

Dishwashing Requirements

These Dishwashing Standards are a supplement to the Food Regulation (Alberta Regulation 31/2006) pursuant to the Public Health Act.

These Standards are to be used in conjunction with **Part 2, Section 28(2)** of the **Food Regulation** (AR 31/2006) made pursuant to the Alberta Public Health Act. These have been developed to establish minimum requirements for mechanical dishwashers and for manual dishwashing procedures.

Mechanical Dishwashing

The following will be considered in determining the suitability/operation of the mechanical dishwashing equipment.

1. Equipment must be maintained in proper operating condition at all times. Check the data plate on the machine and check to assure that the following conditions exist:
 - ◆ The “scrap trays” are clear of soil.
 - ◆ Dishes are properly pre-scraped and racked.
 - ◆ On conveyor type machines, curtains are intact and in proper position.
 - ◆ Tank interior is clear of buildup of lime, food spills, etc.
 - ◆ Wash and rinse nozzles are clear of obstructions.
 - ◆ Wash and rinse thermometers are operating properly.
 - ◆ Flow and pressure meter are functioning properly.
2. Mechanical dishwashers must conform to the applicable temperatures and/or chemical concentrations listed as follows:

High Temperature Machines

When checking temperatures consider these factors:

- a. There is close adherence to the manufacturer’s specifications.

- b. Heat accumulation on the dishes over a period of time, and not merely a single temperature, achieves proper sanitation. Therefore, both the wash and final rinse must be operating at the proper temperatures.
 - ◆ Dishwashers including stationary rack, dual temperature, single tank conveyor, dual temperature, and multi-tank, conveyor, multi-temperature machines require a minimum wash temperature of 60° C.
 - ◆ Dishwashers require a minimum final rinse cycle of 10 seconds duration with a rinse temperature measured at the manifold of at least 82° C.
- c. Unless the machine has been used just prior to testing, it should run through at least two complete cycles before temperature readings are taken.
- d. Maximum-registering thermometers and thermo-labels may be used to confirm the effectiveness of heat sanitation. For high temperature machines, a reading of greater than 71° C at the dish level, measured using a maximum holding thermometer, is an indication of satisfactory sanitation.

Low Temperature / Chemical Machines

Dishwashers using chemical sanitizers require the following:

- ◆ a chlorine solution of 100 ppm chlorine at a temperature of 13° C or warmer; or
- ◆ an iodine solution of 12.5 ppm to 25 ppm at a temperature greater than 24° C but less than 45° C; or
- ◆ a quaternary ammonium solution of at least 200 ppm at a temperature greater than 24° C; and
- ◆ chemical testing equipment (test paper) to confirm these concentrations.

Residential Machines

Residential dishwasher must be NSF approved and conform to the conditions / procedures listed below:

- ◆ This category of dishwasher is only suitable for use in bed and breakfasts, child care institutions, and other food establishments subject to the opinion of the Executive Officer.
- ◆ The dishwasher must be operated on the “sani” or “extended cycle” so that 3600 Heat Unit Equivalents are achieved.
- ◆ Under no circumstances are dishware or utensils to be removed for use prior to the completion of the wash, rinse and drying cycles.
- ◆ The dishwasher must be equipped with a device (gauge or light) that indicates the successful completion of the sanitizing cycle.

Manual Dishwashing

Manual dishwashing utilizing a three-compartment sink must conform to the following procedures/conditions:

1. All dishware, serving/dining/cooking utensils, pots and pans must be:
 - ◆ scraped to remove excess food prior to immersion;
 - ◆ cleaned in the first sink in a detergent solution capable of removing grease and food particles and is maintained at a temperature of not less than 45°C; and
 - ◆ rinsed in the second sink using clean water maintained at not less than 45°C; and
 - ◆ sanitized in the third sink by immersion for at least two minutes:
 - in water capable of maintaining a temperature of at least 77°C; or
 - in a chlorine solution with a concentration of 100 - 200 mg/l at a temperature greater than 45°C; or
 - in a quaternary ammonium solution with a concentration of at least 200 mg/l at a temperature greater than 45°C; or
 - in an iodine solution with a concentration of 12 - 25 mg/l at a temperature of less than 45°C.
2. To maintain the levels in accordance with the aforementioned parameters, thermometers for measuring water temperature and/or chemical testing equipment (test paper) capable of measuring the sanitizing agent concentration are required.
3. All dishes and utensils are to be allowed to air dry.
4. Washing, when using a two-compartment sink, must conform to the conditions listed below:
 - ◆ A two-compartment sink is only suitable for washing and sanitizing cooking utensils, pots, pans and other food preparation equipment.
 - ◆ The three-step procedure for washing, rinsing and sanitizing must still be followed as described below.
 - a. Items must be washed in the first sink, rinsed in the second sink and sanitized in the first sink by draining, then refilling the first sink with a sanitizing solution that has the same concentration as in the three-compartment method; or
 - b. Alternatively, items must be washed in the first compartment, rinsed either under the tap or by refilling the sink with clean water and then sanitized in the second sink by immersion in a sanitizing solution having the same sanitizer concentrations as in the three-compartment method.

For more information, please contact your nearest Environmental Public Health office.

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