

Specification for Curing Concrete

An ACI Standard

Reported by ACI Committee 308



American Concrete Institute®



American Concrete Institute®
Advancing concrete knowledge

First Printing
July 2011

Specification for Curing Concrete

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. Proper use of this document includes periodically checking for errata at **www.concrete.org/committees/errata.asp** 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.

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

Most ACI standards and committee reports are gathered together in the annually revised *ACI Manual of Concrete Practice* (MCP).

American Concrete Institute
38800 Country Club Drive
Farmington Hills, MI 48331
U.S.A.

Phone: 248-848-3700
Fax: 248-848-3701

www.concrete.org

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

Specification for Curing Concrete

An ACI Standard

Reported by ACI Committee 308

Cecil L. Jones
Chair

John C. Hukey
Secretary

Donald L. Brogna
Dianne Carey
James N. Cornell II
Jonathan E. Dongell
Ben E. Edwards
Jerome H. Ford
Sidney Freedman

Gilbert J. Haddad
Eugene D. Hill Jr.
R. Doug Hooton
Kenneth C. Hover
Frank A. Kozeliski
James A. Lee
Darryl Manuel

W. Calvin McCall
William S. Phelan
John W. Roberts
Lawrence R. Roberts
Philip A. Smith
David M. Suchorski
Michael D. A. Thomas

Donald P. Tragianese
Richard E. Van Horn
Jody R. Wall
Patrick M. Watson
Daniel Webber
John B. Wojakowski

David E. Hoyt, Consulting Member

Note: ACI Committee 308 recognizes former committee Chair Steven H. Gebler for his significant contribution to this document prior to his passing in June 2006.

This specification is a reference specification that the Architect/Engineer can make applicable to any construction project by citing it in the Project Specification. The Architect/Engineer uses and supplements the provisions of this reference specification as needed by designating or specifying individual project requirements to which provisions of this specification apply.

This document provides requirements for alternative methods for curing concrete. These alternative methods are not necessarily equal in effectiveness, cost, effect on project schedule, or impact on other aspects of the project. To use this specification, the Architect/Engineer must not only include this document by reference in the Project Specification, but must also identify the concrete elements that are to be cured, and must choose the method to cure those elements. This specification has default settings that may or may not be applicable to a specific project. The Architect/Engineer is to use the Checklists included in this specification to customize the specification to a specific project. Checklists are provided in this document to guide the Architect/Engineer through these selection processes, and the selections must be included in the Project Specification. Alternatively, the Architect/Engineer may allow the Contractor the option of using one or more of a number of permissible curing methods, subject to review and approval. Further, the Architect/Engineer must determine whether deliberate curing efforts are to be terminated after a predetermined time has elapsed, or only after specified concrete properties have developed. When deliberate efforts to cure the concrete are to be terminated only when specified concrete properties have developed, the Architect/Engineer must also select the test method used to measure those properties.

This specification addresses curing methods applied after placement of concrete and does not apply to internal curing (use of saturated lightweight aggregate or other materials to provide supplemental water) or to accelerated curing (heat curing).

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

Keywords: cold-weather concreting; concrete construction; curing; curing films and sheets; hot-weather concreting; insulating concrete; insulation; membrane curing compounds; moist curing; moisture retention; sealers; water curing; water retention.

FOREWORD TO CHECKLISTS

F1. This foreword is included for explanatory purposes only; it does not form a part of ACI Specification 308.1.

F2. ACI Specification 308.1 may be referenced by the Specifier in the Project Specification for any building project, together with supplementary requirements for the specific project. Responsibilities for project participants must be defined in the Project Specification. ACI Specification 308.1 cannot and does not address responsibilities for any project participant other than the Contractor.

F3. Checklists do not form a part of ACI Specification 308.1. Checklists assist the Specifier in selecting and specifying project requirements in the Project Specification.

F4. The Mandatory Requirements Checklist indicates work requirements regarding specific qualities, procedures, materials, and performance criteria that are not defined in ACI Specification 308.1. The Specifier must include these requirements in the Project Specification.

F5. The Optional Requirements Checklist identifies Specifier choices and alternatives. The Checklist identifies the Sections, Parts, and Articles of the ACI Reference Specification 308.1 and the action required or available to the Specifier. The Specifier should review each of the items in the Checklist and make adjustments to the needs of a particular project by including those selected alternatives as mandatory requirements in the Project Specification.

ACI 308.1-11 supersedes 308.1-98, was adopted April 29, 2011, and was published June 2011.

Copyright © 2011, 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.