

RHEOBUILD[®] 3520

Superplasticising admixture and pumping aid

DESCRIPTION

RHEOBUILD 3520 is a chloride free, superplasticising admixture. It contains a synthetic polymer specially designed to impart rheoplastic qualities to concrete and to improve the pumpability of fresh concrete.

A rheoplastic concrete is a fluid concrete with a slump value of at least 200 mm or higher, that flows easily but at the same time is free from segregation, and has the same water/cement ratio as that of a no-slump concrete without additive.

RHEOBUILD 3520 has been formulated to meet the requirements of ASTM C494 for Type G admixture.

FIELDS OF APPLICATION

RHEOBUILD 3520 is recommended for all concrete, shotcrete and mortar mixes in which very high flowability, pumpability, cohesion and slump retention are essential, such as:

- shotcrete mixes with MEYCO TCC activators
- wet shotcrete and pumped shotcrete
- concrete with deficient grading or low fines or low cement content
- concreting in hot climates
- concrete to be transported long distances

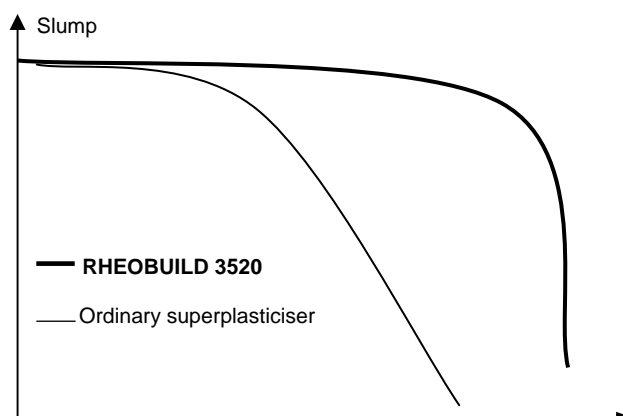
FEATURES AND BENEFITS

Improved pumpability	Minimises choking of pumps and lines even with harsh mixes.
High water reduction	High impermeability and strength. Improves durability.
Good cohesion	No segregation even at high workability. Excellent concrete quality.
Prolonged slump retention	Adequate time for placing and compacting concrete even after long hauls.
Kills slump with a Meyco TCC activator	Low rebound loss without drop in strength, during shotcreting.

TYPICAL PERFORMANCE DATA

Water reduction: 20-30% depending on the dosage, cement type and content and quality of aggregates.

Workability retention: Concrete with **RHEOBUILD 3520** remains workable for about 2 hours at 20°C and 1 hour at 40°C. **RHEOBUILD 3520** maintains workability of fresh concrete for a predetermined time. The duration of workability retention depends on the ambient temperature, types of cement and aggregates used, dosage rate and method of transport. Higher dosages provide longer retention of workability.



Maintenance of workability as compared to ordinary superplasticisers.

APPLICATION

Materials condition

Cement: For optimum performance, always use fresh cement, since the reactivity of cement is reduced with ageing.

Aggregates: Use of properly graded good quality, coarse aggregates and sand helps to achieve higher impermeability and strength.

Dispensing

The addition of **RHEOBUILD 3520** to a dry mix is not recommended.

Introduce **RHEOBUILD 3520** at the specified dosage directly into the mixer through a dispenser along with the mixing water, when the concrete is damp (i.e., after 50%-70% of the mixing water has been added). Mix the concrete for at least 3 minutes.



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DOSAGE

Dosage depends upon the ambient conditions such as temperature and the quality and type of mix ingredients. Typical dosages are:

- Normal concrete : 0.8 - 1.5L per 100 kg of cementitious materials
- Shotcrete : 0.8 - 2.0L per 100 kg of cementitious materials

Higher dosage may be required for prolonged workability retention especially in very hot climates. Site trials are recommended to fix the dosages.

PACKAGING

RHEOBUILD 3520 is available in 205L drums and in bulk delivery.

SHELF LIFE

RHEOBUILD 3520 can be stored for 12 months if stored at temperatures above 5°C, in tightly sealed original drums. If found to be frozen, thaw it and reconstitute by stirring.

PRECAUTIONS

Health : **RHEOBUILD 3520** does not contain any hazardous substances requiring labelling.

It is safe for use with standard precautions followed in the construction industry, such as use of hand gloves, safety goggles, etc.

For detailed Health, Safety and Environmental Recommendations, please consult and follow all instructions on the product Material Safety Data Sheet.

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STATEMENT OF RESPONSIBILITY

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