













**MECHANICAL SYSTEMS AND CONTROLS NOTES:**

1. EPF-1, SPF-1 THRU 3, AND SEF-1 & 2 SHALL BE INTEGRATED TO THE FREEMAN'S OVERRIDE PANEL TO BE LOCATED IN THE FIRE COMMAND CENTER.
2. ELEVATOR AND STAIR PRESSURIZATION FANS EPF-1 AND SPF-1 THRU 3 SHALL BE ENABLED AUTOMATICALLY UPON GENERAL FIRE ALARM SIGNAL AND SHALL OPERATE CONTINUOUSLY UNTIL COMMANDED OFF MANUALLY AT THE FREEMAN'S OVERRIDE PANEL.
3. POST-FIRE SALVAGE SMOKE REMOVAL FANS SEF-1 AND 2 SHALL BE DUCTED TO ALL FIVE FLOORS WITH A FULL SIZE RISER FOR 4" EACH FAN TO EXHAUST 1/2 OF EACH FLOOR. FAN SHALL ONLY BE ENABLED MANUALLY AT THE FREEMAN'S OVERRIDE PANEL.
4. DEDICATED OUTSIDE AIR SYSTEMS, DOAS-1 AND 2, ARE TO PROVIDE OUTSIDE AIR DISTRIBUTION FOR ALL AIR HANDLING SYSTEMS IN OCCUPIED AREAS. EACH SYSTEM IS APPROXIMATELY 80 TONS. EACH SYSTEM TO SERVE ONE HALF OF THE BUILDING, ALL FIVE FLOORS, VIA A DUCT DISTRIBUTION SYSTEM FOR CONNECTION BY TENANTS.
5. ALL CORE ELEMENTS REQUIRING CONDITIONING SHALL BE CONNECTED TO EITHER VRF COOLING ONLY OR HEAT PUMP SYSTEMS AS NOTED BUT SHALL NOT BE CONNECTED TO VRF SYSTEMS DEDICATED TO TENANT FINISH OUT.
6. VRF OUTDOOR UNITS WITH DESIGNATIONS "A" AND "B" ARE INTENDED TO BE TWINNED AND CONNECTED TO A SINGLE BRANCH CONTROLLER. QUANTITY AND SIZES OF FAN-COIL UNITS, BRANCH AND SUB-BRANCH CONTROLLERS TBD.

**INDOOR DUCTED FAN-COIL UNITS**

MARK	MANUFACTURER	MODEL	LEVEL	COOLING CAP	HEATING CAP	O/A	VOLTAGE	PHASE	FREQ.	MCA	MOCP
FCU-1	Mitsubishi Electric	PEFY-P12NMAU-E3	LEVEL 1	12000.0 Btu/h	13500.0 Btu/h		208 V	1	60 Hz	1.2 A	15.0 A
FCU-CORE-1	Mitsubishi Electric	PEFY-P08NMAU-E3	LEVEL 1	8000.0 Btu/h	9000.0 Btu/h		208 V	1	60 Hz	1.1 A	15.0 A
FCU-CORE-2	Mitsubishi Electric	PEFY-P08NMAU-E3	LEVEL 1	8000.0 Btu/h	9000.0 Btu/h		208 V	1	60 Hz	1.1 A	15.0 A
FCU-CORE-3	Mitsubishi Electric	PEFY-P08NMAU-E3	LEVEL 1	8000.0 Btu/h	9000.0 Btu/h		208 V	1	60 Hz	1.1 A	15.0 A
FCU-CORE-4	Mitsubishi Electric	PEFY-P08NMAU-E3	LEVEL 1	8000.0 Btu/h	9000.0 Btu/h		208 V	1	60 Hz	1.1 A	15.0 A
FCU-CORE-5	Mitsubishi Electric	PEFY-P08NMAU-E3	LEVEL 2	8000.0 Btu/h	9000.0 Btu/h		208 V	1	60 Hz	1.1 A	15.0 A
FCU-CORE-6	Mitsubishi Electric	PEFY-P24NMAU-E3	LEVEL 2	24000.0 Btu/h	27000.0 Btu/h		208 V	1	60 Hz	2.7 A	15.0 A
FCU-CORE-7	Mitsubishi Electric	PEFY-P08NMAU-E3	LEVEL 2	8000.0 Btu/h	9000.0 Btu/h		208 V	1	60 Hz	3.5 A	15.0 A
FCU-CORE-8	Mitsubishi Electric	PEFY-P22NMAU-E3	LEVEL 2	22000.0 Btu/h	25000.0 Btu/h		208 V	1	60 Hz	7.7 A	15.0 A
FCU-CORE-9	Mitsubishi Electric	PEFY-P24NMAU-E3	LEVEL 2	24000.0 Btu/h	27000.0 Btu/h		208 V	1	60 Hz	2.7 A	15.0 A
FCU-CORE-10	Mitsubishi Electric	PEFY-P08NMAU-E3	LEVEL 2	8000.0 Btu/h	9000.0 Btu/h		208 V	1	60 Hz	1.1 A	15.0 A
FCU-CORE-11	Mitsubishi Electric	PEFY-P08NMAU-E3	LEVEL 3	8000.0 Btu/h	9000.0 Btu/h		208 V	1	60 Hz	1.1 A	15.0 A
FCU-CORE-12	Mitsubishi Electric	PEFY-P08NMAU-E3	LEVEL 3	8000.0 Btu/h	9000.0 Btu/h		208 V	1	60 Hz	1.1 A	15.0 A
FCU-CORE-13	Mitsubishi Electric	PEFY-P08NMAU-E3	LEVEL 4	8000.0 Btu/h	9000.0 Btu/h		208 V	1	60 Hz	1.1 A	15.0 A
FCU-CORE-14	Mitsubishi Electric	PEFY-P08NMAU-E3	LEVEL 4	8000.0 Btu/h	9000.0 Btu/h		208 V	1	60 Hz	1.1 A	15.0 A
FCU-CORE-15	Mitsubishi Electric	PEFY-P08NMAU-E3	LEVEL 5	8000.0 Btu/h	9000.0 Btu/h		208 V	1	60 Hz	1.1 A	15.0 A
FCU-CORE-16	Mitsubishi Electric	PEFY-P08NMAU-E3	LEVEL 5	8000.0 Btu/h	9000.0 Btu/h		208 V	1	60 Hz	1.1 A	15.0 A
FCUHP-S-1	Mitsubishi Electric	PEFY-P12NMAU-E3	LEVEL 1	12000.0 Btu/h	13500.0 Btu/h		208 V	1	60 Hz	1.2 A	15.0 A

**INDOOR DUCTLESS FAN-COIL UNIT**

MARK	MANUFACTURER	MODEL	DESCRIPTION	LEVEL	COOLING CAP (BTUH)	HEATING CAP (BTUH)	Voltage	Power Factor	Frequency	MCA	MOCP
FCUHP-1-1	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 12000 Btu/h, Wall Mounted, PKA Series Heat Pump	LEVEL 1	12000.0 Btu/h	18000.0 Btu/h	208 V	1	60 Hz	0.24 A	15.0 A
FCUHP-1-2	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 12000 Btu/h, Wall Mounted, PKA Series Heat Pump	LEVEL 1	12000.0 Btu/h	18000.0 Btu/h	208 V	1	60 Hz	0.24 A	15.0 A
FCUHP-1-3	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 12000 Btu/h, Wall Mounted, PKA Series Heat Pump	LEVEL 2	12000.0 Btu/h	18000.0 Btu/h	208 V	1	60 Hz	0.24 A	15.0 A
FCUHP-1-4	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 12000 Btu/h, Wall Mounted, PKA Series Heat Pump	LEVEL 2	12000.0 Btu/h	18000.0 Btu/h	208 V	1	60 Hz	0.24 A	15.0 A
FCUHP-1-5	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 12000 Btu/h, Wall Mounted, PKA Series Heat Pump	LEVEL 1	12000.0 Btu/h	18000.0 Btu/h	208 V	1	60 Hz	0.24 A	15.0 A
FCUHP-1-6	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 12000 Btu/h, Wall Mounted, PKA Series Heat Pump	LEVEL 1	12000.0 Btu/h	18000.0 Btu/h	208 V	1	60 Hz	0.24 A	15.0 A
FCUHP-1-7	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 12000 Btu/h, Wall Mounted, PKA Series Heat Pump	LEVEL 4	12000.0 Btu/h	18000.0 Btu/h	208 V	1	60 Hz	0.24 A	15.0 A
FCUHP-1-8	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 12000 Btu/h, Wall Mounted, PKA Series Heat Pump	LEVEL 4	12000.0 Btu/h	18000.0 Btu/h	208 V	1	60 Hz	0.24 A	15.0 A
FCUHP-1-9	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 12000 Btu/h, Wall Mounted, PKA Series Heat Pump	LEVEL 5	12000.0 Btu/h	18000.0 Btu/h	208 V	1	60 Hz	0.24 A	15.0 A
FCUHP-1-10	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 12000 Btu/h, Wall Mounted, PKA Series Heat Pump	LEVEL 5	12000.0 Btu/h	18000.0 Btu/h	208 V	1	60 Hz	0.24 A	15.0 A
FCUHP-1-11	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 3000 Btu/h, Wall Mounted, PKA Series Hyper Heat Pump	LEVEL 3	3000.0 Btu/h	3400.0 Btu/h	208 V	1	60 Hz		
FCUHP-2-1	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 3000 Btu/h, Wall Mounted, PKA Series Hyper Heat Pump	LEVEL 3	3000.0 Btu/h	3400.0 Btu/h	208 V	1	60 Hz		
FCUHP-2-2	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 3000 Btu/h, Wall Mounted, PKA Series Hyper Heat Pump	LEVEL 3	3000.0 Btu/h	3400.0 Btu/h	208 V	1	60 Hz		
FCUHP-4-1	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 12000 Btu/h, Wall Mounted, PKA Series Heat Pump	LEVEL 1	12000.0 Btu/h	18000.0 Btu/h	208 V	1	60 Hz	0.24 A	15.0 A
FCUHP-4-2	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 12000 Btu/h, Wall Mounted, PKA Series Heat Pump	LEVEL 1	12000.0 Btu/h	18000.0 Btu/h	208 V	1	60 Hz	0.24 A	15.0 A
FCUHP-4-3	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 12000 Btu/h, Wall Mounted, PKA Series Heat Pump	LEVEL 2	12000.0 Btu/h	18000.0 Btu/h	208 V	1	60 Hz	0.24 A	15.0 A
FCUHP-4-4	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 12000 Btu/h, Wall Mounted, PKA Series Heat Pump	LEVEL 2	12000.0 Btu/h	18000.0 Btu/h	208 V	1	60 Hz	0.24 A	15.0 A
FCUHP-4-5	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 12000 Btu/h, Wall Mounted, PKA Series Heat Pump	LEVEL 3	12000.0 Btu/h	18000.0 Btu/h	208 V	1	60 Hz	0.24 A	15.0 A
FCUHP-4-6	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 12000 Btu/h, Wall Mounted, PKA Series Heat Pump	LEVEL 3	12000.0 Btu/h	18000.0 Btu/h	208 V	1	60 Hz	0.24 A	15.0 A
FCUHP-4-7	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 12000 Btu/h, Wall Mounted, PKA Series Heat Pump	LEVEL 4	12000.0 Btu/h	18000.0 Btu/h	208 V	1	60 Hz	0.24 A	15.0 A
FCUHP-4-8	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 12000 Btu/h, Wall Mounted, PKA Series Heat Pump	LEVEL 4	12000.0 Btu/h	18000.0 Btu/h	208 V	1	60 Hz	0.24 A	15.0 A
FCUHP-4-9	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 12000 Btu/h, Wall Mounted, PKA Series Heat Pump	LEVEL 5	12000.0 Btu/h	18000.0 Btu/h	208 V	1	60 Hz	0.24 A	15.0 A
FCUHP-4-10	Mitsubishi Electric	PKA-A12H47	Mitsubishi Electric 12000 Btu/h, Wall Mounted, PKA Series Heat Pump	LEVEL 5	12000.0 Btu/h	18000.0 Btu/h	208 V	1	60 Hz	0.24 A	15.0 A

**BRANCH CONTROLLER SCHEDULE**

MARK	MANUFACTURER	MODEL	TRANE PART#	DESCRIPTION	LEVEL	VOLTAGE	PHASE	FREQ.	MCA	ACCESSORIES
BC-1-1	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 1	208 V	1	60 Hz	1.6 A	
BC-1-2	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 1	208 V	1	60 Hz	1.6 A	
BC-1-3	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 1	208 V	1	60 Hz	1.6 A	
BC-1-4	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 1	208 V	1	60 Hz	1.6 A	
BC-2-1	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 2	208 V	1	60 Hz	1.6 A	
BC-2-2	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 2	208 V	1	60 Hz	1.6 A	
BC-2-3	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 2	208 V	1	60 Hz	1.6 A	
BC-2-4	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 2	208 V	1	60 Hz	1.6 A	
BC-3-1	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 3	208 V	1	60 Hz	1.6 A	
BC-3-2	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 3	208 V	1	60 Hz	1.6 A	
BC-3-3	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 3	208 V	1	60 Hz	1.6 A	
BC-3-4	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 3	208 V	1	60 Hz	1.6 A	
BC-3-5	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 3	208 V	1	60 Hz	1.6 A	
BC-3-6	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 3	208 V	1	60 Hz	1.6 A	
BC-4-1	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 4	208 V	1	60 Hz	1.6 A	
BC-4-2	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 4	208 V	1	60 Hz	1.6 A	
BC-4-3	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 4	208 V	1	60 Hz	1.6 A	
BC-4-4	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 4	208 V	1	60 Hz	1.6 A	
BC-4-5	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 4	208 V	1	60 Hz	1.6 A	
BC-4-6	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 4	208 V	1	60 Hz	1.6 A	
BC-5-1	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 5	208 V	1	60 Hz	1.6 A	
BC-5-2	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 5	208 V	1	60 Hz	1.6 A	
BC-5-3	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 5	208 V	1	60 Hz	1.6 A	
BC-5-4	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 5	208 V	1	60 Hz	1.6 A	
BC-5-5	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 5	208 V	1	60 Hz	1.6 A	
BC-5-6	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 16 BC Controller	LEVEL 5	208 V	1	60 Hz	1.6 A	
BC-CORE-1A	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 8 BC Controller	LEVEL 1	208 V	1	60 Hz	0.8 A	
BC-CORE-1B	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 8 BC Controller	LEVEL 2	208 V	1	60 Hz	0.8 A	
BC-CORE-2A	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 8 BC Controller	LEVEL 3	208 V	1	60 Hz	0.8 A	
BC-CORE-2B	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 4 BC Controller	LEVEL 5	208 V	1	60 Hz	0.8 A	

**SUB-BRANCH CONTROLLER SCHEDULE**

MARK	MANUFACTURER	MODEL	TRANE PART#	DESCRIPTION	LEVEL	VOLTAGE	PHASE	FREQ.	MCA	ACCESSORIES
SBC-1-1	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 8 BC Controller	LEVEL 1	208 V	1	60 Hz	0.8 A	
SBC-1-2	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 8 BC Controller	LEVEL 1	208 V	1	60 Hz	0.8 A	
SBC-1-3	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 8 BC Controller	LEVEL 1	208 V	1	60 Hz	0.8 A	
SBC-1-4	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 8 BC Controller	LEVEL 1	208 V	1	60 Hz	0.8 A	
SBC-2-1	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 8 BC Controller	LEVEL 2	208 V	1	60 Hz	0.8 A	
SBC-2-2	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 8 BC Controller	LEVEL 2	208 V	1	60 Hz	0.8 A	
SBC-2-3	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 8 BC Controller	LEVEL 2	208 V	1	60 Hz	0.8 A	
SBC-2-4	Mitsubishi Electric	CMB-P1019NU-KA1	TCMBM1016KA11N4	Mitsubishi Electric Main Branch, 8 BC Controller	LEVEL 2	208 V	1	60 Hz	0.8 A	

**DEDICATED OUTSIDE AIR UNIT SCHEDULE**

MARK	MANUF.
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