

## ENGAGE™ Gateway placement for new construction

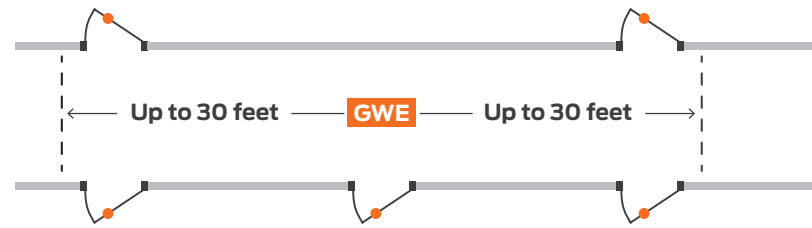
### Single hallway application

- Maximize line of sight to the locks
- Gateway (GWE) should be installed on opposite wall from the doors
- Up to 30 feet range of doors



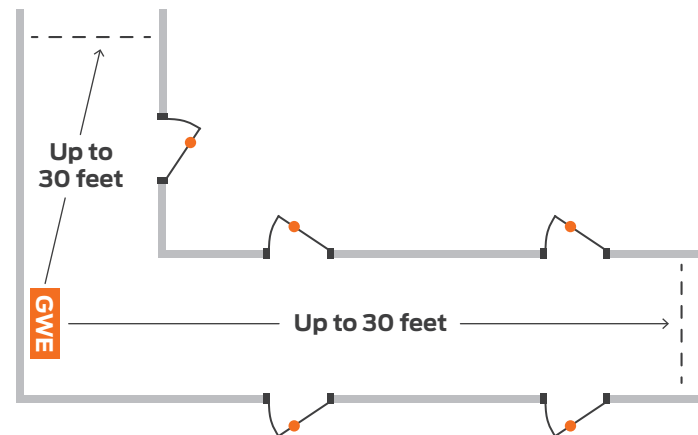
### Double hallway application

- Maximize line of sight to the locks
- Gateway (GWE) should be installed in the middle of the hallway
- Up to 30 feet range of doors



### Corner application

- Gateway (GWE) should be installed to maximize line of sight to the locks
- Up to 30 feet range of doors



When planning an install for new construction where the building is not complete and fully operational, the planning should be based on the gateway being within 30 feet line of sight of the door. An additional 10% contingency should also be planned for with the number of gateways to support full coverage at the time of install.

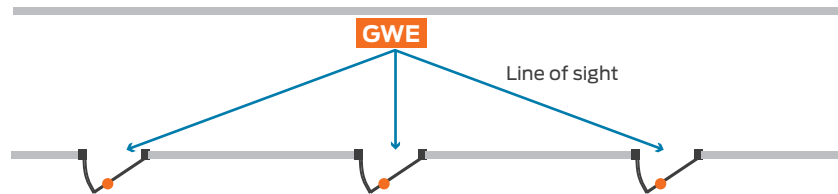
When planning, keep in mind that items can create interference that may reduce range. Items such as: Wi-Fi access points, metal furniture, (shelving and cabinets), HVAC equipment, elevators and microwave ovens all can cause interference.

### 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.

## Effects of building materials on gateway placement and range

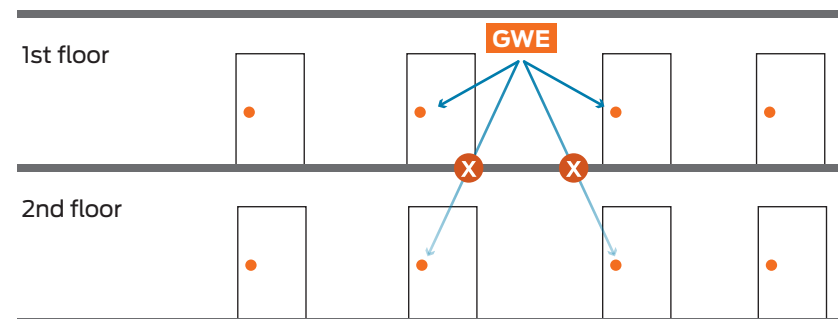
- Line of sight to the door experiences minor losses since it does not travel through wall material to reach the door



- 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.



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.