

## CCIL Requirements for HMA Technician Certification

### I Hot Mix Asphalt (HMA) Laboratory Technician

The “Certified Asphalt Technician” is the generic title given to the asphalt technician that includes a basic knowledge and hands-on experience in hot mix asphalt laboratory testing methods.

#### a) Qualification

The minimum academic/experience qualifications are based on the criteria listed in Table 1.

**Table 1: Technician Academic/Experience Criteria**

Category	Academic Qualifications	Experience, Years *
I	High School Diploma **	3
II	College/University, non-technical Diploma	2
III	College/University, Technology Diploma	1

\* Number of construction seasons with a minimum of 6 months continuous hands on asphalt lab testing related experience

\*\* Previous work experience will be considered for applicants who do not possess a High School Diploma

Asphalt technicians applying for certification must have documented hands-on experience in various hot mix asphalt laboratory testing methods while meeting minimum qualifications listed in Table 1;

Furthermore the Certified Asphalt Technician must regularly participate in the required inter-laboratory proficiency testing program as well as the required testing during the laboratory inspections

#### b) CCIL Certified HMA Laboratory Technician Types

CCIL offers two types of certified HMA technicians, depending on laboratory of employment certification.

**Type 1. HMA Certified Marshall and Superpave Laboratory Technician**

**Type 2. HMA Certified Marshall Only Laboratory Technician**

New Technicians employed by CCIL Certified Marshall and Superpave laboratories must apply for Type 1.

New Technician employed by CCIL certified Marshall ONLY laboratories can apply for Type 1 or 2.

New Type 1 technicians seeking certification must attend the CCIL HMA Technician Certification Program in its entirety and pass all components of the examinations.

New Type 2 technicians seeking certification for Marshall only must also attend the certification program in its entirety. However, participation in the practical and written examinations will be focused only on Marshall related topics.

Note: The CCIL HMA technician certification program should be expected to include comprehensive examinations both practical and written in all related Marshall and Superpave test procedures. The written component should also be expected to include in part calculations pertaining to the various test methods. As this is not an asphalt training course, CCIL does not supply reference notes, books, test standards or any other related printing materials. Technicians participating in the CCIL HMA certification program are encouraged to take Marshall and/or Superpave training course(s), if needed, for skill enhancement prior to participation in the CCIL HMA certification program.

A technician employed at a CCIL certified asphalt laboratory and currently holding valid Marshall or a valid Marshall and Superpave card may renew the card as usual through successful participation in the written examination overseen by CCIL personnel every 5 years.

### **c) Certification Requirements**

1) The Type 1 Asphalt Technician must complete certification examinations and obtain passing grades on procedures listed in CCIL LC101, Appendices A-2 through A-5, as well as demonstrating proficiency in the following test procedures.

**Table 2. PRACTICAL EXAMINATION REQUIREMENTS**

<b>General Asphalt Testing</b>	
1	Sample Preparation - Splitting or Quartering of Bulk Sample and Oven Drying
2	Rotarex, Extraction and Fines Correction
3	A) Compaction and Thickness of Cores Including Trimming B) Maximum Relative Density of Loose Asphalt Mix
4	Grain Size Analysis and Wash Pass 75 µm
<b>Marshall Testing</b>	
5	Preparation of Specimens
	Determination of Stability and Flow
	BRD of Compacted Specimens
<b>Superpave Testing</b>	
6	Preparation of Specimens
	Gmb of Compacted Specimens

2) The Type 2 Asphalt Technician must complete certification examinations, and obtain passing grades on procedures listed in CCIL CL101, Appendices A-2 and A-4. This type technician must also demonstrate proficiency in the test procedures from 1 through 5 in Table 2.