

Please complete ONE (1) form for each site at which a TL FULCRUM Water Heater is installed and return it to TL for Warranty validation within 30 Days of start-up. After completion, email this form to info@thermalleverage.com

Completed By: _____

Date _____

UNIT AND LOCATION

Installation Name: _____

Technician: _____

Street Address: _____

Company: _____

City, State, Zip: _____

Phone: _____

TL Sales REP: _____

Email: _____

EQUIPMENT DESIGNATION

Model Number of Water Heater: _____

Serial Number of Water Heater: _____

Other Please Specify: _____

INSTALLATION DETAILS

1. Is the relief valve and dump solenoid piped to a safe drain? _____
2. Is there an electrical service switch on the wall away from the unit? _____
3. Does the unit have sufficient clearance at the front and sides to operate the unit? _____
4. Is the unit properly grounded from the control Panel? _____
5. Is all communication wire properly shielded? _____
6. What is the system Steam pressure? PSI _____
7. The system application is Potable Water, Process Water, Washdown, Other _____
8. If multiple units are installed are they piped reversed return or center feed? _____
9. If a mixing valve is installed at the outlet does it have a bypass to recirculation? _____

WATER HEATER INSTALLED WITH STORAGE TANK

1. Is the Storage Tank is Stratified or Aqua Booster setup? _____
2. What is the Storage Tank Volume? USG _____
3. What is the heater outlet temperature set point? _____
4. If Aquastat is used on Tank specify its location Top Middle or Bottom? _____
5. What is the Aquastat set temperature. _____
6. Does the Aquastat control the Pump between the Tank & Heater? _____
7. Is there a throttling valve installed between the pump & heater? _____
8. Is there a bypass loop around the pump? _____
9. What is the capacity of the pump? GPM _____

WATER HEATER INSTALLATION

1. Are check valves installed on the domestic water inlet and recirculation lines? _____
2. Is the Building recirculation line connected to the cold water inlet? _____
3. What is the design system flowrate? GPM _____
4. What is the Boiler Water inlet temperature? _____
5. What is the Boiler Water Pressure? _____
6. What is the design boiler plant delta T? _____
7. Is there a dedicated pump to supply the Boiler Water to the Unit? _____
8. What is the flow rating of the pump? GPM _____
9. Is there a Buffer Tank used with the TL heater? _____
10. What is the Steam Supply Pressure to the unit? PSI _____
11. Is the condensate from the trap gravity drain with no lifts _____

WATER QUALITY

TL recommends that a sample of the units input water supply be tested to ascertain if it will have an adverse effect on the materials of construction of the water heater.

1. What is the pH of the water? _____ pH Between 6.3 to 9.8 is acceptable
2. What is the hardness of the water _____ Grains per gallon 2-11 is acceptable
3. Is there any water softening or chemical treatment of any kind _____
 If yes what kind Salt, Chlorine Dioxide, Other _____

CONTROL PANEL SETTINGS

Please indicate if any changes have been made to the factory settings

Factory Setting	Value	Field Value	Factory Setting	Value	Field Value
Primary Alarm	150F		Derivative	0	
Primary Alarm off	150F		Dead Band	0	
Secondary Alarm	160F		Valve Open %	60	
Secondary Alarm off	160F		Pump	On	
Set Point	120F		Aquastat	180F	
Proportional Gain	120				
Integral	40				

The Autotune function should be used once the unit has been operating normally for at least 5-10 minutes and the unit is experiencing several cycles where it passes below and above the set point.