

1. SEE COMBINATION HEATING/DOMESTIC WATER HEATING APPLICATIONS GUIDE TAG-0050 AND WIRING DIAGRAM SD-A-883 FOR COMPLETE APPLICATION AND CONTROLS DETAILS.

- 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. FOR ACTUAL SIZES AND LOCATIONS OF PIPING AND OTHER CONNECTIONS TO THE BOILER, SEE APPROPRIATE BENCHMARK BOILER DIMENSIONAL DRAWING.
- 4. REFER TO SMARTPLATE APPLICATIONS GUIDE, SP-1010, FOR BUFFER TANK SIZING.
- 5. REFER TO SMARTPLATE INSTALLATION DRAWINGS FOR RECOMMENDED DOMESTIC PIPING INSTALLATION: SD-A-772, SD-A-773, SD-A-774, SD-A-775, SD-A-776, SD-A-777
- 6. BOILER PUMP MUST BE SIZED TO PROVIDE THE APPROPRIATE FLOW AT THE DESIGN AT OF BOILER PLANT. BOILER PUMP MUST MAINTAIN BENCHMARK BOILER(S) REQUIRED MINIMUM FLOW OF 40 GPM.
 THIS IS A TYPICAL INSTALLATION DRAWING. LOCAL CODES AND AUTHORITIES SHOULD BE CONSULTED.
 INSTALL THE ACS HEADER SENSOR AND THE AQUASTAT IN THE BUFFER TANK SYSTEM SUPPLY PIPING.

- 9. THE SYSTEM PUMP SHALL BE OPERATED CONSTANTLY OR CONTROLLED BY THE BUILDING CONTROLS.
- 10. ALL (*) ITEMS ARE INCLUDED SEPARATELY IN SHIPMENT.
- 11. 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.
- 12. 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.
- 13. AT 14" W.C. OR BELOW, A GAS REGULATOR IS OPTIONAL UNLESS REQUIRED BY LOCAL CODE.
- 14. USE OF BALANCING VALVES IS RECOMMENDED IF THE PIPING ARRANGEMENT IS NOT REVERSE RETURN.

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BENCHMARK 750/1000/SMARTPLATE - COMBINATION HEATING/DHW PIPING W/ BOILER BUFFER TANK TEMPERATURE BOOST APPLICATIONS

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