

An ACI Standard

Multi-Component Epoxy Adhesive for Bonding to Concrete—Specification

Reported by ACI Committee 548

ACI SPEC-548.13-21



American Concrete Institute
Always advancing

This is a preview. [Click here to purchase the full publication.](#)



Multi-Component Epoxy Adhesive for Bonding to Concrete—Specification

Copyright by the American Concrete Institute, Farmington Hills, MI. All rights reserved. This material may not be reproduced or copied, in whole or part, in any printed, mechanical, electronic, film, or other distribution and storage media, without the written consent of ACI.

The technical committees responsible for ACI committee reports and standards strive to avoid ambiguities, omissions, and errors in these documents. In spite of these efforts, the users of ACI documents occasionally find information or requirements that may be subject to more than one interpretation or may be incomplete or incorrect. Users who have suggestions for the improvement of ACI documents are requested to contact ACI via the errata website at <http://concrete.org/Publications/DocumentErrata.aspx>. Proper use of this document includes periodically checking for errata for the most up-to-date revisions.

ACI committee documents are intended for the use of individuals who are competent to evaluate the significance and limitations of its content and recommendations and who will accept responsibility for the application of the material it contains. Individuals who use this publication in any way assume all risk and accept total responsibility for the application and use of this information.

All information in this publication is provided “as is” without warranty of any kind, either express or implied, including but not limited to, the implied warranties of merchantability, fitness for a particular purpose or non-infringement.

ACI and its members disclaim liability for damages of any kind, including any special, indirect, incidental, or consequential damages, including without limitation, lost revenues or lost profits, which may result from the use of this publication.

It is the responsibility of the user of this document to establish health and safety practices appropriate to the specific circumstances involved with its use. ACI does not make any representations with regard to health and safety issues and the use of this document. The user must determine the applicability of all regulatory limitations before applying the document and must comply with all applicable laws and regulations, including but not limited to, United States Occupational Safety and Health Administration (OSHA) health and safety standards.

Participation by governmental representatives in the work of the American Concrete Institute and in the development of Institute standards does not constitute governmental endorsement of ACI or the standards that it develops.

Order information: ACI documents are available in print, by download, through electronic subscription, or reprint, and may be obtained by contacting ACI.

ACI codes, specifications, and practices are made available in the ACI Collection of Concrete Codes, Specifications, and Practices. The online subscription to the ACI Collection is always updated, and includes current and historical versions of ACI's codes and specifications (in both inch-pound and SI units) plus new titles as they are published. The ACI Collection is also available as an eight-volume set of books and a USB drive.

American Concrete Institute
38800 Country Club Drive
Farmington Hills, MI 48331
Phone: +1.248.848.3700
Fax: +1.248.848.3701

www.concrete.org

This is a preview. Click here to purchase the full publication.

Multi-Component Epoxy Adhesive for Bonding to Concrete—Specification

Reported by ACI Committee 548

Mahmoud M. Reda Taha, Chair

Ashraf I. Ahmed
Mohammad A. Alhassan
Jacques A. Bertrand
Constantin Bodea
Chris Davis
Don Edwards

David W. Fowler
Quentin L. Hibben
Albert O. Kaeding
Jay Lee
John R. Milliron
Bradley Nemunaitis

Joseph A. Nuciforo Jr.
John R. Robinson
Michael L. Schmidt
Joseph R. Solomon
Michael M. Sprinkel
Michael S. Stenko

Donald P. Tragianese
Wafeek S. Wahby
David White

Consulting Members

Milton D. Anderson
Lu Anqi
Craig A. Ballinger
John J. Bartholomew
Shashi P. Bhatnagar
Jerry D. Byrne
Zhi-Yuan Chen

Lech Czarnecki
Harold (Dan) R. Edwards
Larry J. Farrell
George Horeczko
David P. Hu
Bert Paul Kriekemans
Deon Kruger

William Lee
Troy D. Madeley
Henry N. Marsh Jr.
Peter Mendis
Peter J. Moss
Yoshihiko Ohama
Kelly M. Page

Hamid Saadatmanesh
Donald A. Schmidt
Meyer Steinberg
Harold H. Weber Jr.

This Specification describes bonding fresh concrete, hardened concrete, steel, and other materials as covered in Section 2.3 to hardened concrete with a multi-component epoxy adhesive as defined for this purpose in ASTM C881/C881M. Included are controls for adhesive labeling; storage; handling; surface evaluation and preparation; mixing and application; and inspection, safety, quality control, and testing.

Keywords: adhesive; bond; construction; epoxy; epoxy resin; fresh concrete; quality control; repair; safety; surface.

CONTENTS

SECTION 1—GENERAL REQUIREMENTS, p. 2

- 1.1—Scope, p. 2
- 1.2—Interpretation, p. 2
- 1.3—Definitions, p. 2
- 1.4—Referenced standards, p. 3
- 1.5—Submittals, p. 3
- 1.6—Delivery, storage, and handling, p. 3
- 1.7—Project conditions, p. 3
- 1.8—Control of adhesive mixture, p. 3

SECTION 2—BONDING HARDENED CONCRETE, STEEL, AND OTHER MATERIALS TO HARDENED CONCRETE, p. 3

- 2.1—General, p. 3
- 2.2—Products, p. 3
- 2.3—Execution, p. 4

ACI SPEC-548.13-21 supersedes ACI 548.13-14 and was adopted August 27, 2021.
Copyright © 2021, 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 granted by the American Concrete Institute.