

Light Commercial DHW System

Thermal Storage Tank + Heat Pump + Control Dashboard

The unpressurized thermal energy storage tank holds 350 gallons of water as a storage medium to meet domestic hot water needs. Its lightweight, modular components fit through a standard doorway, simplifying transport and installation in space-constrained projects.

The Chiltrix CX35 Heat Pump delivers 3.4 tons of heating capacity with high-efficiency performance, including a seasonal heating rating of 4.69 SCOP and a 4.9 COP (40,468 BTU at W95/A47). It uses R32 refrigerant and operates quietly at just 49 dB(A).



Photo: Installation site in Fort Lauderdale, FL.

REAL BENEFITS

Flexibility

Modular and lightweight tank construction fits easily into most spaces, with durable materials to withstand the environment.

Smarter Systems

Heat Pumps are becoming the standard for meeting emissions goals. Paired with intelligent controls that run the system to maximize savings for the user.

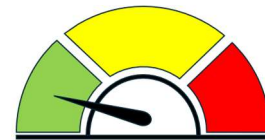
SIZE TO YOUR NEEDS

System Sizing

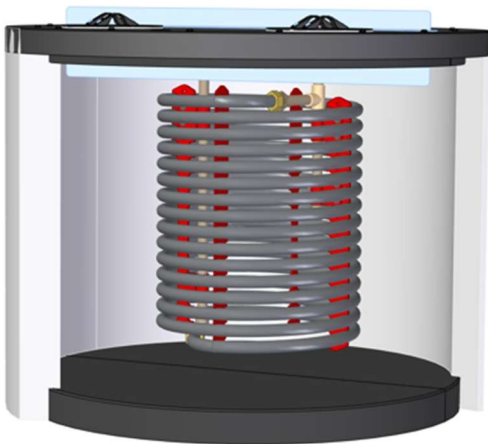
350 Gallon TES Tank
3.5 Ton Heat Pump

Suitable Examples

50 Hospitality Suites
Light Commercial Cooking Applications



LIGHT COMMERCIAL APPLICATIONS



Cutaway view: The 3D rendering shows a submerged heat exchanger within a thermal storage tank. The coiled heat exchanger is a gray color. In normal operation, the tank is filled with water heated by the heat pump, the domestic water will flow into the heat exchanger, gather the stored thermal energy, and exit back through the top of the tank. The color of the tank walls have been altered to show detail.

INSTALLATION

- Modular components fit through standard doorways.
- Flexible configuration, tank and heat pump can be installed in most places with project specific plumbing.
- Use the Control Dashboard to set the tank target temperature.

MATERIALS & CONSTRUCTION

- **Structure:** Engineered foam insulation — base, walls, and lid for superior thermal retention
- **Outer Hoop:** Thermoplastic polyolefin (TPO) — durable, weather-resistant
- **Liner:** Polyvinyl chloride — long-term, corrosion-free reliability
- **Heat Exchanger:** Corrugated stainless steel — maximum surface area for rapid heat transfer
- **Plumbing:** Non-corrosive materials throughout, engineered for lasting performance

SYSTEM COMPONENTS & TECHNICAL SPECIFICATIONS

350-Gallon Thermal Storage Tank				
Capacity	350 gallons			
Dimensions	60" Dia. x 49.6" H			
Weight	130 lbs. (Empty), 3,089 lbs. (Full)			
Max Working Fluid Temp.	200°F			
Thermal Storage Capacity	54.6 kWh @ 35° C delta			
Temp. Loss per 24hr	3.8° F			
Heat Exchanger				
Material	32mm Dia, Corrugated stainless-steel			
Length	30 meter			
Design	Immersed closed-loop system			
Plumbing Connection	1" NPT			
Chiltrix CX35 Heat Pump				
Dimensions	44.0" x 38.5" x 16.7"			
Weight	276 lbs.			
Electrical	208-240 VAC, 50-60Hz, 1Ph; 20 A			
Max Water Temp.	131° F			
Thermal Capacity	3.4 tons heating			
Heating Seasonal Average	4.69 (SCOP)			
Sound	49 dB(A)			
Refrigerant Type	R32			
	Ambient / LWT (°F)		Capacity BTU / COP	
Heating	47° F / 95° F		40,468 4.9	
	32° F / 95° F		31,118 3.88	
	17° F / 95° F		25,113 3.24	
Control Dashboard				
Live System Data	Program and View the System in Real Time			
History	View Historical System Usage			
Savings	Estimated Savings From Your System			
Updates and Alerts	System Alerts and Reminders			

THERMALENERGY HQ

sales@thermalenergyhq.com | ThermalEnergyHQ.com
900 S. Glaspie Street, Oxford, Michigan 48371, USA