

# MechSE WELLness

## X03 Exterior Materials and Structure

### **Intent: Mitigate environmental contamination and hazards.**

All types of chemically treated wood release small amounts of chromium, a known human carcinogen. Evidence links chromium to lung cancer, and associates it with cancer of the nose and sinuses. Pressure treated wood made in the US during mid-70's to 2004 can leach arsenic into the surrounding soil, where children, pets, and plants visit. Inorganic arsenic is shown to increase the risk of skin, liver, bladder, and lung cancers. Older railings, playground materials, etc. were typically painted with lead-based paint, that is now flaking off and ingested in children or others who frequently touch them. Lead harms intelligence quotient, learning, memory, and negatively affects behavior.

**Impact: Promote use of wood-plastic materials that effectively create a closed-loop system of highly recyclable, environmentally preferable plastic products.**

### **What are the requirements to earn this credit?**

1. Any newly installed plastic lumber materials are made from high-, medium-, or low-density polyethylene and do not contain wood-plastic composites, commingled recycled consumer plastics, fiberglass, polystyrene, or polyvinyl chloride.
2. Any newly painted or coated surfaces contain less than 0.1% by weight lead in the form of lead or lead compounds.

### **How is MechSE accomplishing these requirements?**

Currently, Lu MEB nor MEL has any lumber used for exterior building materials. However, if in the future the department wishes to build any exterior structure, say on the roof of Lu MEB or over the south patios, such projects will abide by the requirements above. The existing railings around the perimeter of Lu MEB protecting from fall into the basement windows were all abated and re-painted during the renovation project. Future maintenance will abide by the requirement above.



UNIVERSITY OF  
**ILLINOIS**  
URBANA-CHAMPAIGN