

# GEOTHERMAL DOMESTIC HW & HYDRONIC STORAGE TANKS



## ENERGY EFFICIENT

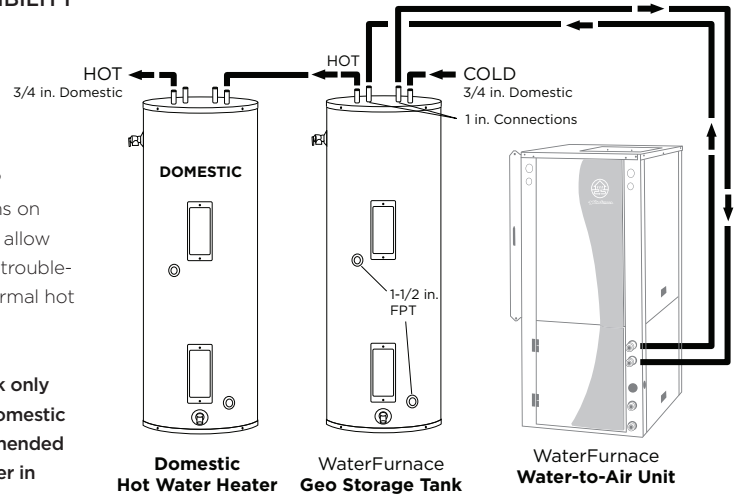
WaterFurnace geothermal storage tanks, available in 80 or 119 gallon capacities, are specifically designed to provide consistent water temperature and constant hot water in geothermal systems! Large plumbing connections, 2 in. (R-16) insulation, built-in temperature sensor, and **chilled water approved** 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

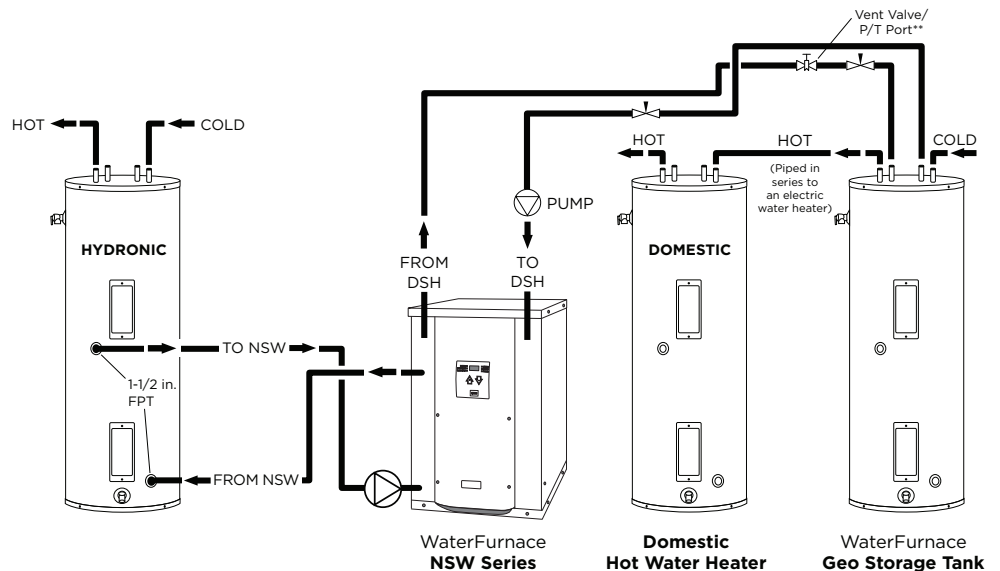
A pair of 1 in. connections on top of the storage tanks allow for easy installation and trouble-free operation in geothermal hot water assist systems.

**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.**



### GEOTHERMAL HYDRONIC

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 auxiliary/backup heat. The lower access panel houses a factory-installed thermistor for accurate tank set-point control.



#### NOTES:

- \* A 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.

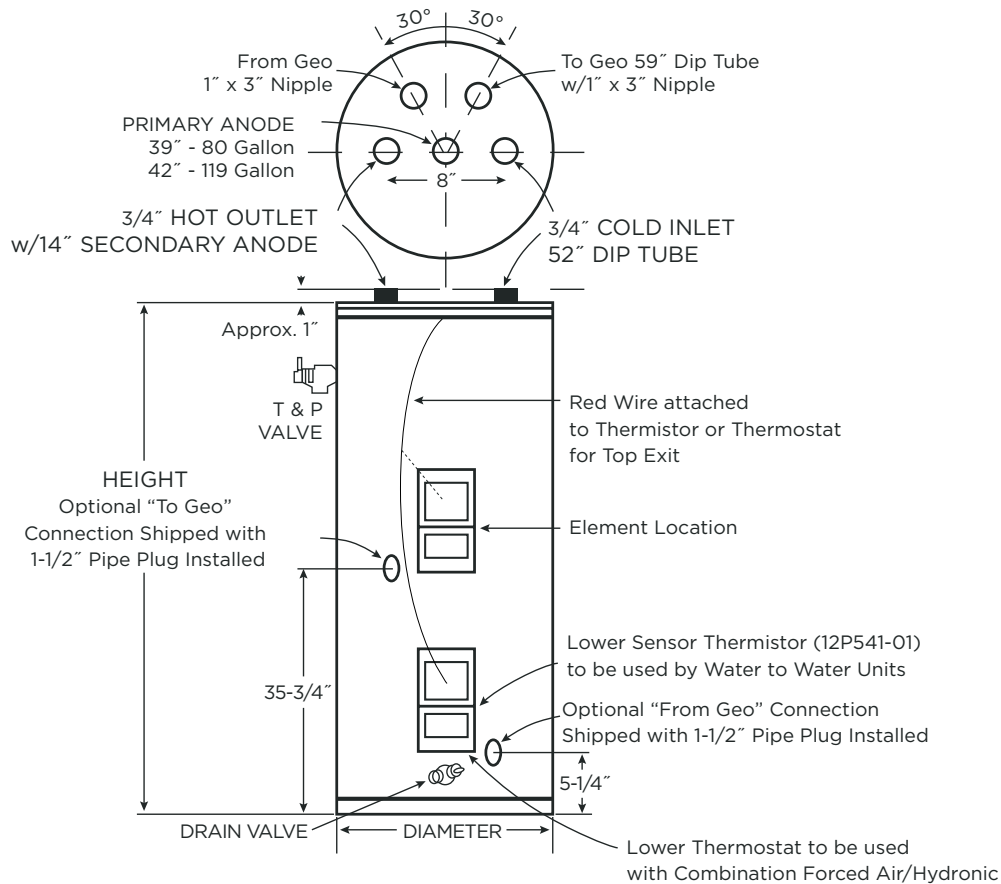
## RELIABILITY

**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.

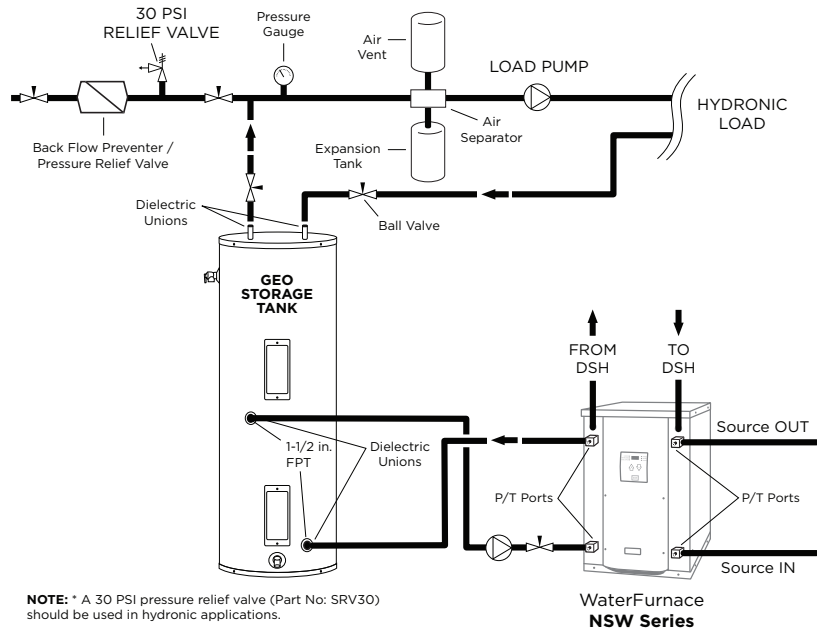
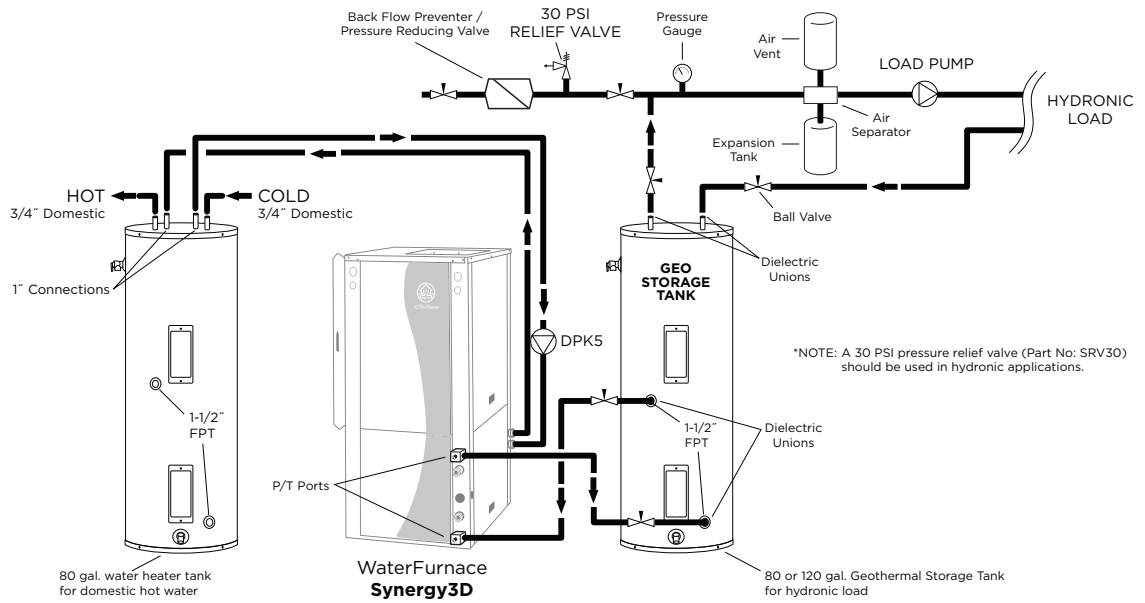
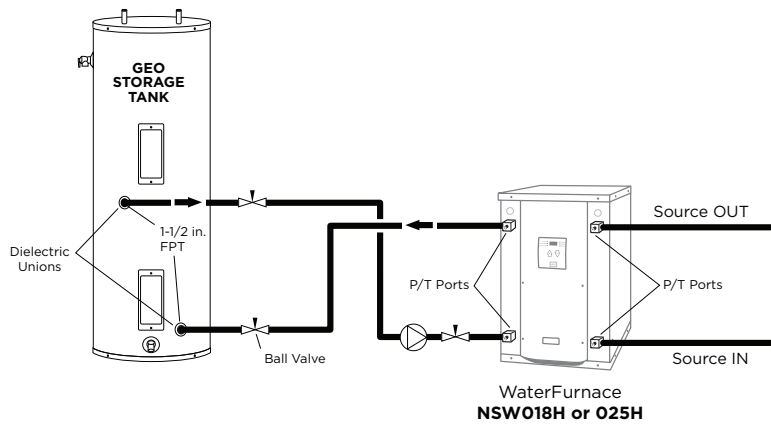
**Sandhog low Watt density 4500 Watt Incoloy Steel Heating Element** is designed to last 2 to 3 times longer than standard copper heating elements.

**5-Year Limited Tank and Parts Warranty.**



| Model Number    | Gallon Capacity | Element Wattage (240 Volt) | Recovery 90°F Rise Gallons/hr | Numbers of Elements | R Value | Dimensions in Inches |          | Approx. Shipping Weight (lbs) |
|-----------------|-----------------|----------------------------|-------------------------------|---------------------|---------|----------------------|----------|-------------------------------|
|                 |                 |                            |                               |                     |         | Height               | Diameter |                               |
| 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

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