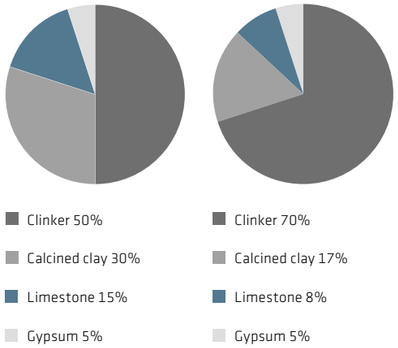
CONCRETE
Sika® ViscoCrete® CC FOR A NEW SUSTAINABLE BINDER CONCEPT

BUILDING TRUST

Sika® ViscoCrete® CC – TIME TO CHANGE TO A NEW, SUSTAINABLE SOLUTION



WHAT IS CC AND ESPECIALLY LC³?

CC stands for calcined clay: The material clay is one of the abundantly available materials on Earth. When burnt to calcined clay, that clay is activated and can be used as a secondary cementitious material. Calcined clay is the basis of a new class of environmentally friendly raw material for cement and concrete. LC³ is a special new concept of formulating binders by clinker, limestone and calcined clay. The clinker content varies depending on specific requirements (~20 – 70%).

With the new range of admixtures specially designed for the needs of CC or LC³ cement in concrete, these Sika products will ensure to lower CO_2 emissions and at the same time the required properties for demanding construction projects when using these new binder technology. The Sika product portfolio of new concrete admixtures enables customers to adapt their materials to the new characteristics of CC or LC³. Water consumption and compressive strength, as well as the workability, hardening and durability of concrete, will be maintained or even improved in comparison to currently used superplasticizers.

ADVANTAGES OF CC

LOW CARBON
The use of CC or LC³ can save 30 – 40% of CO_2 compared to Ordinary Portland Cement (OPC).

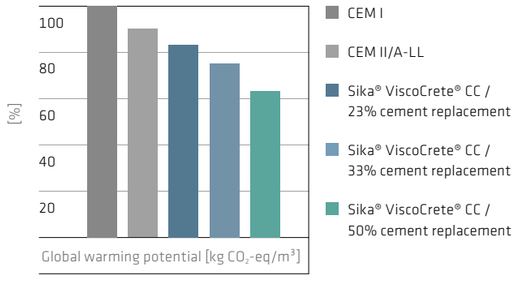
READY TO BE IMPLEMENTED
CC and LC³ are used in the same way as ordinary Portland cement (OPC), yet it is better in performance and requires no special training.

RESOURCE SAVING
CC and LC³ use abundantly available materials, which in turn can save scarce resources.

COST EFFECTIVE
Use of CC and LC³ technology can lead to a reduction in production costs.

GLOBAL SCALABLE
Suitable clays for calcined clays are sufficiently available all over the world.

DURABILITY
Long term performance can be adapted to specific requirements.



Sika® ViscoCrete® CC RANGE

The solution for the challenges of calcined clays use in concrete

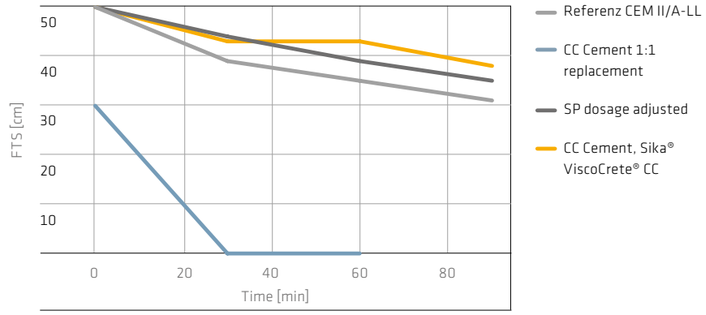
THE CHALLENGES OF CC AND LC³ USE IN CONCRETE

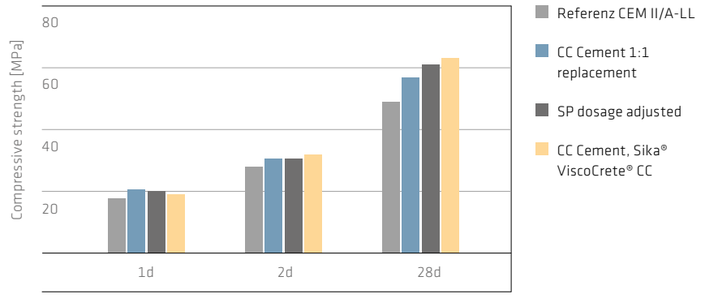
HIGHER WATER DEMAND
The calcined clay and therefore LC³ has a higher water demand compared to ordinary Portland cement (OPC), meaning more water is needed to maintain the same workability.

LOWER WORKABILITY
The workability of concrete using calcined clay cement is reduced compared to the use of ordinary Portland cement (OPC).

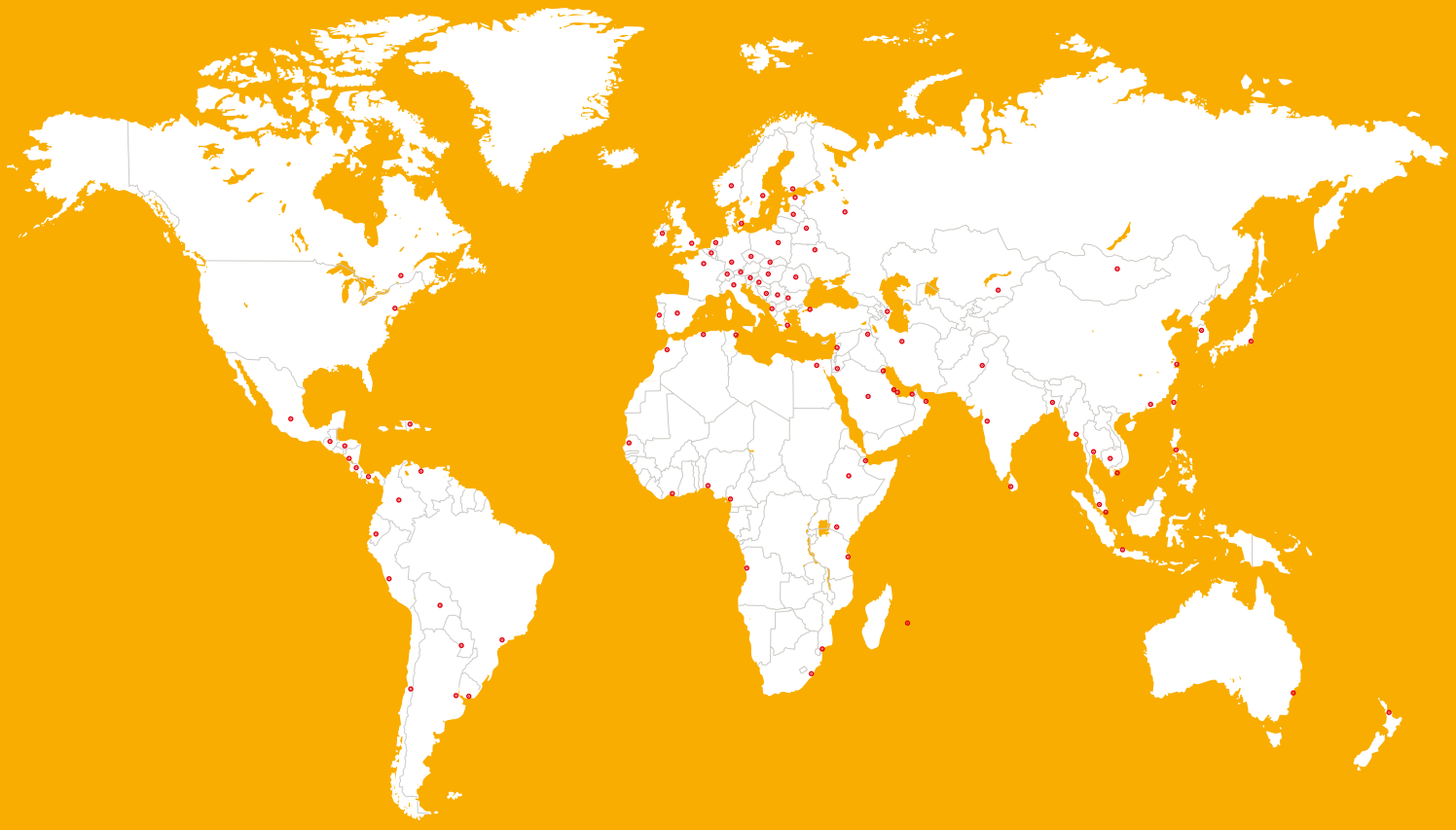
LOWER EARLY STRENGTH
The one-day and two-day compressive strength can be lower with calcined clay (CC) or limestone calcined clay cement (LC³) to similar concrete with ordinary Portland cement (OPC).

THE SOLUTION – Sika® ViscoCrete® CC RANGE





GLOBAL BUT LOCAL PARTNERSHIP



WHO WE ARE

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, industrial flooring as well as roofing and waterproofing systems.

Certified Quality System SQS ISO 9001/EN 29001 since 1986

Certified Management System SQS ISO 14001 since 1997

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