



(ISO 9001 : 2015)

Centre for Construction Development & Research
National Council for Cement and Building Materials

(Under the Administrative Control of Ministry of Commerce & Industry, Govt. of India)
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निर्माण विकास एवं अनुसंधान केन्द्र
राष्ट्रीय सीमेंट एवं भवन सामग्री परिषद्
(भारत सरकार के वाणिज्य एवं उद्योग मंत्रालय के प्रशासनिक शासनाधीन)
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By Speed Post/Emails

Ref: CDR/SP-6615
03 April 2024

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Through: PN Ojha Joint Director & HOC-CDR

Sub: Performance Evaluation of Bipolar Corrosion Inhibiting Admixture- "CORROSTOP-15" in Concrete.

Ref: Interim Report-I dated 01 March 2024

Dear Sir,

In reference to Interim Report-I dated 01 March 2024, Executive summary of the testing done so far is as follows

- Modified Accelerated Corrosion (Based on Japanese Standard JIS Z1535)-With Bipolar Corrosion Inhibiting Admixture "CORROSTOP-15".** Corrosion spots are significantly lesser in comparison to the control sample.
- Immersion Test for 720 Hrs. (Rebar weight loss method) -With Bipolar Corrosion Inhibiting Admixture "CORROSTOP-15".** corrosion rate is lesser in comparison to the control sample.
- Effect of corrosion inhibiting admixture on fresh and hardened properties**

3.1 Fresh properties

- Visual observation:** Addition of Bipolar Corrosion Inhibiting Admixture i.e., "CORROSTOP-15" did not cause any bleeding and segregation in concrete.
- Workability:** Addition of Bipolar Corrosion Inhibiting Admixture i.e."CORROSTOP-15" did not have any significant negative effect on workability in Concrete.
- Initial and Final setting time of fresh concrete:** Addition of Bipolar Corrosion Inhibiting Admixture i.e "CORROSTOP-15" led to a little decrease in initial and final setting time of concrete.

3.2 Hardened properties

- Compressive strength:** Addition of Bipolar Corrosion Inhibiting Admixture i.e."CORROSTOP-15" did not have any negative effect on the compressive strength of Concrete.
- Flexural Strength:** Addition of Bipolar Corrosion Inhibiting Admixture i.e."CORROSTOP-15" did not have any negative effect on the flexural strength of Concrete.

Thanking you

Yours faithfully
For National Council for Cement and Building Materials

Puneet Kaura
Manager

Centre for Construction Development & Research

Structural Assessment & Rehabilitation

Concrete Technology

Construction Technology & Management

Structural Optimization & Design

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