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We want you to have a successful business! This guide is for anyone involved in the planning and construction of retail food service facilities, including architects, contractors, restaurant equipment suppliers, food service operators, and kitchen designers.

Our goal is to provide guidance for designing and constructing food facilities to be efficient, easy to clean and maintain, in order to support good food safety practices. Additional information and resources is available at boco.org/foodsafety

Understanding The Requirements

Nearly every new or significantly altered facility serving or selling food or beverages in Colorado must submit plans to the local health department before a license can be issued. Boulder County Public Health reviews plans for facilities in Boulder County to make sure that the design and equipment in a facility are suitable for the safe storage, preparation, and service of the foods on the proposed menu.

The following types of facilities must create and submit a plan to Boulder County Public Health. Applications for each type of facility are available at boco.org/foodsafety

New facility: New construction and facilities that have never been licensed as a food operation in the past.

Extensively remodeled or altered facility: Extensively remodeled is defined in Section 1-202(18) of the Colorado Retail Food Establishment Rules and Regulations and includes:

- Increased seating capacity by 20%.
- Changed or altered non-public areas that result in a reduction or increase of total space by 25% or more
- Alterations requiring a building permit by local authorities.
- Diminished capability to handle food and utensils in a sanitary manner, creating potentially hazardous conditions.
- Significant changes in the menu.
- Extensive equipment changes.

Change of Ownership: Retail Food Establishment licenses are non-transferrable. A change to the Colorado sales tax number and/or change of ownership require that a plan review application be submitted.

Kiosks, Mobile Units, and Pushcarts: Retail food facilities that are mobile and moved to the commissary location on a daily basis.

Special Events: Organized recurring events or celebrations including farmers markets, stadium sports events, and ongoing street fairs.

Temporary Event: A single community event or a celebration that operates for not more than 14 consecutive days (may include town celebrations, fairs, and festivals).

Other Requirements

Wholesale: Wholesale operations sell their goods to other businesses who then sell the product to the final consumer. If you plan to sell goods as a wholesaler, you must register with the Colorado Department of Public Health and Environment (CDPHE) and/or the FDA (Food and Drug Administration). If you plan to sell goods as a wholesaler and directly to the public you must be approved by Boulder County Public Health and by CDPHE. If you plan to sell food and drinks to out-of-state customers, you must be registered with the FDA.

Cottage Foods: The Cottage Foods Act allows limited types of food products that are non-potentially hazardous (i.e. do not require refrigeration for safety) to be sold directly to consumers without licensing or inspection. However, cottage food items may not be stored, used, or sold in retail food establishments. Contact CDPHE at 303-692-3645 for more information

Creating Your Plan

Plans are reviewed to ensure that the equipment, facilities, and design will be suitable for the food items you plan to serve and/or sell at the facility. Alterations to the plans are commonly required, and any construction started prior to approval could result in unexpected costs and delays.

Start with the Menu and Procedures

Every business is unique. What will be required is based on the space and equipment needed to store, prepare, and serve the foods on your menu safely. Retail stores such as a grocery may not need the facilities and equipment that a full-service restaurant would need, just as small operations may not need as much equipment as larger operations would require.

Start by developing the menu and operational procedures including the type, amount, and variety of foods you'll serve and the operational procedures you'll follow to store, prepare, and serve foods. This will determine the food preparation, storage, refrigeration, and serving equipment needed and help you develop the ideal kitchen layout, including the floor plan, equipment, and plumbing needed.

Adequate provisions will be necessary for handwashing, cooking, cooling, thawing, reheating, cold-holding, hot-holding, and warewashing associated with the menu and operational procedures. Special processes such as sous vide or vacuum packaging may require additional information and approval.

In general:

- Plan for adequate space; do not sacrifice necessary food preparation, storage and dishwashing space to provide "extra room" for customers.
- Plan for an orderly flow of food storage, preparation, and serving areas and for moving soiled and clean dishes and utensils to and from the dishwashing area to minimize contamination throughout the facility.
- Consider your entire floor plan. All areas of the facility used for the storage, preparation, or service of food or drink, and areas used for other facility operations including storage of equipment, single-use items, and linens must meet the requirements of the Colorado Retail Food Establishment Rules and Regulations. This includes attic spaces, basements, outbuildings, restrooms, and other areas where storage and operations take place.

Selecting Equipment

This section outlines the equipment you may need to open your food business. Please review the Food Equipment Installation Guide for more detailed information about equipment requirements.

All equipment used for a retail food operation must be listed as commercial and must be certified by a recognized testing agency. This will ensure it is constructed of materials designed and fabricated for food safety and meets American National Standards Institute (ANSI) standards or comparable design criteria. Household equipment may not be used. Equipment approved as NSF, UL Sanitation, ETL Sanitation, or BISSC meet commercial requirements.

Preparation Tables

Preparation tables must be smooth and easily cleanable, tight-jointed, and have moistureproof surfaces. Cutting boards must be made of approved materials.

Food Shields

Display stands, buffets, and salad bars must have food shields to prevent contamination by customers. Food shields are intended to intercept the direct line between the customer's mouth and the food being displayed to prevent contamination by the customer.

Hot and Cold Holding Equipment

When determining the size and type of refrigeration units, consider the food preparation and assembly processes. Plan for enough hotholding units to store all hot foods during peak demand.

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Beverage display refrigerators are not designed for cold holding of potentially hazardous foods. A data plate will describe the type of food and/or beverage the unit is designed to hold.





Preparation Table



Food Shield



Hot Holding Equipment



Cold Holding Equipment

Handwashing Sink

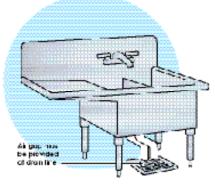
All facilities are required to have hand washing sinks that are easily accessible for employees involved in food preparation and warewashing. Sinks must be equipped with soap and disposable towels or hand dryers.



Handwashing Sink

Food Processing Sink (Food Prep Sink)

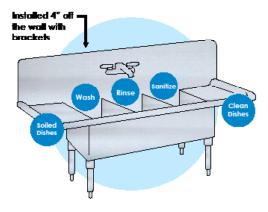
A separate sink is required for the processing of produce and other foods. Processing can include washing, soaking, thawing, and using ice baths for cooling. If a food processing sink is not available, you will be limited to using only prewashed produce.



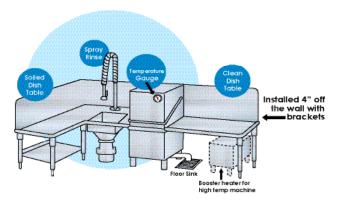
Food Prep Sink

Mechanical Warewashing Machine or 3-Compartment Sink

A mechanical dishwasher or a 3-compartment sink is required in a facility that sells or serves unpackaged food. A 3-comparment sink is recommended to ensure the largest equipment can be washed adequately. Consider a 4-compartment sink to allow for presoaking.



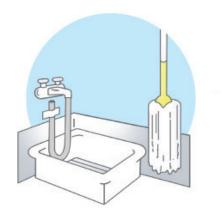
3-Compartment Sink



Mechanical **Warewashing Sink**

Utility (Mop or Service) Sinks

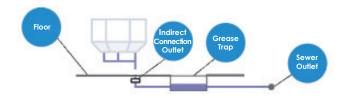
All facilities are required to have a utility sink designated for cleaning mops and tools, and for disposal of mop water. A curbed sink is the ideal option since they make it easier to dump mop water and are a good storage spot for the mop bucket when not in use.



Utility Sink

Grease Interceptor (Grease Trap)

A grease trap is a device that is attached to sinks and/or drains to prevent fats, oils, and grease from flowing to the sewer system. Grease traps are not required to comply with health regulations; however, some local jurisdictions may require them. When installed, they must be easily accessible for cleaning. It is recommended that they be located outside the facility.



Grease Trap

Tip

Grease traps must be cleaned periodically to keep them working properly. An indoor grease trap may need to be cleaned monthly or quarterly, while a larger outdoor unit may only need cleaning once or twice per year.



Ventilation

Sufficient ventilation must be installed to keep rooms free of excessive heat, steam, condensation, vapors, obnoxious odors, smoke, and fumes. Public Health evaluates when, where, and which type of exhaust hoods (Type I or Type II) must be provided.

Dry Storage

Enough designated space must be available for storage of food, dishes, and equipment, including bulk foods, cans, and other items. All food items must be stored at least 6" off floor to prevent contamination.

Chemical Storage

Chemicals must be stored below and/or away from food items, equipment, and utensils to prevent contamination. Chemicals cannot be stored above the 'clean side' dishwashing sink.

Employee Area

Lockers, shelving, or a designated area must be provided for employee belongings. Personal belongings such as coats, purses, cigarettes, and phones cannot be kept in food areas.

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Lighting must be bright enough to allow for safe work conditions and to facilitate cleaning. It must also be

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The employee area is also a great location for employees to store their beverage cups or food.



when it is above food or food preparation areas to prevent contamination in the event of breakage.

Surfaces

All floors, walls, and ceilings in food areas (service, storage, or preparation) must be smooth and easily cleanable. Carpet is allowed only in areas for packaged food storage. Every facility must submit a finish schedule with plan review. Below are approved surfaces that are commonly used.

- Floors: quarry tile, ceramic tile, sealed concrete, poured epoxy
- Walls: stainless steel, FRP, glossy painted drywall, painted concrete block
- Ceilings: vinyl coated ACT (drop ceiling), glossy painted drywall
- Base Coving: tile, rubber

Toilet Facilities

Conveniently located toilets must be provided that are accessible to employees and patrons without allowing patrons access to food preparation areas, storage areas, or warewashing or utensil storage areas.

Planning For Disease Prevention

The Centers for Disease Control estimates that every year in the U.S. 76 million people get sick, more than 300,000 are hospitalized, and 5,000 die from foodborne illnesses. To ensure food is safely prepared and does not bring illness to your customers, include the following items in your plan; you may be asked about them during future inspections.

Employee Training and Illness Policy

The top three causes of foodborne illness are attributed to poor personal hygiene, improper holding temperatures, and improper cooling procedures by food service workers. Training food handlers in food safety is the best way to reduce foodborne illness. Include in your plan:

- How you will train your staff about food safety.
- The food safety practices that will be covered during staff orientation.
- An overview of your employee health policy, including how you will handle sick workers and how you will let employees know about your policy.

Boulder County Public Health offers STAR (Sanitation Training Assistance for Restaurateurs) classes in English, Spanish, and Chinese. Visit <u>boco.org/foodsafety</u> for more information.

Waste & Pest Control

Waste and pest management is critical to operating a safe and clean business. Include in your plan:

- Who will provide your waste pickup.
- How you will handle grease waste and cleaning your grease interceptor.
- Who will provide certified pest control, if needed.
- How you will secure your facility and food supplies are safe and ensure you are using approved suppliers with food from approved sources.

Equipment Maintenance

Include in your plan who will:

- Clean your hood system and/or fire suppression system.
- Provide support and maintenance for your dishwasher.

Water Service

Ensure you have enough hot water capacity for the busiest time of day.

Storage

Make sure you have the storage you need to keep foods safe. Ensure you have:

- Enough storage space for dry goods.
- Space needed to expand the operation, if needed.
- Enough space in coolers and freezers to allow for air circulation.
- Storage to keep hot foods hot (135° F or greater) and cold foods cold (41° F or less) and thermometers for all coolers and for food.

Cleaning

There are several things you can do to prevent the amount of future maintenance necessary for your facility and provide ease of cleaning.

- Construct floors, walls and ceilings with smooth, durable, and easily cleanable materials.
- Consider stainless steel on the walls around the grill line, and behind and around grease producing
- Place heavy equipment on casters, so that it can be moved easily. Every other piece of equipment, especially at the grill line, should be on casters. This makes it easier to clean behind and between equipment.
- Avoid sealing equipment and sinks to walls, and instead brace and set equipment away from walls and other equipment. This makes it easier to clean behind 3 compartment sinks, dishwashers, etc. Set equipment at least 4 inches from the wall.

Fixed Equipment

- Install all fixed equipment to allow for easy cleaning by allowing space from nearby equipment or avoiding sealing to walls or equipment.
- Seal table mounted equipment to the table or use moveable legs.
- Seal all floor mounted equipment (in kitchen areas) that is not easily movable to the floor or elevate it on 6 inch legs.

Processes

To be sure food remains safe, make sure you have processes to:

- Date mark ready-to-eat food products.
- Ensure that a 'first in, first out' system is used for foods.
- Ensure foods are properly thawed by making sure there is enough cooler space to allow for overnight thawing.
- Properly cool large amounts of leftover food by using shallow pans, ice wands, or other necessary cooling equipment.
- Monitor temperatures, including when temperatures will be taken, how they'll be recorded, and who will be responsible.
- Avoid bare hand contact with ready to eat foods, such as using gloves, tongs, utensils, deli paper, or other tools.

Submitting Your Plan For Review

Nearly every new or significantly altered facility serving or selling food or beverages in Colorado must submit plans to the local health department before a license can be issued. Boulder County Public Health reviews plans for facilities in Boulder County to make sure that the design and equipment in a facility are suitable for the safe storage, preparation, and service of the foods on the proposed menu or food list.

Applications

Applications for a plan review differ, based on the type of food operation you are proposing. Visit boco.org/foodsafety and select the plan review application appropriate for your business.

Requirements

The plan review application includes instructions for what must be included for review. Missing information will delay the plan review process. Information to include when submitting your plans:

- a. Plan review application form.
- b. Menu or list of foods prepared on the premises. Plans cannot be approved without submission of a menu or list of foods.
- c. Floor plan drawn to scale consisting of equipment and fixtures. The set of drawings should be approximately to ¼ inch scale or larger. Floor Plan
- d. All areas of the facility used for the storage, preparation, or service of food or drink, and areas used for other facility operations including storage of equipment, single-use items, and linens must be included with the floor plan.
- e. Plumbing schedule showing location of all fixtures, floor drains, floor sinks, supply lines, drain lines, and backflow prevention devices.
- f. Ventilation schedule, including exhaust capacity (CFM ratings) of all hoods, location of all hoods, and detailed shop drawings of all hoods (including length and width), location of all make-up air registers, including CFM ratings for outside air.
- g. Lighting plan.
- h. Equipment list showing make and model numbers, and installation methods.
- i. Finish schedule detailing materials for all floors, wall, ceilings, counters, shelves, etc.
- j. Site plan, including streets, alleys, entrances, and outside dumpster location.
- k. Fixtures requiring hot water.
- l. Water heater location, make and model number, capacity, recovery rate, BTU or KW input, and hot water requirements.
- m. Chemical and personal storage.
- n. Employee hygiene plan.

Review Process and Timeline

Boulder County Public Health will notify you within 14 business days after receiving your application packet to inform you if your plans were approved or if more information or changes are needed.

- If your plans are not approved you will need to submit revised plans. Review of revised plans may take up to 14 additional business days.
- If your plans are approved, you must schedule an opening inspection at least 5 business days before the planned opening date. (See "Planning for your opening inspection" section.) Payment for the annual license fee must be made by check at the opening inspection. If your plans change after they've been approved you may be required to submit revised plans and pay additional fees.

Approval of plans does not constitute acceptance of the completed structure. It also does not waive the responsibility of the owner or contractor to make necessary changes that may be required if the facility is not in compliance with the applicable requirements.

Individual Owners and Sole Proprietors

All licenses, certifications, and registrations issued to individual owners or sole proprietors must be accompanied by verification of citizenship. Verification includes completing a "Restrictions of Public Benefit" affidavit and providing a notarized copy of an approved identification. This requirement does not apply to you if you are not an individual owner or sole proprietor.

Fees

Plan review and license fees vary depending on the type of plan review and license required. The plan review fee is collected when the plan review application is submitted. The license fee is collected at the opening inspection when the facility is approved and the licensing paperwork is completed. License fee schedules are available at BoulderCountyFood.org.

Letter of Approval

Construction of the facility may not begin until you have received a written letter of approval from Boulder County Public Health. The letter will include any requirements and stipulations required prior to beginning construction work; be sure to notify others involved in the project, especially the construction manager, of these requirements and stipulations.

While this quide has been developed by Boulder County Public Health, contacting the local building department will be required if construction is taking place. All required permits must be obtained before Boulder County Public Health can issue a retail food establishment license. The next page includes contact information for agencies that you may need to contact to ensure that you have taken all needed steps and obtained all required permits.

Tip

Arrange for a pre-opening inspection 14 days in advance of the date of the intended inspection. Allow 5 working days to schedule an opening inspection.



Service	Building Department Phone	
Building permits and inspection HVAC/REF Electric inspection Plumbing inspection Structural inspection Assistance finding a licensed contractor	Boulder County	303-441-3925
	City of Boulder	303-441-1880
	Erie	303-926-2781
	Jamestown	303-449-1806
	Lafayette	303-665-5588
	Longmont	303-651-8332
	Louisville	303-335-4584
	Lyons	303-823-6622
	Nederland	303-258-3266
	Superior	303-381-2028
	Ward	303-459-9273
Ventilation hood inspections	Local Fire Department	
Sales tax number issuance	Colorado Department of Revenue	
Liquor licensing	Colorado Liquor Control	
Wholesale operations licensing	Colorado Department of Public Health and Environment	

Planning for Your Opening Inspection

An onsite inspection of the facility must be conducted by Boulder County Public Health prior to final approval. If the facility is approved at the opening inspection, the paperwork will then be completed to issue the retail food license. Retail food facilities, once approved and operating, must maintain ongoing compliance with regulatory requirements.

Scheduling

Arrange for a pre-opening inspection 14 days in advance of the date of the intended inspection. Please allow five working days to schedule an opening inspection.

Requirements

The following is required prior to the opening inspection of a retail food operation:

- Complete construction/Installation: All construction/installations must be complete and in full compliance with the Colorado Retail Food Establishment Rules and Regulations, and all applicable local regulations. Multiple inspections may be required to ensure full compliance prior to approval.
- Fully Operational Equipment: All refrigeration units must be fully operational and be able to maintain the required cold holding temperature. Dish machines must provide adequate sanitizer concentration and/or reach minimum final sanitizing rinse temperature. Sanitizer must be provided for all manual cleaning and wiping cloths.
- Test Equipment: All required test equipment must be provided, including accurate thermometers for refrigeration units, hot holding units, and mechanical dish machines; an accurate metal stem food thermometer with a 0°F to 220°F temperature range; and appropriate test kits for sanitizer.
- Operational Sink Areas: All hand washing sinks must be provided with hot and cold water, soap, paper towels, and a trash can.
- Clean and Operational: Establishment must be clean and operational.
- No Food Stocked or Prepared. No food stocking or preparation is allowed until approval from Public Health has been attained.

License Application and Fees

A license application must be completed and fee(s) paid at the time of the opening inspection if the facility is approved and there are no outstanding violations. Be prepared to provide the following:

- State sales tax number
- Federal Employer Identification Number (FEIN)

The license is renewable annually and is valid from Jan. 1 through Dec. 31.

- Fees are not prorated and are non-transferable.
- A separate license is required for each facility/unit.
- Fees are payable by check only and vary depending on size and type of operation. The license fee schedules are available at boco.org/foodsafety

