

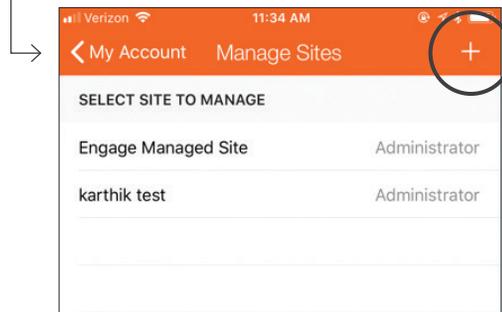
## ENGAGE™ Gateway placement for existing construction

### Before you begin you will need the following hardware:

- a mounted NDE Lock
- an ENGAGE Gateway
- an extension cord (optional)
- a mobile device with the ENGAGE mobile app installed

### One-time hardware setup

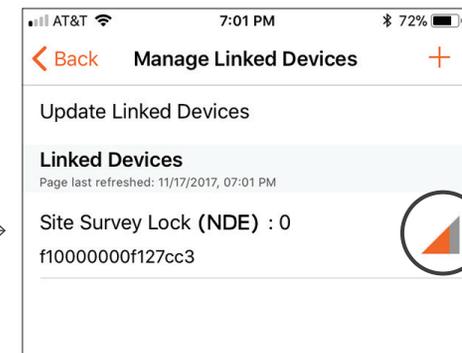
- 1 Log in to your account in ENGAGE mobile app and create a new site in "Manage Sites".
  - Click on the + (in the upper right corner for iOS)
  - Select the appropriate Access Control Software (if unknown use the most probable)
  - Define Site Details
    - Site name: Survey
    - Site type: What best describes the environment
- 2 Commission the lock and gateway to the new "Survey" site created
  - Name both devices
  - Turn Wi-Fi off on lock
- 3 Link the lock to the gateway
  - Using the ENGAGE mobile app, connect to gateway
  - Press "Manage Linked Devices"
  - Add new linked device (+)
  - Select lock



### Measure signal strength

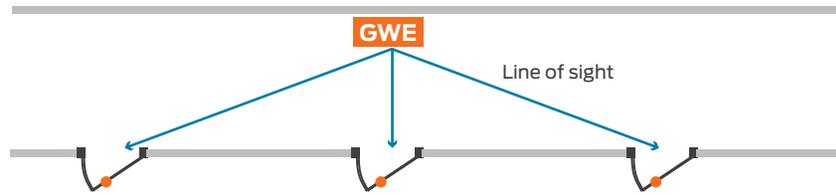
- 4 Place the lock at the inside lever of the door. (May need to request access to door.)
- 5 Place the gateway at the desired install location, and use the ENGAGE mobile app to measure the signal strength. Signal strength can be seen in the ENGAGE mobile app when connected to the gateway under Managed Linked Devices. The signal strength triangle should be at least 1/2 orange for a reliable install.

**This method provides an evaluation of connectivity at a designated point in time. However, this does not guarantee a reliable connection due to dynamic RF noise specific to the local environment.**



## Effects of building materials on gateway placement and range

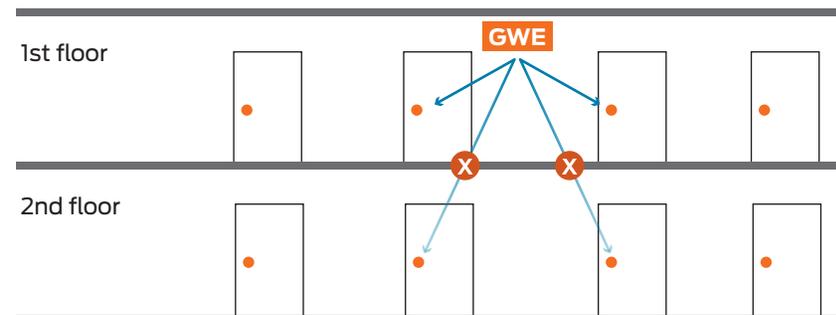
- Line of sight to the door experiences minor losses since it does not travel through wall material to reach the door



- Performance through walls is greatly dependent on the building construction. The signal may be degraded and functionality could be severely limited



- Do not mount the gateway and locks on different floors. The signal may be degraded and functionality could be severely limited.



When planning, keep in mind that items can create interference that may reduce range. Items such as: Wi-Fi access points, metal furniture, (shelving and cabinets), HVAC equipment, elevators and microwave ovens all can cause interference.

### Construction materials

The wireless signal will not pass through metal walls or metal mesh in the walls (i.e. stucco).

Do not install the gateway in a metal box or on a metal surface. A separation of at least one inch must be maintained in all directions from any metal.

### Wi-Fi access point placement

To minimize RF interference from Wi-Fi access points maximize the distance between the gateway and the Wi-Fi access point.