

# Clean air. Clean surfaces.

photoment®

## Application requirements for **manufacture** of concrete goods with Photoment®



Photoment® is a concrete additive. In a light-dependent photocatalytic reaction at the concrete surface, toxic nitrogen oxides (NO<sub>x</sub>) are rendered harmless. When the application requirements are fulfilled, a superhydrophilic surface is formed and supports the self-cleaning effect of the concrete goods surface.

In order to ensure optimum effectiveness and the warranted characteristics of the Photoment® surfaces, the manufacturer of the concrete goods must fulfill the following requirements:

- The minimum quantity of Photoment® recommended by STEAG Power Minerals must be worked into the surface layer.
- The manufacturer must permanently monitor the correct compaction and the associated absorbency of the concrete goods, in order to avoid the resulting risk of reduced effectiveness of Photoment®.
- The concrete goods produced with Photoment® must comply with the standards DIN EN 1338/1339 for paving stones and flags.
- STEAG Power Minerals GmbH recommends that manufacturers regularly have their production systems and the Photoment® concrete goods checked by the STEAG Power Minerals laboratory with a view to optimizing the use of Photoment® (concrete formula, etc.).

## Application requirements for **laying** of concrete goods with Photoment®



The effectiveness and the described properties (including the photocatalytic reaction) of Photoment® surfaces is decisively dependent on fulfillment of the conditions set out below.

The surface of Photoment® paving stones is reactive. It must remain freely accessible for light and rain.

Manufacturers of concrete goods who use Photoment® in their production are to draw the attention of planners and layers to the following conditions when using Photoment®.

- Any cover or sealing reduces the necessary quantity of light. This can reduce the effectiveness of Photoment® and in the extreme case cause the loss of its properties as described here.
- If exposure to rainwater is not sufficient to remove the products of the photocatalytic reaction (nitrates, organic substances and dirt particles), the surface of the concrete goods is to be cleaned regularly with water.
- Standing water and constant moisture on the Photoment® surface are to be avoided at all costs. Water falling onto the surface must flow off rapidly from the surface and the drainage area in as short a route as possible.
- The laying instructions in DIN 18318 and those of the concrete goods manufacturers are to be followed.

Photoment® is a product brought to you by  
**STEAG Power Minerals GmbH**  
Duisburger Str. 170  
D-46535 Dinslaken  
Tel. +49 2064 608-366  
info@photoment.com  
www.photoment.com

in cooperation with  
**KRONOS INTERNATIONAL, Inc.**  
Peschstraße 5  
D-51373 Leverkusen  
Tel. +49 214 356-2472  
innovations@kronosww.com  
www.kronosww.com



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