

Connecticut's 1st Solar Thermal - Gas Heat Pump Combination



Robur Gas Heat Pumps continue their versatile benefits in the HVAC marketplace!

This historic landmark building once home to Marlow's Department Store for 83 years in Manchester, CT was recently renovated to be the new home of retail tenants, a non-profit organization and residential apartment dwellers.

Now entering a new era, this "green" revitalization is known as Dowling on Main and features 15-tons of natural gas-driven heat pumps on the roof, installed to provide the hot water

for heating 12 apartments in combination with a solar thermal system demonstrating the versatility that gas heat pumps offer in answering today's heating and air conditioning needs.



Cooling and heating with a unique gas-fired, high-efficiency Robur heat pump offers many benefits that other systems just are not capable of providing.

The heat pump supplies hot water up to 140°F **or** chilled water down to 37.4°F. The same unit is suitable for heating and cooling by reversing the absorption cycle.

In the heating mode the system is 126% efficient, greater than any other gas system available today and by shaving peak electric demands in Summer, the gas cooling saves you more \$.

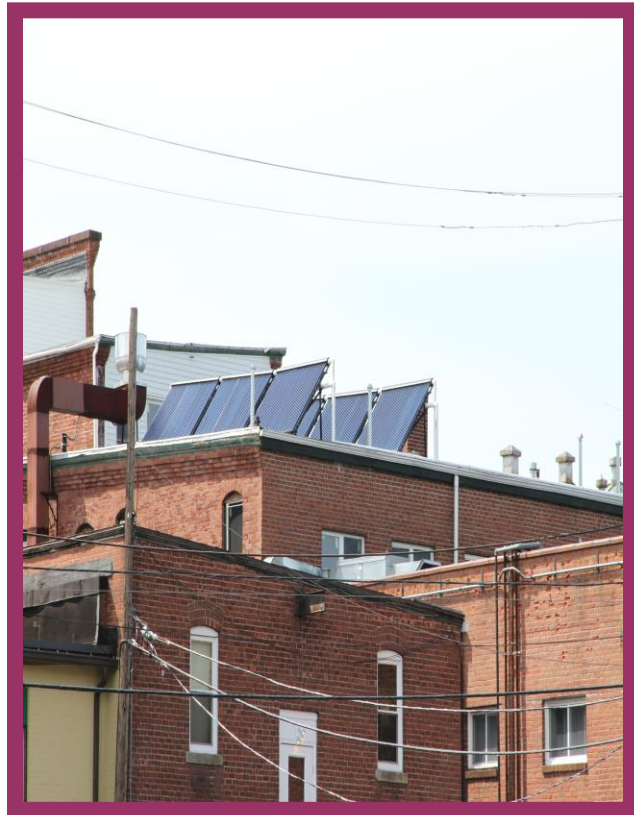
The solar thermal system takes energy from the sun to heat water that provides heating for the apartments as well as domestic hot water. The hot water produced is stored in tanks to be used as needed.

Since the solar system does not provide the hot water needed 100% of the time, the Robur GAHP-ARs pick up the slack when needed.

Using *natural gas*, combined with *renewable heat* obtained from the atmosphere, the GAS heat pump offers **over 126% efficiency**.

When the Sun is lower on the horizon, as it is during the winter months, the Robur **GAS** heat pumps pick up more of the load, supplying the hot water for both the heating and the apartments' domestic needs.

Come summer, the GAHP-AR unit reverses and provides 15-tons of 45°F chilled water for cooling, using only 2.25kW or 30 amps of 208V, single-phase power.



Rooftop Thermal Solar Panels

In order for the thermal solar system to be approved for energy incentives from the State's *Energy Efficiency Fund*, it must have a back up system. The Robur heat pumps are ideal companions for this type of system. For additional information on this installation or how to apply for the State's energy incentives, please contact, Brian or Hank Cullinane at 860-528-0081 or email Hank or Brianc@clover-corporation.com.