



# CONCRETE

## SikaRapid<sup>®</sup>-600

ULTRA FAST HARDENING CONCRETE

BUILDING TRUST



# LET TRAFFIC ROLL OVER YOUR CONCRETE WITHIN HOURS

SikaRapid®-600 is used for constructing, reinstating or replacing concrete where a very high early strength is required in a short space of time.

## KEEPING YOU MOVING

Shut downs, diversions, delays and closures are words you maybe do not want to hear on a construction project. Waiting for concrete to achieve a strength before it can be loaded can cost time and money. SikaRapid®-600 minimises disruption and returns the area back into service much quicker.

## TYPICAL USES

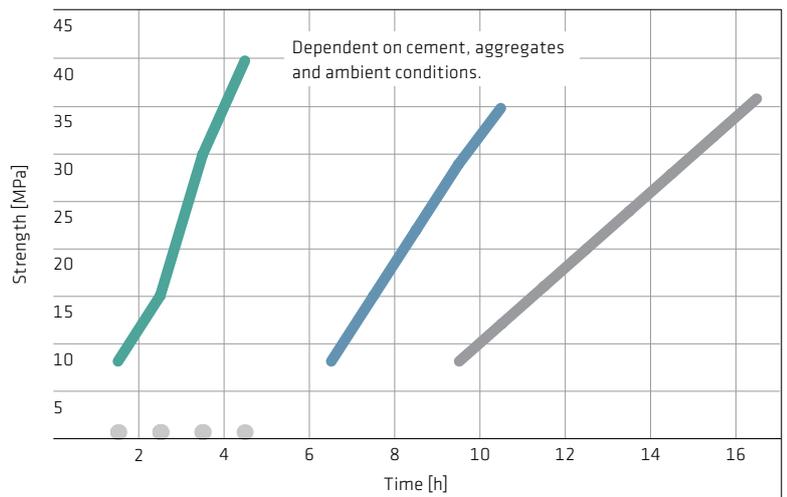
- Airport airside
- Roads and bridges
- Tramways
- Loading bays
- Roundabouts
- Bus stops
- Concrete slabs



## TECHNOLOGY

SikaRapid®-600 is a system comprising of a powder component and two liquid components when combined with locally sourced Portland cement, aggregates and water produces a rapid hardening concrete. Sika's system reacts with local Portland cement and delivers the concrete's outstanding strength development. The special admixtures allow control of the setting time and enhance slump retention up to 150 minutes.

## Accelerator positioning



- SikaRapid®-1
- SikaRapid® C-100
- SikaRapid®-2
- SikaRapid®-600



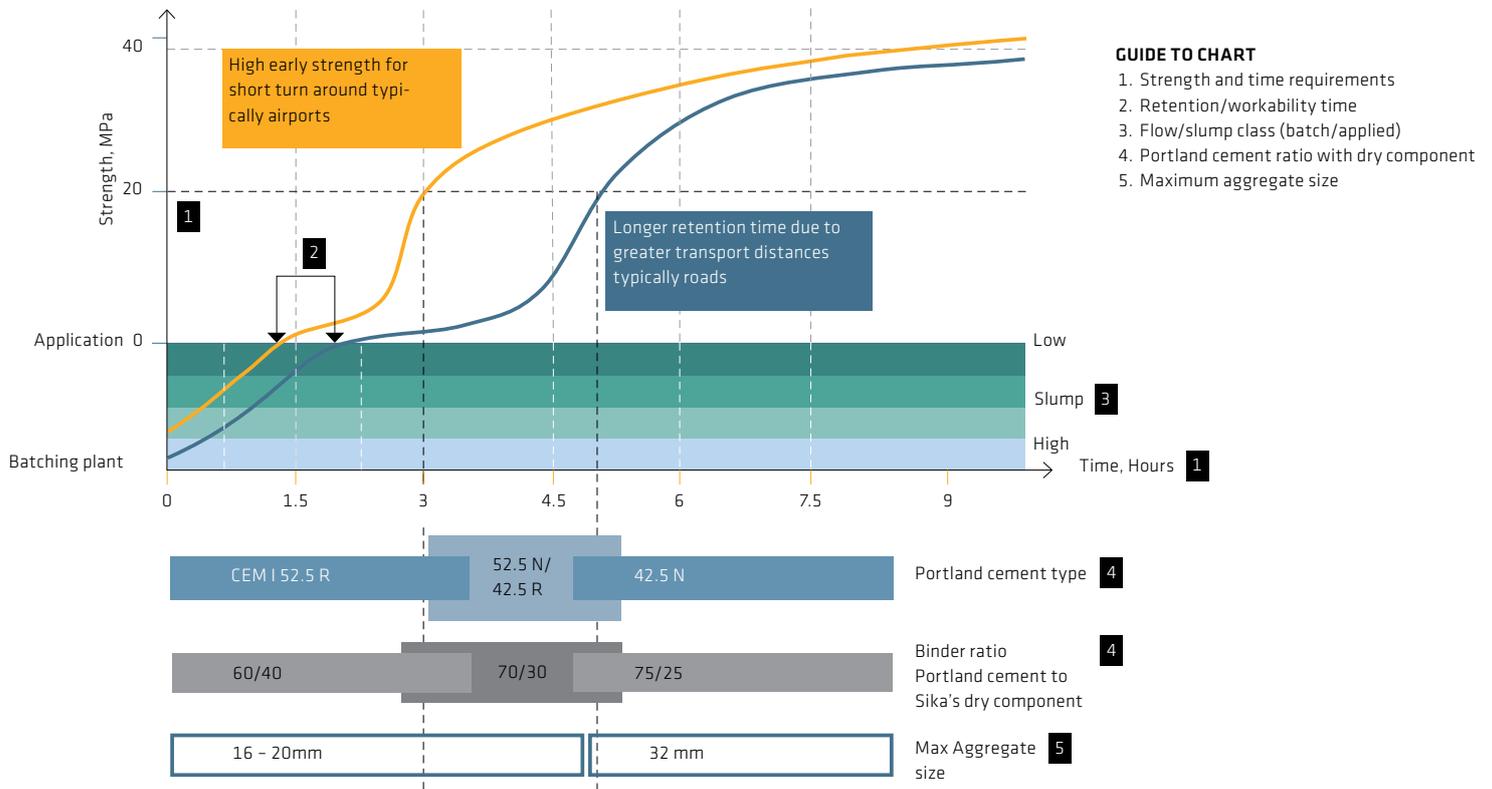


Figure 2: illustration of how strength development at + 20°C can be customised by adjusting the concrete mix constituents.

## RAPID PERFORMANCE

The hardening development of SikaRapid®-600 occurs very quickly. The strength and retention time are both adjustable, depending on the concrete specification, ambient conditions, available raw material and concrete mix design. The following is a typical indication of the possible performances between +15 – 25°C. These performances can be achieved in more extreme conditions as long as the best demonstrated concrete practices are followed.

| Concrete Strength | Time after start of mixing | Retention time |
|-------------------|----------------------------|----------------|
| ≥ 20 MPa          | 3 hours                    | ≤ 90 minutes   |
| ≥ 20 MPa          | 5 hours                    | ≤ 150 minutes  |

## SUPPORT FROM SPECIFICATION TO APPLICATION

When the performance requirements are known Sika will work with the Engineer, Contractor and concrete producer to suggest an optimised mix design. Mixing takes place as normal in the concrete batching plant so no special mixing equipment or additional admixtures are required on the job site.

## OFFERING SOLUTIONS

Sika's unique solutions adds more value to all types of projects

| Product name     | Product type              | Product use   |
|------------------|---------------------------|---|
| SikaRapid®       | Accelerator               | Control hardening/setting process   |
| Sika® Separol®   | Mould release agent       | Powerful formwork release   |
| Sika® Antisol®   | Curing agent              | Protection from premature drying  |
| SikaFiber®       | Micro and macro fibers    | Improve mechanical properties, toughness, reduce cracking and replace reinforcement |
| SikaControl® AER | Air-entrainment           | Durability improver - freeze-thaw resistance  |
| Sikagard®        | Hydrophobic impregnations | Durability improver - prevent ingress of aggressive materials                       |
| Sikaflex®        | Joint sealant             | Sealing joints between concrete pavements   |

# GLOBAL BUT LOCAL PARTNERSHIP



## 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.

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