

How to Open, Renovate and Operate a Restaurant

Great location, top quality food, and excellent customer service are the hallmarks of any successful restaurant. Whether you're interested in starting a café, a bar, family style restaurant or event catering business, you will be part of the restaurant industry. There are many kinds of restaurants and catering services. Popular types of restaurants and catering businesses include, Gourmet and casual dining, fast-food and food trucks, ethnic and speciality food (vegan, gluten free, organic), pubs, bistros & brasseries, and coffee shops & cafeterias

It is very important to understand the neighbourhood including the competition and find out what the neighbourhood wants prior to decide what your concept and brand. In general, restaurants typically employ a 300% markup on food and alcohol sales. The supplies expense is typically about 30-35% of the total food and beverage revenues. Because utilities are not very sensitive to changes in the volume of business, this expense category was calculated as a percentage of the rent. Typically, utility cost is about 10% of the rent for the restaurant. The average annual rent for a restaurant is \$175/m² to 300/m² for an independent licensed restaurant in a neighbourhood commercial context.

As with any customer service intensive business, when you're operating a restaurant the owner should be present and fully engaged with the business as much as possible. For many customers the sign of a good business is seeing the owner greeting and serving the guests. Having a hands-on presence also helps to motivate restaurant staff to perform at their best. If you are unable to be present finding a good manager to operate the restaurant is very important

Typical Parking Requirements for Restaurants in the City of Toronto:

- where the gross floor area used for eating establishments in a building is less than 200 m² no parking space is required;
- where the gross floor area used for eating establishments in a building is 200 m² or more but less than 500 m², parking spaces must be provided at a minimum rate of 3 for each 100 m² of gross floor area; and
- where the gross floor area used for eating establishments in a building is 500 m² or more, parking spaces must be provided at a minimum rate of 5 for each 100m² of gross floor area.

Typical Parking Requirements for City of Mississauga and City Brampton:

- Restaurant- 16 spaces per 100 m²
- Take-out Restaurant 6 spaces per 100 m²

Typical cost of Renovation to have a restaurant:

Cost of renovation to have a restaurant may cost between \$850/m² to \$5,000/m² and the average cost for a restaurant including the build-out, permits, equipment with mid-level finishes in Greater Toronto Area is about \$2,450/m². Cost of renovation to have a restaurant depends on the existing conditions of the restaurant. New kitchen equipment for a small restaurant may cost over \$30,000. A new commercial kitchen exhaust fan with makeup air unit may cost between \$20,000 to \$50,000. A new walk-in freezer and cooler may cost a minimum of \$20,000.

Rebrand a 100m² space that was previously used as a restaurant may cost as low as \$50,000, since the space may already have plumbing in place; built-out kitchen, dining, areas and washroom; and oftentimes already contain equipment like walk-in cooler/freezer and kitchen exhaust hood.

Typical Scope of Renovation Work required to have a Small Restaurant

EXTERIOR FINISHES

- Drive-thru window

PLUMBING

- Underground drainage/sewer lines to plumbing fixtures & equipment
- Above ground domestic water lines, sewer lines to plumbing fixtures & equipment
- Washroom fixtures including sink, toilet, vanity mirror, grab bars,
- Restaurant sinks complete with faucets and hardware - wall hung sinks and n counter bar sinks

ELECTRICAL

- Main electrical service equipment including disconnect switches, splitters, breaker panels, and a transformer
- Electrical branch wiring from breaker panels to equipment, lighting, receptacles, etc.
- Recessed LED light fixtures into suspended drop tile T-bar ceilings
- Complete installation and connection to illuminated menu boards and illuminated signs

HVAC DUCT WORK

- HVAC duct work, flex connections and diffusers

KITCHEN HOOD

- Rooftop exhaust fan, duct work and hood

INTERIOR FINISHES

- Ceramic floor
- Taped, sanded ready for paint finish of interior walls
- Taped, sanded ready for final wall finish of interior drywall partitions to underside of suspended drop tile T-bar ceiling grid system
- Fiberglass reinforced plastic (FRP) paneling from floor to underside of suspended drop tile T-bar ceiling
- Ceramic back wall treatment in front of service area from floor to ceiling
- Ceramic wall treatment in front of service area from back countertop to ceiling
- Suspended drop tile T-bar ceilings
- Drywall ceiling bulkhead around the exhaust system
- Front service counter millwork cabinets plastic laminate countertop
- Back service counter millwork cabinets
- Stainless steel kick plate around front counter and vinyl base on inside of front counter cabinets, all back counters and inside / outside of prep kitchen, back counter base and new walls
- Installation of graphic wall paper
- Wall painting of washroom and walls in public area
- Hollow metal doors, complete with knockdown frame and door hardware

Your restaurant or catering business will be inspected and appraised, so you should strive to maintain high health standards. When you are dealing with health issues, there are several standards that you may need to be aware of including:

- Food temperature control
- Protection of food from contamination
- Employee hygiene and hand washing
- Maintenance and sanitation of surfaces and equipment
- Maintenance and sanitation of washrooms
- Storage and removal of waste
- Pest control.

The Health Protection and Promotion Act of Ontario requires that every person who intends to commence to operate a restaurant give notice of his intention to the local health unit in which the food premises is to be located. Every person who operates a restaurant in Ontario must meet the requirements of the Ontario Food Premises Regulation (O. Reg. 562/90). The Ontario Food Premises Regulation (O. Reg. 562/90) under the Health Protection and Promotion Act provides the minimum requirements for the operation of a restaurant.

A Public Health Inspector (PHI) will review the food premises regulation with the restaurant operator before and during opening, renovating and operating a restaurant. A preopening inspection must be arranged with a Public Health Inspector Public Health Inspector (PHI) at least one week prior to opening of a restaurant.

Ontario Building Code – Restaurant Requirements

Restaurant Lighting

- Adequate lighting must be maintained during all hours of operation. Ensure sufficient bright light in restaurant kitchen, preparation and storage areas to facilitate cleaning. Adequate lighting is required in the Food preparation area to chop, bake, fry, sauté, as well as any other task that needs to be completed in the kitchen. Food preparation area lighting must meet Ontario Building Code requirements enforced by the local Building Department. To improve the safety of the kitchen staff and kitchen efficiency, adequate proper lighting is a must. Protective light covers are recommended for fluorescent lights. The requirements for the levels of illumination are regulated under the Ontario Building Code. Please contact local municipal Building and Fire Department for more information.

Restaurant Ventilation

- Ventilation in a restaurant kitchen is crucial. The specific ventilation requirements for washrooms and food preparation areas are regulated under the Ontario Building Code. All restaurant cooking equipment, dishwashing equipment and washrooms require mechanical ventilation vented to the outside. Mechanical ventilation over restaurant cooking equipment must be equipped with exhaust fan, canopy, filters, etc. Contact local municipality Building and Licensing Department and the local Fire Department for specific details.

Restaurant Mezzanines

- A mezzanine shall be treated as part of the main floor area if any exiting from the mezzanine directs people down and through the main floor level – the occupant load calculated for the mezzanine is included in the main floor area calculation
- The main floor shall support both occupant loads
- A mezzanine that has separate exiting from the main floor area shall be considered as a separate floor area and shall have a separate maximum occupant loads posted on each level.

Determining Occupant Load for Restaurants

Most of the restaurants have approximately 40% of the gross area occupied by the kitchen and storage areas. The Ontario Building Code requires that all alcoholic beverage or dining spaces must provide guests will at least 1.1 m²/person. Typically, restaurants provide between 1.5 and 2 m² of space per guest. To promote more of a fine dining experience, a floor area ratio of 2.5 m²/guest is required.

Floor Area (Table 3.17.1., Div. B)

- An occupant load of 1.1m² net floor area per person for licensed restaurants (Table 3.1.17.1)
- Occupant load calculations are specific to the use of different areas with the establishment. For example; kitchen areas are calculated at 9.3m²/person under Table 3.1.17.1.
- Washrooms are not included in the floor area calculation
- In no circumstance shall the required exits from the main building empty into an enclosed patio or a contained exterior space.

Restaurants with not more than 30 occupants is classified as Group E - Mercantile Occupancy and restaurants with more than 30 occupants is classified as Assembly Occupancy - Group A, Division 2.

Required Number of Toilets (3.7.4.3., Div. B)

The fast food outlet is considered a Group E occupancy as no seating is provided for consumption of food and a single unisex barrier free accessible washroom to serve the fast food outlet provides sufficiency of compliance with Sentence 3.7.4.8.(3) of the Ontario Building Code.

Universal toilet rooms, where required, shall comply with 3.8.3.12., Div. B of the building code.

Dining Rooms, Restaurants, Cafeteria & Alcoholic Beverage Establishments

Table 3.7.4.3.F. Plumbing Fixtures for Assembly Occupancies

Minimum Required Number of Toilets and Sinks for Employees

Employees of Each Sex 1 to 9 - Minimum Required Toilets and Sinks for Each Sex - 1

Employees of Each Sex 10 to 24 - Minimum Required Toilets and Sinks for Each Sex - 2

Where a separate employee washroom is provided, the same room may be used by both female and male employees provided that,

- (a) the total number of employees is not more than 5, and
- (b) the door to the room can be locked from the inside.

Table 3.7.4.3.D. Toilets for Assembly Occupancies

Persons of Each Sex 1 to 20 -	Minimum Required Toilets for Each Sex - 1
Persons of Each Sex 21 to 70 -	Minimum Required Toilets for Each Sex - 2
Persons of Each Sex 71 to 105 -	Minimum Required Toilets for Each Sex - 3
Persons of Each Sex 106 to 135 -	Minimum Required Toilets for Each Sex - 4
Persons of Each Sex 136 to 165 -	Minimum Required Toilets for Each Sex - 5

(7) Except as provided in Sentence (8), in every dining room, restaurant, cafeteria and alcoholic beverage establishment having not more than 40 seats, patrons are permitted to share the washrooms provided for employees, and the minimum number of toilets and sinks shall conform to Table 3.7.4.3.D. based on,

(a) a male occupant load of 50% of the number of seats plus the number of male employees, and

(b) a female occupant load of 50% of the number of seats plus the number of female employees.

(8) Where a separate employee washroom is provided, the same room may be used by both female and male employees provided that,

(a) the total number of employees is not more than 5, and

(b) the door to the room can be locked from the inside.

(9) The number of employees in Sentences (6), to (8) shall be the maximum number of employees who are normally present on the premises at one time and shall include only those who are present for more than 25 per cent of the working day.

Establishments Used Primarily for the Consumption of Alcohol Beverages

Limited or No Food Service

Table 3.7.4.3.E. Toilets for Assembly Occupancies

Number of Persons of Each Sex and Minimum Required Number of Toilets for Each Sex

Persons of Each Sex 1 to 70 -	Minimum Required Toilets for Each Sex - 2
Persons of Each Sex 51 to 70 -	Minimum Required Toilets for Each Sex - 3
Persons of Each Sex 71 to 90 -	Minimum Required Toilets for Each Sex - 4
Persons of Each Sex 91 to 110 -	Minimum Required Toilets for Each Sex - 5

Exit Capacity (3.4.3.2., Div. B)

6.1mm per person of exit width required (a 36" door may accommodate 150 persons) but shall not be permitted to accommodate more than half of the required occupant load as per 3.4.3.2.(6)B where 2 exits are required.

Fire Alarm System (3.2.4.1., Div. B)

A fire alarm system is required where the occupant load exceeds 150 persons. Fire alarms shall be designed by a competent person (Electrical Engineer).

Exit Signs (3.4.5.1.(8), Div. B)

- Exit signs are required where the restaurant occupant load exceed 60 persons.
- Exit signs shall consist of a green pictogram and white graphic symbol complying with ISO 3864-1 meeting the visibility specifications and ISP 7010 meeting the dimensional requirements.
- Restaurant exit doors must exit in the direction of travel to be considers an exit.
- Restaurant exits shall conform with all other building code requirements such as emergency lighting, flame spread ratings, permitted openings, etc.

Door Release Hardware (3.4.6.16., Div. B)

Door release hardware or "panic hardware" shall be provided on exit doors where the occupant load exceeds 100 persons.

Grease Traps

Interceptor means a receptacle that is designed and installed to prevent oil, grease, sand or other materials from passing into a drainage system.

7.4.4.3. Interceptors

(1) Except for suites of residential occupancy, where a fixture discharges sewage that includes fats, oils or grease and is located in an area that food is cooked, processed or prepared, it shall discharge through a grease interceptor.

(5) Every interceptor shall have sufficient capacity to perform the service for which it is provided.

(8) The flow rate through a grease interceptor shall not exceed its rated capacity

7.2.3.2. Interceptors

(3) Where a grease interceptor is required by Sentence 7.4.4.3.(1), the interceptor shall conform to,

(a) CAN/CSA-B481.1, "Testing and Rating of Grease Interceptors Using Lard", or

(b) CAN/CSA-B481.2, "Testing and Rating of Grease Interceptors Using Oil".

CAN/CSA B481 Series 12 Grease Interceptors

The second edition of the CSA B481 Series of Standards, Grease interceptors consists of the following Standards:

(a) CSA B481.0, Material, design, and construction requirements for grease interceptors;

(b) CSA B481.1, Testing and rating of grease interceptors using lard;

(c) CSA B481.2, Testing and rating of grease interceptors using oil;

(d) CSA B481.3, Sizing, selection, location, and installation of grease interceptors;

(e) CSA B481.4, Maintenance of grease interceptors; and

(f) CSA B481.5, Testing and rating of grease interceptors equipped with a grease removal device.

Grease Interceptors are to be either CSA B481.1 or CSA B481.2 certified as per the Ontario Building Code (OBC)

Ontario Building Code (OBC) also requires a properly sized interceptor. CSA B481.3 Standard specifies sizing and installation requirement and includes calculations for peak flow rates. It also states that when a grease interceptor is required to service a dishwasher, it shall be a dedicated grease interceptor.

CSA B481.4 Standard is explicit with maintenance requirements

Gravity Grease Interceptors and Grease Recovery Devices (GRD) are acceptable devices in place of Hydromechanical Grease Interceptors. GRD is covered in CSA B481.5

CSA B481.4 - Maintenance Highlights

Grease interceptors shall be serviced before the volume of Fats, Oil and Grease and solids exceeds 25% of the liquid volume of the grease interceptor.

Grease interceptors shall be serviced at least once every four weeks.

The servicing frequency shall be determined by monitoring the Fats, Oil and Grease accumulation in the grease interceptor to ensure that it does not exceed the maximum containment capacity (see Clause 5.1.1)

CSA B481.4.6.1.3 Chemical or other agents - An operator of a restaurant shall not use or permit the use of chemical agents, enzymes, bacteria, solvents, hot water, or other agents to facilitate the passage of Fats, Oil and Grease through a grease interceptor.

Basic Restaurant Requirements

RESTAURANT BUILDING MAINTENANCE

- A restaurant shall operate and be maintained in such a manner that it does not pose a health hazard. Sneeze Guards are required for salad bars, steam tables, dessert carts etc., which are used in public areas. If bulk ice cream is served, a running dipper-well for the scoop should be provided.
- Storage space for employee personal belongings must be provided and must be away from the food preparation area.
- Restaurant floor and floor-coverings must be tight, smooth and non-absorbent (includes kitchen, storage area, washrooms, behind bar). Examples: vinyl flooring, ceramic tile. Floors in the food preparation and dishwashing areas must be constructed of materials that are easily cleaned. Carpeting is allowed in dining area only. Walls and ceilings must have an easily cleanable finish. Acoustic tile is not acceptable in a food preparation area. A painted surface must withstand frequent cleaning. Walk-in cooler/freezer floor must covered with a smooth, non-absorbent and washable surface
- The walls and ceilings of rooms and passageways shall be maintained in a sanitary condition.
- Garbage must be stored in a separate room, compartment or bin. The garbage area must be constructed and maintained in such a manner to exclude insects and vermin and to prevent odours and health hazards on the interior and exterior of the premises. Garbage containers or facilities must be provided inside and outside the establishment. The containers or facilities must be durable, easily cleanable, rodent proof and must be provided in sufficient numbers and located at convenient locations both inside and outside.

Restaurant Equipment

- Any article or piece of equipment used in the restaurant kitchen shall be of sound and tight construction, kept in good repair and made of such material that it can be readily cleaned and sanitized.
- Equipment and utensils that come in direct contact with food shall be corrosion-resistant, non-toxic and free from cracks, crevices and open seams.
- All food shall be stored on racks, shelves or pallets no less than 15 cm (6") above the floor. Stainless steel or pre-finished shelves are recommended for food storage. Shelves must be at least 15cm (6") off the floor.
- All food shall be protected from contamination and adulteration. Enclosed protective containers, cabinets or shields shall be provided to protect all food displayed for sale or service. Food storage containers must be made of food grade plastic or other non-corrosive food grade material.
- The dispensing scoop handles must extend well above the water line so that the server's hand does not come in contact with the water. If ice cream, frozen confections or desserts are served, a dipperwell with potable running water shall be provided for storing dispensing scoops.

Water

- An adequate supply of potable water must be provided for the operation of a restaurant. Potable water means the absence of total coliform and E.coli in the source of the water.
- Hot and cold running water under pressure must always be available in areas where food is processed, prepared or manufactured or where equipment and utensils are washed.

Restaurant Sinks

- **Handwashing Sink** - Separate handwashing sinks with liquid soap in dispenser and paper towels must be conveniently located in each food preparation area. There must be at least one handwashing sink in each food preparation area. This sink must be provided with its own supply of potable hot and cold running water under pressure, liquid soap in a dispenser and single use paper towels. Adequate sanitizer (i.e. Bleach, Quaternary Ammonium or Iodine) and sanitizer test strips should be provided
- **Dishwashers and Sinks for Washing and Sanitizing Equipment and Utensils** - Separate Two-compartment sink with a drain rack is required where only single service utensils are provided for the service or sale of food.

If multi-service equipment and utensils (i.e. reusable forks, plates, etc.) are used by patrons, one of the following is required:

- a) A three-compartment sink of adequate size for the manual wash, rinse and sanitization procedure. Adequate size means that all equipment and utensils can be immersed in each of the sinks;
- b) A commercial-style mechanical dishwasher equipped with a temperature gauge, either a high temperature machine (capable of reaching 82°C) or a low temperature machine with chemical sanitizing rinse.

For restaurant equipment and utensils that are too large to fit into that mechanical dishwasher, a two-compartment sink of adequate size must be made available for the manual wash, rinse and sanitation procedure. There must be a supply of test strips to accurately determine the effectiveness of the sanitizing agent.

- **Vegetable / Food Preparation Sink**

In addition to a handwashing sink and sinks for washing and sanitizing equipment and utensils, a food preparation sink may be required for washing vegetables, produce, emptying pots, etc.

- **Janitorial/Slop Sink**

A separate mop-sink is required to prevent contamination of food and dishwashing areas. A janitorial/slop sink must be provided for the sanitary disposal of liquid, floor and chemical wastes.

Temperature and Thermometers

- Restaurant refrigerators must be capable of keeping cold foods cold at 4°C or below and restaurant freezers must keep frozen foods frozen at -18°C or below. Ensure to provide enough space for storing ingredients, raw foods, foods being chilled, leftovers, etc.
- Adequate hot holding equipment is required to keep hot foods hot at 60°C or above (i.e. steam table, etc.).
- An accurate, visible and conveniently located indicating thermometer is required in each cold, hot and frozen unit that is used for the storage of hazardous foods.
- An accurate indicating probe thermometer that can be easily read is required to measure the internal temperature of hazardous foods (i.e. whole turkey, chicken, hamburger, etc.).
- **Commercial Dishwashers** - All restaurant dishwashers must be provided with accurate temperature gauges. High temperature dishwashers must reach a temperature of 82° C (180° F) in the final rinse cycle. Low temperature dishwashers must be provided with approved sanitizing chemicals.

Restaurant Sanitary Facilities / Washrooms

- At least one sanitary facility shall be provided for each gender and must have a sign clearly indicating the gender for which they are intended.
- All restaurant washrooms must be equipped with liquid soap in a dispenser and paper (single use) towels for proper hand washing. Every sanitary facility shall be equipped with a continuous supply of: potable hot and cold running water under pressure, toilet paper, liquid soap in dispenser, single use paper towels and a durable, easy to clean receptacle for used towels and other waste material.
- The number of handwash sinks, urinals and toilets required in restaurant washrooms is regulated under the Ontario Building Code. The Ontario Building Code may require that separate facilities be provided for staff and customers. Contact local municipal Building and Licensing Department for information about washroom requirements. Restaurant washrooms must not open directly into any food processing, preparation, handling, distribution, selling, manufacturing, or serving areas.

OTHER CONSIDERATION BEFORE OPENING AND OPERATING A RESTAURANT

WELL WATER

- If the restaurant water supply is from a private well, then the well water must be free of Total Coliform and E. Coli bacteria. The food premises may also be classified under Ontario Regulation 319/08 as a Small Drinking Water System.

PRIVATE SEWAGE DISPOSAL

- If the restaurant does not have municipal sewers then it must have a sewage disposal system which complies with Part 8 of the Ontario Building Code.
- An application must be submitted to the Municipal Health Department to verify that the performance of the existing private sewage disposal system is satisfactory. A permit may be required for a change of use, alteration, repair or construction of a new system. If you are not the owner of the property, a letter of authorization from the owner to release information to Municipal Health Unit is required.

RESTAURANT FOOD HANDLER TRAINING

- It is strongly recommended that there is a Certified Food Handler on site. We encourage that all staff who handle food be certified in safe food preparation and handling.

ADDITIONAL LEGISLATION WHICH MAY APPLY TO A RESTAURANT INCLUDES BUT IS NOT LIMITED TO

- a) [Alcohol Gaming Commission of Ontario \(Liquor License\)](#)
- b) [Ontario Building Code](#) (Local Building Department)
- c) [Ontario Fire Code](#) (Local Fire Department)
- d) Local Municipal Bylaws (i.e. Zoning)
- e) Smoke Free Ontario Act

Restaurant Checklist

Before Opening, Renovating and Operating a Restaurant

- ˘ Contact local Public Health Inspector for food premises requirements
- ˘ Review Food Premises Regulation
- ˘ Contact municipal Building and Zoning Departments for any bylaw requirements
- ˘ Provide owner/operator name, name of business, business address and telephone number when established to municipal authorities.
- ˘ Submit and review the restaurant floor plan and menu with a Public Health Inspector
- ˘ Notify a Public Health Inspector for a pre-opening restaurant inspection

The above Restaurant Checklist does not exclude other requirements that may be necessary after the review process. Review all requirements with the Public Health Inspector before opening, renovating and operating a restaurant.

Fats, Oil and Grease Generated from Normal Operations of Restaurants

Grease is commonly washed into the plumbing system during clean-up via kitchen sink. As it cools, it congeals & decreases pipe capacity both inside the restaurant and in municipal sewers. Fats, Oil and Grease blocks restaurant drain, neighbors' & can overflow into environment (spill)

Toronto Sewers By-law 681-10B(1) states:

Every owner or operator of a restaurant or other industrial, commercial or institutional premises where food is cooked, processed or prepared, which premises is connected directly or indirectly to a sewer, shall take all necessary measures to ensure that oil & grease are prevented from entering the sewer

Toronto Sewers By-law 681-10B(2) states:

The owner or operator of a restaurant as set out in Subsection B(1) shall install, operate, and properly maintain a grease interceptor in any piping system at its premises that connects directly or indirectly to a sewer. The grease interceptors shall be installed in compliance with the most current requirements of the Ontario Building Code

A grease trap/interceptor is a plumbing device designed to intercept/reduce the amount of Fats, Oil and Grease from entering the sanitary sewer. Grease trap/interceptor functions to separate Fats, Oil and Grease's (90% of weight of water) by gravity & coalescence and contains a separation chamber which allows Fats, Oil and Grease to rise to the surface.

The most common type of Grease trap/interceptor is a hydromechanical batch-flow grease interceptor with a flow rating of 26 L/min (7 gpm) to 380 L/min (100 gpm). These are small and often are found under the sinks. A Grease Removal Device automatically removes the grease to an outside vessel. Gravity grease interceptors are large in-ground interceptors that are 1,000 gallons or more and have a longer retention time compared to the hydromechanical grease interceptor. A grease interceptor is often referred to as a grease trap.

A grease trap should be connected to any fixture or drain that discharges wastewater containing oil and grease, including sinks for washing dishes, floor drains, drains serving self-cleaning exhaust hoods and cooking equipment. Wastewater enters the grease trap. The water cools & the grease and oil harden and float to the top of the trap. The rest of the wastewater flows through the trap and out the exit pipe to the sanitary sewer. Solids settle to the bottom. The Fats, Oil and Grease and solids remain in the trap. When warm fats, oils and grease make their way into the plumbing system, over time they build up and cause several problems, including blocked sewers.

Blocked sewers can lead to a sewage backup into the restaurant, neighbouring properties or even local creeks and rivers. Blocked sewers can also lead to increased vermin and contact with disease-causing organisms, all of which pose serious health risks to anyone working in or visiting the restaurant.

Issues caused by blocked sewers could ultimately lead to a temporary or permanent closure of the restaurant by Municipal Public Health Unit. Costs incurred by the municipality as a result of a grease-blocked sewer or damage to the sewers will be charged back to those responsible.

Good Restaurant Kitchen Management Practices

Indoor Restaurant Practices:

- Use rubber scrapers and/or paper towel to remove food solids and grease from pots, pans and wares before washing. Dispose of food solids in the Green Bin.
- Install and maintain screens over all sinks and floor drains to capture food solids. Dispose of collected food solids in the Green Bin.
- Keep cooking oil out of the drains. Waste oil can be sold to rendering facilities.
- Use absorption material to soak up Fats, Oil and Grease spills on the kitchen floor and under fryer baskets. Dispose of soiled material in the Green Bin or garbage (depending on the absorption material used, e.g. paper towel, rag, etc.).
- Fats, Oil and Grease from restaurant exhaust system filters and hoods should be recycled or soaked up using absorption material and disposed of in the Green Bin or garbage (depending on the absorption material used, e.g. paper towel, rag, etc.).
- Clean the restaurant grease trap before the grease and solids combined reach 25% of the trap's liquid volume. A minimum cleaning frequency of once per month is generally recommended.
- Maintain a frequent cleaning schedule of complete pump-outs of the grease interceptor and include inspections to confirm the grease trap is operating properly.
- Use a certified Ministry of Environment and Climate Change (MOECC) waste hauler to pump-out and clean the grease trap. These companies can provide operational information on the grease trap, including efficiency, possible weaknesses (i.e. warping or corrosion) and helpful upgrades/devices.
- Do not discharge hot water into the grease trap as this may melt the Fats, Oil and Grease or displace the contents of the grease interceptor, where it can harden and block your drain line.
- Do not add any enzymes or other additives into the grease trap, they will only move Fats, Oil and Grease down the restaurant sewer pipe where it could harden and block the pipe.
- It is recommended that not to use garbage disposers/grinders as liquefied food waste will fill up the grease trap quicker leading to more cleaning.

Outdoor Restaurant Practices:

- Ensure recycling barrels and containers for transporting oil are covered and secured from spillage or tipping over.
- Ensure Fats, Oil and Grease and wastewater does not enter the catch basin/sewer grate outside. This includes:
 - ✓ Wastewater from inside the restaurant (e.g. mop water)
 - ✓ Wastewater from outdoor cleaning
 - ✓ Leakage from waste/oil bins
 - ✓ Anything other than rain water or melted snow that enters a catch basin can cause damage to the sewer system, pollute the environment, harm aquatic habitat, create a public health concern and generate unpleasant odours.

Storage

- Storage areas shall be kept clean and tidy.
- A minimum clearance of 18 inches from sprinkler heads and heat/smoke detectors shall be maintained.
- Never block fire exit doors.
- Fire extinguishers shall remain accessible and in open view.
- Electrical panels and sprinkler system controls shall be kept clear of obstructions.
- Never store combustibles within 3 feet of refrigeration equipment, electrical equipment or in the furnace/ boiler room.

Flammable & Combustible Liquids

- All flammable liquids shall be stored in approved containers or cabinets.
- Flammable/ combustible liquids are to be stored in accordance with the Ontario Fire Code Part 4.

Combustible Materials

- Shall be kept a minimum of 3 feet away from electrical or heating equipment.
- If applicable, shall be stored in approved containers.

Commercial cooking equipment exhausts and fire protection systems shall be installed and maintained in conformance with NFPA 96, "Ventilation Control and Fire Protection of Commercial Cooking Operations". Ensure wet chemical, alkali-based chemical or "K" rated portable fire extinguishers are provided to protect commercial cooking equipment and are readily available for use in an emergency.

Daily

Check cylinder gauges to ensure pressure is in operating range (within green area).
Check to ensure seal (tie) has not been removed from pull out security pin.

Weekly

Hoods, grease removal devices, fan, ducts and other equipment shall be checked and cleaned at frequent intervals, prior to surfaces becoming heavily contaminated with grease or oily sludge.

Every 6 Months

Trained and qualified persons in conformance with the Ontario Fire Code, Section 6.8.1.1, shall perform inspection and servicing of fire extinguishing system.

Inside the restaurant kitchen a lot of heat is produced and wasted. Restaurant ovens are constantly on and being opened. The heat gets sucked up an exhaust stack and released into the air. Meanwhile, under a separate process, natural gas is used to heat up municipal water and, in the winter, the fresh air coming into a restaurant through an intake vent. Why buy gas to heat a restaurant when thousands of dollars of that heat is sent up an exhaust stack every month? Install a system that captures otherwise wasted kitchen heat and uses it to pre-heat water and restaurant air which will drop gas consumption for building heating and hot water by 75 to 80%. In the summer, when building heat isn't required, all of the waste heat goes toward pre-heating water. Systems vary in size and cost depending on the restaurant. But energy savings on a \$75,000 retrofit, for example, have translated into a payback period ranging from two to three years. If the heat recovery system is built into a new restaurant as it's constructed, the payback time can be as little as one year because both the exhaust and makeup air unit they would have to purchase anyway.

Contact the following for further information.

- Martin Air Systems (4380 South Service Rd Burlington 905-681-0440)
- Halton Systems (1021 Brevik Pl, Mississauga 905-624-0301)
- Collis Group (6-1255A Reid St, Richmond Hill 1-877-244-4408)
- Pro Eco Energy (5811 Giants Head Rd, Summerland 1-866-786-4968)

Requirements for Compliance with A.S.H.R.A.E. 90.1-2010

- Compliance with A.S.H.R.A.E. standard 90.1 is the first step in becoming L.E.E.D. certified.
- A.S.H.R.A.E. 90.1 promotes efficient kitchen hoods and energy efficiency without penalizing indoor environment
- Requires at least 1 energy conservation measure for kitchens that exhaust more than 5000 cfm
- Maximum use of transfer air
- Use of Heat recovery on the exhaust system
- Use of Demand Control Kitchen Ventilation (DCKV)
- Reduce exhaust requirements from the norm by 30% or more (e.g. norm by ASHRAE 154 Standard)
- Requirements of DCKV Systems to meet ASHRAE 90.1-2010
- Demand Ventilation system(s) on at least 75% of the exhaust air.
- Systems must be capable of at least 50% reduction in exhaust and replacement airflow while maintaining full capture and containment of smoke, effluent and combustion products during cooking and idle conditions
- Performance Testing: An approved field test method shall be used to evaluate design air flow rates and demonstrate proper capture and containment of installed commercial kitchen exhaust systems. Where demand ventilation systems are utilized to meet 6.5.7.1.4,
- Additional performance testing shall be required to demonstrate proper capture and containment at minimum airflow

Restaurant and dining facilities use a large amount of energy per floor area. Commercial kitchen exhaust hoods contribute greatly to that energy use. Energy is used both to exhaust operate fans and to heat and cool makeup air that is then exhausted. ANSI/ASHRAE/IES Standard 90.1-2010 specify energy efficiency requirements for commercial restaurant kitchen exhaust hoods.

Energy can be saved by using transfer air—conditioned air from adjacent spaces—as much as possible for replacement air, minimizing the need for conditioned makeup air. In larger restaurant kitchens, fan energy is saved by reducing airflow when cooking activity is low.

Two mandatory requirements apply to all restaurant kitchens: makeup air is limited to maximize transfer air and short-circuit kitchen rangehoods are not allowed. Short-circuit kitchen rangehoods inject more than 10% of unconditioned makeup air directly into the kitchen rangehood rather than into the space. These kitchen hoods require higher airflows to effectively contain smoke, increasing overall energy use. In larger kitchen facilities, ASHRAE Standard 90.1-2010 limits the volume of air for kitchen exhaust to an appropriate but not excessive level. Larger kitchens must also meet one of three energy efficiency requirements: (1) use 50% transfer air, (2) use variable speed hood fans, or (3) use exhaust heat recovery.

The variable speed fan option or demand ventilation system includes controls that sense temperature and smoke under the hood and vary the speed to maintain safe and effective kitchen exhaust. The demand ventilation system must be applied to 75% of total kitchen hood flow, must be able to reduce exhaust flow to half, and must modulate makeup airflow. Controls maintain hood airflow at the levels needed to capture and contain smoke, effluent, and combustion products. Performance testing verifies proper operation of the demand ventilation system. Most restaurant kitchens have refrigerators, walk-in freezers, coolers, ice machines, etc. Heat can be extracted from the condensing units of refrigeration equipment and used to pre-heat water and/or air during the heating season. If the restaurant refrigeration equipment is air cooled and their condensers are located within the restaurant kitchen, heat is recovered whenever the equipment runs—summer and winter.

In summer this increases the cooling load and probably negates any wintertime energy savings. If the air-cooled condensers are located near an outside wall, it may be possible to locate them within an enclosed area and provide dampers and a fan to cool the enclosure with outside air in summer. In winter the dampers could be reset to close off the outside air and circulate the warm air into the kitchen.

Another way to recover heat from refrigeration systems is through a desuperheater—a small refrigerant-to-water heat exchanger designed to recover heat from the outlet of the refrigeration compressor.

Desuperheaters can provide up to 140°F water, but since they are not a standard option on refrigeration skids, they must be field-installed, which increases their cost and reduces their economic viability considerably. Restaurants—with their open flames, hot equipment, electrical connections, cooking oils, cleaning chemicals and paper products—have all the ingredients for a fire to flame out of control. A fire can devastate restaurant business, leading to lost revenues and even permanent closure.

Install an automatic fire-suppression system in the kitchen. This is crucial because more than half of restaurant fires involve cooking equipment. These systems automatically dispense chemicals to suppress the flames and have a manual switch. Activating the system automatically shuts down the fuel or electric supply to nearby cooking equipment. Have the fire-suppression system professionally inspected semiannually. Keep portable fire extinguishers as a backup.

You'll need Class K extinguishers for kitchen fires involving grease, fats and oils that burn at high temperatures. Class K fire extinguishers are only intended to be used after the activation of a built-in hood suppression system. Keep Class ABC extinguishers elsewhere for all other fires (paper, wood, plastic, electrical, etc.). Schedule regular maintenance on electrical equipment, and watch for hazards like frayed cords or wiring, cracked or broken switch plates and combustible items near power sources. Have the exhaust system regularly inspected for grease buildup.

Point of Sale (POS) Restaurant Software

A typical Point of Sale (POS) Restaurant Software is a fully featured software application with the flexibility to suit a wide range of restaurant types. From Quick Serve to Table Serve, Point of Sale (POS) Restaurant Software has the power needed by today's restaurateur. Utilizing the powerful Screen Designer programming function, Point of Sale (POS) Restaurant Software can customize screens to create operation specific transaction flow and screen layouts that are the most efficient and appropriate for the store operations. Screen Designer also allows for the use of graphical images and for user defined button sizes, shapes, and positions. This flexibility is the key to designing screens that can access any Point of Sale (POS) Restaurant Software function or gain access to the included modules.

Quick Serve (QSR)

Point of Sale (POS) Restaurant Software is equipped to handle all sizes of quick service operations. It possesses all operational and management functionality that are key to running an efficient Quick Serve (QSR) operation including the following.

- Auto-Meal Combination Recognition
- Coin Changer Support
- Kitchen Video support
- Assign customer phone number for to-go orders
- Drive-Thru Mode
- Drive-thru Order Confirmation Board Support
- Inventory control including recipes and cost analysis

Table, Bar and Casual Dining

Point of Sale (POS) Restaurant Software can be easily designed to allow for the various styles of restaurant concepts. From the start of the order process, the various transitions that a guest check can be subjected to are handled quickly and efficiently.

Whether in a Cashier style operation or full service using a banked wait staff concept, Point of Sale (POS) Restaurant Software has all of the necessary management control and report tracking to provide an accurate view of the day's business including the following.

- Table and Retained Check Tracking
- Graphical Table Map
- Integrated Credit Authorization Option
- Server Banking and Cashier Operations

- Auto Gratuity
- Inclusive Tax Items
- Liquor Dispenser Support
- Assign Names to Bar Tabs
- Priority Sorting for Kitchen Printers
- Custom Kitchen Messages
- Separate Check Functionality by Item, Seat, or Dollar Amount
- Split an item up to 9 ways
- Combine Check Function
- Server Transfer, one or all checks
- Check Recall by bar code scanner

Point of Sale Restaurant Software's Delivery Module

Point of Sale (POS) Restaurant Software's Delivery Module will allow Guest Checks to be created and assigned to customers for delivery. Point of Sale Restaurant Software can maintain a customer file of 9,999 entries which can be accessed and sorted by Customer ID Number, Phone Number, Address, First and Last Name or by City. Point of Sale (POS) Restaurant Software's Delivery Module can create and store new customers on the fly during a first time purchase. When used with PC WorkStation, Point of Sale (POS) Restaurant Software can automatically retrieve order history allowing for fast and accurate order entry. Guest Checks created for delivery are managed by the Driver Dispatch functions where accountability for delivery orders are assigned to drivers. Typical (POS) Point of Sale Restaurant Software offer

- 9,999 Customer File
- Sort by ID, Phone, Address, First and Last Name or by City
- Automatically searches by sort option
- Create new customers on the fly
- Delivery Notes for each customer
- Retrieve Order History (Requires PC Workstation)
- Fast and Accurate Order Entry
- Select All items or Tag Item to Current Check
- Personalized service
- Assign Delivery Order to available Drivers
- Displays a list of Employees Clocked In with Job Code "Driver"
- Displays Assigned Checks
- Dispatch Drivers
- Displays Status of Drivers (Ready or en route)
- Arrange Tickets for desired delivery route
- Checks totals posted to driver for accountability

Inventory

[Point of Sale \(POS\) Restaurant Software](#)'s integrated Inventory system accurately tracks product and ingredient usage by way of Recipe Definitions and Product Mix information. Item count down feature can signal the wait staff that a particular product is no longer available, while Inventory Reports provide usage details and food cost information.

Timekeeping

Using the available time clock feature, [Point of Sale Restaurant \(POS\) Software](#) will help managers capture the valuable information necessary to control labor costs. Employee clock in/out procedures can either be performed by numeric entry, magnetic card or digital I-Button. Security levels assigned by Job Codes provide the controls necessary to access POS functions. Detailed time clock reports will provide employee punch time data with accumulated pay period totals, as well as additional reports to provide critical labor to sales information.

Labor Scheduling

The [Point of Sale Restaurant \(POS\) Software](#)'s Labor Module adds increased functionality to the integrated labor scheduling portion of the point of sale system, including the following:

- Maintain schedules for the Current Week and for the Next Week.
- Roll the Current Week Schedule to create the Next Week Schedule
- Create Grace Periods by Job Code for Early Clock In/Out and Late Clock In/Out
- Create Labor Schedules for youth that adhere to hour restrictions imposed by the Fair Labor Standards Act (FLSA).

Programming

With [Point of Sale \(POS\) Restaurant Software](#) no back office computer is required to make changes or add to the system tables. All menu item, employee, screen design, etc. are performed directly on the POS terminal in an easy to use programming mode using an on-screen touch keyboard. Changes are accomplished easily and are immediately available to all stations in the POS system.

Third-party software apps such as [Skip the Dishes](#), [UberEATS](#), [DoorDash](#), and [Foodora](#) that allow to order food from a restaurant, and have it delivered are gaining popularity and make a real impact on restaurant business. When the restaurant's menu is featured in the app, new customers can discover it and loyal customers can enjoy it more often.

Municipal building permits must be obtained for new restaurant, remodeling to freshen up, or to rebrand an existing restaurant. Renovations to an existing restaurant provide an opportunity to examine industry trends and to see where the restaurant fits in, while also differentiating from other restaurants in the neighbourhood. Periodic remodeling and/or rebranding of an existing restaurant to strategize ways to keep the restaurant relevant in a changing marketplace is not only important, it can be vital to success in the ever-changing restaurant industry.

All the required building permit drawings should be in compliance with the applicable Ontario Building Code and municipal by-laws. Our expertise and guidance can save a great deal of time and money while also providing an attractive and functional restaurant. We are experienced in dealing with the unique challenges of restaurants. We pride ourselves on working diligently to create real value for each and every client. Having vast experience in engineering design, we offer effective, innovative and cost efficient concept designing, design detailing and construction drawings to our clients. Our team's proficiency in conceptualizing designs and plans in accordance with our clients' requirements has made us very successful.

We provide proper Engineering and Architectural Drawings based on our extensive experience to obtain Municipal Building Permits for proposed construction, addition or renovation of Restaurants in Ontario.

Overall, the design of your own restaurant needs your personal attention. No one knows more about your desires, philosophies, and goals than you do. When working on layout of a restaurant, the first thing that we do is listening to you and understanding your vision. It is important to know your design goals before details can be implemented in an effective restaurant layout by us.

We would

- **determine your space needs**
- **translate your requirements into appropriate space planning**
- **create an efficient layout and flow**

With careful planning, we develop a cost-effective and efficient restaurant space, one that's well-designed, well-staffed, and always makes a positive impression.

Since we incorporate your [ideas](#), we do NOT charge for the [space planning and design](#).

Our fee for preparing the necessary drawings to obtain municipal building permit for renovation of a small restaurant is as follows:

- ✓ **Site Plan with a Key plan - \$395**
- ✓ **Applicable Building Code Matrix - \$395**
- ✓ **Existing and Proposed Floor Plans - \$795**
- ✓ **Existing and Proposed Reflected Ceiling Plan - \$795**
- ✓ **Existing and Proposed Plumbing Plans - \$795**
- ✓ **Exit and Emergency Lighting Plans - \$395**
- ✓ **Grease Interceptor Calculations - \$295**

If Required by the municipality

- Heat Loss & Heat Gain Calculations - \$795
- Heating / Cooling Duct Design & Ventilation Air Balance Calculation \$795
- Commercial kitchen Hood Exhaust Design - \$795
- Design of make-up air unit & additional air to balance the total exhaust - \$795
- Fire Alarm Design - \$795
- Architect Review - \$1,975
- Structural Drawings for any roof openings \$795
- Structural Drawings for any proposed mezzanine - \$795
- Structural Drawings removal of any load bearing walls - \$795
- Electrical Lighting Plan - \$995

Our fee does NOT include the cost of ESA – Electrical Safety Authority Inspection, Municipal Building Permit Fee etc. If required by the municipality, the contractor must provide stamped engineering drawings and obtain permit for the fire suppression system. If you would like us to prepare the millwork and cabinetry drawings, it will cost extra. Similarly, the municipality does not require electrical drawings except Exit and Emergency Lighting Plans. If you want us to prepare electrical drawings, the electrical drawings will cost extra.

Call 24/7: (416) 332 1743

Text Messages: (416) 727 8336

Email: buildingexpertscanada@yahoo.com

BUILDING EXPERTS CANADA LTD

We prepare building permit drawings for restaurants in Ontario including Toronto ([City of Toronto](#)), Hamilton ([City of Hamilton](#)), Oshawa ([City of Oshawa](#)), Pickering (City of Pickering), Clarington (Municipality of Clarington), Ajax (Town of Ajax), Whitby ([Town of Whitby](#)), Brock (Township of Brock), Scugog (Township of Scugog), Uxbridge (Township of Uxbridge), Burlington (City of Burlington), Halton Hills (Town of Halton Hills), Milton (Town of Milton), Oakville (Town of Oakville), Brampton (City of Brampton), Mississauga (City of Mississauga), Caledon (Town of Caledon), Vaughan (City of Vaughan), Aurora (Town of Aurora), East Gwillimbury (Town of East Gwillimbury), Georgina (Town of Georgina), Markham (City of Markham), Newmarket (Town of Newmarket), Richmond Hill (City of Richmond Hill), Whitchurch - Stouffville (Town of Whitchurch-Stouffville), King (Township of King), Bradford-West Gwillimbury (Town of Bradford-West Gwillimbury)

Having vast experience in municipal engineering design, we offer effective, innovative and cost-efficient concept designing, design detailing and construction drawings to our clients. Our team's proficiency in conceptualizing designs and plan in accordance with our clients' requirements has made us very successful.

Our licensed professional engineers prepare thorough, detailed, and clear Engineering Drawings and plans to suit the client's needs while also adhering to design requirements of the municipality and submit to municipality for review and approval to obtain site plan approvals and building permits.

Since our licensed Professional Engineers certify the plans and drawings, they are filing for building permit are in compliance with Ontario Building Code, Municipal By-laws and Regional Government Authority Requirements, municipal plan review process for the building permit is always much faster. Feel Free to Contact Us Anytime. Our cost-effective, inviting and attractive designs are configured for future expansion. Customer-friendly layouts are very easy to navigate.

Our attractive, practical, multifunctional, environmentally friendly restaurant designs increase cash flow and profit margin. Unique energy efficient cost-effective clear span elegant banquet hall designs are not only attractive; they very much reduce the operational expenses as well.

Our restaurant designs are simply awesome amazing astonishing beautiful serene really inspiring restaurant designs.

We creatively and cost effectively try our best to incorporate everything possible on our client's dream restaurant wish list. We pride ourselves on work diligently to create real value for each and every restaurant.

Our service area includes Our service area includes the following municipalities:

Toronto ([City of Toronto](#)), Hamilton ([City of Hamilton](#)), Oshawa (City of Oshawa), Pickering (City of Pickering), Clarington (Municipality of Clarington), Ajax (Town of Ajax), Whitby (Town of Whitby), Brock (Township of Brock), Scugog (Township of Scugog), Uxbridge (Township of Uxbridge), Burlington ([City of Burlington](#)), Halton Hills (Town of Halton Hills), Milton (Town of Milton), Oakville (Town of Oakville), Brampton ([City of Brampton](#)), Mississauga ([City of Mississauga](#)), Caledon (Town of Caledon), Vaughan ([City of Vaughan](#)), Aurora (Town of Aurora), East Gwillimbury (Town of East Gwillimbury), Georgina (Town of Georgina), Markham ([City of Markham](#)), Newmarket (Town of Newmarket), Richmond Hill ([City of Richmond Hill](#)), Whitchurch - Stouffville (Town of Whitchurch-Stouffville), King (Township of King), Bradford-West Gwillimbury (Town of Bradford-West Gwillimbury)