

SIKA MONOTOP®-412 ECO – SUSTAINABILITY FACTSHEET

Taking Responsibility

Limited resources, climate change, water and infrastructure are global megatrends re-shaping Sika markets and guiding Sika business. As an innovative pioneer Sika thinks ahead and is committed to a better environment with an integrated approach including solution, supply chain and social sustainability.

Product Characteristics

Sika MonoTop®-412 Eco is a new high performing one-component ready to mix, repair mortar containing fly ash as a supplementary cement material (SCM). The product is produced in Austria.

Product Advantages

In comparison to an equivalent cement mortar, Sika MonoTop®-412 Eco has a

- Reduced cement content (Resource efficiency) and;
- Increased fly ash content (Resource efficiency), which;
- Reduces greenhouse gas emissions (Climate protection)

Product Benefits

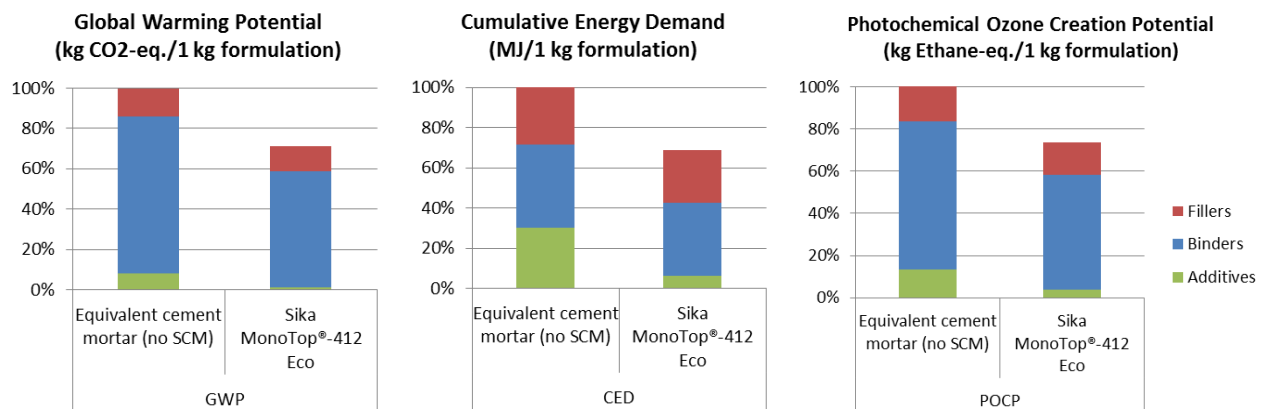
The main characteristic of Sika MonoTop®-412 Eco is the significant reduction of Portland cement by replacing part of it with fly ash, which may otherwise be disposed to a landfill. In direct comparison with a cement based mortar of equivalent performance, reducing the amount of Portland cement in Sika MonoTop®-412 Eco has demonstrated the following benefits:

- ~ 31 % reduction in primary energy demand (CED)
- ~ 29 % reduction in carbon dioxide emissions (GWP)
- ~ 26 % reduction in summer smog (POCP)

Product Proof

Life Cycle Assessment (LCA) is a standardized method to assess and compare the inputs, outputs and potential environmental impacts of products and systems over their life span. LCAs are recognized as a convenient way to evaluate the sustainability performance.

The LCAs conducted by Sika are performed according to ISO 14040 and EN 15804. The impact assessment methodology used is CML 2001. The data for Sika LCAs are based on public databases such as Ecoinvent, the European reference Life Cycle Database (ELCD), GaBi by thinkstep and specific data collected from Sika production plants and products. An LCA comparing the fly ash blended cement mortar MonoTop®-412 Eco to a cement based mortar with equivalent performance was conducted in order to evaluate the impact of the improved formulation.



For more information, please contact your local Sika organization.