

# CEMTEC 850

## HIGH RANGE WATER REDUCING ADMIXTURE (TYPE F)

**CEMTEC 850** is a ready to use polycarboxylate based, high range water-reducing admixture for concrete. **CEMTEC 850** increases early concrete strength as well as ultimate strength. **CEMTEC 850** can be used to produce increased concrete slump or to significantly reduce water demand for a specific slump. **CEMTEC 850** can be added at the plant or job site and is compatible with other admixtures. **CEMTEC 850** contains no added chlorides.

### PRIMARY APPLICATIONS

- High Performance concrete
- Self-consolidating concrete
- Precast concrete
- Low water cement ratio concrete
- High early strength applications

### FEATURE / BENEFITS

- Low water/cement ratio reduces water demand
- Self-consolidating concrete reduces labor costs
- High early strength reduces energy costs
- Controlled setting times reduces labor costs

### Specifications / compliances

- Fully complies with the requirements of ASTM C-494, Type F admixture and AASHTO M-194 Type F admixture
- Complies with the requirements of ASTM C-1017 as a Type I admixture

### PACKAGING

**CEMTEC 850** is packed in bulk, 1000 liters IBC tanks, 210 Liters drums and 20 Liters pails.

**Storage:** Agitable before use

**Shelf Life:** 2 years in original, unopened package.

### TECHNICAL INFORMATION

#### Typical Engineering Data

The following results were developed under laboratory conditions.

#### **Compressive Strength PSI (MPa)**

	<b>Control Mix</b>	<b>Cemtec 850</b>
1 day	1720(11.9)	2610 (18)
3 days	3070(21.2)	4260(29.4)
7 days	3660(25.2)	5420(37.4)

28 days	4640(32.0)	6200(42.7)
6 months	5570(38.4)	7560(52.1)
1 year	5880(40.5)	8010(55.2)

#### **Flexural Strength PSI (MPa)**

	<b>Control Mix</b>	<b>Cemtec 850</b>
3 days	475(3.2)	665(4.6)
7 days	585(4.0)	730(5.0)
28 days	630(4.3 )	790(5.4)

#### **Time of Set**

	<b>Control Mix</b>	<b>Cemtec 850</b>
<b>Initial Set</b>	4:49	4:30
<b>Final Set</b>	6:19	5:54
<b>Relative Durability Factor</b>		101.9%

### DIRECTIONS FOR USE

Dosage - **CEMTEC 850** can be used at dosage rates of 200 - 1000 mls/100kgs of cementitious material. Contact your local CMCI representative for recommendations.

**Mixing** - After the addition of **CEMTEC 850**, the concrete should be mixed for a minimum of five minutes.

**Storage and Handling** - **CEMTEC 850** should be stored at temperatures above 32°F (0°C). **CEMTEC 850** should be agitated before use.

**Compatibility** - **CEMTEC 850** can be used with most other concrete admixtures. Contact your CMCI representative for recommendations.

### SELF-CONSOLIDATING CONCRETE

**CEMTEC 850** can be used to make self consolidating concrete in mixes with 0.30 or higher water/cement ratios. Contact your local CMCI sales representative for assistance with mix design adjustments and the optimization of dosages rates using a viscosity modifier such as Viscrol. Typical **CEMTEC 850** dosages of 400 - 800ml/100kg of cement will give required flow.

### PRECAUTIONS / LIMITATIONS

- **CEMTEC 850** should be added to the concrete independently of other admixtures and never directly on cement.
- Test should be conducted when using **CEMTEC 850** with air entrainment. Dosage of air entraining admixtures may need to be lowered to achieve desired air content.

*“High Quality Construction Chemicals”*

#### QUALITY STATEMENT

CMCI manufacture 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

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The Technical Specification information and recommendation 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.