



| v3 - LEED 2009

## PBT source reduction - lead, cadmium and copper

MRC4.2 | Possible 2 points

Glossary

### Intent

To reduce the release of Persistent Bioaccumulative and Toxic (PBTs) chemicals associated with the life cycle of building materials.

### Requirements

Specify substitutes for materials manufactured with lead and cadmium, as follow:

- Specify and use 100% lead-free solder and flux used to connect plumbing pipe on-site for water intended for human consumption that meets the California AB1953 standard that solder must not contain more than 0.2% lead, and flux not more than a weighted average of 0.25% for wetted surfaces.
- Specify and use pipes, pipe fittings, plumbing fittings and faucets for water intended for human consumption that meets the California AB1953 standard of a weighted average lead content of the wetted surface area of not more than 0.25% lead.
- Specify and use lead-free roofing and flashing.
- Specify and use electrical wire and cable with lead content <300ppm.
- Specify no use of interior or exterior paints containing cadmium or lead. Green Seal certified paints or paints meeting Green Seal criteria exclude metals including cadmium, lead, mercury, antimony, and hexavalent chromium.

For copper pipe applications, reduce or eliminate joint-related sources of copper corrosion:

- use mechanically crimped copper joint system, or
- specify that all solder joints are compliant with ASTM B828 and specify and use ASTM B813 flux.

For renovation projects, ensure the removal and appropriate disposal of disconnected wires with lead stabilizers, consistent with the 2002 National Electric Code requirements.

Note: To comply with the intent of this credit, specify "100% lead free" products. The "lead free" label as defined by the EPA's Safe Drinking Water Act (SDWA) (<http://www.epa.gov/safewater/sdwa/index.html>) does not provide adequate screening for the purposes of this credit because these products may still contain lead. The SDWA defines "lead free" as:

- Solders and flux containing 0.2% lead or less.
- Pipes, pipe fittings, and well pumps containing 8% lead or less.
- Lead used for radiation shielding and copper used for MRI shielding are exempt from the requirements of this credit.