

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.
3. When optional operational features are provided, refer to Security Door Opening Matrix for requirements by facility classification.
4. 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

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

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

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 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
- 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 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

- Closer
- Continuous Hinge
- 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
- Mortise Lock

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