

An ACI Standard

# Specification for Installation of Cementitious Grouting between Foundations and Equipment Bases

Reported by ACI Committee 351

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## Specification for Installation of Cementitious Grouting between Foundations and Equipment Bases

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American Concrete Institute  
2880 Country Club Drive  
Farmington Hills, MI 48331  
Phone: +1.248.848.3700  
Fax: +1.248.848.3701

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Reported by ACI Committee 351

David Kerins\*, Chair

Mukti L. Das, Secretary

Omesh B. Abhat  
Richard P. Bohan†  
William L. Bounds  
William D. Brant  
Michael M. Chehab  
Shu-Jin Fang  
Fred R. Goodwin

Shraddhakar Harsh  
Erick N. Larson  
Robert R. McGlohn  
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Michael A. Paipal†  
Ira W. Pearce

Charlie L. Rowan  
William E. Rushing  
Yasser Saleh  
Larry W. Schulze  
Philip A. Smith†  
William J. ...  
Alan Wiley

Sheng-Chi Wu

*Consulting Members*  
Navin N. Pandya  
Shamsher Prakash  
Robert L. Rowan Jr.

\*Chair of Task Force 351.TG1.

†Members of Task Force 351.TG1 who prepared this specification.

*This specification covers minimum requirements for cementitious grouting between foundations and equipment bases. Included are requirements for materials and placing.*

**Keywords:** cement grout; cementitious grout; equipment grout; foundations; grout; hydraulic cement grout; machinery grout

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(mandatory portion follows)

## PART 1—GENERAL

### 1.1—Scope

**1.1.1** This specification covers minimum requirements for cementitious grouting between foundations and equipment and machinery bases.

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**1.1.2** This specification supplements the Contract Documents and provides requirements for the Contractor.

**1.1.3** This specification governs for construction within its scope, except the Contract Documents govern if there is a conflict.

**1.1.4** This specification governs if there is a conflict with referenced material and testing standards.

**1.1.5** The Contractor is permitted to submit written alternatives to any provision in this specification.

**1.1.6** Do not use this specification in conjunction with ACI 301, ACI 350.5, or ACI 530.1 unless Contract Documents state that this specification governs for Work covered by 1.1.1.1.

**1.1.7** Ignore provisions of this specification that are not applicable to the Work.

**1.1.8** Values in this specification are stated in SI units. A companion specification in inch-pound units is also available.

**1.1.9** The “Notes to specifiers” are not part of this specification.

## 1.2—Interpretation

Unless otherwise explicitly stated, this specification shall be interpreted using the following principles:

(a) Interpret this specification consistent with the plain meaning of the words and terms used.

(b) Definitions provided in this specification govern. Unless otherwise explicitly stated, this specification shall be interpreted using the following principles:

i. Its provisions are in harmony and do not conflict.

ii. Headings are part of this specification and are intended to identify the scope of the provisions or sections that follow. If there is a difference in meaning or implication between the text of a provision and a heading, the meaning of the text governs.

iii. Where a provision of this specification involves two or more items, conditions, requirements, or events connected by the conjunctions “and” or “or” interpret the conjunction as follows:

“and” indicates that all of the connected items, conditions, requirements, or events apply.

“or” indicates that the connected items, conditions, requirements, or events apply singularly.

iv. The use of the verbs “may” or “will” indicates that the specification provision is for information to the Contractor.

## 1.3—Definitions

**1.3.1** The following definitions govern in this specification. For definitions not given herein, refer to “ACI Concrete Technology.”

**headbox**—device for controlling the gravity flow of grout into the formwork.

**unrestrained areas of grout**—areas of grout that are not under or within 100 mm of the baseplate.

## 1.4—Referenced standards

Standards of ACI Specified in this specification are listed by name and designation, including year.

### 1.4.1 ACI standards

ACI 117M-10—Specification for Tolerances for Concrete Construction and Materials and Commentary

ACI 301M-10—Specifications for Structural Concrete

## 1.5—Submittals

**1.5.1 General**—Provide to Architect/Engineer submittals required by this specification in accordance with Contract Documents.

**1.5.2 Quality control plan**—If required, submit a quality control plan showing means and methods to control the purchase, use, and placement of grout. Provide information related to quality control in accordance with 1.5.2.1.

**1.5.2.1** Submit data on qualifications of proposed testing agency for acceptance. Use of testing services will not relieve Contractor of the responsibility to furnish materials and construction in compliance with Contract Documents

### 1.5.3 Quality control procedures

**1.5.3.1** Submit the following to Architect/Engineer before the start of the work:

- Experience record of supervisory personnel
- List of equipment and procedures
- Detailed procedures for grouting, including anchoring unrestrained areas of grout if required in Contract Documents

**1.5.3.2** Submit the following to the Architect/Engineer during construction:

- Notification to Architect/Engineer in time to permit in-place inspection of the foundation and formwork prior to placement of grout
- Test results for samples taken in accordance with 1.7.4
- Record set markup of drawings
- Formwork and formwork accessories data

## 1.6—Delivery, storage, and handling

**1.6.1** Grout shall be stored and handled in accordance with the manufacturer’s written instructions and material safety data sheets.

## 1.7—Quality control procedures

**1.7.1 General**—Grout materials and operations may be tested and inspected by Owner as Work progresses. Failure to detect defective Work or material shall not prevent rejection for defects discovered later nor shall it obligate Architect/Engineer for final acceptance.

**1.7.1.1** Testing agencies shall be accepted by Architect/Engineer before performing any Work. Field tests of grout required in 1.7.2 and 1.7.3 shall be performed by personnel trained in testing grouts.

**1.7.2 Testing responsibilities of Contractor**—Unless otherwise specified in Contract Documents, Contractor shall assume the following duties and responsibilities:

- Qualify proposed materials
- Allow access to the project site or to the source of materials and assist Owner’s testing agency in obtaining