



Design Standard Door Hardware

Purpose:

This design standard has the purpose of creating a consistent installation of door hardware throughout the South San Francisco Unified School District thereby achieving a standard of aesthetic quality, maintenance and performance throughout all renovation and new building projects.

Design Standard:

General Requirements

- Design of the school hardware systems can be broken into three categories; new schools where all the hardware is new, existing schools where all the hardware is being upgraded, and existing schools where some (not all) of the hardware is being upgraded.
- Inventory all the existing hardware for each door that is being upgraded. As part of the inventory process, it is suggested that each door be photographed from both sides to show all hardware, hardware functions, and latch side clearances.
- For schools where all the hardware is being upgraded or is being supplied as new, the design standards are Schlage/ Ingersoll-Rand products unless noted otherwise. No Substitutions on these products.
- For existing schools where a partial upgrade is being done, match the existing finish, existing functions, and existing keying for each door. It is strongly recommended that the Architects engage a reputable hardware consultant for this work.
- ALL HARDWARE: Exposed fasteners shall be tamper resistant type.
 - Recessed pulls are NOT ALLOWED in “Accessible” areas.
 - ‘Z’ shaped pulls are NOT ALLOWED in “Accessible” areas.
 - Round shaped, surface mounted, pulls are preferred.
- Provide special wrenches and tools applicable for installation to the District.



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- Provide maintenance tools and accessories supplied by the hardware manufacturer to the District.
- Follow the hardware types listed below. Note that not all possible types are listed here and there may be additional hardware devices needed for proper operation. Use this as a guide:

Hanging Devices

Opening Type	Description	Manufacturer(s)	Model / Series*
Primary Exterior Entrances and Exits (see note)	Floor Closer & Offset Pivots – ¾" offset	Rixson	27 Series @ 90 deg 25 Series @ 180 deg
Other Exterior Doors	Heavy Duty, Ball Bearing Butt Hinges – Non Ferrous	Hager, Ives, Stanley	BB1199NRP
Interior Doors	Heavy Duty, Ball Bearing Butt Hinges	Hager, Ives, Stanley	BB1168NRP

*Model / Series listed for first listed manufacturer.

- All hinges shall be non-removable pin (NRP) type.
- Finish at Schools to Receive All New Hardware: Exterior BHMA 630; Interior BHMA 652.
- Finish at Schools with Limited Replacement: Match existing.
- Continuous geared hinges with overhead closers are acceptable for Elementary School primary exterior entrances and exits. Middle Schools and High Schools require recessed floor closers with off-set pivot hinges at these locations.

Securing Devices

Opening Type	Description	Manufacturer(s)	Model / Series*
Exterior Pair Entrances and Exits	Rim Exit Devices x Vertical Concealed Rods	Von Duprin	99NL x 99EO Series x VR 900 Series Trim



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Exterior Pair Entrances and Exits with Mullions	Rim Exit Devices x Mullion	Von Duprin	99NL x 99EO Series x VR 9009Series Trim x 4954 Mullion
Exterior Single Entrances and Exits	Rim Exit Device	Von Duprin	99NL Series x VR 900 Series Trim
Classroom Doors	Classroom Security Cylindrical Lockset	Schlage	ND Vandalguard Series; Sparta Trim ND 95 PD- 626-SPA-IC
Other Exterior (non-exit, non-classroom) Doors	Cylindrical Lockset	Schlage	ND Vandalguard Series; Sparta Trim
Interior Single Doors w/ Exit Devices	Rim Exit Device	Von Duprin	99L Series
Interior Pair Doors w/ Exit Devices	Rim Exit Devices x Concealed Vertical Rods.	Von Duprin	99L Series
Interior Pair Doors w/ Exit Devices with Mullions	Rim Exit Device x Mullion	Von Duprin	99L Series x 4954 Mullion
Interior Doors w/o Exit Devices, non-classroom	Cylindrical Lockset	Schlage	ND Vandalguard Series; Sparta Trim
Interior Doors – Adult/ Staff Single Occupancy	Faculty Restroom Lockset	Schlage	ND 85 PD; Sparta Trim

*Model / Series listed for first listed manufacturer.

- Finish at schools receiving all new hardware: BHMA 626. (Satin Chrome)
- Finish at schools with limited replacement: Match existing.
- No cylinder dogging on exit devices.
- Removable Mullions to be used in areas where mullions current exist and doors are not replaced or in areas with a high level of abuse. Consult with District Facilities Department.
- Mullions to be mechanically fastened. Do not provide keyed mullions.



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- Where vertical rod devices must be added to or replaced at existing doors, provide surface type, top and bottom latching with bottom ADA and CBC- compliant latch guard. New doors must be concealed type, per ADA and DSA requirements.
- Exit devices shall be thru-bolted- For exit devices on exterior gates, use anodized aluminum finishes.
- Existing school lock upgrade: Provide Don-Jo or MAG wrap-around cover plates for locks or equal.
- Keying at Schools to Receive All New Hardware: Schlage Primus 35-157-468-JP. Verify with District Facilities Department. No substitutions.
- Keying at schools with Limited Replacement- Match Existing Manufacturer and System. Consult with District Facilities Department.
- Cylinders: interchangeable cores with 626 finish.

Closing Devices

Opening Type	Description	Manufacturer(s)	Model / Series*
Primary Exterior Entrances and Exits (see note)	Floor Closer & Offset Pivots – ¾” offset	Rixson	27 Series @ 90 deg 25 Series @ 180 deg
Other Exterior Doors	Heavy Duty Surface Closer	LCN	4111 x EDA x TB
Interior Doors	Heavy Duty Surface Closer	LCN	4111 x EDA x TB
Automatic Door Openers	Heavy Duty, overhead concealed parallel arm door mounted track	LCN	2610

*Model / Series listed for first listed manufacturer.

- Finish at Schools to Receive All New Hardware: BHMA 689.
- Finish at schools with Limited Replacement: Match existing.
- All surface closers shall be through bolted to doors.
- Provide parallel arm closers ONLY.



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- Overhead closers are acceptable for Elementary School primary exterior entrances and exits.

Stops and Holders

Opening Type	Description	Manufacturer(s)	Model / Series*
Non Hold-Open Doors	Imbedded Floor Stop	Ives, Trimco, Hager	FS18S
Non-Rated Hold-Open Doors	Floor Stop/Holder	Ives, Trimco, Hager	FS40 Series
Rated Hold-Open Doors	Electromagnetic Holder	LCN	SEM 7800 Series

*Model / Series listed for first listed manufacturer.

- Finish at new campuses: BHMA 626.
- Finish at existing campuses: Match existing.
- Holders thru-bolted to door.
- Kick-down door holders are NOT ALLOWED.
- Provide electromagnetic holders on all interior stair doors.

Accessories

Opening Type	Description	Manufacturer(s)	Model / Series *
Janitor Closet, Toilet Room, Classroom, and Kitchen Doors	Stainless Steel Kick Plate- 10" height	Ives, Trimco, Hager	8400 Series B4E
Multi-Occupant Toilet Rooms (non-rated)	Stainless Steel Push and Pull Plates	Ives, Trimco, Hager	8200 4" x 16" 8303 4" x 16"
Exterior and Rated Doors	Perimeter Gasket	Pemko, Reese, National Guard	303APK
Interior Non-Rated Doors	Silencers	Ives, Trimco, Hager	SR64 / SR65



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Approved Manufacturers

- See above.

Substitutions allowed?

- No substitutions for listed Schlage/ Ingersoll Rand Products. Other products may be substituted if performance and quality can be evidenced.

Associated Design Standards

- N/A

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