Concrete Strength and Temperature Sensors
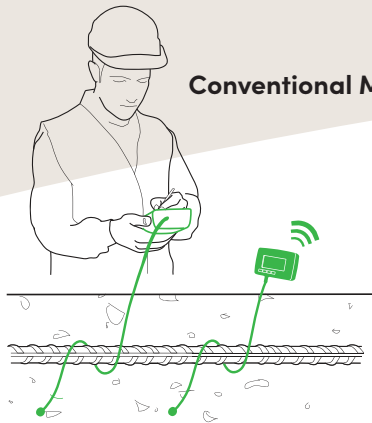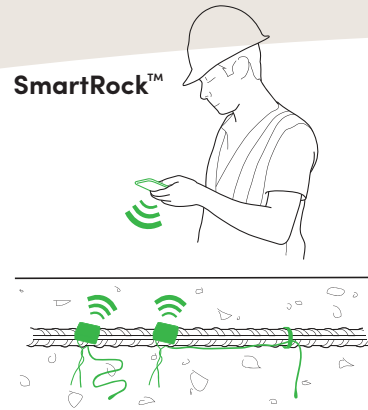

Conventional Methods

SmartRock™

Wired*

Wireless

Installation

Wired:
- Select sensor location
- Install sensor at point of measurement and run the thermocouple outside of the concrete for data connection
- Use data logger to manually connect to protruding thermocouples
- Read data on site and/or bring data logger to the office and download data on computer

Wireless:
- Select sensor location
- Install and secure sensor and thermocouple on rebar
- Connect to sensor wirelessly
- Data is automatically uploaded to cloud and all stakeholders' devices

Data Extraction

Wired:
- Take data logger and manually connect to thermocouple protruding from the concrete. These thermocouples can be in unsafe/high-risk areas for workers to connect to and are prone to damage
- Connect data logger to thermocouple and download most recent data point
- Connect data logger to a computer, download the data and calculate strength value
- Send results to appropriate stakeholders

Wireless:
- Locate sensor in the phone application
- Connect to sensor wirelessly and download real-time and all historical data
- Strength, temperature and maturity data is automatically sent to the cloud and to all other stakeholders' devices
- User-friendly PDF and CSV sensor reports can be sent from the mobile device

Components

Wired:
- Data logger
- Thermocouples
- Box for thermocouples to connect to Hub (optional)
- Remote monitoring Hub (optional)
- Contractor online data platform (optional)

Wireless:
- Phone application
- Sensor (datalogger and thermocouple)
- Remote monitoring SmartHub™ (optional)
- Contractor online data platform (optional)

Cost

Wired:
- Data logger $$$$
- Thermocouples $
- Box for thermocouples to connect to Hub $$
- Remote monitoring Hub $$$$
- Contractor online data platform $$

Wireless:
- Phone application (FREE)
- Sensor (data logger and thermocouple) $$
- Remote monitoring SmartHub $$$$
- Contractor online data platform* $$
  ***FREE** for contractors working with SmartRock™ Plus partners

*Due to type of wired systerm, information may vary

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