

If you've already looked at our [Smart™ Concrete product page](#), then you know that this program helps ready-mix producers differentiate their company, and mixes, within the market. But this value-added solution also provides project managers and contractors with an opportunity to significantly speed up their timelines, helping improve productivity on site.

How you may ask?

By offering you an opportunity to reduce your reliance on third-party labs for compressive strength testing and instead use wireless maturity sensors.

As you probably already know, most jobsites use cylinder break tests to measure the compressive strength of concrete. However, this process is [not only outdated, it is also very inefficient for keeping your project schedule on track](#). For this reason, more and more project managers are turning to wireless maturity sensors to monitor concrete strength directly on site. A very simple process, it only requires a [calibration](#) up to 28-days prior to your pour before you are able to receive strength data. That is what the Smart™ Concrete program is all about. Licensed ready-mix producers offer you the means to use [SmartRock™ maturity sensors](#) on your project using mixes which have already been pre-calibrated with the maturity calculation.

## How Do Wireless SmartRock™ Sensors Work?

Giatic's wireless SmartRock™ sensors allow you to estimate the early-age and compressive strength of in-place concrete based on the maturity method, according to ASTM C1074. The goal of these sensors is to measure the temperature of your slab in real-time and correlate this data to the concrete's strength. Temperature data is collected by the sensor and uploaded to any smart device within an app using a wireless connection. This information is then used to calculate the compressive strength of the in-situ concrete element based on the maturity equation that is set up in the app. This means you will know right away when your concrete is strong enough to move on to the next steps in the construction process. This data is considered to be very accurate and reliable as the sensors are subject to the same curing conditions as the in-situ concrete slab. Using this method means cylinder testing is significantly reduced, and likely only needed on day-28 to confirm strength. You can therefore obtain accurate in-situ strength data and avoid [inaccuracies associated with testing labs](#).

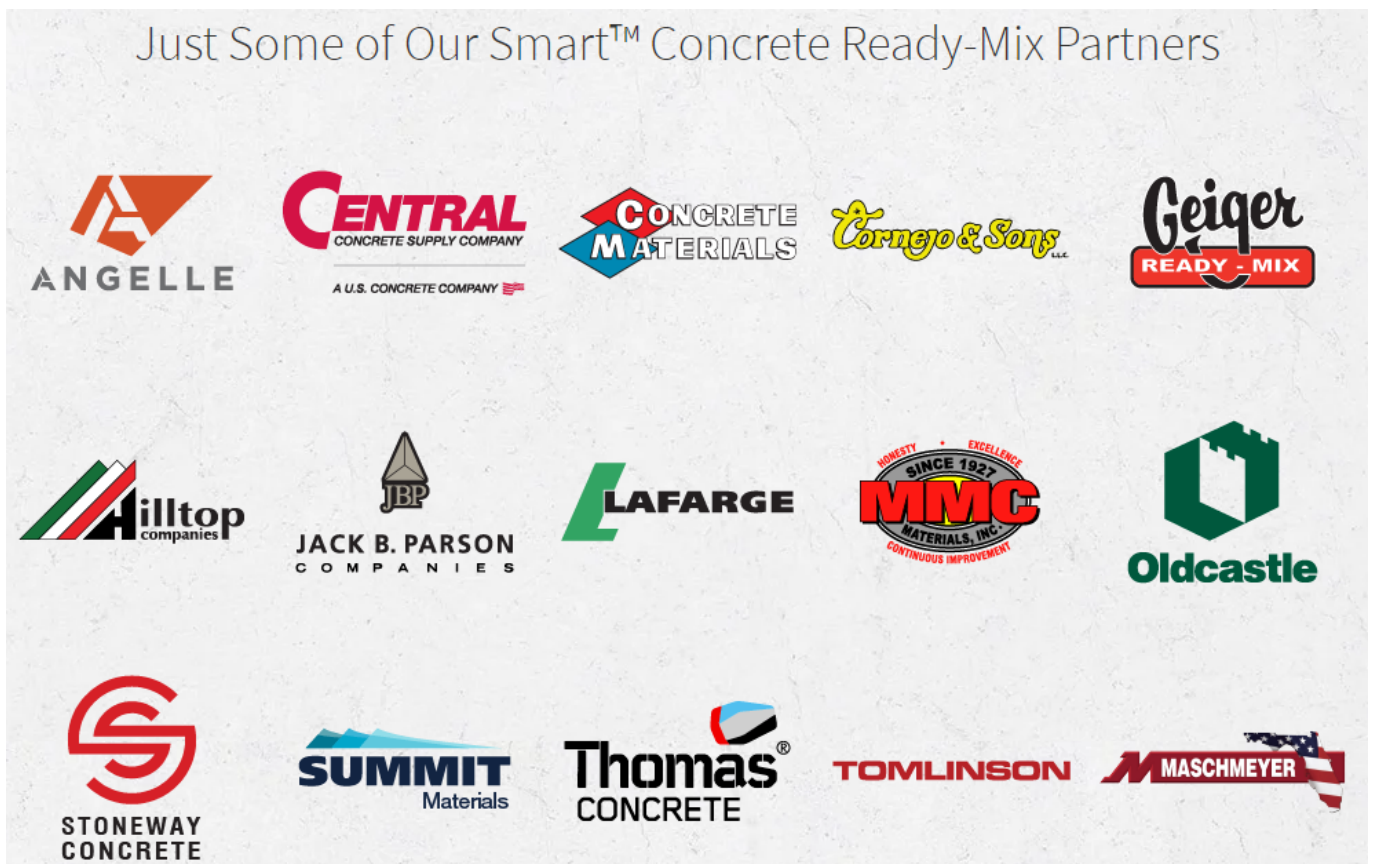
## The Benefits of Using Smart™ Concrete

If it's so simple, why not set up the SmartRock™ sensors yourself?

For some jobsites, project managers want to make sure the calibration process has been done properly. For others, they simply want to get started on their pours right away and don't have time to wait the 28-days for calibration to be ready. Not only will these ready-mix companies tell you how many sensors you need on your site based on the square footage, they will also set them up and connect them to your Smart™ Concrete application. This means that everything will be ready for you to immediately start receiving strength data via your mobile device.

In this way, the Smart™ Concrete program offers you the convenience of being able to test concrete strength right away without having to teach your team how to perform the calibration, or spend the time placing the sensors and setting them up in your app.

### Just Some of Our Smart™ Concrete Ready-Mix Partners



Smart™ Concrete producers also have a variety of mixes calibrated and ready for contractors. They can help you identify a mix that fits your project's specific performance requirements--whether they be paving, post-tensioned decks, structural columns, or industrial elements. Not only that, but with the Smart™ Concrete program, the ready-mix producer you partner with will be continually improving their mixes and optimizing them to speed up the curing process. This would allow you to purchase Smart™ mixes which are specifically designed for your project and timeline. This is especially useful when working on high-rise projects, post-tensioned concrete, fast-track pavement repairs, etc. This saves significant time and gives contractors more control of their schedules, allowing for more knowledge regarding when additional operations can be implemented, such as formwork removal.

Learn more about Smart™ Concrete and find out how you can benefit from this program today.

*Editors Note: This post was originally published in June 2018 and has been updated for accuracy and comprehensiveness.*