IN-LB Inch-Pound Units

An ACI Standard

Specification for Construction of Pervious Concrete Pavement

Reported by ACI Committee 522

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This Specification covers minimum requirements for the construction of pervious concrete pavement. This Specification covers materials, preparation, forming, placing, finishing, jointing, curing, and quality control of pervious concrete pavement. Provisions governing testing, evaluation, and acceptance of pervious concrete pavement are included.

Keywords: construction; curing; inspection; jointing; parking lots; testing.

CONTENTS

(mandatory portion follows)

ACI 522.1-20 supersedes ACI 522.1-13, became effective May 15, 2020, and was published November 2020.

PART 1—GENERAL

1.1—Scope

1.1.1 This Specification covers construction of pervious concrete pavement.

1.1.2 This Specification is incorporated by Contract Documents and provides requirements for the Contractor.

1.1.3 This Specification governs for construction within its scope, except project-specific 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 Contractor is permitted to submit written alternatives to any provision in this Specification for consideration.

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

1.1.7 Values in this Specification are stated in inch-pound units. A companion specification in SI units is available.

1.1.8 The Notes to Specifier are not part of this Specification.

1.2—Interpretation

1.2.1 Unless otherwise explicitly stated, this Specification shall be interpreted using the following principles.

1.2.1.1 Interpret this Specification consistent with the plain meaning of the words and terms used.

1.2.1.2 Definitions provided in this Specification govern over the definitions of the same or similar words or terms found elsewhere.

1.2.1.3 Whenever possible, interpret this Specification so that its provisions are in harmony and do not conflict.

1.2.1.4 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.

1.2.1.5 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.

1.2.1.6 The use of the verbs "may" or "will" indicates that the Specification provision is for information to Contractor.

1.2.1.7 The phrase "as indicated in Contract Documents" means the specifier included the provision requirements in Contract Documents.

1.2.1.8 The phrase "unless otherwise specified" means the specifier may have included an alternative to the default requirement in Contract Documents.

1.2.1.9 The phrase "if specified" means the specifier may have included a requirement in Contract Documents for which there is no default requirement in this Specification.

1.3—Definitions

The following definitions govern in this specification.

accepted—determined by Architect/Engineer to be in compliance with Contract Documents.

Contract Documents—set of documents that form the basis of a contractual relationship between an Owner and contractor or design-builder. These documents are defined by the contractual agreement, and can contain contract forms, contract conditions, specifications, drawings, addenda, and contract changes.

Contractor—the person, firm, or entity under contract for construction of the Work.

contraction joint—sawed or tooled groove in a concrete pavement to create a weakened plane to regulate the location of cracking resulting from dimensional change of different parts of the pavement.

design void content—percentage of voids of a unit volume of pervious concrete based on the theoretical mixture proportions and design density, as tested in accordance with ASTM C1688/C1688M; unit volume includes the volume of the solids and the voids.

drawings—graphic presentations that detail requirements for Work and may include written notes.

extended set admixture—an admixture that can predictably stop or reduce the hydration rate of cement for applications requiring extended time of setting followed by normal strength development; also referred to as a hydration-controlling admixture or a hydration-stabilizing admixture.

hardened density—the dry density of pervious concrete determined in accordance with ASTM C1754/C1754M.

lot—5000 ft^2 of pavement.

Owner—the corporation, association, partnership, individual, public body, or authority for whom the Work is constructed.

raveling—the contiguous dislodging of surface aggregate.

submit—provide to Architect/Engineer for review.

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.

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