



## SMALL VOLUME HOT WATER STORAGE TANKS 40, 50, 80, 119 & 200 GALLON



Thermal Solutions offers commercial small volume hot water storage tanks in 40, 50, 80, 119 and 200 gallons that are readily available:

- Tanks: **Vertical** - All carbon steel tanks are constructed either Non-ASME or ASME certified in accordance Section IV, Part HLW for maximum 180°F hot water temperature and 150 PSI working pressure. Optional 316L stainless steel tank design available.
- Interior: **Glass Lining** - The tank interior is a premium single glass enamel lining providing a rugged wear that minimizes the effects of high temperature hot water up to 180 degrees and has a minimum of 10 mils of finished glass. The glass enamel lining is tested under the following ASTM testing guidelines:
- **W-H-196 Test** - This test consists of exposing the enamel to a boiling (212°F) 4/10% solution of sodium Bicarbonate for (8) eight, (18) eighteen-hour cycles. Maximum weight loss after eight cycles is not to exceed 8 mg/in<sup>2</sup>.
  - **PEI T-21 Spot Acid Test** - This test is used to determine enamel resistance to acids. The test area is examined for visible effects on the enamel and is graded from Class AA (no sign of etching) to Class D (etched surface). Minimum grade shall be no less than A.
  - **Impact resistance** - The impact resistance test is used to determine the adhesive qualities of enamel to the substrate. The enamel is graded from Class 1 (worst) to Class 5 (best), fractured glass adhering solidly to the impact area. Minimum Class shall be no less than 4.
  - **Hi-Pot Test** - The HYPO test is a measurement of the continuity of the enamel coating (Spark Test). A maximum of Twenty (20) sparks shall be an acceptable count.
- Optional 316L stainless steel tank does not use a lining.
- Exterior: **Jacket & Insulation** - Factory installed heavy 24 gauge steel jacket finished with a baked acrylic enamel finish. The storage tank is completely encased in a minimum of 2" thick, high density polyurethane foam insulation that minimizes heat loss with an R value of 12.5 and meets the energy efficiency requirements of the latest edition of the ASHRAE 90.1 Standard.
- Optional 316L stainless steel tank has high density polyethylene plastic jacket.
- Warranty: **Five year Limited Warranty** - Against tank failure resulting from defects in materials and workmanship. Optional 316L stainless steel tank has a 1 year limited warranty.

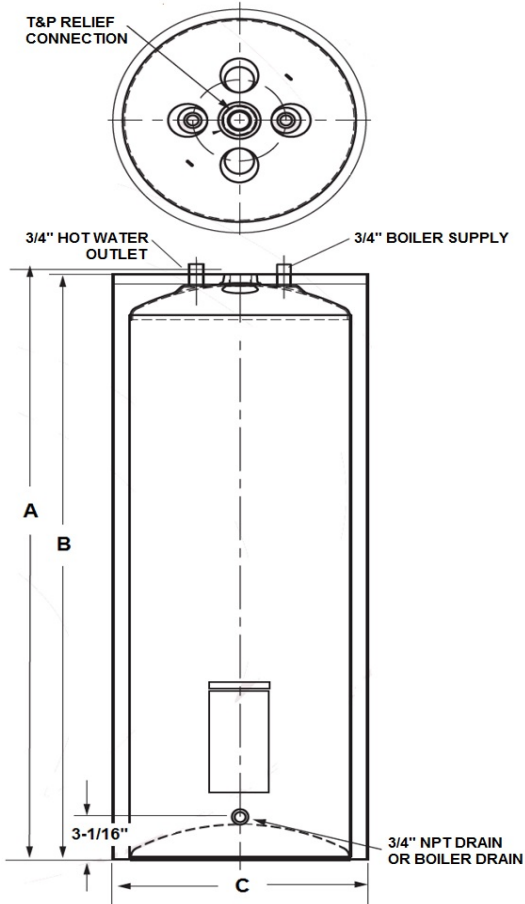
## Small Volume Hot Water Storage Tanks

MODEL NOMENCLATURE						
TS	V	119	-	J	1	-
Thermal Solutions	<b>Tank Configuration</b> V=Vertical	<b>Gallons Actual</b>	<b>Exterior</b> J=Jacketed & Insulated	<b>Lining</b> 1=10 Mils Glass	<b>Options</b> Blank=Non-ASME Design A=ASME Design S=316L Stainless	

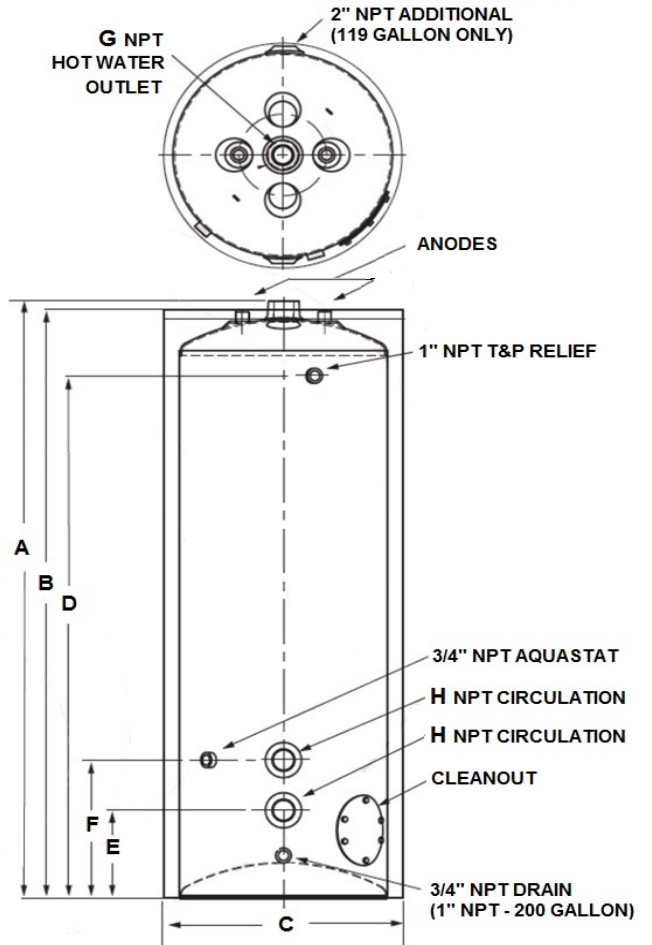
### VERTICAL CARBON STEEL TANKS - NON-ASME OR ASME CONSTRUCTED, 150 PSI

Model	TSV40-J1	TSV50-J1	TSV80-J1	TSV80-J1-A	TSV119-J1	TSV119-J1-A	TSV200-J1-A
Gallons	40	50	80	80	119	119	200
A) Height, Overall	47-7/8"	47-5/16"	59-3/4"	59-3/4"	63-1/2"	63-1/2"	78"
B) Height, Top of Jacket	46-5/16"	46-5/16"	58-3/4"	58-3/4"	62-1/2"	62-1/2"	77"
C) Diameter	22"	22"	24"	24"	28"	28"	32"
D) T&P Conn. To Floor	N/A	N/A	52-1/2"	52-1/2"	55-3/4"	55-3/4"	66"
E) Circulation, Bottom Conn. To Floor	N/A	N/A	9-1/4"	9-1/4"	9-1/4"	9-1/4"	11-1/4"
F) Circulation, Top Conn. To Floor	N/A	N/A	14-1/4"	14-1/4"	14-1/4"	14-1/4"	16-1/4"
G) Hot Output	N/A	N/A	2" NPT	2" NPT	2" NPT	2" NPT	2-1/2" NPT
H) Inlet/ Circulation	N/A	N/A	2" NPT	2" NPT	2" NPT	2-1/2" NPT	2-1/2" NPT
Shipping Weight	103 lbs	130 lbs	192 lbs	192 lbs	225 lbs	225 lbs	541 lbs

40 and 50 Gallon Models



80 Gallon and Larger Models



Notes:

- 1) Tank information is subject to change without notice.
- 2) Tank options not available.