

## **Basic Principles**

### **By Joseph P. Guzzo**

As promised, in this month's article we will discuss Basic Principles. Similar to the Rules in our gas modifications basic principles are often overlooked. However many answers to code questions can be found in the 26 very important principles. Following are a few of these principles contained in section 10.02.

**Basic Principle #3- Hot Water Required-***Hot water must be supplied to all plumbing fixtures which normally need or require hot water for their proper use and function.* How many times have you seen an old decrepit toilet room, with a sink with just cold water, because the owner was too cheap to supply hot water. This is not legal. It goes on in factories, offices, and believe it or not even in schools. Hot water must be supplied.

**Basic Principle #6 - Required Plumbing Fixtures-***To meet the basic prerequisites of sanitation and personal hygiene each dwelling shall include the following, etc.* This principle is one of the more important for all plumbers and inspectors to know and understand. Unfortunately during the last round of revisions it was chopped up by a butcher impersonating a code writer. It explains the minimum required plumbing for residential dwellings. You will notice the fixtures are listed separately and numbered. This has caused much confusion, for example some may think this means only one toilet must be working in one bathroom, and one lav working in another, or a shower working in yet a different bath. The true intent as it was written before is to have one full bath working in the house, one kitchen sink, that's a kitchen sink in the kitchen, and one washing machine connection. Not a washing machine, only the connections ready to accept a washing machine. No inspector can make you install a washing machine. And obviously hot water must be working. These minimum working plumbing fixtures will allow occupancy for a dwelling. The requirements are the same for a two family house, including a washing machine connection for each unit. The laundry requirements change for multi-family dwellings, multi-family means three families and up. Then only one washing machine connection is required for every ten units. And for elderly multi-family dwellings one washing machine connection for every twenty units. I am consistently asked about this code requirement because sometimes people want to move in to their home before it is complete. Nowhere in this code will it require items like a dishwasher, garbage disposer, or stove. As long as the minimum requirements are complete and operating as explained, the house is legal to live in from the standpoint of this code.

**Basic Principle #15- Light and Ventilation-***No toilets, urinals, bathtubs, or shower facilities shall be installed into a new or renovated room, space, or compartment that does not incorporate proper illumination and mechanical exhaust to the exterior of the building. This Principle does not apply to the removal and replacement of existing fixtures.* OK, now we can kill this argument right now. You must have a mechanical fan in the bathroom, even if there is a window. Inspectors cannot sign off on completion of any toilet room unless there is light and ventilation, get it.

Basic Principle #19- Fixtures Shall Be Accessible- *All plumbing fixtures shall be installed in a manner with respect to clearances for spacing and accessibility for their intended use and cleansing.* There are no minimum dimensional requirements for residential bathrooms. However the room must meet the intent of this principle. The spacing must be reasonable, like you can't step over the toilet to get in the tub. And for commercial toilet rooms they all must meet the dimensional requirements of 521 c.m.r. handicapped code. That is the intended use.

Basic Principle #23-Privacy for Toilets- *In a room that accommodates more than one toilet or that incorporates a urinal and a toilet, each toilet shall be enclosed and each urinal shall be side shielded for privacy.* This is really a no brainer, yet I see it all the time. A toilet and a urinal together in one room, and the toilet is not enclosed. Architects actually draw it on blue prints, plumbers install them, and Inspectors approve them. It is ridiculous. I could see missing it in the code once, but this regulation is in our code twice, there is no excuse.

Basic Principle #24- Drinking Fountains- *Drinking fountains shall be installed in a safe, clean, and hazard free area. The installation of a drinking fountain in a rest room that incorporates toilets or urinals is prohibited.* Well, most rest rooms have toilets, so don't install drinking fountains in the bathroom.

Those are just a few of the 26 basic principles. Bookmark them in your code, and chances are you may find the answer to the code question you are looking for. Next issue we will discuss the last of my trilogy series, definitions.