

®



The Trusted Brand in
CONSTRUCTION
CHEMICALS

CEMTEC 670

WATER REDUCING ADMIXTURE (TYPE A & F)



DESCRIPTION

CEMTEC 670 is a polycarboxylate based performance plasticizing admixture for concrete which is flexible enough to use as an ASTM C-494 Type A & Type F water reducer. Excellent setting characteristics predictable response to air entrainment and outstanding slump retention makes **CEMTEC 670** ideal for all ready mix and precast concrete. When using **CEMTEC 670** at lower doses, expect better workability and higher compressive strengths. At higher doses **CEMTEC 670** demonstrates excellent slump increase, slump retention and higher compressive strengths. **CEMTEC 670** can be used to accommodate tough to reach midrange needs, high range water reduction, as well as self-consolidating concrete. **CEMTEC 670** does not contain calcium chloride or other potential corrosion enhancing ingredients.

FEATURES & BENEFITS

Plastic Concrete

- Improves finishability
- Improves workability
- Reduces water requirement
- Improves setting times
- Superior slump retention

Hardened concrete

- Increase early and late age strengths
- Reduces permeability
- Increases durability

BASIC USES

- Ready - Mix concrete
- Precast concrete
- Cast in place
- Self-consolidating concrete

SPECIFICATIONS / COMPLIANCES

CEMTEC 670 meets or exceeds the requirements of

- ASTM C-494, Type A and Type F
- AASHTO M-194

TECHNICAL INFORMATION

Physical Properties

Specific Gravity.....	1.04
Freeze Point.....	200F (-6.70C)

PERFORMANCE

Mix Design: 360 kg/m³ of Type I portland cement in air entrained concrete with a 0.45 water cement ratio. **CEMTEC 670** was dosed at 1 liter per 100 kgs of cement and plastic properties measured over 1 hour.

Slump

Initial Slump (mm)	225
Slump @ 60 minutes	190

Air Content

Initial Air Content	8.0%
Air Content @ 60 minutes	7.2 %
Initial setting Time	4.06

Compressive Strengths:psi (MPa)

1 day	2103 (14.5)
28 day	5298 (36.5)

Dosage Rates

ASTM-C-494 Type A

CEMTEC 670 will achieve ASTM C-494 Type A performance at dosages of 130- 200 ml per 100 kgs cement.

Mid Range

For mid-range performance, **CEMTEC 670** can be used at the rate of 260-390 ml per 100 kg of cement

ASTM C-494 Type F

CEMTEC 670 can be used at the rate of 460 - 650 ml per 100 kgs of cement for high range admixture performance.

SELF-CONSOLIDATING CONCRETE

Dosage of **CEMTEC 670** to make SCC will vary depending on mixture design. Trial mixtures should be run to verify plastic and hardened performance with local materials. Contact your local CMCI sales representative for trial mixtures and dosing

DIRECTIONS FOR USE

Should be added to sand or water. It should not come in contact with dry cement or other admixtures until mixed thoroughly with the concrete batch. **CEMTEC 670** is dispensed with automatic equipment, thus insuring uniformity of admixture use through the job.

PACKAGING	CEMTEC 670 is packed in 1000 liter IBC Tanks, 210 liters drums and 20 liters pails.
COLOR	Light Amber

Shelf Life: 1 years in original, unopened package.

PRECAUTIONS / LIMITATIONS

- Care should be taken to maintain above freezing; however, freezing and subsequent thawing will not harm the material if thoroughly agitated.
- Never agitate with air.
- Add to concrete mix independent of other admixtures.

Quality Statement

CMCI manufactures its products at their manufacturing facility in Saudi Arabia as per the Quality Procedures certified to conform with quality Management System described in ISO 9000 series

CMCI provides a comprehensive technical support system for its full range of high performance construction products CMCI also offers full technical field support to consultants, Architects, contractors, applicators and End Users.

The Technical Specification information and recommendations given are based on the current technical knowledge and the user or his representative is recommended to check the suitability of the product CMCI reserves the right to amend the technical characteristic of the product as part of ongoing research and development. As the work execution is beyond the direct and continuous control of CMCI no guaranty and or responsibility is assumed on the performance of work completion executed with use of our products.

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