

NEWS:

ASTM Allows Water Additions in Transit

ASTM C94/C94M (Standard Specification for Ready-Mixed Concrete) was revised in 2013 to allow water additions during transit for trucks equipped with automated slump monitoring and water measurement systems. Verifi meets the requirements of ASTM C94/C94M for water addition in transit.

Why is this change being made?

Previously, ASTM C94/94M limited water additions to the jobsite so that an inspector or other qualified person could oversee any additions of water to ensure the maximum water content was not exceeded, the amount of water added was recorded, and the concrete was properly mixed. Truck-mounted equipment is now available to automatically add water in transit, measure and record all additions of water on the truck, stop water additions when the maximum water is reached, and ensure concrete is properly mixed. This change enables concrete suppliers, contractors, and engineers to take advantage of this technology.

What are the benefits of this change?

The addition of water in transit allows concrete to arrive at the jobsite at the correct slump and water content, ready to complete mixing and start discharging. This results in consistent quality concrete and faster construction.

What does the standard require?

The standard allows water addition in transit under the following conditions:

- Water addition in transit must be permitted by the purchaser.
- The truck must have automated equipment to monitor and report slump or slump flow based on pre-established correlations.
- The truck must have a water meter with accuracy of +/-3%. At the request of the purchaser, the ready mix producer must provide calibration data for the water meter no older than 6 months.
- The water added cannot exceed the maximum water content for the mix.
- The concrete must be mixed 30 revolutions at mixing speed after the last addition of water and before the start of discharge. It is not necessary to mix concrete at mixing speed before the truck arrives at the jobsite, even if multiple water additions are made in transit.
- The water added to the truck mixing drum must be provided on the batch ticket.

Are any other changes needed?

Engineers should review their specification to identify any instances where water additions during transit or at the jobsite are restricted. Replace with the following:

Water additions are permitted during transportation to the jobsite when made in accordance with ASTM C 94/C94M-13.

Download the Standard

<http://www.astm.org/Standards/C94.htm>

Learn more about Verifi

Verifi helps ready mix producers, contractors, engineers, and owners ensure consistent quality concrete and accelerate construction. Learn more at verifconcrete.com.