

Purchasing of readymix concrete

October 2011

Sarma has over the past 6 years been pushing the quality of readymix concrete.

Concrete can only be assessed for its quality once it has been set. This happens well after it has been signed for, placed and cured. This therefore means that it is up to the readymix producer to ensure the product is of high quality.

So how would one insure this? Sarma has devised a Shreq program which deals with Safety, Health, Road Transport, Environmental issues and most importantly the Quality issues.

Some producers may claim ISO 9000 systems in their businesses, but that only deals with Quality. The Sarma program also includes Safety, Health and Environment.

So back to the readymix used. It is rare where advanced cube testing methods are employed and results of the estimated 28 day concrete strengths are at hand 24 hours after the receipt of the RMC, a serious setback may not be avoided, since the concrete had already been built into the structure.

Should a 'failure" exist the amount of the substantial concrete would be replaced, because the cost of demolishing a part of the structure (columns, floors, walks & beams) is far higher and the loss of time and prestige is much greater than just the cost of a few cubic meters of RMC.

With the Sarma audit and certification, the Sarma member is loaded with a moral responsibility to safeguard the contractor/public against any looming disaster.

The element of uncertainty regarding the acceptance and use of fresh concrete in a structure is so great that it requires an entire network of control from both the supplier of readymix and the user alike.

The readymix supplier there against has the problem that the material supplied to produce readymix concrete has to be up to standard, i.e. the quality of the cement, the sand, stone, water, admixtures, etc. To buy from a supplier who is not committed to good products will affect the end product, i.e. readymix concrete.

To help members, Sarma checks this by using ISO principles, as well as SABS 878 (manufacture of readymix concrete).

Sarma therefore checks strengths and checks the technical data to ensure extensive statistical analysis.

Due to limited financial resources and short life-spans, the smaller single contractor, does not establish a sitelaboratory as it is not justified, thus the contractor is fully dependent on a reliable readymix supplier.

The other problem is that the lack of space of city contracts often forces large contractors to use readymix concrete instead of trying to mix it on site. Again the contractor has the peace of mind that it is up to the readymix supplier to ensure quality and look after health, safety and other issues.

It often happens that "profit sensitive" issues affect judgment of contractors.

If a contractor is committed to produce concrete, which will comply with the requirements of the job specification (which usually includes the relevant SABS specification), then the contractor is expected to produce a concrete proved to be of a higher strength than the normal strength requirement. This condition is prevalent until such time as it can be proven by a sufficient large number of cube results that the concrete as produced is consistently uniform.

SARMA – HOW TO USE READYMIX CONCRETE

If a Sarma accredited readymix plant has produced the concrete, then the responsibility of the readymix concrete producers expires at the point of discharge from the truck-mixer and no further responsibility should be expected if the contractor handles the product.

Target strengths of readymix concrete is designed and adjusted for the specific site as per the requirements of the clients.

What is important is that Sarma member's readymix concrete does not provide a safety factor against mistakes made by contractors, specifiers and clients and is designed on the assumption that such mistakes never occur and the contractor or client carries out the perfect job as far as compaction and curing of concrete is concerned.

The Sarma members cannot be expected to make provision at their own expenses for mistakes made by the Contractor, and obviously too, the contractor is going to continue to make those unwanted mistakes forever.

The Sarma Shreq audit assists its members to at least ensure that systems are in place to ensure a proper process. For more information, visit the Sarma website on www.sarma.co.za.

NICO PIENAAR **DIRECTOR : SARMA**

www.sarma.co.za P O Box 1983 Ruimsig 1732 email: office@sarma.co.za Tel: 011 791 3327 Accounts: 011 791 0858