Georgia Food Code Chapter 290-5-14 Equipment Spec Sheet

CLEANING FREQUENCY: Equipment food-contact surfaces & utensils shall be cleaned & sanitized each time there is a change from working with raw animal foods to RTE foods or between uses with raw fruits & vegetables and with PHF/TCS FOODS; before using or storing food TMD's; any time when contamination may have occurred; and before each use with different type of raw animal food, *except in contact with a succession of different raw animal foods each requiring a higher cooking temperature as specified under Rule 290-5-14-.04 subsection (5) (a) than the previous food, such as raw fish followed by cutting/preparation of raw poultry.*

Preparation Room Temperature		Cleaning Frequency
41°F or less	5.0°C or less	24 hours
> 41°F to 45°F	> 5.0°C to 7.2°C	20 hours
> 45°F to 50°F	> 7.2°C to 10.0°C	16 hours
> 50°F to 55°F	> 10.0°C to 12.8°C	10 hours
> 55°F unrefrigerated rooms	> 12.8°C	4 hours

Refrigerated room temperatures & cleaning frequency to be documented.

PHF/TCS FOODS, Food Contact Surfaces:

1. In storage, containers of PHF/TCS FOODS (maintained at Chapter 3 temperatures/date markings) are cleaned when emptied.
2. Containers in serving situations such as salad bars that are maintained and refilled with PHF/TCS FOODS at Rule 290-5-14-.04 temperatures are cleaned at least every 24 hours.
3. In-use utensils intermittently stored in a container of hot water at ≥135°F are cleaned every 24 hours or more frequently to preclude accumulation of soil residues.

NON-PHF/TCS FOODS, Food Contact Surfaces:

1. Utensils & equipment - at any time when contamination may have occurred.
2. At least every 24 hours for iced tea dispensers and consumer self-service utensils
3. Before restocking consumer self-service equipment & utensils
4. In or enclosed components of equipment such as ice bins, ice makers, beverage nozzles & syrup dispensing lines/tubes, cooking oil storage tanks & distribution lines, coffee bean grinders, and water vending equipment: as specified by the manufacturer or as necessary to preclude accumulation of soil or mold.

SANITIZATION: CONCENTRATION, pH, TEMPERATURE, HARDNESS & CONTACT TIME

Minimum Concentrations ppm or mg/L	pH ≤10.0 & Minimum Temperature	pH ≤8.0 & Minimum Temperature	Contact Time
Chlorine 25	120°F (49°C)	120°F (49°C)	≥ 10 seconds
Chlorine 50	100°F (38°C)	75°F (24°C)	≥ 7 seconds
Chlorine 100	55°F (13°C)	55°F (13°C)	≥ 10 seconds
Iodine ≥ 12.5 to 25	pH ≤ 5.0 or per label; ≥ 75°F (24°C)		≥ 30 seconds
Quaternary Ammonium, per label	water hardness ≤ 500 ppm or mg/L or per label; ≥ 75°F (24°C)		
Hot Water Sanitize, 3 compartment sink w/ integral heating device	≥ 171°F (77°C) immersed in rack or basket		

NOTE: All chemical sanitizers shall be listed in 21 CFR 178.1010 Sanitizing Solutions and used in accordance with the EPA-approved manufacturer's label use instructions.

WAREWASHING: MECHANICAL & MANUAL		Minimum Wash Temperature	Minimum Sanitizing Temperature
SPRAY TYPE WAREWASHERS: Single Tank, Hot Water Sanitize	Stationary rack, single temperature	165°F (74°C)	165°F (74°C)
	Stationary rack, dual temperature	150°F (66°C)	180°F (82°C)
	Conveyor, dual temperature	160°F (71°C)	
Multitank, Hot Water Sanitize	Conveyor, multi temperature	150°F (66°C)	
Chemical Sanitize	Any warewashing machine	120°F (49°C)	sanitization levels as stated in the above table or per labeled manufacturer's instructions on the container.
3 Compartment Sink	Cleaning agent labeling may permit lower washing temperatures	110°F (43°C)	

MECHANICAL WAREWASHING:

1. As appropriate, washing, rinsing & sanitizing temperatures; fresh water sanitizing rinse pressure; conveyor speed or cycle time shall be in accordance with dish machine "data plate" and manufacturer's instructions.
2. Fresh hot water sanitization: the flow pressure immediately downstream or upstream of the sanitization rinse control valve shall be 15 psi to 25 psi (100 to 170 kilopascals), and any pressure measuring devices shall be scaled at increments of at least 1 psi or 7 kilopascals, and accurate to +/-2 psi or +/-14 kilopascals within the working pressure range. Hot water entering the manifold for sanitizing may not be more than 194ºF (90ºC) {*except for hand-held spraying devices for in-place cleaning & sanitizing*}. Utensil surface temperatures must reach at least 160ºF (71ºC) as measured by an irreversible registering temperature indicator.
3. Automatic dispensing of detergents & sanitizers required for units installed after the adoption of this code and shall be equipped with a visual or audible indicator to signal when chemicals are not being delivered.

FOOD-CONTACT SURFACE LIMITATIONS:

GALVANIZED METAL: May not be used in contact with acidic food.

CAST IRON: *May be used as a cooking surface or serving utensils only as part of an uninterrupted process from cooking through service.*

COPPER & COPPER ALLOYS (BRASS): May not be used for foods with a pH < 6.0 such as vinegar, fruit juice, wine, etc., {*except for the prefermentation & fermentation steps of a beer brewing operation*} or for a water supply line between a soda carbonator & backflow preventer.

WOOD: Wood & wood wicker may not be used as a food-contact surface.
Except:

1. *Hard maple or equivalently hard, close-grained wood may be used for cutting boards & blocks, bakers' tables, and utensils such as rolling pins, doughnut dowels, salad bowls & chopsticks;*
2. *Wooden paddles for pressure scraping kettles in confectionery operations with products reaching at least 230oF (110oC).*
3. *Whole uncut raw fruit & vegetables, and unshelled nuts may be kept in the original wooden shipping container.*
4. *Whole, uncut, raw foods requiring the removal of rinds, peels, husks, or shells may be kept in untreated wood containers or treated wood as specified in 21 CFR 178.3800 Preservatives for Wood.*

NONSTICK COATINGS: Cooking surfaces that have a perfluorocarbon resin coating shall be used with nonscoring or nonscratching cleaning aids.

SPONGES: May not be used in contact with cleaned & sanitized or in-use food contact surfaces.

Ceramic, China & Crystal	Hot Beverage or Coffee Mugs	Maximum Lead: 0.5 ppm or mg/L
	Large Hollowware, bowls ≥ 1.16 qts. or 1.1 L	1.0 ppm or mg/L
	Small Hollowware, bowls < 1.16 qts. or 1.1 L	2.0 ppm or mg/L
	Flat Utensils, plates & saucers etc.	3.0 ppm or mg/L
Pewter Alloys used as a food contact surface		.05%
Solder & Flux used as a food contact surface		.2%

TEMPERATURE MEASURING DEVICES - TMD's

1. Designed to be easily readable.
2. Food TMD's shall be provided & readily accessible for ensuring attainment & maintenance of food temperatures as specified under Rule 290-5-14-.05.
3. Food TMD's may not have sensors or stems constructed of glass, *except stems encased in a shatterproof coating such as candy thermometers may be used.*
4. Mechanically refrigerated or hot food storage units: equipped with at least one integral or permanently affixed, easily viewed TMD with sensors or a simulated product temperature shall be located in the warmest part of the refrigeration unit and in the coolest part of a hot storage unit. *Except where a TMD is not practical for measuring ambient air surrounding the food, such as heat lamps, cold plates, steam tables, salad bars and insulated food transport containers.*
5. Warewashing machine TMD's to indicate water temperature in each wash and rinse tank; and entering the hot water sanitizing final rinse manifold or in the chemical sanitizing solution tank.

TMD Accuracy	Food	Ambient Air & Water
Fahrenheit & Celsius, or Celsius only	+/- 1°C	+/- 1.5°C
Fahrenheit Only	+/- 2°F	+/- 3°F
Food or warewashing TMD's shall have a numerical scale, printed record or digital readout increments are to be no greater than 2°F (1°C) in the intended range of use.		

Georgia Food Code Chapter 290-5-14 FOOD SPEC SHEET

TABLE 1: MINIMUM COOKING TEMPERATURES & HOLDING TIME AT SPECIFIED TEMPERATURES

165°F (74°C) for 15 seconds 7 log reduction in microorganisms (or 7D kill)	poultry; wild game animals (live caught or field dressed) STUFFED fish, meat, pasta, poultry or ratites; and STUFFING containing fish, meat, poultry or ratites.
165°F (74°C) with a 2 minute post cooking hold 7D kill	**Microwave Cooking** for raw animal foods: covered, rotated or stirred throughout or midway through the cooking process, and held for 2 minutes covered.
155°F (68°C) for 15 seconds or 158°F (70°C) for <1 second 150°F (66°C) for 1 minute 145°F (63°C) for 3 minutes 5D kill	ratites; injected meats; COMMINUTED raw animal foods such as fish, ground beef & other meats, commercially raised game animals, and RAW SHELL EGGS not prepared for immediate service (combined or hot hold), {also see Highly Susceptible Populations (HSP)}.
145°F (63°C) for 15 seconds 3D kill --- **surface temperature ≥145°F (63°C) + cooked color change on all external surfaces**	raw shell eggs prepared for immediate service; commercially raised game animals, exotic animals or rabbits; and other raw animal foods not otherwise specified in this table. --- WHOLE-MUSCLE, INTACT BEEF STEAK that is properly labeled as such may be served undercooked as RTE if not serving a HSP

WHOLE ROASTS OF BEEF, CORNED BEEF, PORK OR CURED PORK

145°F (62.8°C) 4 minutes* 158°F (70.0°C) 0 sec.*
144°F (62.2°C) 5 minutes* 157°F (69.4°C) 14 sec.*
142°F (61.1°C) 8 minutes* 155°F (68.3°C) 22 sec.*
140°F (60.0°C) 12 minutes* 153°F (67.2°C) 34 sec.*
138°F (58.9°C) 18 minutes* 151°F (66.1°C) 54 sec.*
136°F (57.8°C) 28 minutes* 149°F (65.0°C) 85 sec.*
135°F (57.2°C) 36 minutes* 147°F (63.9°C) 134sec*
133°F (56.1°C) 56 minutes*
131°F (55.0°C) 89 minutes*
130°F (54.4°C) 112 minutes* 6.5D kill
*Note: holding time may include post-cooking heat rise

Oven Type	Roast Weight < 10 lbs. (4.5 kg)	Roast Weight ≥ 10 lbs. (4.5 kg)
Still Dry	≥ 350°F (177°C)	≥ 250°F (121°C)
Convection	≥ 325°F (163°C)	≥ 250°F (121°C)
High Humidity[1]	≤ 250°F (121°C)	≤ 250°F (121°C)

1. Relative humidity >90% for ≥ 1 hour as measured in the cooking chamber or exit of the oven, or in a moisture-impermeable bag that provides 100% humidity.

135 °F (57 °C)	**PLANT FOOD COOKING FOR HOT HOLDING:** fruits & vegetables that will be hot held shall be cooked to the hot holding temperature of **135 °F (57 °C)**

Except where stated, references below are to refrigeration temperatures of 41°F (5°C

REHEATING FOR IMMEDIATE SERVICE: cooked and refrigerated RTE foods for a consumer's order may be served at any temperature, ie, roast beef sandwich au jus.

REHEATING FOR HOT HOLDING: to be completed ≤ 2 hours. Leftovers shall be reheated to at least 165°F (74°C) for 15 seconds {microwave is 165°F (74°C) rotated or stirred, covered, held for 2 minutes}. Remaining unsliced portions of beef or pork roasts cooked as stated in Table 1 above may be reheated with the same initial cooking parameters listed in the table 1. Commercially processed, packaged, ready-to-eat (RTE) food shall be reheated to at least **135 °F (57 °C).**

COLD & HOT HOLDING: Cold foods ≤ 41°F (5°C). Hot foods ≥ **135 °F (57 °C),** except beef & pork roasts cooked or reheated as stated above, may be held at 130°F (54°C).

COOLING PHF's: Hot foods: **135°F to 70°F (60°C to 21°C) within 2 hours first**, then 70°F (60°C to 21°C) to 41°F (5°C) within 4 hours or less for a total cooling time of 6 hours.
Ambient room temperature ingredients: cooled to 41°F (5°C) within 4 hours, ie. reconstituted foods, canned tuna
Cold receiving: laws allowing shipping temperatures ≥ 41°F (5°C) for certain products shall be cooled to 41°F (5°C) within 4 hours, Raw eggs shall be received and immediately placed in refrigerated equipment that maintains an ambient air temperature of 41°F (5°C) or less.

TIME AS A PUBLIC HEALTH CONTROL: Written procedures on site & available to the inspector. The working supply (before cooking) or RTE (for service or display) PHF is marked or identified with the maximum 4 hour or 6 hour time period when removed from temperature controls. After 4 hours or 6 hours OR if the product is unmarked or mismarked per time, or the temperature of the food on display for service exceeds 70°F in the case of the 6 hour holding time, the food shall be discarded. Procedure may not be used with raw eggs in a HSP facility.

PARASITE DESTRUCTION: Freezing fish for parasite destruction: (1) -4°F (-20°C) or colder for 168 hours or 7 days; OR (2) -31°F (-35°C) or colder for 15 hours; OR (3) -31°F (-35°C) or below until solid and stored at -4°F (-20°C) or below for a minimum of 24 hours. Includes written agreement if frozen by supplier, or if frozen by the PIC, then records retained at facility for 90 days. *(Except certain species of tuna: Yellow fin; Bluefin, Northern & Southern; and Bigeye.)*

FROZEN FOOD: temperature necessary to keep product frozen "solid" and varies with product type.
SLACKING: moderating the temperature under refrigeration ≤ 41°F (5°C), OR at any temperature if the food remains frozen.

THAWING:
1. Refrigerate ≤ 41°F (5°C);
2. Cook or microwave as part of an uninterrupted cooking process;
3. Use any procedure for thawing a RTE food for immediate service in response to a consumers order;
4. Submerge under running water ≤ 70°F (21°C) with sufficient velocity & flow to float off loose particles in an overflow, and no portion of a RTE food rises above 41°F, OR any raw animal food that will be properly cooked and does not rise above 41°F for more than 4 hours (includes time exposed to running water, preparation & cooling to ≤ 41°F)

RTE, PHF DATE MARKING: Refrigerated RTE, PHF's "prepared in the establishment" or "opened package from a food processing plant" and held over 24 hours shall be marked to indicate the date or day the food shall be consumed on the premises, sold, or discarded. The day of "preparation" or "opening" shall be counted as "Day 1". RTE foods or ingredients subsequently combined with additional ingredients or portions shall retain the date marking of the earliest or first-prepared portion. Foods with expired "Dates" (including vending machines) OR not marked OR inappropriately marked shall be discarded.
1. 7 days for foods held ≤41°F (5°C).
2. The "day or dated" marked may not exceed the manufacturer's use by date if the manufacturer's date was based on food safety.
3. Foods frequently rewrapped (lunchmeats, roast, etc.) or bulk product (soft serve mix) may be marked by an alternative method if acceptable to the regulatory authority.
4. If these foods are subsequently frozen: Marked at the time of freezing as to the days already held at refrigeration and upon removing from the freezer, the new "date" is the appropriate 7 days minus the time held before freezing.
5. *EXCEPTIONS to date marking:*
   a. Individual portions repackaged from bulk containers to fill a consumer's request, or
   b. Whole unsliced, intact portions of fermented or salt-cured sausages or product, that are not labeled "keep refrigerated," from a federally inspected food processing plant and are shelf stable with the original cellulose casing intact on the uncut portion, i.e. summer sausage, prosciutto, and Pama..

REDUCED OXYGEN PACKAGING (ROP): produced in a food establishment shall have a HACCP plan as specified under Rule 290-5-14 subsection (6) (k) 2. and provide a secondary barrier to "C. botulinum" or "L. monocytogenes in addition to refrigeration at < 41°F.

Secondary barriers could be a) an aw of < 91 (available water content), or b) a pH of < 4.6, or c) a meat or poultry product cured at a food processing plant regulated by the USDA using substances specified in 9 CFR 424.21Use of food ingredients and sources of radiation, and is received in an intact package,, or c) a food with a high level of competing organisms such as raw meat or poultry, and prominently & conspicuously labeled: maintain at <41°F (5°C) {no exception to 41° F}, and discard if not consumed within 14 days of packaging (except the time the product is maintained frozen) OR the original manufacturer's "sell by" or "use by" date of the product, whichever occurs first.

Hard, pasteurized process and semi-soft cheeses may be vacuum packaged for 30 days (see Rule 290-5-14-.04 subsection (6) (k) 5 and cook chill or sous vide packaged product require special consideration (see Rule 290-5-14-.04 subsection (6) (k)).

HIGHLY SUSCEPTIBLE POPULATIONS (HSP): (Includes children ≤ 9 years old in a school, day care or other custodial setting)
1. May not be offered or served: unpasteurized prepackaged juice or beverage containing juice; unpasteurized juice prepared on the premises; raw or partially cooked animal foods (includes meringue made from unpasteurized eggs); and raw seed sprouts.
2. Food in unopened original containers may not be re-served (includes condiments).
3. Pasteurized eggs & egg products shall be substituted for raw shell eggs in the preparation of:
   a. RTE or partially cooked foods such as Caesar salad, hollandaise sauce, & egg nog, and
   b. Recipes in which more than one egg is broken and combined; EXCEPT when combined immediately before cooking for one consumer's serving, such as scrambled eggs (no holding time permitted); before baking and the eggs are thoroughly cooked, such as a cake or muffin; or food preparation is conducted under a HACCP plan per Rule 290-5-14-.04 subsection (9) 6.

SHELLSTOCK IDENTIFICATION: Shellstock may not be removed from the original container other than immediately before sale or preparation for service (*unless the source on display is properly identified & recorded*). Tags remain attached until the container is emptied, then retain tags for 90 days in chronological order from date(s) sold or served. Identification tags/labels are affixed by the harvester and/or each dealer. Containers may carry harvester & dealer tags. If both tags are present, the dealers tag is not required to carry harvest information. If the dealer's tag includes dealer & harvester information, then dealer's information shall be listed first.

TAG INFORMATION IN THE FOLLOWING ORDER:
Dealer's name, address & certification number; original shipper's certification number w/ name of state or county of harvest location; harvester's identification number, date of harvest, harvest location w/ name of state or county, type & quantity of shellfish; and "This tag is required to be attached until container is empty (or retagged) and thereafter kept on file for 90 days".

Information only: National Shellfish Sanitation Program (NSSP) also requires the following label on tags: "RETAILER INFORM YOUR CUSTOMERS. Thoroughly cooking foods of animal origin such as beef, eggs, fish, lamb, poultry or shellfish reduces the risk of foodborne illness. Individuals with certain health conditions may be at higher risk if these foods are consumed raw or undercooked. Consult your physician or public health official for further information". http://www.issc.org

The Interstate Certified Shellfish Shippers List (ICSSL) can be found at www.cfsan.fda.gov/~ear/shellfis.html

SHUCKED SHELLFISH: Nonreturnable containers, (*may be removed from original containers for display/dispensing if the source on display is properly identified & recorded*). **Labeled** with name, address & certification number of the shucker-packer or repacker; and "sell by" date for <½ gallon or "date shucked" for ≥½ gallon.