dormakaba

Wi-Fi requirements
for multifamily applications

Saffire EVO locks

Introduction

This document states the network requirements when connecting the dormakaba Saffire EVO™ Wi-Fi locks to the dormakaba Lyazon cloud API over a Wi-Fi® network. The essential requirements are mandatory to ensure satisfactory performance. The recommended requirements balance security, connection stability, and power consumption. If essential requirements are not met, consult a dormakaba representative to learn about support options.

Essential requirements

The following requirements **must be in place**.

- Port 443 (HTTPS) must be open on the wireless network for secure communication between the Saffire EVO locks and the cloud platform.
- The wireless network must broadcast in the 2.4GHz band.
- The wireless network must be set to communicate over the 802.11 b/g/n or an earlier standard. The Saffire EVO locks do not support 802.11 ac (Wi-Fi 5) or 802.11ax (Wi-Fi 6) standards.
- The wireless network SSID must be broadcasting (not hidden). The Saffire EVO locks do not support the use of hidden networks.
- Do not use special characters in the wireless network SSID.
- A separate and dedicated VLAN must be set up for the exclusive use of Saffire EVO locks. No other devices should be connected to this VLAN.
- Saffire EVO locks require a minimum signal strength of -70db in order to connect to the Wi-Fi network. The -70db signal strength must be present at the Wi-Fi communicator INSIDE the lock housing, not just in the surrounding area of the lock. Please reference the Lock Installation Guide for the specific lock model being used to determine the physical location of the Wi-Fi communicator.
- Obtain a Wi-Fi network heatmap to show the signal strength available at each lock locations.

Recommended requirements

The following requirements are recommended to maximize battery life:

- The wireless network access points must have a Multicast filter in place to significantly reduce/eliminate network traffic from other devices connected to any other networks capable of communicating back to the dedicated VLAN.
- If the wireless network access point being used has a background scanning feature, this must be turned off.

Support

- Technical support: 1-800-849-8324 (option 3) or mhtechnicalsupport.us@dormakaba.com

Best practices

- Use a managed wireless network rather than a bulk wireless network to provide the best coverage.
- The Property should provide the Partner with contact information for the Internet Service Provider (ISP) to either verify all essential requirements and obtain a Wi-Fi heatmap to show signal strength at lock locations.
- Tune the signal broadcast strength for the wireless network points to the appropriate level that balances sufficient coverage at each door while minimizing signal overlap/interference based on the size of the area that needs to be covered. For example, many access points and routers will sufficiently cover an 800-1400 sq ft apartment on its lowest signal strength setting.
- Wireless network access points should use static and staggered channel assignments. Automated RF adjustments will result in the fluctuating continual channel and power changes that are disruptive to performance.
- Establish a strategy to minimize channel overlap and reuse across multiple wireless network access points.
- Factor the materials used in the building construction when determining access point placement, such as: metal or steel doors, thickness and materials used in walls and line of sight.
- After configuring an access point, restart the access point to initialize the configuration.

IMPORTANT NOTICE

The placement of the Wi-Fi communicator within the Saffire EVO locks varies per lock models:

- For Deadbolt (D) and Inter-connect (I) models, the Wi-Fi communicator is located in the inside housing of the lock (inside the door).
- For Mortise (M), Cylindrical (L) and Exit trim (P) models, the Wi-Fi communicator is located in the outside housing of the lock (outside the door).
- Reference the Saffire EVO installation guide for each model used for more details.

This information must be considered when evaluating Wi-Fi signal strength for the Saffire EVO locks.