

UPDATE

guest room lock standard

Mobile Key Certified RFID Lock with Bluetooth Low Energy (BLE)

FREQUENTLY ASKED QUESTIONS

1. What are RFID and BLE?

- a. Radio Frequency Identification (RFID) lock systems require the guest to simply wave the plastic keycard in front of the lock to open the door. This is a more advanced and reliable technology compared to magnetic locks. RFID locks have a significantly lower failure rate (i.e. RFID keys do not demagnetize and become inoperable).
- b. Bluetooth Low Energy (BLE) or Bluetooth Smart technology allows the guest device to communicate with the BLE enabled lock and pass the securely encrypted key payload to the lock. BLE is an enhanced version of Bluetooth technology that has a significantly decreased rate of power consumption.

Note: Physical keys will still work; Bluetooth is simply an additional component to the lock.

2. Why is Marriott exploring BLE technology and providing guests with the opportunity to open their guestroom with their mobile device?

- a. Target Gen X&Y guests and Business travelers rank Mobile Key as #1 and #2 respectively in most desired mobile features
- b. RFID lock technology has lower initial and ongoing costs; reduced maintenance requirements; obsolescence of mag stripe locks; and comparable or greater physical security when compared to magnetic stripe technology.

3. What vendors are Approved for new guests rooms and common area lock installs?

- a. Properties installing new locks under the guestroom lock standard will be required to utilize one of the following Marriott Mobile Key Certified lock models:
 - Saflok MT RFID with BLE; or
 - Saflok RT RFID with BLE
 - Saflok Quantum 1 RFID with BLE; or
 - Saflok Quantum 3 RFID with BLE
 - Assa Abloy (Ving) Signature RFID with BLE
 - Assa Abloy (Ving) Essence RFID with BLE
 - Assa Abloy (Ving) Classic RFID with BLE
 - Assa Abloy (Ving) Flex RFID with BLE

The Lock Standard will be updated with an additional lock vendor (Onity), once final contract negotiations are complete. There are no plans to have additional lock vendors outside these three.

4. How secure is this Marriott Mobile Key BLE solution compared to current traditional lock systems?

- a. The Mobile Key solution eliminates RFID MiFare vulnerability concerns of "skimmers" reading and duplicating RFID cards as it's equipped with multi-layered encryption. Here's how it works:
 1. Mobile services cloud encrypts and securely delivers key to assigned phone
 2. Guest's smartphone receives encrypted key in a secure key vault within app
 3. When presented to lock, access app transmits encrypted key to lock through a secure communication channel
 4. Lock decrypts the digital key and unlocks door

Additionally, the app can recognize whether your phone is password protected. It will not download Mobile Key unless the phone is in fact password protected.

5. Procurement trends for RFID vs. Magnetic Locks?

- a. Supply: The volume of new RFID lock purchases are outpacing magnetic lock purchases
- b. Investment: New hardware costs for RFID vs. Magnetic are usually in close parity, with Magnetic being higher costs in some cases due to lower volumes/economies of scale
- c. Operating costs
 - i. Magnetic key card costs are generally ~20% of current RFID costs (ex. \$0.30 for RFID vs \$0.05 for Magnetic)
 - ii. RFID key are significantly more reliable compared to magnetic keys
 1. Magnetic keys are prone to being demagnetized and
 2. Can be negatively effected by door lock readers that require cleaning/on-going maintenance

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6. What rooms should be prioritized if for activation?

- a. Activate BLE capability into the most popular room types that meet guest preferences. Also, full-floor installations will allow for more streamlined property management and rooms control. Possible floors include Concierge, High Floor, etc. and room types include suites, ADA, and rooms with view/balcony.

7. Should a hotel retrofit or replace the locks to enable the BLE for Marriott Mobile Key

- a. <6 Years: BLE retrofit required
- b. 6-10 Years: BLE retrofit required; recommend lock system replacement
- c. 10+ Years: Lock system replacement required

8. What impact does mobile key have to the battery life of a lock?

- a. While the exact impact will be determined by usage once the system is fully implemented, the BLE module may impact battery life by about 10%.

9. Is the mobile key BLE solution "future proofed" to protect the investment in lock technology?

Marriott International is committed to working closely with our Mobile Key certified lock vendors to design and architect solutions that will allow for evolution in future technology.

10. What are the Customer benefits?

There are three main goals to Mobile Key:

- a. Expands Mobile Check-In
- b. Enables Rewards guests to check in easily and quickly from their mobile devices via the Mobile App
- c. Includes a Room Ready notification and digital key so guests can go straight to their rooms and skip the desk

11. Will parking gate readers/Remote Control Units (RCUs) and/or Elevator control units (ECUs) Work with Mobile key?

Yes, RCUs and ECUs will be updated with Mobile Key enabled locks, which requires installation by the parking gate vendor and elevator company.

Note: The Lock Standard will be updated with an additional lock vendor (Onity), once final contract negotiations are complete. There are no plans to have additional lock vendors outside these three.

12. What vendors should former Starwood hotels use to install locks?

- a. Hotels in the W, Aloft, and Element brands must install RFID BLE locks through Assa Abloy (Ving). All hotels outside of the W, Aloft, and Element brands are recommended to continue installing RFID BLE locks compatible with the Lock Standard, with either Saflok (Dorma Kaba) or Assa Abloy (Ving).

13. Are there any brands excluded from complying with the Lock Standard (i.e. using another vendor, installing locks not part of the Lock Standard, etc.)?

- a. No. All brands across all continents must comply with the Lock Standard. Currently, Saflok (Dorma Kaba) and Assa Abloy (Ving) are the certified lock vendors in the Lock Standard, providing RFID BLE locks. However, the Lock Standard will be updated with an additional lock vendor (Onity), once final contract negotiations are complete. There are no plans to have additional lock vendors outside these three. Hotels in the W, Aloft, and Element brands must install RFID BLE locks through Assa Abloy (Ving). All hotels outside of the W, Aloft, and Element brands are recommended to continue installing RFID BLE locks with either Saflok (Dorma Kaba) or Assa Abloy (Ving).