



CONCRETE

Sika[®] Separol[®]

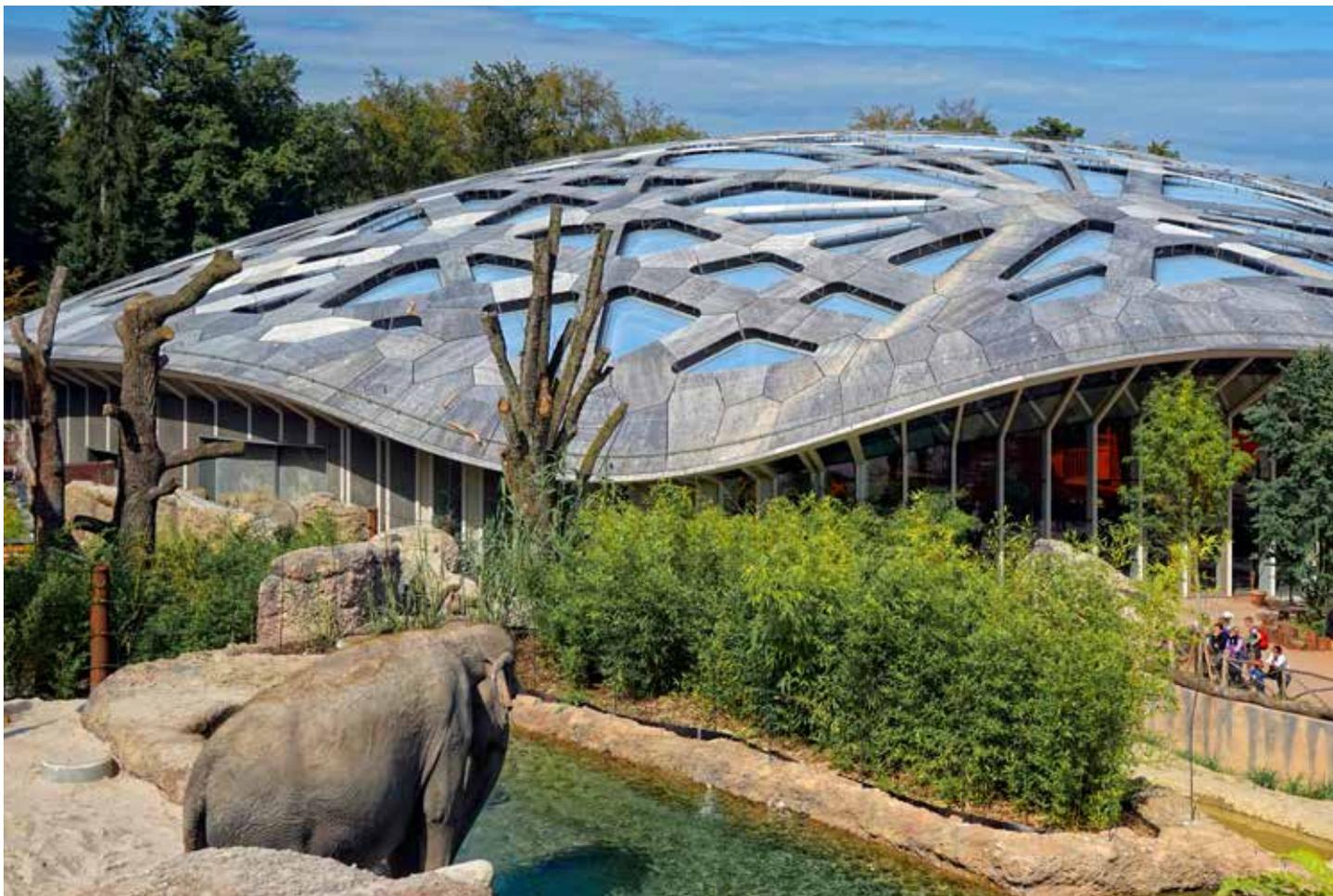
MOULD RELEASE AGENTS

BUILDING TRUST



EXCELLENCE IN CONCRETE TECHNOLOGY WITH Sika® Separol®

THE UNIQUE FEATURE OF CONCRETE among all construction materials is its ability to take almost every shape and keep that shape with constant material properties for extremely long time. The dimensions of that shape are given by the formwork in which the concrete is casted into. The challenge within the concrete construction process is to prevent adhesion of the hardened concrete on the formwork and ensure easy cleaning and durability of it. This can be achieved with the application of the right mould release agent, which additionally leads to smooth and dense concrete surfaces improving the durability as well as the aesthetical appearance of the concrete surface.





REQUIREMENTS

The proper release of hardened concrete and formwork is influenced by several factors whereas the application of a suitable mould release agent plays a decisive role. Strong release performance, easy application and cleaning of the formwork are the characteristics a mould release agent has to offer. In order to achieve a good release performance as well as a smooth concrete surface, without any defects, it is important to use the right combination of mould release agent technology and formwork type. In different fields of the concrete construction industry different requirements regarding mould release agent performance are of interest. May it be a robust technology which can be applied on absorbent formwork or heat resistant technologies used on heated formwork within precast concrete production. As a matter of fact it is not possible to fulfill all different requirements with a single mould release agent technology and product respectively. Therefore the Sika® Separol® product range offers different technologies to fulfill the comprehensive and specific needs of each application. Moreover the application of resource friendly technologies with a high degree of sustainability is becoming more and more important.





TECHNOLOGIES

The Sika® Separol® product range is based on the three today generally used technologies: full-oil based, solvent-based and water based emulsion technologies. Powerful release performance, easy application, high surface appearance quality and low ecological impact of the mould release agents developed by Sika are ensured by intensive evaluation of raw materials available in combination with Sika know-how regarding formulation and processing of mould release agents. The latest innovation in the Sika® Separol® product range is the water based emulsion mould release agent technology. With this technology very thin mould release agent films can be applied in an extremely safe and easy way leading to blowhole free concrete surfaces especially in wet precast concrete applications. This product range is characterized by its efficient, resource friendly raw material usage and worker friendly application offering improved working environment with regard to Ecology, Health and Safety.





TECHNOLOGIES	DESCRIPTION
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Sika® Separol® F	Sika® Separol® F products are full-oil based products representing a technology that is suitable for all construction site applications and precast concrete applications where an immediate use of the formwork is essential. This technology fits to changing ambient conditions and can be used for absorbent and non-absorbent formworks.
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Sika® Separol® S	Within Sika the solvent based products belong to the Sika® Separol® S series, offering enhanced concrete surface appearance in all kinds of concrete construction applications. Due to the self-leveling effect a thin mould release agent film can be applied and with this thin film the concrete surface smoothness is improved.
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Sika® Separol® W	The Sika® Separol® W product range combines release power, fast and easy application with the capability to produce fair-faced concrete surfaces fulfilling high aesthetical requirements. With its high degree of raw material efficiency it represents a resource friendly mould release agent technology with which the working environment especially in wet precast production can be significantly improved. Furthermore the Sika® Separol® W products incorporate the sustainable raw materials recycled oils, bio-degradable oils and natural oils.
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APPLICATION

All Sika® Separol® mould release agents should be applied on dry and clean formwork surfaces, because any dirt or moisture on the formwork surface will have an extremely negative impact on the release performance of the mould release agent as well as on the concrete surface appearance. The target to apply a mould release agent film as thin as possible is essential to make full use of the performance of any mould release agent. In this case less is more, because the thinner the Sika® Separol® film is, the better the resulting concrete surface will be. It is important to notice that this target can easier and safer be accomplished with solvent or especially emulsion based products. The best method for all types of products is the application with a high pressure spray gun with a suitable spraying nozzle and an operating pressure of 3 to 6 bar. Especially when using emulsion based Sika® Separol® products spray gun application is recommended in order to spray uniformly distributed small, white emulsion drops on the formwork surface. After evaporation of the water these drops disappear and a uniform thin mould release agent film remains due to the self-leveling effect of this technology.



ECOLOGY, HEALTH AND SAFETY

Aspects of mould release agent development beyond release power, easy application and simple cleaning are

- Resource friendly material usage
- Biodegradability
- Improved working environment with regard to Ecology, Health and Safety of the applicator.

The emulsion based Sika® Separol® W technology minimizes the material usage and fulfills the highest requirements according to Ecology, Health and Safety.



GLOBAL BUT LOCAL PARTNERSHIP



FOR MORE CONCRETE INFORMATION:



WE ARE SIKA

Sika is a specialty chemicals company with a leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing and protecting in the building sector and the motor vehicle industry. Sika's product lines feature concrete admixtures, mortars, sealants and adhesives, structural strengthening systems, flooring as well as roofing and waterproofing systems.

Our most current General Sales Conditions shall apply. Please consult the most current local Product Data Sheet prior to any use.



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