LEED BD+C: Healthcare | v4 - LEED v4

PBT source reduction - lead, cadmium and copper

Possible 2 points

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 follows.

Lead

- For water intended for human consumption, specify and use solder and flux to connect plumbing pipe on site that meets the California AB1953 standard, which specifies that solder not contain more than 0.2% lead, and flux not more than a weighted average of 0.25% lead for wetted surfaces. The “lead free” label as defined by the Safe Drinking Water Act (SDWA) does not provide adequate screening for the purposes of this credit because the SDWA defines “lead free” as solders and flux containing 0.2% lead or less.
- For water intended for human consumption, specify and use pipes, pipe fittings, plumbing fittings, and faucets that meet the California law AB1953 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 less than 300 parts per million.
- Specify no use of interior or exterior paints containing lead.
- For renovation projects, ensure the removal and appropriate disposal of disconnected wires with lead stabilizers, consistent with the 2002 National Electric Code requirements.

Lead used for radiation shielding and copper used for MRI shielding are exempt.

Cadmium

- Specify no use of interior or exterior paints containing intentionally added cadmium.

Copper

- For copper pipe applications, reduce or eliminate joint-related sources of copper corrosion:
  - use mechanically crimped copper joint systems; or
  - specify that all solder joints comply with ASTM B828 2002, and specify and use ASTM B813 2010 for flux.