



Architectural Lead Sheet LCA

A Life Cycle Assessment (LCA) has been undertaken to assess the life cycle impacts associated with the use of lead sheet in building construction.

The main findings of the study are as follows:

Lead sheet compares very well with alternative building materials - The LCA highlights that lead sheet has a superior environmental performance compared with alternative building materials in a range of applications such as: cavity wall (comparison with reinforced EPDM, plasticised PVC and SEBS), flashing (comparison with reinforced PiB and SEBS) and valley gutter (comparison with GRP).

High recycling rates reduces its environmental impact - In part this is a result of its full recyclability which means there are no significant impacts associated with its end-of-life phase.

The durability of lead sheet adds to its life cycle credentials - Over the longer term lead sheet becomes an even more attractive as a material for roofing applications, due to its extended service life.

Low generation of greenhouse gases - Lead sheet's low melting point allows recycling with minimal impact on global warming.

Contamination of water and soil is low - Very low surface corrosion means insignificant impacts on water and soil contamination.

No impact on resources - As 100% secondary materials are used in its manufacture there is no impact on resource depletion.

The LCA was conducted on behalf of ELSIA (European Lead Sheet Industry Association) in association with International Lead Association it replaces a previous study undertaken in 2006. More information on the life cycle impacts associated with lead sheet can be found on the ELSIA [website](#)

What is a LCA?

LCA is a tool that is increasingly being used to examine the environmental impact of a product through its entire life cycle. For metals, a typical 'cradle to grave' LCA study covers the mining and extraction of raw materials, their fabrication, use, and recycling/disposal, and includes energy and transportation considerations and all the other product supplies required.

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