

Third Pacific Area Meeting Papers

Symposium on

Effect of Water-Reducing Admixtures and Set-Retarding Admixtures on Properties of Concrete



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SYMPOSIUM ON EFFECT OF
WATER-REDUCING
ADMIXTURES AND SET-
RETARDING ADMIXTURES ON
PROPERTIES OF CONCRETE

Presented at the
THIRD PACIFIC AREA NATIONAL MEETING
AMERICAN SOCIETY FOR TESTING MATERIALS
San Francisco, Calif., October 14, 1959



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FOREWORD

The use of water-reducing admixtures and set retarders in concrete has grown continuously since their introduction over 25 years ago, with a present estimated usage in the production of 25 million cubic yards of concrete annually in the United States alone. Further indication of current interest is evidenced by the fact that ASTM Committee C-9 on Concrete and Concrete Aggregates and certain public agencies are actively drafting standard methods of test and specifications to govern the purchase and performance requirements of these admixtures for concrete.

The future of better concrete lies in an increased understanding of concreting materials and the best manner of combining them to produce the maximum in strength and durability. It is with this in mind that Committee C-1 on Cement and Committee C-9 have jointly sponsored this Symposium, held during the Third Pacific Area National Meeting of the Society from October 11-16, 1959, in San Francisco, Calif.

The Symposium consisted of ten papers and a summary. It is of interest to note that four of the papers represent the joint contribution of four principal producers of admixtures. The remaining papers were prepared by representatives of consumer interests, research organizations, and the cement industry.

The Symposium was held during two sessions on Wednesday, October 14. Professors R. E. Davis and Milos Polivka, both of the University of California, presided over the two sessions respectively.

The Joint Symposium Committee, representing Committees C-1 and C-9, included the following members:

R. E. DAVIS, University of California (*Chairman*)
W. C. HANNA, California Portland Cement Co. (*Vice-Chairman*)
MILOS POLIVKA, University of California (*Secretary*)
R. L. BLAINE, National Bureau of Standards
JOSEPH E. GRAY, National Crushed Stone Assn.
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W. J. MCCOY, Lehigh Portland Cement Co.
RICHARD C. MIELENZ, Master Builders Co.

**NOTE.—The Society is not responsible, as a body, for the statements
and opinions advanced in this publication.**

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THIS PUBLICATION is one of many issued by the American Society for Testing Materials in connection with its work of promoting knowledge of the properties of materials and developing standard specifications and tests for materials. Much of the data result from the voluntary contributions of many of the country's leading technical authorities from industry, scientific agencies, and government.

Over the years the Society has published many technical symposiums, reports, and special books. These may consist of a series of technical papers, reports by the ASTM technical committees, or compilations of data developed in special Society groups with many organizations cooperating. A list of ASTM publications and information on the work of the Society will be furnished on request.