Minimum Pipe Sizes

<table>
<thead>
<tr>
<th>Branch</th>
<th>Return</th>
<th>Main</th>
</tr>
</thead>
<tbody>
<tr>
<td>300</td>
<td>1-1/2</td>
<td>2&quot;</td>
</tr>
<tr>
<td>400</td>
<td>2&quot;</td>
<td>2-1/2</td>
</tr>
<tr>
<td>500</td>
<td>2&quot;</td>
<td>2-1/2</td>
</tr>
<tr>
<td>700</td>
<td>2&quot;</td>
<td>2-1/2</td>
</tr>
<tr>
<td>850</td>
<td>2&quot;</td>
<td>2-1/2</td>
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</tbody>
</table>

This piping diagram is RAYPAK's recommendation and is not intended to replace an engineered piping system designed by a professional engineer.

1. EXPANSION TANK
2. WATER PRESSURE REGULATOR
3. WATER SENSOR
4. PIPE DIAM MAX
5. SYSTEM PUMP
6. ISOLATION VALVES (TYP)
7. CHECK VALVE (TYP)
8. CONDENSATE DRAIN (TYP)
9. PRESSURE RELIEF VALVE (TYP)
10. BOILER PUMP (TYP)

PLUMB SWING CHECK VALVE IN GRAVITY CLOSED POSITION.
PIPE ALL RELIEF VALVES TO DRAIN, OR AS LOCAL CODES REQUIRE.
3. PIPE SIZE MUST BE EQUAL TO THE BOILER INLET/OUTLET SIZE. SEE "PIPE SIZES" CHART ABOVE.
4. CALIBRATED AT MAX FLOW.
5. CONDENSATE MUST BE PIPPED TO AN APPROVED DRAIN. LOCAL CODE MAY REQUIRE DEAERATION PRIOR TO DRAIN.
6. PROVIDE FOR THERMAL EXPANSION OF HOT WATER. IF A BACKFLOW PREVENTER, CHECK VALVE, WATER METER OR PRESSURE-REDUCING VALVE IS INSTALLED IN THE COLD WATER LINE.

PLUMB SWING CHECK VALVE IN GRAVITY CLOSED POSITION.

BOILERS SHOWN REPRESENT VARIOUS MODELS. BECAUSE INDIVIDUAL MODELS WILL VARY IN DESIGN AND SIZING, SEE EACH SPECIFIC BOILER TYPE FOR DETAILS.

UNLESS OTHERWISE SPECIFIED:
- ALL VENTS MUST BE CAulkED AND VENT CAPS MUST BE INSTALLED.
- ALL DUCTING MUST BE 72" MIN. DIAMETER.
- ALL PIPE SIZES MUST BE EQUAL TO THE BOILER INLET/OUTLET SIZE.
- ALL CONDENSATE MUST BE PIPPED TO AN APPROVED DRAIN.
- PROVIDE FOR THERMAL EXPANSION OF HOT WATER. IF A BACKFLOW PREVENTER, CHECK VALVE, WATER METER OR PRESSURE-REDUCING VALVE IS INSTALLED IN THE COLD WATER LINE.

RAYPAK, CUXHARD, CALIFORNIA

PIPING, HYDRONIC: 2 BOILERS, XYRE

ACAD: 8741.0WG

K. ANDREW
4-7-11
SPR

H 300-850
8741