



# Licensed Kitchen – Food Service Code Construction and Design Guidance

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Across the state, many food processors and entrepreneurs want to expand beyond the Farmers Markets and sell to in-state local retailers, convenience stores, and craft stores. However, selling at one of these venues requires that the processor process their product out of a licensed kitchen. To many processors, this seems like a daunting and expensive task. This publication is a supplement to the [South Dakota Licensed Kitchen Process](#) article. The goal in this publication will be to help the processor understand the South Dakota food service code so they can determine if it's feasible to build their own licensed kitchen at their home residence.

## South Dakota Food Service Establishment Code

The South Dakota Food Service Establishment guideline is the code and regulation that all licensed kitchens in the state of South Dakota need to meet if they are to be licensed by the South Dakota Department of Health (SD DOH). The table below will give the specific requirement, provide clarification on the requirement, and also advise on whether the requirement is applicable to the product/process/processor. Whether the processor chooses to have a standalone building at their residence, quarantine off an area in their garage or shed, or build a licensed kitchen in their basement, the table below lists out the food service code that must be met in order to be licensed by the SD DOH.

Code	Food Service Establishment Guidelines	Clarifying Comments on the Food Service Establishment Guideline	Required? (Yes/No)
1. Layout plans must be submitted to the department of health for approval at least 30 days prior to the beginning of any new construction or major renovations	<ul style="list-style-type: none"> <li>Plans should be drawn to a recommended scale of 1/4" = 1 foot. Any new or extensively renovated food service establishment which is more than 4000 square feet must have layout plans that are stamped by a professional engineer or architect.</li> </ul>	<ul style="list-style-type: none"> <li>Ensure that the drawing is submitted to the SD DOH prior to construction. Construction, layout, and design that do not meet the food service code will be required to be re-constructed at the processor's cost.</li> </ul>	Yes
2. Private sewer systems which serve a food service establishment	<ul style="list-style-type: none"> <li>Must be approved by the SD Department of Environment and Natural Resources (DANR). Prior to submitting a food service license application, prospective owners/operators must contact DANR.</li> </ul>	<ul style="list-style-type: none"> <li>Inspection by the DANR is not required for properties utilizing public or rural plumbing utilities</li> <li>For sewer systems that are newly constructed, the city inspector will perform the inspection.</li> <li>Septic systems and designs have to be approved by DANR and must be installed by licensed septic installer</li> </ul>	Yes – Only if Sewer System is Private  No – If Sewer System is Public
3. Water supply: all private drinking water supplies must be of a safe, sanitary quality and from an approved source	<ul style="list-style-type: none"> <li>Water samples must be submitted to an EPA-certified laboratory on a monthly basis and must meet minimum drinking water standards, Chapter 74:04:05 of DANR Administrative Rules.</li> <li>The test results from these samples must be provided to the Health Protection Program</li> </ul>	<ul style="list-style-type: none"> <li>For water that is supplied from a public city/town/county source, no testing is required.</li> <li>Only water that is on a private well requires samples being pulled.</li> </ul>	Yes – Only if Water Source is from a private well  No – If Water Source is from a public source

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4. Floors, walls and ceilings	<ul style="list-style-type: none"> <li>• All floors, walls, and ceilings, shall be constructed of smooth, nonabsorbent, and easily cleanable material.</li> <li>• Carpet, porous blocks, tiles with perforations or fissures are not allowed</li> <li>• If there is a cook area, there must be a 1-hour rated fire retardant wall on both sides of the wall</li> </ul>	<ul style="list-style-type: none"> <li>• Absorbent tiles are not permitted</li> <li>• Flooring that is not easily cleanable or in poor repair would have to be replaced</li> <li>• Cement needs to be sealed or polished in a way to prevent moisture absorption.</li> <li>• Painted drywall is acceptable for walls.</li> <li>• Wallpaper is not allowed on walls or ceilings.</li> <li>• Fiberglass board or tile may be needed where water is used and introduced to prevent moisture being absorbed into drywall.</li> <li>• Stainless steel plate may be used for fire retardant wall</li> </ul>	Yes
5. Exhaust system	<ul style="list-style-type: none"> <li>• All kitchen equipment producing smoke, steam vapors, or excessive heat must be covered by an exhaust system which includes metal filters for collection of grease which are readily removable for cleaning and replacement if not designed to be cleaned in place.</li> <li>• All hood ventilation systems must be vented directly to the outside.</li> <li>• Ventilation systems shall be designed and installed according to the following codes: 1994 Uniform Building Code, 1994 Uniform Mechanical Code and 1991 National Fire Protection Association (NFPA 96) and, when vented to the outside, shall not create an unsightly or harmful discharge. Hood systems shall extend a minimum of 6" over all sides of the cooking equipment.</li> <li>• Variations in hood systems must be approved by the Health Department or the State Fire Marshall.</li> <li>• Hood systems over equipment which develop open flames during cooking or use hot cooking oil for frying shall be equipped with a fire extinguishing or ansul system.</li> </ul>	<ul style="list-style-type: none"> <li>• Residential hood systems are adequate for residential utilities. Commercial hood systems are needed for commercial grade cooking equipment</li> </ul>	<p>Yes – If kitchen equipment produces smoke, steam vapors, or excessive heat</p> <p>No – If kitchen equipment does not produce smoke, steam vapors, or excessive heat</p>

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6. Equipment	<ul style="list-style-type: none"> <li>• All equipment shall be designed and fabricated for durability under conditions of normal use and shall be resistant to denting, buckling, pitting, chipping, and crazing.</li> <li>• All equipment shall be easily cleanable. Equipment requiring disassembly for cleaning shall be done so on a regular basis using simple tools such as mallet, wrench or screwdriver which should be kept available near the equipment.</li> <li>• Equipment designed for in-place cleaning shall be self draining or capable of being completely evacuated. Floor-mounted equipment unless easily movable shall be sealed to the floor or elevated on legs at least 6 inches above the floor.</li> <li>• Table mounted equipment which is not portable should be sealed to the table or counter or elevated on legs to provide at least a 4" clearance between the equipment and table or counter top.</li> <li>• Unless sufficient space is provided for easy cleaning between, behind and above each unit of fixed equipment, the space between it and adjoining equipment units and adjacent walls or ceiling shall not be more than 1/32 inch.</li> </ul>	<ul style="list-style-type: none"> <li>• All equipment which includes utensils, food processing equipment, ancillary equipment, tables, stands, etc, must be of sanitary design and durable under conditions of normal use to prevent denting, buckling, pitting, chipping, and crazing</li> <li>• The 4 inch gap clearance between equipment and table or countertop is to ensure the area can be cleaned and does not become a harborage point for food debris and water</li> <li>• The 1/32 inch space between adjoining equipment units and adjacent walls or ceiling is to prevent food debris and material becoming lodged and collecting in niche points</li> <li>• For refrigeration and freezing, residential freezers and residential refrigerators are allowed to be used.</li> </ul>	Yes

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7. Lighting	<ul style="list-style-type: none"> <li>• Permanently fixed artificial lights shall be installed to provide at least 50 foot-candles of light on all food preparation surfaces.</li> <li>• Also, at least 20 foot-candles of light shall be provided in utensil storage areas, handwashing areas, utensil-washing areas, and restrooms.</li> <li>• At least 10 foot-candles of light must be provided in food storage areas including storerooms and walk-in coolers.</li> <li>• All lights in the food preparation area, dishwashing area, walk-in cooler, food display area, service area or anyplace where open food items are stored or displayed must be shielded to protect against broken glass contaminating the food or utensil should the artificial light be broken.</li> </ul>	<ul style="list-style-type: none"> <li>• 50 foot candles = 628.50 lumens</li> <li>• 20 foot candles = 251.40 lumens</li> <li>• 10 foot candles = 150.84 lumens</li> <li>• If light source is an LED disc light and already shielded, no further protection is needed</li> </ul>	Yes
8. Hand lavatory	<ul style="list-style-type: none"> <li>• A separate hand lavatory shall be provided in the food preparation area, utensil washing area, toilet rooms, and any additional areas where foods are prepared or dispensed.</li> <li>• The hand lavatories shall be conveniently located and easily accessible by all employees.</li> <li>• Hot and cold water provided through a mixing faucet, hand cleansing soap and sanitary towels or a hand-drying device providing heated air shall be conveniently located near each lavatory.</li> <li>• Additional hand lavatories may be needed depending on the size and design of the food service operation as determined by the health authority</li> </ul>	<ul style="list-style-type: none"> <li>• For hand lavatory, the hand lavatory needs to be in the area where food prep, utensil washing, or toilet rooms are located. For example, it would not be acceptable to have a sink placed in another area where hands can't immediately be washed (example - having an upstairs handwashing station with a downstairs prep room)</li> <li>• For hand lavatory, the hand sink should not exceed 20ft or be obstructed by a door. The SD DOH guidance is that the sink should not be more than 20 feet away from the processing area</li> </ul>	Yes

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9. Adequate dishwashing and utensil washing facilities must be provided	<ul style="list-style-type: none"> <li>• These may consist of either a commercial dishwasher or a three-compartment sink.</li> <li>• When a commercial dishwasher is used it shall meet all requirements as stated in ARSD 44:02:07:58.</li> <li>• When a three-compartment sink is used, it shall be of adequate size to accommodate the establishments largest utensil requiring cleaning. It shall be provided with an attached drainboard of at least 18" in length and the entire width of the sanitizing rinse sink.</li> <li>• A dish table or counter space may be substituted for a drainboard for the dirty utensil storage area prior to beginning the cleaning and sanitizing procedure. A three compartment sink is also recommended in all establishments employing a commercial dishwashing unit. This will allow the compartment to operate should the dishwashing unit become inoperative and will allow for better cleaning and sanitizing of large utensils.</li> </ul>	<ul style="list-style-type: none"> <li>• Three compartment sink is more economically feasible for smaller processors as commercial dishwashers are typically more expensive</li> <li>• The sinks for a three compartment sink can also be drop in sinks where there is water supply to all three sinks</li> <li>• Home dishwashers are not considered commercial grade and are not permitted to be used per the food service code</li> <li>• The drain board on the three compartment sink must be properly sloped to prevent standing water</li> </ul>	Yes
10. Prep sink/vegetable sink	<ul style="list-style-type: none"> <li>• A separate prep sink or vegetable sink must be provided whenever food preparation procedures require washing, soaking, or rinsing of food items.</li> <li>• The sink must be plumbed with a physical air break on the drain</li> </ul>	<ul style="list-style-type: none"> <li>• The third basin which is the sanitizing basin, can be used as the prep sink as long as there is an air gap on the drain. The air gap must be in place for the third basin to ensure there is no back siphonage into the sink. The other two basins are direct plumbed but the third basin must be air gapped.</li> <li>• For processors that require a larger area for the prep sink, it is advised to have a stand alone prep sink.</li> </ul>	<p>Yes – If the product/process requires a prep sink for preparing ingredients</p> <p>No – Not required if product/processing does not require the use of a prep sink</p>
11. Utility/janitors sink	<ul style="list-style-type: none"> <li>• In new or extensively remodeled establishments at least one mop sink or janitors sink shall be provided and used for disposal of mop water or similar liquid wastes and for the cleaning of mops of similar wet floor cleaning tools.</li> </ul>	<ul style="list-style-type: none"> <li>• A utility or mop sink should be utilized to dump waste water laundry sink</li> <li>• It is not acceptable to dump waste water or chemicals outside for environmental and pest concerns</li> </ul>	Yes

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12.Plumbing	<ul style="list-style-type: none"> <li>All plumbing shall be installed in accordance with the South Dakota Plumbing Code ARSD 20:54 and 1996 National Standard Plumbing Code.</li> </ul>	<ul style="list-style-type: none"> <li>If the space has already been inspected and been approved by an inspector, no further inspection is needed.</li> </ul>	Yes
13.Restrooms	<ul style="list-style-type: none"> <li>The number of restroom facilities shall comply with ARSD 20:54 and 1996 National Standard Plumbing Code.</li> <li>Toilet rooms shall be completely enclosed and shall have tight fitting, self-closing, solid doors which shall be closed except during cleaning and maintenance.</li> <li>Each restroom must be provided with mechanical ventilation. Separate hand lavatories shall be provided. A covered waste receptacle shall be provided in the restrooms.</li> <li>Hot and cold running water through a mixing faucet must be provided at each lavatory. Also hand cleanser and either paper towels, roll cloth towels or a hand drying device must be provided near the lavatories. ARSD 44:02:07:68, 69 &amp; 72.</li> <li>The Americans With Disabilities Act (ADA) became law in July 1990. This Act requires owners of public accommodations to provide facilities or services that are accessible to disabled individuals. This Act is enforced by the US Justice Department.</li> </ul>	–	Yes
14. Electrical	<ul style="list-style-type: none"> <li>All electrical wiring in the kitchen area shall be installed in accordance with the 1996 National Electrical Code.</li> <li>Electrical outlets with Ground Fault Interrupters should be provided around utensil washing, food preparation and hand sinks</li> </ul>	<ul style="list-style-type: none"> <li>If the space has already been inspected and been approved by an inspector, no further inspection is needed.</li> </ul>	Yes

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15. General premises	<ul style="list-style-type: none"> <li>• Perimeter walls and roof of a food establishment must effectively protect the establishment from the weather and entry of insects, rodents, and or other vermin.</li> <li>• All openings to the building must be protected against entry of rodents and insects.</li> <li>• Windows or doors, kept open for ventilation or other purposes must be protected against the entry of insects and rodents by use of 16 mesh screens, properly designed and installed air curtains or other effective means.</li> <li>• All entry or exit openings must be equipped with solid self-closing, tight-fitting doors.</li> </ul>	–	Yes

## Conclusion

Although it may seem daunting to build one's own licensed kitchen, this article will hopefully clarify the Food Service Establishment guidelines to help the processor and food entrepreneur understand and plan if building their own licensed kitchen is feasible, affordable, and practical. Additionally, the SD DOH is willing and able to provide further clarification and guidance to processors to ensure that the planning, construction, and design of their licensed kitchen will meet the Food Service Establishment guidelines.