



Commercial Integrated Hydronic Heating

Commercial customers who are planning a new facility or renovating an existing central plant may now choose an affordable way to provide both space heating and domestic hot water. This innovative approach is called integrated hydronic heating. Integrated hydronic heating uses one natural gas burner to do both jobs, reducing cost and saving energy.

While every installation is different, typical integrated hydronic heating installation includes the following elements:

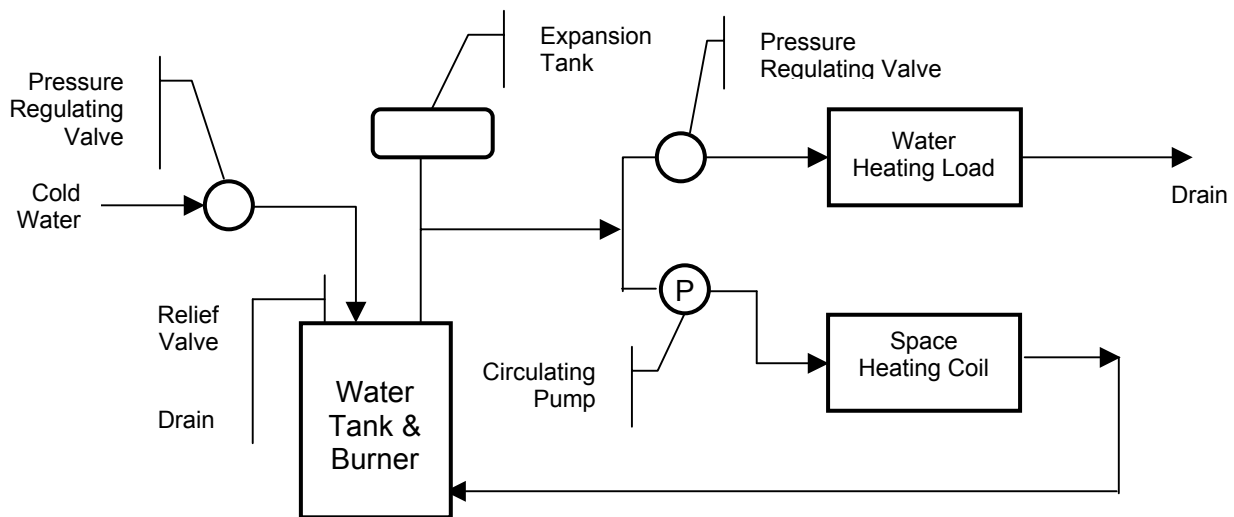


Figure 1: Typical Integrated Hydronic Heating System Components

When hot water is required, the system operates like any conventional water heater. When space heat is needed, the wall thermostat energizes a small pump that circulates hot water from the water heater through a heating coil in the air handler. A fan located in the air handler comes on and blows air over the coils where it absorbs the heat. This warm air is then circulated through the ducts and into the office space. Operating costs are reduced, because natural gas can provide heat more efficiently than other fuels. The burner must be deliver enough heat to satisfy both the water-heating and space-heating requirements.

Incentive Summary

<u>Incentive/Unit</u>	<u>Tank Size</u>	<u>Btu</u>	<u>Energy Factor</u>	<u>Recovery Efficiency</u>
\$500	All	All	.54	76%

Program Guidelines

1. All participants must be customers of Texas Gas Service and be within the Austin and Sunset Valley city limits with a base gas service rate B12, B1B, B1C, B1D, B13, B1E (small and large commercial). This is determined on the statement of charges of your gas bill.
2. Rebates are offered for integrated hydronic heating installations in new and existing commercial construction.
3. Only systems using gas-fired equipment are eligible for this program.
4. To be considered eligible for a rebate, integrated hydronic heating installations must also:
 - a. Have been reviewed by the appropriate municipal authorities and obtained all required permits.
 - b. Be installed by a qualified and licensed professional.
 - c. Include natural gas water heaters as the primary space-heating source. This equipment must meet the U.S. Department of Energy's Minimum energy efficiency standards for commercial water heaters. The gas water heater must also be listed in the Gas Appliance Manufacturers Association (GAMA) and listed in their "Consumer Directory of Certified Efficiency Ratings for Residential Heating and Water Heating Equipment."
 - d. Include water heaters must be approved and listed by the American Gas Association and all combo air handlers must be approved and listed by Underwriters Laboratories
 - e. Provide proper amounts of ventilation and combustion air. The installation shall be performed in accordance with Section 1307 of the Uniform Plumbing Code.
5. In line with the proposed changes to the local Uniform Mechanical and Uniform Plumbing Codes, Texas Gas Service currently recommends that all equipment used and its method of installation follow exactly the manufacturer's instructions pertaining to proper installation and that this work be performed in accordance with all applicable national and local building and electrical codes.
6. Installers must honor the manufacturer's warranty on all equipment installed through this program.
7. The selection of contractors and equipment is the responsibility of the property owner. Texas Gas Service will not intervene in disputes between property owner and contractor beyond enforcing specifications at the time of inspection. We will refer disputes to appropriate avenues of mediation and advice where applicable.
8. Installations are subject to Texas Gas Service verification by an on-site inspection.
9. The incentive will be paid only to the equipment purchaser.
10. The published rebate amount may be altered on a case-by-case basis at the sole discretion of Texas Gas Service Conservation Program management.
11. This program is operated on a first come, first served basis. The funding and/or guidelines for this program may be altered or discontinued at any time without notice.

- ◆ **For more specific information about these programs, please call 370-8243.**
- ◆ **Si usted quiere esta información en español, llame al 370-8243**