FOOD SERVICE FACILITY PLANNING GUIDE

The Windsor Code requires that plans to construct new food service facilities or to modify existing establishments be submitted to the Health Department for review and approval **before** beginning work. This requirement applies even to replacing an existing piece of equipment if the replacement is not the same make and model as the one being replaced. Depending upon the scope of work, the plans may also have to be approved by the Building Official and the Fire Marshal. **Any work that involves removing or constructing walls or partitions, installing electrical or plumbing, fire sprinkler systems, exhaust hoods, HVAC and hot water systems, etc. requires that a building permit be secured before any work is commenced. In the case of some permits, such as electrical, plumbing, HVAC and fire suppression systems, the application must be signed by and the work performed only by appropriately licensed personnel.**

New establishments and existing establishments that are changing their mode or scope of service may also require a **Special Use** from the Town Planning and Zoning Commission. Town staff is available to discuss your proposal during the planning process. You can contact any member of the core inspection team to schedule a meeting with Health, Building, Fire and Planning and Zoning staff. If you are unfamiliar with or unsure of your ability to adequately design the facility plans, it is very strongly recommended that you employ a professional designer. In some cases, such as facilities that exceed a certain size or that are in a building with mixed uses, plans may have to be prepared by a Connecticut-licensed architect. If you have questions, please call:

HEALTH DEPARTMENT	(860) 285-1823	BUILDING DEPARTMENT	(860) 285-1961
FIRE MARSHAL	(860) 285-1971	PLANNING DEPARTMENT	(860) 285-1980

The facility plan must devolve from the proposed menu, proposed number of meals to be served, and the proposed frequency of deliveries of groceries and other supplies. These details will enable the planner to calculate the amount of space required for refrigerated and dry storage, preparation areas, warewashing areas, and service and dining areas. In general, plans for a food service facility must show the following:

1. The facility needs to have a vestibule or other area for receiving deliveries.

2. The facility must provide toilet facilities for employees and the public as required by the Public Health Code and the Connecticut Basic Building Code.

3. There must be adequate facilities for employees to keep personal items like purses, coats, overshoes, etc., out of work areas. Changing rooms for each sex must be provided if employees routinely change clothing on the job.

4. There must be an area for the disposal of mop water and for the sanitary storage of cleaning implements.

5. There must be an area separate from food preparation, storage and service areas for the storage of cleaning and sanitizing chemicals, “Sterno”, etc.. A separate, secure area must be provided for pesticide storage. A suitable, dedicated cabinet may be sufficient depending upon the amount of material to be stored.

6. There must be conveniently located hand washing sinks, that are used for no other purpose, in toilet rooms, food preparation and utensil washing areas.

7. Appropriate ware-washing facilities must be provided for cleaning and sanitizing kitchenware, food service equipment, and multi-use utensils and tableware. This may include a three-compartment sink with drain boards and/or a mechanical dishwasher, depending upon the type of operation. There must be adequate, sanitary storage space for clean tableware, kitchenware and utensils.

8. Separate sinks are very strongly recommended for food preparation to avoid the possibility of accidental cross-contamination from cleaning compounds or sanitizers. Where possible, separate facilities should be provided for raw meats and for produce.

9. Adequate facilities must be provided to vent steam, smoke and cooking vapors directly to the outside. Depending upon the type of operation, this may require exhaust hoods constructed to NFPA, UL and NSF standards.

10. Water heating facilities must be sized to deliver an adequate amount of hot water (gallons per hour) to ware washing facilities, food preparation and utility sinks, and hand washing sinks. Required temperatures can vary from 110 – 115 degrees Fahrenheit at hand sinks to 125 degrees at pot sinks and 140 degrees at dish machines. When hot water is to be supplied to an individual piece of equipment, such as a dishwasher, the minimum required temp. can be found in the manufacturer’s specifications. When more accurate usage figures are not available, use 70 – 90 gallons per hour

for three-compartment sinks, 15 for utility and prep. sinks, and 5 for hand sinks. Supply requirements for other equipment, such as dishwashers, must be calculated from the manufacturer's specifications. The resulting figure must be equal to or less than the *recovery rate* of the water heater: this is different than the tank size.

11. Adequate space must be provided for refrigerated and for dry storage. There are formulas available that can enable the planner to calculate the cubic footage required for storage. Remember that a lot of space in storage rooms and walk-in refrigerators and freezers is not usable; it is taken up by aisles and required floor and ceiling clearances, and these volumes must be added to the required volume to get the total that is needed.

12. Utilities, such as electrical connections, water, drains and gas must be provided convenient to the equipment requiring such connections. Where possible, exterior runs along walls should be avoided. If absolutely necessary, horizontal, exterior runs must be greater than 6" above the floor and suspended away from the wall by 1" bell hangers. Floor drains are generally necessary in ware washing areas and adjacent to walk-in coolers, and in any other areas that may be flooded during operations (i.e. pressure washing floors). Floor drains that are required to receive indirect wastes from food service equipment, such as ice maker and dishwasher drains, should be of the floor sink variety. All drains from food service equipment should be indirect, and a positive **air-gap** is required for pressurized wastewater from water-cooled compressors and the like. Grease traps are required for dishwashers and utensil washing sink wastes: an external grease trap is preferred to separate, indoor ones. The water supply lines to some pieces of equipment, such as chemical dispensing or pressure washing devices, water heaters, ice makers, dishwashers, steamers, and carbonators may require backflow protection devices. Any hose bib or threaded sink spout to which a hose could be attached must be similarly protected.

13. Environmental surfaces must be light-colored, smooth, durable and easily cleanable. Floors in food preparation and ware washing areas must usually be ceramic tile or poured, seamless flooring. In some cases an industrial-grade, sheet vinyl safety floor with heat-welded joints may be acceptable. Floor/ wall joints must be sealed and coved: rubber or vinyl cove base is not permitted in these areas. Floors must be sloped to drain where floor drains are provided. Walls in these areas must be ceramic tile, sealed masonry, or durable, fiberglass wall panels (Glasboard, Kemlite, Marlite, etc.) up to a level exposed to splash or spray, generally not less than 4.5 - 5'. Walls in cooking line areas must be metal. Ceiling surfaces in these areas must be smooth and washable: no fissured, acoustic ceiling tile or sand finishes are allowed. Service areas, dining areas and toilet rooms may use commercial grade vinyl composition floor tiles, finished wallboard and acoustic ceiling tiles. Dining areas may be carpeted. Any pipe or conduit penetrations must be sealed and finished.

14. Food service equipment must be constructed of non-toxic, durable materials and be easily cleanable. This generally means it must be designed and constructed to the appropriate NSF standard (listing by ETL or by UL to an NSF standard is also acceptable). Used equipment meeting these standards is permitted if it is free of other than minor, cosmetic defects. Equipment must be installed so that it and the area around it can be easily cleaned and maintained. Equipment that is to be installed adjacent to a wall or to other equipment must have adequate space around it for access for cleaning and maintenance. Where the reach distance is less than 2', 6" of unobstructed space is required; for 2 to less than 4', 8"; 4 to less than 6', 12"; and 18" for anything 6' or more. These clearances are waived for equipment that is permanently installed and sealed to the adjoining walls; equipment that is moveable by means of casters, sliders or rails; or, that is otherwise easily moved by one person (generally weighs less than 80 lbs.). Equipment should be on sanitary legs at least 6" high or on casters or sealed to a raised, masonry platform or the floor.

15. Adequate space for operations must be shown. There must be appropriate separation between operations involving raw food preparation, holding and serving prepared food, and the handling of soiled tableware, kitchenware and utensils and the storage of cleaned and sanitized items. In general, aisle and passageways should be equal or greater than 36" wide. The planner may wish to flow-chart the operation in order to better visualize conflicts or potential points for cross-contamination to occur.

16. Adequate space must be provided for the collection and storage of garbage and other wastes, pending disposal. This area must be appropriately screened from public view and constructed so as to be easily cleaned. If large, dumpster-type containers are provided, a concrete pad is required. Separate containers for recyclable wastes may be necessary. Containers must be of sanitary design: fly-tight and rodent-proof.

Allow for possible expansion. If you design your facility to minimum standards, and don't make allowance for greater business than projected, possible menu changes or space for future expansion, you may find your facility undersized and inadequate to safely prepare the quantities of food required by the additional business, menu change, etc.