# PACKAGED ROOFTOP UNIT PERFORMANCE SCHEDULE

* - (NET) AT 95°F AMBIENT
** - MIXED AIR, NO ERV WHEEL

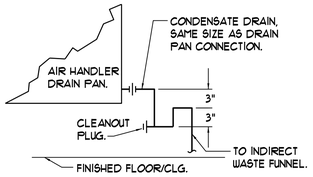
| TAG | NOMINAL COOLING (TONS) | TOTAL COOLING (MBH)* | SENSIBLE COOLING (MBH) | EDB/EWB OUTSIDE (°F) | EDB/EWB POST-WHEEL MIXED (°F) | TOTAL AIRFLOW (CFM) | E.S.P. SUP/EXH (IN.WG) | SUPPLY FAN RPM | MINIMUM O.A. (CFM) | MINIMUM EXHAUST (CFM) | FUEL INPUT (MBH) | HEATING OUTPUT (MBH) | HEATING EAT POST WHEEL (°F) | HEATING LAT (°F) | EER (BTUH/ WATT) | WEIGHT W/ CURB (LBS) | TYPE OF REFRIG-ERANT | FUEL | ELECTRICAL REQUIREMENTS | | | | BASIS OF DESIGN - YORK | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | HP | MCA | MOCP | V/PH/HZ | SERVICE | MODEL |
| HVAC-1A | 10.0 | 124.0* | 84.3* | 95.0/75.0 | 83.7/68.6 | 3005 | 0.75 | 917 | 825 | 650 | 240.0 | 192.0 | 62.5 | 121.7 | 12.0 | 2100 | R-410a | NAT GAS | - | 51.7 | 60.0 | 208/3/60 | CELLAR DOOR | ZJ120 |
| HVAC-1B | 10.0 | 124.0* | 84.3* | 95.0/75.0 | 83.7/68.6 | 3005 | 0.75 | 917 | 825 | 650 | 240.0 | 192.0 | 62.5 | 121.7 | 12.0 | 2100 | R-410a | NAT GAS | - | 51.7 | 60.0 | 208/3/60 | CELLAR DOOR | ZJ120 |
| HVAC-2A | 10.0 | 132.8* | 96.6* | 95.0/75.0 | 81.3/68.0 | 4100 | 0.75 | 1201 | 1525 | 1300 | 240.0 | 192.0 | 59.3 | 102.7 | 12.0 | 2100 | R-410a | NAT GAS | - | 51.7 | 60.0 | 208/3/60 | BREWERY | ZJ120 |
| HVAC-2B | 10.0 | 132.8* | 96.6* | 95.0/75.0 | 81.3/68.0 | 4100 | 0.75 | 1201 | 1525 | 1300 | 240.0 | 192.0 | 59.3 | 102.7 | 12.0 | 2100 | R-410a | NAT GAS | - | 51.7 | 60.0 | 208/3/60 | BREWERY | ZJ120 |
| HVAC-3[1] | 5.0 | 57.8* | 37.0* | 81.0/73.0 | 79.0/67.0** | 1500 | 0.75 | - | 450 | - | 160.0 | 129.0 | 40.0** | 120.0 | 12.2 | 1350 | R-410a | NAT GAS | - | 32.5 | 45.0 | 208/3/60 | YETI | ZJ061 |
| HVAC-3[1] | 5.0 | 57.8* | 37.0* | 81.0/73.0 | 79.0/67.0** | 1500 | 0.75 | - | 450 | - | 160.0 | 129.0 | 40.0** | 120.0 | 12.2 | 1350 | R-410a | NAT GAS | - | 32.5 | 45.0 | 208/3/60 | CRYPTO | ZJ061 |
| HVAC-4 | 10.0 | 134.2* | 92.7* | 95.0/75.0 | 81.6/68.8 | 4000 | 0.75 | 1171 | 1475 | 1250 | 180.0 | 144.4 | 57.5 | 90.9 | 12.0 | 2100 | R-410a | NAT GAS | - | 51.7 | 60.0 | 208/3/60 | DISTILLERY | ZJ120 |

PROVIDE ALL UNITS WITH DUAL ENTHALPY ECONOMIZERS AND TWO STAGE OR MODULATING HEAT
ZJ120 UNITS - PROVIDE WITH ENERGY RECOVERY WHEEL ACCESSORY (COOLING CAPACITIES & EDB/EWB ARE AFTER WHEEL).
ERV ACCESSORY REQUIRES SEPARATE POWER (MCA 11.4A, MOCP 15A, 208/3/60) AND SUPPLY AND RETURN SMOKE DETECTORS.

# FAN PERFORMANCE SCHEDULE

| TAG | AIRFLOW (CFM) | T.S.P (IN.WG) | NOISE (SONES) | RPM | DRIVE | ELECTRICAL REQUIREMENTS | | | | | BASIS OF DESIGN : PANASONIC | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | HP | BHP | WATTS | AMPS | V/PH/HZ | SERVICE | ARRANGEMENT | MODEL |
| EF-1 | 75/30 | 0.25 | 0.6 | 1166 | DIRECT | - | - | 45 | - | 120/1/60 | RESTROOMS | CEILING | FV-08VK5E3 |

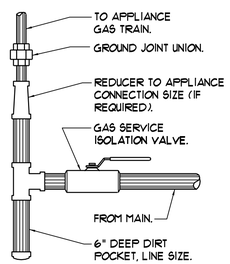
PROVIDE EF-1 WITH MANUFACTURER SPECIFIED LAMPS




## CONDENSATE TRAP DETAIL

NTS

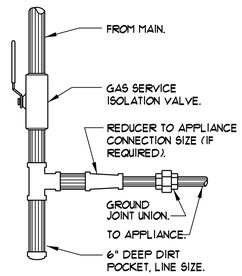
NOTE - CAP UNUSED DRAIN PAN CONNECTIONS.




## UPFEED GAS PIPING CONNECTION DETAIL

NTS

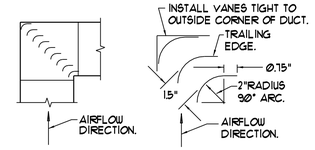
NOTE APPLIANCES WITH REGULATORS LOCATE PIPING SHOWN HEREIN UPSTREAM OF THE APPLIANCE REGULATOR. PROVIDE A TEST PLUG DOWNSTREAM OF THE APPLIANCE REGULATOR.




## DOWNFEED GAS PIPING CONNECTION DETAIL

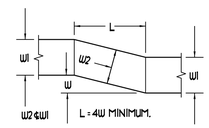
NTS

NOTE APPLIANCES WITH REGULATORS LOCATE PIPING SHOWN HEREIN UPSTREAM OF THE APPLIANCE REGULATOR. PROVIDE A TEST PLUG DOWNSTREAM OF THE APPLIANCE REGULATOR.



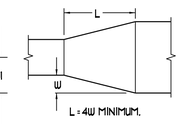

## RECT. ELBOW W/TURNING VANES

NTS NOTE INSTALL VANE EDGES TO PROJECT TANGENTS PARALLEL TO DUCT SIDES.



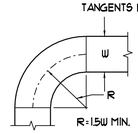

## OFFSET TYPE 1 (ANGLED)

NTS



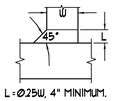

## CONCENTRIC TRANSITION

NTS



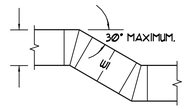

## RADIUS ELBOW

NTS



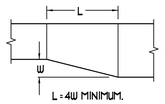

## RECTANGULAR TAP 45 DEGREE ENTRY

NTS




## OFFSET TYPE 2 (MITERED)

NTS

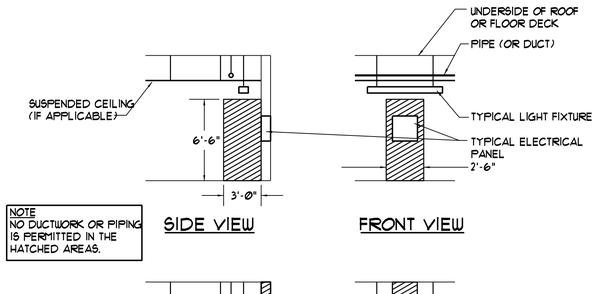


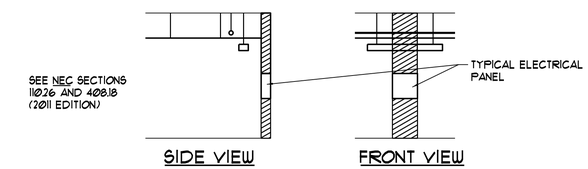

## ECCENTRIC TRANSITION

NTS

## LOW PRESSURE DUCT CONSTRUCTION DETAILS - TYPICAL

NTS




## CLEARANCES AT ELECTRICAL PANELS

NTS

# MECHANICAL AND PLUMBING SYMBOLS AND ABBREVIATIONS LEGEND

NOTE - USE SYMBOLS AND ABBREVIATIONS AS APPLICABLE FOR THIS MECHANICAL DRAWING SET.
SOME SYMBOLS AND ABBREVIATIONS IN THIS LEGEND MAY NOT APPLY.

| SYMBOL | DESCRIPTION |
|---|---|
| —G— | GAS PIPING (G) |
| | PIPE CAP |
| | DIRECTION OF FLUID FLOW |
| | ELBOW UP |
| | ELBOW DOWN |
| | PIPE TEE UP |
| | PIPE TEE DOWN |
| | PIPE REDUCER |
| | PIPE WITH GUIDE |
| | PIPE WITH ANCHOR |
| | BUTTERFLY VALVE |
| | OS & Y GATE VALVE |
| | CHECK VALVE |
| | BALANCING VALVE (ADJUSTABLE) |
| | AUTOMATIC FLOW CONTROL VALVE |
| | RELIEF VALVE (RV) |
| | BALL VALVE |
| | BALL VALVE |
| | 3/4" BALL VALVE WITH 3/4" HOSE END |
| | GATE VALVE |
| | PRESSURE REDUCING VALVE |
| | FUSIBLE VALVE |
| | STRAINER W/BLOWDOWN BALL VALVE |
| | UNION |
| | PIPE FLANGE |
| FC | FLEXIBLE PIPE CONNECTION (FC) |
| | PITCH DOWN |
| | PETCOCK |

| SYMBOL | DESCRIPTION |
|---|---|
| PL | PRESSURE GAGE WITH GAGE COCK |
| T | THERMOMETER IN WELL |
| WF | WATER FLOW SWITCH |
| PE | PRESSURE SWITCH OR SENSOR |
| T | EMURSION TEMPERATURE SENSOR |
| SD | DUCT MOUNTED SMOKE DETECTOR |
| R | ROOM TEMPERATURE SENSOR |
| T S | THERMOSTAT OR SENSOR ON WALL |
| T G | TSTAT OR SENSOR W/ TAMPERPROOF GUARD |
| V | MANUAL AIR VENT |
| 2 | NOTE TAG (NUMBER) |
| A 250 | AIR DEVICE TAG (LETTER) WITH CFM |
| 101 | ROOM NUMBER |
| | TURNING VANES |
| | DUCT W/MANUAL DAMPER |
| | DUCT W/FLEXIBLE CONNECTION (FC) |
| | LAGGED DUCT |
| | DUCT W/ACOUSTIC LINING |
| | DUCT W/SQUARE-TO-ROUND TRANSITION |
| | FLEXIBLE DUCT |
| MOD | MOTOR OPERATED DAMPER |
| | AIRFLOW OUT |
| | AIRFLOW IN |
| ϕ | DIAMETER OR FLAT OVAL |
| | FIRE DAMPER |
| | ROUND OR FLAT OVAL DUCT DOWN |
| | ROUND OR FLAT OVAL DUCT UP |
| | SUPPLY DIFFUSER |
| | RETURN GRILLE |
| | STEAM TRAP |
| | WATER HAMMER ARRESTOR |

| ABBREVIATION | DESCRIPTION |
|---|---|
| AAV | AUTOMATIC AIR VENT |
| AD | ACCESS DOOR |
| AFF | ABOVE FINISHED FLOOR |
| AHU-* | AIR HANDLING UNIT TAG |
| AMS | AIRFLOW MONITORING STATION |
| AMPS | AMPERES |
| AP | ACCESS PANEL |
| APD | AIR PRESSURE DROP |
| AR | ACID RESISTANT PIPING |
| AS-* | AIR SEPARATOR TAG |
| ATC | AUTOMATIC TEMPERATURE CONTROL |
| BFP-* | BACKFLOW PREVENTER TAG |
| BHP | BRAKE HORSEPOWER |
| BTUH | BRITISH THERMAL UNITS PER HOUR |
| CC-* | COOLING COIL TAG |
| CFM | CUBIC FEET PER MINUTE |
| CO | CLEANOUT |
| CP-* | CIRCULATING PUMP TAG |
| Cv | VALVE COEFFICIENT |
| CW | COLD WATER |
| DB | DRY BULB |
| dB RE | DECIBELS RELATIVE TO |
| DC | DOUBLE CHECK |
| DCA | DOUBLE CHECK ATMOSPHERIC |
| DEG F | DEGREES FAHRENHEIT |
| DIA | DIAMETER |
| DIW | DOWN IN WALL |
| DN | DOWN |
| EA | EXHAUST AIR |
| EAT | ENTERING AIR TEMPERATURE |

| ABBREVIATION | DESCRIPTION |
|---|---|
| EDB | ENTERING DRY BULB |
| EDC-* | ELECTRIC DUCT COIL TAG |
| EER | ENERGY EFFICIENCY RATIO |
| EF-* | EXHAUST FAN TAG |
| EFF | EFFICIENCY |
| ESP | EXTERNAL STATIC PRESSURE |
| ET-* | EXPANSION TANK TAG |
| EWB | ENTERING WET BULB |
| EWH-* | ELECTRIC WATER HEATER TAG |
| EWT | ENTERING WATER TEMPERATURE |
| EXG | EXISTING |
| EXH | EXHAUST |
| FC | FLEXIBLE CONNECTION |
| FCO | FLOOR CLEANOUT |
| FD | FIRE DAMPER |
| FD-* | FLOOR DRAIN TAG |
| FLA | FULL LOAD AMPS |
| FPHB | FROST PROOF HOSE BIBB |
| FPM | FEET PER MINUTE |
| FSD | COMBINATION FIRE & SMOKE DAMPER |
| FT | FEET |
| GA. | GAGE |
| GAL | GALLONS |
| GPH | GALLONS PER HOUR |
| GPM | GALLONS PER MINUTE |
| HC-* | HEATING COIL TAG |
| HP | HORSEPOWER |
| HRV-* | HEAT RECOVERY VENTILATOR TAG |
| HW | HOT WATER |
| HWS/R | HOT WATER SUPPLY AND RETURN |

| ABBREVIATION | DESCRIPTION |
|---|---|
| I=B=R | INSTITUTE OF BOILER AND RADIATOR MANUFACTURERS |
| IN. | INCHES |
| L-* | LOUVER TAG |
| LAT | LEAVING AIR TEMPERATURE |
| LB | POUNDS |
| LWS/R | LOOP WATER SUPPLY/RETURN |
| LRA | LOCKED ROTOR AMPS |
| LWCO | LOW WATER CUTOUT |
| LWT | LEAVING WATER TEMPERATURE |
| MAX | MAXIMUM |
| MBH | THOUSANDS OF BTU PER HOUR |
| MCA | MINIMUM CIRCUIT AMPACITY |
| MIN | MINIMUM |
| NC | NOISE CRITERION |
| NIC | NOT IN CONTRACT |
| NTS | NOT TO SCALE |
| OA | OUTSIDE AIR |
| OBD | OPPOSED BLADE DAMPER |
| O.D. | OUTSIDE DIAMETER |
| OED | OPEN ENDED DUCT |
| OPD | OVERCURRENT PROTECTIVE DEVICE |
| P-* | PLUMBING FIXTURE TAG |
| PENET'N | PENETRATION |
| PF-* | PADDLE FAN TAG |
| PSIA | POUNDS PER SQUARE INCH ABSOLUTE |
| PSIG | POUNDS PER SQUARE INCH GAGE |
| PVC | POLYVINYL CHLORIDE (PIPE) |
| RA | RETURN AIR |
| RD | ROOF DRAIN |
| RDE | RECOMMENDED DUAL ELEMENT FUSE AMPS |
| RHW | RECIRCULATED HOT WATER |

| ABBREVIATION | DESCRIPTION |
|---|---|
| RLA | RUNNING LOAD AMPS |
| RPM | REVOLUTIONS PER MINUTE |
| RPS | REVOLUTIONS PER SECOND |
| RPZ | REDUCED PRESSURE ZONE |
| RTU | ROOM TEMPERATURE SENSOR |
| RV | RELIEF VALVE |
| RWL | RAINWATER LEADER |
| SA | SUPPLY AIR |
| SAN | SANITARY (DRAIN & WASTE) |
| SD | SMOKE DAMPER |
| SEER | SEASONAL ENERGY EFFICIENCY RATIO |
| SF | SUPPLY FAN |
| SP | STATIC PRESSURE |
| SQFT | SQUARE FEET |
| ΔT | TEMPERATURE DIFFERENTIAL |
| TEMP. | TEMPERATURE |
| TCP | TEMPERATURE CONTROL PANEL |
| TMV-* | THERMOSTATIC MIXING VALVE TAG |
| TSP | TOTAL STATIC PRESSURE |
| TYP | TYPICAL |
| UH-* | UNIT HEATER TAG |
| VB | VACUUM BREAKER |
| VFD | VARIABLE FREQUENCY INVERTER DRIVE |
| VTR | VENT THRU ROOF |
| V/PH/HZ | VOLTS/PHASES/HERTZ |
| WB | WET BULB |
| WCO | WALL CLEANOUT |
| WG | WATER GAGE |
| WPD | WATER PRESSURE DROP |
| WSA | WIRE SIZING AMPS |
| WTD | WATER TEMPERATURE DROP |
| W/ | WITH |


RESURGAM CITY OF PORTLAND, MAINE
Reviewed for Code Compliance
Inspections Division
Approved with Conditions
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Revisions:

ISSUED FOR CONSTRUCTION

Scale: 1/8" = 1'-0"

Date: 1-4-2016

MECHANICAL SCHEDULES, LEGEND AND DETAILS

M3.01