

TECOCHILL®

- Gas-engine water chiller
- 150 refrigeration tons
- 118-room hotel
- South Miami, Florida



Owners of the newly built Hotel Vila opted for a gas-engine water chiller as an alternative to individual room A/C units. As expected, significant energy and operating cost savings resulted.

The Hotel Vila is a four-story Mediterranean-style hotel built in 1991. When the design engineer presented owners with the plans for the facility's construction, they requested a more energy-efficient cooling option than the traditional individual room air conditioning units. The engineer then suggested a natural gas engine chiller. An energy and cost analysis prepared by City Gas Company convinced them, and a TECOCHILL® CH-150 was installed.

The chiller's optional heat recovery feature, selected by the hotel, reclaims its thermal energy and uses it to generate hot water for the kitchen, laundry, swimming pool, and other domestic uses. At full load, the

TECOCHILL® chiller unit yields 700,000 Btus per hour for water heating.

Guillermo Terrones, chief engineer, said he and the owners are quite pleased with the unit's operation. Specifically, they've seen a 46 percent savings in energy efficiency compared to individual room air conditioners. Projected operating savings amount to \$43,000 per year. Further cost savings came from an equipment rebate offered by City Gas Company as an incentive to customers choosing gas chillers over electric. Most importantly, the TECOCHILL® has provided 98.9 percent availability; an important consideration in a business whose success depends on customer





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satisfaction and comfort.

The TECOCHILL® unit measures up from an environmental standpoint as well, since it uses the preferred HCFC-22 refrigerant. R22 has a 95 percent reduced ozone depleting potential.

The Hotel Vila's TECOCHILL® unit even stood up to a natural disaster and emerged as a "hero," Terrones said. Hurricane Andrew plowed

through Miami in August 1992, causing the hotel to lose electric power for more than a week. However, a rental standby generator provided power for the hotel's facilities, including the gas chiller unit. The hotel quickly filled with guests whose homes had been damaged or destroyed by the storm.

