# GAS / ELECTRIC ROOFTOP UNIT SCHEDULE

| UNIT | AREA SERVED | NOM TONS | SUPPLY AIR... CFM | SUPPLY E.S.P. IN H2O | NET COOLING CAPACITY TOTAL... MBH | NET COOLING CAPACITY NET SENS MBH | NET COOLING CAPACITY EAT DB/WB | NET COOLING CAPACITY LAT DB/WB | OSA AIR FLOW CFM | EER | NATURAL GAS HEATING CAPACITY INPUT MBH | NATURAL GAS HEATING CAPACITY OUTPUT MBH | NATURAL GAS HEATING CAPACITY EAT DB | NATURAL GAS HEATING CAPACITY LAT DB | UNIT ELECTRICAL DATA VOLTAGE/ PHASE | LOAD MCA | STARTER DIV. 23 | STARTER DIV. 26 | DISCONNECT DIV. 23 | DISCONNECT DIV. 26 | VFD | EMERG. POWER | SINGLE PT. CONN. | UNIT WEIGHT (LBS) | DIMENSIONS LxWxH | MODEL NUMBER | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RTU-1 | 3RD - 8TH FLOOR CORRIDOR VENTILATION & RESIDENCE... | 20 | 7,800 | 1.5 | 237.3 | 237.3 | 95 / 68 | 64 / 57 | 7,800 | 12 | 540 | 432 | 17 | 68.0 | 208 / 3 | 103 | | X | | X | SUPPLY FAN | N/A | X | 3,100 | 111 X 101 X 60 | AAON RNA-020-C-0-8-AAA02 | 1-7, 9 |
| RTU-2 | 3RD - 8TH FLOOR CORRIDOR VENTILATION & RESIDENCE... | 20 | 7,800 | 1.5 | 237.3 | 237.3 | 95 / 68 | 64 / 57 | 7,800 | 12 | 540 | 432 | 17 | 68.0 | 208 / 3 | 103 | | X | | X | SUPPLY FAN | N/A | X | 3,100 | 111 X 101 X 60 | AAON RNA-020-C-0-8-AAA02 | 1-7, 9 |
| RTU-3 | CLUB ROOM 821 | 7.5 | 3,000 | 0.75 | 78.3 | 73.3 | 78 / 63 | 55 / 53 | 440 | 11 | 180 | 148 | 62 | 107.7 | 208 /3 | 43 | | X | | X | YES | N/A | X | 1,500 | 89 X 60 X 42 | CARRIER 48TCED08A2A5 | 1-6, 8 |

**NOTES:**
1. DESIGN SUMMER OSA TEMP. (DEGREES F): 90
2. DESIGN SUMMER ROOM TEMP (DEGREES F): 75
3. DESIGN WINTER OSA TEMP. (DEGREES F): 15
4. DESIGN WINTER ROOM TEMP (DEGREES F): 70
5. PROVIDE WITH SPRING ROOF CURB, ECONOMIZER.
6. PROVIDE WITH 2" MERV-13 FILTER & SMOKE DETECTOR.
7. PROVIDE WITH STAINLESS STEEL HEAT EXCHANGER, 10:1 MODULATING GAS VALVE & UNIT CONTROLS FOR MAKE-UP AIR OPERATION.
8. PROVIDE WITH POWERED EXHAUST & RETURN AIR SMOKE DETECTOR.
9. PROVIDE WITH SUPPLY AIR SMOKE DETECTOR.

3

# VRF CONDENSING UNIT VE SCHEDULE

| UNIT TAG | BRANCH SELECTOR UNIT TAG | MITSUBISHI MODEL NO. | NOMINAL TONS | SYSTEM DIVERSITY (%) | LOCATI... | VOLT. / PHASE | MODULE #1... MCA | MODULE #2... MCA | DIMENSIONS LxWxH | WEIGHT LBS | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|
| HP-1 | BC-1 | PURY-P264TSNU-A | 22 | 114 | ROOF | 208/230V / 3 PH | 52 / 48 | 43 / 40 | 140X30X65 | 1,400 | 1 |

NOTES:
1. TWO SEPARATE ELECTRICAL CONNECTIONS.

# MITSUBISHI BC CONTROLLER VE SCHEDULE

| UNIT TAG | CONDENSER UNIT TAG | MITSUBISHI MODEL NO. | VOLT. / PHASE | LOAD MCA | DIMENSIONS LxWxH (INCHES) | WEIGHT LBS | NOTES |
|---|---|---|---|---|---|---|---|
| BC-1 | HP-1 | CMB-P108NU-JA1 | 208/230V/1 PH | 0.83 / 0.97 | 36X22X10 | 130 | |

**NOTES:**

## MOTORIZED DAMPER VE SCHEDULE

| VE... TAG | OL... TAG | EQUIPMENT SERVED | DUCT... INCHES | CFM MIN | CFM MAX | VOLTA... | CONTROLS TYPE | POSITIO... | BINARY OR ANALOG | NORMA... | POWER | FAIL /... | EMERGENCY... (DIV. 26) | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MD 2-1 | MD 2-2 | FC 2-2 VENTILATION AIR | 10" DIA | 0 | 360 | 24-VOLT | INTERLOCK WITH FC 2-2 | 2 | BINARY | OPEN | OPEN | CLOSE | NO | 1 |

NOTES:
1. PROVIDE WITH CONTROL WIRING & AIRFLOW SWITCH AT THE FANCOIL FOR DAMPER TO OPEN WHEN FC BLOWER IS ENABLED.

# ELECTRIC FAN COIL SCHEDULE

3

| UNIT | MODEL NO. | ROOM SERVED | TYPE | HEATING KW | OSA CFM | SUPPLY CFM | Tmix oF | FAN ESP (IN. H2O) | TEMP. RISE oF | NUMBER OF STAGES | VOLTAGE/ PHASE | AMPS | APPROX. WEIGHT (LBS) | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EFC-1 | FIRST COMPANY 3RHH | BIKE STORAGE 204 | DUCT | 5 | 210 | 210 | 17 | 0.15 | 56 | 1 | 208/230V/ 1 PH | 24 / 28 | 75 | 1, 2 |

**NOTES:**
1. PROVIDE WITH SOLID PANEL FOR BOTTOM OF UNIT, LOW VOLTAGE TRANSFORMER & REMOTE THERMOSTAT.
2. FAN TO RUN CONTINUOUS.

4

# DUCTLESS SPLIT SYSTEM SCHEDULE

| INDOOR UNIT: UNIT TAG | AREA SERVED / LOCATION | MITSUBISHI MODEL NO. | SUPPLY CFM | NOM TON | MAX. D/X LENGTH / HEIGHT | VOLT. / PHASE | LOAD MCA | WEIGHT (LBS) | DIMENSIONS W X D X H | OUTDOOR UNIT: UNIT TAG | MITSUBISHI MODEL NO. | LOCATION | COOLING MBH | VOLT. / PHASE | LOAD MCA | SEER | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DS-1 | ELEV EQUIP 230 | PKA-A24HA6 | 770 | 2.0 | 225 / 100 | 208/230/1 | 1 | 50 | 47 X 12 X 15 | CU-1 | PUY-A24NHA6 | ROOF | 25.0 | 208/230/1 | 18 | 17 | 1 - 4 |
| DS-2 | DAS | PKA-A24HA6 | 770 | 2.0 | 225 / 100 | 208/230/1 | 1 | 50 | 47 X 12 X 15 | CU-2 | PUY-A24NHA6 | ROOF | 25.0 | 208/230/1 | 18 | 17 | 1 - 4 |
| DS-3 | FIRE OPERATIONS 111B | PKA-A24HA6 | 770 | 2.0 | 225 / 100 | 208/230/1 | 1 | 50 | 47 X 12 X 15 | CU-3 | PUY-A24NHA6 | GARAGE | 25.0 | 208/230/1 | 18 | 17 | 1 - 4 |

**NOTES:**
1. PROVIDE WITH MFR'S WALL THERMOSTAT.
2. CONNECT TO EMERGENCY POWER AS SECONDARY POWER.
3. SEISMIC OSHPD CERTIFIED.
4. PROVIDE WITH CONDENSATE PUMP.

# PACKAGED TERMINAL HEAT PUMPS

| IDENTITY DATA: TAG [MARK] | APPLICATION [DESCRIPTION] | LOCATION [INSTALL] | AIRFLOW PERFORMANCE: MAX FLOW [CFM] | VENTILATION [CFM] | COOLING PERFORMANCE: NOMINAL [BTU/H] | EER [-] | HEATING PERFORMANCE: NOMINAL [BTU/H] | ELEC. [KW] | COP [-] | ELECTRICAL DATA: POWER [V/PH/HZ] | MCA [A] | MOCP [A] | MFG [NAME] | MODEL [NAME] | WEIGHT [LBS] | NOTES [#] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PTHP-1 | 1/2 TON | WALL | 370 | N/A | 7,600 | 12.0 | 4,200 | 1.3 | 3.3 | 208/1/60 | 8.5 | 15 | AMANA | PTH073G - - A | 123 | 1 - 3 |
| PTHP-2 | 1 TON | WALL | 370 | N/A | 12,000 | 11.0 | 4,200 | 1.3 | 3.2 | 208/1/60 | 8.5 | 15 | AMANA | PTH123G - - A | 132 | 1 - 3 |
| PTHP-3 | 1 TON | WALL | 370 | N/A | 12,000 | 11.0 | 6,800 | 2.1 | 3.2 | 208/1/60 | 14.1 | 15 | AMANA | PTH123G - - A | 132 | 1 - 3 |
| PTHP-4 | 1-1/4 TON | WALL | 410 | N/A | 14,700 | 9.7 | 6,800 | 2.1 | 3.0 | 208/1/60 | 14.1 | 15 | AMANA | PTH153G - - A | 142 | 1 - 3 |
| PTHP-5 | 1-1/4 TON | WALL | 410 | N/A | 14,700 | 9.7 | 9,900 | 3.0 | 3.0 | 208/1/60 | 19.5 | 20 | AMANA | PTH153G - - A | 142 | 1 - 3 |
| PTHP-6 | 1-1/4 TON | WALL | 410 | N/A | 14,700 | 9.7 | 14,000 | 4.1 | 3.0 | 208/1/60 | 27.6 | 30 | AMANA | PTH153G - - A | 142 | 1 - 3 |

**NOTES:**
1. PROVIDE WITH PROGRAMMABLE WALL MOUNTED THERMOSTAT COMPLIANT WITH 2014 OEESC 503.2.4
2. PROVIDE WITH SUB-BASE KIT
3. HEAT PUMP DOES NOT OPERATE BELOW 25 F OUTDOOR COIL TEMPERATURE, SUPPLEMENTAL HEAT ONLY IS USED - COMPRESSOR AND SUPPLEMENTAL HEAT DO NOT OPERATE SIMULTANEOUSLY

# ELECTRIC HEATER VE SCHEDULE

3

| UNIT | MODEL NO. | ROOM SERVED | TYPE | HEATING KW | SUPPLY CFM | TEMP. RISE oF | VOLTAGE/ PHASE | AMPS | APPROX. WEIGHT (LBS) | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| EUH-1 | MARKEL F2FUH05C03 | FUTURE RETAIL SHELL 150 | UNIT | 5.0 | 400 | 39 | 208V / 3 PH | 14.0 | 50 | 1 |
| EUH-2 | MARKEL F3FUH03C03 | FUTURE RETAIL SHELL 150 | UNIT | 3.3 | 400 | 26 | 208V / 3 PH | 9.2 | 40 | 1 |
| EWH-3 | MARKEL E3055T2DWB | STAIR 1 S101 | WALL | 1.5 | 100 | 47 | 120V / 1 PH | 12.5 | 10 | 1 |
| EWH-4 | MARKEL E3055T2DWB | STAIR 2 S102 | WALL | 1.5 | 100 | 47 | 120V / 1 PH | 12.5 | 10 | 1 |
| EWH-5 | MARKEL HF3326TD-RP | WATER 118 | WALL | 3.0 | 175 | 54 | 208V / 1 PH | 14.4 | 30 | 2 |
| EWH-6 | MARKEL E3055T2DWB | EXIT 103 | WALL | 1.5 | 100 | 47 | 120V / 1 PH | 12.5 | 10 | 2 |
| EWH-7 | BY OTHERS | BEDROOM / BATHROOM | WALL | 0.5 | - | - | 120V / 1 PH | - | - | - |
| EWH-8 | BY OTHERS | BEDROOM / BATHROOM | WALL | 0.75 | - | - | 120V / 1 PH | - | - | - |
| EWH-9 | BY OTHERS | BEDROOM / BATHROOM | WALL | 1.0 | - | - | 120V / 1 PH | - | - | - |
| EWH-10 | BY OTHERS | BEDROOM / BATHROOM | WALL | 1.5 | - | - | 120V / 1 PH | - | - | - |
| EWH-11 | BY OTHERS | BEDROOM / BATHROOM | WALL | 2.0 | - | - | 120V / 1 PH | - | - | - |
| EWH-12 | MARKEL HF3326TD-RP | UTILITY 114 | WALL | 0.75 | 175 | 13 | 208V / 1 PH | 14.4 | 30 | 2 |
| EWH-13 | MARKEL HF3326TD-RP | ELEVATOR VESTIBULE R900 | WALL | 0.75 | 175 | 13 | 208V / 1 PH | 14.4 | 30 | 2 |
| EUH-14 | MARKEL F3FUH03C03 | FUTURE RETAIL SHELL 150 | UNIT | 3.3 | 400 | 26 | 208V / 3 PH | 9.2 | 40 | 1 |
| EUH-15 | MARKEL F3FUH03C03 | FUTURE RETAIL SHELL 150 | UNIT | 3.3 | 400 | 26 | 208V / 3 PH | 9.2 | 40 | 1 |
| EUH-16 | MARKEL F2FUH05C03 | FUTURE TI SHELL 109 | UNIT | 5.0 | 400 | 39 | 208V / 3 PH | 14.0 | 50 | 1 |

3

**NOTES:**
1. PROVIDE WITH MOUNTING BRACKET, DISCONNECT SWITCH, INTEGRAL THERMOSTAT.
2. PROVIDE WITH RECESS MOUNT MOUNTING BRACKET, DISCONNECT SWITCH & INTEGRAL THERMOSTAT.
3. PROVIDE WITH MARKEL MODEL AD5150 ANEMOSTAT DIFFUSER.

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# FIRE / SMOKE / FIRE-SMOKE DAMPERS VE SCHEDULE

| TAG [MARK] | SYSTEM SERVED | DUCT... IN. X IN. | APPLICATION [TYPE] | (EXTERNAL MOTOR) [INSTALL] | FIRE [HRS] | FRONT ACESS | LEAKAGE [CLASS] | RATING [TEMP] | CLOSE OFF VELOCITY [ FT / MIN.] | CLOSE OFF PRESSU... [ IN .WG.] | NORMAL [POSITION] | ALARM [POSITI... | FAIL [POSITI... | POWER [VOLT/PH] | CONTROL [VOLT/PH] | FEEDBACK [TYPE] | E-POWER [DIV. 26] | MFG [NAME] | MODEL [NAME] | NOTES [#] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SD 9-1 | RH-2 | 30 X 30 | DYNAMIC - MOTOR EXTERNAL | EXTERNAL | N / A | N / A | II | 250 | 2000 | 4 | CLOSED | OPEN | OPEN | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | YES | RUSKIN | SD60-2 | 2, 3, 6 |
| SD 9-2 | SPF-1 SUPPLY AIR | 48 X 48 | DYNAMIC - MOTOR EXTERNAL | EXTERNAL | N / A | N / A | II | 250 | 2000 | 4 | CLOSED | OPEN | OPEN | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | YES | RUSKIN | SD60-2 | 2, 3, 6 |
| SD 9-3 | SPF-1 RELIEF AIR | 48 X 48 | DYNAMIC - MOTOR EXTERNAL | EXTERNAL | N / A | N / A | II | 250 | 2000 | 4 | CLOSED | OPEN | OPEN | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | YES | RUSKIN | SD60-2 | 2, 3, 6 |
| SD 9-4 | SPF-2 SUPPLY AIR | 48 X 48 | DYNAMIC - MOTOR EXTERNAL | EXTERNAL | N / A | N / A | II | 250 | 2000 | 4 | CLOSED | OPEN | OPEN | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | YES | RUSKIN | SD60-2 | 2, 3, 6 |
| SD 9-5 | SPF-2 RELIEF AIR | 48 X 48 | DYNAMIC - MOTOR EXTERNAL | EXTERNAL | N / A | N / A | II | 250 | 2000 | 4 | CLOSED | OPEN | OPEN | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | YES | RUSKIN | SD60-2 | 2, 3, 6 |
| SD 1-1 | SPF-1A SUPPLY AIR | 14" DIA | DYNAMIC - MOTOR EXTERNAL | EXTERNAL | N / A | N / A | II | 250 | 2000 | 4 | CLOSED | OPEN | OPEN | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | YES | RUSKIN | SDRS25 | 2, 3, 6 |
| SD 1-2 | SF-2 SUPPLY AIR | 20" DIA | DYNAMIC - MOTOR EXTERNAL | EXTERNAL | N / A | N / A | II | 250 | 2000 | 4 | CLOSED | OPEN | OPEN | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | YES | RUSKIN | SDRS25 | 2, 3, 6 |
| FSD 0-1 | SF-2 ELEC E001 RELIEF AIR | 12 X 12 | STATIC - MOTOR EXTERNAL | EXTERNAL | 2 | NO | II | 165 | 2000 | 4 | OPEN | CLOSED | CLOSED | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | NO | RUSKIN | FSD60 | 1 - 4 |
| FSD 2-1 | RTU-2 WEST SHAFT OSA DUCT | 12 X 6 | STATIC - MOTOR EXTERNAL | EXTERNAL | 2 | NO | II | 165 | 2000 | 4 | OPEN | CLOSED | CLOSED | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | NO | RUSKIN | FSD60 | 1 - 4 |
| FSD 2-2 | EF-1 SHAFT DUCT | 24X30 | STATIC - MOTOR EXTERNAL | EXTERNAL | 2 | NO | II | 165 | 2000 | 4 | OPEN | CLOSED | CLOSED | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | NO | RUSKIN | FSD60 | 1 - 4 |
| FSD 2-3 | OSA DUCT | 22X6 | STATIC - MOTOR EXTERNAL | EXTERNAL | 2 | NO | II | 165 | 2000 | 4 | OPEN | CLOSED | CLOSED | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | NO | RUSKIN | FSD60 | 1 - 4 |
| FSD 2-4 | NOT USED | 20X8 | STATIC - MOTOR EXTERNAL | EXTERNAL | 2 | NO | II | 165 | 2000 | 4 | OPEN | CLOSED | CLOSED | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | NO | RUSKIN | FSD60 | 1 - 4 |
| FSD 2-5 | FC 2-3 SUPPLY DUCT | 20X12 | STATIC - MOTOR EXTERNAL | EXTERNAL | 2 | NO | II | 165 | 2000 | 4 | OPEN | CLOSED | CLOSED | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | NO | RUSKIN | FSD60 | 1 - 4 |
| FSD 2-6 | FC 2-3 RETURN AIR GRILLE | 36X14 | STATIC - MOTOR EXTERNAL | EXTERNAL | 2 | NO | II | 165 | 2000 | 4 | OPEN | CLOSED | CLOSED | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | NO | RUSKIN | FSD60 | 1 - 4 |
| FSD 2-7 | OSA DUCT | 6X6 | STATIC - MOTOR EXTERNAL | EXTERNAL | 2 | NO | II | 165 | 2000 | 4 | OPEN | CLOSED | CLOSED | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | NO | RUSKIN | FSD60 | 1 - 4 |
| FSD 2-8 | NOT USED | 6X6 | STATIC - MOTOR EXTERNAL | EXTERNAL | 2 | NO | II | 165 | 2000 | 4 | OPEN | CLOSED | CLOSED | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | NO | RUSKIN | FSD60 | 1 - 4 |
| FD 2-1 | OFFICE 223 SUPPLY DUCT | 6X6 | CURTAIN | N/A | 1.5 | NO | | 165 | 2000 | 4 | OPEN | N/A | N/A | N/A | N/A | N/A | N/A | RUSKIN | IBDT | 1 |
| FD 2-2 | OFFICE 225 SUPPLY DUCT | 6X6 | CURTAIN | N/A | 1.5 | NO | | 165 | 2000 | 4 | OPEN | N/A | N/A | N/A | N/A | N/A | N/A | RUSKIN | IBDT | 1 |
| FSD 3-1 | RTU-2 WEST SHAFT OSA DUCT - HIGH | 24 X 9 | STATIC - MOTOR EXTERNAL | EXTERNAL | 2 | NO | II | 165 | 2000 | 4 | OPEN | CLOSED | CLOSED | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | NO | RUSKIN | FSD60 | 1 - 4 |
| FSD 3-2 | EAST SHAFT OSA DUCT | 24 X 9 | STATIC - MOTOR EXTERNAL | EXTERNAL | 2 | NO | II | 165 | 2000 | 4 | OPEN | CLOSED | CLOSED | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | NO | RUSKIN | FSD60 | 1 - 4 |
| FSD 3-3 | EAST SHAFT OSA DUCT FOR UNITS 318, 320 | 6" DIA | STATIC - MOTOR EXTERNAL | EXTERNAL | 2 | NO | II | 165 | 2000 | 4 | OPEN | CLOSED | CLOSED | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | NO | RUSKIN | FSDR60 | 1 - 3, 5 |
| FSD 4-1 | WEST SHAFT OSA DUCT | 24 X 9 | STATIC - MOTOR EXTERNAL | EXTERNAL | 2 | NO | II | 165 | 2000 | 4 | OPEN | CLOSED | CLOSED | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | NO | RUSKIN | FSD60 | 1 - 4 |
| FSD 4-2 | EAST SHAFT OSA DUCT | 24 X 9 | STATIC - MOTOR EXTERNAL | EXTERNAL | 2 | NO | II | 165 | 2000 | 4 | OPEN | CLOSED | CLOSED | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | NO | RUSKIN | FSD60 | 1 - 4 |
| FSD 5-1 | WEST SHAFT OSA DUCT | 24 X 9 | STATIC - MOTOR EXTERNAL | EXTERNAL | 2 | NO | II | 165 | 2000 | 4 | OPEN | CLOSED | CLOSED | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | NO | RUSKIN | FSD60 | 1 - 4 |
| FSD 5-2 | EAST SHAFT OSA DUCT | 24 X 9 | STATIC - MOTOR EXTERNAL | EXTERNAL | 2 | NO | II | 165 | 2000 | 4 | OPEN | CLOSED | CLOSED | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | NO | RUSKIN | FSD60 | 1 - 4 |
| FSD 6-1 | WEST SHAFT OSA DUCT | 24 X 9 | STATIC - MOTOR EXTERNAL | EXTERNAL | 2 | NO | II | 165 | 2000 | 4 | OPEN | CLOSED | CLOSED | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | NO | RUSKIN | FSD60 | 1 - 4 |
| FSD 6-2 | EAST SHAFT OSA DUCT | 24 X 9 | STATIC - MOTOR EXTERNAL | EXTERNAL | 2 | NO | II | 165 | 2000 | 4 | OPEN | CLOSED | CLOSED | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | NO | RUSKIN | FSD60 | 1 - 4 |
| FSD 7-1 | WEST SHAFT OSA DUCT | 24 X 9 | STATIC - MOTOR EXTERNAL | EXTERNAL | 2 | NO | II | 165 | 2000 | 4 | OPEN | CLOSED | CLOSED | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | NO | RUSKIN | FSD60 | 1 - 4 |
| FSD 7-2 | EAST SHAFT OSA DUCT | 24 X 9 | STATIC - MOTOR EXTERNAL | EXTERNAL | 2 | NO | II | 165 | 2000 | 4 | OPEN | CLOSED | CLOSED | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | NO | RUSKIN | FSD60 | 1 - 4 |
| FSD 8-1 | WEST SHAFT OSA DUCT | 24 X 9 | STATIC - MOTOR EXTERNAL | EXTERNAL | 2 | NO | II | 165 | 2000 | 4 | OPEN | CLOSED | CLOSED | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | NO | RUSKIN | FSD60 | 1 - 4 |
| FSD 8-2 | EAST SHAFT OSA DUCT | 24 X 9 | STATIC - MOTOR EXTERNAL | EXTERNAL | 2 | NO | II | 165 | 2000 | 4 | OPEN | CLOSED | CLOSED | 115V / 1 PH | 115V / 1 PH | END SWITCH ON ACTUATOR | NO | RUSKIN | FSD60 | 1 - 4 |
| FD 1-1 | TRASH T100 EF INTAKE | 14X14 | CURTAIN | N/A | 1.5 | NO | | 165 | 2000 | 4 | OPEN | N/A | N/A | N/A | N/A | N/A | N/A | RUSKIN | IBDT | 1 |

**NOTES:**
1. FIRE DAMPER TO COMPLY WITH UL555
2. SMOKE DAMPER TO COMPLY WITH UL555S
3. DAMPER IS PART OF AN ENGINEERED SMOKE CONTROL SYSTEM.
4. PROVIDE WITH RETAINING ANGLE.
5. PROVIDE WITH RETAINING PLATE.
6. END SWITCHES ARE PROVIDED BY DIVISION 23 AND TO BE (2) SINGLE-POLE DOUBLE THROW SWITCHES PROVING BOTH IN OPEN AND IN CLOSED POSITION.

# LOUVER & ROOF HOOD SCHEDULE

| TAG | MODEL NO. | SYSTEM SERVED | LENGTH X HEIGHT (IN X IN) | INSTALLATION MEDIUM | PROVIDED BY | CORRESPONDING ARCHITECTURAL REFERENCE SHEET | CORRESPONDING ARCHITECTURAL REFERENCE LENGTH X HEIGHT (IN X IN) | ACTIVE LENGTH X... (IN X IN) | CFM | FREE AREA (SQ. FT.) | VELOCI... (FPM) | PRESSURE DROP IN. W.C. | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L -1 | RELIABLE | EMERGENCY GENERATOR INTAKE | 60 X 60 | BRICK | AHI | A03.02 | 60 X 65 | 60 X 60 | 12,917 | 13.9 | 927 | 0.1 | 1, 2 |
| L -2 | RELIABLE | NOT TO BE USED | 60 X 60 | BRICK | AHI | A03.02 | 60 X 65 | - | - | - | - | - | 1, 5 |
| L -3 | RELIABLE | NOT TO BE USED | 60 X 60 | BRICK | AHI | A03.02 | 60 X 65 | - | - | - | - | - | 1, 5 |
| L -4 | RELIABLE | EMERGENCY GENERATOR RADIATOR DISCHARGE | 42 X 60 | BRICK | AHI | A03.02 | 45 X 65 | 42 X 60 | 4,133 | 9.61 | 430 | 0.1 | 1 |
| L -5 | RELIABLE | EMERGENCY GENERATOR RADIATOR DISCHARGE | 44 X 60 | BRICK | AHI | A03.02 | 45 X 65 | 44 X 60 | 4,133 | 9.61 | 430 | 0.1 | 1 |
| L -6 | RELIABLE | EMERGENCY GENERATOR RADIATOR DISCHARGE | 42 X 60 | BRICK | AHI | A03.02 | 45 X 65 | 42 X 60 | 4,133 | 9.61 | 430 | 0.1 | 1 |
| L -7 | RELIABLE | EF-1, 24 & TRASH T100 EXHAUST INTAKE | 60 X 60 | BRICK | AHI | A03.02 | VARIES | 60 X 60 | 7,600 | 13.9 | 547 | 0.1 | 1, 2 |
| L -8 | RELIABLE | EF-1, 24 & TRASH T100 EXHAUST INTAKE | 60 X 60 | BRICK | AHI | A03.02 | 60 X 65 | 60 X 60 | 6,400 | 13.9 | 460 | 0.1 | 1, 2 |
| L -9 | RELIABLE | EF-24 WATER 118 INTAKE | 14 X 14 | BRICK | AHI | N/A | N/A | 14 X 14 | 300 | 1.0 | 300 | 0.1 | 1 |
| L -10 | RELIABLE | EF-24 WATER 118 EXHAUST | 14 X 14 | BRICK | AHI | N/A | N/A | 14 X 14 | 300 | 1.0 | 300 | 0.1 | 1 |
| - | RELIABLE | PTHP-1, 2, 3, 4 | TBD | FRAMED WALL | AHI | A03.01, A03.02,... | VARIES | | | | | | 1, 7 |
| RH-1 | COOK 36X485TRE | EF-1 COURTYARD TERMINATION | 48 X 36 | N/A | AHI | A07.71 | 48 X 36 | - | 6,800 | 14.05 | 484 | 0.15 | 6 |
| RH-2 | COOK 30X30GR | BOTH ELEVATOR HOISTWAYS | 30 X 30 | N/A | AHI | N/A | N/A | 30 X 30 | - | - | - | 0.1 | 6, 8 |
| RH-3 | COOK 48X72GR | STAIR 1 SPF-1 RELIEF AIR | 72 X 48 | N/A | AHI | N/A | N/A | 72 X 48 | 12,500 | 20.66 | 605 | 0.077 | 6, 8 |
| RH-4 | COOK 48X72GR | STAIR 2 SPF-2 RELIEF AIR | 72 X 48 | N/A | AHI | N/A | N/A | 72 X 48 | 12,500 | 20.66 | 605 | 0.077 | 6, 8 |

**NOTES:**
1. PAINT PER ARCHITECT'S APPROVED LOUVER FACTORY AVAILABLE COLORS
2. BLANK-OFF REMAINING UN-USED LOUVER WITH SHEET METAL. INSULATION BY OTHERS.
3. PROVIDE LOUVERS INSTALLED IN GLAZING SYSTEM TO WITH GLAZING ADAPTERS.
4. CFMS FOR LOUVERS FOR FUTURE RETAIL SPACES ARE MAXIMUMS CALCULATED BASED ON LOUVER SIZE.
5. BLANK-OFF & POST SIGNAGE ON PLENUM, 'DO NOT USE LOUVER FOR INTAKE'.
6. PROVIDE WITH COOK 13.5H ROOF CURB & PRIME COAT.
7. QTY (182), NOTE 5 FOR UNIT 318, 320.
8. PROVIDE WITH SMOKE DAMPER.

## CEILING AND WALL ACCESS PANEL SCHEDULE

| TAG | SERVICE ACCESS | LOCATION | LENGTH X WIDTH (IN X IN) | PROVIDED BY | FLANGES | LATCH | HINGE TYPE | INSULATION THICKNESS (INCHES) | FINISH | MATERIAL INSTALLATION | RATED (Y / N) | LABELING INSTRUCTIONS | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CAP 1-1 | FC 1-5 SERVICE | RESTROOM 107 CEILING | 92 X 30 | AHI | DRYWALL BEAD | SCREWDRIVER CAM | FLUSH CONTINUOUS HINGE | NONE | TBD | 1-LAYER GYPSUM | N | FC 1-5 | 1 |
| CAP 1-2 | FC 1-4 SERVICE | LOBBY 100 CEILING | 66 X 36 | AHI | DRYWALL BEAD | SCREWDRIVER CAM | FLUSH CONTINUOUS HINGE | NONE | TBD | 1-LAYER GYPSUM | N | FC 1-4 | 1 |
| CAP 1-3 | BC-1 SERVICE | TRASH T200 | 60 X 30 | AHI | DRYWALL BEAD | SCREWDRIVER CAM | FLUSH CONTINUOUS HINGE | NONE | TBD | 1-LAYER GYPSUM | N | BC-1 | 1 |
| CAP 1-4 | FC 1-3 SERVICE | STORAGE 119 CEILING | 92 X 30 | AHI | DRYWALL BEAD | SCREWDRIVER CAM | FLUSH CONTINUOUS HINGE | NONE | TBD | 1-LAYER GYPSUM | N | FC 1-4 | 1 |
| CAP 3-1 | FSD 3-1 | AMENITY 102 CEILING | 18 X 18 | AHI | DRYWALL BEAD | SCREWDRIVER CAM | FLUSH CONTINUOUS HINGE | NONE | TBD | 1-LAYER GYPSUM | N | FSD 3-1 ACTUATOR | 1 |
| WAP 2-1 | FC 2-3 SERVICE | AMENITY 210 NORTH WALL | 66 X 30 | AHI | DRYWALL BEAD | SCREWDRIVER CAM | FLUSH CONTINUOUS HINGE | NONE | TBD | 4-INCH METAL STUD WALL | N | FC 2-3 | 1 |
| WAP 2-2 | BEDROOM 325 -825 & BEDROOM 329 - 829 DRYER CLEAN OUT | UNIT 329 FOYER SOUTH WALL 6" A.F.F. | 24 X 24 | AHI | DRYWALL BEAD | SCREWDRIVER CAM | FLUSH CONTINUOUS HINGE | 1 | TBD | 6-INCH METAL STUD WALL | Y , 2-HOUR SHAFT | DRYER CLEAN-OUT | 1 |
| WAP 2-3 | SPF-1A | EXIT 113 CEILING | 36X36 | AHI | DRYWALL BEAD | SCREWDRIVER CAM | FLUSH CONTINUOUS HINGE | 1 | TBD | 6-INCH METAL STUD WALL | Y , 2-HOUR SHAFT | SPF-1A | 1 |

**NOTES:**

City Of Portland
REVIEWED FOR CODE COMPLIANCE
Date: 02/11/20
Project: 19-106743-REV-01-CO

American Heating, Inc.
5035 SE 24TH AVENUE
PORTLAND, OREGON 97202-4765
TELEPHONE (503) 239-4600 FAX (503) 239-7018
DATE: 08/23/18
CONTACT: B. SHEA
DRAFTER: J. LOVELL
NO. 418308

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REGISTERED PROFESSIONAL ENGINEER
49035PE
OREGON
JOSELITO G. AUSTRIA
EXPIRES: 12/31/19

18S
GREYSTAR
1715 SW Salmon St
Portland, OR 97205

REVISIONS

| | | |
|---|---|---|
| 1 | ADDENDUM 1 | 05/03/2019 |
| A | PERMIT RESPONSE 1 | 06/03/2019 |
| B | PERMIT RESPONSE 2 | 08/09/2019 |
| C | PERMIT RESPONSE 3 | 09/18/2019 |
| 3 | AB-01 | 09/27/2019 |
| 4 | AB-02 | 11/01/2019 |

CHECKED BY: Checker
ISSUE DATE: 27 SEP 2019
PROJECT NO: 1803002

CONSTRUCTION SET

HVAC SCHEDULES

M00.00