# $\mathsf{VERIFI}^{\scriptscriptstyle{\$}}$

# In Spec. On Time.

# Every Time.

### Verifi® is a concrete slump management system installed on ready-mix trucks

#### Verifi® sensors and controls on the truck measure, manage and record:

- Slump
- Temperature
- Load Size
- Age

- Water
- Admixture
- Drum speed
- Revolutions

**Result:** Optimum concrete slump control. Concrete arrives on site—"delivered as you ordered it."

#### Verifi® Benefits:

- 1. Takes the guesswork out of the slump.
- 2. Consistent concrete saves you time.
  - · Concrete arrives on-site ready to unload, with no need for on-site adjustments
  - Reduced need to re-temper on site means faster discharge
  - Fewer defects and rejected loads means fewer delays
- 3. No surprises.

#### Verifi® A Closer Look

- Sensors and controls on the truck will measure, manage, and record multiple attributes. This will result in increased concrete quality through real-time management and control of slump and monitoring of temperature during transport.
- Adopting this system eliminates the manual additions of water through a ball valve at the back of the truck. Verifi® will be performing automatic water additions through a central processor mounted on each truck.
- After each water addition, the Verifi® System will require the concrete to mix for 30 revolutions, as required by ASTM C94 -Standard Specification for Ready-Mix Concrete.
- To take the guesswork out of slump measurement, hydraulic pressure sensors are being used to measure the slump of the concrete and automatic water additions will occur based on a calibrated curve for that mixture design.

- If you require a higher slump than what was requested at the time of order placement, indicate to the driver the desired slump and he/she will adjust through the Verifi® System. See FAQs Q#3 and O#4 on reverse side for further clarification.
- Information for every load is recorded on the Verifi® web portal and summary reports for your project are available upon request.
- The Verifi® system meets or exceeds all requirements of ASTM C94-13. The standard specification for ready-mix concrete is the reference standard for ACI 318.

# **VERIFI**®

# Frequently Asked Questions

#### Q#1. Why use Verifi®?

A. The Verifi® System takes the guesswork out of the slump, and allows the truck to arrive on-site with consistent concrete, ready to unload. Adopting this system eliminates making manual adjustment to achieve the proper slump, thereby saving valuable time on the job.

#### Q#2. How does Verifi® Work?

A. Verifi® is tied into the batch panel and dispatch systems, providing real-time data from start to finish, for each and every load. Instead of adjusting water with the ball valve, we now meter it through the cab computer. We re-temper (add water) and secure results after 30 revolutions, per ASTM C94.

## Q#3. How do I request a slump change when the truck is on-site?

A. If you require a higher slump than what was requested at the time of order placement, indicate to the driver the desired slump and he will adjust through the Verifi® system. Any adjustments must be signed for on the delivery taq.

# Q#4. What if my slump request is outside of the design parameters of the mix design I am pouring?

A. The customer accepts full responsibility for any adjustments to the mix design outside of the designs specification. It is best to contact your ready mix supplier. They will work with you to ensure you are receiving the most appropriate mix for the job you are working on.

# Q#5. What do I do if I disagree with the slump reading that Verifi® is displaying?

A. If you do not believe the displayed slump is correct, you should request to have the slump checked by an onsite ACI certified technician. Many concrete mixes can be very difficult to determine an accurate slump without conducting an actual ACI slump test, therefore please DO NOT rely upon a visual slump to determine the slump of the concrete. If after conducting a proper slump test, it is confirmed that the Verifi® system is reporting an incorrect slump you should note this on the delivery ticket and ask the concrete delivery professional to make the needed slump adjustments through the Verifi® system. The driver will notify the Quality Control department to validate the calibration of the truck.

### Q#6. Can I see how much Verifi® has managed my load of concrete?

A. Yes. Contact your ready mix supplier and they will be able to provide you with documentation of the history of your load of concrete, from the time it was batched until placement.

#### Q#7. Does Verifi® affect the characteristics of my concrete?

A. No, Verifi manages slump. The performance properties associated with the specific concrete mix at the arrival slump will not be changed.

#### Q#8. How often is Verifi® calibrated?

A. Verifi® is calibrated after initial installation and whenever it is suspected that results are inaccurate. Water and admixture meters are calibrated at the factory. NRMCA requires that water meters be recalibrated every 12 months. Some state's DOT's require more frequent water meter re-calibration.

#### Q#9. Can an inspector get Verifi® data?

A. The driver can show the inspector data on the in-cab interface. Contact your local ready mix supplier who can provide additional data upon request.

### Q#10. Can Verifi® manage previous concrete, flowable fill, or SCC?

A. We anticipate having the ability to manage SCC and similar mixes in the near future.

#### Q#11. Does drum build-up affect slump measurement?

Routine drum build-up does not affect slump measurement. Exceptions are excessive drum build-up or if all the build-up is on one side of the drum.