1. **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.
3. Text in GRAY FONT is provided for reference and in locating applicable articles within the specification.
4. 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-250-CY: Bored, Cylindrical-Type EAC Lockset

AD-250-MS/MD: Mortise-Type EAC Lockset

AD-250-993: Exit Device Trim EAC Lockset

HHD: Handheld Programing Device

SCHLAGE AD-250
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-250-CY

A. Manufacturer: "AD-250-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.
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.

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 10,000 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:

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) Magnetic stripe (insertion type).
   2) Magnetic stripe (insertion type) and keypad.
   3) Magnetic stripe (swipe type).
   4) Magnetic stripe (swipe type) and 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) Magnetic card triple track reader capable of reading tracks 1, 2 or 3 per configuration in field. **OPTION-1**
   2) Dual credential reader with Keypad plus Magnetic card triple track reader capable of reading tracks 1, 2 or 3 per configuration in field. **OPTION-2**
      a) Reading capabilities of credential card and PIN
      b) [**Full insertion**][**Swipe**] reader capable of reading information along full length of magnetic stripe.
      c) 12 button keypad with backlit buttons.

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-250-MS/MD

A. Manufacturer: "AD-250-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.
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. **NOTE**: Optional
c. Audible feedback that can be enabled or disabled.
d. Onboard processor with memory capacity of 10,000 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:

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) Magnetic stripe (insertion type).
    2) Magnetic stripe (insertion type) and keypad.

3) Magnetic stripe (swipe type).
4) Magnetic stripe (swipe type) and 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) Magnetic card triple track reader capable of reading tracks 1, 2 or 3 per configuration in field. **OPTION-1**
2) Dual credential reader with Keypad plus Magnetic card triple track reader capable of reading tracks 1, 2 or 3 per configuration in field. **OPTION-2**
   a) Reading capabilities of credential card and PIN
   b) [**Full insertion**][**Swipe**] reader capable of reading information along full length of magnetic stripe.
   c) 12 button keypad with backlit buttons.

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 OFFLINE ELECTRONIC ACCESS CONTROL – EXIT DEVICE TRIM PROPRIETARY – AD-250-993

A. Manufacturer: "AD-250-993" 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 exit trim devices with following functions, as scheduled, that are field configurable without taking the trim 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 exit device trim 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 10,000 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:

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) Magnetic stripe (insertion type).
2) Magnetic stripe (insertion type) and keypad.
3) Magnetic stripe (swipe type).
4) Magnetic stripe (swipe type) and 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) Magnetic card triple track reader capable of reading tracks 1, 2 or 3 per configuration in field. **OPTION-1**
2) Dual credential reader with Keypad plus Magnetic card triple track reader capable of reading tracks 1, 2 or 3 per configuration in field. **OPTION-2**
a) Reading capabilities of credential card and PIN
b) [**Full insertion**][**Swipe**] reader capable of reading information along full length of magnetic stripe.
c) 12 button keypad with backlit buttons.

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

A. NO INFORMATION INCLUDED IN PART 3 OF THIS TEMPLATE

END OF SECTION