

# Specification for Type MMS (Methyl Methacrylate Slurry) Polymer Overlays for Bridge and Parking Garage Decks

An ACI Standard

Reported by ACI Committee 548

Michael S. Stenko  
Chair

Herschel H. Allen III  
Milton D. Anderson  
John J. Bartholomew  
Constantin Bodea  
James T. Dikeou  
Garth J. Fallis

David W. Fowler  
Robert W. Gaul  
Albert O. Kaeding  
John R. Milliron  
Brad Nemunaitis  
Richard C. Prusinski

Mahmoud M. Reda Taha  
John R. Robinson  
Donald A. Schmidt  
Qizhong Sheng  
Joe Solomon  
Michael M. Sprinkel

Donald P. Tragianese  
Saraswamy Vipulanandan  
Wafeek S. Wahby  
Harold H. Weber, Jr.  
David White  
David P. Whitney

*This Specification covers methyl methacrylate slurry (MMS) overlays for bridge and parking garage decks. Type MMS polymer overlay incorporates methyl methacrylate-based primer, binder, and top coat with selected filler and aggregate to produce a flexible, skid-resistant, and water-resistant overlay. The overlay is used for both new construction and rehabilitation. The overlay is placed by applying the polymer slurry system to the surface and broadcasting aggregate. This Specification includes requirements for chemical components, aggregates, storage and handling, surface preparation, surface profile, mixing, placement, finishing, and quality control.*

*The materials, processes, quality control measures, and inspections described in this document should be tested, monitored, or performed as applicable only by individuals with appropriate ACI certifications or equivalent.*

**Keywords:** aggregate; bridge decks; methyl methacrylate; mortar; overlays; parking garage decks; polymer; premeasured; resin; slurry.

## CONTENTS

### Section 1—General, p. 2

- 1.1—Scope
- 1.2—Definitions
- 1.3—Reference standards
- 1.4—Submittals
- 1.5—Project conditions
- 1.6—Labeling, storage, and handling of materials
- 1.7—Safety

### Section 2—Products, p. 3

- 2.1—Methyl methacrylate-based primer
- 2.2—Methyl methacrylate-based binder
- 2.3—Filler

- 2.4—Methyl methacrylate-based top coat
- 2.5—Aggregate
- 2.6—Polymer overlay slurry

### Section 3—Execution, p. 4

- 3.1—Procedure qualification
- 3.2—Surface preparation
- 3.3—Mixing methyl methacrylate-based primer, binder-filler slurry, and top coat
- 3.4—Overlay application
- 3.5—Curing
- 3.6—Excess aggregate removal
- 3.7—Joints
- 3.8—Opening to traffic

### Notes to Specifier, p. 5

General notes

### Foreword to checklists, p. 6

### Mandatory Requirements Checklist, p. 6

### Submittals Checklist, p. 6

ACI 548.10-10 became effective July 7, 2010 and was published August 2010.  
Copyright © 2010, American Concrete Institute.

All rights reserved including rights of reproduction and use in any form or by any means, including the making of copies by any photo process, or by electronic or mechanical device, printed, written, or oral, or recording for sound or visual reproduction or for use in any knowledge or retrieval system or device, unless permission in writing is obtained from the copyright proprietors.