SPLIT SYSTEMS/ HEAT PUMP & AC UNITS

SYSTEM	TOWNHOUSES		1ST FLOOR/2BA&3BA	2ND FLOOR LOBBY	3RD FLOOR LOBBY	4TH FLOOR LOBBY		1ST FLOOR LOBBY	ELECT.	COMMUNITY	WATER HEATER RM	ELEV. MACH
INDOOR UNIT MARK NUMBER	IHP 1A	IHP 1B	IHP 2	IHP 3	IHP 4	IHP 5		IHP 7 / IHP 8	IHP 12	IHP 13	IHP 14	IAC 1
TYPE (INDOOR UNIT)	WALL MTD	DUCTED FC	WALL MTD	WALL MTD	WALL MTD	WALL MTD		WALL MTD	WALL MTD	WALL MTD	WALL MTD	WALL MTD
HEATING CAPACITY	9000 BTUH	9000 BTUH	18,000 BTUH	36,000 BTUH	36,000 BTUH	36,000 BTUH		34,800 BTUH	–	27,000 BTUH	12,000 BTUH	
COOLING CAPACITY(SENSIBLE)	9000 BTUH	9000 BTUH	20,000 BTUH	22,160 BTUH	22,160 BTUH	22,160 BTUH		21,030 BTUH	14,130 BTUH	18,000 BTUH	8,100 BTUH	26,200 BTUH
CFM (HIGH)	380 CCFM	305 CFM	500 CCFM	960 CCFM	960 CCFM	960 CCFM		890 CFM	583 CCFM	635 CCFM	380 CFM	920 CFM
WEIGHT	20 #	50 #	35 #	50 #	50 #	50 #		50 #	45 #	35 #	35 #	50#
BASIS OF DESIGN: DAIKIN	FTX09LVJU	FDXS09LVJU	FAQ18PVJU	FTXS36LVJU	FTXS36LVJU	FTXS36LVJU		FTXS30LVJU	FTKN18NMVJU	FAQ24PVJU	FTXS09LVJU	MITSUBISHI *PKA–A36KA4
OUTDOOR UNIT MARK NUMBER	OHP 1		OHP 2	OHP 3	OHP 4	OHP 5		OHP 7 / OHP 8	OHP 12	OHP 13	OHP 14	OAC 1
TYPE (OUTDOOR UNIT)	HEAT PUMP		HEAT PUMP	HEAT PUMP	HEAT PUMP	HEAT PUMP		HEAT PUMP	COOLING ONLY	HEAT PUMP	HEAT PUMP	COOLING ONLY
OUTDOOR COOLING CAPACITY	18,000 BTU/HR		18,000 BTU/HR	36,000 BTUH	36,000 BTUH	36,000 BTUH		31,400 BTUH	17,100 BTUH	27,000 BTUH	9,000 BTUH	34,200 BTUH
OUTDOOR HEATING CAPACITY	18,900 BTU/HR		20,000 BTU/HR	34,400 BTUH	34,400 BTUH	34,400 BTUH		34,800 BTH		24,000 BTUH	12,000 BTUH	–
COOLING EFFICIENCY (SEER)	16.45 SEER		18.6	15.9 SEER	15.9 SEER	15.9 SEER		17.5 SEER	15.0	17.6	24.5	14.0
HTG EFFICIENCY (HSPF/COP)	9.45 HSPF		8.7/3.0	9.2/2.78	9.2/2.78	9.2/2.78		9.3/29.2	11	9.1 HPSF	12.5/4.47	–
MAX PIPING LENGTH	82 FT PER UNIT		165 FT	98 FT	98 FT	98 FT		98 FT	98 FT	165 FT	98 FT	165 FT
MAX PIPING ELEV. CHANGE	49 FT.		98 FT.	66 FT.	66 FT.	66 FT.		66 FT.	66 FT.	98 FT.	66 FT.	100
OUTDOOR UNIT DESIGN WT.	130 LBS.		150 LBS.	150 LBS.	150 LBS.	150 LBS.		150 LBS.	150 LBS.	150 LBS.	150 LBS.	165#
PUMPED CONDENSATE	YES – **		YES – **	YES – **	YES – **	YES – **		YES – **	YES – **	YES – **	YES – **	YES – **
BOD: DAIKIN	2MXS18NMVJU		RZQ18PVJU9	RXS36LVJU	RXS36LVJU	RXS36LVJU		RXS30LVJU	RKN18NMVJU	RZQ24PVJU9	RXS09LVJU	MITSUBISHI * PUY–A36NHA4
ELECTRICAL	208/1		208/1	208/1	208/1	208/1		208/1	208/1	208/1	208/1	208/1

* – ROUTE CONDENSATE PUMP IN WALL TO A FLOOR ABOVE. PROVIDE A CONDNENSATE PUMP WITH MINIMUM 15FT LIFT.
** – PROVIDE ALL UNITS THAT CANNOT BE DRAINED BY GRAVITY WITH A CONDENSATE PUMP. ROUTE CONDENSATE DRAINS FROM EACH UNIT TO FLOOR DRAINS OR SINK/LAV TAIL PIECES AS SHOWN ON PLUMBING PLANS. KEEP ALL CONDENSATE DRAINS HIDDEN WITHIN STRUCTURE AS MUCH AS POSSIBLE. COORDINATE ALL CONDENSATE LINES WITH ARCHITECT PRIOR TO INSTALLATION.

EXHAUST FANS

MARK NUMBER	EF 1	EF 2	EF 3	EF 4	EF 5A	EF 5B	EF 5C	EF 6	EF 7	EF 8
TYPE	CEILING DIRECT DRIVE	CEILING CABINET	CEILING CABINET	CABINET DIRECT DRIVE	CEILING DIRECT DRIVE	CEILING DIRECT DRIVE	CEILING DIRECT DRIVE	CABINT DIRECT DRIVE	ROOF DIRECT DRIVE	CEILING DIRECT DRIVE
SYSTEM	TOWNHOUSE	BATHROOM	BATHROOM	RECYCLING	1ST JAN/TRASH	2ND JAN/TRASH	3RD JAN/TRASH	1ST FL. R.R.	TRASH COMP.	LAUNDRY 104
CFM	60	90	45/90	350	625	625	625	375	500	340
TOTAL SP. (IN H20)	0.25	0.25	0.25	0.375"	0.50"	0.50"	0.50"	0.375"	0.50"	0.50"
RPM	1100	0/1146	1062/1146	1315	1006	1006	1006	1320	1448	1070
TIP SPEED (FPM)	––	NA	NA	––	––	––	––	––	––	––
MOTOR POWER (HP OR WATTS)	7.8	11.7	5/11.7	135 W	254 W	254 W	254 W	135 WATTS	1/8 HP	224 WATTS
CONTROLLED BY	CONTINUOUS	***	*	CONTINUOUS	CONTINUOUS	CONTINUOUS	CONTINUOUS	CONTINUOUS	CONTINUOUS	HUMIDISTAT
INTERLOCK WITH		MOTION SENSOR	MOTION SENSOR							2–POS DAMPER
FAN SPEED CONTROLLER	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES
WHEEL TYPE	BI	BI	BI	FC	FC	FC	FC	FC	BI	FC
BACK DRAFT DAMPER	GRAVITY	GRAVITY	GRAVITY	GRAVITY	2–POS CONTROL DAMPER			GRAVITY	2–POS CTRL DMP	GRAVITY
ISOLATION	RUBBER	RUBBER	RUBBER	RUBBER	RUBBER	RUBBER	RUBBER	RUBBER	RUBBER	RUBBER
DESIGN WEIGHT (LBS)	25	25	25	25	35	35	35	25	20	35
MAX. SONES	0.6	0.3/0.6	0.3/0.6	3.0	1.2	1.2	1.2	0.7	8.1	4.0
BASIS OF DESIGN:	PANASONIC FV–05–11VK1	PANASONIC FV–05–11VK1	PANASONIC FV–05–11VK1	GREENHECK CSP–A390	GREENHECK CSP–A700	GREENHECK CSP–A700	GREENHECK CSP–A700	GREENHECK CSP–A390	GREENHECK G–095–D	GREENHECK SP–A510
VOLTS/PHASE	120/60/1	120/1/60	120/1/60	120/60/1	120/60/1	120/60/1	120/60/1	120/60/1	120/60/1	120/60/1

* – FAN TO RUN AT LOW SPEED CONTINUOUSLY, AND INCREASE TO HIGH SPEED UPON ACTIVATION OF THE MOTION SENSOR.
** – FANS TO INCLUDE MOTION SENSOR AND MULTI SPEED CONTROL WITH TIME DELAY.
***– FAN TO OPERATE UPON ACTIVATION OF THE MOTION SENSOR.

ELECTRIC WALL HEATER

MARK NUMBER	EH 1A / EH 1B / EH 1C	EH 2	EH 3	EH 4	EH 5	EH 6	EH 7
TYPE	RECESSED/WALL MTD	RECESSED/WALL MTD	RECESSED/WALL MTD	RECESSED/WALL MTD	RECESSED/WALL MTD	RECESSED/WALL MTD	RECESSED/WALL MTD
SYSTEM	BEDROOM	STAIR 3	STAIR 4	STAIR 2	LAUNDRY 104	JANITORS	FIRE RISER ROOM
VOLTS/PHASE	120/1	208/1	208/1	208/1	208/1	208/1	208/1
ELECT HEAT KW	1.5 KW	2.0 KW	2.0 KW	2.0 KW	2.0 KW	2.0 KW	2.0 KW
BASIS OF DESIGN–BERKO	SRA1512DSF	SRA2020DSF	SRA2020DSF	SRA2020DSF	SRA2020DSF	SRA2020DSF	SRA2020DSF
NOTES:	1	1,2	1,2	1,2	3	3	3

NOTES:
1. PROVIDE TAMPER–PROOF THERMOSTAT, WALL CAN, AND GRILL
2. INSTALL ON MIDLANDING BETWEEN 1ST AND 2ND FLOORS.
3. SET TO 50°F (ADJUSTABLE).

INDOOR UNITS

MARK NUMBER	FC 1	FC 2
SYSTEM GROUND FLOOR	COMMUNITY	OFFICE
TYPE	DUCTED	DUCTED
EFFICIENCY	SEE OUTDOOR UNIT	SEE OUTDOOR UNIT
NOMINAL COOLING CAPACITY	36,000 BTUH	24,000 BTUH
HEATING CAPACITY	27,300 BTUH/8 KW ELECT	20,500 BTUH/6 KW ELECT
TOTAL SUPPLY CFM	1200	800
OSA CFM	260	45
EXTERNAL SP. ("H20)	0.25	0.25
VOLTS/PHASE	208/1	208/1
MCA/MOP	42 MCA/50 MOP	33 MCA/35 MOP
WEIGHT	30	30
BASIS OF DESIGN	FIRST CO 36HXX8	FIRST CO 25HXX6
OUTDOOR UNIT	OHP 9	OHP 10

1. INDOOR UNIT REQUIRES A SEPARATE CONNECTION, SEE WIRING DIAGRAM ON EQUIPMENT CUT SHEET FOR WIRING & PROTECTION DETAILS.
2. PROVIDE ALL UNITS THAT CANNOT BE DRAINED BY GRAVITY WITH A CONDENSATE PUMP. ROUTE CONDENSATE DRAINS FROM EACH UNIT TO FLOOR DRAINS SHOWN ON PLUMBING PLANS. KEEP ALL CONDENSATE DRAINS HIDDEN WITHIN STRUCTURE AS MUCH AS POSSIBLE. COORDINATE ALL CONDENSATE LINES WITH ARCHITECT PRIOR TO INSTALLATION.
3. PROVIDE UNIT WITH OPTIONAL HIGH STATIC TAP. PROVIDE FAN WITH ECM MOTOR.

OUTDOOR UNITS – SPLIT SYSTEM HEAT PUMP

MARK NUMBER	OHP 9	OHP 10
SYSTEM	COMMUNITY	OFFICE
TYPE	HEAT PUMP	HEAT PUMP
NORMAL COOLING CAPACITY	36,000 BTUH	24,000 BTUH
NORMAL HEATING CAPACITY	36,000 BTUH	24,900 BTUH
EFFICIENCY SEER/EER	14.0	14
EFFICIENCY HSPF/COP	8.2	8.2
REFRIGERANT	410 A	410 A
MAX OPERATING TEMPS	115/5	115/5
MAX PIPING LENGTH	200 FT	200 FT
MAX PIPING HEIGHT	80 FT	80 FT
VOLTS–PHASE	208/1	208/1
MCA/MOP	18/30 AMPS	11/15 AMPS
COMPRESSOR	CONSTANT SPEED	CONSTANT SPEED
WEIGHT	270 LBS	250 LBS
BASIS OF DESIGN	CARRIER 25HCE436C030	CARRIER 25HBC524A030

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PRELIMINARY
NOT FOR
CONSTRUCTION

KING+PARKS MULTI-FAMILY RESIDENCES

PROJECT SITE: NE Martin Luther King Jr. Boulevard & N Rosa Parks Way
OWNER: Portland Community Reinvestment Initiatives Inc. (PCRI)
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PROJECT NO. 16-0602
ISSUE DATE 06.23.2017
REVISIONS

SHEET
MECHANICAL DETAILS
M6.1
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PRICING SET