Selected Technical Papers

STP 1551

PERVIOUS CONCRETE

Editors:
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Foreword

THIS COMPILATION OF Selected Technical Papers, STP1551, on Pervious Concrete, contains peer-reviewed papers that were presented at a symposium held December 4, 2011 in Tampa, FL, USA. The symposium was sponsored by ASTM International Committee C09 on Concrete and Concrete Aggregates and C09.49 Pervious Concrete.

The Symposium Co-Chairpersons and STP Editors are Heather J. Brown, MTSU/Concrete Industry Mgmt., Murfreesboro, TN, USA and Matthew Offenberg, W. R. Grace, Canton, GA, USA.
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Overview

The symposium that was held discussed the importance of having testing standards for a segment of the industry that has been placing pervious concrete for over 30 years in the United States. The community of industry professionals now engaged in specifying, designing, testing and installing pervious concrete is so large that appropriate standards are paramount for the industry to keep its momentum. Currently, four standards are approved with several more concepts being researched. These activities will impact the use/acceptance of pervious concrete going forward and the confidence that the specifying community has in the material.

This symposium provided a forum for presenting data collected on pervious projects relating to fresh concrete properties, hardened properties, durability, permeability and mix design alternatives. Topics that were presented contained, but were not limited to:

- Surface durability,
- Use and intention of C1701 (ASTM Standard Test Method for Infiltration of In Place Pervious Concrete) for field permeability,
- Density and voids of freshly delivered material,
- Use of admixtures to improve pervious attributes, and
- Correlations of field cores to C1688 (ASTM Standard Test Method for Density and Void Content of Freshly Mixed Pervious Concrete).