

## HOT WATER DEMANDS

ESTABLISHMENT \_\_\_\_\_ Date \_\_\_\_\_

ADDRESS \_\_\_\_\_

Fill In Applicable Fixtures	# Units	x	GPH =	=	Total GPH	=	GPM
<u>3-Compartment Sink (    " x    " x    " )</u>	<u>3 (basins)</u>		_____	=	_____		_____
<u>Pre-Rinse Unit for 3- comp sink</u>	_____		_____	=	_____		_____
<u>Bar 3- Compartment Sink</u>	_____		_____	=	_____		_____
<u>Hand Sink(s) including restrooms</u>	_____		_____	=	_____		_____
<u>Prep. Sink w/ faucet or pre rinse</u>	_____		_____	=	_____		_____
<u>Dishwasher #1</u>	_____		_____	=	_____		_____
<u>Dishwasher #2</u>	_____		_____	=	_____		_____
<u>Mop Sink w/ backflow faucet</u>	_____		_____	=	_____		_____
_____	_____		_____	=	_____		_____
_____	_____		_____	=	_____		_____
TOTAL GPH =					_____	<b>Total GPM= _____</b>	
						<b><u>Instantaneous</u></b>	

\_\_\_\_\_ TOTAL GPH x \_\_\_\_\_% (See sizing requirements below) = \_\_\_\_\_ GPH Required

### COMPUTING THE BTU INPUT (gas water heaters)

\_\_\_\_\_ GPH required x 60° rise x 11 = \_\_\_\_\_ **BTU** input of water heater

### FORMULA FOR ELECTRIC WATER HEATERS

\_\_\_\_\_ GPH required x .149 = \_\_\_\_\_ **KW** input

### SIZING REQUIREMENTS FOR STORAGE WATER HEATERS (not instantaneous water heaters)

Food facilities with multi service eating utensils, heavy use (serving 3 meals a day) 100% GPH required

Food facilities with multi service eating utensils, moderate use 90% GPH required

Food facilities with single-service eating utensils, or don't use utensils at all 80% GPH required

Food facilities that sell **only** prepackaged foods. A water heater with a minimum storage capacity of 10 gallons must be provided.

## HOURLY HOT WATER DEMAND TABLE

### UTENSIL SINKS

18" x 18"	14 gallons per compartment
24" x 24"	25 gallons per compartment

Custom sink sizes can be calculated using the following formula:

$$\text{Length (ft) x Width (ft) x Depth (ft) x 7.5 = gallons per compartment}$$

### BAR 3- Comp SINKS

6 gallons per compartment

### HAND SINKS

5 gallons per sink

### PRE-RINSE UNITS

Hand spray type	45 gallons
Other type:	Refer to manufacturer's Specifications for the equipment

### CLOTHES WASHERS

9 and 12lb. Washers	45 gallons
16 lb. Washers	60 gallons

### FOOD PREPARATION SINKS

5 gallons per sink

### EMPLOYEE SHOWER

20 gallons per shower

### JANITORIAL SINKS & GARBAGE CAN WASH FACILITIES

15 gallons per sink or facility

### OTHER FIXTURES THAT USE HOT WATER

Refer to manufacturer's specifications for the equipment or NSF® listing.

### INSTANTANEOUS WATER HEATERS

Instantaneous water heaters must be sized to provide hot water at a **60 degree rise at 120°F** and at a rate of at least **2 GPM to each sink (hand sinks must receive at least ½ GPM)**. NSF listings are used to determine the minimum GPM hot water demand for automatic dishwashers.

\*\*Refer to the water heater unit manual to verify sizing.

For additional information on sizing and installation of water heaters, see *Guidelines for Sizing Water Heaters* available at the Division of Environmental Health.