UTILITY FOR YOUR FACILITY

Foodservice design is a lot like interior design in that there really is no *one* right answer. There are health codes and specific design standards which must be adhered to in every design, but generally speaking, no regulatory agency is going to dictate whether the cooking line is running north-south or east-west in a kitchen. They will not be concerned whether the office is located at the front or rear of the kitchen, or whether the service station is in the dining room or in front of the chef's counter. So much of foodservice design is based upon opinion, experience, or preference, and nothing more than that.

Where foodservice design differs greatly with interior design is the ease with which changes to earlier decisions can be made. For instance, let's say that the owner of a restaurant no longer likes the tables and chairs in a dining room, or a hotel property owner no longer likes the drapes, curtains, or furniture in the guestrooms. Changing these pieces out for new ones is relatively easy and can completely change the design impact of the space. In fact, making dramatic changes, including the style or even the placement of these furniture and fixture items, is relatively simple. Making similar changes in a kitchen, however, is far more complicated. The main limiting factor is not the equipment, but rather the utilities (i.e. gas, water, electrical power, floor sinks, floor drains, etc.) and infrastructure that were originally provided to support that equipment. The placement of utilities in the original design of a kitchen space can not only impact the initial layout, but also impact future changes and modifications to the kitchen space. There is a lot riding on decisions made regarding the location, inclusion, or exclusion of utility rough-ins during the design and construction process.

<u>Thinking Ahead</u>

Too often, project teams plan only for the equipment that they have specified in the original design or renovation plans and not for the equipment that the owner *might* have in the future. This can be a *very* costly mistake. Though there is some additional cost involved, providing ample utilities in a kitchen space is far more cost effective than adding them later. In fact, there is an exponential

savings for including additional utilities in the design on the front end, which makes for a great argument to provide excess utility capacity when possible. Let's start with a simple example. A particular refrigerator may require 6.0 amps to operate, but I may specify a 10.0 amp load on our drawings. Why? Well, for one thing I know that there are manufacturers that make refrigerators which require 8.0 amps and not 6.0 amps to operate. By providing the additional capacity, I am ensuring the owner's flexibility to one day replace the refrigerator with a model from the manufacturer of their choosing.

Okay, you say, 8.0 amps may be justified … but why 10.0 amps? Well, what if the owner one day implements a menu change that requires a freezer instead of a refrigerator? The freezer will run off 10.0 amps. This additional capacity, which typically carries only a minor premium, also allows for flexibility during the bidding process, enabling the owner to consider alternate manufacturers, which might have different load requirements, without incurring costs for change orders in the field.

Shifting gears just a bit, I want to focus on utilities that are incorporated into the floor. This may include stubbed-up electrical conduits, stubbed-up water lines, or floor sinks and drains, for example. Each of these – *especially* the floor sinks and drains – can have a long lasting and potentially limiting effect on the facility's flexibility down the road. Thus, it may be wise during the planning stages to carefully consider the placement of these items. I would suggest looking at the floor plan both with and without the proposed equipment layout to ensure there are enough floor sinks or floor drains for possible future modifications. In certain instances, it may even make sense to add an extra floor sink or two just to leave options open for later. You may think I am nuts, so let me give you a tangible example. What if an operator has a significant menu change that requires the addition of a steamer in a location where one did not previously exist? Routing a water line can be done fairly easily, as the supply line can be run through the ceiling or adjacent walls. Floor sinks, however, are typically a much different story as the plumbing system is in the floor. The provision of a floor sink on both

ends of a cooking line, whether initially required or not, would limit the cost of adding the steamer to the line.

Minimizing the Budget Impact

Though it has been a while, if you are a frequent reader of this column series, you might recall my theory of *First Define, Then Fill*. In a nutshell, this theory is my belief that the design of the space is the primary consideration, with the selected equipment a clear second. Further, it is a mindset that will permit the owner to delay the purchase of the actual equipment, if required due to budget constraints, without impacting the integrity of the overall layout. If the utilities are available, it is far easier and less costly in the long run to purchase and install the equipment at a later date.

If on the other hand the utilities are not provided during the initial phase of construction, adding the equipment at a later date will be far more difficult, if not almost impossible … and far more costly. When equipment may be categorized as "future" to support an initial construction budget, it is important to make sure the utilities are not also deleted from the project. With budget constraints a concern on nearly every project, the elimination of equipment often translates into the elimination of the equipment's required utilities as well. It is preferable to provide the utilities, even when the equipment has been deleted or its purchase has been delayed.

The "Poor Man's" UDS

There is a piece of equipment available called a utility distribution system, or UDS to use the industry jargon, that offers a great deal of flexibility for utility modifications. A UDS, typically placed behind or between the cooking line(s), consists of vertical pillars with a horizontal chase that contains the main utility lines. The horizontal chase contains access panels to allow for easy modifications at a later date, with the vertical pillars providing a means to route the utility lines through the ceiling. These systems, which often come pre-wired and pre-plumbed, can be *very* expensive. However, there is an alternative. Rather than having the manufacturer pre-pipe and pre-plumb the system at the

factory, you can order what I refer to as a “poor man’s” UDS, which consists of nothing more than the vertical and horizontal structure. The utilities are then run in the field by the electrician or plumber. There will still be an additional cost for this system, but the “poor man’s” UDS will provide most of the same benefits and is worth considering no matter what type of foodservice establishment is being planned. Regardless of the approach that is selected, it is important to consider what impact your utility locations will have on the long-term viability of your facility to support your operation. A little planning on the front end can save you big bucks later.