

## Appendix A2: Security Door Opening Schedule

### General Notes

1. The hardware devices identified below indicate those generally required to meet the operational and security requirements. They are not all inclusive. Certain devices may not be applicable to every opening. For example, flush bolts are not required for single doors and neither continuous hinges nor electric strikes would be used on frameless doors.
2. The hardware devices and performance criteria shown below must be coordinated with the Project Manager and the facility. Refer to PG-18-1, Master Specifications, PG-18-14, Room Finishes, Door, and Hardware Schedules, and NCA Master Construction Specifications for additional information and coordination items. When there is a discrepancy between the devices identified below and those identified in the Master Specifications (PG-18-1 and NCA) or PG-18-14, the devices or combination of devices that provide the greatest level of security shall be provided. That may require specifying devices from the hardware sets in the Master Specifications in addition to devices identified below.
3. Doors shall have protection plates or astragals to prevent manipulation of strikes from the public side of an opening.
4. Transfer hinges shall be provided where power must be provided at lock.
5. When optional operational features are provided, refer to Security Door Opening Matrix for requirements by facility classification.
6. Items required for functional purposes that are not related to door operation are not included in the descriptions below. For example, an intercom may be required at a guard booth so that a visitor can communicate with the guard, but it is not required for door operation.

### SDO 101

#### Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge or Pivots
- Door Contact
- Electric Strike
- Exit Device
- Flush Bolts
- Intercom
- Magnetic Lock



- Mortise Lock

Normal Daytime Operation:

- Free operation from either side

After Hours Operation:

- Exterior lever inoperative
- Card reader on exterior releases electric strike or magnetic lock
- Remote release releases electric strike or magnetic lock
- Free operation from interior
- Door contact alarmed to central monitoring

## SDO 102

Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact
- Electric Strike
- Exit Device
- Flush Bolts
- Hold-open Alarm
- Intercom
- Magnetic Lock
- Mortise Lock

Operation at All Times:

- Outside lever always rigid
- Card reader releases electric strike
- Free operation from interior at all times

## SDO 103

Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge or Pivots
- Deadbolt
- Door Contact
- Electric Strike
- Exit Device
- Flush Bolts
- Hold-open Alarm
- Magnetic Lock
- Mortise Lock



- Pull

Normal Daytime Operation:

- Free operation from either side

After Hours Operation:

- Exterior lever inoperative
- Card reader on exterior releases electric strike or magnetic lock
- Delayed action and alarmed operation from interior when door is a means of egress; card reader for egress when door is not a required means of egress
- Door contact alarmed to central monitoring

## SDO 104

Hardware Devices:

- Closer
- Continuous Hinge or Pivots
- Door Contact
- Exit Device
- Flush Bolts
- Hold-open Alarm
- Mortise Lock

Operation at All Times:

- Operation of exit device from inside retracts bolt and sounds local alarm and central monitoring station
- No operation from exterior

## SDO 105

Hardware Devices:

- Power Operator
- Card Reader
- Continuous Hinge
- Intercom
- Magnetic Lock
- Intercom

Normal Daytime Operation:

- Power operated doors (swinging or horizontal sliding)
- Door activated by motion sensor on interior and exterior

After Hours Operation:

- Power operated doors (swinging or horizontal sliding)
- Door activated from exterior by card reader or remote release
- Door activated by motion sensor on interior



## SDO 106

### Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge or Pivots
- Door Contact
- Electric Strike
- Exit Device
- Flush Bolts
- Intercom
- Magnetic Lock
- Mortise Lock

### Normal Daytime Operation:

- Free operation at all times

### After Hours Operation:

- Exterior lever inoperative
- Card reader on exterior releases electric strike or magnetic lock
- Remote release releases electric strike or magnetic lock
- Free operation from interior
- Door contact alarmed to nurses' station

## SDO 107

### Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact
- Electric Strike
- Flush Bolts
- Hold-open Alarm
- Mortise Lock

### Operation at All Times:

- Outside levers always rigid
- Card reader releases electric strike or key in outside lever retracts latchbolt
- Inside lever retracts latchbolt at all times
- Hold-open alarm annunciates at central monitoring station

## SDO 108

### Hardware Devices:

- Card Reader
- Door Contact



- Intercom
- Key cylinder for keyswitch

Operation at All Times:

- Card reader activates motorized door operator or provides access to manual operator

## SDO 109

Hardware Devices:

- Continuous Hinge
- Door Contact
- Flush Bolts

Operation at All Times:

- Outside lever always rigid
- Inside lever retracts latchbolt at all times
- Door contact alarmed to central monitoring station

## SDO 110

Hardware Devices:

- Closer
- Continuous Hinge
- Knox Box®
- Mortise Lock

Operation at All Times:

- Outside lever always rigid
- Key in Knox Box® retracts latchbolt from exterior
- Inside lever retracts latchbolt at all times

## SDO 111

Hardware Devices:

- Closer
- Continuous Hinge
- Door Contact
- Flush Bolts
- Mortise Lock

Operation at All Times:

- Outside lever always rigid
- Key retracts latchbolt from exterior
- Inside lever retracts latchbolt at all times
- Door monitor alarmed at central monitoring station



## SDO 112

### Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge or Pivots
- Door Contact
- Electric Strike
- Exit Device
- Flush Bolts
- Hold-open Alarm
- Intercom
- Magnetic Lock
- Mortise Lock

### Normal Daytime Operation:

- Outside lever always rigid
- Card reader or remote switch release electric strike or magnetic lock
- Inside lever releases latchbolt; card reader, remote switch or fire alarm release magnetic lock
- Door alarmed to central monitoring station

## SDO 113

### Hardware Devices:

- Closer
- Continuous Hinge
- Flush Bolts
- Mortise Lock

### Operation at All Times:

- Outside lever always rigid
- Key retracts latchbolt from exterior
- Inside lever retracts latchbolt at all times

## SDO 114

### Hardware Devices:

- Closer
- Continuous Hinge
- Mortise Lock

### Operation at All Times:

- Outside lever rigid when locked by mechanical device
- Outside lever free when unlocked by mechanical device
- Inside lever retracts latchbolt at all times



**SDO 115**

## Hardware Devices:

- Hinges included in roof hatch assembly
- Hasp and padlock
- Door Contact

## Operation at All Times:

- Hatch locked from interior
- Hatch monitor alarmed at central monitoring station

**SDO 116**

## Hardware Devices:

- Closer
- Continuous Hinge
- Door Contact
- Flush Bolts
- Mortise Lock

## Operation at All Times:

- Outside lever always free
- Key retracts latchbolt from interior
- Outside lever retracts latchbolt at all times
- Door monitor alarmed at central monitoring station

**SDO 117**

## Hardware Devices:

- Manual (push button) on interior

## Operation at All Times:

- Push button activate motorized door operator or provides access to manual operator

**SDO 118**

## Hardware Devices:

- Power Operator
- Continuous Hinge or Pivots
- Magnetic Lock

## Normal Daytime Operation:

- Power operated doors (swinging or horizontal sliding)
- Door activated by motion sensor on interior and exterior

## After Hours Operation:

- Power operated doors (swinging or horizontal sliding)



- Door activated from exterior by card reader or remote release
- Door activated by motion sensor on interior

## SDO 119

### Hardware Devices:

- Card reader
- Closer
- Continuous hinge
- Door contact
- Electric strike
- Magnetic lock and Storeroom function mortise lock
- Flush bolts
- Hold open arm
- Intercom

### Operation at All Times:

- Outside and inside levers rigid at all times
- Card reader with biometric or PIN identification retracts electric strike and releases magnetic lock
- Door monitor alarmed to central monitoring station

## SDO 201

### Hardware Devices:

- Closer
- Continuous Hinge or Pivots
- Exit Device
- Flush Bolts
- Mortise Lock
- Normal Daytime Operation:
- Outside (lobby side) lever set for free operation
- Free passage from interior
- After Hours Operation:
- Outside (lobby side) lever rigid
- Free passage from interior

## SDO 202

### Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact





- Electric Strike
- Exit Device
- Flush Bolts
- Hold-open Alarm
- Intercom
- Magnetic Lock
- Mortise Lock

Operation at All Times:

- Outside lever always rigid
- Card reader or remote switch release electric strike or magnetic lock
- Card reader and fire alarm release magnetic lock from interior
- Inside lever retracts latchbolt at all times

## SDO 203

Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact
- Electric Strike
- Flush Bolts
- Hold-open Alarm
- Mortise Lock

Operation at All Times:

- Outside lever always rigid
- Outside card reader releases electric strike or outside combination lock retracts latchbolt
- Inside lever retracts latchbolt at all times
- Door alarmed to central monitoring station

## SDO 204

Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact
- Electric Strike
- Mortise Lock

Operation at All Times:

- Outside lever always rigid



- Outside card reader releases electric strike or outside combination lock retracts latchbolt
- Inside lever retracts latchbolt at all times
- Door alarmed to central monitoring station

## SDO 205

### Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Deadbolt
- Door Contact
- Electric Strike
- Mortise Lock

### Operation at All Times:

- Outside and inside levers always rigid
- Card reader releases electric strike
- Door monitor alarmed to central monitoring station

## SDO 206

### Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact
- Electric Strike
- Mortise Lock

### Operation at All Times:

- Outside lever always rigid
- Outside card reader releases electric strike or outside combination lock retracts latchbolt
- Inside lever retracts latchbolt at all times
- Door monitor alarmed to central monitoring station

## SDO 207

### Hardware Devices:

- Closer
- Continuous Hinge or Pivots
- Door Contact
- Exit Device



- Flush Bolts
  - Mortise Lock
- Normal Daytime Operation:
- Free operation from either side
- After Hours Operation:
- Outside lever always rigid
  - Exit device releases latchbolts from interior
  - Door monitor alarmed to central monitoring station

## SDO 208

- Hardware Devices:
- Closer
  - Continuous Hinge
  - Door Contact
  - Flush Bolts
  - Mortise Lock
- Operation at All Times:
- Outside lever always rigid
  - Inside lever retracts latchbolt at all times
  - Door monitor alarmed to central monitoring station

## SDO 209

- Hardware Devices:
- Card Reader
  - Closer
  - Continuous Hinge
  - Door Contact
  - Electric Strike
  - Mortise Lock
- Normal Daytime Operation:
- Outside lever always rigid
  - Card reader releases electric strike
  - Inside lever retracts latchbolt
- After Hours Operation:
- Outside lever always rigid
  - Card reader releases electric strike from outside
  - Inside lever retracts latchbolt
  - Door monitor alarmed to central monitoring station



## SDO 210

### Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact
- Electric Strike
- Flush Bolts
- Hold-open Alarm
- Intercom
- Magnetic Lock and Storeroom Function Mortise Lock\*

\* Two locks required by Directive 1047

### Operation at All Times:

- Outside and inside levers rigid at all times
- Card reader with biometric or PIN identification retracts electric strike from either side
- Door monitor alarmed to central monitoring station

## SDO 211

### Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact
- Electric Strike
- Hold-open Alarm
- Intercom
- Mortise Lock

### Operation at All Times:

- Outside and inside levers rigid at all times
- Card reader with biometric or PIN identification retracts electric strike from either side
- Door monitor alarmed to central monitoring station

## SDO 212

### Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact
- Electric Strike



- Hold-open Alarm
- Mortise Lock

Operation at All Times:

- Outside and inside levers rigid at all times
- Card reader or remote release retracts electric strike from either side
- Door monitor alarmed to pharmacy and central monitoring station

## SDO 213

Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact
- Electric Strike
- Flush Bolts
- Intercom
- Mortise Lock

Operation at All Times:

- Outside lever always rigid
- Card reader or remote switch releases electric strike
- Inside lever retracts latchbolt at all times
- Door monitor alarmed to central monitoring station

## SDO 214

Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact
- Flush Bolts
- Mortise Lock

Operation at All Times:

- Outside lever always rigid
- Latchbolt released from outside by combination lock
- Inside lever retracts latchbolt at all times

## SDO 215

Hardware Devices:

- Closer
- Continuous Hinge



- Door Contact
  - Flush Bolts
  - Mortise Lock
- Operation at All Times:
- Outside lever always rigid
  - Latchbolt released from outside by combination lock
  - Inside lever retracts latchbolt at all times

## SDO 216

Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact
- Electric Strike
- Flush Bolts
- Intercom
- Mortise Lock

Operation at All Times:

- Outside lever always rigid
- Card reader with biometric or PIN identification retracts electric strike
- Inside lever retracts latchbolt at all times
- Door monitor alarmed to central monitoring station

## SDO 217

Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact
- Electric Strike
- Flush Bolts
- Mortise Lock

Operation at All Times:

- Outside lever always rigid
- Card reader with biometric or PIN identification retracts electric strike
- Inside lever retracts latchbolt at all times
- Door monitor alarmed to central monitoring station



**SDO 218**

## Hardware Devices:

- Continuous Hinge
- Flush Bolts
- Mortise Lock

## Operation at All Times:

- Outside lever always rigid
- Latchbolt released by key outside and lever inside

**SDO 219**

## Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact
- Electric Strike
- Flush Bolts
- Mortise Lock

## Operation at All Times:

- Outside lever rigid at all times
- Card reader releases electric strike from outside
- Inside lever retracts latchbolt at all times
- Door monitor alarmed to central monitoring station

**SDO 220**

## Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact
- Electric Strike
- Mortise Lock

## Operation at All Times:

- Outside lever rigid at all times
- Card reader releases electric strike from outside
- Inside lever rigid at all times
- Card reader releases electric strike from inside
- Door monitor alarmed to central monitoring station



**SDO 221**

## Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Deadbolt
- Door Contact
- Electric Strike
- Magnetic Lock
- Mortise Lock

## Operation at All Times:

- Outside lever rigid at all times
- Card reader with biometric or PIN identification releases electric strike and magnetic lock from outside
- Inside lever rigid at all times
- Card reader with biometric or PIN identification releases electric strike and magnetic lock from inside
- Door monitor alarmed to central monitoring station

**SDO 222**

## Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact
- Electric Strike
- Flush Bolts
- Intercom
- Magnetic Lock
- Exit Device

## Operation at All Times:

- Outside lever always rigid
- Card reader with biometric or PIN identification releases electric strike or magnetic lock
- Inside lever retracts latchbolt at all times or request to exit button releases magnetic lock
- Door monitor alarmed to central monitoring station

**SDO 223**

## Hardware Devices:

- Card Reader





- Closer
- Continuous Hinge
- Door Contact
- Electric Strike
- Flush Bolts
- Mortise Lock

Operation at All Times:

- Outside and inside levers rigid at all times
- Card reader with biometric or PIN identification releases electric strike on either side
- Door monitor alarmed to central monitoring station

## SDO 224

Hardware Devices:

- Closer
- Continuous Hinge
- Mortise Lock

Operation at All Times:

- Outside lever always rigid
- Key in outside lever retracts latchbolt
- Inside lever retracts latchbolt at all times
- Door monitor alarmed to central monitoring station

## SDO 225

Hardware Devices:

- Card Reader
- Door Contact

Operation at All Times:

- Card reader permits elevator door to open on restricted access floors
- Door monitor alarmed to central monitoring station

## SDO 226

Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact
- Electric Strike
- Exit Device

Operation at All Times:

- Outside lever (stair side) always rigid



- Card reader releases electric strike
- Delayed action and alarmed operation from inside (occupied side) when door is a means of egress; card reader for egress when door is not a required means of egress
- Door monitor alarmed to central monitoring station

## SDO 227

### Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact
- Electric Strike
- Exit Device
- Flush Bolts
- Intercom
- Mortise Lock

### Operation at All Times:

- Outside lever always rigid
- Card reader or remote switch releases electric strike
- Inside lever retracts latchbolt at all times
- Door monitor alarmed to central monitoring station

## SDO 228

### Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact
- Electric Strike
- Flush Bolts
- Mortise Lock

### Operation at All Times:

- Outside lever always rigid
- Card reader releases electric strike or combination lock retracts latchbolt
- Inside lever retracts latchbolt at all times
- Door monitor alarmed to central monitoring station

## SDO 229

### Hardware Devices:

- Card Reader



- Closer
- Continuous Hinge
- Door Contact
- Electric Strike
- Flush Bolts
- Intercom
- Mortise Lock

Operation at All Times:

- Outside lever always rigid
- Card reader or remote switch releases electric strike from outside
- Inside lever always rigid
- Card reader releases electric strike from inside
- Door monitor alarmed to central monitoring station

## SDO 230

Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact
- Electric Strike
- Flush Bolts
- Intercom
- Magnetic Lock
- Mortise Lock

Operation at All Times:

- Outside lever always rigid
- Card reader or remote switch releases electric strike or magnetic lock from outside
- Inside lever always rigid
- Card reader or fire alarm releases electric strike or magnetic lock from inside
- Door monitor alarmed to central monitoring station

## SDO 231

Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact
- Hold-open Alarm
- Intercom
- Magnetic Lock



- Mortise Lock
- Operation at All Times:
- Outside and inside levers always free (passage function for latching requirements only)
  - Card reader or remote switch at nurses' station releases magnetic lock
  - Fire alarm releases magnetic lock
  - Door monitor alarmed at nurses' station

## SDO 232

### Hardware Devices:

- Closer
- Continuous Hinge
- Door Contact
- Exit Device
- Magnetic Lock

### Operation at All Times:

- No hardware on outside
- Magnetic lock released by remote switch at nurses' station or by fire alarm
- Door monitor alarmed at nurses' station

## SDO 233

### Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact
- Electric Strike
- Flush Bolts
- Intercom
- Magnetic Lock
- Mortise Lock

### Operation at All Times:

- Outside lever rigid at all times
- Card reader with biometric or PIN identification or remote switch release electric strike and magnetic lock from outside
- Card reader, remote release, or request to exit button release electric strike and magnetic lock from inside
- Door monitor alarmed to COOP and central monitoring station



**SDO 234**

## Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Door Contact
- Electric Strike
- Flush Bolts
- Mortise Lock

## Operation at All Times:

- Outside lever rigid at all times
- Card reader on outside releases electric strike or combination lock on outside retracts latchbolt
- Inside lever retracts latchbolt at all times
- Door monitor alarmed at central monitoring station

**SDO 235**

## Hardware Devices:

- Card Reader
- Closer
- Continuous Hinge
- Electric Strike
- Flush Bolts
- Mortise Lock

## Operation at All Times:

- Outside lever always rigid
- Card reader releases electric strike
- Inside lever retracts latchbolt at all times

**SDO 236**

## Hardware Devices:

- Card Reader
- Continuous Hinge
- Flush Bolts
- Mortise Lock

## Operation at All Times:

- Outside lever always rigid
- Latchbolt released by key outside and lever inside

