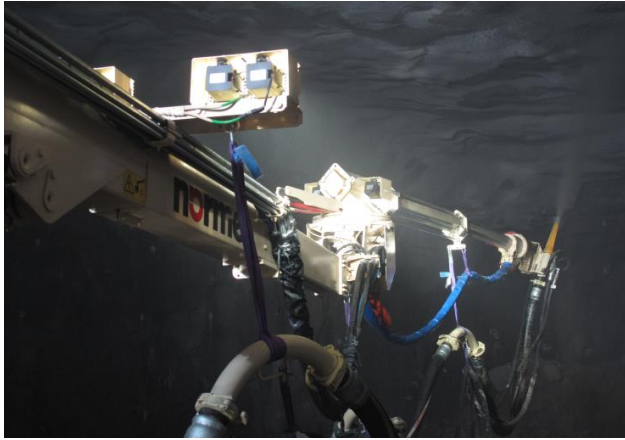


Consistent Control Admixture,  
Incorporating a Dormant Strength Enhancer

## DESCRIPTION

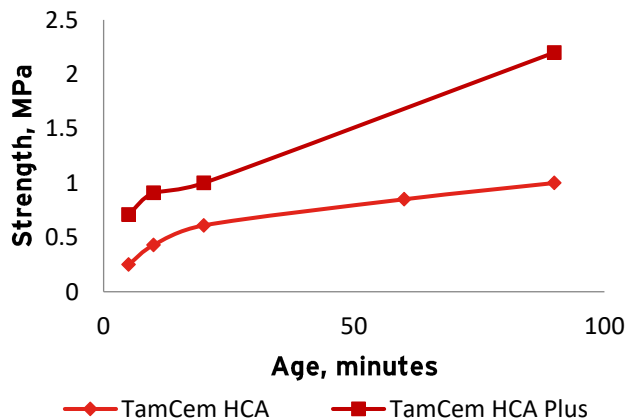


TamCem HCA Plus is a consistence controlling admixture for sprayed concrete meeting the requirements layout in EN 934-5. Unlike other consistence controlling admixtures, TamCem HCA Plus contains Normet's unique dormant strength enhancing technology to give early age strength boosts to sprayed concrete when accelerated using an alkali-free set accelerator, such as TamShot 100AF.

By adjusting the dosage, mix open time can be tailored to suit required needs.

## KEY BENEFITS

- > Controllable, long open time for enhanced placement and delivery control.
- > Contains a unique dormant accelerator to boost early strength of accelerated sprayed concrete.



Early age strength of sprayed concrete mix. Cem III/A-V, TamShot 100AF, showing improved strength gain when TamCem HCA Plus is used in place of TamCem HCA.

## TYPICAL APPLICATIONS

TamCem HCA Plus reacts with all commonly used Portland cement types and can be used to control hydration of all cement based grouts or concrete types. Typically, TamCem HCA is used in the mining and underground construction industry for applications such as:

- > Sprayed Concrete
- > Mixes where prolonged open time is required

## TECHNICAL DATA

TamCem HCA Plus	
Colour	Colourless
Density	1.49 ± 0.02 g/cm <sup>3</sup>
Form	Clear Liquid
Chloride Content	< 0.1 %
pH value	13.0 ± 1.0
All at 20°C	

All technical data stated herein is based on tests carried out under laboratory conditions.

## APPLICATION GUIDELINES

Refer to our Technical Department for detailed information on the application of TamCem HCA Plus.

TamCem HCA Plus should be added directly at the batching plant or truck-mixer at a suggested dosage of 0.3% to 2% of the cement weight in the concrete mix. TamCem HCA Plus should always be added at the end of the batching process after all the concrete is thoroughly wetted out.

In all cases, it is recommended to carry out prior testing involving all components such as cement, fly ash, micro silica, sand, aggregates, in order to optimise the dosage required to maintain mix workability with TamCem superplasticising admixtures.

All testing should be in accordance with EN, ASTM, or EFNARC standards to evaluate the best performing mix-design against economical considerations. Please always involve your local Normet representative for support.

Whilst any information and/or specification contained herein is to the best of our knowledge, true and accurate, we always recommend that a trial be carried out to confirm suitability of the product. Please note regional climatic conditions may cause a variation in the performance of the product. No warranty is given or implied in connection with any recommendations or suggestions made by us or our representatives, agents or distributors. The information in this data sheet is effective from the date shown and supersedes all previous data. Please check with your local Normet office to confirm that this is current issue.

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## PACKAGING

TamCem HCA Plus is supplied in IBCs, drums and bulk. Packaging size may vary subject to local regulations and requirements, please contact your local Normet representative for more details.

## STORAGE

TamCem HCA Plus should be stored at room temperature (min 5°C and max 38°C), kept dry and out of direct sunlight. If these conditions are maintained and the product packaging is unopened, then a shelf life of six months can be expected. However it is recommended that the suspension shall be mechanically agitated after long storage and before use.

## HEALTH & SAFETY

TamCem HCA Plus should only be used as directed. We always recommend that the Safety data sheet (SDS) is carefully read prior to application of the material. Our recommendations for protective equipment should be strictly adhered to for your personal protection. The Safety data sheet is available upon request from your local Normet representative.