NO-LEAD BRASS – THE BASICS

EST. 1856
McDonald

09/11

LEADED BRASS FACTS:

- Underground brass (per AWWA C800 and C83600 ASTM B584-09A) currently contains nominally 5% lead, 85% copper, 5% tin and 5% zinc.

WHAT DOES NO-LEAD MEAN?

- The Safe Drinking Water Act (SDWA) currently defines No-Lead or Lead Free brass as containing not more than 8% lead by weight. Per U.S.A. Public Law 111-380 the definition of lead free brass will be revised to a weighted average Lead content ≤0.25% for wetted surfaces.

WHY IS LEAD IN BRASS?

- Lead is in brass to make castings pressure tight. In the foundry process lead is the last element to solidify and therefore seeks and fills the microscopic voids in the brass.

- Lead also acts as a lubricant and chip breaker during the machine operation allowing for easier machining and longer tool life.

WHAT WILL BE REPLACING LEAD?

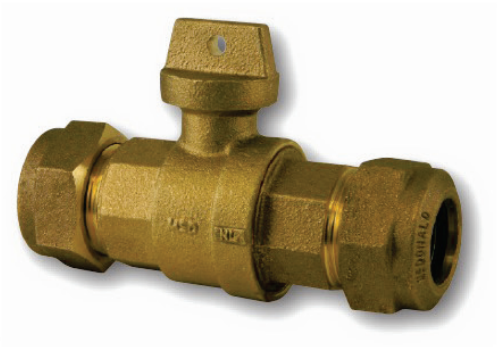
- Bismuth is added in place of lead to address pressure tightness and machining issues.
- A.Y. McDonald no-lead brass may contain trace amounts of Lead less than or equal to 0.09 of one percent by weight.

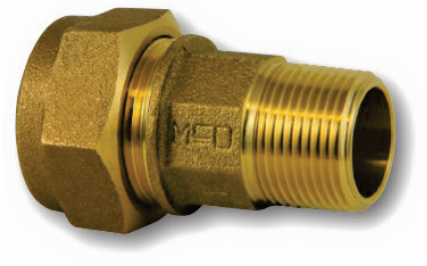
IS ANY UNDERGROUND LEADED BRASS EXEMPT?

- Yes, service saddles are exempt from U.S.A. Public Law 111-380, California, and Louisiana laws. The Vermont and Maryland NL laws *do not* exempt service saddles.

NO-LEAD VS. LEADED DIFFERENCES

- You will not see a physical difference between Leaded and No-Lead brass other than a manufacturers mark on each component that touches water. No-lead brass is designated with a cast “NL” on each component.





WILL INSTALLATION INSTRUCTIONS CHANGE?

- No, installation instructions will not change, however No-Lead brass is still brass and therefore softer than iron so care should be taken when ever wrenching and handling No-Lead brass valves and fittings.

CAN'T WE JUST TAKE THE LEAD OUT?

- Once lead is added to the smelting process it cannot be taken out. Dilution is the only way to reduce the percentage of lead in brass.

WHERE WILL NO-LEAD BRASS COME FROM?

- No-Lead brass will have to be smelted just as Leaded brass is today.

WHAT IS THE COST DIFFERENCE?

- No-lead brass is currently 25 to 40 percent more expensive than leaded brass.

WHEN WILL NL LEGISLATION TAKE EFFECT?

- California and Vermont No-Lead laws went into effect January 1st, 2010.
- Maryland No-Lead law goes into effect January 1st, 2012
- Louisiana No-Lead law goes into effect January 1st, 2013.
- U.S.A. Public Law 111-380 goes into effect January 4th, 2014.

HOW CAN I ORDER A.Y. NO-LEAD BRASS?

- Add a “7” prefix to each model number, for example 4758-22 ¾” will become 74758-22 ¾”

FOR MORE INFORMATION, GO TO:

WWW.NOLEADBRASS.COM

OR CALL TOLL-FREE

1-800-292-2737

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