

### AIR HANDLING UNIT

MARK	AREA SERVED	MFR.	MODEL	SUPPLY FAN				OUTDOOR AIR				DX COOLING COIL CAPACITIES						ELECTRIC HEATING COIL CAPACITIES				ELECTRICAL V/PH/HZ	NOTES		
				NOM CFM	TSP "WC	ESP "WC	HP	CFM	DB °F	WB °F	SENS. MBH	TOT. MBH	EAT DB °F	EAT WB °F	LAT DB °F	LAT WB °F	AIR PD "WC	TOT. MBH	EAT DB °F	LAT DB °F	ELECTRICAL			AIR PD "WC	
																					KW				V/PH/HZ
AHU-1	CONCESSIONS/VENDING	CARRIER	39MN03	1700	2.17	1.00	3	MOD.	95	78	33.5	36.8	78	65	60	58	.56	58	56	88	17	208/3/60	.02	208/3/60	1 THRU 12

**NOTES:**  
1.) DX COOLING COIL  
2.) ELECTRIC HEATING COIL  
3.) COIL ACCESS SECTION  
4.) SUPPLY FAN SECTION  
5.) ANGLE FILTER MIXING BOX WITH 2" CARBON FILTERS  
6.) EXTENDED LUBRICATION LINES  
7.) 2" SPRING ISOLATORS ON FAN  
8.) 6" BASE RAIL (NEOPRENE PAD BETWEEN FLOOR AND RAIL)  
9.) BELT GUARD  
10.) FACTORY-MOUNTED STARTER AND DISCONNECT  
11.) CO2 SENSOR MOUNTED IN RETURN AIR DUCT  
12.) SEVEN DAY PROGRAMMABLE THERMOSTAT

### ELECTRIC HEATER

MARK	AREA SERVED	MFR.	MODEL	TYPE	CFM H/L	KW	STEPS	MBH	ELECTRICAL		OPER. WT. LBS.	NOTES
									V/PH/HZ	FLA (MCA)		
UH-1	PUMP/MECH.	MARKEL	5100	WALL-MOUNT	400	10	1	34.1	208/3/60	20.8	55	1,2,3,4,5,6
UH-3	ELEV. EQUIP.	MARKEL	5100	WALL-MOUNT	400	3.3	1	11.5	208/3/60	6.9	30	1,2,3,4,5,6
UH-4	ELECT.	MARKEL	5100	WALL-MOUNT	400	3.3	1	11.5	208/3/60	6.9	30	1,2,3,4,5,6

**NOTES:**  
1.) 3-POLE CIRCUIT BREAKER/DISCONNECT  
2.) WALL BRACKET WITH DUST SHIELD  
3.) OSHA FAN GUARD  
4.) LOW VOLTAGE THERMOSTAT  
5.) TRANSFORMER AND CONTACTOR  
6.) STRATIFICATION THERMOSTAT

### ELEVATOR ROOM UNIT

MARK	AREA SERVED	MFR.	MODEL	FAN		COOLING CAPACITIES				ELEC. REHEAT		ELECTRICAL		OPER. WT. LBS.	NOTES	
				NOM CFM	ESP "WC	SENS. MBH	TOT. MBH	EAT DB °F	REFRIG. BTU/H	FAN HP	V/PH/HZ	INDOOR FLA				
													DB °F			WB °F
AC-1	ELEVATOR EQUIPMENT	CARRIER	388NE018	726	-	-	10.6	8.8	8.7	R-22	18,000	1/10	208/1/60	.4	27.5	1,2

**NOTES:**  
1.) MICROPROCESSOR CONTROL/THERMOSTAT  
2.) REFRIGERANT LINE SET SIZED BY MANUFACTURER

### EXHAUST FAN

MARK	AREA SERVED	MFR.	MODEL	TYPE	CFM	E.S.P. (" WC)	RPM	DRIVE	SONES	ELECTRICAL		OPER. WT. LBS.	NOTES	
										HP	V/PH/HZ			FLA (MCA)
EF-1	ELECTRICAL	COOK	60SQN-B	ILC	175	.25	1754	BELT	9.4	1/6	115/1/60	4.4	145	1,2,3,4,5,6,8,10,12,13

**NOTES:**  
1.) PRE-WIRED DISCONNECT SWITCH  
2.) EXTENDED LUBRICATION LINES  
3.) THERMAL OVERLOAD MOTOR  
4.) SPRING VIBRATION ISOLATION HANGERS  
5.) OSHA GUARD/MOTOR COVER  
6.) THERMOSTATICALLY CONTROLLED  
7.) 115V MOTORIZED DAMPER  
8.) FLANGED OUTLET  
9.) OUTLET COMPRESSION FLANGE  
10.) INLET GUARD  
11.) ILC - INLINE CENTRIFUGAL EXHAUST OR SUPPLY FAN

**NOTE:** FANS SELECTED BASED UPON A MEDIUM DRIVE LOSS FOR BELT DRIVEN MODELS. FANS ALSO SELECTED AT AN ALTITUDE OF 496 FT AND 70F.

### AIR COOLED CONDENSING UNIT

MARK	UNIT SERVED	MFR.	MODEL	COOLING		O.A. TEMP.		COMPRESSOR		CONDENSER		UNIT SEER	REFR. R-	ELECTRICAL		OPER. WT. LBS.	NOTES
				CAP. MBH	CAP. MBH %	DES. AMB °F	MIN. AMB °F	QTY. TONS EACH	QTY. CKTS	QTY. FANS	HP EACH			V/PH/HZ	FLA (MCA)		
CU-1	AHU-1	CARRIER	389R036	36	-	95	0	1	3	1	1/5	12	22	208/3/60	(20)	186	1,2,3,4,5,6,7,8,9,10,11
CU-2	AG-1	CARRIER	389N010	10	-	95	0	1	1.6	1	1/1	10	22	208/1/60	(11)	157	3,9

**NOTES:**  
1.) BALL-BEARING CONDENSER FAN MOTOR  
2.) START CAPACITOR AND RELAY  
3.) CRANKCASE HEATER  
4.) ANTI-SHORT CYCLE TIMER  
5.) EVAPORATOR FREEZE STAT  
6.) SUCTION AND LIQUID LINE FILTER DRIER(S)  
7.) HIGH PRESSURE CUT-OUT  
8.) LOW PRESSURE CUT-OUT  
9.) FAN SPEED CONTROL FOR LOW AMB. OPERATION  
10.) THERMOSTATIC EXPANSION VALVE  
11.) WINTER START CONTROLLER

### H.V.A.C. DAMPER SPECIFICATIONS

MANUFACTURER	RUSKIN	RUSKIN	RUSKIN	RUSKIN	RUSKIN
MODEL	MD25	MD35	CD60	CD50	CD102
DAMPER TYPE	BALANCING OVER 12"	BALANCING OVER 12"	CONTROL	CONTROL	CONTROL
FUNCTION	BALANCING 12"H DUCT AND UNDER	BALANCING 13"H DUCT AND OVER	RETURN AIR	OUTSIDE AIR INTAKE	FAN DISCHARGE
SHAPE	RECTANGULAR	RECTANGULAR	RECTANGULAR	RECTANGULAR	RECTANGULAR
MAX. PRESSURE ("WG)	2" (36"W)	2" (36"W)	6.2" (48"W)	6.2"	12.0"
MAX. VELOCITY (FPM)	1500	1500	4000	4000	4000
MAX. PD @ MAX VELOCITY (24X24, 24"DIA)	0.05"WG	0.05"WG	0.03"WG	0.02"WG	0.01"WG
LEAKAGE @ 1"WG (CFM/SQ.FT.)	-	80@1.0"WG	2.0@1.0"WG	2.0@1.0"WG	8.5@1.0"WG
BLADE MATERIAL	GALV. STEEL	GALV. STEEL	GALV. STEEL	ALUMINUM	ALUMINUM
BLADE CONSTRUCTION	8" WIDE 16 GAGE REINFORCED	8" WIDE 16 GAGE REINFORCED	14 GAGE ROLL FORMED	6" WIDE 6063-T5 EXTRUDED	7.75" WIDE 6063-T5 EXTRUDED
BLADE TYPE	SINGLE SKIN	SINGLE SKIN	AIRFOIL	AIRFOIL	AIRFOIL
BLADE SEAL MATERIAL	NONE	NONE	NEOPRENE	NEOPRENE	SILICONE RUBBER
FRAME MATERIAL	GALV. STEEL	GALV. STEEL	GALV. STEEL	ALUMINUM	GALV. STEEL
FRAME CONSTRUCTION	5"x1" 16 GAGE	5"x1" 16 GAGE	16 GAGE HAT CHANNEL	5"x1" 0.125" EXTRUDED	10"x2" 12 GA. STEEL CHANNEL
AXLE MATERIAL	STEEL	STEEL	PLATED STEEL	PLATED STEEL	PLATED STEEL
AXLE DIAMETER	3/8" SQUARE	3/8" SQUARE	1/2"	1/2"	3/4"
BEARING MATERIAL (TYPE)	SYNTHETIC	SYNTHETIC	STAINLESS STEEL	SYNTHETIC	STAINLESS STEEL
NOTES	-	-	-	-	-

### AIR DEVICE

PLAN MARK	SUPPLY DIFFUSERS								EXHAUST / RETURN / TRANSFER GRILLES										
	MANUFACTURER & MODEL NO.	NECK SIZE	FACE SIZE	MOUNT	MATE-RIAL	ACCESS-ORIES	FINISH	TYPE	NOTES	MANUFACTURER MODEL NO.	NECK SIZE	FACE SIZE	MOUNT	MATE-RIAL	ACCESS-ORIES	FINISH	TYPE	NOTES	
1	TITUS 300FS	12X10	14X12	DUCT SIDEWALL	AL	VC	BWE	DD		A	TITUS 350FL	24X24	-	DRYWALL SIDEWALL	AL	VC	BWE	FAB	
										B	TITUS 350FL	24X20	-	DRYWALL SIDEWALL	AL	-	BWE	FAB	
										C	TITUS 350FL	10X10	-	DRYWALL SIDEWALL	AL	VC	BWE	FAB	

**MATERIAL**  
AL - ALUMINUM

**FINISH**  
BWE - BAKED WHITE ENAMEL

**ACCESSORIES**  
VC - VOLUME CONTROL DAMPER

**TYPE**  
FAB - FIXED ANGLE BLADE  
DD - DOUBLE DEFLECTION

### LOUVER

MARK	MFR.	MODEL	SIZE HxWxD	FUNCTION	MATERIAL			FREE AREA VELOCITY	EFFECTIVENESS RATIO %	STATIC PRESS. DROP	NOTES
					FRAME	BLADE	FINISH				
L-4	RUSKIN	EME520DD	18X24X5	INTAKE	ALUM.	ALUM.	CLEAR. ANODIZED	500	99.3	.04	1
L-5	RUSKIN	EME520DD	12X24X5	EXHAUST	ALUM.	ALUM.	CLEAR. ANODIZED	500	99.3	.05	1
L-6	RUSKIN	EME520DD	12X24X5	EXHAUST	ALUM.	ALUM.	CLEAR. ANODIZED	500	99.3	.05	1
L-7	RUSKIN	EME520DD	12X40X5	INTAKE	ALUM.	ALUM.	CLEAR. ANODIZED	500	99.3	.04	1
L-8	RUSKIN	EME520DD	18X24X5	INTAKE	ALUM.	ALUM.	CLEAR. ANODIZED	500	99.3	.04	1

**NOTES:**  
1.) INSECT SCREEN

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# KAI

**PHASE 2A**  
**LEWIS AND CLARK MEMORIAL TOWER**  
**VILLAGE OF HARTFORD, ILLINOIS**  
 HARTFORD, ILLINOIS 62049

SHEET TITLE: MECHANICAL SCHEDULES

REV. NO.	DATE	REMARKS
1	11-08-05	DOT SUBMISSION

KENNEDY PROJECT NO  
KAI# 10-02048

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