

## ASTM C-114

**RE: PROTECRETE Densifier for Rebar Water Soluble Chloride Ion Modified ASTM C-114 Test.  
Excerpted from a document originating at a reputable unbiased testing laboratory,  
(Testing laboratory name is kept undisclosed pursuant to initiator's request).**

This letter represents a summary of testing services provided relative to determining water soluble chloride ions in various concrete specimens.

The testing was performed on a concrete parking garage deck being repaired for a University Performing Arts Hall. Our company was providing construction inspection and testing to this project.

Initially, samples for chloride ion testing were hammer drilled from spare test cylinders cast from the delivered concrete. Subsequent test specimens were drilled after 12 months  $\pm$  from the top three to four inches in the areas of the parking deck where the concrete used to make the cylinders was placed. The deck had been reportedly treated with Densifier for Rebar by the contractor.

Actual testing was done by another laboratory through agreement with ours. The results are:

### WATER SOLUBLE CHLORIDE ION\*

Pour Date	% of Total Sample		Calculated % of Cementious Fraction	
	<b>1990</b>	<b>1991</b>	<b>1990</b>	<b>1991</b>
07/31/90	0.026	0.035	0.19	0.21
	0.026	< 0.002	0.19	< 0.012
08/01/90	0.029	0.003	0.21	0.018
	0.024	0.007	0.18	0.042
08/23/90	0.032	0.002	0.24	0.012
	0.041	0.013	0.30	0.078
08/24/90	0.032	0.003	0.24	0.018
	0.043	< 0.002	0.32	< 0.012

\* By Potentiometric with Silver Nitrate (Modified ASTM C-114).

**NOTE:** Based on these results, Densifier for Rebar appears not only to prevent an increase of chloride ion content in concrete exposed to deicers and vehicular traffic, but also reduce the amount already present.