

### **S1.2.3 USING LIFE-CYCLE THINKING FOR SUSTAINABLE MATERIAL CHOICES**

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Choosing green materials is becoming an increasingly complex exercise. A proliferation of standards, lists and certifications don't always equate to the wisest choices from an environmental perspective. The 12 principles of Green Chemistry, risk assessment methodologies and Life Cycle Analysis provide a more systematic approach to selecting materials and developing building products that cause the least harm to occupants and the environment while ensuring sustainable performance. "Red Lists" have been introduced by several organizations. A Red List however is only one of many tools for making complex decisions about materials, and can be limiting in evaluating a product on its full life cycle impact. In our rush to avoid toxins, newer materials whose properties and environmental impacts are sometimes poorly understood are being introduced as alternatives. And some alternatives with good intentions have unintended consequences. This session will explore the tool kit for evaluating materials and products that purport to be green alternatives.