

An ACI Standard

Specification for Installation of Epoxy Grout between Foundations and Equipment Bases

Reported by ACI Committee 351

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Specification for Installation of Epoxy Grout between Foundations and Equipment Bases

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This specification covers minimum requirements for epoxy grouting between foundations and equipment bases. Included are requirements for materials, placement, and quality control.

(non-mandatory portion follows)

Keywords: epoxy grout; foundations; grout.

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(mandatory portion follows)

PART 1—GENERAL

1.1—Scope

1.1.1 This specification covers requirements for installation of epoxy grout between foundations and bases of equipment and machinery. Included are requirements for materials, placement, and quality control.

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.

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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 301M, ACI 350.5M, or ACI 530/530.1 unless Contract Documents state that this specification governs for Work covered by 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 Specifier 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 over the definitions of the same or similar words or terms found elsewhere.

(c) Whenever possible, interpret this specification so that its provisions are in harmony and do not conflict.

(d) 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.

(e) 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:

- i) “and” indicates that all of the connected items, conditions, requirements, or events apply.
- ii) “or” indicates that the connected items, conditions, requirements, or events apply singularly.

(f) 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 provided herein, refer to “ACI Concrete Terminology.”

accepted—determined to be satisfactory by Architect/Engineer.

Architect/Engineer—the architect, engineer, architectural firm or engineering firm developing Contract Documents, administering the Work under Contract Documents, or both.

head box—device for controlling the flow of grout into the formwork.

submittal—document or material provided to Architect/Engineer for review and acceptance.

testing agency—the person, firm, or entity under contract for providing testing services.

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

Work—the entire construction or separately identifiable parts thereof required to be furnished under Contract Documents.

1.4—Reference standards

Standards of ACI and ASTM International cited in this Specification are listed by name and designation, including year.

1.4.1 *American Concrete Institute*

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

ACI 301M-10—Specifications for Structural Concrete

1.4.2 *ASTM International*

ASTM C579-01(2012)—Standard Test Methods for Compressive Strength of Chemical-Resistant Mortars, Grouts, Monolithic Surfacing, and Polymer Concretes

ASTM C1107-14—Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink)

1.5—Submittals

1.5.1 General—Contractor shall provide to Architect/Engineer submittals required by this Specification in accordance with Contract Documents.

1.5.2 Contractor's quality control—Submit a quality control plan showing means and methods to control the purchase, use, and placement of epoxy grout. Provide information related to quality control in accordance with 1.7.5.

1.5.3 Contractor's testing agency—If Contractor is nominating a testing agency, submit data on qualifications of proposed testing agency for acceptance.

1.5.4 *Quality control procedures*

1.5.4.1 Submit the following to Architect/Engineer before the start of Work:

- a) Experience record of supervisory personnel
- b) List of equipment and procedures
- c) Detailed procedures for grouting.

1.5.4.2 Submit the following to Architect/Engineer during construction:

- a) Notification to Owner's Representative in time to permit in-place inspection of foundation and formwork prior to placement of grout
- b) Test results
- c) Record set markup of drawings

1.5.4.3 Submit formwork and formwork accessories as specified in Contract Documents.

1.6—Delivery, storage, and handling

Deliver, store, and handle grout per manufacturer's instructions and material safety data sheets (MSDS).

1.7—Quality assurance and control

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 will not prevent rejection if a defect is discovered later nor shall it obligate Architect/Engineer for final acceptance.