IN-LB

Inch-Pound Units

S

International System of Units

Guide for Design and Construction Responsibilities for Architectural Precast Concrete

Reported by ACI Committee 533





American Concrete Institute

Always advancing



First Printing
April 2020

ISBN: 978-1-64195-100-5

Guide for Design and Construction Responsibilities for Architectural Precast 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 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.

Most ACI standards and committee reports are gathered together in the annually revised the ACI Collection of Concrete Codes, Specifications, and Practices.

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

+1.248.848.3701

www.concrete.org

ACI 533.1R-20

Guide for Design and Construction Responsibilities for Architectural Precast Concrete

Reported by ACI Committee 533

David Wan, Chair

Mehdi Bakhshi George F. Baty Harry A. Chambers* Benjamin Lavon James Lewis Donald F. Meinheit Brian D. Miller Verya Nasri Karen Polanco Larbi M. Sennour Venkatesh Seshappa Michael H. Weber Dennis M. Wittry Wael A. Zatar

Consulting Members

Aaron W. Fink

Sidney Freedman

Ava Shypula

Weiland Song

*Deceased.

Architectural precast concrete is a subcategory of concrete construction that involves the same basic entities as other concrete construction, but is cast in a plant and has a more decorative appeal by using color, texture, distinguished surface finishes, or all of these. This document outlines the responsibilities for various parties of the design/construction team for architectural precast concrete projects and does not necessarily apply to concrete or precast concrete in general.

Keywords: architect; architectural precast concrete; construction manager; general contractor; owner; precaster; specialty structural engineer; structural engineer of record.

CONTENTS

CHAPTER 1—INTRODUCTION AND SCOPE, p. 2

1.1—Introduction, p. 2

1.2—Scope, p. 2

ACI Committee Reports, Guides, and Commentaries are intended for guidance in planning, designing, executing, and inspecting construction. This document is 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. The American Concrete Institute disclaims any and all responsibility for the stated principles. The Institute shall not be liable for any loss or damage arising therefrom.

Reference to this document shall not be made in contract documents. If items found in this document are desired by the Architect/Engineer to be a part of the contract documents, they shall be restated in mandatory language for incorporation by the Architect/Engineer.

CHAPTER 2—DEFINITIONS, p. 2

CHAPTER 3—GENERAL RESPONSIBILITIES, p. 3

- 3.1—Owner responsibilities, p. 3
- 3.2—Architect responsibilities, p. 4
- 3.3—Structural engineer of record responsibilities, p. 5
- 3.4—General contractor/construction manager responsi-
- 3.5—Precaster responsibilities, p. 7
- 3.6—Specialty structural engineer responsibilities, p. 8
- 3.7—Erector responsibilities, p. 9

CHAPTER 4—HARDWARE RESPONSIBILITY, p. 9

- 4.1—Hardware supply, p. 9
- 4.2—Building frames of cast-in-place concrete, p. 9
- 4.3—Building frame of structural steel, p. 9
- 4.4—Accessories and hardware provided by the precaster, p. 10

ACI 533.1R-20 was adopted and published April 2020.

Copyright © 2020, 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

