

Metering Faucets; The Truth “Leaks” Out By Joseph P. Guzzo

Back in 2002, I wrote an article about metering faucets. The article titled *Metering Faucets Where, When, Why* generated a huge response. And even today 5 years later, I still get calls about the article and the many interpretations about metering faucets. Back then the code had still not been revised. Metering faucets although in our code for over 15 years were not clearly understood, and not enforced by Inspectors that were out of touch with the code, and there were many. However if you just took a little time to study the section on metering faucets, and understood the intent of the regulation, it really wasn't that complicated.



Metering faucets were put in our code for two reasons only, water and energy conservation. The regulation was joined with similar energy conservation rules like low flush toilets, shower heads, and efficiency ratings, mandated by the Federal Government. The regulation could be found in 2.14 now 10.14 *Water Supply and Distribution*, under the heading *Conservation of Hot Water*. The code also allowed the use of electronic and linkage type faucets. However all had to deliver a limited amount of water, and the water temperature could not exceed 110 degrees for safety reasons.

The code stated that energy saving faucets had to be installed on lavatories in public restrooms. Many had and still have a problem with the term public. However if you read the definition of public and private in our code this should clear things up. In short, anything other than residential is considered public in our code. These definitions were put in our code to simplify the term public in regards to plumbing fixtures and toilet facilities. And it is quite simple if you just stick to our definitions. The definition of public in other codes and terminologies is different.

You had a choice to use one of three types of faucets. A touch free electronic (hold your hands under it) and must deliver a maximum of .5gpm. A linkage type (knee or foot pedals) like on a Bradley sink, also 5gpm. A metering type faucet (simply a much improved self closing faucet) compared to the old spring type. I remember those in school. The metering faucet had to be adjusted to run for a maximum discharge of .25 gallons, equal to 10 seconds. Perhaps the most contentious interpretation about metering faucets is their use on a handicapped lavatory. As I wrote before, this is very easily explained. We now know that 248 cmr requires metering type faucets. So to kill an argument whether a metering faucet can be installed on a handicapped lav, all you have to do is check the State handicapped regulations 521cmr. Everyone should have a copy to go right along with your plumbing and gas code. Section 30.9.6 (faucets) will state. *Lever operated, push type, touch type, or electronic controlled mechanisms are acceptable designs. If self closing valves are used, the faucet shall remain open for at least 10 seconds.* So metering faucets are allowed and will conform to both codes. Except for perhaps a linkage type faucet allowed in the plumbing code but not listed in the handicapped code. These faucets are seldom used on lavatories anyway. They can usually be found on laboratory or clinical

sinks. Otherwise no code conflict exists. It is incredible to me how many people have deluded themselves into the false belief that only lever operated faucets with wrist blade handles are allowed on handicapped lavatories. It is just not true. One example of this could be found at Winthrop Town Hall. This is where the Plumbing Board held its subcommittee meetings for many years, before relocating to Quincy. Now this is a Town Hall so there is absolutely no argument that it is public. One year the Town Hall underwent some renovations, among them was a new unisex handicapped toilet room directly adjacent to the Plumbing Boards meeting room. When complete, low and behold the faucet on the lavatory was not a metering, electronic, or linkage type as required by code, but a lever operated faucet with wrist blade handles. In addition, the faucet was not tempered to 110 degrees as per code. I often wondered if anyone else ever noticed this code violation except me. Ah but wait perhaps the Town was granted a variance, I'll take that bet.

Now let's fast forward to 2005. The new code book was finally complete with revisions that were on hold for years. There was supposed to be only one revision to the metering faucet section. I should know I was on the committee that approved it. It was to eliminate the requirement for metering faucets in facilities that were for employees only. Quote, *Metering faucets of any type are not required for toilet facilities designated and used by employees only.* This wording was added and is in the code now. However another section was altered with one word and in essence eliminated the requirement for metering faucets altogether. I allege this was done purposely by the administration for the Plumbing Board, who are in complete control of all code revisions, and did not believe in or understand the true intent of metering faucets. Please check out the following wording taken directly from the code.

Section 10.14,3,a,2 *Lavatory faucets in public toilet facilities shall, Limit the delivery of water to a maximum of .5 G.P.M. unless a metering faucet is provided that limits the delivery to a maximum of 0.25 gallons per metering cycle.* In other words by adding the word unless you can now use any faucet you want as long as it has a flow restrictor of 5 G.P.M. Out go metering, electronic, or linkage faucets for any use. And out go the energy and conservation measures in our code for years.

You may draw your own conclusions. But I again allege this was done purposely, and is an example of how our code is being manipulated by so called grammatical changes. I will hereby challenge any member of the Plumbing Board that they were aware of this at the time of so called approval. The Board is being spoon fed while blindfolded. Case in point the elimination of drinking fountains from table one. I even wrote a letter on this, yet it still went through. My letter probably ended up in the circular file, like all my others. Then at a continuing education meeting we were told to pencil the drinking fountains back in table one...only to tell us to erase them at the very next meeting.

As I see it there are only two solutions to this problem. The Plumbing Board must take full control of the code revisions. They must get them out of the front office, where the revisions are the administration's own personal philosophies disguised as grammatical changes. And if you ever question them, their response will be "that's what they wanted." "They???" The Board must organize a diversified professional code committee that reports directly to the Board. Otherwise the only other solution available is to adopt the IAPMO National Code. It is by far the best National Plumbing Code in the Country. The

revisions are handled by a professional committee. There are interpretation manuals, and even technical code support.

I do not blame the Plumbing Board for not knowing all of the revisions set forth by the administration. The revisions are presented in a way that is overwhelming -- Hundreds of pages, with lines drawn through some single words, sentences, paragraphs, partial paragraphs, and entire pages... with no direction, and no explanation. It is impossible to decipher all of them.

The amount of code revisions should be limited. They must be separate, not presented in the text of the code. They must be clear and concise, showing the existing wording, and the proposed change. Each revision must contain the name of the person that submitted it. There must be an explanation of each revision as to the reasons and intent of the change. There must be a mailing and publication of the revisions, with a way to comment on the revision. This includes all revisions, even so called grammatical changes that now are a poor excuse to alter the code. For which I contend if it is not illegal, it certainly is not proper.

I never thought I would support a National Code. I have always been a staunch supporter of our Mass Code. And I believe it can still be the best code in the nation. However code revisions affect everyone in the industry, from the Plumber right down to the consumer. These important revisions cannot be decided by one person sitting at a computer, typing whatever they feel is worthy.