



Roofing Research and Standards Development

FOURTH VOLUME

Thomas J. Wallace and
Walter J. Rossiter, Jr., editors

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Roofing Research and Standards Development: Fourth Volume

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Foreword

This publication, *Roofing Research and Standards Development: Fourth Volume*, contains papers presented at the symposium of the same name held in Nashville, Tennessee, on 6 December 1998. The symposium was sponsored by ASTM Committee D8 on Roofing, Waterproofing and Bituminous Materials. The symposium co-chairmen were Thomas J. Wallace, Philadelphia Housing Authority, and Walter J. Rossiter, Jr., National Institute of Standards and Technology.

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Overview

If the 1980s were referred to as the “decade of revolution” in the commercial roofing community, then the 1990s might be called the “decade of stability.” No longer does the industry find new products “coming and going” to the dismay of the consumer. As the industry has stabilized, a broad variety of roof systems have found general acceptance by the building owners, architects, engineers, contractors, and others who select and install roofs. These roof systems include those based on conventional built-up membranes using glass and synthetic reinforcements, synthetic polymeric membranes using elastomers and thermoplastics, polymer-modified membranes, and sprayed polyurethane foam. To be sure, for a given roof in a specific environment, one system may be a better choice than the others. ASTM Committee D8 on Roofing, Waterproofing, and Bituminous Materials has contributed significantly in many important ways to the roofing community’s stabilization including issuing standard specifications to assist consumers in the selection and use of these systems.

This is not surprising, as it has always been among the purpose of D8 to provide standards to assist in the selection and use of low-sloped and steep roofing. But, the Committee’s scope is broader and includes development of standards associated with application, inspection, maintenance, and analyses. Some of the issues facing the roofing community today—for example, enhanced system durability, better methods of material characterization, environmental impact, recycling of materials and systems, industry conversation to the S.I. system metric—readily fall within D8’s scope. The availability of sound standards can contribute to the resolution of many of these issues. Consequently, the demands on D8 for new and improved roofing standards are as great today as they were a decade or more ago. D8 remains as committed today to meet these demands as it was in the past.

Sound standards have strong technical bases. This symposium on *Roofing Research and Standards Development* is the fifth in a series dating back to early 1980s. It was conducted under the auspices of Subcommittee D8.21 on Research Needs for Roofing and Waterproofing. This symposium and the papers described in the Proceedings illustrate D8’s commitment made to developing standards having strong technical bases, which ultimately contributes to improved roof performance. Proceedings from previous symposia are: *Single-Ply Roofing Technology, ASTM STP 790* (1982), edited by W. H. Gumpertz, *Roofing Research and Standards Development, ASTM STP 959* (1986), edited by R. A. Critchell, and *Roofing Research and Standards Development, 2nd Volume, ASTM STP 1088* (1990), edited by T. J. Wallace and W. J. Rossiter, Jr., *Roofing Research and Standards Development, 3rd Volume, ASTM STP 1224* (1994), edited by T. J. Wallace and W. J. Rossiter, Jr.

As in the past, this publication is dedicated to the members of ASTM Committee D8 who give unselfishly of their time and energy to improve the performance of roofs. The editors express their sincere thanks and appreciation to those many individuals who participated in the organization and conduct of the symposium. C. G. Cash, W. C. Cullen, M. J. Franks, W. A. Kirn, J. F. Lindberg, L. R. Meyers, R. M. Paroli, G. A. Smith, T. L. Smith, and J. R. Wells were D8 members of the steering committee. At ASTM headquarters, Dorothy Savini and Pat Picariello provided for symposium arrangements. Annette Adams working with Kathy Dernoga directed the review and publication of the papers. We especially note with sincere appreciation Ms. Adam’s commitment to keeping the review process on schedule to enable the timely appearance of these *Proceedings*. Mona Wolf, WolfSensory, Inc., was the ASTM Committee on Publications (COP) representative to the Sympo-

sium Steering Committee. And, above all, special thanks are given to the authors and reviewers of the papers without whose efforts the symposium would not have been possible.

Finally, we remark with sadness on the loss of Steering Committee member Bill Cullen in November 1997. Bill contributed immensely behind the scenes to the D8 symposia series on Roofing Research and Standards Development. This was only natural. Those who knew Bill well remember that research to improve roofing, and the implementation of the research results through standards development, were the heart of his career. Bill will be missed.

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