



# SUBMITTAL : ECO-HZ505GLNST

## 505 Gallon Horizontal Tank



|                  |  |
|------------------|--|
| Job Name         | Location   |
| Purchaser        | Engineer   |
| Submitted to     | Reference <input type="checkbox"/> Approval <input type="checkbox"/> Construction <input type="checkbox"/> |
| Unit Designation | Schedule #   |

|   |                           |
|---|---------------------------|
| <b>Specifications</b>                                   | <b>GS4-45HPC &amp; -D</b> |
| <b>Performance per GS4-45HPC &amp; GS4-45HPC-D unit</b> |                           |
| Capacity per Heat Pump                                  | 4.5kw or 15,400 Btu/h     |
| Recovery per HP @ 90°F Rise                             | 20.6 Gallons per Hour     |
| <b>Storage Tank</b>                                     |                           |
| <b>ECO-HZ505GLNST</b>                                   |                           |
| Tank Volume Actual/Nominal                              | 505 / 558 Gallons         |
| Pressure Relief Valve (Psig & °F)                       | 125 Psig                  |
| Temperature Sensor                                      | Thermistor                |
| Installed Tank Weight (lbs)                             | 874lbs                    |
| Shipping Tank Weight (lbs)                              | 1350lbs                   |
| Anodes  | 3 x Magnesium             |
| <b>Tank Connection Sizes</b>                            |                           |
| Cold Water Inlet  | 2 1/2" NPT                |
| Hot Water Outlet  | 2 1/2" NPT                |
| Cold Water to Heat Pump                                 | 1 1/4" NPT                |
| Hot Water Return from HP                                | 1 1/4" NPT                |
| <b>Pipe Size - Tank to Heat Pump</b>                    |                           |
| Cold Water pipe - Tank to HP                            | Based on # of GS4 units   |
| Hot Water pipe - HP to Tank                             | Based on # of GS4 units   |
| Max Pipe Length inc                                     | 66ft                      |
| Max Vertical Separation of                              | 23ft                      |
| <b>Approvals</b>  |                           |
| Tank  | ASME                      |
| <b>Warranty</b>   |                           |
| Tank  | 5 Years                   |

### Construction

The tank shall be manufactured from carbon steel with a baked on Ultonium porcelain enamel lining  
 Tank outer shell shall be covered with a spray on foam insulation with an acrylic top coat to allow both interior and exterior installation  
 Tank shall have ECO2 on the Insulation top coat

### Insulation

A minimum of 2" of R12.5 insulation shall be sprayed onto the tank to reduce heat loss and comply with California Title 24 requirements

### Connections

Connections to the Hot and Cold building supplies shall be 2 1/2" NPT Female type  
 Cold Water Inlet Connection to the Horizontal Tank shall be located on the bottom of the Tank and the Hot Water Outlet shall be at the top of the Horizontal Tank  
 This is to provide stratification on the Tank water storage

Connection to Cold supply from the tank to the Heat Pump shall be 1 1/4" NPT female type  
 Connection to Hot return from the Heat Pump to the tank shall be 1 1/4" NPT female type

### Controls

The tank shall be supplied with a Temperature sensor well for field installation so that Tank Temperature sensors are able to be inserted  
 Each Heat Pump connected to the Storage Tank shall require a 91101-45190 temperature sensor to be field installed in the Sensor well and wired directly to the Heat Pump  
 If the ECO-MSCTRL-BMS Multi Unit Controller shall be used it shall be supplied with a Tank Temperature sensor and Tank Cold Water to Heat Pump(s) sensor  
 All sensors shall be field installed to the Storage Tank

### Pressure and Temperature Relief

Tank shall be supplied with a field installed, ASME approved Pressure relief valve  
 Valve Setting shall be at 125 Psig  
 Relief Valve shall be piped to a suitable location in case of hot water discharge

|                  |            |                                   |                                       |
|------------------|------------|-----------------------------------|---------------------------------------|
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### Storage Tank Dimensions

