

FACILITIES BUILDING STANDARDS

Section 08 0000 Openings

Last update: 10/10/2020

Doors and Door Hardware

1. Reference Standards Section 28 0000 Electronic Safety and Security for additional access control hardware information.
2. Owner shall provide keying schedule to coordinate with architect and CM/contractor.
3. Acceptable door hardware manufacturers (and finishes) include the following:
 - a. Hinges: Ives, Stanley, Lawrence (exterior 630; interior 652), Hagar
 - b. Flush bolts: Ives, Rockwood
 - c. Coordinators: Ives, Rockwood
 - d. Locks: Schlage L9000 (626)
 - e. Exit Devices: Von Duprin 99 or 33 Series (626)
 - f. Door Closers: LCN 4010/4110 (689)
 - g. Protective Plates: Ives, Rockwood (630)
 - h. Door Trim: Ives, Rockwood (630)
 - i. Overhead Holders: Glynn-Johnson, ABH, Besam
 - j. Thresholds and Weather-stripping: Zero, Reese (AL)
 - k. Silencers: Ives, Rockwood
 - l. Electromechanical Closers-Holders: LCN, Besam
 - m. Magnetic Holders: LCN
 - n. Door Operators: LCN 4600
 - o. Electromagnetic Locks: SCE, Besam
 - p. Access Control Locks: SCE AD200, AD300, AD400
 - q. Keypad Locks: SCE CO100 Series
 - r. Pivots (626): Ives, Stanley
4. BOD for exterior and interior automatic doors is Besam. Horton is alternate. Stanley is not acceptable.
5. Plastic-clad doors shall be considered for high traffic areas (corridors, storage rooms, EVS closets, etc), list as add alternate. **Preferred for Med Surg patient rooms and OR's.**
6. Access doors in ORs or other "clean" rooms shall be stainless steel.
7. Flush bolts shall have lever at no higher than 6'AFF. Automatic flush bolts shall be provided at pairs of doors.
8. Door coordinators shall mount flat to the stop and extend through the full width of the frame with use of a filler bar. A face-mounted to the frame coordinator is not permitted. Door closers shall be fully hydraulic, rack and pinion action with high strength cast iron cylinders and one-piece forged steel pistons (aluminum not permitted). Hydraulic regulation controlled by tamper proof non-critical valves with separate adjustments for backcheck, latch and closing speed. Door closers shall not have pressure relief valves (PRV's), these valves are not acceptable. Arms are to be heavy duty, constructed of forged steel, stamped steel is not acceptable. Provide adjustable units for door opening force and delayed action closing.
9. Armor, kick and mop plates shall have beveled edges and 0.05" thickness. The width shall be 2" less the door width on push side for single doors, 1" less the door width on the pull side, and push side of pairs of doors.
10. Overhead holders shall be non-handed, field reversible and have adjustable holding force. Overhead stops shall be provided wherever wall stops will not stop the door.
11. For thresholds and weather-stripping, use vinyl or silicone inserts in face of stop at exterior doors. Verify threshold requirements with drawings and sill conditions for proper application. For exterior doors provide

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a threshold anchor channel assembly that sets firmly into the concrete and secures the threshold. Provide an abrasive, skid and corrosion resistant threshold at all exterior locations. For weather-strip provide at the jambs and head of the frame. On pairs of doors provide an overlapping astragal with a seal running the full height of the door or two split astragals (rubber) at the meeting stile to seal doors that require independent operation. (Note: if required by code.)

12. Silencers shall be provided at all interior openings; 3ea at single doors and 2ea at paired openings.
13. Electromagnetic single closers-holders shall be selective through a range of 85deg to 110deg. Closer to be hydraulic with full rack and pinion enclosed in a case aluminum alloy shell with two non-critical valves to independently regulate sweep speed and latch speed with an adjustable backcheck cushioning valve. Laster units shall have integral smoke detector with dual ionization chamber with latching alarm and reset switch. Support units shall be tied into a UL-listed fire alarm system. All units shall be 24 VDC.
14. Provide low voltage (24VDC) magnetic holders that have a holding power of 35 lbs and release the door upon activation of the buildings fire alarm system. Provide floor or wall units as required for proper installation.
15. Automatic doors shall primarily have low-energy operators. Door closing force shall be adjustable to insure adequate closing control. Door closing speed shall be controlled by independent hydraulic adjustment valves in the sweep and the latch range of the closing cycle. Control to have an adjustable backcheck feature to cushion the door opening speed. Door control unit shall provide conventional door closer opening and closing forces unless the power operator motor is activated by a wall or frame switch. When the motor is energized the door shall be power opened at both a speed and at a force that are adjustable. The door shall open to the full open position and remain in momentary hold open for an adjustable 0 to 30 seconds. At any time during the hold open time cycle or while the door is closing that a switch is activated the door shall return to full open position and restart the cycle.
16. Electromagnetic locks shall be provided with built-in surge protection to protect circuitry against spiking and power surge. Armature plate is to be self-aligning. Units shall be provided with 25VDC and less than 250mA. Provide with regulated power supplies and battery backup if not tied into a UPS system. Furnish will all required mounting brackets.
17. Access control locks shall be modular in design to allow for customization and easily upgraded without removing the lock from the door. Options shall include choices for credential readers, chassis type, network configurations, locking functions, lever styles and finishes. Lock shall include all the hardware components required at the door for a complete access control system and shall include the lock, credential reader which is an SI (Reader Only) or SIK (Reader and Keypad) to accept iClass credentials, request to enter and exit sensors, door position switch and tamper guard. Lock shall feature an open architecture platform with secure encrypted data transmission. The wireless feature shall have the ability for centralized lockdown in less than 10 seconds.
18. Keying: Provide a Great Grand Master Everest Primus and Everest Restricted Patented Key system in "D" keyway to match the existing facility key system as specified herein and directed by the owner. All keys and key blanks for locks and cylinders shall be protected by utility patents and provide geographic exclusivity. Provide temporary construction cores at removable core locations and temporary construction keying at all other locations. All cylinders are to be factory keyed. At exterior doors and doors with exit devices provide removable core full size cylinders. At all other doors provide Everest Restricted. Permanent keys and cores are to be furnished to the owner's representative prior to occupancy.
19. Typical locking mechanisms for specific room types:
 - a. Offices – Office function locks
 - b. Clinical rooms (patient rooms, ORs, procedure, exam, etc) – Passage function set
 - c. Mechanical, electrical, TR rooms – Storage function lock
 - d. Medication rooms – Credential reader
 - e. Clean Utility/Holding, Soiled Utility/Holding, Equipment rooms – keypad
 - f. Conference rooms – Office function lock
20. All door frames and headers shall be designed to withstand heavy use; stronger gauge metal, double headers, etc shall be coordinated by the designer to ensure durability long term.

Access Panels

1. All access panels in OR's, procedure rooms and building exterior, shall be stainless steel
2. Access panels in public areas, patient care and staff areas shall be powder coated to match ceiling