

# Appliance or Plumbing Fixture, Don't Be Deceived

By Joseph P. Guzzo



Recently a friend of mine sent me a newspaper article titled "Obscure Appliance Law May Hose Buyers." It was about disgruntled appliance store owners in support of proposed legislation under House Bill #214. The proposed bill calls for the training and licensing of Home Appliance Servicers, abbreviated H.A.S. In addition the bill would allow H.A.S. to disconnect and reconnect hardwiring, water connections and gas connections necessary to repair or replace an appliance. A definition of "Appliances" is also added, "any appliance manufactured which may require the tech to disconnect and reconnect electric, water, and gas." The article was filled with unsupported exaggerations to a point of intentional deception. So here's as they say, the rest of the story, the truth. As I go along I will break down the articles deceptions.

First, I do not have anything against appliance store owners or workers. They work hard and are trying to make a living just like everyone else. I also admit that I know little about the appliance business. That makes us almost even, because obviously the author of the article knows less than nothing about plumbing and gas fitting. This is how our plumbing regulations are described in the article, "obscure appliance law" "old rule" "little known and even lesser used provision in State Law" "law that is archaic and never enforced" "its asinine," those quotes from the article are referring to Mass. General Law Chapter 142, and 248 C.M.R.

The article claims that only licensed plumbers and electricians are allowed to install or replace appliances such as refrigerators, dishwashers, and stoves. Even though the connections "screw in like a garden hose." Under the definition of Plumbing contained in M.G.L. 142, and 248 C.M.R. includes "fixed appliances." Remember this is plumbing not gas. A dishwasher is considered a fixed appliance, and a plumbing permit is definitely required. Proper connections to the potable water system and sanitary drainage system must be installed by licensed professional plumbers. Also the unit does not plug in and would require proper wiring by an electrician. A refrigerator is used in the article as a deception. Fact, you definitely do not need a license or a permit to install a refrigerator. However if the refrigerator has an ice maker, that would fall under the plumbing code and require proper connection to the potable water supply. The amateurs would say, "What's so hard about connecting an ice maker? Just use one of those saddle valves." As plumbers we know saddle valves are not permitted by code. And just where do the amateurs install these saddle valves? Usually on any shiny copper pipe in the basement. Let's see cold water, hot water, hydronic heating systems, refrigeration tubing, and don't forget propane gas, believe it.

How about a washing machine, that is certainly an appliance. Fact, you do not need a permit or a license to install a washing machine, anyone can do it. What is required by code are proper connections for the washing machine, consisting of hot and cold water connections ready to accept a hose and a stand pipe or laundry sink to accept the drain hose. Washing machines and the connections are at the top of the list for amateurs to try to install. The problem is that many old homes do not have proper washing machine

connections. When someone buys a new washing machine and finds out there are no connections to install it, many make the mistake of trying to install it themselves. Here's just a few of the creations I have seen. Six bushings in the main clean out, the hose stuck in the end held on with duct tape. A hole broken in the stack with a hammer and the hose stuck in the hole again held in with duct tape. Hot and cold hoses connected to a lavatory faucet, and the hose discharging into the bathtub. And the simplest solution, just stick the hose out the cellar window. Today for all new construction and remodeling a proper washing machine connection is required as part of basic principle #6 for this very reason. Again, a washing machine is not a code requirement, you do not have to have a washing machine, however the proper connections ready to accept a washing machine are required by code.

Let's talk about stoves and clothes dryers. Without question only licensed plumbers or gas fitters are allowed to install or replace any gas equipment for very obvious reasons. However for the disgruntled appliance people there is an exception contained in 248 C.M.R Mass. Modifications Rule 8,a "*The adjusting of gas appliance controls, the adjusting of gas flames, the replacement of gas controls, the installation or replacing of gas meters, and regulators, and the servicing of gas appliances shall be deemed work for which no permit shall be required.*" This does not include the installation or replacement of any gas equipment. How about electric stoves and dryers? I do not know of any permit that would be required anywhere to plug something in. However if there are no plugs, these appliances require 220 volts. A appliance person, mover, H.A.S., whatever you want to call them, no matter how much training cannot perform electrical wiring any more than they could install gas piping. It's not asinine, it is common sense... did I mention it is also the law.

So the replacing and repairing of many of these appliances does not need a permit or a licensed professional, like a refrigerator, washing machine, electric dryer, electric stove. And even the repairing of some gas equipment is also allowed. However gas piping, water piping, sanitary waste and venting, and electrical wiring must be performed by licensed trained professionals.

It is also important to mention the manufacturer's installation instructions for gas utilization equipment and many appliances. It will state that they must be installed in strict conformance with all State and local regulations, and must be installed by licensed professionals. Otherwise the warrantee will be void. Not to mention your own home owners insurance, if something was to go wrong and equipment in question was found to be installed by amateurs, without permits as required by law. I doubt you would recoup any money for damages, and would also probably be cancelled. There are also other types of equipment many call appliances. In fact you will find items like furnaces, water heaters, and central air conditioners in the appliance section of home centers. Obviously this equipment must be installed by licensed professionals.

You have heard the expression "written in blood," that phrase was coined for building codes. From the beginning of time these codes and regulations were built on the tragedies of destruction of property, serious injury, and death. And today codes are still being revised because of tragedies. For example new sprinkler regulations were enacted after the horrific fire that claimed the life's of 100 people at the Station Night Club in Rhode Island. And our Mass. Modifications were also recently revised for direct vent

heaters due to the death of a young girl from carbon monoxide poisoning.

Hugh Kelleher Executive Director of the Greater Boston P.H.C.C. wrote a very informative short story about the history of plumbing. It is titled "A Code to Live By," following is an excerpt from the story. *"in 1893 Representative Alfred S. Roe of Worcester, who had suffered the loss of a child whose death was attributed to imperfect plumbing in Worcester, presented a petition for the enactment of law somewhat similar to the Maryland law which was then in operation. The young girl had apparently died as the result of a cross connection, and there was a furor to make sure that amateurs were stopped from installing piping systems. Appealing to the Committee on Public Health, Representative Roe called for strict state wide registration requirements." Representative Roe became known as the father of effective plumbing regulation in Massachusetts.* This briefly explains the origins of our plumbing laws. It's all in the title of Hugh's story, "A Code to Live By."

Death and sickness caused by cross connections due to the very simple reason amateurs were installing plumbing. To stress this point on the first day of class I would always read my students a passage from the book titled "Plumbing" written by the father of modern plumbing design Professor of Sanitary Engineering Harold E. Babbitt. *"The improper installation of plumbing may affect the health of the occupants of a building and create a focal center for the spread of disease. The possibility is of sufficient public interest to require the regulation of plumbing by law. To drink the mixture from a recently used water closet, to bathe in the liquid discharged from a urinal, to cleanse the teeth with the contents of a bedpan, to purge the wound with the drippings from an operating table or mortuary slab, all are possibilities resulting from cross connections in plumbing, the horrors, unknown and known, that have resulted from cross connections are difficult to exaggerate and have resulted in vigorous action by health authorities and strict regulations in plumbing codes."*

1982 Spencer Oklahoma, 7 Dead 34 Injured In Water Heater Blast. This was not a gas explosion, the 85 gallon water heater exploded due to excessive pressure build up. After an investigation the temperature and pressure relief valve was incorrectly installed by unlicensed persons, amateurs.

Avon High School 2000, 5 Gallon Electric Water Heater Explodes, Blows Out Concrete Wall, again the heater was found to be improperly maintained by unlicensed persons, amateurs.

Hong Kong 2003, Sars Virus Kills 299, the spread of this virus was attributed to faulty and poor plumbing design. The virus infected 8098 people, and killed 774 worldwide.

I could continue but I think you get the picture. Our plumbing industry is about health, safety, and public protection and can never be taken for granted. We strive for continuing education, training and professionalism. We refuse to go backwards and jeopardize over 100 years of progress, no matter how much a small group of amateurs try to deceive the public, and distort the truth.