



NRMCA Concrete Field Testing Technician - Grade II

Program Overview

Certification Program:

NRMCA Certification - Field Testing Technician Program

Certification Level:

Concrete Field Testing Technician - Grade II

Definition

A Concrete Field Testing Technician - Grade II is an individual who has demonstrated the knowledge to understand specifications, terminology and procedures and to record the results of standardized test methods for the standards listed in the Scope. The NRMCA Concrete Field Testing Technician Grade II must hold a valid ACI Concrete Field Testing Certification-Grade I when the exam for the Grade II Certification is attempted. An exception will be made for those who are in the process of obtaining ACI Grade I certification.

A Grade II technician may be required where a higher level of concrete testing expertise is needed such as jobs where acceptance testing is very critical. Such examples of projects would include situations where an understanding of specification requirements and tolerances for ready mixed concrete. Technicians that need proficiency in test methods for self-consolidating concrete, pervious concrete, non-destructive testing and testing beams for airfield paving projects are examples where this certification would likely be required.

Scope and Knowledge

The program requires a working knowledge of the following standards:

C31 – Practice for Making and Curing Concrete Test Specimens in the Field (Beams)

C42 – Test method for Obtaining and Testing Drilled Cores

C94 – Specification for Ready Mixed Concrete

C125 - Terminology (selected for technicians)

C803 – Test Method for Penetration Resistance of Hardened Concrete (Windsor Probe)

C805 – Test Method for Rebound Number of Hardened Concrete (Rebound Hammer)

C1611 – Test Method for Slump Flow of Self-Consolidating Concrete

C1688 – Test Method for Density and Void Content of Freshly Mixed Pervious Concrete

The basis for the examination for the Grade II certification is from Summaries of the ASTM Standards rather than the standards themselves. Information in the ASTM Standards not covered in the NRMCA Summary will not be on the examination. Questions regarding general concrete technology will not be on the examination. Unlike ACI Field Testing Technician Grade I, there is no performance component to the NRMCA Concrete Field Testing Technician Grade II certification.

Certification Requirements

NRMCA will grant certification to those who meet both of the following requirements:

- 1) A current ACI Concrete Field Testing Technician Grade I Certification, and
- 2) A passing grade on the NRMCA Concrete Field Testing Technician Grade II examination as defined below

Certification is valid for a period of 5 years from the date of the exam.

Recertification requires successful completion the written examination and other current policy in place at the time of recertification. The standards used for this certification may change over time.

**Study Material**

Technician's Workbook for NRMCA Certification of Concrete Field Testing Technician - Grade II

A study guide for the examinee, providing information and instructional material on the Summary of ASTM Standards - C31, C42, C94, C125, C803, C805, C1611, and C1688. Also included are study questions and answers. Go to the NRMCA website bookstore to order and/or obtain current pricing on this item. www.nrmca.org

NRMCA has developed a series of presentations that cover the basic instruction for each standard and will make this available to the local sponsoring groups if they wish to offer a training program to those attempting this certification. Contact NRMCA for more information.

Examination

The examination shall be administered by an approved Examiner as discussed below. The Examiners and local sponsoring groups have no responsibility of the content or grading of the examination. The examination is closed book. Notes or other technical material related to the subject matter are not permitted in the examination area. Non-programmable calculators are permitted.

The examination consists of not less than seventy five [75] true-false/multiple choice type questions, with 8-15 questions from each Summary of ASTM Standards. The duration of the exam is 1 hour and 45 minutes. Exam answer sheets are collected at 1 hour and 45 minutes. Examinees will be provided access to the exam question booklet for an additional time, up to one half hour, to facilitate exam question challenges. If an examinee is incapable of understanding the written examination, it may be administered orally upon pre-approval of the Examiner.

Examination-pass criteria:

- a) Score sixty percent [60%] or higher on each individual ASTM Standard; AND
- b) Score a minimum of seventy percent [70%] for the overall examination.

Re-Examination Criteria

Failure of the examination by either of the examination pass criteria shall require a reexamination on the entire examination.

Appeals

Appeals regarding the administration of the exam should be made during the exam session and should be directed to the Examiner. In the event that the examinee is not satisfied with the decision of the Examiner regarding an appeal, the examinee may pursue an appeal with NRMCA according to the following order:

1. Local Sponsoring Group
2. NRMCA Senior Vice President of Engineering
3. NRMCA RES Committee

Appeals submitted directly to NRMCA for consideration after the exam session must be received, in writing, within sixty [60] days of exam date.

Appeals on exam questions should be documented on the exam challenge form included in the exam booklet. NRMCA will consider the appeal and will respond to the examinee if the question impacts their pass/fail status.