* RELIEF VALVE

SEQUENCING VALVE

HEADER SENSOR (SEE NOTE 9)

2 TO 10 FEET (SEE NOTE 9)

(NOTE 4)

SYSTEM AIR SEPARATOR

SYSTEM PUMP

PRESSURE REDUCING FILL VALVE

GAS INLET (SEE NOTE 8)

* MANUAL GAS SHUTOFF

GAS REGULATOR (SEE NOTE 8)

CHECK VALVE

WATER SUPPLY

SHELL DRAIN VALVE

HIGH TEMP. SYSTEM RETURN (i.e. 140°F)

(SEE NOTE 12)

LOW TEMP. SYSTEM RETURN (i.e. 100°F)

DIAPHRAGM TYPE EXPANSION TANK

SYSTEM SUPPLY

* CONDENSATE DRAIN TRAP

NOTES:
1. FOR ACTUAL SIZES AND LOCATIONS OF PIPING AND OTHER CONNECTIONS TO THE HEATER, SEE DIMENSIONAL DRAWING.
2. SHELL DRAIN VALVE AND CONDENSATE HOSE SHOULD BE ARRANGED TO PERMIT THE FLUIDS TO DRAIN FREELY, BY GRAVITY, TO A FLOOR DRAIN. RELIEF VALVE DISCHARGE SHOULD BE PIPED TO THE NEAREST FLOOR DRAIN. WHEN NO FLOOR DRAIN IS AVAILABLE, THE RELIEF VALVE DISCHARGE SHOULD BE PIPED VERTICALLY TO A HEIGHT 18" ABOVE THE FLOOR.
3. ALL (*) ITEMS ARE INCLUDED SEPARATELY IN SHIPMENT.
4. LOCATE WATER INLET AND OUTLET FITTINGS (i.e.UNIONS, ELBOWS, ETC.) A MINIMUM OF 6" FROM HEATER FITTINGS, TO PREVENT INTERFERENCE WITH REMOVAL OF BOILER PANELS AND COVERS. ALL PIPING AND ELECTRIC CONNECTIONS (SERVICE SWITCHES, CONDUIT BOXES) SHOULD LIKEWISE BE 6" AWAY FROM SIDE PANELS.
5. SYSTEM PUMP MUST BE SIZED TO PROVIDE THE APPROPRIATE FLOW AT THE DESIGN ΔT OF BOILER PLANT. MAXIMUM ΔT ACROSS BOILER IS 100°F. SYSTEM PUMP MUST MAINTAIN BENCHMARK BOILER(S) REQUIRED MINIMUM FLOW OF 25 GPM.
6. THIS IS A TYPICAL INSTALLATION DRAWING. LOCAL CODES AND AUTHORITIES SHOULD BE CONSULTED.
7. WHEN USING THE AERCO CONDENSATE NEUTRALIZER TANK, FOR PROPER CONDENSATE DRAINAGE, THE NEUTRALIZER TANK MUST BE INSTALLED IN A PIT OR THE BOILER AND THE AERCO CONDENSATE TRAP MUST BE ELEVATED 4" OR HIGHER ABOVE THE FLOOR. SEE CONDENSATE TANK INSTRUCTIONS TID-0074 FOR DETAILS.
8. REVIEW BENCHMARK GAS SUPPLY DESIGN GUIDE GF-2030 FOR GAS PIPING INSTALLATION INSTRUCTIONS.
9. HEADER SENSOR MUST BE INSTALLED BETWEEN 2 TO 10 FEET FROM JUNCTION AND FROM LAST UNIT.
10. CONSULT AERCO FOR ADDITIONAL INFORMATION OR DIFFERENT DESIGN CONDITIONS.
11. USE OF BALANCING VALVES IS RECOMMENDED IF THE PIPING ARRANGEMENT IS NOT REVERSE RETURN.
12. DUAL RETURNS ARE OPTIONAL. FEATURE CAN BE SELECTED WHEN CONFIGURING A BOILER ORDER.

AERCO
A WATTS Brand
100 ORITANI DRIVE BLAUVELT, NY 10913
aerco.com

BENCHMARK® 1500-3000 MBH
MULTI UNIT INSTALLATION
WITH DUAL RETURNS

DWN.BY S.S. DATE 110515	SD-A-1089	REV.
SCALE NTS		D
REV.BY K.S. DATE 062123		