



## WORKABILITY RETAINING ADMIXTURES FOR CONCRETE

# EXTENDED SLUMP TECHNOLOGY



### EXTENDED WORKABILITY APPLICATIONS

- Ready-Mix Concrete
- Precast/Pre-Stressed Concrete
- High Slump Concrete
- High Performance Concrete
- Self Consolidating Concrete
- Mining and Tunneling
- Shotcrete
- Long Pumping/Hauling Distances
- Hot Weather

### FEATURES AND BENEFITS

- Improved slump retention without retardation
- Eliminates the need for job site re-tempering or addition of High Range Water Reducers
- Will not significantly impact air content of the original concrete mixture
- Aids in concrete placement and consistency between loads
- Stable air content

### RELEVANT PUBLICATIONS

ACI 212.3R-16

### RELEVANT PRODUCTS

- PLASTOL AMP-X<sup>2</sup>
- PLASTOL AMP-X<sup>3</sup>
- PLASTOL 6200EXT
- EUCON STASIS

### WHEN SHOULD YOU USE IT?

Workability retaining admixtures should be used when a decrease in workability is expected and consistent placement can be considered a challenge. Such cases include, but are not limited to: hot weather, long haul times, job site waiting, long pumping times, and Type III/white cement usage.

The use of a workability extending admixture also allows flexibility for multiple applications with varying haul times depending on overall product dose.

### WHY SHOULD YOU USE IT?

The use of a workability retaining admixture works by maintaining a consistent slump or flow over a significantly increased time period. It will minimize the need for job site slump adjustments or re-tempering while maintaining consistent air contents from batching to concrete placement. This eliminates the need for re-tempering, thus leading to more consistent compressive strengths, air contents and increased concrete durability.

Haul times can also be increased with the use of workability retaining admixtures without the fear of decreased concrete workability over time or increased concrete set retardation.

### WHICH ONE SHOULD YOU USE?

There are three types of workability retaining admixtures; a high-range water reducing admixture that is specifically engineered to provide extended concrete workability, a time release workability retaining admixture formulated using advanced polycarboxylate technologies, and hydration control admixtures.

**PLASTOL 6200EXT** is a high-range water reducing admixture with extended workability characteristics. It maintains the typical benefits of polycarboxylate technology: high compressive strengths, flexural strength, and excellent setting characteristics. It can also be used to reduce the overall cement content or water content like a standard High Range Water Reducer.

**PLASTOL AMP-X<sup>2</sup>** and **PLASTOL AMP-X<sup>3</sup>** are time release workability retaining admixtures. They work in partnership with a normal, mid-range, or high-range water reducer to aid in maintaining a consistent slump or flow over a significantly increased time period. They will not effect set time.

**EUCON STASIS** is a dual purpose liquid chemical admixture, specially formulated to retard concrete for extended periods of time. These products work by virtually stopping the hydration of cement during hot weather and extending pumping operations. Workability can be extended by 2 or more hours. The concrete set will also be extended when these products are used.

### WHAT CAN HAPPEN IF I DON'T USE A WORKABILITY RETAINING ADMIXTURE?

- Lower freeze/thaw durability
- Lower compressive strengths
- Improper strength development
- Possible thermal cracking
- Shortened lifespan or service life of the structure



# CONCRETE & MASONRY ADMIXTURE PRODUCTS

## ACCELERATORS

- Chloride
- Non-Chloride

## RETARDERS

## AIR ENTRAINERS

## WATER REDUCERS

## MID-RANGE WATER REDUCERS

## HIGH RANGE WATER REDUCERS

## POWDERED ADMIXTURES

## MASONRY / MCP PRODUCTS

- Plasticizing
- Integral Water Repellency
- Efflorescence Control

## MORTAR ADMIXTURE PRODUCTS

## SPECIALTY PRODUCTS

- Air Detrainers
- ASR Control
- Corrosion Inhibitors
- Flowable Fill
- Hydration Stabilizers
- Micro Silica
- Rheology Modifiers
- Shrinkage Compensation
- Shrinkage Reduction
- Waterproofing
- Workability Extending

## INCRETE COLOR

- Integral Colors

## FIBER PRODUCTS

- Micro Synthetic
- Macro Synthetic
- Steel

## MISCELLANEOUS PRODUCTS

- Form Release Agents
- Surface and Evaporation Retardants
- Equipment Cleaners
- Dust Control