



APPROVED QUALITY PROGRAM[©]

FOR

SUB-CONTRACTED READY MIXED CONCRETE TRUCKS

AUDIT AND CHECK LIST

TO BE COMPLETED BY AUDITING ENGINEER (PLEASE PRINT)

NAME OF SUB-CONTRACTED COMPANY

LOCATION

TRUCK NUMBERS

CONTACT PERSON

PHONE EMAIL

NAME OF CERTIFYING ENGINEER

DATE OF INSPECTION

FOR RMCAO USE ONLY

NEW EXPIRY DATE

	<u>Date</u>	<u>Initial</u>
MAILED	_____	_____
RECEIVED	_____	_____
CHECKED	_____	_____

1 ST CERT. MAILED	_____	_____
2 ND CERT. MAILED	_____	_____
CONTACT	_____	_____



A Publication of

READY MIXED CONCRETE ASSOCIATION OF ONTARIO

102B – 1 Prologis Boulevard, Mississauga, ON L5W 0G2

FOREWORD

DEFINITION: An RMCAO Sub-Contracted Certified Truck with qualified driver is a “person or firm contracted to do part of member’s work”.

It is the intent of this program, as part of the RMCAO Approved Quality Program, to identify those trucks referred to as a “Sub-Contracted Certified Truck”. This program provides a sub-contracted truck owner and/or company with the means of obtaining a certification card that shall be clearly affixed to the interior of the rear window of the cab.

The program has been designed to offer an assurance to the end-user/specifier, that the truck mixer has been inspected as per the requirements of the RMCAO Approved Quality Program (AQP).

GENERAL

A registered Professional Engineer in the Province of Ontario must inspect or supervise the inspection of all Sub-Contracted Trucks covered by the Check List and affix his/her signature to the completed form. In order to complete this AQP Check List, the certifying Engineer must meet the following RMCAO requirements:

- i) *Be a registered Professional Engineer in the province of Ontario,*
- ii) *Be a member currently in good standing with the Professional Engineers Ontario (PEO),*
- iii) *Successfully completed the RMCAO Engineers’ Certification Course as offered by the RMCAO (valid for 5 years),*
- iv) *Be an independent third party Auditor currently listed on the RMCAO’s Approved Auditors’ List.*

A "**Certification Card**" will be issued by the President of the Ready Mixed Concrete Association of Ontario upon receipt of a properly executed Audit and Check List indicating that the requirements have been accepted, provided that all other conditions are met. To validate the Conformance Agreement, the inspecting Engineer must affix his/her signature, **and** the Sub-Contracted company executive must sign the agreement, attesting that he/she will maintain the mixer trucks in compliance with the Audit and Check List requirements at all times. **Original Certification Cards for Sub-Contracted Ready Mixed Concrete Trucks must be clearly affixed to the interior of the rear window of the cab.**

CONFORMANCE

Certification: Conformance with the requirements of the **Check List** must be assured. The completion of the Conformance Agreement, validated by the signature of the inspecting Engineer and by the signature of the signing authority of the Sub-Contracted Company, will make the truck(s) eligible for a “**Certification Card**”.

- **The Audit and Check List shall be valid for a period of two (2) years from the date of inspection; however, the Truck Certification card is only valid for a period of one (1) year.**
- **Mid-Term Documents** – prior to the issuance of the second-year card, the submitted Summary of Truck Mixers must be verified by the Company Official and a copy returned to RMCAO.
- The **Certification Card** becomes invalid upon change of the mixer or change of ownership of the mixer truck.
- The **Certification Card** may be revoked at the sole discretion of the Ready Mixed Concrete Association of Ontario.
- **Non-Conformance** with these requirements can result in loss of certification of the vehicle.

NOTE 1: *This Check List is provided with the understanding that all aspects of good business procedures are followed (RMCAO Directions/Policies, Best Management Practices).*

*In addition, conformance with the RMCAO **Code of Conduct** must be assured. This Code deals with the business practices of the concrete supplier relating to quality of the product.*

TRUCK MIXERS

DEFINITION: Concrete mixers mounted on trucks or other vehicles used for the complete mixing of concrete ingredients after they have been batched at the plant.

1. Each acceptable truck mixer shall conform to the following requirements:

- 1.1 Charging and discharge openings and chute in good condition, free from appreciable accumulations of cement or concrete and with the hopper and chute surfaces clean and smooth.
- 1.2 Drum of such size that the rating as a mixer (in volume of mixed concrete) does not exceed those as listed in the chart in Appendix A. This requirement is met by all mixers carrying a rating plate of the Truck Mixer Manufacturers Bureau [TMMB].
- 1.3 Provided with a plate (secured on frame or door interior) showing the mixer manufacturer's recommended operating speed for mixing and must have demonstrated the capability to operate satisfactorily at the recommended speed.
- 1.4 On units equipped to batch mixing water, equipment to be in proper working condition; gauge glasses clean and legibly graduated; water pump or injection system in good working order. *Site glasses are not required in freezing weather.*
- 1.5 In the event that the mixer blade wear exceeds 10% or the mixer design has been significantly altered; the Inspecting Engineer will consider the mixer satisfactory only when that unit demonstrates compliance with the requirements of CSA A23.1 Table 13, "Determination of Within Batch Uniformity".

2. Delivery Fleet Inspection by the Inspecting Engineer

	1 st Inspection	2 nd Inspection
2.1 The delivery fleet inspection indicates that not more than one unit or 10 percent of the units, whichever is greater; to be used at the plant fails to meet requirements.	[]	[]
2.2 The delivery fleet used on a normal business day during the period when the facilities are being inspected demonstrate compliance with requirements.	[]	[]
2.3 The company maintains records that indicate compliance with the requirements of this Check List for the inspection of delivery vehicles.	[]	[]
2.4 The Inspecting Engineer has updated the Summary of Fleet Condition and submitted a copy to RMCAO.	[]	[]

NOTE 2: The Inspecting Engineer will evaluate all available truck mixers used to deliver concrete. The evaluation will be based on a study of the records of truck mixer purchase, inspection and maintenance. Units that meet the above requirements will be considered satisfactory.

NOTE 3: New concrete trucks purchased by the sub-contracted company conform to the requirements of clause 1 and do not require a truck inspection. The sub-contracted company shall immediately notify RMCAO of the new truck purchase and shall supply RMCAO with the truck number. The sub-contracted company's truck records will be updated and a certification card will be issued for the truck.

NOTE 4: Used concrete trucks purchased by the sub-contracted company must conform to the requirements of clause 1 and requires a truck inspection by a third party engineer. The sub-contracted company shall then submit an updated Summary of Fleet Condition to RMCAO.

 Engineer
 Initials

CONFORMANCE AGREEMENT

ENGINEER'S AGREEMENT

I, a registered Professional Engineer in the Province of Ontario, certify that the concrete mixers identified in this document and owned by:

(Sub-Contracted Company)

(Address)

have been inspected according to the AQP Audit and Check List for Sub-Contracted Ready Mixed Concrete Trucks, and thereby meets the necessary RMCAO requirements of conformance as of the date of inspection.

(Signature of P.Eng.)

(Inspection Date)

SUB-CONTRACTED COMPANY'S AGREEMENT

This Company agrees to maintain these truck mixers in compliance with the requirements of this document and RMCAO policies and directives at all times and will promptly correct any deficiencies that develop.

(Company Name)

(Signature and Title of Company's Executive/Manager)

(Date)



Ready Mixed Concrete
Association of Ontario

NOTE 5: *The Check List indicates only that truck mixers are satisfactory for the production of quality concrete when properly operated. The conformance of the concrete itself with specification and/or customer requirements must be verified by the terms and conditions of the sales agreement. Non-Conformance with the requirements of this Check List can result in loss of certification.*

APPENDIX A - DRUM SIZES

Maximum Capacity of Mixed Concrete Cubic Metres ⁽²⁾		Gross Drum Volume Limits			
		Rear Discharge Only ⁽³⁾ Maximum		Rear and Front Discharge Minimum	
<u>As Mixer</u>	<u>As Agitator</u> ⁽¹⁾	<u>Cubic Feet</u>	<u>Cubic Metres</u> ⁽²⁾	<u>Cubic Feet</u>	<u>Cubic Metres</u> ⁽²⁾
5.4	7.1	310	8.8	306	8.7
6.1	8.0	356	10.1	352	10.0
6.5	8.6	380	10.8	376	10.6
6.9	9.2	403	11.4	399	11.3
7.3	9.7	427	12.1	423	12.0
7.6	10.1	450	12.7	446	12.6
8.0	10.7	474	13.4	470	13.3
8.4	11.3	497	14.1	493	14.0
8.8	11.9	521	14.8	517	14.6
9.2	12.2	544	15.4	540	15.3
9.6	12.8	568	16.1	564	16.0
9.9	13.4	591	16.7	587	16.6
10.7	14.5	638	18.1	634	18.0
11.5	15.5	685	19.4	681	19.3

⁽¹⁾ Maximum agitator capacity may be less, as designated on manufacturer's data plate.

⁽²⁾ Metric equivalents provided for information and may be approximate.

⁽³⁾ In 1991, the Bureau voted to reinstate the maximum gross drum volume requirements for rear discharge inclined axis truck mixers only, to be effective January 1, 1994.



**CONCRETE
ONTARIO**

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Best Management Practices

All holders of the "Ready Mixed Concrete Association of Ontario Certificate of Ready Mixed or Mobile Mixed Concrete Production Facilities" agree to the following:

1. *To operate and comply to all Transport, Health and Safety, Environment and other applicable Regulations and Legislation applicable to the Province of Ontario and Canada.*
2. *To operate and comply to the requirements of the RMCAO Audit and Check List for Concrete/Mobile Mix Production Facilities,*
3. *To adhere to the Best Management Practices (BMP) relating to quality products:*
 - a) *We will only produce and deliver concrete that meets specifications.*
 - b) *We will not alter concrete in any way that negatively affects performance.*
 - c) *We will only supply and sell concrete and concrete products as a complete quality package.*
 - d) *We will not sell or deliver concrete that has been incorrectly specified.*
 - e) *We will only accept concrete tests that are done correctly according to CSA A23.2.*
 - f) *We will only use quality certified materials in the manufacture of concrete.*
 - g) *We will operate and abide by the directions and policies of the RMCAO as set from time to time.*