# SUSTAINABILITY PORTFOLIO MANAGEMENT

Sustainability Portfolio Management (SPM) is the mechanism used by Sika in order to evaluate and classify its products in defined market segments in terms of Performance and Sustainability. The outcome of the SPM evaluation is a portfolio of "Sustainable Solutions" – products with combined significant Sustainability and Performance benefits.

The evaluation criteria that fall under the sustainability category of SPM are presented in the infographic below.





Prioritizing the use of responsible

**COST SAVINGS DOWNSTREAM** 

and significantly reduce costs

Helping customers to directly, measurably

packaging for products

Efficient use of precious resources

**GREEN BUILDING** 

Products that contribute to

**Green Building Standards** 

# Sika MonoTop®-4012

#### **MORE PERFORMANT - MORE SUSTAINABLE**

MORE PERFORMANT MORE SUSTAINABLE stands for Sika's product innovation through a unique combination of higher performance and proven sustainability benefits. A Sustainable Solution is a product in a given application which combines superior performance with a significant sustainability contribution within its technology range for our customers.

### PRODUCT CHARACTERISTICS AND BENEFITS

Sika MonoTop®-4012 is a new high performing and sustainable one-component ready to mix mortar for concrete repair and protection, containing fly ash as a supplementary cement material (SCM). With one 25 kg bag of mortar, Sika customers benefit from:

- approx. 1.5 kg CO₂ savings
- low dust formation during handling
- direct contributions to LEED v4

#### **CLIMATE: REDUCED CARBON FOOTPRINT**

Sika MonoTop®-4012 has a reduced carbon footprint as a result of the replacement of Portland cement with fly ash within its formulation. When compared to a reference cementitious concrete repair mortar, Sika MonoTop®-4012 shows an approx. 15% reduction in Global Warming Potential (GWP). This corresponds to approx. 1.5 kg of CO<sub>2</sub> saved per 25kg bag of mortar.

- A Life Cycle Assessment (LCA) was conducted in order to generate the GWP figures presented in this factsheet. The goal of the LCA was to compare the formulation of the fly ash-blended product to the formulation of the reference cementitious concrete repair mortar in order to evaluate the impact of the improved formulation.
- LCA is a standardized method used to assess and compare the inputs, outputs and potential environmental impacts of products and systems. The LCAs conducted internally by Sika are performed according to ISO 14040 and EN 15804 standards and make use of the CML 2001 impact assessment methodology. Sika LCAs make use of Sika and industry-standard data.

### **AIR QUALITY AND EMISSIONS: REDUCED DUST FORMATION**

Sika MonoTop®-4012 shows a heavily reduced dust formation (approx. 70%) compared to a reference cementitious concrete repair mortar based upon suitable scientifically internal laboratory test and is amongst the best-in-class solutions in the market with regards to its dust reduction level.

- The dust content measurement was carried out with the DustMon test device, an independent measuring system for determining the dust behavior during handling and mixing powdery dry mortar.
- There are currently no standardized and official limit values, of which dust classes or the like derive. For this reason, the test results are compared to a defined reference sample of the predecessor product. The dust level is evaluated by the dust-index-level taken over a period of 30 seconds.

## **GREEN BUILDING: MEETS LEED V4 REQUIREMENTS**

Sika MonoTop®-4012 is part of the Sika LEED product portfolio and conforms on three LEED v4 credit requirements, thus directly contributing to the attainment of 3 points. More details about the individual credit fulfillment are given in the Sika LEED Attestations.

- LEED v4 MRc 2 (Option 1): Building Product Disclosure and Optimization Environmental Product Declarations • contribution to the attainment of 1 full point under this credit.
- LEED v4 MRc 3 (Option 2): Building Product Disclosure and Optimization Sourcing of Raw Materials ◆ contribution to the attainment of 1 full point under this credit.
- LEED v4 MRc 4 (Option 2): Building Product Disclosure and Optimization Material Ingredients
  - contribution to the attainment of 1 full point under this credit.

