HOT WATER DEMAND (Storage Tank Water Heaters)

**FACILITY NAME:**

**ADDRESS:**

<table>
<thead>
<tr>
<th>FIXTURE SERVED</th>
<th>NO. UNITS</th>
<th>GPH</th>
<th>TOTAL GPH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utensil / 3-Compartment Sinks</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mop Sinks</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outdoor Trash Area</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>Dump Sinks</td>
<td>X</td>
<td></td>
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</tr>
<tr>
<td>Handwash Sinks</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Preparation Sinks</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Handspray / Pre-rinse Units</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee Shower</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clothes Washer (9 and 12 lb washers)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clothes Washer (16 lb washers)</td>
<td>X</td>
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<td></td>
</tr>
<tr>
<td>Automatic Utensil Washing Machine*</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional Utensil / 3-Compartment Sinks</td>
<td>X</td>
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</tbody>
</table>

**TOTAL GPH (gallons per hour) =**

**Sizing Requirements for Storage Water Heaters (Not Instantaneous Water Heaters)**

| Facilities with multi-service eating utensils, heavy use (serving 3 meals a day) | 100% GPH required |
| Facilities with multi-service eating utensils, moderated use | 90% GPH required |
| Facilities with single service eating utensils or don’t use utensils at all | 80% GPH required |

Total GPH x _______ % (see sizing requirements above) _________ GPH required

**Computing the BTU input (Gas Water Heaters):**

- GPH required x 60º Rise x 11 = ________________ BTU input of water heater
- GPH required x 80º Rise x 11 = ________________ BTU input of water heater
  (if a 180º rinse automatic utensil washing machine with a 40º rise booster is used)

**Formula for Electric Water Heaters:**

- GPH required x (.149) = ________________ KW input required
  (60º rise)
- GPH required x (.2) = ________________ KW input
  (80º rise, if a 180º rinse automatic utensil washing machine with a 40º rise booster is used)

*NSF International or other nationally recognized testing laboratories are used to determine the minimum GPH hot water demand required for automatic utensil washing machines.*
## HOURLY HOT WATER DEMAND TABLE

### Utensil Sinks
- **18” x 18”** 14 gallons per compartment
- **24” x 24”** 25 gallons per compartment
- **Others** Calculate based on compartment use

**Custom sink** sizes can be calculated using the following formula:

\[
\text{Length (ft.)} \times \text{Width (ft.)} \times \text{Depth (ft.)} \times 7.5 = \text{gallons per compartment}
\]

### Bar Sinks
6 gallons per compartment

### Hand Sinks
5 gallons per sink

### Dishwashing Pre-rinse Units
- **Hand spray type** 45 gallons
- **Others** refer to manufacturer’s specifications

### Dishwashers
refer to manufacturer’s specifications

### Food Preparation Sinks
5 gallons per sink

### Clothes Washers
- **9 – 12 lb. washers** 45 gallons
- **16 lb. washers** 60 gallons
- **Others** refer to manufacturer’s specifications

### Employee Shower
20 gallons per shower

### Janitorial Sinks / Garbage Can Wash Facilities
15 gallons per sink

### Other Fixtures
refer to manufacturer’s specifications

For additional information on sizing and installation of water heaters see Guidelines for Sizing Water Heaters available on the CCDEH website: [http://www.ccdeh.com/committee/food/documents/](http://www.ccdeh.com/committee/food/documents/)