READY-MIXED CONCRETE CERTIFICATION SCHEME

Under the Uniform Buildings By-Laws (UBBL), conformance to standards is deemed to have satisfied the requirements for safety. In addition to that, the latest version of the standard supersedes the previous old standard. Hence, it is important for local engineers, consultants, contractors and suppliers of ready-mixed concrete to adopt the latest standard on concrete. In this latest standard on concrete (MS 523 series), it is recommended that ready-mixed concrete be certified in order to ensure the quality.

The Technical Committee (TC) on Concrete and Concrete Products established by the Standard Research and Management Centre, SIRIM Berhad has developed series of standards for ready-mixed concrete, including the recommendations on certifications, to ensure the production of good quality concrete for structural application.

SIRIM QAS International is taking a step further by introducing a Ready-Mixed Concrete Certification Scheme. The certification scheme will enhance customers' confidence in the quality and consistency of concrete supplied. Furthermore, it will also help the industry to face various challenges such as the need to enhance productivity and quality along the entire construction industry value chain.

This certification scheme is applicable to all ready-mixed concrete plants supplying ready mixed concrete for structural use including those involved in production of precast structural elements.

SIRIM QAS International in collaboration with the Standard Research and Management Centre, SIRIM Berhad and the National Ready-Mixed Concrete Association (NRMCA) has organized a launching ceremony for the Ready-Mixed Concrete Certification Scheme to inform the public the availability of the standards and its certification scheme. In addition, a pilot programme for the certification scheme has also been launched to introduce and promote the use of MS 523. Besides, it will act as a platform for participating organizations to understand the standard requirements and its implementation.

Information regarding this new scheme is provided in the following FAQs.

Frequently Asked Questions (FAQs) about the Ready-Mixed Concrete Certification Scheme.

1. Why do we need the Ready-Mixed Concrete (RMC) to be certified?

The use of ready-mixed concrete has increased considerably in the last few years. Most of the construction projects require speedier construction to meet the deadline and also the use of higher grade RMC. The certification of RMC will enhance customers' confidence in the quality and consistency of the concrete supplied.

2. What are the standards used for specifying and controlling the quality of Ready Mixed Concrete*?*

The standards used are as follows.

a. MS 523: Part 1: 2005, Concrete- Part 1: Specification, Performance, Production and Conformity (Second revision)
b. MS 523: Part 2:2011, Concrete- Part 2: Method of specifying and guidance for the specifier
c. MS 523: Part 3:2010, Concrete-Part 3: Constituent materials, production, transportation and conformity requirements

There are also other relevant standards which are cross-referred in the above standards. In addition, SIRIM QAS International has established a guideline to be used for the certification of the RMC, i.e. "Guideline on Certification of Ready-mixed Concrete (RMC) Producers.

3. Who can apply for certification?

The applicants of the scheme shall be manufacturers of the RMC. The manufacturer shall have facilities and capabilities to produce the RMC. They should show that the following are available:

a. Batch mixer with capability of generating computerized records for each batch of production;
b. Stock pile facilities for constituent materials;
c. Testing facilities to conduct routine tests as required by the standard and the product certification requirements.
d. Competent personnel to oversee the operation and quality control of the plant.

In addition, the manufacturer shall be able to demonstrate that there is an acceptable quality plan and process control which could satisfy the requirements of the certification scheme.

4. Where can we get the information and relevant forms to apply the scheme?

The soft copy of the relevant forms can be downloaded from our web site,
www.sirim-qas.com.my

5. How much does it cost to apply for the SIRIM Product Certification Scheme?

To get the official quotation, please contact our Sales, Marketing and Business Development at 03-55445941 or 03-55446822.

6. Where can we test the product?

The test could be done at SIRIM QAS International's laboratories or any laboratories accredited by ILAC-MRA signatories.

7. How long does it take to obtain certification?

This depends largely on the findings from the audit and the results of testing. In an ideal situation the licence could be awarded within a 3-months period.

8. We produce many types of concrete grades and concrete compositions. Do we need to certify all the models that we produced?

The applicants will have to decide the composition/grades that they want to certify. The auditor will identify the applicant's capabilities in producing the applied composition/grades and sufficient samples to represent the entire composition/grades will be selected and tested for certification purposes.

9. How to distinguish between the certified and non-certified RMC?

Once the RMC is certified, the licencee is required to use the SIRIM Mark on the delivery ticket along with the following information:

a. Name of the ready-mixed concrete plant;
b. Serial number of the ticket;
c. Date and time of loading i.e. first contact between cement and water;
d. Truck number or vehicle identification;
e. Name of purchaser;
f. Name of location of the site
g. Details or references to specifications e.g. code number, order number;
h. Amount of concrete in cubic metres;
i. Declaration of conformity to the specifications and to MS 523: Part 1: 2005;
j. Name of the certification body, i.e. SIRIM QAS International Sdn. Bhd.;
k. Time at which the concrete arrives at the site;
l. Time of the beginning of unloading;
m. Time of the end of unloading.

Example of SIRIM Mark as required by the Product Certification Scheme

SIRIM
Certified to MS523: Part 1: 2005
Certification no: PX XXXXXX

9. How long is the licence valid?

The Product Certification licence is valid for 1 year. During the 1 year validity period, surveillance audits will be conducted twice in order to ensure continued compliance of the product to the standard and the Product Certification Requirements.

10. Some of the characteristics of my product have changed. Can we still use the SIRIM Mark?

If the changes do not affect the product compliance, the SIRIM Mark can still be used. However, SIRIM QAS International shall be notified in writing for any modifications made to the certified product and the approval shall be sought first before the changes are made.

11. What are the advantages of having the SIRIM Mark?

SIRIM Mark is one of the best means to menifest the quality of your product. It has a potential of creating a centre of attention to your company and thus improves the image of your organization. Some of the benefits are as follows:-

a. Provides 3rd party assurance on the quality of the product.
b. Certification will replace the need for trial mix with certified concrete (initial tests for new designed concrete only and conformity of initial test).
c. The concept of “concrete family” will reduce the sampling frequency from sampling of every individual concrete composition within the production period.
d. Specifier will be able to provide users with detailed guidance from the better performance-based specification prepared with MS 523: Part 1: 2005.
e. RMC producers have a clearer defined role, responsibility and requirements for their concrete production.
f. SIRIM Product Certification Mark will also act as a marketing tool where the licence will speak for itself regarding the quality of the products.