



**Axim**  
Italcementi Group

# CATEXOL™ 2000 R.H.E.

## Low Temperature, Non-Chloride, Accelerating Admixture

### Product Description

**CATEXOL 2000 R.H.E.** is a unique, next generation, non-chloride accelerating admixture for concrete. In laboratory and field evaluations against the major competitive non-chloride accelerators, **CATEXOL 2000 R.H.E.** has demonstrated unsurpassed acceleration of setting time and strength over a wide range of cold weather temperatures and dosages.

With adequate protection, concrete containing **CATEXOL 2000 R.H.E.** can be placed in sub-freezing temperatures with superior rate-of-set and compressive strength results. Field evaluations must be conducted in order to determine the **CATEXOL 2000 R.H.E.** dosage necessary in order to meet rate-of-set and strength development requirements, minimum acceptable ambient and concrete temperatures considering your concrete components and jobsite conditions, and the level and length of protective measures.

### Benefits

- Superior set acceleration.
- Controlled acceleration (determined by dosage).
- Reduced segregation and bleeding.
- Greater impermeability.
- Superior finishability.
- Increased durability.
- Earlier stripping and re-use of forms.
- Increased early and ultimate compressive and flexural strengths.
- Reduced protection time and/or protective measures in cold weather.

### Value

**CATEXOL 2000 R.H.E.** provides the greatest value in a non-chloride accelerator when comparing rate-of-set acceleration, strength gain, and cost per yd<sup>3</sup> of concrete. Also, compare the performance and value of AXIM's high quality **CATEXOL 2000** admixture when producing high performance concrete through admixture systems such as: CATEXOL 1000 SP-MN superplasticizer, CATEXOL 2000 N mid-range plasticizer, CATEXOL 1000 CI corrosion inhibitor, CATEXOL S.F.-D. silica fume, and CATEXOL A.E. 260 air entrainer, among others.

### Recommendations

**CATEXOL 2000 R.H.E.** is designed for concrete where accelerated setting and strength gain characteristics are desired. **CATEXOL 2000 R.H.E.** is especially effective in concretes containing such pozzolanic materials as fly ash, silica fume and slag.

In addition to the set accelerating characteristics of **CATEXOL 2000 R.H.E.**, the strength gains allow earlier finishing and form removal as well as reducing energy costs in cold weather concreting.

### Dosage

**CATEXOL 2000 R.H.E.** is normally used at dosage rates of 10 and 20 ounces per 100 pounds (650 to 1300 ml/100kg) of cement. The recommended dosage range for **CATEXOL 2000 R.H.E.** is 5 to 60 ounces per 100 pounds (325 to 3900 ml/100kg) of cement. As the quantity is increased, the acceleration of setting time is increased.

In sub-freezing ambient temperatures, dosages of 60 to 90 ounces per 100 pounds (3900 to 5850 ml/100kg) are frequently used. (Consult your AXIM representative for dosage recommendations.)

It is highly recommended that trial mixes be conducted to determine the required dosage for desired set times and optimum performance.

Caution: Depending upon the dosage used, delayed set times may occur with some cements when this product is used in conjunction with water-reducers.

## Directions For Use

**CATEXOL 2000 R.H.E.** can be dispensed into any of the concrete materials, except cement, but preferably into the water. **CATEXOL 2000 R.H.E.** is compatible with other

admixtures; however, each admixture should be added to the mix separately.

## Applicable Standards

**CATEXOL 2000 R.H.E.** meets or exceeds the requirements of ASTM C-494, Type C & E.

## Packaging

**CATEXOL 2000 R.H.E.** is supplied in 55-gallon (208 litre) drums or in bulk delivery.

## Technical Service

A trained AXIM representative is available to assist in the preparation of specifications, and the resolution of concrete problems in the field.

### COLD WEATHER PERFORMANCE CHARACTERISTICS

**Type I Cement (lbs/yd<sup>3</sup>)  
Admixture**

**517  
Catexol 2000 R.H.E.**

**Dosage (ozs/cwt)  
Slump (inches)**

**15  
5-1/2**

### Setting Time Performance

**Mix**

**INITIAL SET  
Hr:Mn**

**COMPARISON  
Hr:Mn**

**Plain  
CATEXOL 2000 R.H.E.**

**7:46  
4:28**

**Control  
-3:18**

**Plain  
CATEXOL 2000 R.H.E.**

**FINAL SET**

**COMPARISON**

**9:56  
6:19**

**Control  
-3:37**

### Warranty

AXIM warrants its products to be free of manufacturing defects and that they will meet AXIM's current published physical properties when applied in accordance with AXIM's directions and tested in accordance with ASTM and AXIM standards.

AXIM makes no warranty or guarantee, express or implied, including warranties of fitness for a particular purpose or merchantability, respecting its products, and AXIM shall have no other liability with respect thereto. Any claim regarding product defect must be received in writing within one (1) year from the date of shipment. No claim will be considered without such written notice or after the specified time interval.

User shall determine the suitability of the products for the intended use and assume all risks and liability in connection therewith.



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