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1 January 2013

**Committee C01 on Cement  
Subcommittee C01.29 on Sulfate Resistance**

**Research Report C01-1012**

**Interlaboratory Study to Establish Precision Statements for ASTM  
C1012-12, Test Method for Length Change of Hydraulic-Cement  
Mortars Exposed to a Sulfate Solution**

Method B

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**1. Introduction:**

Interlaboratory Study 494 was conducted to establish a precision statement for C1012, Test Method for Length Change of Hydraulic-Cement Mortars Exposed to a Sulfate Solution.

**2. Test Method:**

The Test Method used for this ILS is C1012-12. To obtain a copy of C1012, go to ASTM's website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service by phone at 610-832-9585 (8:30 a.m. - 4:30 p.m. Eastern U.S. Standard Time, Monday through Friday) or by email at [service@astm.org](mailto:service@astm.org).

**3. Participating Laboratories:**

The following laboratories were sent samples for this interlaboratory study:

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**4. Description of Samples:**

There were 1 samples of varying targeted results used for this study. Each sample was prepared and distributed by Gary Knight of Lehigh Hanson. Cement was supplied for the by Lehigh Hanson, Lafarge and Holcim.

**5. Interlaboratory Study Instructions:**

Laboratory participants were emailed the test program instructions. For a copy of the instructions, please see Annex A.

**6. Description of Equipment/Apparatus<sup>1</sup>:**

For information on the equipment/apparatus used by each laboratory, please see Annex B.

**7. Data Report Forms:**

Each laboratory was provided with a data report form for the collection of data. A copy of the data is provided in Annex C.

Please note: The laboratories have been randomly coded and cannot be identified herein.

**8. Statistical Data Summary:**

A summary of the statistics calculated from the data returned by the participating laboratories is provided in Annex D.

**9. Precision and Bias Statement:**

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<sup>1</sup> The equipment listed was used to develop a precision statement for C1012-12. This listing is not an endorsement or certification by ASTM International.  
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