



Wireless Concrete Sensor for Temperature and Strength Monitoring

SmartRock has been a good investment in that it's extremely user-friendly, convenient, and saves us time on our project.

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Remote Monitoring Capabilities



Easy Activation & Installation



Slab 1

0

Temperature (°F)

62.0

Maturity (°F-hrs) 2399

Pouring: Oct 25, 2019 at 8:50 AM

Strength (psi)

Weather Mix 4500

Max.

75.7

Real-Time Data Collection

SmartRock[™]

Wireless Concrete Sensor for Temperature and Strength Monitoring



SmartRock

Conventional Methods

Overview

SmartRock is the world's leading wireless sensor for monitoring the curing and hardening of concrete. The sensor is fully-embedded and secured on the rebar, making it completely maintenance and hassle-free. Temperature data is collected, and the strength of your in-place concrete is calculated automatically based on the maturity method (ASTM C1074). These results are accessible in real-time and remotely through the SmartRock mobile app and on the Giatec 360 cloud dashboard to help you make informed decisions. SmartRock's Al assistant, Roxi™, eliminates human-error by sending smart notifications and alerts to give you the upmost confidence in your mix calibration data and accuracy of strength test results.

Features

Software

- Accurate real-time data display (i.e. temperature, strength, max-min values, and graphs)
- · Maturity calibration database
- Free Android/iOS app with easy-to-use guide
- Project management tools including live data sharing
- · Giatec 360 web-based cloud dashboard
- Proactive AI notifications of concrete pouring time and mix calibration errors
- · Full PDF & CSV reporting and data exporting
- Open API integration with project management applications (i.e. Procore)

Hardware

- Wire-free and wireless technology
- · Fast, simple, and hassle-free activation and installation
- Extended temperature sensor cable and probe for mass concrete
- · Rugged and waterproof design
- · Long battery life
- 24/7 remote monitoring capabilities with the SmartHub™ device

Applications

- Timely formwork removal
- Post-tensioning
- Optimize curing conditions
- Saw cutting
- · Control quality in the field
- Monitor temperature differentials in mass concrete
- Open roads to traffic



Technical Specifications

Reading Range -22 to +181 °F (-30 to 85 °C)

Measurement Accuracy ± 1.8 °F (± 1°C)

Measurement Resolution ± 0.18 °F (± 0.1°C)

Measurement Frequency
Once every 15 mins
(for 2 months of data)

Wireless Signal Range Up to 40 ft (12 m)

Temperature Cable Length 16 in (40 cm) / 10 ft (3 m)

Battery Life

Up to 4 months after installation

Data Communication and Analysis

Free Android and iOS app Giatec 360 Cloud Dashboard

Standards

ASTM C1074 (Approved by ACI 318, CSA A23.1, most USDOT specifications)

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