW CFM	MOTOR SIZE, HP	HEATING CAPACITY MBH	HEATING CAPACITY WATTS	EAT, DEG F	LAT, DEG F	NUMBER OF STAGES	VOLT/PHZ	FLA	MANUFACTURER		MODEL NO.
EUH-B1	CONCESSION B105	96	6-3/4	2-7/8	N/A	N/A	8.5	2500	60	108.4	1	240/60/1	10.4	QMARK	QMKC25408W	DOUBLE POLE THERMOSTAT
EUH-B2	CONCESSION B105	96	6-3/4	2-7/8	N/A	N/A	8.5	2500	60	108.4	1	240/60/1	10.4	QMARK	QMKC25408W	DOUBLE POLE THERMOSTAT
EUH-B3	CONCESSION B105	96	6-3/4	2-7/8	N/A	N/A	8.5	2500	60	108.4	1	240/60/1	10.4	QMARK	QMKC25408W	DOUBLE POLE THERMOSTAT
EUH-B4	WOMENS B100	15-3/4	19-5/16	3-13/16	N/A	N/A	10.2 / 5.1	3000 / 1500	60	108.4	2	240/60/1	12.5 / 6.3	BERKO	FRCA427F	INTEGRAL DISCONNECT SWITCH, INTEGRAL THERMOSTAT & SURFACE MOUNTING BRACKET
EUH-B5	JANITOR B101	15-3/4	19-5/16	3-13/16	N/A	N/A	5.1	1500	60	108.4	1	120/60/1	12.5	BERKO	FRCA1512F	INTEGRAL DISCONNECT SWITCH, INTEGRAL THERMOSTAT & SURFACE MOUNTING BRACKET
EUH-B6	MENS B102	15-3/4	19-5/16	3-13/16	N/A	N/A	10.2 / 5.1	3000 / 1500	60	108.4	2	240/60/1	12.5 / 6.3	BERKO	FRCA427F	INTEGRAL DISCONNECT SWITCH, INTEGRAL THERMOSTAT & SURFACE MOUNTING BRACKET
EUH-B7	FAMILY B103	15-3/4	19-5/16	3-13/16	N/A	N/A	5.1	1500	60	108.4	1	120/60/1	12.5	BERKO	FRCA1512F	INTEGRAL DISCONNECT SWITCH, INTEGRAL THERMOSTAT & SURFACE MOUNTING BRACKET
EUH-B8	CONCESSION B104	15-3/4	19-5/16	3-13/16	N/A	N/A	10.2 / 5.1	3000 / 1500	60	108.4	2	240/60/1	12.5 / 6.3	BERKO	FRCA427F	INTEGRAL DISCONNECT SWITCH, INTEGRAL THERMOSTAT & SURFACE MOUNTING BRACKET
EUH-C1	CONCESSION C101	14	16	7.5	350	N/A	17	5000	60	105	1	240/60/1	21	BERKO	HUHAAS24-PRO	WALL MOUNTING BRACKET, INTEGRAL DISCONNECT SWITCH & INTEGRAL THERMOSTAT
EUH-C2	CONCESSION C101	14	16	7.5	350	N/A	17	5000	60	105	1	240/60/1	21	BERKO	HUHAAS24-PRO	WALL MOUNTING BRACKET, INTEGRAL DISCONNECT SWITCH & INTEGRAL THERMOSTAT
EUH-C3	CONCESSION C101	14	16	7.5	350	N/A	17	5000	60	105	1	240/60/1	21	BERKO	HUHAAS24-PRO-SSP	WALL MOUNTING BRACKET, INTEGRAL DISCONNECT SWITCH, 24V TRANSFORMER & REMOTE LOW VOLTAGE THERMOSTAT
EUH-C4	CONCESSION C101	14	16	7.5	350	N/A	17	5000	60	105	1	240/60/1	21	BERKO	HUHAAS24-PRO-SSP	WALL MOUNTING BRACKET, INTEGRAL DISCONNECT SWITCH, 24V TRANSFORMER & REMOTE LOW VOLTAGE THERMOSTAT

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