



SEAL OF CONCRETE QUALITY

APPLICATION WITH INSTRUCTIONS

PLANT LOCATION: _____

CIVIC ADDRESS: _____

COMPANY OPERATING PLANT _____

CONTACT PERSON _____

PHONE _____

CELL _____

NAME OF CERTIFYING ENGINEER _____

AUDIT DATE _____

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CONCRETE
even smarter than you think™

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1.0 APPLICATION INSTRUCTIONS FOR A SEAL OF CONCRETE QUALITY

This section describes the application procedures for member producers who wish to apply for the Seal of Quality of the Atlantic Concrete Association (ACA) for concrete produced from their plants. The Seal of Quality is granted to a producing plant which, under specific conditions described and compressive strength data, and upon analysis, shows a co-efficient of variation of eleven (11) percent or less.

The collection, collation, and analysis of test data must be made by a registered Professional Engineer and application for a Seal of Quality must be made by the engineer on behalf of the producer member. The examining engineer may be an employee of a member company of the Association. The granting of a Seal of Concrete Quality is restricted to member companies of ACA and, further, to those member producer's plants who possess and display a valid Certificate of Conformance of Ready Mixed Concrete Production Facilities issued by ACA. A Seal of Concrete Quality shall be granted for a period of twelve (12) months and shall be inscribed on the face of the Seal to describe the award.

Application for a Seal of Concrete Quality must be made for each producing plant. The Seal of Concrete Quality is not transferable within the plants of a member company. A change of ownership of a producing plant invalidates the Seal of Concrete Quality.

A minimum of 30 tests of the same class of concrete (the batch masses of the materials remaining substantially unchanged) conducted within a six month period are required for evaluation.

The manual will be provided by ACA for each plant an application for a Seal of Concrete Quality is to be made and the Professional Engineer shall make the necessary copies to meet the submission requirements indicated in 2.1 below.

2.0 CHECK LIST FOR SEAL OF CONCRETE QUALITY

2.1 The following questions are for the purpose of establishing the validity of the test data considered for analysis.

The questions shall be answered by a Professional Engineer. The examining engineer shall be satisfied that the test data is extracted from actual project records and shall be satisfied concerning the competency of persons performing the tests. No reference is to be made in these documents which would identify either the work to which the concrete was supplied or the persons and/or the organizations concerned.

The examining engineer shall sign and seal the application and provide signed and sealed copies of the application to the producer and the secretary of ACA. The third copy shall be kept in the engineer's confidential file for a period of one year and then destroyed.

2.2 To qualify the test data for analysis to determine the co-efficient of variation, the answers to all questions must be "yes".

2.2.1 Does the test data submitted for evaluation comprise thirty (30) or more tests of the same class of concrete? _____

2.2.2 Were the specimens made within a six- month period? _____

2.2.3 Is the test data submitted for evaluation truly representative of the plant's performance? _____

2.2.4 To ensure an adequate frequency of testing is the quotient of cubic metres (cubic yards) less than 200 (250)?
number of tests _____

2.2.5 Were the test specimens made (including sampling), stored, cured and tested in accordance with the current version of CSA A23.2. _____

2.2.6 Do the plant records show that for the period under consideration there have been no delays or interruption of production or delivery which may have affected the quality of the concrete? _____

3.0 EVALUATION OF COMPRESSIVE STRENGTH RESULTS

3.1 To evaluate the compressive strength test results submitted and to derive the co-efficient of variation, the examining engineer may use the root mean square method explained in ACI Standard 214, Recommended Practice for Evaluation of Strength Test Results of Concrete.

3.2 The examining engineer shall prepare three (3) copies of the application for the Seal of Concrete Quality, to which shall be attached a tabulation of individual test values, with corresponding slump and air content test results. The tabulation shall indicate the specified compressive strength of the concrete, the theoretical mixture design, and the derivation of the co-efficient of variation. The tabulation shall be signed and sealed by the examining engineer.

4.0 APPLICATION FOR THE SEAL OF CONCRETE QUALITY

The undersigned, a registered Professional Engineer, has examined and analysed Compressive Strength data representing concrete from the concrete production facility described as:

(please print: member company and civic address)

and asserts that in their professional judgement that a Seal of Concrete Quality may be issued to the above facility.

Date

Signature of Professional Engineer

Name of Professional Engineer (please print)

(Seal)

Address (please print)

5.0 REFERENCES

1. CSA Standard A23.1-14, Concrete Materials and Methods of Concrete Construction, and CSA Standard A23.2-14, Methods of Test and Standard Practices for Concrete. (These two standards are published in one volume by Canadian Standards Association, 178 Rexdale Boulevard, Toronto, Ontario, M9W 1R3).
2. American Concrete Institute Standard 214, Recommended Practice for Evaluation of Strength Test Results of Concrete.

6.0 ENGINEER INFORMATION FORM

To be submitted to the Secretary, ACA, with the completed application for the Seal of Concrete Quality.

Name: _____

Address: _____

Resume of qualifications and expertise in concrete technology.

(Signature)

(Seal)

(Date)