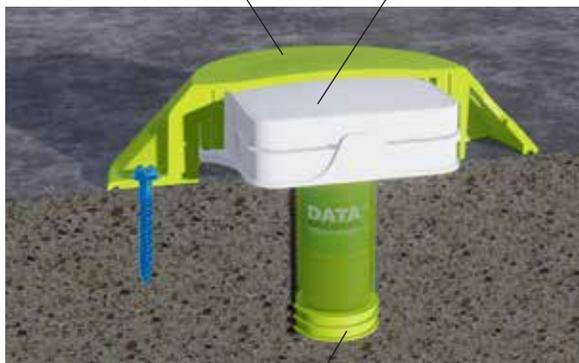


# True Remote Monitoring<sup>™</sup> System Installation Guide

With the True Remote Monitoring System, contractors are now able to monitor concrete and jobsite environmental conditions remotely, in real-time, from the comfort of the office, or anywhere in the world. No more back and forth to a jobsite that isn't ready. Save time and money by using this system to monitor ambient conditions and return to the jobsite only when the concrete is ready for the next phase.

Protective dome — Rapid RH<sup>®</sup> DataGrabber range extender (DGRE)



Rapid RH<sup>®</sup> L6 System, including the Rapid RH<sup>®</sup> L6 Sensor and the DataGrabber<sup>®</sup> with Bluetooth



Floorcloud<sup>®</sup> Jobsite Conditions Sensor

## ! BEFORE PROCEEDING WITH INSTRUCTIONS !



MAKE SURE YOU HAVE SET UP A PROJECT AND SECTION TO MONITOR WITHIN FLOORCLOUD.



ENSURE THAT YOU HAVE TURNED ON BLUETOOTH WITHIN YOUR MOBILE DEVICE.

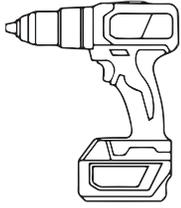
**Wagner Meters** info@wagnermeters.com  
www.wagnermeters.com  
**(800) 634-9961**

**Floorcloud<sup>®</sup>** support@floorcloud.com  
www.floorcloud.com  
**(617) 395-1668**

See how  
it works



# RECOMMENDED TOOLS:



**Small Hammer Drill**  
(for drilling concrete screws)



**5/16" carbide tipped concrete drill bit**  
- For Rapid RH<sup>®</sup> L6 Sensor hole to be drilled into the slab



**5/32" x 3-1/2" carbide tipped concrete drill bit**  
- For Tapcon concrete screw holes to be drilled into the slab  
(1 per cap depending on density of concrete)



**1/4" Hex impact nut driver**



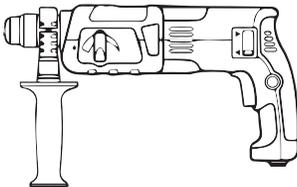
**3/16" x 1-1/4" hex head concrete screws**  
(3 per dome)



**Small phillips head screw driver**  
(to mount DGRE inside protective dome)



**3M Command Strips**  
(to mount Floorcloud sensor to wall)



**SDS Hammer drill**  
(to drill the concrete for the Rapid RH L6 sensors)



**Rapid RH<sup>®</sup> L6 True Remote Monitoring starter kit**



**Small Shop Vac**  
(to vacuum concrete hole)



**Red Tape** (to tape off testing in progress on concrete)



**Sharpie** (to mark testing in progress on red tape)



1.

Upon arriving at your jobsite, open the section of the project you will be monitoring within the Floorcloud® mobile app and connect the Floorcloud® Jobsite Conditions Sensor by scanning the QR code on the front of the sensor. This will activate the sensor and begin its acclimation process, it can take between 30-60 minutes to acclimate.

- A. You do not need to choose the exact location to mount the Floorcloud® sensor at this point, but connecting it now will speed your overall set up process.



2.

Determine your preferred placement location in the concrete for the Rapid RH® L6 sensors.

- A. Keep in mind they must be within a radius of 75-100 feet (depending on obstructions) of where you will eventually mount your Floorcloud® Jobsite Conditions Sensor.
- B. Ensure the hole is drilled 100% perpendicular. If the Rapid RH® sensor is on a slight angle it is difficult to insert.

3.

**Install the Rapid RH® L6 sensor(s) into the concrete.**

Leave the cap off (to be installed after the following step). Note: The True Remote Monitoring Kit and the DGRE will both come with the Rapid RH® L6 sensor installation instructions.

- A. Take precautions not to crush or crimp the L6 sensor as they are placed in the hole or the DataGrabber® will not properly seat with the L6 sensor.

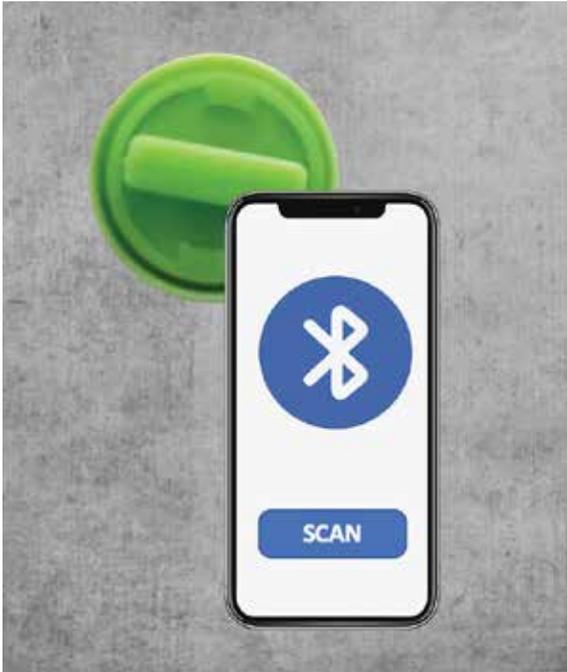
4.

**Install a Rapid RH® DataGrabber® with Bluetooth by pressing it firmly inside of the Rapid RH® sensor.**

A.

Make sure the DataGrabber® is installed firmly so that the contact pins make solid contact with the metal rings at the bottom of the sensor.

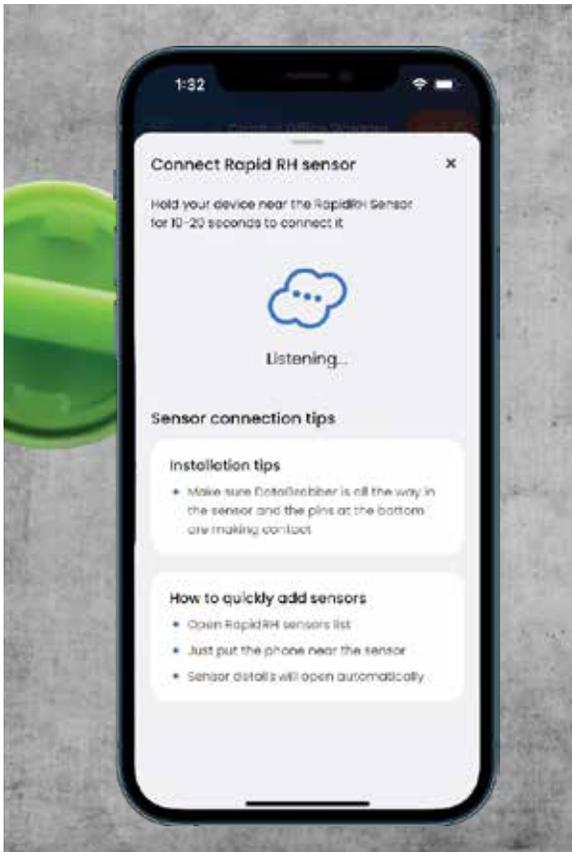




**B.**

**Confirm the connection between the DataGrabber® and the Rapid RH® L6 sensor is live by opening the Floorcloud® mobile app, and opening the section of the project you will monitor.**

Before continuing, make sure that there's no other Rapid RH® Sensors with DataGrabbers® near the one you are installing. Otherwise system can pick up the signal from another sensor, which could lead to the mislabeling of the sensors.



**C.**

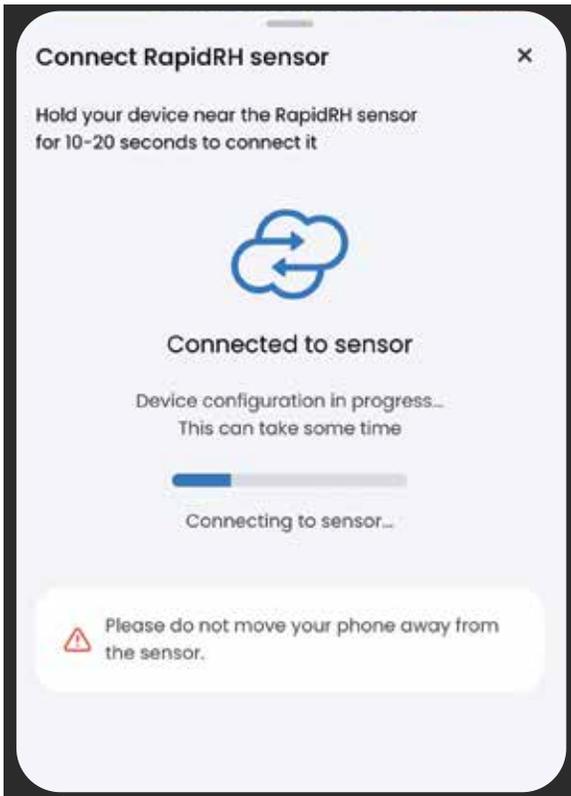
**Touch on the blue plus button on the bottom menu bar, and then touch on "Connect Rapid RH® sensor" and hold your phone about 12" or less over the Rapid RH® L6 sensor/DataGrabber®.**

This will launch the Connect Rapid RH® sensor screen and begin "Listening" for the Bluetooth signal from the DataGrabber®. It may take up to 20 seconds to connect.

Do not move your phone away during the connection

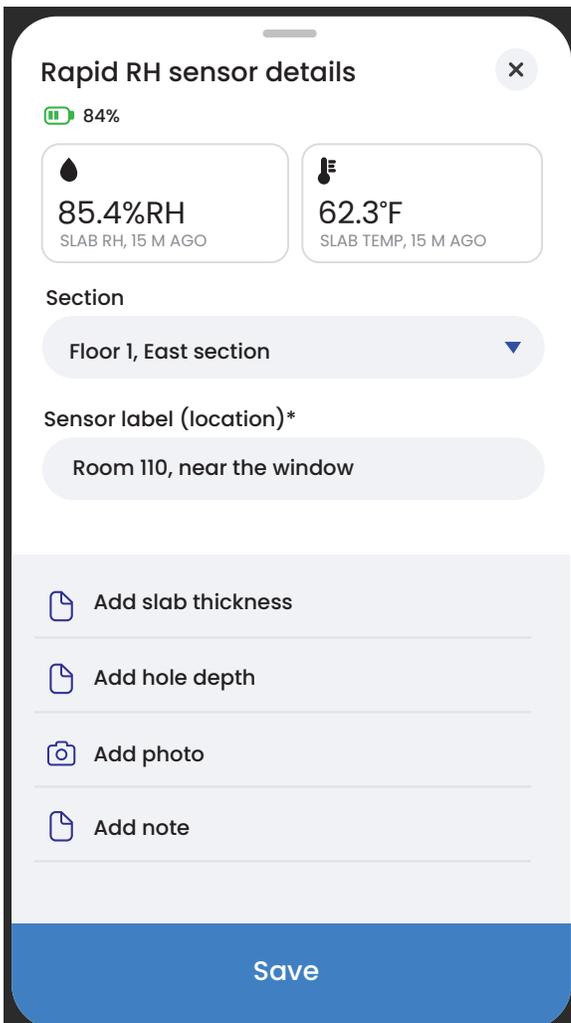
If the Sensor is not connecting

- make sure DataGrabber® is firmly pressed to the bottom of the Rapid RH® L6 sensor.
- Close connection dialog and turn Bluetooth on your phone off and on from the phone's settings menu..... Then try to connect again.



D.

Connection to the sensor takes some time (5-20 seconds), you will be presented with a progress bar and on screen explanations.



E.

When the connection is complete, the Rapid RH® Sensor details page is presented.

To complete Sensor connection, add descriptive details about the sensor and a photo of its location. You can also add slab thickness, hole depth and a text note as needed. Click Save to complete.

F.

Repeat this process to activate and label as many probes as you will monitor.



# 5.

## Install the Rapid RH® DGRE (DataGrabber® Range Extender) and protective dome.

### A.

Turn on the Rapid RH® DGRE by holding down the gray circular button on the top of the device.

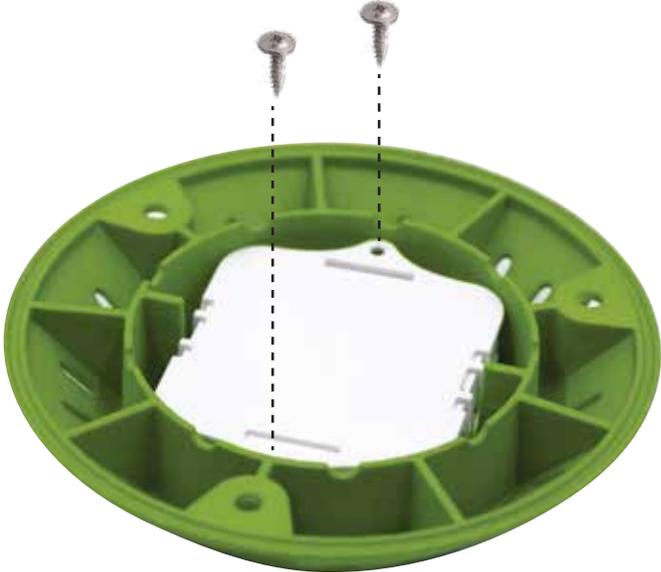
Hold for 3 seconds until a solid green light appears.

Once the light is green lift your finger. A flashing blue light (every 11 seconds) will now appear to indicate that Bluetooth communication has been activated.

### B.

Install the Rapid RH® DGRE into the protective dome using the small screws provided.

DGRE battery life is typically 1 year depending on usage level. Batteries are size AA and can be easily replaced by removing the 4 screws on the back panel.





C.

Install the Rapid RH® DGRE directly above your L6 sensor on the floor.

First, insert the DataGrabber® into the Rapid RH® L6 sensor inside of the concrete. Then, the DGRE must be placed on the concrete surface above the DataGrabber®.

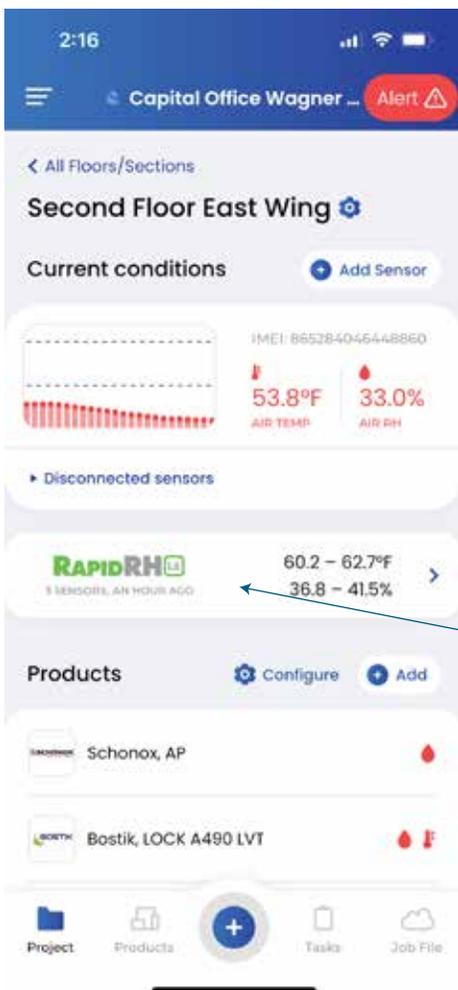
The DGRE is only designed to be used with one DataGrabber®. If you want to remotely read more L6 sensors additional DGRE's must be installed.



D.

Then place the Rapid RH® DGRE over the Rapid RH® sensor and DataGrabber® on the surface of the concrete. Securely attach the Rapid RH® DGRE to the concrete surface using either the concrete screws provided or a suitable construction adhesive.

- Be sure to drill pilot holes into the concrete using a hammer drill before using the concrete screws provided.
- Placing red tape on the concrete around the perimeter of the protective dome is recommended to further communicate that live testing is in progress.
- Use a Sharpie to write "Testing" on the red tape.



6.

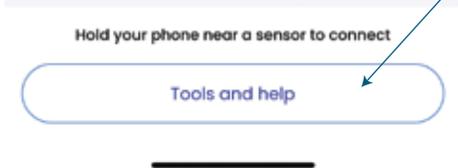
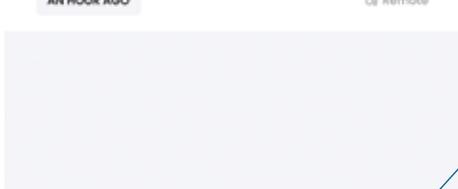
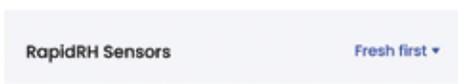
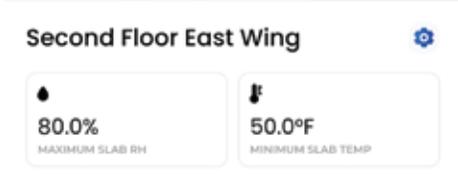
**Determine Floorcloud® Sensor location.**

**A.**

Open the Floorcloud® mobile app and open the section of the project you will monitor.

**B.**

Touch on the Rapid RH® logo.

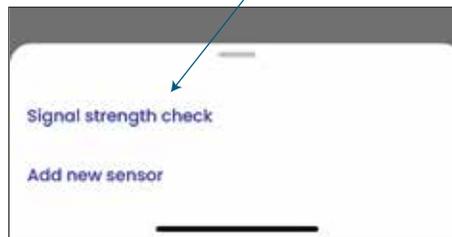


## 6. Determine Floorcloud® Sensor location continued.

C.

Select "Tools and help" at the bottom of the screen.

Then select "Signal strength check".

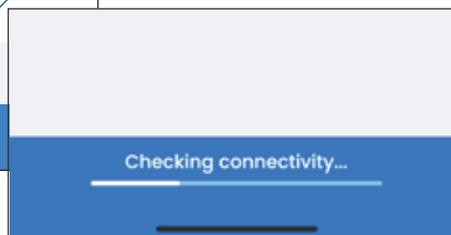
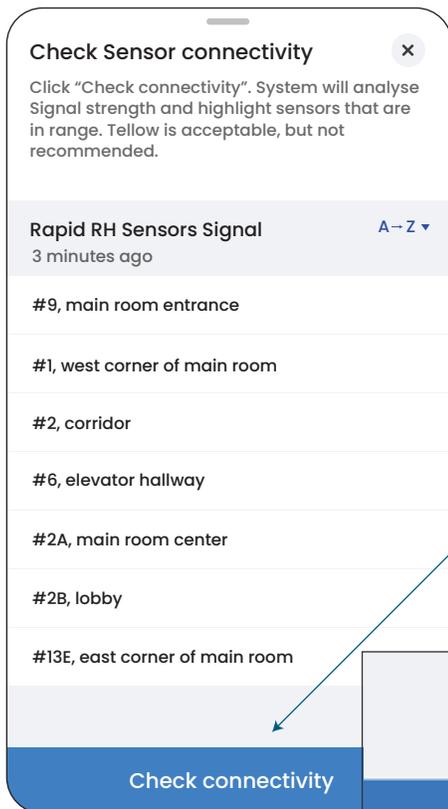


D.

You will then see the list of Rapid RH® L6 sensors appear on screen that have been added to the section.

E.

Touch on the "Check connectivity" to test the signal strength between the Rapid RH® DGRE device and the Floorcloud® Jobsite Conditions Sensor location.



F.

Testing will take between 20-30 seconds and is indicated by the "Checking connectivity" indicator bar. Please do not move phone around during testing, this can lead to inaccurate connectivity readings.

**G.** When the signal strength testing is complete, each Sensor will be highlighted in a color band representing the signal strength of the connectivity.

- Green: a good stable signal.
- Yellow: connectivity is borderline acceptable. Proceed only if necessary, changing the Floorcloud® Sensor location is advised.
- No highlight = no signal from the Rapid RH® Sensor. Try to find a place closer to the Rapid RH® sensor location or a place with less obstructions in the way.



**H.** If your connection is not good, move to another location and repeat the signal strength check.

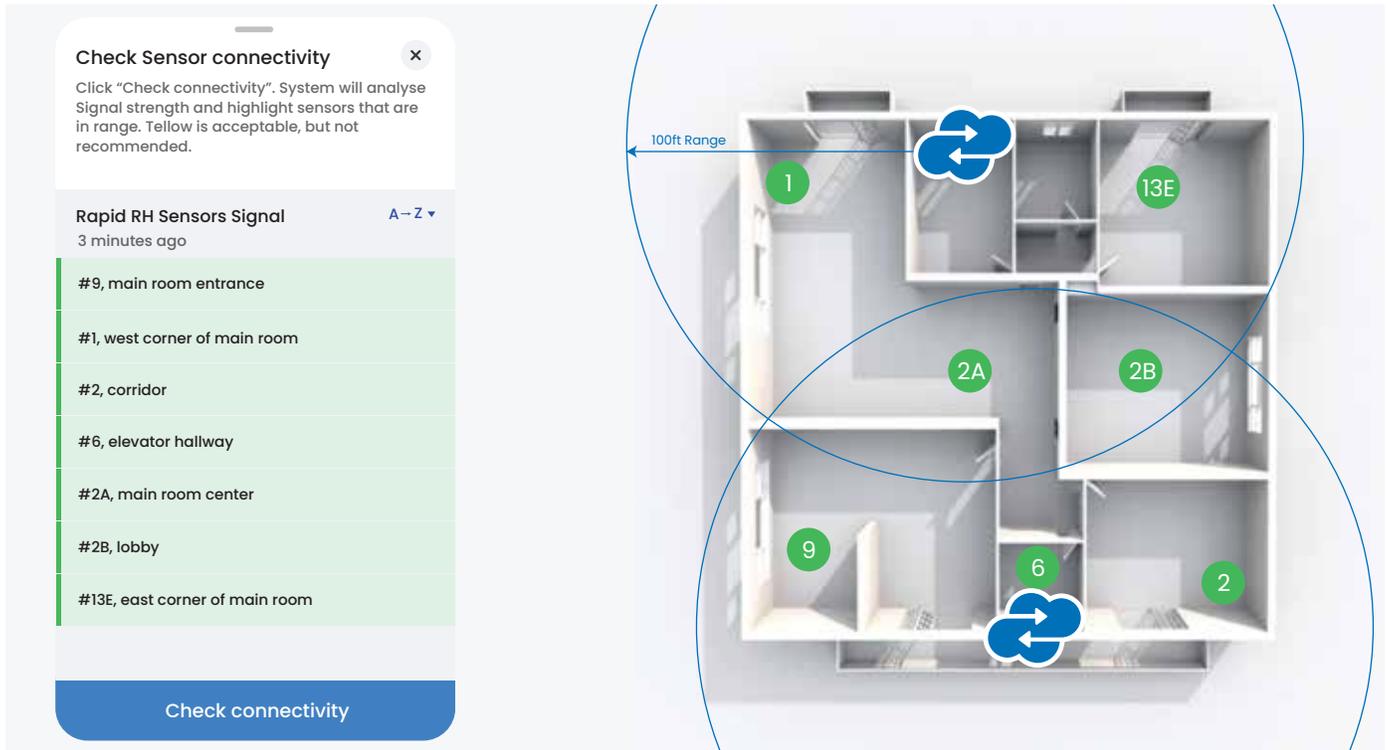
Your goal is to find a location where all the Rapid RH® devices you want to connect are highlighted in green. (yellow is acceptable, but not recommended)

**I.** This is a location where you should now mount the Floorcloud® Sensor.

**J.** Though not required, installing an additional Floorcloud® sensor in an area with multiple obstructions, or simply as a redundant/back up unit, is always a useful solution.

K.

Obstructions like walls and doors or large distance can reduce power of signal. You can install several Floorcloud® sensors for complex situations or as a backup. Just connect sensors to the same section.



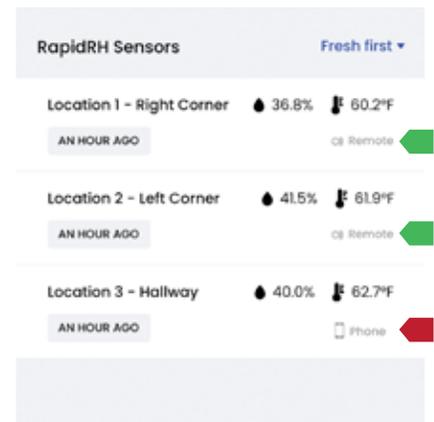
7.

Verify that the Rapid RH® L6 sensor is successfully being read remotely.

Within the Floorcloud® mobile app, open the section you are monitoring. Touch on the Rapid RH® L6 logo icon.

You will see the list of sensors being monitored for this section. On the right side of the screen, confirm you see a "Remote" icon. This will confirm that the Floorcloud® app is now receiving the Bluetooth data directly using the Floorcloud® sensor and not your mobile phone.

If the "phone" icon appears, remain on the jobsite for the next ping of data to be sent from the Floorcloud® sensor to the Floorcloud® database. Once complete, the icon will change to now read "Remote".



8.

Now you've completed your sensor installation, it's time to enjoy True Remote Monitoring of your jobsite!