# **GEOTHERMAL DOMESTIC HW & HYDRONIC**

STORAGE TANKS



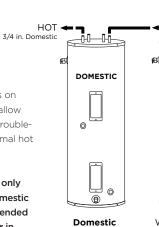
# ENERGY EFFICIENT

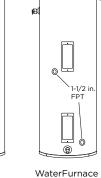
WaterFurnace geothermal storage tanks, available in 80 or 119 gallon capacities, are specifically designed to provide consistent water temperature and constant hot water in geothermal systems! Large plumbing connections, 2 in. (R-16) insulation, built-in temperature sensor, and *chilled water approved* make these tanks the perfect choice for geothermal hydronic systems. Complete with extra plumbing connections and deluxe features, our storage tanks are also a great choice for geothermal domestic hot water systems.

#### APPLICATION FLEXIBILITY

**DOMESTIC HOT WATER** A pair of 1 in. connections on top of the storage tanks allow for easy installation and troublefree operation in geothermal hot water assist systems.

NOTE: Geo Storage Tank only will not provide 100% domestic hot water and is recommended to connect a water heater in series as shown in the diagram.





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COLD

3/4 in. Domestic

1 in. Connections

Hot Water Heater Geo Storage Tank

WaterFurnace Water-to-Air Unit

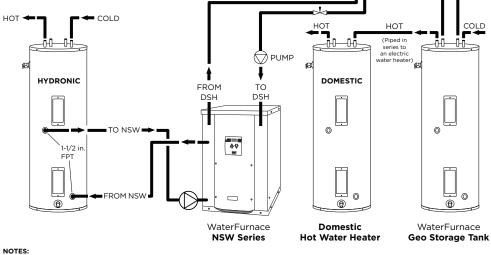
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Vent Valve/ P/T Port\*\*



Large 1-1/2 in. FPT re-circulating side connections (shipped plugged) are included for high-flow water-to-water units. The upper element provides easy use of auxillary/backup heat. The lower access panel houses a factoryinstalled thermistor for accurate tank set-point control.



\* 3 30 PSI pressure relief valve (Part No: SRV30) should be used in hydronic applications.
\*\* Vent valve or P/T port at highest point in return line prior to ball valve.



# OTHER APPLICATION FEATURES

*All 'cold' connections* feature a diffuser dip tube to reduce lime and sediment buildup and maximize equipment efficiency. Made from PEXAN, a cross linked polymer, these connections can withstand long term exposure to temperatures up to 400°F.

#### Factory installed temperature/pressure relief valve.

UL 174 Certified for household electric water heaters and factory approved for chilled water storage.

## RELIABILITY

*Glass-lined tank with two anode rods.* Primary and secondary aluminum anode rods provide maximum protection against corrosion.

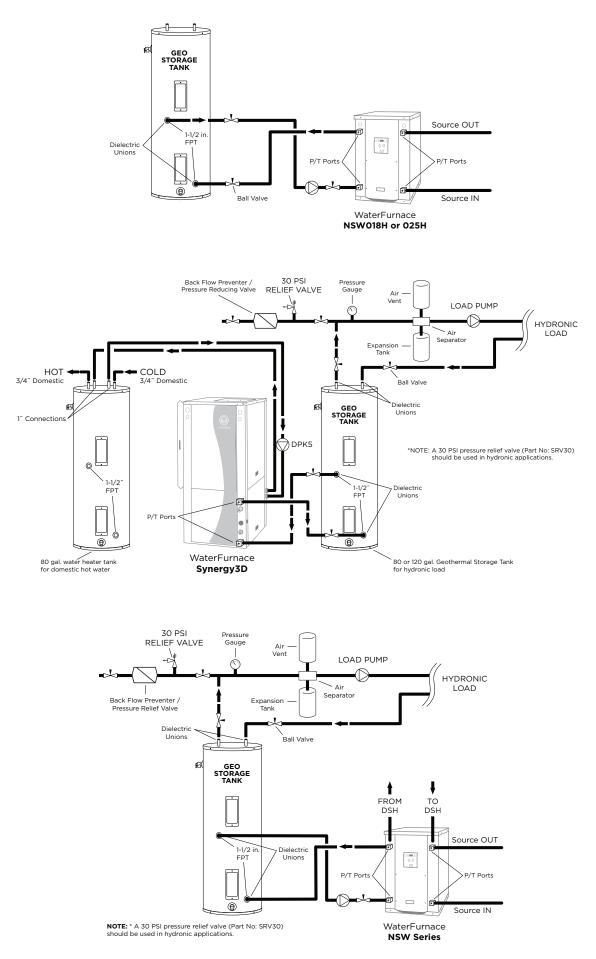
*Brass tamper-resistant drain valve* provides durability and longer life than plastic valves.

Sandhog low Watt density 4500 Watt Incoloy Steel
Heating Element is designed to last 2 to 3 times longer than standard copper heating elements.
5-Year Limited Tank and Parts Warranty.

30 300 To Geo 59" Dip Tube From Geo 1" x 3" Nipple w/1" x 3" Nipple  $\mathcal{O}$ PRIMARY ANODE 39″ - 80 Gallon θ θ Θ 42" - 119 Gallon 3/4" HOT OUTLET 3/4" COLD INLET w/14" SECONDARY ANODE 52" DIP TUBE Approx. 1" ł۳\_ Red Wire attached Т&Р to Thermistor or Thermostat VALVE for Top Exit HEIGHT Optional "To Geo" **Element Location** Connection Shipped with 1-1/2" Pipe Plug Installed £ Lower Sensor Thermistor (12P541-01) to be used by Water to Water Units 35-3/4 Optional "From Geo" Connection Shipped with 1-1/2" Pipe Plug Installed e **≜** QG 5-1/4 ¥ DRAIN VALVE DIAMETER Lower Thermostat to be used with Combination Forced Air/Hydronic

	Gallon	Element	Recovery	Numbers of	R Value	Dimensions in Inches		Approx.
Model Number	Capacity	Wattage (240 Volt)	90°F Rise Gallons/hr	Elements		Height	Diameter	Shipping Weight (lbs)
GEO-STORAGE-80	80	4500	21	1	16	63-1/4	24	204
GEO-STORAGE-120	119	4500	21	1	16	63-1/4	28	311

## PLUMBING DIAGRAMS



# TYPE L COPPER PRESSURE LOSS

Ft of Hd per 100 ft

	Type L Copper Tube							
GPM	3/4	1	1-1/4	1-1/2	2			
2	1.5							
3	3.2							
4	5.5	1.4						
5	8.5	2.1						
6		2.9	1.1					
7		3.9	1.4					
8		5.0	1.8					
9		6.1	2.3	0.9				
10		7.5	2.8	1.1				
12			3.9	1.6				
14			5.2	2.1				
16			6.6	2.7				
18			8.2	3.4				
20			10.0	4.1	1.1			
22				5.0	1.3			
25				6.3	1.6			
30					2.2			
35					2.9			
40					3.8			
45					4.7			
50					5.7			

**NOTE:** Standard piping practice limits pressure drop to 4 ft of hd per 100 ft.

## PARTS

Description	Part Number	
Top Element		
4500 Watt/240V	19P579-03	
5500 Watt/240V	19P579-02	
6000 Watt/240V	19P579-01	
Lower Bung with 1/8 tapped sensor		
1 in. NPSM with 1/8 in. FPT for sensor	22P554-01	
Single Element Thermostat	19P582-01	

**NOTE:** All Geo Storage tank replacement parts are drop shipped and do not include freight.

