

## ENGAGE™ Gateway placement for existing construction

### Before you begin, you will need the following tools:

- a mounted NDE Lock or designated Site Survey lock
- an ENGAGE Gateway with power supply
- an extension cord (optional)
- a mobile device with the ENGAGE mobile app installed

### One-time hardware setup

- 1 Log in to your account in the ENGAGE mobile app and create a new SAM site in "Sites." Note, this new site is for Site Surveys only. If you wish to use a site previously created, skip to step 4.
  - Add new site (+)
  - 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 survey lock and Gateway to the new "Survey" site created. Commission Gateway in IP mode.
  - Name both devices
  - Do not turn Wi-Fi on in the lock
- 3 Link the survey lock to the Gateway
  - Connect to the Gateway by selecting the Gateway device name
  - Select "Linked Devices"
  - Add new linked device (+)
  - Select survey lock that was just commissioned

### Measure signal strength: site survey

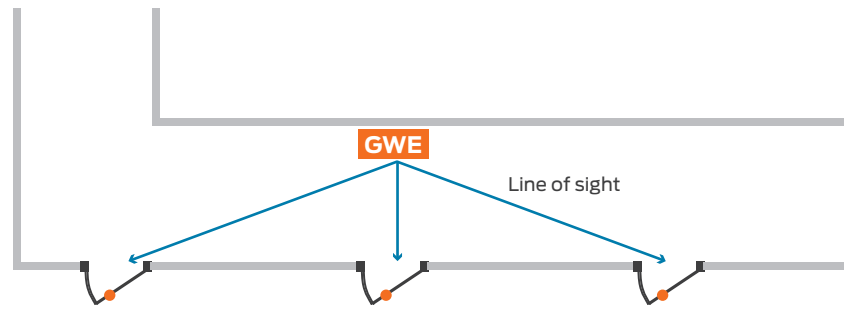
- 4 Place the survey lock at the inside lever of the door as close as possible to where it will be installed. Place the Gateway at the desired mounting location.
- 5 Connect to the Gateway by selecting the Gateway device name and select "Site Survey." Select "Start Survey" at the bottom and wait for confirmation to view the signal quality of your connected device(s). The signal quality should be at least 40 for a reliable install in the yellow zone and at least 60 for a reliable install in the green zone. The color indications are specified below. As needed, move the Gateway and repeat Site Survey in attempt to optimize signal quality.

**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. The most assured connection is in the green zone.**

Signal quality	IP	RSI cache enabled	RSI cache disabled
0-39	X	X	X
40-59	✓	✓	X
60-100	✓	✓	✓

## Effects of building materials on Gateway placement and range

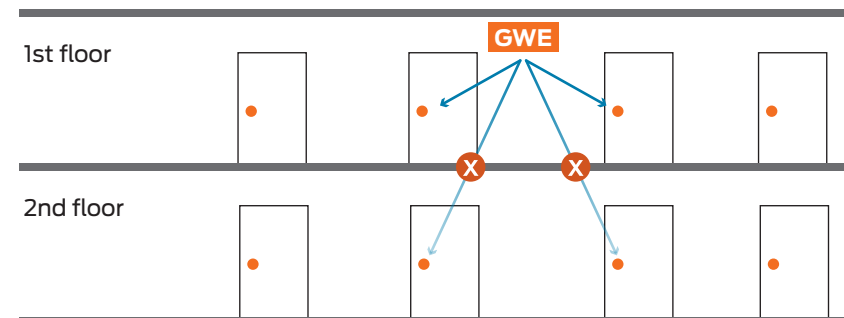
- Line of sight to the door experiences minor losses since it does not travel through wall material to reach the door.



- Performance through walls is greatly dependent on the building construction. The signal may be degraded and functionality could be severely limited. This is especially true for recess doors.



- 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.