

**OPERATIONS MANUAL FOR
CONSTRUCTION MATERIALS TESTING
TECHNICIAN CERTIFICATION
PROGRAM**



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SEI

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1. Introduction

1.1 This document establishes the system for the Construction Materials Testing (CMT) technician certification program in accordance with the Individual Performance Certification (IPC) Policies and Procedures Manual. Individuals shall comply with both the IPC Policies and Procedures Manual and this manual. Individuals who earn a certified Construction Materials Testing (CMT) technician designation have demonstrated the requisite knowledge and abilities to perform and record the results of ASTM standards.

2. Definitions

2.1 Please refer to the Individual Performance Certification (IPC) Policies and Procedures Manual.

3. Eligibility Criteria

3.1 There are no specific education or work experience requirements for the Construction Materials Testing (CMT) technician certification programs. Please refer to the Individual Performance Certification (IPC) Policies and Procedures Manual for accommodations for disabilities.

4. Application Criteria

4.1 Application for the CMT certification programs is managed using the Certemy platform. Individuals shall create an account in the Certemy platform for submittal of all application materials.

5. Certification Criteria

5.1 Individuals shall successfully complete both a written examination and a performance examination.

6. Validity of Certification

6.1 Individuals that successfully complete the certification criteria will be awarded a digital badge redeemable through the Credly digital badging platform.

6.2 Credentials obtained through completion of a CMT technician certification program shall be valid for a period of five (5) years from the date on the digital badge.

6.3 Recertification is necessary every five (5) years and requires successful completion of both the written and performance examinations.

7. Examination Criteria

7.1 Both the written and performance examinations are closed-book. Copies of ASTM standards, notes, or other technical material shall not be allowed in the examination area.

7.2 The written examinations are administered using the Questionmark OnDemand platform and are online, proctored exams.

7.3 Individuals shall pass the written examination with a total overall score of 70% or higher. Individuals shall also score at least 60% correct for each topic/standard covered in the exam.

7.4 Individuals shall complete a performance examination for the ASTM standard(s) covered in the certification program. The individual shall physically demonstrate each test method to a qualified representative of their organization. The qualified representative must meet, at a minimum, the personnel requirements as detailed in Section 6.1.2 of ASTM C1077 or Section 7.2 of ASTM D3666 or D3740, whichever is applicable to the certification program scope of testing. Verbal walkthroughs may take place in lieu of physical demonstration for standards where physical demonstrations are not practicable.

7.5 The performance examinations are administered through the Certemy platform. The qualified representatives shall create an account in the Certemy platform for submittal of performance examinations.

7.6 An Individual may reschedule the written exam free of charge to another date within six (6) months of the original exam date. The Individual must contact ASTM Credentialing at credentialing@astm.org to reschedule the exams. Please refer to the Request Form for Exam Rescheduling for additional information on any requirements for rescheduling the exam.

8. CMT Technician Certification Program Descriptions

8.1 Please refer to the individual program outlines for additional information such as standards covered.

8.2 Asphalt Aggregates Laboratory Technician Level I (AGG)

8.2.1 Designed for laboratory technicians engaged in the testing and inspection of construction materials. ASTM's Certification program tests knowledge and performance in the ability to properly perform, calculate, and report the results of laboratory procedures for aggregate, particularly as it pertains to No. 200 washes, sieving analysis, and the determination of relative densities.

8.3 Asphalt Aggregates Laboratory Technician Level II (AGG2)

8.3.1 Designed for laboratory technicians engaged in the testing and inspection of construction materials. This program will test knowledge and performance in the ability to properly perform, calculate, and report the results of laboratory

procedures for aggregate, particularly as it pertains to sampling, bulk densities, sand equivalent values, and shape characteristics.

8.4 Asphalt Mixture Field Technician (AFIELD)

8.4.1 Designed for field technicians engaged in the testing and inspection of construction materials. This program will test knowledge and performance in the ability to properly perform, calculate, and report the results of field procedures for asphalt mixture, particularly as it pertains to sampling, in-place determinations of density and percent compaction.

8.5 Asphalt Mixture Laboratory Technician (ALAB)

8.5.1 Designed for laboratory technicians engaged in the testing and inspection of construction materials. This program will test knowledge and performance in the ability to properly perform, calculate, and report the results of laboratory procedures for asphalt mixture, particularly as it pertains to gradations, asphalt content, relative densities, compaction, and volumetric analyses.

8.6 Soil Laboratory Technician (SOIL)

8.6.1 Designed for laboratory and field technicians engaged in the testing and inspection of construction materials. This program will test knowledge and performance in the ability to properly perform, calculate, and report the results of laboratory procedures for soil, particularly as it pertains to the liquid limit, plastic limit, and plasticity index of soils, field and laboratory determinations of moisture content, Proctor compaction, and in-place determinations of moisture and percent compaction.

9. Special Testing Accommodations

9.1 Individuals with a disability as defined in Title III of the Americans with Disabilities Act who may be placed at a disadvantage when taking a SEI certification examination may request a testing accommodation by contacting ASTM Credentialing at credentialing@astm.org prior to scheduling testing.

9.2 Each request will be evaluated individually, and every effort will be made to offer reasonable accommodations to qualifying applicants.

9.3 There will be no additional charges to qualifying applicants for these accommodations.

9.4 ASTM Credentialing will contact the applicant to arrange a mutually suitable accommodation.

10. Appeals

10.1 Please refer to the Individual Performance Certification (IPC) Policies and Procedures Manual.