

WARNING: DID YOU KNOW?

LEAD BRASS WILL BE ILLEGAL TO INSTALL IN ALL DRINKING WATER APPLICATIONS AS OF JANUARY 4, 2014.

Lead Free changes everything:

Manufacturers, Distributors, Builders, and Plumbers across the country must comply with the Reduction of Lead in Drinking Water Act, affecting all potable plumbing products sold or installed in the United States.

What does "Lead Free" mean to me?

After January 4, 2014, when the Act goes into effect, the wetted surface of every pipe, fixture, and fitting sold in the United States for use in a potable water system must contain less than 0.25% of lead by weight.

Put simply, it means every potable plumbing product that does not meet this new standard will be illegal and cannot be sold or installed for use with potable water. Period. The law does not pertain to copper tube or wrought copper fittings.

States will be required to implement the new Lead Free requirements through state or local plumbing codes, and some states may also enforce the requirements through consumer protection statutes or other laws. Violators of the federal law (Senate Bill 3874) may be subject to monetary penalties, government lawsuits, or civil lawsuits.

What should my concerns be before the law goes into effect?

All existing inventory must be depleted. There is no magic process that allows brass products containing lead to be recycled into a lead free alloy product. You should purge and deplete your inventory prior to January 4, 2014. Please be aware, as of June 30, 2013 all items not meeting the new legal requirement will not be returnable to Wolff Bros Supply and/or our manufacturers.

What is different about the new alloys?

The basic properties, performance, and appearance of the metals are similar to the products being sold today. However, it does require more care during every step of the manufacturing process and this does add cost. Does that mean it will cost more? Yes, no-lead alloy products cost 30% to 50% more than the product we sell today. As manufacturers gain experience with the new alloys and become more efficient, we are optimistic the cost differential will diminish.

Why do I hear so many different terms when people refer to new alloys?

No Lead, Low Lead, Lead Free, Federalloy, EnviroBrass, etc. Basically, everyone is talking about the same thing... different manufacturers adopted the industry "buzz words" used in their respective market segments. We do anticipate future standards and specifications to clarify some of this industry jargon, as well as the variety of product labeling that exists today.

*Remember, any leaded plumbing product installed after January 4, 2014 is illegal and a fine will be issued if you do not comply.

For more information go to: [Get The Lead Out Plumbing](#) | [We Are Lead Free](#) | [Shed The Lead](#) | [LegiScan](#)

Exemptions to Public Law 111-380 as of March 1, 2013:

Pipes, pipe fittings, plumbing fittings, or fixtures, including backflow preventers, that are used exclusively for non-potable services such as manufacturing, industrial processing, irrigation, outdoor watering, or any other uses where water is not anticipated to be used for human consumption.

*Toilets, bidets, urinals, fill valves, flushometer valves, tub fillers, shower valves, service saddles, or water distribution main gate valves that are 2 inches in diameter or larger.

Safe Drinking Water Act 111-380:

Section 1417 (a) (1) of the SDWA states "no person may use any pipe, pipe fitting, or plumbing fixture, any solder, any flux, in the installation or repair of any public water system or any plumbing in a residential or nonresidential facility providing water for human consumption that is not lead free" - [United States Environmental Protection Agency](#)

*Note: The following is for information purposes only and is not intended to be legal advice. Should any party need legal advice regarding the information contained herein, they should contact their own counsel who specializes in this area of the law.



Soldering Lead-Free Brass



Lead-free brass is more sensitive to soldering conditions than traditional leaded (i.e., yellow) brass. Therefore, strict adherence to good soldering practices is paramount.

Lead-free brass has a lower thermal conductivity compared to leaded brass, as well as unique corrosion resistance due to its natural oxidative barrier, making for an exceptional lead-free brass product. Lead-free brass requires following proper brass soldering techniques to enable a good plumbing joint connection.

Soldering Tips and Techniques

Good preparation and cleaning: All metals should be properly cleaned prior to soldering, but because of the natural oxidative barrier of lead-free brass, a clean surface is imperative to help remove oxide films and achieve a sound and uniform quality-soldered joint. Adequate cleaning requires the use of mechanical abrasive product, such as a wire brush, sandpaper or a sanding cloth. Also, be sure to apply a sufficient coat of flux prior to soldering. Fluxing and soldering should be done immediately after cleaning as oxide films tend to reform quickly on cleaned surfaces of lead-free brass.

Use only flux that contains chloride compounds and only lead-free flux. Oatey #5 Paste Flux is approved.

Uniform heating: Uniform heating around the entire perimeter of the fitting /pipe juncture is critical to making a good joint. When soldering any brass, it is always good practice to heat the component gradually, using a smaller tip, and continually moving the location of the flame around the joint. This is also true with lead-free brass.

Avoid excess heat: It is especially important not to overheat lead-free brass. It will turn a distinctive brown color when overheated. This discoloration is an indicator that flux may have been burned out of the solder joint, resulting in a lack of complete solder coverage. If this condition occurs, the joint must be disassembled and the “good preparation” procedure reapplied.

Cool properly: Over-heating the joint and the subsequent delay in cooling (due to the low thermal conductivity of lead-free brass) may actually allow solder to weep from the joint, or allow the joint to be disrupted after soldering. Cooling the joint with a wet cloth immediately after soldering will speed the transfer of heat, reducing the risk of disrupted joints.

*Note: The information contained herein is made available for use as an example for soldering techniques. However, the installer must take into account the variables involved with each particular installation, many of which cannot be foreseen or anticipated.

