**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.

**AD-200-CY**: Bored, Cylindrical-Type EAC Lockset

AD-200-MS/MD: Mortise-Type EAC Lockset

AD-200-993: Exit Device Trim EAC Lockset

**HHD**: Handheld Programing Device

## SCHLAGE AD-200 ELECTRONIC ACCESS CONTROL LOCKSETS

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 – OFFLINE BORED-TYPE PROPRIETARY – AD-200-CY

- A. Manufacturer: "AD-200-CY" series, as manufactured by Schlage, an Ingersoll Rand Company. No substitutes will be accepted.
- B. Requirements: Offline electronic locksets shall comply with the following requirements.
  - 1. Type: Heavy-duty, bored cylindrical, non-handed, field-reversible.
  - 2. Backset: 2-3/4-inch (70 mm) standard, with 2-3/8-inch (60 mm), 3-3/4-inch (95 mm) and 5-inch (127 mm) backset optional.
  - 3. Latchbolt Throw: 1/2-inch (13 mm) with optional 3/4-inch (19 mm) throw available.
  - 4. Chassis: Shall accommodate standard 161 cylindrical lock prep for 1-3/4-inch (44 mm) doors standard, or 1-3/8-inch (35 mm) to 2-3/4-inch (70 mm) thick doors in 1/8-inch (3 mm) increments.
  - 5. Applicable Standards:
    - a. Listed, UL 294 The Standard of Safety for Access Control System Units.
    - b. Compliant with ANSI Standard A156.25 and A156.2 Series 4000, Grade 1 strength and operational requirements.
    - c. Compliant with ANSI/BHMA A156.25 Grade 1 Operation and Security Requirement.
    - d. Certified to UL10C, FCC Part15, Florida Building Code Standards TAS 201 large missile impact, TAS 202 and TAS 203.
    - e. Compliant with ASTM E330 for door assemblies.
    - f. Compliant with ICC / ANSI A117.1, NFPA 101, NFPA 80, and Industry Canada RSS-210.
  - 6. Lockset Functions: Provide locks with following functions, as scheduled, that are field configurable without taking the lock off the door:

**EDIT** – as required

- a. Classroom / Storeroom 70.
- b. Apartment 60.
- c. Office 50.
- d. Privacy 40.
- 7. Emergency Override: Lockset shall have the ability to utilize emergency mechanical key override with the following manufacturer's key systems in the lever:

## **EDIT** – as required for cylinders/cores.

- a. Full Size cylinders from Schlage and Sargent up to 6-pin cylinders and Falcon up to 7-pin cylinders.
- b. Full Size Interchangeable Cores from Schlage, Sargent, Corbin Russwin, Medeco, and Yale format by Medeco in up to 6 pin cylinders
- c. Small Format Interchangeable core up to 7 pin by Schlage, Falcon, BEST, Sargent, Corbin Russwin, Medeco, Yale, and others.

#### 8. Levers:

- a. Vandal Resistance: Exterior (secure side) lever designed with ability to rotate freely while door remains securely locked, preventing damage to internal lock components from vandalism by excessive force.
- b. Lever trim to be non-handed, and to operate independently of non-locking levers for extended life cycles.

#### **EDIT** – Lever style

- c. Style: Sparta[Rhodes][Athens][Tubular]
- d. Tactile Warning (Knurling): Provide on levers on exterior (secure side) of doors serving rooms considered to be hazardous by the authority having jurisdiction.
- 9. Power Supply:
  - a. Lockset powered by four AA batteries with options for eight AA batteries or a 12V or 24V DC power supply.
  - b. Lockset shall have ability to communicate battery status.
- 10. Features: Locksets shall incorporate the following features.
  - Visual tri-colored LED indicators that indicate activation, additional PIN code credential required, operational systems status, system error conditions and low power conditions.
  - b. Visual bi-colored LED indicator on interior that is capable of indicating secured/unsecured status of device to occupants on interior. **NOTE**: Optional
  - c. Audible feedback that can be enabled or disabled.
  - d. Onboard processor with memory capacity of 5,000 users, 5,000 event audit history, up to 16 time zones and up to 32 calendar events.
  - e. Tamper-Resistant Screws: Tamper torx screws on inside escutcheon for increased security.

#### 11. Adaptability:

- a. Networking Capabilities: Network adaptable without removing device from door. Lockset to have the ability to be upgraded in the field from a standalone battery powered configuration to a wireless networked configuration without being removed from the door.
- b. Field changeable Reader Modules: Lockset to have the ability to change credential reader technologies without being removed from door.
- 12. Switches: Provide locksets with the following switches, standard:
  - a. Door Position Switch
  - b. Interior Cover Tamper Guard
  - c. Mechanical Key Override
  - d. Request to Exit
  - e. Request to Enter
  - f. Lock/Unlock Status (Clutch Position).
- 13. Credential Reader: Provide credential reader modules in the following configurations, as indicated in door hardware sets. Multi-tech contactless reader shall be NFC-Compatible and read access control data from both 125 kHz and 13.56 MHz contactless smart cards. The multi-tech contactless reader shall be optimally designed for use in access control applications that require reading both 125 kHz proximity and 13.56 MHz contactless smart cards.

#### **EDIT** – Select configuration(s) as required.

- a. Credential Reader Configuration: Provide credential reader modules in the following configurations, as indicated in door hardware sets.
  - 1) Proximity, Smartcard via Multi-Technology.
  - 2) Proximity, Smartcard via Multi-Technology and keypad.
  - 3) Magnetic stripe (insertion type).
  - 4) Magnetic stripe (insertion type) and keypad.
  - 5) Magnetic stripe (swipe type).
  - 6) Magnetic stripe (swipe type) and keypad.
  - 7) Keypad.
- b. Credential reader capabilities for Partner integrated software to include, but may not be limited to:

# **EDIT** – Select capabilities, as appropriate, based upon reader configuration(s).

- 1) 13.56 MHz Smart card credentials: **NOTE**: Multi-tech reader.
  - a) Secure section (Multi-Technology and Smartcard): Schlage, XceedID ISO-X, MIFARE, ISO-X Lite, my-d, DESFire 8-EV1.
  - b) 13.56 MHz Serial number only (Multi-Technology and Smartcard): MIFARE, DESfire, iClass, Inside Pictotag, ST Micro, TI Tagit.
  - c) 125 kHz Proximity card credentials: Schlage, XceedID, HID, GE/CASI ProxLite and AWID. **NOTE**: Multi-tech reader.
- 2) Multi-Technology readers that read both 13.56 MHz Smart Cards and 125 kHz Prox cards. **NOTE**: Multi-tech reader.
- 3) Dual credential reading capabilities credential card or fob and PIN. **NOTE**: Credential reader combined with keypad.
- 4) 12 button keypad with backlit buttons.
- 5) Magnetic Card Reader:

- a) Full insertion or swipe reader capable of reading information along full length of magnetic stripe.
- b) Magnetic card triple track reader capable of reading tracks 1, 2 or 3 per configuration in field.

## 14. Operation:

- a. Lockset shall have ability to be configured at door by handheld programming device the length of time device is unlocked upon access grant.
- b. Lockset shall have the ability to communicate identifying information such as firmware versions, hardware versions, serial numbers, and manufacturing dates by handheld programming device.

# 2.3 ELECTRONIC ACCESS CONTROL LOCKSETS – OFFLINE MORTISE-TYPE PROPRIETARY – AD-200-MS/MD

- A. Manufacturer: "AD-200-MS/MD" series, as manufactured by Schlage, an Ingersoll Rand Company. No substitutes will be accepted.
- B. Requirements: Offline electronic locksets to comply with the following requirements.
  - 1. Type: Mortise, field-reversible handing.
  - 2. Backset: 2-3/4-inch (70 mm), nominal.
  - 3. Latchbolt: 3-piece, beveled, stainless steel with 3/4-inch (19 mm) throw and anti-friction latch.
  - 4. Chassis: Shall accommodate ANSI standard mortise lock prep for 1-3/4-inch (44 mm) doors standard, or 1-3/8-inch (35 mm) to 2-3/4-inch (70 mm) thick doors in 1/8-inch (3 mm) increments.
  - 5. Applicable Standards:
    - a. Listed, UL 294 The Standard of Safety for Access Control System Units.
    - b. Compliant with A156.25 and A156.13 Series 1000, Grade 1 Operational and Security.
    - c. Certified to UL10C, FCC Part15, Florida Building Code Standards TAS 201 large missile impact, TAS 202 and TAS 203.
    - d. Compliant with ASTM E330 for door assemblies.
    - e. Compliant with ICC / ANSI A117.1, NFPA 101, NFPA 80, and Industry Canada RSS-210.
  - 6. Lockset Functions: Provide locks with following functions, as scheduled, that are field configurable without taking the lock off the door:

#### **EDIT** – as required

- a. Classroom / Storeroom 70. **NOTE:** Not available in mortise deadbolt option.
- b. Apartment 60.
- c. Office 50. **NOTE:** Not available in mortise deadbolt option.
- d. Privacy 40.

#### **EDIT** – Deadbolt is an option, delete entire paragraph if not required.

7. Deadbolt Option: Provide lockset incorporating deadbolt complying with the following.

- a. Characteristics: Stainless steel, 1-inch throw, 1-5/8-inch (41 mm) high and 5/8-inch (16 mm) thick.
- b. Operation:
  - 1) Deadbolt can be thrown from interior when door is in closed position to prevent unauthorized entry.
  - 2) Deadbolt can be retracted from both interior and exterior.
  - 3) Deadbolt interconnected with latch.
- 8. Emergency Override: Lockset shall have the ability to utilize emergency mechanical key override with the following manufacturer's key systems in the lever:

# **EDIT** – as required for cylinders/cores.

- a. Full Size cylinders from Schlage and Sargent up to 6-pin cylinders and Falcon up to 7-pin cylinders.
- b. Full Size Interchangeable Cores from Schlage, Sargent, Corbin Russwin, Medeco, and Yale format by Medeco in up to 6 pin cylinders
- c. Small Format Interchangeable core up to 7 pin by Schlage, Falcon, BEST, Sargent, Corbin Russwin, Medeco, Yale, and others.

#### 9. Levers:

- a. Vandal Resistance: Exterior (secure side) lever designed with ability to rotate freely while door remains securely locked, preventing damage to internal lock components from vandalism by excessive force.
- b. Operation: Outside and inside levers operate independently of each other.

## **EDIT** - Lever

- c. Style: Sparta (17)[Rhodes (06)][Athens (07)][Tubular (03)]
- d. Tactile Warning (Knurling): Provide on levers on exterior (secure side) of doors serving rooms considered to be hazardous by the authority having jurisdiction.

# 10. Power Supply:

- a. Lockset powered by four AA batteries with options for eight AA batteries or a 12V or 24V DC power supply.
- b. Lockset shall have ability to communicate battery status.
- 11. Features: Locksets shall incorporate the following features.
  - a. Visual tri-colored LED indicators that indicate activation, additional PIN code credential required, operational systems status, system error conditions and low power conditions.
  - b. Visual bi-colored LED indicator on interior that is capable of indicating secured/unsecured status of device to occupants on interior.
  - c. Audible feedback that can be enabled or disabled.
  - d. Onboard processor with memory capacity of 5,000 users, 5,000 event audit history, up to 16 time zones and up to 32 calendar events.
  - e. Tamper-Resistant Screws: Tamper torx screws on inside escutcheon for increased security.

# 12. Adaptability:

- a. Networking Capabilities: Network adaptable without removing device from door. Lockset to have the ability to be upgraded in the field from a standalone battery powered configuration to a wireless networked configuration without being removed from the door.
- b. Field changeable Reader Modules: Lockset to have the ability to change credential reader technologies without being removed from door.
- 13. Switches: Provide locksets with the following switches, standard:
  - a. Door Position Switch
  - b. Interior Cover Tamper Guard
  - c. Mechanical Key Override
  - d. Request to Exit
  - e. Request to Enter
  - f. Lock/Unlock Status (Clutch Position).

#### 14. Credential Reader:

a. Credential Reader Configuration: Provide credential reader modules in the following configurations, as indicated in door hardware sets. Multi-tech contactless reader shall be NFC-Compatible and read access control data from both 125 kHz and 13.56 MHz contactless smart cards. The multi-tech contactless reader shall be optimally designed for use in access control applications that require reading both 125 kHz proximity and 13.56 MHz contactless smart cards.

## **EDIT** – Select configuration(s) as required.

- 1) Proximity, Smartcard via Multi-Technology.
- 2) Proximity, Smartcard via Multi-Technology and keypad.
- 3) Magnetic stripe (insertion type).
- 4) Magnetic stripe (insertion type) and keypad.
- 5) Magnetic stripe (swipe type).
- 6) Magnetic stripe (swipe type) and keypad.
- 7) Keypad.
- b. Credential reader capabilities for Partner integrated software to include, but may not be limited to:

### **EDIT** – Select capabilities, as appropriate, based upon reader configuration(s).

- 1) 13.56 MHz Smart card credentials: **NOTE**: Multi-tech reader.
  - a) Secure section (Multi-Technology and Smartcard): Schlage, XceedID ISO-X, MIFARE, ISO-X Lite, my-d, DESFire 8-EV1.
  - b) 13.56 MHz Serial number only (Multi-Technology and Smartcard): MIFARE, DESfire, iClass, Inside Pictotag, ST Micro, TI Tagit.
  - c) 125 kHz Proximity card credentials: Schlage, XceedID, HID, GE/CASI ProxLite and AWID. **NOTE**: Multi-tech reader.
- 2) Multi-Technology readers that read both 13.56 MHz Smart Cards and 125 kHz Prox cards. **NOTE**: Multi-tech reader.
- 3) Dual credential reading capabilities credential card or fob and PIN. **NOTE**: Credential reader combined with keypad.
- 4) 12 button keypad with backlit buttons.
- 5) Magnetic Card Reader:

- a) Full insertion or swipe reader capable of reading information along full length of magnetic stripe.
- b) Magnetic card triple track reader capable of reading tracks 1, 2 or 3 per configuration in field.

## 15. Operation:

- a. Lockset shall have ability to be configured at door by handheld programming device the length of time device is unlocked upon access grant.
- b. Lockset shall have the ability to communicate identifying information such as firmware versions, hardware versions, serial numbers, and manufacturing dates by handheld programming device.

# 2.4 ELECTRONIC ACCESS CONTROL – OFFLINE EXIT DEVICE TRIM PROPRIETARY – AD-200-993

- A. Manufacturer: "AD-200-993" series, as manufactured by Schlage, an Ingersoll Rand Company. No substitutes will be accepted.
- B. Requirements: Offline electronic exit device trim shall comply with the following requirements.
  - 1. Type: Exit device trim, non-handed, field-reversible.
  - 2. Exit Device Configurations: Exit device lever trim to retract latchbolt for the following exit device applications:
    - a. Rim

### **NOTE** – The following are applicable to Von Duprin 98/99/22 only.

b. Surface vertical rod

## **NOTE** – The following are applicable to Von Duprin 98/99 only.

- c. Mortise
- d. Concealed vertical rod
- 3. Exit Device Compatibility: Provide exit device trim with universal mounting plate enabling operation as follows:

# **EDIT** – as required for configurations and manufacturer series.

- a. All Von Duprin 98/99 Series exit device configurations.
- b. Von Duprin 22 Series rim and surface vertical rod configurations.
- c. Rim exit devices from [Falcon 25 Series][, Sargent 80 Series][, Corbin-Russwin 5000 Series][, Dorma 9300 Series][, Precision 21 Series][, Yale 7000 Series]

  NOTE: Precision 2100 converts to 21 w/ Precision BP21 kit.

## 4. Applicable Standards:

- a. Listed, UL 294 The Standard of Safety for Access Control System Units.
- b. Compliant with ANSI/BHMA A156.25 Grade 1 Operation and Security Requirement.

- c. Certified to UL10C, FCC Part15, Florida Building Code Standards TAS 201 large missile impact, TAS 202 and TAS 203.
- d. Compliant with ASTM E330 for door assemblies.
- e. Compliant with ICC / ANSI A117.1, NFPA 101, NFPA 80, and Industry Canada RSS-210.
- 5. Exit Device Trim Functions: Provide locks with following functions, as scheduled, that are field configurable without taking the lock off the door:
  - a. Classroom / Storeroom.
- 6. Emergency Override: Lockset shall have the ability to utilize emergency mechanical key override with the following manufacturer's key systems in the lever:

# **EDIT** – as required for cylinders/cores.

- a. Full Size cylinders from Schlage and Sargent up to 6-pin cylinders and Falcon up to 7-pin cylinders.
- b. Full Size Interchangeable Cores from Schlage, Sargent, Corbin Russwin, Medeco, and Yale format by Medeco in up to 6 pin cylinders
- c. Small Format Interchangeable core up to 7 pin by Schlage, Falcon, BEST, Sargent, Corbin Russwin, Medeco, Yale, and others.

#### 7. Levers:

- a. Vandal Resistance: Exterior (secure side) lever designed with ability to rotate freely while door remains securely locked, preventing damage to internal lock components from vandalism by excessive force.
- b. Style: Sparta (17)[Rhodes (06)][Athens (07)][Tubular (03)]
- c. Tactile Warning (Knurling): Provide on levers on exterior (secure side) of doors serving rooms considered to be hazardous by the authority having jurisdiction.

### 8. Power Supply:

- a. Exit device trim powered by four AA batteries with options for eight AA batteries or a 12V or 24V DC power supply.
- b. Exit device trim shall have ability to communicate battery status.
- 9. Features: Exit device trim shall incorporate the following features.
  - a. Visual tri-colored LED indicators that indicate activation, additional PIN code credential required, operational systems status, system error conditions and low power conditions.
  - b. Visual bi-colored LED indicator on interior that is capable of indicating secured/unsecured status of device to occupants on interior. **NOTE**: Optional
  - c. Audible feedback that can be enabled or disabled.
  - d. Onboard processor with memory capacity of 5,000 users, 5,000 event audit history, up to 16 time zones and up to 32 calendar events.
  - e. Tamper-Resistant Screws: Tamper torx screws on inside escutcheon for increased security.

#### 10. Adaptability:

- a. Networking Capabilities: Network adaptable without removing device from door. Exit device trim to have the ability to be upgraded in the field from a standalone battery powered configuration to a wireless networked configuration without being removed from the door.
- b. Field Changeable Reader Modules: Exit device trim to have the ability to change credential reader technologies without being removed from door.
- 11. Switches: Provide exit device trim with the following switches, standard:
  - a. Door Position Switch
  - b. Interior Cover Tamper Guard
  - c. Mechanical Key Override
  - d. Request to Exit
  - e. Request to Enter
  - f. Lock/Unlock Status (Clutch Position).

#### 12. Credential Reader:

a. Credential Reader Configuration: Provide credential reader modules in the following configurations, as indicated in door hardware sets. Multi-tech contactless reader shall be NFC-Compatible and read access control data from both 125 kHz and 13.56 MHz contactless smart cards. The multi-tech contactless reader shall be optimally designed for use in access control applications that require reading both 125 kHz proximity and 13.56 MHz contactless smart cards.

## **EDIT** – Select configuration(s) as required.

- 1) Proximity, Smartcard via Multi-Technology.
- 2) Proximity, Smartcard via Multi-Technology and keypad.
- 3) Magnetic stripe (insertion type).
- 4) Magnetic stripe (insertion type) and keypad.
- 5) Magnetic stripe (swipe type).
- 6) Magnetic stripe (swipe type) and keypad.
- 7) Keypad.
- b. Credential reader capabilities for Partner integrated software to include, but may not be limited to:

### **EDIT** – Select capabilities, as appropriate, based upon reader configuration(s).

- 1) 13.56 MHz Smart card credentials: **NOTE**: Multi-tech reader.
  - a) Secure section (Multi-Technology and Smartcard): Schlage, XceedID ISO-X, MIFARE, ISO-X Lite, my-d, DESFire 8-EV1.
  - b) 13.56 MHz Serial number only (Multi-Technology and Smartcard): MIFARE, DESfire, iClass, Inside Pictotag, ST Micro, TI Tagit.
  - c) 125 kHz Proximity card credentials: Schlage, XceedID, HID, GE/CASI ProxLite and AWID. **NOTE**: Multi-tech reader.
- 2) Multi-Technology readers that read both 13.56 MHz Smart Cards and 125 kHz Prox cards. **NOTE**: Multi-tech reader.
- 3) Dual credential reading capabilities credential card or fob and PIN. **NOTE**: Credential reader combined with keypad.
- 4) 12 button keypad with backlit buttons.
- 5) Magnetic Card Reader:

- a) Full insertion or swipe reader capable of reading information along full length of magnetic stripe.
- b) Magnetic card triple track reader capable of reading tracks 1, 2 or 3 per configuration in field.

## 13. Operation:

- a. Exit device trim shall have ability to be configured at door by handheld programming device the length of time device is unlocked upon access grant.
- b. Exit device trim shall have the ability to communicate identifying information such as firmware versions, hardware versions, serial numbers, and manufacturing dates by handheld programming device.

#### 2.5 COMPONENTS

- A. Handheld Programming Device for Electronic Access Control Locksets[ and Exit Device Trim]: PROPRIETARY
  - 1. Manufacturer: "HHD" series with "Schlage Utility Software," as manufactured by Schlage, an Ingersoll Rand Company. No substitutes will be accepted.
  - 2. Requirements: Handheld programming device shall comply with the following requirements.
    - a. Capable of initializing lock and accessories using preloaded Schlage Utility Software.
    - b. Used to field configure electronic access control devices for the following attributes:
      - 1) Credential reader formats
      - 2) Lock function
      - 3) Unlock period
      - 4) Power failure mode
      - 5) Audible alarm ON/OFF
      - 6) Battery status
      - 7) Validate hardware and software revision
      - 8) Troubleshooting status signals
      - 9) Special access delay (ADA)
      - 10) Delayed egress (release delay)
      - 11) Door propped open delay
      - 12) Lockdown cancel delay time out between credential and PIN
      - 13) Number of key presses without valid PIN before lockout
      - 14) Current date/time
      - 15) Enable/disable manual programming
    - c. Utilized to download firmware updates and door files to device.
    - d. Utilized to download audit files from device.
    - e. Features/Components:
      - 1) 3.5-inch (89 mm) LCD display minimum
      - 2) Touch Screen/Keypad Backlit
      - 3) 32-bit processor minimum
      - 4) Memory: 128MB RAM/256 MB ROM
      - 5) Battery: Rechargeable Li-ion

### 2.6 FINISHES

A. Electronic Access Control Locksets[ and Exit Device Trim]: 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

NO INFORMATION INCLUDED IN PART 3 OF THIS TEMPLATE

**END OF SECTION**