



CCIL Certification Office
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To: All CCIL certified Concrete Laboratories

CCIL Implementation Letter #2 for the implementation of CSA Standards A283:19 and A23.1:19/A23.2:19

Dear CCIL Certified Concrete Laboratory:

This is the 2nd letter pertaining to CCIL's implementation of the new edition of CSA Standards A283:19 and A23.1:19/A23.2:19 for the Concrete Certification program.

Implementation:

There are many changes in both CSA Standards A23.2:19 and A283:19 standards published in July 2019. CCIL has reviewed the changes and is in the process of updating all Certification documents, forms and applications. The application on the portal that will be required to be completed by all labs is expected to be finalized in the near future (approx. 2 weeks), however we have several documents and templates which have been developed and are now ready to be completed. As indicated in our previous letter, starting January 1, 2020 all concrete laboratories will be certified to the new 2019 standards. If you have not already done so, please ensure your laboratory has purchased a copy of the CSA Standards A283:19 and A23.1:19/A23.2:19 and your lab staff have access to them.

Change of Supervising Engineer to Supervising Professional:

Based on the new requirements for Supervising Professional, CCIL has updated the Letter of Undertaking to cover the new CSA Standard A283:19 requirements and we have developed a Monthly Signoff template. As detailed in the new Letter of Undertaking we will require each lab to submit the following documents thru the portal once the application is ready:

- Scan or photo of the Supervising Professional's license to practice engineering,
- Resume, including dates specific to concrete experience to confirm more than 2 years,
- Organizational Chart, showing that the Supervising Professional is responsible for all Concrete field and lab personnel, (typically a hierarchy chart)
- Signed List of Certified Technicians, using the new CCIL template,

- Cover Letter, that specifically demonstrates conformance with the items in Clause 5.2.2.3 of CSA Standard A283:19 clause,
- Signed Letter of Undertaking, using the new template.

The application on the Portal has taken longer than expected due to the significant changes to the structure of the program. You can start preparing the above documents so that when the application is ready, they can be easily uploaded for review.

The Supervising Professional's Monthly signoff form will be reviewed by the CCIL Inspectors at the next annual audit. The signoff records must begin no later than January 2020.

Changes to certification categories:

As previously notified the existing Categories (0, 1 and 2) will no longer be in use.

The new Certification types will be as follows, in accordance with Clause 6 of CSA Standard A283:19.

NEW LABORATORY CERTIFICATION	CCIL DESIGNATION	ADDITIONAL TESTS AVAILABLE
Basic Concrete Certification (1C, 3C, 4C, 5C, 9C, 17C)	Type Q	8A, 1B, 6B (Proc A), 3C (flex), 7C, 8C, 11C, 14C, 15C, 16C, 19C, 20C
Concrete Aggregate Certification (1A, 2A, 3A, 4A, 5A, 6A, 7A, 10A, 12A, 13A) <i>basic concrete (Type Q) no longer a prerequisite</i>	Type R	9A, 11A, 15A, 16A, 17A, 23A, 24A, 25A, 26A, 29A, 2B, 3B, 4B, 8B
Advanced Concrete Certification <i>BASIC CONCRETE & CONCRETE AGGREGATE (TYPE Q + R) PREREQUISITE PLUS (8A, 2C, 6C, 11C)</i>	Type S	14A, 6B (proc B), 10C, 12C (incl 18C), 13C, 18C, 21C, 22C, 23C, 26C, C457, C666

Similarly, the new technician certifications will be as follows:

NEW FIELD TECHNICIAN CERTIFICATION	CCIL DESIGNATION	ADDITIONAL TESTS AVAILABLE
Basic Concrete Field Technician (1C, 3C (field compressive), 4C, 5C, 17C)	Type QF	1B (field), 6B (Proc A), 3C (flexural), 7C, 14C (field), 15C, 16C, 19C, 20C
Concrete Aggregate Field Technician (1A, 10A) <i>basic concrete (Type QF) no longer a prerequisite</i>	Type RF	None
Advanced Concrete Field Technician <i>BASIC CONCRETE & CONCRETE AGGREGATE (TYPE QF AND RF) PLUS (6C)</i>	Type SF	12C (field) (incl 18C), 18C

NEW LABORATORY TECHNICIAN CERTIFICATION	CCIL DESIGNATION	ADDITIONAL TESTS AVAILABLE
Basic Concrete Laboratory Technician (3C (lab), 9C)	Type QL	8A, 1B (lab), 8C, 11C, 14C (lab)

Basic Concrete Aggregate Laboratory Technician (2A, 3A, 4A, 5A, 6A, 7A, 12A, 13A) <i>basic concrete (Type QL) no longer a prerequisite</i>	Type RL	9A, 11A, 15A, 16A, 17A, 23A, 24A, 26A, 29A, 2B, 3B, 4B, 8B
Advanced Concrete Laboratory Technician BASIC CONCRETE & CONCRETE AGGREGATE (TYPE QL AND RL) PLUS (8A, 2C, 11C)	Type SL	14A, 6B (proc B), 10C, 12C (lab), 13C, 21C, 22C, 23C, 26C, C457, C666
Additional Individual Laboratory Technician Tests	QA, RA or SA	Any of the above additional laboratory tests for Types QL, RL and SL based on valid laboratory certification.

Once the Portal application is ready, each laboratory will be required to verify the certification to the new categories. You will have the opportunity to indicate whether you wish to downgrade or upgrade the new concrete certification or accept the default new certification. Your 2020 laboratory certificate will not be issued until this application is reviewed and accepted.

*Please note: That Category 1 laboratories who currently have additional tests 14A, 6B (proc B), 10C, 12C (incl 18C), 13C, 18C, 21C, 22C, 23C, 26C, C457, or C666 must upgrade to Advanced Concrete certification to keep the certification for these additional tests. Upgrades will require site inspections and technician certification, which can be scheduled immediately to avoid disruption of service or it can be covered during the regular annual audit. However, if you choose to wait for the annual audit, you may temporarily lose the certification for these tests. You can review the list of tests in 6.4.3 Advanced Concrete certification — Additional tests, to see if you will need to upgrade to Advanced Concrete certification.

Subdivision by Procedure for Test Methods 10C of CSA A23.2:19 and C457 of ASTM:

To ensure lab certification reflects the actual capacity of the laboratory and to prevent a laboratory from purchasing unnecessary equipment, the following 2 tests will be subdivided by procedure and laboratories can choose which procedure they wish to be certified for.

- 10C of CSA A23.2:19 “Accelerating the curing of concrete cylinders and determining their compressive strength” Procedures A, B and/or C
- C457 of ASTM “Standard Test Method for Microscopical Determination of Parameters of the Air-Void System in Hardened Concrete” Procedures A, B and/or C

Improvements to Technician Competency:

To meet CSA Standard A283:19 requirements, Clause 5.2.1.1 and to be consistent with current industry standard, we have improved our methods of verifying technician competency. The specific changes regarding competency requirements of certified field technicians will be confirmed in our next implementation update and will be implemented in the New Year.

In relation to Clause 5.2.2.2 e) of CSA Standard A283:19, CCIL will require Supervising Professionals to have records of technician training in addition to proof of technician certification (cards for field and letters for lab technicians). A reminder that CCIL does not provide training or training material for technicians. In accordance with Clauses 5.2.1.1 b) and 5.2.2.2 e) it is the

responsibility of the laboratories to train and maintain competent testing personnel and ensure that all concrete tests are done by certified technicians.

Submission of Report forms:

In accordance with clause 5.4.4 of CSA Standard A283:19, CCIL will require labs to provide copies of report forms for each test method included in their certification to the inspector, commencing January 1st, 2020. All required information listed in each test method must be on a form that is provided to client.

Allowance for Shared Equipment:

The revision to CSA Standard A283:19 includes the addition of clause 5.3.5. CCIL will therefore allow equipment to be shared between certified laboratories within the same company, provided the conditions of Clause 5.3.5 are met. Specific requirements related to shared equipment that will be included in the annual audit are:

- Records kept of appropriate chain of custody, including a condition check prior to use
- Confirmation the required calibration schedule of Table 1 is being maintained
- Calibration records for the equipment are maintained and available during an audit
- During annual audits the test equipment must be at the lab being audited

Continued certification requires the company to own all of the equipment listed for each test on the laboratory's certification. To reiterate, the equipment must be present during the annual audit for each laboratory. This includes coring equipment for A23.2-14C and a concrete mixer for A23.2-2C.

Closure

I trust this information is helpful in understanding CCIL plans for implementing the new editions of CSA Standards A23.1-19/A23.2-19 and A283-19. We will be updating our information documents and posting them on the website once they are completed to keep you informed. Stay tuned, our next implementation communication is expected to follow, early in December.

Sincerely



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