



Sonic Drive-In Restaurant Tankless Natural Gas Water Heaters Save Energy, Floor Space

- **Commerical food service**
- **Tankless water heating**
- **Thomson, Georgia**

“We install natural-gas fired tankless water heaters in all of our new construction because they perform well and are costeffective.” This is Lee Brantley, manager of a Sonic Drive-In in Thomson, Georgia. This restaurant is one of a group of Sonic restaurants in Georgia that have chosen to use Rinnai tankless water heaters as the sole source of hot water. They were attracted to this application because of its operating efficiency, and its ability to conserve floor space.

Headquartered in Nagoya, Japan, Rinnai is a long-established firm with a wide line of gas-fired products for heating, cooking and water heating. It has been especially prominent in the area of gas-fired tankless water heating. The firm manufactures these water heaters for both the residential and commercial markets.

Heats when water is needed

The unique feature of tankless water heaters is their ability to heat water only when it is demanded by users, thus dramatically reducing standby energy losses incurred with storage water heaters. Further, the supply of hot water is essentially inexhaustible, because the unit begins heating immediately and can supply water in large volume. An additional advantage to the tankless system is its relatively compact size, thus conserving floor space.

According to Brantley, the new Sonic building in the City of Thomson was completed in August 2003, and the water heater was installed by the contractor that built the facility. He said the decision was driven by his company's experience with tankless units in its other facilities. A reliable source of hot water is required for the restaurant for food preparation and cleanup, hand washing, and general cleaning. The Rinnai "Continuum" water heater provides up to 8.5 gpm of hot water, more than enough to supply the Thomson restaurant.

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Both indoor and outdoor models

The unit is available in both indoor and outdoor wall-mounted models. In both models, the unit is 24 in. high by 14 in. wide by 9 in. deep. The indoor model, the type used by Sonic, has a 5-in. wall flue. The Rinnai unit has an electronic ignition system, improving efficiency by eliminating the need for a standing pilot light. The unit has multiple safety devices, including a flame detector to detect flame failure, overheat sensors, a boiling protection switch, and a thermal fuse. Additionally, it has freeze protection down to -30°F.

The water heaters have a remote control panel for the owner to set or adjust desired water temperature. Units are commonly set to supply water at 140°F, but can be adjusted to meet specific needs, either upward or downward. The remote control also displays diagnostic codes if the water heater requires service or maintenance.

Wide range of applications

Rinnai indicates the units are suitable for a wide range of commercial applications, including restaurants, convenience stores, assisted living centers, schools, and hair salons. The unit is also suitable for residential use. In commercial or residential situations where a larger volume of hot water is needed, multiple units can be installed.

According to Lee Brantley at Sonic, they have been pleased with the performance with the units. "They are trouble-free and perform very well." For this and many other applications, tankless water heaters supply hot water when it is needed and only when it is needed.



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