

PACKAGED ROOF TOP MAKE-UP AIR UNIT SCHEDULE				
GENERAL	ITEM	MUA-1	MUA-2	MUA-3
	MOUNTING	ROOF	ROOF	ROOF
	MFR	DAKEN	DAKEN	DAKEN
	MODEL	DF5007A	DF5004A	DF5005A
	EEP	16.3	17.7	15.4
ELECTRICAL	VOLTS-PH-HZ	208-3-60	208-3-60	208-3-60
	MOTOR	ECM	ECM	ECM
	FLA	33.9	17.9	21.4
	MCA	45	25	30
	DISCONNECT SW. FURN BY	UNIT MFR	UNIT MFR	UNIT MFR
	SMOKE DETECTOR (SD)	NO (<2,000 CFM)	NO (<2,000 CFM)	NO (<2,000 CFM)
	TYPE	MERV 8	MERV 8	MERV 8
FILTER SECTION	DRIVE	DIRECT DRIVE - ECM MOTOR	DIRECT DRIVE - ECM MOTOR	DIRECT DRIVE - ECM MOTOR
SUPPLY FAN	AIRFLOW, cfm	1,640	820	
	ESP, in.wc.	1"	1"	1"
GAS HEAT	MBTUH (OUTPUT) MAX	160.0	96.0	96.0
	MBTUH (INPUT) MAX	200.0	120.0	120.0
	EXCHANGER	SS	SS	SS
	GAS	NATURAL	NATURAL	NATURAL
	ENTERING AIR TEMP	-10F	-10F	-10F
	LEAVING AIR TEMP	85.8	71.5	97.9
	HEATING STAGES	MODULATING - 5 TO 1	MODULATING - 25% TO 100%	MODULATING - 25% TO 100%
	MIN GAS INLET PRESSURE	5"	5"	5"
	MAX GAS INLET PRESSURE	11"	11"	11"
DX COOLING COIL	ENT. AIR DB/WB	87 / 72	87 / 72	87 / 72
	TMBTUH	91.0	51.3	56.2
	SMBTUH	55.7	34.3	32.9
	FACE AREA	14.00	4.80	6.00
	FACE VELOCITY	110	226	137
	REFRIGERANT	R410A	R410A	R410A
CONDENSING SECTION	AMBIENT DB, DEG-F	95F	95F	95F
	COMPRESSOR TYPE	DIGITAL SCROLL	DIGITAL SCROLL	DIGITAL SCROLL
	MIN STAGES OF COOLING	MODULATING - 10% TO 100%	MODULATING - 10% TO 100%	MODULATING - 10% TO 100%
OVERALL DIMENSIONS	LENGTH	107"	67"	67"
	WIDTH	96.5"	87"	87"
	HEIGHT	55.8"	40.8"	40.8"
	CURB HEIGHT	24"	24"	24"
	OVERALL HEIGHT	80"	64.8"	64.8"
	OPERATING WEIGHT (LBS)	2,082	1,302	1,346
NOTES	NOTES	VERIFY CFM BASED ON OWNER SUPPLIED HOOD		

ELECTRIC HEATER SCHEDULE									
TAG	SERVES	QMARK MODEL	TYPE	VOLTS	PHASE	WATTS	BTUH	NOTES	
EH-1	VEST 007-107	CWH35083F	WALL OR CEILING	208	3	4,800	16,382	1,2,3	
EH-2	N. STAIR 023	CWH35083F	WALL OR CEILING	208	3	4,800	16,382	1,2,3	
EH-3	ELEV VEST 024	CWH34083F	WALL OR CEILING	208	3	4,000	13,652	1,2,3	
EH-4	ELEV VEST 124	CWH34083F	WALL OR CEILING	208	3	4,000	13,652	1,2,3	
EH-5	ELEV VEST 026	CWH34083F	WALL OR CEILING	208	3	4,000	13,652	1,2,3	
EH-6	S. STAIR 025	CWH3404F	WALL OR CEILING	208	1	1,500	5,120	1,2,3	
EH-7	CLOSET 004	CWH3404F	WALL OR CEILING	208	1	1,500	5,120	1,2,3	
EH-8	CLOSET 233A	CWH3404F	WALL OR CEILING	208	1	1,500	5,120	1,2,3	
EH-9	ELEV VEST 728	CWH3404F	WALL OR CEILING	208	1	1,500	5,120	1,2,3	
EH-10	ELEV VEST 828	CWH3404F	WALL OR CEILING	208	1	1,500	5,120	1,2,3	
EH-11	JOES STORAGE 003	IUH520	HORIZ UH	208	3	5,000	17,065	4	
EH-12	MECH-STOR 002	IUH520	HORIZ UH	208	3	5,000	17,065	4	
EH-13	WATER SPRINKLER 002A	IUH520	HORIZ UH	208	3	5,000	17,065	4	
EH-14	LOBBY 100	CWH3404F	WALL OR CEILING	208	1	1,500	5,120	1,2,3	
EH-15	LOBBY 100	CWH3404F	WALL OR CEILING	208	1	1,500	5,120	1,2,3	
EH-16	TRASH 102	IUH724	HORIZ UH	208	3	7,500	25,998	4	
EH-17	MECH 105	CWH3404F	WALL OR CEILING	208	1	1,500	5,120	1,2,3	
EH-18	MECH 106	CWH3404F	WALL OR CEILING	208	1	1,500	5,120	1,2,3	
EH-19	JOES 108 - EAST ENTRANCE	CWH3404F	WALL OR CEILING	208	1	1,500	5,120	1,2,3	
EH-20	JOES 108 - NORTH ENTRANCE	CWH3404F	WALL OR CEILING	208	1	1,500	5,120	1,2,3	
NOTES:	1. COORDINATE WALL RECESS. 2. COORDINATE LOCATION WITH REFLECTED CEILING PLAN. PROVIDE T-BAR ADAPTER AS REQUIRED. 3. COORDINATE MOUNTING TYPE WITH ARCHITECTURAL AND FRAMING. RECESSED VS. WALL BOX VS CEILING 4. USE CEILING MOUNT, MAY USE WALL MOUNT IF NEEDED								

FINNED TUBE RADIATION SCHEDULE (HOT WATER)											
TAG	STERLING MODEL No.	LENGTH	BTU/FT	BTU	GPM	AWT	ENCLOSURE	ELEMENT	FIN DIMENSIONS	FINS/FT	NOTES
FT-1	BARE ELEMENT "A"	6 FT	500	3,000	1.5	140F	NONE	3/4" CU 0.02" FIN THICKNESS	3-1/4" SQ	50	
NOTES:	1. PROVIDE BARE ELEMENT CEILING HANGERS.										

ENERGY RECOVERY UNIT SCHEDULE			
GENERAL	TAG	ERV-1	ERV-2
QTY		139	1
SERVES		APARTMENTS	FITNESS-OFFICE-LOUNGE
TYPE		FIXED-PLATE ENTHALPIC	FIXED-PLATE ENTHALPIC
MFR		LIFEBREATH	RENEWAIRE
MODEL		120 ERV	HE1X1NH
FAN SPEED CONTROL	WALL CONTROLLER	LOW - HI, Humidity	ECM MOTOR
MOTOR	TYPE	Motorized Impeller	ECM
OUTSIDE AIR FAN	AIRFLOW, cfm	75	580
	ESP, in.wc.	1"	1"
	AIRFLOW, cfm	75	580
	ESP, in.wc.	1.0"	0.85"
OVERALL DIMENSIONS	LENGTH	28-5/8"	44-1/8"
	WIDTH	18-1/4"	15-7/8"
	HEIGHT	9-1/4"	36-3/8"
	OPERATING WEIGHT, lbs.	38 LBS.	150 LBS.
	DUCT CONNECTIONS - DIAMETER	5"	10"
HEAT RECOVERY CORE	SENSIBLE RECOVERY % WINTER	74%	74%
	TOTAL RECOVERY % WINTER	62%	68%
	TOTAL RECOVERY % SUMMER	35%	56%
	FROST CONTROL	RECIRCULATION	NOT NEEDED
FILTERS	TYPE	WASHABLE FOAM	MERV 8
ELECTRICAL DATA	V-PH-HZ	120/1/60	208/1/60
	MCA	1.7	10.1
	MOP		15
PROVIDE FACTORY OPTIONS	DISCONNECT	PLUG/15 Amp Breaker	FACTORY FUSED D/S
	1. SEE SPEC 237200		

FAN SCHEDULE																
TAG	LOCATION	SERVES	MFR	MODEL	TYPE	DRIVE	CFM	SP (IN. WC.)	MAX BHP	MOTOR HP	ELECTRICAL					
											VFD FURN. BY	DISC. SWITCH FURN BY	VOLTS/PH	MAX SONES	WEIGHT (LBS.)	DAMPER
EF-B1	BASEMENT	GARAGE VENTILATION	GREENHECK	SE-30-620-B20	WALL PROPELLOR	DIRECT	10,000	0.5"	1.86	2	DIV 26	FAN MFR	208/1	25.0	230	NO
EF-B2	BASEMENT	WATER - SPRINKLER	GREENHECK	SE1-14-436-VG	WALL PROPELLOR	DIRECT	1,500	0.5"	0.34	1/2	BUILT IN ECM	FAN MFR	208/1	13.8	75	BDD BY FAN MFR.
EF-R1	ROOF	JOE'S KITCHEN HOOD	GREENHECK	CUE-131-VG	GREASE EXHAUST	DIRECT	1,390	1.5"	0.57	3/4	BUILT IN ECM	FAN MFR	208/1	14.2	90	NO
EF-R2	ROOF	TRASH ROOM, MAIL ROOM	GREENHECK	CUE-101-VG	CENT UPBLAST EXHAUST	DIRECT	450	1.5"	0.27	1/2	BUILT IN ECM	FAN MFR	208/1	14.2	75	NO
EF-R3	ROOF	JANITORS CLOSET	GREENHECK	CUE-85-VG	CENT UPBLAST EXHAUST	DIRECT	200	7/8"	0.07	1/6	BUILT IN ECM	FAN MFR	208/1	8.9	41	NO
EF-1	1ST FLR	JOE'S BATHROOM	GREENHECK	CSP-B150	CEILING INLINE DUCTED	DIRECT	140	0.5"	129V		BUILT IN SPEED CONTROL	FAN MFR	115/1	2.0	20	BDD BY FAN MFR.
SF-R1	ROOF	STARWELL PRESSURIZATION	GREENHECK	SWD-18-VG	BACKWARD INCLINE CENTRIFUGAL	BELT	4,142	1.0"	1.41	5	VARI GREEN PRESS. SPD CONTROL	FAN MFR	208/1	36.0	196	MOD WD-340
SF-R2	ROOF	STARWELL PRESSURIZATION	GREENHECK	SWD-18-VG	BACKWARD INCLINE CENTRIFUGAL	BELT	4,142	1.0"	1.41	5	VARI GREEN PRESS. SPD CONTROL	FAN MFR	208/1	36.0	196	MOD WD-340
NOTE: SF-R1 & SF-R2 NEED TO BE BALANCED TO MEET THE MINIMUM PRESSURE REQUIREMENT OF 0.10 IN H2O. THIS SHOULD BE MAINTAINED UTILIZING VARI GREEN PRESSURE CONTROL																

DUCTLESS SPLIT SYSTEM SCHEDULE																
UNITS	NOTE	QTY	COND UNIT	LR EVAP	BR EVAP	BR EVAP	EVAP 4	NOMINAL HEATING AT SF	HEATING DE-RATED	NOMINAL COOLING	COOLING DE-RATED	HSPF	ELECTRICAL	MCA	FUSE AMPS	CONDENSING UNIT DIMENSIONS
201 TO 801	CORNER	7	MKZ-3C24NAHZ	MSZ-GE15	MSZ-GE06	-----	-----	25,000	21,250	23,600	21,057	10.0	208/1/60	30	40	37.41"W x 41.26"H x 13.6"D
202 TO 802	CORNER	7	MKZ-3C24NAHZ	MSZ-GE15	MSZ-GE06	-----	-----	25,000	21,250	23,600	21,057	10.0	208/1/60	30	40	37.41"W x 41.26"H x 13.6"D
203 TO 803	WEST	7	MKZ-3C24NAHZ	MSZ-GE15	MSZ-GE06	-----	-----	25,000	21,250	23,600	21,057	10.0	208/1/60	30	40	37.41"W x 41.26"H x 13.6"D
204 TO 804	EAST	7	MKZ-3C24NAHZ	MSZ-GE15	MSZ-GE06	-----	-----	25,000	21,250	23,600	21,057	10.0	208/1/60	30	40	37.41"W x 41.26"H x 13.6"D
205 TO 805	WEST	7	MKZ-3C24NAHZ	MSZ-GE15	MSZ-GE06	-----	-----	25,000	21,250	23,600	21,057	10.0	208/1/60	30	40	37.41"W x 41.26"H x 13.6"D
206 TO 806	EAST	7	MKZ-3C24NAHZ	MSZ-GE15	MSZ-GE06	-----	-----	25,000	21,250	23,600	21,057	10.0	208/1/60	30	40	37.41"W x 41.26"H x 13.6"D
207 TO 807	WEST	7	MKZ-3C24NAHZ	MSZ-GE15	MSZ-GE06	-----	-----	25,000	21,250	23,600	21,057	10.0	208/1/60	30	40	37.41"W x 41.26"H x 13.6"D
208 TO 808	EAST	7	MKZ-3C24NAHZ	MSZ-GE15	MSZ-GE06	-----	-----	25,000	21,250	23,600	21,057	10.0	208/1/60	30	40	37.41"W x 41.26"H x 13.6"D
209 TO 809	WEST	7	MKZ-3C24NAHZ	MSZ-GE15	MSZ-GE06	-----	-----	25,000	21,250	23,600	21,057	10.0	208/1/60	30	40	37.41"W x 41.26"H x 13.6"D
210 TO 810	STUDIO	7	MSZ-FH12NA	MUZ-FH12NA	-----	-----	-----	13,600	11,560	12,000	10,200	12.5	208/1/60	11	15	37.41"W x 41.26"H x 13.6"D
211 TO 811	STUDIO	7	MSZ-FH12NA	MUZ-FH12NA	-----	-----	-----	13,600	11,560	12,000	10,200	12.5	208/1/60	11	15	37.41"W x 41.26"H x 13.6"D
212 TO 812	EAST	7	MKZ-3C24NAHZ	MSZ-GE15	MSZ-GE06	-----	-----	25,000	21,250	23,600	21,057	10.0	208/1/60	30	40	37.41"W x 41.26"H x 13.6"D
213 TO 813	WEST	7	MKZ-3C24NAHZ	MSZ-GE15	MSZ-GE06	-----	-----	25,000	21,250	23,600	21,057	10.0	208/1/60	30	40	37.41"W x 41.26"H x 13.6"D
214 TO 814	SUITE	7	MKZ-3C24NAHZ	MSZ-GE15	MSZ-GE06	-----	-----	25,000	21,250	23,600	21,057	10.0	208/1/60	30	40	37.41"W x 41.26"H x 13.6"D
215 TO 815	STUDIO	7	MSZ-FH12NA	MUZ-FH12NA	-----	-----	-----	13,600	11,560	12,000	10,200	12.5	208/1/60	11	15	37.41"W x 41.26"H x 13.6"D
216 TO 816	EAST	7	MKZ-3C24NAHZ	MSZ-GE15	MSZ-GE06	-----	-----	25,000	21,250	23,600	21,057	10.0	208/1/60	30	40	37.41"W x 41.26"H x 13.6"D
217 TO 817	WEST	5	MKZ-3C24NAHZ	MSZ-GE15	MSZ-GE06	-----	-----	25,000	21,250	23,600	21,057	10.0	208/1/60	30	40	37.41"W x 41.26"H x 13.6"D
717 TO 817	STUDIO	2	MSZ-FH12NA	MUZ-FH12NA	-----	-----	-----	13,600	11,560	12,000	10,200	12.5	208/1/60	11	15	37.41"W x 41.26"H x 13.6"D
318 TO 618	STUDIO CORNER	4	MSZ-FH12NA	MUZ-FH12NA	-----	-----	-----	13,600	11,560	12,000	10,200	12.5	208/1/60	11	15	37.41"W x 41.26"H x 13.6"D
718 TO 818	CORNER	2	MKZ-3C24NAHZ	MSZ-GE15	MSZ-GE06	-----	-----	25,000	21,250	23,600	21,057	10.0	208/1/60	30	40	37.41"W x 41.26"H x 13.6"D
319 TO 619	2 BR SUITE	4	MKZ-3C30AHZ	MSZ-GE24	MSZ-GE06	MSZ-GE06	-----	28,600	23,942	28,400	25,341	11.0	208/1/60	30	40	37.41"W x 41.26"H x 13.6"D