WIRELESS ELECTRONIC ACCESS CONTROL PRODUCTS

SCHLAGE **ENGAGE WIRELESS ELECTRONIC PRODUCTS**

**NOTES TO SPECIFIER**: Items in BLUE font are edit prompts and notes that **should be deleted from final section**.Specifications are for electronic access control locksets, exit device trim and handheld programming devices and as such, are only part of a complete access control installation. Copy and paste information into complete specification section as required.

2. Text in GRAY FONT is provided for reference and in locating applicable articles within the specification.
3. Typical edit prompts: Explanation

   **EDIT/NOTE** = Flag with instructions to the specifier on options/selections.

   [**Brackets**] = Options. Delete brackets and turn off **bold** to include.

   <**Carrots**> = Text Insert. Turn off **bold**, replace text and delete carrots.

**NAVIGATION SHORTCUTS**: Hover the cursor over **bold, underlined** text and follow instructions for shortcut link to specified item.

**GW**: Gateway, 3rd party EAC Software Interface Module

**SCHLAGE ENGAGE WIRELESS**
**ELECTRONIC ACCESS CONTROL PRODUCTS**

## PART 1 - GENERAL

NO INFORMATION INCLUDED IN PART 1 OF THIS TEMPLATE

## PART 2 - PRODUCTS

### 2.1 MATERIALS

A. Fasteners: Manufacturer's standard corrosion-resistant, nonstaining, nonbleeding fasteners and accessories compatible with adjacent materials.

### 2.2 ELECTRONIC ACCESS CONTROL LOCKSETS– WIRELESS BORED-TYPE PROPRIETARY – NDE CYLINDRICAL

A. Manufacturers:

1. Scheduled Manufacturer: Schlage. No substitute.

B. Product: Schlage NDE wireless bored-type electronic lockset.

1. Provide bored cylindrical locks conforming to ANSI/BHMA A156.2 Series 4000, Grade 1, non-handed, field-reversible without tools.
2. Backset: 2-3/4-inch (70 mm) standard.
3. Latchbolt Throw: 1/2-inch (13 mm) unless noted otherwise. Provide 3/4-inch (19 mm) throw for UL listing at pairs.
   Chassis: A156.115 series bored lock with lever prep for 1-3/4-inch (44 mm) doors with no modifications.

C. Requirements:

1. Provide battery powered wireless electronic products that comply with the following requirements:

   a. Listed, UL 294 - The Standard of Safety for Access Control System Units.
   b. Compliant with ANSI/BHMA A156.25 Operation and Security interior operating range of 32 degrees F (0 degrees C) to 120 degrees F(49 degrees C) for interior use only.
   c. Certified to UL10C 3 hour rating, ULC-S319, FCC Part15, ADA RoHS, ICC ANSI A117.1
   d. Compliant with ASTM E330 for door assemblies.
   e. Compliant with ICC / ANSI A117.1, NFPA 101, NFPA 80 and IBC Chapter 10.

2. Functions: Provide storeroom function.

3. Emergency Override: Provide mechanical key override; cylinders: Refer to "KEYING" article, herein.
4. Levers:

    a. Vandal Resistance: Exterior (secure side) lever rotates freely while door remains locked, preventing damage to internal locking components from vandalism by excessive force.
    b. Provide lever trim that operates independently of each other.
    c. Style: Sparta[Rhodes][Athens]
    d. Tactile Warning (Knurling): Where required by authority having jurisdiction. Provide on levers on exterior (secure side) of doors serving rooms considered to be hazardous.

5. Power Supply: 4 AA batteries

    a. Provide battery powered wireless electronic products with the ability to communicate battery status and battery voltage level by means of a mobile app at door and remotely by Partner integrated software.

6. Features:

    a. Ability to communicate unit's communication status.
    b. Visual LED indicators that indicate activation, operational systems status, system error conditions and low power conditions.
    c. Audible feedback that can be enabled or disabled.

7. Switches:

    a. Door Position Sensor – magnet integrated into strike to eliminate additional door prep
    b. Interior Cover Tamper Guard
    c. Battery Status
    d. Request to Exit

8. Credential Reader:

    a. Credential Reader Configuration: Provide credential reader modules in the following configurations, as scheduled.
        1) Proximity, Smartcard via Multi-Technology reader.

    b. Credential reader capabilities:
        1) 13.56 MHz Smart card credentials:
            a) Secure section (Multi-Technology and Smartcard): aptiQ MIFARE Classic, aptiQ MIFARE DESFire EV1
            b) 13.56 MHz Serial number only (Multi-Technology and Smartcard): DESFire CSN, HID iCLASS CSN, MIFARE CSN, MIFARE DESFire EV1 CSN
        2) 125 kHz Proximity card credentials: Schlage, XceedID, HID, GE/CASI, AWID
        3) Multi-Technology readers that read both 13.56 MHz Smart Cards and 125 kHz Prox cards on a battery powered device.

9. Operation: Provide battery powered wireless electronic products able to operate in three possible modes without change to lock hardware.

    a. Manual operation – Updates pulled direct from mobile app via BLE when in range of up to 100 feet from mobile device to wireless electronic product.
    b. Daily operation –
        1) Updates request by wireless electronic product within 24 hours over Wi-Fi communication, Wi-Fi connection required at the wireless electronic product.
        2) Can be managed by external software.

    c. Real-time operation
        1) Updates communicated in real-time via 2.4 GHz communication to gateway in less than 5 seconds.
        2) Wireless electronic products will be connected via integrated 3rd party software.
        3) Wireless electronic products to have real-time bidirectional communication between access control system and wireless electronic products in less than 5 seconds.

    d. Remote Commanding by Partner Integrated Access Control Network Software with Real–time operation: Provide battery powered wireless electronic products with wireless gateway allowing activation of remote, wireless access control products, enabling activated wireless electronic products to be locked or unlocked from a centralized location within 5 seconds or less without user interface at the device.
    e. Upon Loss of Power to Wireless Electronic Products: Provide battery powered wireless electronic products able to manage access control offline in one of three methods below that can be configured in the field at wireless electronic product by mobile app and remotely by Partner integrated software:
        1) Fail locked (secured)
        2) Fail unlocked (unsecured)
        3) Fail As-Is

    f. Upon Loss of Communication Between Wireless Electronic Products and Gateway with Internet Protocol connection to Host for Real-time operation: Provide battery powered wireless electronic products able to manage access control offline with self-contained database inside device until communication can be re-established between Wireless Electronic Product and Host via Gateway.
        1) Wireless electronic product manages access offline with up to 5,000 users and access schedules as provided by Host prior to loss of communication
        2) Wireless electronic product captures up to 2,000 audit events from time of communication loss with Host. Audits are transferred to Host upon reconnection of communication via Gateway.

    g. Upon Loss of Communication Between Wireless Electronic Products and Gateway with RS-485 connection to Access Control Panel or Host for Real-time operation: Provide battery powered wireless electronic products able to manage access control offline in one of four methods below that can be configured in the field at wireless electronic product by mobile app and remotely by Partner integrated software:
        1) Fail locked (secured)

2) Fail unlocked (unsecured)
3) Fail As-Is
4) Fail to Degraded/cache mode utilizing cache memory with following selectable options:
    a) Grant access up to the last 1,000 unique previously accepted User IDs.
    b) Grant access up to the last 1,000 unique previously accepted facility/site codes
    c) Remove from cache previously stored User IDs or facility/site codes that have not been presented to wireless electronic product within the last 5 days.

h. Provide battery powered wireless electronic products able to be remotely configured and managed with Web App, Mobile App, or Partner integrated software.

i. Provide battery powered wireless electronic products able to communicate identifying information such as firmware versions, hardware versions, serial numbers, and manufacturing dates by mobile app and remotely by Partner integrated software.

j. Wireless Transmission:
    1) Bluetooth Low Energy (BLE)
    2) Wi-Fi 802.11 B & G

k. Data Encryption

    1) Encryption: AES-256 bit Key minimum – all BLE communication is AES 256 bit encryption minimum
    2) TLS encryption –
        a) Wireless Electronic Product to Cloud – Daily Mode
        b) Gateway to Cloud - Real Time Mode

D. COMPONENTS

1. Product: Allegion Engage Mobile App.

    a. Provide Mobile App for wireless electronic access control products capable of the following minimum requirements.
        1) Add and Configure wireless electronic access control products.
        2) Send updates to wireless electronic access control products.
        3) Add new users and enroll credentials to wireless electronic access control products.
        4) View audits and alerts by wireless electronic access control product.
        5) Perform diagnostics of wireless electronic access control products.

    b. System Requirements: mobile devices, provided by others, require one of the following operating systems.
        1) IOS 7.1 or later
        2) Android 4.4, Kit Kat, or later
        3) Capable of using Allegion Engage Mobile App

    c. Mobile App capable of field configuring electronic access control devices for the following minimum attributes.

1) Credential reader formats
2) Unlock Period
3) Power failure mode
4) Audible alarm ON/OFF
5) Battery status
6) Validate hardware and software revision
7) Troubleshooting status signals
8) Door propped open delay

2. Product: Allegion Engage Web App.

a. Provide Web App for wireless electronic access control products capable of the following minimum requirements.
1) Configure wireless electronic products
2) Add new users and enroll credentials
3) View audits and alerts by door

b. System Requirements: computers or other devices, provided by others, require the one of the following browsers.
1) Internet Explorer 9.0 or later
2) Chrome 33.0 or later
3) Firefox 28.0 or later
4) Safari 7.0 or later

3. Product: Gateway

a. Provide Gateway for Real-time operation between wireless electronic access control products and Host system that meets the following requirements.
1) Supports real-time communications to wireless electronic access control product.
2) Communicates between gateway and host by RS-485, Ethernet (IP/PoE)
3) Supports up to 10 wireless electronic access control products.
4) Performs lockdown/unlock command from host to wireless electronic access control product within 5 seconds.
5) Capable of receiving remote firmware upgrades by mobile app.
6) Capable of updating the firmware on a linked wireless electronic product.
7) Capable of being powered over Ethernet (PoE) or via an external 12/24 VDC power supply.
8) Supports a remote antenna to extend reach of wireless signal to wireless electronic access control product.
9) Communicates secured data between the gateway and wireless electronic access control products.

## 2.3 FINISHES

A. Electronic Access Control Products - Provide metal finish complying with BHMA A156.18, as indicated below [and where indicated in door hardware sets].

**EDIT** – Select one, or if multiple required, defer to door hardware schedule edit option above.

1. 605 (Bright Brass)

2. 606 (Satin Brass)
3. 612 (Satin Bronze)
4. 643e(Aged Bronze)
5. 619 (Satin Nickel)
6. 625 (Bright Chrome)
7. 626 (Satin Chrome)
8. 626AM (Satin Chrome, Antimicrobial)

## PART 3 - EXECUTION

A. NO INFORMATION INCLUDED IN PART 3 OF THIS TEMPLATE

**END OF SECTION**