



Information for New Concrete Laboratory Applicants

This document supplements the information contained in the document “CCIL Concrete Testing Laboratory Certification Program” and provides a more informal description of the certification process for new applicants considering certification of a concrete testing laboratory.

1 Overview

CCIL certifies concrete laboratories in accordance with the requirements of CSA Standard A283-19 “Qualification code for concrete testing laboratories”.

The three categories: basic concrete, concrete aggregate and advanced concrete, otherwise identified as Types Q, R and S respectively, are defined in CSA A283-19. Laboratories may also apply to be certified to perform any of the additional tests listed in Clause 6.4 of A283-19 for the certification category selected.

2 Documents

The following documents are relevant to the certification process and are available on the CCIL website <http://ccil.com/certification/concrete-certification> :

- i) CCIL Concrete Testing Laboratory Certification Program Description;
- ii) CCIL Certification Procedure for Granting and Amending Certification;
- iii) CCIL Concrete Testing Laboratory Certification Checklist;
- iv) Letter of Undertaking- template
- v) Supervising Professional's Monthly sign-off (2 forms to choose from)
- vi) Training and Certification of Concrete Technicians.
- vii) CCIL List of Certified Technicians (required template)
- viii) Basic Concrete Field Technician Practical Exam Record (FPR)
- ix) Basic Concrete Laboratory Technician Practical Exam Record (LPR)

The laboratory must purchase copies of CSA Standard A283:19 “Qualification code for concrete testing laboratories”, CSA Standard A23.1-19 “Concrete materials and methods of concrete construction” and CSA Standard A23.2-19 “Test methods and standard practices for concrete” and all ASTM Standards for which the laboratory is certified..

3 Application Process

The following steps are involved in completing an application:

- Register and create a password for the ccil portal.
- Provide the name and address of the laboratory, and contact information for the supervising professional and main contact person (commonly, but not necessarily, the laboratory supervisor).
- Enter the Category of certification requested, and any additional tests (if applicable).
- Upload the following required documents:
 - resume, cover letter documenting compliance with the Qualifications requirements of CSA Standard A283:19 and engineering license of the supervising professional ,
 - the organization chart,
 - the list of certified technicians for the laboratory, and
 - a Letter of Undertaking.
- The names of all Field Technicians and Laboratory Technicians, and the test methods for which certification is requested.

Upon receipt of the application, the laboratory will be contacted by CCIL to review the application and answer any questions relating to the certification process.

An invoice for the annual maintenance fee (used to cover program overheads) will be issued. Upon receipt of payment, the laboratory will be contacted by a CCIL Inspector to arrange an audit.

The CCIL inspectors will complete the CCIL Checklist and the CCIL Compliance Report at the time of their visit, and also conduct the written and practical examinations of the technicians. The cost of the inspector's visit will be invoiced following completion of the audit.

4 Technicians

Laboratories must employ one or more Field Technician(s) and one or more Laboratory Technician(s) certified for the same categories as the Laboratory Certification. Other technicians can be certified with fewer categories than the Laboratory Certification. An individual can be certified as both a Field Technician and a Laboratory Technician.

Field technicians must complete a written (closed book) examination and a practical (demonstration) examination. Laboratory technicians must complete a written (open book) examination and a practical exam to demonstrate competence in the laboratory test methods. Details of the test methods included in each examination are given in the document "Training and Certification of Concrete Technicians". Please note that the laboratory must submit a request through the CCIL portal to transfer a technician's card issued in the name of another employer or from another office before the technician is included in the laboratory's organizational chart.

Concrete field technicians passing the written and practical examinations are issued CCIL certification cards that are valid for a period of 5 years. The certification of laboratory

technicians is also valid for five years. Individual cards are not issued to laboratory technicians however the examination results are recorded in the Results of Testing for Concrete Testing Personnel Letter sent to the laboratory by the CCIL Certification Office.

5 Inter-Lab Correlation

In addition to the requirements contained in the CSA A283-19, there is a CCIL requirement for each new laboratory to participate in an inter- laboratory correlation of compressive strength testing of a minimum of twelve concrete cylinders, to ensure the acceptability of test results for compressive strength. Six cylinders must be cast and tested by technicians employed by the new laboratory and the results compared with those from six cylinders (from the same batch of concrete) cast and tested by technicians from a CCIL certified laboratory. The concrete shall be commercial ready-mixed concrete having a specified strength of not less than 25 MPa at 28 days. All testing is to be done in accordance with CSA test methods A23.2:19-1C, A23.2:19-3C and A23.2:19-9C, and the final report must include the test results reported by the two laboratories on each laboratory's Concrete Test Report form.

It is preferable that the cylinders be tested at age 28 days, although results from cylinders tested at age 7 days will be accepted where the correlation testing is the only outstanding item in the certification process, and providing that the specified strength of the concrete is not less than 30 MPa at 28 days. Where cylinders are tested at age 7 days, all twelve cylinders must be tested at age 7 days.

6 Additional Information

A list of all CCIL certified concrete laboratories is posted on the website at www.ccil.com.

Following certification, concrete testing laboratories are audited annually to verify continued compliance with the requirements of CSA A283-19.

For further information, please contact the CCIL Certification Office by phone at 289 337 8888 or by email to gkermath@ccil.com.