

CCIL CONCRETE TESTING LABORATORY CERTIFICATION PROGRAM

1.0 GENERAL

This document describes the procedure for the initial qualification assessment of laboratories for the CCIL Concrete Testing Laboratory Certification Program. The document also covers procedure for certification and annual follow-up inspections/assessments.

2.0 SCOPE

2.1 This laboratory certification program is intended to provide a means of independent evaluation of the concrete testing laboratory's capabilities to test concrete materials, plastic concrete and hardened concrete in compliance with CSA A283 Standard. Assessment and certification of concrete testing laboratories shall be in accordance with one of the following categories as identified in the CSA A283 Standard:

- 1) Category 0 – Basic Tests
- 2) Category 0 – Basic Tests plus the flexural test option
- 3) Category 1 – Intermediate Tests
- 4) Category 2 – Advanced Tests

Note: Category 1 and Category 2 applicants may also register for Additional Tests

3.0 PROCEDURE

3.1 Inquiry

The customer is given an explanation about application, registration fee, Standards, registration/certification process, other costs and follow-up service.

3.2 Application and Fee

The application and supporting documentation is sent to CCIL by the applicant, and an invoice for the annual maintenance fee is sent to the applicant.

3.3 Initial Qualification Assessment

3.3.1 Upon receipt of the completed application, CCIL will review the submitted application for completeness and will work with the applicant facility throughout the process.

3.3.2 If the application is found satisfactory, and the applicant has met the potential candidacy requirements, CCIL will assign a CCIL inspector who will arrange a time for an on-site evaluation and assessment of the applicant's capabilities and qualifications as related to the registration requirements.

3.4 On-Site Evaluation

All concrete testing laboratories, applying for registration under this program, shall undergo an on-site evaluation by designated CCIL personnel to evaluate their capabilities to test concrete.

During the evaluation visit, CCIL will carry out the following activities:

- 1) Conduct a full discussion with the applicant's senior management, Professional Engineer supervising the laboratory and the person(s) who will be responsible for the effective operation of the registration program to ensure their commitment to the program and their understanding of the following:
 - a) the CCIL certification process;
 - b) certification procedures; and
 - c) applicable standards, test procedures and other certification requirements.
- 2) Complete the Concrete Testing Laboratory Program Certification Checklist and verify that the laboratory has the personnel and equipment appropriate to the category for which the laboratory is applying in compliance with the CSA A283 Standard;
- 3) Review the applicant's record keeping procedures and applicable forms;
- 4) Verify calibration records of all equipment being used by the laboratory appropriate to the category for which the laboratory is applying;
- 5) Witness demonstrations conducted by applicant's testing personnel of all applicable test methods appropriate to the category for which the laboratory is applying. The demonstration shall reveal no major findings, deficiencies or deviations;
- 6) Review the qualifications of all concrete testing personnel and their capability in the area of sampling and testing concrete. Testing personnel shall undergo practical and written tests to demonstrate their capability, to the satisfaction of the CCIL Inspector. Field personnel shall be issued individual cards valid for five (5) years, when they achieve a minimum of 70% passing marks on applicable tests. An Exam Results letter shall be utilized in informing applicant on their testing personnel's results; and
- 7) Discuss the Concrete Testing Laboratory Certification Program and the Compliance Report with the applicant's representative. The Compliance Report shall be completed by the CCIL Inspector and signed by the supervising engineer and laboratory supervisor acknowledging the requirements and agreeing to comply with them.

3.5 Documentation and Process

- 3.5.1 An applicant's qualification package, consisting of the documentation listed below, shall be assembled for CCIL review:
- 1) list of qualifications (both academic and professional experience) of the supervising engineer and the supervisor of the laboratory;
 - 2) an organization chart showing those parts of the laboratory's operation, under the direction of the supervising engineer, listing all testing personnel and their duties. The organization chart shall also show the category, and the expiry date of the certification of qualified technicians.
 - 3) Letter of Undertaking, signed by the supervising engineer of the laboratory. The letter shall state clearly that the laboratory will abide by the test methods and procedures outlined in the CSA A283 Standard;
 - 4) completed Concrete Testing Laboratory Certification Checklist;
 - 5) completed Concrete Testing Laboratory Certification Compliance Report, signed by both CCIL Inspector and the supervising engineer; and
 - 6) completed Forms outlining the results of all practical and written tests taken by laboratory's testing personnel during the qualification process.

- 3.5.2 The applicant shall respond in writing to the findings outlined in the Compliance Report, advising corrective actions implemented, within the deadline set on the report.
- 3.5.3 The qualification package, and the applicant's response to the Compliance Report, shall be reviewed by CCIL within reasonable amount of time of its receipt.
- 3.5.4 The CCIL Program Manager shall make a decision on registration. A confirming re-evaluation visit may be scheduled to the laboratory, if necessary, to confirm compliance with CSA A283 Standard and certification requirements.
- 3.5.5 **Qualification Acceptable**
CCIL Certificate of Qualification shall be issued.
- 3.5.6 **Qualification Not Acceptable**
CCIL will advise the applicant of the shortcomings and if qualification might be achievable, CCIL will offer recommendations. The application shall then be closed and the applicant invoiced in the usual manner with a statement of their account.
- 3.5.7 The certification process must be completed within one year of the date of the application. If the process is not completed within one year, the laboratory may abandon the application, or pay the annual maintenance fee for the second year to renew the application.

3.6 Follow-Up Inspections/Assessments

- 3.6.1 The follow-up phase of the Concrete Testing Laboratory Certification Program is designed to provide a means for ensuring that certified laboratories continue to meet the requirements of the applicable Standards(s). A Compliance Report is completed during the follow-up visits to the applicant's facilities
- 3.6.2 Follow-up visits to the applicant's facilities are conducted annually.
- 3.6.3 The frequency of assessments may be increased, depending on the number and nature of nonconforming issues found during previous audits.
- 3.6.4 During the CCIL follow-up assessment visits, CCIL may conduct testing of the laboratory's personnel, who are not yet in compliance with the CSA A283 Standard. Tested personnel shall successfully complete the practical and written tests as applicable to the registration category of their laboratory, in order for them to be registered/to test concrete and related materials.