

FOOD ESTABLISHMENT CONSTRUCTION GUIDE
Cherokee Nation Office of Environmental Health
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This construction guide is to be used in conjunction with the Food Service Establishment Regulations as a guideline for any person intending to construct or extensively remodel a food establishment. It should not be considered to be all-inclusive. It is suggested that you contact your local building code office, local fire department, the State Fire Marshall's Office, or Occupational Licensing for further requirements.

A license applicant or license holder is encouraged to submit plans and specifications to the Office of Environmental Health for review before:

- The construction of a food service establishment
- The conversion of an existing structure for use as a food service establishment, or
- The remodeling of a food service establishment or a change of type of food service establishment or food operation.

The plans and specifications shall be drawn to scale and include the

- Intended Menu
- Proposed floor plan to include the location of all equipment and plumbing fixtures.
- The proposed finish materials for walls, floors, and ceilings.
- Proposed equipment types.

MINIMUM FACILITY REQUIREMENTS

1. FLOORS

- Floors of all food prep, food service, food storage, dishwashing areas, walk-in refrigerator units, toilet rooms and vestibules must be constructed of smooth, DURABLE material that is impervious to water and easily cleanable such as ceramic tile, terrazzo, durable grade linoleum or sealed concrete.
- Carpeting is not allowed in food preparation areas, food storage areas or restroom facilities.
- Junctures between walls and floors shall be covered and sealed.
- Pipes and utility lines shall not be unnecessarily exposed.

2. WALLS AND CEILINGS

- Must be light colored, smooth, durable, non-absorbent, sealed and easily cleanable. This requirement also applies to restroom stall partitions.
- Exposed studs, joists, and rafters are prohibited in food preparation and dishwashing areas.
- Pipes and utility lines shall be installed so as not to obstruct proper cleaning.

3. WATER SUPPLY

- Potable water for the needs of the food establishment shall be provided from a source that complies with state laws and regulations.

4. SEWAGE DISPOSAL

- All sewage and wastewater shall be disposed of by a public sewage system or by an individual sewage disposal system that complies with state law and regulations.

5. PLUMBING

- Plumbing shall be sized, installed and maintained in a safe manner and according to the International Plumbing Code, applicable local ordinance or health code.
- The supply lines or fittings for every plumbing fixture shall be installed so as to prevent backflow. This includes all hose bibs.
- Equipment and fixtures utilized for the storage, preparation and handling of food, including ice, shall discharge through an indirect water pipe by means of an air gap. This requirement shall not apply to machines and sinks used solely for dishwashing.
- An air gap between the water supply inlet and the flood level rim of the plumbing fixture equipment, or non-food equipment shall be at least two (2) times the diameter of the water supply inlet and shall not be less than one (1) inch.
- Floor drains must be easily accessible for maintenance and cleaning and be equipped with proper strainers.
- A grease trap, if required, shall be located to be easily accessible for cleaning.

6. HOT WATER

- Hot water shall be supplied to all sinks.
- Hot water generation shall be sufficient to meet the peak hot water demands throughout the food establishment.
- The hot water supply to any fixture shall be installed on the left side of the fixtures.

7. HANDWASHING FACILITY

A minimum of one handwashing sink is required in all food preparation areas. Based on the design of the facility, more than one sink may be required.

The handwashing sink:

- Must be conveniently located in food preparation, food dispensing, and dishwashing areas.
- Must provide water at a temperature of at least 100° F through a mixing valve or combination faucet.
- Metered faucets shall provide water for a minimum of 15 seconds.
- Soap and disposable towels must be provided at all handwashing sinks.

8. MOP SINK

- At least one mop sink or curbed cleaning facility with a floor drain shall be provided.
- Must have provision for the proper storing and air drying of mops.

9. RESTROOMS

Adequate toilet facilities shall be provided as required in the locally adopted building or plumbing code or the International Plumbing Code.

- Male and Female restrooms are required in facilities where the occupant load exceeds 15. (The fire department will determine the occupant load. It is not based on the number of patron seats/chairs that are available.).

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- Public access to the restrooms may not be through food preparation areas, food storage areas or dishwashing areas.
- Approved handwashing sinks shall be properly installed.
- Restrooms shall be provided with tight fitting, self-closing doors.
- Restrooms shall be provided with adequate forced-air ventilation.
- An adequate number of covered trash receptacles must be provided. A covered trash receptacle must be provided in the women's restroom.

10. LIGHTING

Light bulbs shall be shielded, coated, or otherwise shatter-resistant in areas where there is exposed food, clean equipment, utensils, linens, and unwrapped single-service articles.

Adequate artificial illumination shall be provided in accordance with the following minimum requirements:

- 50 foot-candles
 - ✓ in all food preparation areas, including under ventilation hoods.
- 20 foot candles
 - ✓ in consumer self-service areas and inside lighted equipment
 - ✓ at a distance of 30 inches above the floor area used for handwashing, dishwashing, equipment and utensil storage and in toilet rooms.
- 10 foot candles at a distance of 30 inches above the floor.
 - ✓ in walk-in refrigeration units and dry food storage areas.
 - ✓ in other areas and rooms during periods of cleaning.

11. EQUIPMENT

- All floor-mounted food equipment shall be certified by the National Sanitation Foundation (NSF). This includes, but is not limited to sinks, ovens, ranges, mixers, prep freezers, refrigerators, grills, griddles, fryers, ice machines and steam tables.
- Microwave ovens and handheld equipment/utensils do not have to be certified by NSF.
- Equipment and utensils shall be designed and constructed of non-toxic, durable materials.
- Equipment shall be installed to facilitate cleaning.
- Floor mounted food equipment that is not easily moveable shall be sealed to the floor or elevated on legs with a minimum height of 6 inches.
- Wood and wood wicker shall not be used as food-contact surface, except close-grained hard wood may be used for items such as cutting blocks, boards, bakers' tables, rolling pins, salad bowls.
- Equipment may be located under automatic fire sprinkler heads, but not under leaking or unshielded sewer lines or leaking water lines.

12. HOODS AND DUCTS

Ventilation hood systems and devices shall

- Meet the requirements of locally adopted codes or the Oklahoma State Board of Health Mechanical Industry Regulations.

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- Be installed above heat generating equipment that is capable of producing grease-laden vapors.
- Be sufficient in number and capacity to prevent grease, condensation, smoke or noxious odors from collecting in the food establishment.
- Filters or other grease extracting equipment shall be designed to be readily removable for cleaning and replacement, if not designed to be cleaned in place.

13. REFRIGERATION

All refrigeration units shall

- Be capable of operating at 41°F or below at all times.
- Be provided with a thermometer, accurate to plus or minus 2°F.
- **RESIDENTIAL, HOME-TYPE REFRIGERATORS ARE NOT PERMITTED.**

14. HOT FOOD STORAGE OR DISPLAY

All hot storage or display facilities shall

- Be capable of maintaining hot food to an internal temperature of 135°F or above.
- Be provided with a thermometer accurate to plus or minus 2°F.

15. STORAGE

- Food, cleaned utensils and equipment, linens, and single-service articles shall be stored a minimum of six (6) inches above floor.
- Items that are kept in closed packages may be stored less than six (6) inches above the floor if stored on dollies, pallets, racks, and skids provided such equipment is easily moveable.
- Unfinished construction is not allowed. All exposed surfaces of all cabinetry and shelving shall be finished with a smooth, nonabsorbent, corrosion-resistant, cleanable surface.

16. CUSTOMER SELF SERVICE

Sneeze shields shall be installed at all displays of unpackaged foods accessible for service by the customer.

17. DISHWASHING FACILITIES

A commercial dishwasher or a three-compartment sink with drain boards is required. Accurate test kits or thermometers shall be provided.

➤ **The three compartment sink:**

- ✓ Must be NSF certified or equivalent.
- ✓ Must have rounded corners, be smooth, and have no welded seams.
- ✓ Must have adequately sized self-draining drain boards, racks or tables to accommodate soiled and clean items that accumulate during hours of operation.
- ✓ Must have compartments large enough to accommodate immersion of at least half of the largest piece of equipment or utensil used in the establishment.
- ✓ **SHALL NOT BE USED FOR HANDWASHING OR FOR THE DISPOSAL OF MOP WATER.**

➤ **The commercial dishwasher:**

- ✓ Must be NSF certified or equivalent.
- ✓ An exhaust system is to be provided above hot water sanitizing machines to remove steam.
- ✓ Accurate thermometers shall be installed on all dishwashers.
- ✓ Be capable of maintaining rinse water at 180° F or above.
- ✓ Dishwashing machines that use a chemical sanitizer shall be equipped with a device that audibly or visually indicates when more sanitizer needs to be added.

18. OUTER OPENINGS

If windows or doors are kept open, the openings must be protected against the entry of insects and rodents with approved screens (#16 mesh screening), properly designed air curtains or other effective means.

19. GARBAGE AND REFUSE

- Receptacles for refuse, recyclables, returnables and materials containing food residue shall be durable, cleanable, insect and rodent resistant, leak proof and non-absorbent.
- Receptacles used outside the food service establishment shall be designed and constructed to have tight-fitting lids, doors or covers. They must be in good repair and have a drain plug.
- The outdoor storage surface for refuse shall be constructed of non-absorbent material such as concrete or asphalt and shall be smooth, durable, and sloped to drain.

20. LIVING AREAS

- No operation of a food establishment shall be conducted in any room used as living or sleeping quarters.
- Laundry equipment may be installed in storage rooms containing only pre-packaged food or single-service items.

21. EMPLOYEE LOCKER AREAS

- Lockers or other suitable facilities shall be provided and used for the storage of employee's clothing and other possessions.
- Dressing rooms shall be provided if the employees regularly change their clothes in the establishment.

22. OTHER

All electrical, mechanical, or plumbing work MUST be performed by individuals licensed by the Oklahoma State Department of Health.

