

# SUPERStor GL

## **GLASS LINED STORAGE TANK**



Available in 50-, 80-, 119-, and 175-Gallon Models

#### The most efficient way to store hot water for residential and commercial applications.

More hot water and increased storage capacity. Installed individually or in multiple applications, The SuperStor Coil Booster Glass Lined Storage Tank can provide 80% draw capability without an appreciable temperature decrease in single temperature applications.

#### **Construction Features**

- Long life tank
   design
   Unique steel
   formulation with high temperature porcelain
   enamel to maximize
   corrosion resistance
   resulting in a superior
   tank design.
   Heavy duty
   magnesium anode
   rod(s) are installed for
   longer tank life.
- Efficient design
  Rigid polyurethane foam
  insulation provides superior
  insulating qualities that
  allow less than 1 degree
  F per hour heat loss (24
  degreess F in 24 hrs.)
  resulting in reduced
  operating costs. The patented
  process of injecting foam
  into the insulating cavity
  adds additional durability
  and toughness to the tank.
- Tank Openings
   Circulating line connections
   and hot outlets are 3/4" NPT on
   the GL-50, 2" NPT on the GL-80
   and GL-119 and 2-1/2" NPT on
   the GL-175. Other openings are
   provided for relief valve and
   temperature control. The GL 175 is equipped with a hand hole cleanout.

#### **Certifications and Ratings**

Optional ASME Construction
 ASME construction is available on
 storage models GL-80 ASME/GL-119
 ASME/GL-175 ASME. Certified to
 ASME boiler and pressure vessel code
 standards.

#### **Limited Warranty**

 This product features a five-year limited warranty against tank leaks.
 See warranty brochure for complete details.

#### **Features and Benefits:**

- Glass lined steel tank for long life.
- 1½"-thick foam insulation allows less than 1 degree F per hour heat loss (24 degrees F in 24 hours) for easy servicing.

## **Plumbing**

It is important that all plumbing is done in accordance with all local, state, and federal plumbing codes and that thread dope (provided) be used on all mechanical connections.

NOTE: The use of heat, such as blow torches, etc., near the tank, may cause distortion to the high density polyethylene wrapper. Caution should be exercised.

NOTE: When filling the tank, make sure you open a hot water tap to release air in the booster tank and piping system.

## **Operating Your Glass Lined Storage Tank**

Boiler high limit should be set at least 20 degrees F. higher than the booster tank temperature setting. Temperature setting of 120 degrees F. is recommended, or use setting in accordance with local and state codes for normal operation. You may prefer a lower temperature setting to satisfy your needs. A mixing valve in connection with a higher temperature setting may be used for high demand applications (saunas, spas, hot tubs, whirlpools)

NOTE: If draining of the tank is necessary, open the T & P valve or a hot water tap to prevent vacuum buildup in the tank and piping.

#### **Domestic Hot Water Outlet Connection**

Use both thread tape and pipe dope and connect an NPT brass tee (refer to dimensional information chart for the correct connection size for your tank) In the run off the brass tee, install an NPT brass T&P valve long element for hot water storage tanks, required by local codes, but not less than the valve certified as meeting the requirements for relief valves for hot water heaters (ANSI Z212B-1984) by a nationally recognized lab that maintains periodic inspection of production listed equipment. Make sure the relief valve is sized to the BTU and storage capacity of the tank. The temperature and pressure relief valve must be plumbed down so discharge can exit only 6" above or at any distance below the structural floor and cannot be in contact with any live electrical parts.

#### **A WARNING**



Water temperature over 120 degrees F. can cause severe burns instantly, or death from scalds. Children, disabled, and elderly are at highest risk of being scalded. See instruction manual before setting temperature at water heater! Feel water before bathing or showering. Temperature limiting valves are available, see manual.



# **5 Year Limited Warranty**

Heat Transfer Products, Inc., warrants to the original retail purchaser, that Heat Transfer Products Inc. will furnish a replacement GL series tank assembly in the event of tank leakage or defects in material, workmanship or repair same at our option, at no cost to the original retail purchaser, except as set forth in the warranty. Heat Transfer Products Inc. shall not, under any circumstances, be liable for incidental and or consequential damages and expenses resulting from alleged defects under this warranty.

## **Accessories and Options**

**GL-KT1** Aquastat cover with BX and line cord (for GL-50 series only)

GL-KT2 Aquastat cover with BX, line cord and bronze pump (for GL-50 series only)

## **Dimensional Information**

Plastic Jacketed (Non-ASME)												
							Water Connections		Tank Capacity		Maximum	Approximate
Model Number	Units	A	В	C	D	E	Hot Outlet	Front Side	Gallons	Liters	Working Pressure	Shipping Weight
GL-50 (non-ASME)	inches	52"	19-1/4"	14"	7″	45"	3/4" NPT-M	3/4" NPT-M	50	189	150 PSI	120 lbs.
	mm	1320	489	355	177	1143	19	19			1034 kPa	54 kgs
GL-80 (non-ASME)	inches	59"	23-1/4"	13"	7″	51-1/4"	2" NPT-M	2" NPT-M	80	303	150 PSI	165 lbs.
	mm	1498	590	330	177	1302	50	50			1034 kPa	75 kgs
GL-119 (non-ASME)	inches	64"	27"	13"	4-1/16"	55"	2" NPT-M	2" NPT-M	115	435	150 PSI	250 lbs.
	mm	1625	685	330	177	1397	51	51			1034 kPa	113 kgs

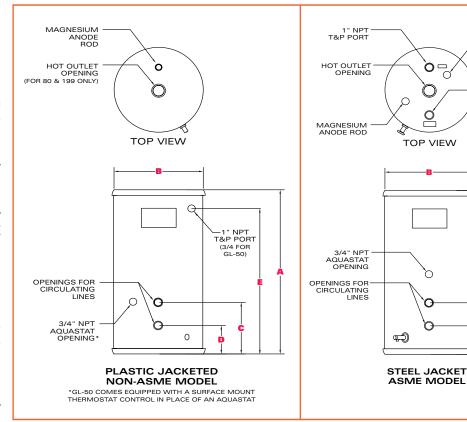
Metal Jacketed (ASME)											
						Water Connections		Tank Capacity		Maximum	Approximate
Model Number	Units	A	В	C	D	Hot Outlet	Front Side	Gallons	Liters	Working Pressure	Shipping Weight
GL-80 ASME	inches	58-5/16"	24-7/16"	13-3/16	6-3/16	2" NPT-M	2" NPT-M	80	303	125 PSI	260 lbs.
	mm	1481	621	335	157	51	51			862 kPa	118 kgs
GL-119 ASME	inches	59-1/4"	28-1/4"	11-1/16"	4-1/16"	2" NPT-M	2" NPT-M	115	435	160 PSI	340 lbs.
	mm	1505	718	281	103	51	51			1103 kPa	154 kgs
GL-175 ASME*	inches	67-1/4"	32-1/4"	12-9/16"	5-9/16"	2-1/2" NPT-M	2-1/2" NPT-M	175	662	150 PSI	600 lbs.
	mm	1708	819	319	141	64	64			1034 kPa	272 kgs

MAGNESIUM ANODE ROD

3/4" NPT THERMOMETER OPENING

## **Specifications**

Tank(s) interior shall be coated with a high temperature porcelain enamel and furnished with two magnesium anode rods rigidly supported for the metal jacketed and one magnesium anode for the plastic jacketed. Storage Tank(s) shall exceed the efficiency requirement of ASHRAE Standard 90.1b-2001. Tank(s) shall have a working pressure rating of 150 psi, and shall be completely assembled. Tank(s) shall be insulated with rigid polyurethane foam insulation. Storage Tank(s) shall be covered by a five year limited warranty against tank leaks.

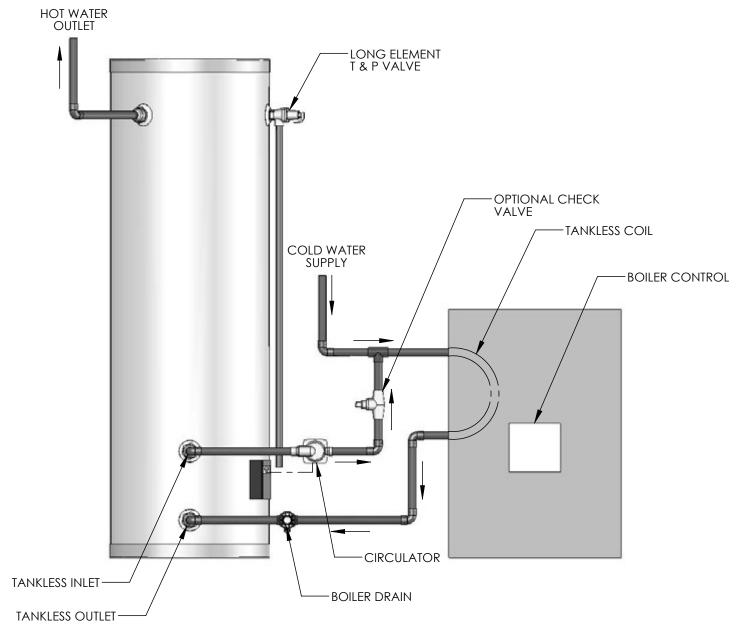


## **ASME Constructions**

Metal Jacketed Storage Tank(s) shall be constructed in accordance with the requirements of the ASME Boiler Pressure Vessel Code, Section IV Part HLW.

<sup>\*</sup>Also available in non-ASME model

## **Typical Glass Lined Storage Tank Installation**



**NOTE:** IF A BACKFLOW PREVENTER OR A NO RETURN VALVE IS INSTALLED, A THERMAL EXPANSION TANK IS REQUIRED ON THE COLD WATER INLET BETWEEN THE SUPERSTOR AND THE BACKFLOW PREVENTER.

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