Notes:

1. Noritz recommends the use of Isolation Kit (IK-WV-7) with installation. Connections are available in Threaded or Sweat. These kits include an integrated shut-off and service valve with unions and a pressure relief valve.

2. Set the aquastat to 10°F below the set output temperature at the mixing valve.

3. Size the pump to provide a maximum of 2 GPM through the system at 10 ft of head plus piping losses. Adjust the flow using a globe valve and verify the flow rate with the maintenance monitors.

4. Size the pump to provide 3 GPM with a head pressure equal to the loss through the water heater and Air Handler.

5. Check valve required if it is not included with the pump.

6. Expansion tank required if a backflow preventer is installed.

7. If the system requires water for space heating at a higher temperature than for other uses, means such as a mixing valve shall be provided to temper the water for the other uses to help prevent scalding.

8. Set the flow switch to deactivate the Air Handler when the domestic hot water flow reaches 3 GPM. Adjust as necessary to prevent cycling.
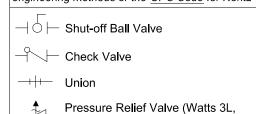
Air Handler

Isolation Kit (*1)

Pump (*4)

Check Valve (*5)

Recirculation Line

Globe Valve

Pump to Aquastat (*2)

Pump (*3)

Flow Switch (*8)

Backflow Preventer (optional)

Cold Water Supply

Tempered Hot Water for Domestic

Optional Expansion Tank (*6)

Mixing Valve (*7)

Fixtures

Gas Supply

Hot Water Supply

NORITZ
11160 Grace Avenue
Fountain Valley, California 92708
866-7NORITZ (866-766-7489)
www.noritz.com

MODEL:
NR83 Series

APPLICATION:
Hydronic Heating Domestic Hot Water Recirculation Loop

DRAWING NUMBER:
(6b1)NR83

DRAWING DATE:
August 27, 2010

Noritz Accessories

Note: *This diagram is for reference only.* Installation must comply with State and Local Code, all gas and water pipe must be sized correctly to specific length, according to accepted engineering methods or the UPC Code for Noritz Water Heaters to operate correctly.

Shut-off Ball Valve

Check Valve

Union

Pressure Relief Valve (Watts 3L, Zurn P1000A, Cash Acme FWL-2)

Aquastat (Honeywell Model #L6006A or L6006C)

Pump

Mixing Valve

Thermal Expansion Tank