



# SUBMITTAL : ECO-HZ210JKNST

## 210 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-HZ210JKNST</b>	
Tank Volume Actual/Nominal	210 / 229 Gallons
Pressure Relief Valve (Psig & °F)	125 Psig
Temperature Sensor	Thermistor
Installed Tank Dry Weight (lbs)	622lbs
Shipping Tank Weight (lbs)	717lbs
Anodes	2 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" NPT
Hot Water Return from HP	1" 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 jacket of powder coated steel to provide a secure cover to the Tank and insulation to allow both interior and exterior installation  
 Tank shall have ECO2 on the Jacket

### Insulation

A minimum of 2" of R12.5 insulation shall be sprayed onto the tank to reduce heat loss and meets ASHRAE 90.1b (2010) requirements and complies with California Title 24 requirements

### Connections

Hot Water to, Cold Water from building connections shall be 2 1/2" NPT Female at the Top & Bottom of the Tank  
 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 Thermowell bulb so that field installation of the Tank Temperature sensors shall be 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

