# Slant/Fin. COMBIACAT

DOMESTIC HOT WATER PRODUCTION SYSTEM



The Combi-Cat is a unique way to make domestic hot water using a high efficiency boiler as the heat source. Incorporating a brazed plate stainless steel heat exchanger, boiler water flows between half the plates transferring heat to domestic water on the other side of the plates. This remarkable unit transfers heat to the domestic hot water with nearly 100 percent efficiency. It requires no maintenance or cleaning and will last for years and years. A circulator pump and flow switch are included. The pump is sized to overcome the friction losses of the boiler and the heat exchanger and therefore provides enough boiler water flow to transfer the maximum amount of heat energy from the boiler to the domestic hot water.

The hot water production is limited primarily by the boiler's BTUH output (see chart on next page). As soon as there is even a minimal flow of domestic hot water, the flow switch activates both the boiler and the circulator and within seconds hot water will be available for domestic purposes.



- Ideal for small residences
  - Provides up to 4 gpm hot water with 120 MBH boiler
  - Provides 6.5 GPM of hot water at 55°F temperature rise (see chart on back) with 200 MBH boiler
- Heat transfer from boiler to DHW with nearly 100% efficiency
- Maintenance-free brazed plate stainless steel heat exchanger
- Wall Hung, light weight, easy to install
- Reversible mounts with piping facing left or right
- Taco 0011 circulator with integral flow check
- Flow switch included





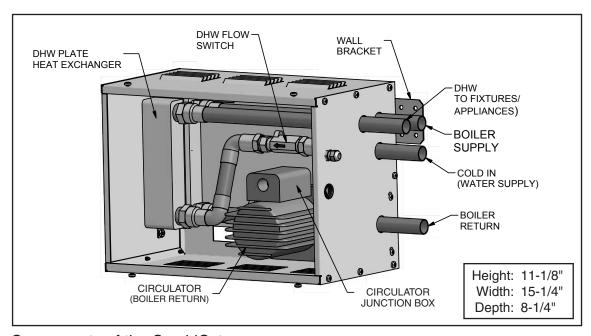




### DOMESTIC HOT WATER PRODUCTION SYSTEM

### **Components Included**

- 1. See figure below for the identification and location of each component and piping connection provided in the DHW system.
- 2. The DHW pump is sized for the required flow rate through the plate exchanger to provide adequate hot water production.
- 3. A flow switch is provided to detect any flow of domestic water, and will energize the DHW pump and give a call for the burner to operate as required for the demand.
- Combi-Cat pump provided has integral flow check, to prevent water flow in the DHW boiler loop when it is running for space heating demand.



# Components of the CombiCat

## "DHW temp rise"

The amount of hot water produced is largely dependent on the BTUH output of the boiler, the desired flow rate, the temperature of the hot water desired and the temperature of the incoming cold water. In winter, water can be as cool as 40°F. Therefore if you want 105°F water (approximately the temperature one would like for a shower, a 65 degree temperature rise is required. With a Bobcat 120 about 3.2 gpm would be available, for example. See the box on the right for more information.

# **DHW Temp. Rise vs. Water Flow**

TEMP. RISE △t°F	DHW FLOW RATE - GPM				
	LX-85A BOILER	LX-90 BOILER	B-120A or LX-120 BOILER	LX-150 BOILER	B-200A BOILER
100	1.4	1.6	2.0	2.3	2.5
80	1.8	2.0	2.5	3.3	3.75
70	2.1	2.3	3.0	4.0	4.75
60	2.5	2.7	3.5	4.5	5.75
55	2.8	3.0	4.0	5.0	6.5



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