

OPEN THIS DOCUMENT FIRST: Design Standards Process

Overview:

SCCD has established standards for design and construction to ensure equity and consistency in facilities and for efficiency in operations and maintenance. The Standards consist of **Design Standards** that are directives and information that Design Consultants should incorporate into their contract documents (drawings and specifications). A few disciplines have also provided **Construction Specifications** and **Typical Details**, which should be customized to the design project.

These Standards were developed by the District, with intensive input from District Facilities, Maintenance and Operations personnel, in addition to IT personnel and the Security shared governance Committee for relevant sections. The Standards are based on prior experience at the District and the best practices from other California Community Colleges, and the products selected were carefully evaluated based on criteria that included aesthetics & user comfort, durability, ease of maintenance, sustainable properties/practices and cost.

Purpose:

These Design Standards are a tool to clarify direction and streamline project execution for design professionals, construction managers and other participants in capital improvement projects. They represent the District's "strong preference" and should be applied, when possible, without compromising the creativity of the overall design. Final disposition, color, size, product choice etc. should conform to the best extent possible where equivalent substitutes are allowed in the Design Standard. If equivalent substitutes are allowed only "if performance and quality equivalency can be evidenced" or the consultant wishes to deviate from the written design standards for other reasons, then the consultant needs to provide evidence/justification and seek District approval as outlined below.

In all cases the written design standards do not diminish or eliminate the standard of care owed by the consultant to SCCD or relieve, in any manner whatsoever, a consultant from any professional responsibility, duty or due diligence required toward that work.

These Design Standards should be incorporated into all Solano Community College ("SCC", the "College") projects. Projects include but are not limited to new construction, Tenant Improvements (TI) projects, remodels, and renovations. It is understood that the College could not attempt to upgrade and retrofit all campus facilities in a single massive construction project; such a process would be prohibitively costly and disruptive. Rather, the strategy is for installations to be implemented continually and concurrently in a phased manner, over time and as funding allows, toward a goal of all campuses and campus buildings eventually meeting the same consistent Design Standards.



Design Standards Process:

The following Design Standards Process Guidelines incorporation and approval process provides procedural guidelines to ensure that project-specific design and contractor teams submit and receive approval by authorized SCCD departmental and administrator personnel at defined milestones. This allows for SCCD review, input, and approval as well as documentation of any approved deviations or variances to the Design Standards early in the design process.

Approved deviations and variances from the Design Standards should be conscious and justifiable, provide a solution for a site-specific need or replace outdated/obsolete requirements, and be compatible with other Design Standards. **Proposed deviations shall be submitted to SCCD in writing for review and approval prior to incorporation into the project.** Approved deviations may be project-specific or permanent; if an approved deviation or variance is intended to be permanent the change should be reflected in the associated Design Standard.

Review and Approval

Review and approval by SCCD is required at the conclusion of each of the design phases listed below prior to progressing to the next phase. Documentation required for review includes project drawings and specifications; manufacturer cutsheets, diagrams, and other product data; associated progress cost estimates and written identification of deviations/variances from District Standards. Not all projects will include all phases.

Schematic Design

Design professionals should become familiar with the **Architectural, Landscape, Sustainability and other Guidelines** (found in Book 1 of the Facilities Master Plan) and the **District Standards** (found in Book 2 of the Facilities Master Plan and on Facilities Website) prior to initiating the design process. While most of the specifics within the District Standards will be reflected in future design phases, there are some aspects reflected in the District Standards that require consideration from the onset of the design process. If any deviations/variations are apparent at this early phase, bring them to District attention for consideration.

Deliverables of this phase are as stipulated in the Contract with the District. In addition for system designs such as Electronic Security and Safety, Fire Alarm etc. provide the following: a written design narrative which describes planned system elements by function and overall design. The narrative should include conceptual device and system floor plan, site layout drawings and functional/operational project planning.

Design Development

This is the phase where the specifics within the Design Standards will need to be reflected and coordinated within the specific project, and any required deviations/variances should be apparent during this phase. Bring all deviations/variances to District attention, in written format, for



evaluation and action as soon as they are determined. Do not assume deviations/variations will be apparent to District personnel during their documentation review towards the end of this phase.

Deliverables of this phase are as stipulated in the Contract with the District. In addition for system designs such as Electronic Security and Safety, Fire Alarm etc. provide the following: refinement of schematic design conceptual elements to provide a greater level of detail of system floor plan, functional/operational project planning and site layout drawings as well as required supporting components such as physical, electrical, MEP, data network, etc.

Construction Documents

By this phase the deviations/variances should have already been resolved. If coordination and detailing efforts during this phase require previously unknown deviations/variances from District Standards, bring them to District attention, via written format, for evaluation and action as soon as they are determined.

Deliverables of this phase are as stipulated in the Contract with the District. In addition for system designs such as Electronic Security and Safety, Fire Alarm etc. provide the following: design drawings indicating location, installation details, cabling and interfaces for elements approved in the schematic design and design development phases. This phase includes written device and systems specifications in the current MasterFormat edition as issued by the Construction Specifications Institute. These specifications should clearly describe interfaces between systems or assemblies and interfaces to any other equipment and systems under other Design Standards.

Project Close-Out

Deliverables of this phase are as stipulated in the Contract with the District. District should endeavor to update District Standards for any deviations or variances that were approved as permanent during that particular project.

End of Document

DESIGN STANDARD for Acoustical Panel Ceilings

Purpose:

The purpose of this design standard is to achieve the following performance and sustainability criteria for acoustical ceiling panels installed at the Solano Community College District sites:

- High noise reduction and CAC coefficients
- Good light reflectance to conserve energy associated with mechanical lighting
- Product using recycled content
- High humidity resistance to prevent sagging

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Design Standard:

- Solano College's preference is to simplify design, construction and maintenance by limiting panels to one type (and standard sizes) in any given project, unless programmatic requirements call for specialized/unusual sized panels in certain areas.
- Specialized/unusual size panels have to be reviewed and approved by the Director of Facilities. Larger size panels are harder to remove and replace so factors contributing to approval are the location of panels with respect to items above ceilings that need to be maintained/serviced.
- Design Professionals should specify that contractor is to provide 10% attic stock for all panel types used on this project.
 - This attic stock will be stored in the Custodial Main Storage Room within the same building (see [**Design Standard for Custodial Spaces**](#)). Doing so avoids confusion with which panels belong to which buildings and reduces maintenance time associated with locating extra stock and replacing panels.

- For Standard Typical Applications:
 1. Lowest Grade of Acoustic Ceiling Panel: use only when acoustic criteria, light reflectance, recycled content and humidity resistance are not of high priority and the space is temporary or of utility use only.
 - Size: 2' x 4' x 5/8" Flat Panel
 - Color: White
 - Style: Square Lay-in
 - NRC Rating: 0.55
 - CAC Rating: 0.35
 - LR Rating: 0.80
 - Recycled Content: not less than 40%
 - Cost Rating: \$
 - Product: USG Radar #2315 or equivalent in performance criteria above.
 2. Highest Grade of Acoustic Ceiling Panel: for normal occupied classroom, corridor and office spaces. This panel has the "second look" in that it is a 2' x 4' panel with a tegular 2' x 2' appearance, which adds textural richness to the ceiling plane while still using the economical and easily accessible larger grid spacing.
 - Size: 2' x 4' x 5/8" Flat Panel
 - Color: White
 - Style: Angled Tegular
 - NRC Rating: 0.70
 - CAC Rating: 0.35 or higher
 - LR Rating: 0.85
 - Recycled Content: no less than 40%
 - Cost Rating: \$\$
 - Product: USG Millennia Clima Plus, Illusion Two/24 Panels, SLT Edge detail, Panel #78780, or equivalent as long as "second look" aesthetic and performance criteria as noted above are met.
 3. Special Grade of Acoustic Ceiling Panel: for applications such as computer and control rooms, kitchens/food prep areas (specify Class 100 panels) and laboratories that may require this level of cleanability.
 - Size: 2' x 4' x 5/8" Flat Panel
 - Class: 10M-100M Panels typical, Class 100 panels for Kitchen/Prep Areas.
 - Color: White
 - Style: Square
 - NRC Rating: 0.55
 - CAC Rating: 0.35
 - LR Rating: 0.79
 - Recycled Content: no less than 40%
 - Cost Rating: \$\$\$
 - Product: USG Clean Room ClimaPlus, 10M-100M Panels, Panel # 56090 or equivalent as long as performance criteria as noted above are met.
- Suspended Grid System: USG Donn/DX series, white.



Approved Manufacturers:

As noted in this Standard.

Substitutes Allowed:

As noted in this Standard.

Associated Design Standards and Construction Specifications

Design Standard for Custodial Spaces.

End of Document

DESIGN STANDARD for Casework

Purpose:

The purpose of this design standard is to create a consistent standard for the quality, reliability and ease of maintenance for casework throughout the Solano Community College District. Casework must be designed and installed with the understanding that it will be subject to decades of use, abuse and continually changing applications. Casework should be simple and intuitive to use. Surface materials should hide dirt and wear, while being aesthetically pleasing.

Note: these Design Standards are a tool to clarify direction and streamline project execution for design professionals, construction managers and other participants in capital improvement projects. They represent the District's "strong preference" and should be applied, when possible, without compromising the creativity of the overall design. Final disposition, color, size, product choice etc. should conform to the best extent possible where equivalent substitutes are allowed in the Design Standard. If equivalent substitutes are allowed only "if performance and quality equivalency can be evidenced" or the consultant wishes to deviate from the written design standards for other reasons, then the consultant needs to provide evidence/justification and seek District approval as outlined in the [*Open this Document First: Standards Process.pdf*](#). In all cases the written design standards do not diminish or eliminate the standard of care owed by the consultant to SCCD or relieve, in any manner whatsoever, a consultant from any professional responsibility, duty or due diligence required toward that work.

Design Standard:

1. Countertops

- Science or Vocational laboratory countertops shall be cast of epoxy resin for the following reasons:
 - Solid materials, such as epoxy resin, do not delaminate, nor do they contain off-gassing glues/binders; therefore, the quality of indoor air is healthier.
 - Epoxy resin does not depend on a surface coating for chemical resistance.
 - Molded construction allows for integral back-splashes and marine edges.
 - A non-glare matte finish is attractive and easy to maintain.
 - Plastic Laminates are not permitted for Science or Vocational Laboratory countertops.
- SCCD's preference for other countertops is natural stone such as slab granite, recycled glass material Terrazo, composite engineered stone, or a solid material such as epoxy resin for the following reasons:
 - These materials does not contain off-gassing glues/binders; therefore they contribute to healthier indoor air quality, and they do not have the de-lamination issues associated with plastic laminates.

- For non-wet conditions alternate materials will be considered. Design professionals are encouraged to consider sustainable products such as wood and bamboo, 9-ply plywood and other similar sustainably produced products that do not contain off-gassing glues/binders. Plastic laminates are discouraged due to the de-lamination issues, but may be permitted on a case by case basis.
- For countertops with sinks: locate sink faucets so that outlet is well over sink to prevent water splashing onto counter top.
 - Sinks shall be fabricated of a material equal to or better than counter top material. Verify required size and depth of sinks with User.
- All edges shall have fused edging, such as 3MM PVC, and backer sheet. Self-edges, T-mold or bull-nosed laminate edges are unacceptable.

2. Casework:

- Casework shall be WIC Certified.
- The use of the WIC Manual of Millwork as a standard of performance is acceptable provided the specific grades which are applicable are specified.
 - Minimum quality for casework shall be WIC Custom Grade.
 - Science and vocational laboratory casework shall be WIC Laboratory quality.
- Include in construction specifications the requirement for contractor to arrange for and pay costs of WIC inspections, and obtain WIC Certified Compliance Label on each unit of casework indicating grade specified. In order to allow non-WIC licensed millwork contractors to bid on SCCD projects, include the following provision in construction specifications:

“Millwork specified shall be manufactured in accordance with the standards established in the Manual of Millwork of the Woodwork Institute of California, current edition, in the grade or grades hereinafter specified or as shown on the drawings. If the manufacturer of millwork is not a WIC licensee, Contractor shall furnish to Architect, prior to installation, a Certificate of Re-inspection by the WIC indicating that the millwork in question meets the requirements of the WIC grade specified. If the manufacturer of millwork is a WIC licensee, each unit of millwork shall bear the WIC Certified Compliance grade stamp indicating the grade specified, and by the completion of the job WIC Certified Compliance Certificates shall be provided indicating the grade specified. The foregoing shall not be construed to limit the power and authority of Architect to reject millwork which does not, in Architect's opinion, meet with any one or more of the specifications of the contract.”

- Casework Design Guidelines
 - Casework is to be of modular design (4'- 0" lengths) for ease of access to building site and possible reuse in future remodeling work.
 - Design drawers and shelves for heavy loading; use metal standards/rests and/or guides only with a minimum load carrying capacity of 125 pounds.
 - Specify adequate backing in stud walls for attachment of casework, and detail same on Drawings.
 - Verify if User requires locks for casework doors and/or drawers. If locks are required, verify keying requirements with User. Comply with **Design Standard for Door Hardware**.
 - Verify if User requires glazed or full glass casework doors.
 - Where plastic laminate is used for casework cabinet bodies, verify with User whether chemical resistant type is required. If wood is used for casework bodies, verify with User whether finish must be chemical resistant.
 - Design of shelving span shall be verified with User, since they may load same with heavy equipment, etc.
 - All edges shall have fused edging, such as 3mm PVC, and backer sheet. Self-edges, T-mold or bull-nosed laminate edges are unacceptable.
 - Design minimal design details (nooks, crannies, edges in millwork) which require additional time or labor for cleaning.
 - Specify standard rubber base around exposed bases of casework, to create a unified appearance at the base of walls and casework. Direct contractor to run a bead of silicone caulk where casework base meets floor, prior to installation of rubber base, to ensure that floor cleaning activities do not damage the structural integrity of the casework base. Comply with **Design Standard for Flooring** for rubber base specification.
 - Design sloped wall cabinet tops, to discourage storage of items which is a safety hazard and a cleaning burden.
 - Casework must be adjustable over time to accommodate new contents, changes in teaching styles and technology. Ensure that such flexibility is achievable by non-tradespersons; i.e., design such flexibility into the initial design of the casework.
 - Specify adjustable metal shelf standards and rests.
 - Drawer and door pulls shall be 4" metal wire pull type, in stainless steel or satin nickel.
 - Cabinet locks: comply with requirements stated **Design Standard for Door Hardware**.
 - Drawer Slides: full extension steel slides, white epoxy coated, with steel bearing rollers and integral positive stops. Static load carrying capacity of minimum 125 pounds.
 - Concealed hinges, Grade 2 European Style, 170 degree opening, all steel construction, self-closing.
 - Catch: magnetic catch with plastic housing.

3. Color/Finishes:

- The casework materials for any given project should be designed in consultation with the furniture consultant or furniture coordinator, since the architectural and furniture finishes will be experienced holistically by the building's end users.



Approved Manufacturers:

The fabricator shall be equipped for and experienced in doing work, including fabricating, finishing, and installing, equal to standards specified, and be able to provide evidence of such experience to the Architect's and District's satisfaction. Failure to meet these qualifications may be sufficient cause for rejection.

Substitutes Allowed:

Not Applicable.

Associated Design Standards and Construction Specifications

Design Standard for Door Hardware

Design Standard for Flooring

End of Document

DESIGN STANDARD for Custodial Spaces

Purpose:

Custodial spaces include **Custodial Closets** and **Custodial Main Storage Rooms**. Adequate sized and placed custodial closets are essential for productive and efficient maintenance of a facility. Too small of a closet and too few closets add unproductive labor hours spent going back and forth to closets or other floors to gather custodial supplies and equipment. Similarly, every building must have adequate custodial storage space to store bulk supplies and equipment. The following guidelines will lower the long-term cost of maintaining a facility with increased productivity and efficiency of the custodial crew.

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Design Standard:

A. Custodial Closets:

- Closet locations: Placed on every floor with not more than 150 feet between closets. For each 15,000 to 18,000 square feet of building floor space, provide a minimum of one closet. Locate closets adjacent to, or between, restrooms, for economics of plumbing. Alternate preferred location is close to an elevator. **Do not** locate closets in stairway landings or under stairways.
- **Do not** locate electrical panels, elevator controls, telephone equipment, roof hatches and plumbing items inside the closets.
- Closet size: should be 8' x 8' (64 sq. ft.) minimum.
- Shelving: Shelving at eye level with a minimum of two 24" deep shelves. Wooden shelves are more practical than steel because of the corrosion that can occur with chemicals. For gallon size chemicals a minimum of 18 inches between shelving is required.
- Provide adequate ventilation with an exhaust grill in the upper wall or ceiling.

- Electrical: Minimum one GFCI (ground fault circuit interrupter) outlet.
- Lighting: Provide at least 50 to 75 foot candles of illumination or a minimum two fluorescent tube ceiling light with a safety guard to protect breaking of tubes. Install a motion light sensor to conserve energy.

B. Custodial Main Storage Room:

- The Custodial Main Storage Room will store bulk supplies and equipment for building maintenance purposes and it will also store building replacement materials for that particular building (e.g. extra stock for ceiling panels, carpet tiles etc.).
- Main Storage Room Size: should be 10' x 20' (200 sq. ft.) minimum.
- The Custodial Main Storage does not replace a Custodial Closet for that particular floor/area. The Custodial Main Storage is in addition to the Custodial Closet requirements. Should the layout of the Building require these to be combined for a particular floor/area, the size of the combined room shall be 264 sq. ft. minimum.
- Storage location: Near an elevator and normally placed in the lower levels of the facility.
- Shelving: Reinforced shelving that is wall mounted along one entire wall.
- Provide adequate ventilation with an exhaust grill in the upper wall or ceiling.
- Electrical: Several GFCI outlets to charge battery-operated equipment.
- Lighting: Install two sets of two fluorescent tube-ceiling lights.

C. Custodial Doors:

- Comply with [Design Standard for Door Hardware](#).
- Door Swing and Space Implications: doors should open outward to gain maximum square footage. If the door opens inward, re-design the closet/main storage by adding the square footage the door occupies to the total square footage of the closet/main storage.
- Door Size:
 - Custodial Closet: Door should be 36 inches minimum.
 - Custodial Main Storage: Door should be 42 inches minimum.
- Provide Hollow Metal door and door frames per [Design Standard for Doors and Door Frames](#). Door should have a vent and a Stainless Steel armor plate on push side of door.
- Door Signage: Provide Room Sign for all Custodial Spaces on wall side adjacent to door lever.

D. Custodial Floor Finish:

- 1st Choice: Provide ceramic tile, 6" x 6" size, semi-gloss finish.
- 2nd Choice: Concrete with a floor coating such as Rust-Oleum's Easyclear® Epoxy Maintenance Floor Coating or equivalent.
- See [Design Standard for Flooring](#) for more information.

E. Custodial Wall Finish:

- At the floor mounted service sink: provide Rigid Sheet Vinyl Material on the wall sides of service sink. Rigid Sheet Vinyl Material Thickness no less than 0.040" and to a height of 48 inches Above Finish Floor. Product: InPro Corp. Wall Protection, Standard Color: [Antique White](#).
- Rest of the Walls 1st Choice: Provide ceramic tile, 6" x 6" size, semi-gloss finish to a height of three-feet and six-inches (3'-6") above finish floor on all walls. Provide semi-gloss, water based epoxy painted gypsum board above ceramic tile, color: [District Standard Navajo White](#).
- Rest of the Walls 2nd Choice: semi-gloss, water based epoxy painted gypsum board, color: [District Standard Navajo White](#).
- 3rd Choice: concrete block sealed with an epoxy resin similar to Rust-Oleum® Wet Look Concrete Sealer or equivalent.
- See [Design Standard for Interior Paint](#) for more information.

F. Plumbing Fixtures:

- Comply with [Design Standard for Plumbing Fixtures](#) for plumbing fixtures, hose bibs and floor drains in each custodial closet and custodial main storage room.
- Service Sink: Floor mounted (24" x 24" x 10"), with a chemical impervious surface and a stainless steel collar.
- Sink faucet: Bibb-type faucet with hose tread and backflow preventer installed. Install shut off valves for the faucets.
- Sink Essentials: Install a mop grip-all, preferably on the wall without the faucet. Leave space on the faucet-side wall to install a chemical dilution system.
- Provide one Floor Drain with waterless trap guard per custodial closet/main storage room: nickel bronze drain with trap primer.

Approved Manufacturers:

Per above and referenced Design Standards.

Substitutes Allowed:

Yes, if performance and quality equivalency can be evidenced.

Associated Design Standards and Construction Specifications

Design Standard for Door Hardware
Design Standard for Doors and Door Frames
Design Standard for Flooring



Design Standard for Interior Paint
Design Standard for Plumbing Fixtures

End of Document

DESIGN STANDARD for Building, Floor, Room, Stairway, Elevator Equipment and Outlet Designations

Purpose:

Designations of buildings, floors, rooms, stairways and elevators are important elements in way-finding for all on a college campus, and designations for equipment and outlets are important for maintenance and facilities staff. SCCD's goal is to establish naming and numbering protocols that are consistent and naturally intuitive for all end-users including students, faculty, staff, visitors and maintenance staff.

Design Standard:

1. Campus Designations

The following campus designations for the Solano Community College District are the first characters for all buildings:

FF	Fairfield
VJ	Vallejo
VV	Vacaville
NT	Nut Tree

2. Building Naming

Solano Community District is in the process of reviewing its process for naming Buildings. While naming buildings using numbers is useful for State inventory and ease of reference among users that are well familiar with any particular campus, it is not as useful for new students, visitors, faculty and staff. There is also an acknowledgement that naming buildings according to disciplines can be easily confusing and inflexible because a student may not expect a mathematics lecture to be held in a "humanities" building, and it is inflexible because should the building house other disciplines in the future the name will need to be adjusted to clarify this among users. Designers should review building naming with the Project Manager early in the Schematic Design phase.

3. Building Designations

Currently the buildings on the Fairfield Campus are identified predominantly by their building number. On the other sites the buildings are identified by their name (Vallejo Center which is in the process of being renamed, Vacaville Center, Vacaville Annex and Nut Tree Hanger). In the future all buildings will be identified by name, however, for the interim there is a need to maintain the building numbers in the building designations until the building naming for all existing buildings to remain has been completed. The building number will also be maintained for the stair, elevator, equipment and outlet designations.

a. New Building Designations

To replace the three to four numbers scheme currently in use, future buildings should use a **two-letter** abbreviation from the building name as the building name shorthand. Designers should review building abbreviation with the Project Manager early in the Schematic Design phase.

b. Existing Building Designations

Maintain existing building numbers until a name has been assigned (at which point a two-letter abbreviation from its name will be used). If a name is not assigned District may opt to simplify the building numbers to two-numbers. For example Building 500 would become Bldg 5. The rationale for this is to simplify the Room designation which uses the building name/number in its identifier.

4. Floor Designations

- Floor numbering will begin with the floor accessed at the *main* grade as “first floor” and will be designated with a “1.”
- One floor above will be “second floor” and will be designated with a “2.”
- The next floor above that will be “third floor” and will be designated with a “3” if occupied and accessed by students and faculty. If this floor is a roof it will be called “roof” and designated with a “R.”
- If the Building has a basement that floor will be called “Basement” and designated with a “B.”

5. Room Designations

- Basement rooms will be designated with two-digit room numbers (e.g. 01, 02, etc.)
- First floor room numbers will be the 100 series; second floor rooms will be the 200 series, third floor/roof rooms will be the 300 series, etc.
- Century numbers (100, 200, etc.) should be used for main lobbies/main circulation only.
- Divide the floor into decades. From the point of entry on the floor (principal entrance, elevator/stair), assign decades along major circulation routes to facilitate way finding. In general, work counterclockwise.
- Assign whole numbers to rooms with an entrance on a public circulation lobby or corridor.
- Assign alpha suffixes to rooms whose sole access is from within a room (e.g., if there are rooms within room 110, the inner rooms shall be designated room 110A, 110B, etc.). Skip letters “I” and “O”.
- Create number intervals to allow future assignments should subdivision occur.
- Assign numbers in sequence.
- In general, keep even numbered rooms on one side of each corridor, and odd numbered rooms on the opposite side.
- Rooms will be designated by the Campus, building number and then followed by the room number, separated by a hyphen (e.g., FF300-110 is Room 110 in Building 300 on the Fairfield Campus).



6. Stairway Designations

- Stairways should be identified by building two-letter abbreviation or building number and the predominant cardinal direction (North, South, East and West) of its placement in the building. For example the VV101-North Stair is the Stair in the Vacaville Center on the North Side.

7. Elevator Designations

- Elevators should be identified by building two-letter abbreviation or building number and the predominant cardinal direction (North, South, East and West) of its placement in the building. For example FF400-East Elevator is the Elevator in Building 400 on the Fairfield Campus located on the East side of the Building.

8. Equipment Designations

- Equipment such as Mechanical and Electrical equipment should be identified using the building number (or two letter abbreviation for future naming), hyphen, floor number, hyphen, two-three letter (common) abbreviation for equipment item, hyphen and number 1, 2,3 etc. For example 200-R-EF-3 is the exhaust fan (EF) #3 on the Roof of Building 200.

9. Outlet Designations

- Outlets should be identified using the building number (or two letter abbreviation for future naming), hyphen, floor number, hyphen, "EO" for electrical outlet and "DO" for data outlet, hyphen and number 1, 2, 3 etc.

Approved Manufacturers:

Not Applicable

Substitutes Allowed:

Not Applicable

Associated Design Standards and Construction Specifications

Not Applicable

End of Document

DESIGN STANDARD for Door Hardware

Purpose:

Door hardware across District sites must be consistent to facilitate the logistics of keying locks and to assist in the efficiency of door maintenance. Pursuant to Public Contract Code Section 3400, the following particular products are designated by brand name in order to match other products in use on a particular public improvement (facilities on all District sites) either completed or in the course of completion. No substitutions will be accepted for these products, unless otherwise indicated.

Coordinate all hardware requirements with the Electronic Access Control System (EACS) and other requirements in the [District Standard for Electronic Safety and Security](#).

Note: these Design Standards are a tool to clarify direction and streamline project execution for design professionals, construction managers and other participants in capital improvement projects. Given the logistical, and compatibility requirements with the Electronic Access Control System, **all door hardware selected by consultant must be reviewed by the Director of Facilities** and equivalent products (only where allowed) have to be approved as outlined in the [Open this Document First: Standards Process.pdf](#). In all cases the written design standards do not diminish or eliminate the standard of care owed by the consultant to SCCD or relieve, in any manner whatsoever, a consultant from any professional responsibility, duty or due diligence required toward that work.

Design Standard:

A. Exterior Door Hardware

- 1) Preferred Choice for Main Entrance to Buildings: Automatic Sliding Doors. See details in [District Standard on Doors and Door Frames](#).
 - Hardware provided by Automatic Sliding Door Manufacturer, except for Electronic Access Control System (EACS), see [District Standard for Electronic Safety and Security](#).
- 2) Alternate Choice for Main Entrance to Buildings: Aluminum Entrance Doors with Automatic Door Operators.
 - These Doors shall have the following features:
 - Operators shall be furnished with three-position rocker switches (on/off/hold open).
 - Hardwire all Door Operators. Radio-controlled receivers are acceptable for retrofit installations only.
 - Provide motion sensor activation system in addition to push plate activation.

- Door & Frame per Exterior Aluminum Entrance in **District Standard for Doors and Door Frames**.
 - Glazing per **District Standard for Glazing**.
 - Interlock the power assist's actuators with the EACS, see **District Standard for Electronic Safety and Security**.
 - Suggested products: Stanley Access Technologies *Magic Access (Low Energy)*, or equivalent product that is compatible with the EACS and performs to above criteria.
- 3) In new buildings with more than one major entry, provide at least one Automatic Sliding Door entry and Aluminum Entrance Doors with Automatic Door Operators at all other locations.
- 4) In retrofits all major entries can be Aluminum Entrance Doors with Automatic Door Operators if it is not feasible to make one of them an Automatic Sliding Door entry.
- 5) All other exterior doors:
- For type see **District Standard for Doors and Door Frames**. For Glazing see **District Standard for Glazing**.
 - Hinges: Heavy Duty Ball Bearing Hinges with non-removable pins.
 - Finish to be non-ferrous and to match adjacent door frame.
 - Identify appropriate substrate for application.
 - Continuous hinges are permitted as long as backing in the jamb is provided.

B. Interior Doors

For Door material/finish see **District Standard for Doors and Door Frames**.

C. Locks

All doors (including doors with EACS) must have mechanical lock mechanisms, and must be keyed to the College's master key system. This protocol facilitates emergency response, ease of use, departmental control, protection of SCCD assets, and the safety and security of faculty, staff and students. No exceptions to this protocol are allowed.

- 1) The mechanical key system installed at SCCD is Stanley Security System's *BEST Interchangeable Core (IC)*. No substitutions allowed. Contact campus locksmith for keying on all projects.
- Locksets: ANSI A156.2, Series 4000, Grade 1 UL Listed, Extra Heavy-Duty cylindrical type.
 - Interchangeable core 7-pin: District is moving to COREMAX™ Patented Keying System.
 - Series: 9K.
 - Lever Style: 15D.



- Lockset Finish:
 - Fairfield Campus Exterior Finish: US10B (613) Dark Oxidized Satin Bronze, Oil Rubbed.
 - Vacaville/Vallejo Exterior Finish: US26 A M (626 A M) Satin Chrome plated with UltraShield antimicrobial Finish.
 - All Interior Finish: US26 A M (626 A M) Satin Chrome plated with UltraShield antimicrobial Finish.
 - Keys:
 - Best Standard 7-pin, District is moving COREMAX™ Patented Keying System.
 - All keys must be stamped by manufacturer “DO NOT DUPLICATE.”
 - Implementation:
 - All permanent cylinders and keys are to be furnished directly to the College’s Chief Engineer for keying.
 - Specify the use of construction cores and keys for doors requiring locking during construction. Construction control and operating keys and cores are not part of permanent keying system or furnished on same keyway (or key section) as permanent keying system. Remove temporary inserts immediately prior to SCCD occupancy and return to Stanley/BEST.
 - Warranty: 7 years.
- 2) Electronic Control Access System including Keypads, Proximity Cards etc. see [District Standard for Electronic Safety and Security](#).
- 3) Electrified Locking:
- All electronically access controlled doors require electrified locksets.
 - Depending on application this may require a door core and an electric transfer hinge, or an electric transfer door loop for door-mounted locksets or exit devices.
 - If a door core is performed on a rated opening in the field the work should be performed by a NRTL-certified contractor so that the opening may be re-labeled in the field. (NRTL = Nationally Recognized Testing Laboratory such as UL or Intertek).
 - Lockset per this Standard shown in item #1.
 - Coordinate lockset requirements with [District Standard for Electronic Safety and Security](#).
 - Request-To-Exit (REX):
 - Electrified door locks and exit devices must be ordered with a request-to-exit (REX) microswitch in the door lock.
 - At pairs of doors, each door lock or exit device requires this integral request-to-exit (REX) microswitch and electric transfer hinge – even if only one of the two door leafs will be powered and operated by the Electronic Access Control System (EACS).
 - REX does not control nor operate the door lock in any way – it only shunts (temporarily disables) the “door forced” alarm in the access control system when someone exits through the door. All doors have free egress in the egress direction with no special effort or knowledge required.

- Electric Transfer Hinge:
 - BEST Cylindrical Locks require an electric transfer hinge.
 - Exit devices require an electric transfer hinge.
 - Pairs of doors require an electric transfer hinge for each door leaf for the REX as previously noted. (Exception at pair with Interchangeable Core lockset in active leaf and the inactive leaf pinned with head/foot bolts.)
 - Exit Device (Panic Hardware) Local Door Power Supply:
 - Where exit devices (panic/crash bars) are scheduled with local door power supplies they shall be provided by the Door Hardware Contractor; low-voltage cabling terminations by Security Contractor; and installed with 120VAC high-voltage power by Electrical Contractor.
 - 120VAC high-voltage power is required to the local power supply at the door location. Local power supply shall be installed within 50 feet of the door location.
 - Low-voltage cabling from the local power supply to the electrified exit devices (panic/crash bars) shall be in flex conduit from the local power supply to the electric transfer hinges.
 - Local door power supplies are required where specified for the exit devices (panic/crash bars), such as when scheduled with Electric Latch Retraction function. This is due to the 16A in-rush on unlocking.
 - Typically, few doors should require the Electric Latch Retraction function, such as the main front lobby doors. Electric Latch Retraction function would also be required where doors are scheduled with Auto Door Operators typically associated with ADA accessible openings.
 - All other exit devices (panic/crash bars) should be scheduled with Electric Unlock Only which is solenoid operated and consumes less than an amp in-rush on unlocking. These exit devices (panic/crash bars) shall be powered by low-voltage power supply provided and installed in a centralized location by the Security Contractor.
 - All exit devices should also have cylindrical dogging as a secondary system. Coordinate width of door stile (where applicable) to accommodate exit device with cylindrical dogging system integrated.
 - BEST Cylindrical locksets shall also be powered by low-voltage power supply provided and installed in a centralized location by the Security Contractor.
- 4) Padlocks will be keyed to the College's Master Key System, as such Stanley *BEST 3 Series Heavy Duty Padlocks (similar to 41B/42B series)*, with Best Interchangeable Cores and COREMAX™ Patented Keying System should be specified.
- 5) Furniture & Casework that **house materials that need to be secured** (as determined by the District) should be provided with Interchangeable Cores Cabinet Locks, and keyed to the College's Master Key System. Locks shall fit flush to the cabinetry surface. Product: Stanley *BEST Cabinet Locks*.
- 6) Other Furniture & Casework that do NOT house materials that need to be secured specify: *Olympus Locks with Small Format BEST Interchangeable Cores* or equivalent.

D. Other Hardware

All hardware to be 626 Satin Chrome finish or 630 Satin Stainless Steel finish unless otherwise noted.

- 1) Hinges: ANSI Heavy Duty Ball Bearing Hinges with non-rising pin (NRP).
 - Stainless Steel (630) typical interior and exterior, except at Fairfield Campus exterior locations where Brass, Antique Bronze, Oiled (613) should be used.
 - Unless otherwise specified, the size of the butts will be determined by the following table:
 - Doors 1-3/8 inch thick to have 3-1/2 inch.
 - Doors 1-3/8 inch thick and up to 41 inch wide to have 4-1/2 inch.
 - Doors 1-3/4 inch thick, 42 inch to 48 inch wide, to have 4-1/2 inch extra heavy.
 - Doors 2 inches thick and over 48 inches wide to have 5 inch extra heavy.
 - Provide widths sufficient to clear trim projection when door swings 180 degrees.
 - Provide 2 hinges to 60 inches high, 3 hinges to 90 inches high (except 2 hinges at doors in units), 4 hinges to 120 inches high for each door leaf.
 - Products: *Hager BB 1199 NRP* or equivalent.
- 2) Exit Devices to be touch bar design, rim and concealed rod types.
 - Use key removable and rim devices at pairs of doors.
 - Use Interchangeable Cylindrical Cores at panic devices.
 - All exit devices at non-rated doors to have Cylinder dogging (CD).
 - All exit devices at fire-rated doors to have double cylinder (BEST Intruder Function).
 - Products: *Stanley Precision Hardware Apex 2000 Series Exit Device*, select specific exit device appropriate for specific application. No Substitutions allowed. This product has been selected because it integrates with District Locksets and District Electronic Access Control System.
- 3) Surface Closers to be heavy-duty, for institutional use.
 - Non-handed preferred for ease of maintenance/re-installation by maintenance staff.
 - Must comply with Building Code requirements for opening force.
 - Provide hold-open arm for non-rated conditions.
 - Products: *Stanley Door Closers D-4550/D-4551 Series* selected as appropriate for specific application.
- 4) Floor Closers: District preference is to not use Floor Closers. Exceptions need to be approved by Director of Facilities for Solano CCD.
- 5) Flush Bolts:
 - Manual Flush Bolts typical.
 - Auto Flush Bolts at Fire Doors with Panic Hardware and I.T. Rooms.
 - Product: *IVES: FB 30,40,50, 60 Series* or equivalent.



- 6) Pivots shall be in ground, 3/4" offset, and stainless steel finish. *Ives 7215 series* or equivalent.
- 7) Stops:
 - Wall Stops are preferred. *Ives WS443* or equivalent.
 - Avoid Floor Stops to best extent possible.
 - Overhead Stops: use only where wall or floor stops are inadvisable, and must be approved by Director of Facilities for Solano CCD. Use in coordination with extra heavy duty hinges.
 - Automatic Door Holder/Stop where required: *Ives WS45* or equivalent.
- 8) Seals shall be adjustable screw type with silicone underneath. Avoid adhesive types. *Pemko, National Guard Products* or equivalent.
- 9) Thresholds to be coordinated with project conditions. Aluminum typical finish, except at Fairfield Exterior locations where Bronze should be specified. *Pemko* or equivalent.
- 10) Door Plates:
 - Provide Stainless Steel Kick Plates 10" high x Door Width minus 2 inches at all Restrooms and High Use Rooms.
 - Provide 30" high Stainless Steel Armor Plates at push side of Custodial Closets and Main Storage Rooms.
 - *Ives, Pemko* or equivalent.

Approved Manufacturers:

As noted within this standard.

Substitutes Allowed:

As noted within this standard.

Associated Design Standards and Construction Specifications

Design Standard on Electronic Safety and Security Standards.

Design Standard on Doors and Door Frames.

Design Standard on Glazing.

End of Document

Cutsheet Attachments:

Stanley Security Solutions, BEST 9K Series Heavy Duty Locks-Levers

Partial Stanley Security Solutions 3 Series Padlocks

Partial Stanley Security Solutions Door Closers D-4550-D-4551

Partial Stanley Security Solutions Exit Devices Apex 2000 Series

DESIGN STANDARD for Doors and Door Frames

Purpose:

Doors are an important part in the user's experience, and are perhaps the most intimately experienced element of the built environment, because they are used daily to enter and exit the building and the rooms and spaces within. Doors should be inviting, easy to find, easy to use, durable and maintainable, add aesthetic value, and allow authorized entries while restricting unauthorized entries. The door design standards cited herein are intended to establish and maintain a minimum level of door quality in the educational and work facilities of SCCD buildings.

Note: these Design Standards are a tool to clarify direction and streamline project execution for design professionals, construction managers and other participants in capital improvement projects. Given the compatibility requirements with the Electronic Access Control System, **all doors and door frames selected by consultant must be reviewed by the Director of Facilities** and equivalent products (only where allowed) have to be approved as outlined in the [Open this Document First: Standards Process.pdf](#). In all cases the written design standards do not diminish or eliminate the standard of care owed by the consultant to SCCD or relieve, in any manner whatsoever, a consultant from any professional responsibility, duty or due diligence required toward that work.

Design Standard:

A. Exterior Doors and Frames (For Main Entry):

Given the windy conditions on all District Sites, which create challenges for the disabled community access, the District Standard for Exterior Doors is as follows:

- 1) Preferred Choice for Main Entrance to Buildings: Automatic Sliding Doors.
 - These Doors shall have the following features:
 - Continually monitor door position with microprocessor controller.
 - Provide smooth, trouble-free operation with long-lasting load-bearing wheels.
 - Prevent slippage and uneven closing with anti-riser wheels.
 - Provide complete threshold protection at all times with self-contained sensors.
 - Emergency Breakaway Capability: power-operated automatic sliding doors may be used as emergency egress doors because they "break-out" in the direction of egress.
 - Glazing: Standard 1/4" tempered to match Glazing in [Design Standard for Glazing](#).
 - Door & Frame Finish to match Exterior Aluminum Entrance in item B that follows.
 - Access Control Locking with recessed panic hardware: coordinate stile width to accept EACS (Electronic Access Control System), see [Design Standard for Electronic Safety and Security](#). Door hardware must be compatible with EACS.
 - Battery Back-Up.

- Control Switch: Auto-Close-Open.
 - Suggested products: Stanley Access Technologies *Dura-Glide 2000/3000*, or Besam equivalent product or Horton Automatics equivalent product.
- 2) Alternate Choice for Main Entrance to Buildings: Aluminum Entrance Doors per item B below.
- Provide hardware as identified in **Design Standard for Door Hardware, item A2**.

B. Exterior Doors and Frames (All other Entries and Public Access Spaces):

- Aluminum Entrances such as *Kawneer 350 Heavy Wall Entrance, Vistawall 375* or equivalent.
- Aluminum Storefront such as *Kawneer Trifab®400* or equivalent.
- Entrance, Frame and Storefront Finish:
 - Fairfield: *Kawneer Finish No. 40 Dark Bronze Anodized Aluminum*, Aluminum Association Specification # AA-M10C22A44.
 - Vallejo and Vacaville Centers: *Kawneer Finish No. 14 Clear Anodized Aluminum*, Aluminum Association Specification # AA-M10C22A41.
- Coordinate Stile Width with door hardware, see Electronic Access Control System in **Design Standard on Electronic Security and Safety** and **Design Standard on Door Hardware**.
- Glazing per **Design Standard on Glazing**.

C. Exterior Doors and Frames (All others):

- Shall be Aluminum Entrance if they occur in Aluminum Storefront. For finish, see item B above. For Glazing see **Design Standard on Glazing**.
- Shall be Hollow Metal Doors and Frames all other instances:
 - Insulated Exterior Flush Doors: ANSI 250.8, Level 4 Maximum Duty, Model 2 Seamless Construction, 14 gauge thick galvanized metal. Reinforce door lock edge with one-piece full height 14 ga channel; reinforce hinge edge with one-piece full height 12 ga channel.
 - Exterior Door Frames: full profile welded, ANSI 250.8, Level 4 Maximum Duty, 12 gauge thick material, 2-inch core with 1 ½" flashing fin.
 - Hollow Metal Door and Frame Finish:
 - Paint grade hollow metal doors and frames shall be painted the same color as the surrounding wall finish, to allow the doors to visually "disappear" to reinforce that the doors are not for public access.
 - Exceptions: if appropriate to Exterior Color Scheme hollow metal door frames should be painted to match finish identified in item B above (Entrance, Frame and Storefront Finish), and hollow metal doors should be painted per Exterior Color Scheme.
 - Suggested Manufacturers: Amweld, Curries or equivalent.

D. Interior Doors (Public Spaces):

- Stained wood veneer solid core doors are to be used for all public space types, such as classrooms, offices, labs, meeting rooms, break rooms, restrooms, and corridor separation doors.
 - Flush Interior Doors: 1-3/4 inches thick; WI Premium Grade; solid core; 5 ply construction; “A” grade veneer per ANSI/WDMA I.S.1A, White Birch, Plain-Sliced.
 - Preferred Finish Option
Basis of Design: Marshfield DoorSystems® Signature Series Wood Veneer Doors, White Birch, Plain-Sliced, Honey 26-95 Finish with Enviroclad UV™
 - Alternate Finish Option subject to approval by District
Basis of Design: Marshfield DoorSystems® Signature Series Wood Veneer Doors, White Birch, Plain-Sliced, Wine 38-95 with Enviroclad UV™
 - Materials subject to compliance with LEED Green Building Rating System Credit Requirements.
 - Suggested Manufacturers: Marshfield Door Systems; Algoma Hardwoods inc or equivalent.
- Exceptions: if appropriate to design and use, public space doors can be glazed aluminum storefront doors. Finish: Clear Anodized Aluminum.

E. Interior Doors (Non-Public Spaces):

- Painted hollow metal doors are to be used for non-public type spaces, such as utility rooms, maintenance shops, warehouses, and theatrical back-of-house areas such as oversized scene shop doors.
- Hollow Metal Flush Doors shall be:
 - Steel Sheet material in accordance to ANSI A250.
 - ANSI 250.8, Level 3 Extra Heavy Duty, Model 2 Seamless Construction
 - 14 gauge thick metal.
 - Reinforce door lock edge with one-piece full height 14 ga channel; reinforce hinge edge with one-piece full height 12 ga channel.
 - Paint grade doors shall be painted the same color as the surrounding wall finish, to allow the doors to visually “disappear” to reinforce that the doors are not for public access.
- Suggested Manufacturers: Amweld, Curries or equivalent.

F. Interior Door Frames:

- Shall be (Hollow Metal) Steel Sheet material in accordance to ANSI A250:
 - Full profile welded, ANSI 250.8, Level 4 Maximum Duty , 12 gauge thick material, 2-inch core with 1 ½” flashing fin.
 - Frame Finish:
 - At Public Space Types: paint grade hollow metal frames shall be painted to visually match the Clear Anodized Aluminum.
 - At Non-Public Space Types: paint grade hollow metal frames shall be painted the same color as the surrounding wall finish, to allow the frames to visually “disappear” to reinforce that the doors are not for public access.



- Suggested Manufacturers: Amweld, Curries or equivalent.

Approved Manufacturers:

As noted in this Standard.

Substitutes Allowed:

Not Applicable.

Associated Design Standards and Construction Specifications

Design Standard on Electronic Safety and Security Standards.

Design Standard on Doors Hardware.

Design Standard on Glazing.

End of Document

DESIGN STANDARD for Elevators

Purpose:

When required elevators are a critical component in the building. They provide access to the disabled community, transport supplies and equipment vertically through a building, and provide convenience to the general public. Given tight maintenance budgets, new and renovated elevators must achieve reliable performance and ride quality, as well as the level of aesthetic quality, operability and maintainability suggested by this design standard.

Note: these Design Standards are a tool to clarify direction and streamline project execution for design professionals, construction managers and other participants in capital improvement projects. They represent the District's "strong preference" and should be applied, when possible, without compromising the creativity of the overall design. Final disposition, color, size, product choice etc. should conform to the best extent possible where equivalent substitutes are allowed in the Design Standard. If equivalent substitutes are allowed only "if performance and quality equivalency can be evidenced" or the consultant wishes to deviate from the written design standards for other reasons, then the consultant needs to provide evidence/justification and seek District approval as outlined in the [*Open this Document First: Standards Process.pdf*](#). In all cases the written design standards do not diminish or eliminate the standard of care owed by the consultant to SCCD or relieve, in any manner whatsoever, a consultant from any professional responsibility, duty or due diligence required toward that work.

Design Standard:

1. Elevator Installer and Maintenance Qualifications

Installer must be a licensed Elevator Contractor in the State of California and must:

- Show evidence of successful experience in complete installation and maintenance of proposed manufacturer's elevator equipment.
- Directly employ sufficient competent personnel within 50 miles of Fairfield, California to handle both construction and maintenance duties.
- Maintain local stock of parts adequate for replacement on permanent or emergency basis.
- Respond to trouble calls within one hour.

2. Elevator Types and Stops

- Given the height of buildings proposed (two to three stories) and the existing precedent on campus, hydraulic elevators are the preferred elevator type at SCCD.

- Provide at least one elevator that serves all floors, including Basement (where it exists) and Roof Level.

3. Controllers

- Elevators shall use standard, non-proprietary controllers. This allows SCCD to have many choices of service providers, rather than being locked into one sole source provider. Acceptable controllers include MotionControl Engineering, or an equivalent controller that can be easily and economically serviced by an elevator service company other than the installing company.
- All diagnostic tools and equipment required for adjusting and troubleshooting shall be an integral / “on-board” feature of the microprocessor controller, and shall not require recharging, reprogramming or be of the automatic destruct type.

4. Battery Emergency Operation

Battery back-up is required to prevent entrapment during power outages. In the event of a power outage, the battery power lowers the elevator to the main exit floor and the doors open to allow anyone who would otherwise be entrapped to exit safely.

Battery backup should operate as follows:

- Provide a battery driven unit that will initiate operation of the protective circuits in case of a power failure.
- Arrange circuitry so that, if the mainline switch is open when the power transfer takes place, the elevator will not respond to the operation of the protective circuit.
- In case of normal power failure, arrange the elevator system to lower from a battery emergency supply. The emergency power supply shall consist of battery and battery chargers.
- Upon the failure of normal power, lower the elevator to the main exit floor. Upon arrival at the main exit landing, the elevator doors shall open automatically and remain open until regular door time has expired. The elevator shall then become inactivated.
- Automatically resume normal operation on restoration of normal power supply to the building.

5. Double-Bottom Cylinders with Sealed PVC Casings

To enhance passenger safety and reduce the risk of environmental contamination, SCCD requires new hydraulic elevators to have a double-bottom cylinder (in order to control the descending speed of the car as the hydraulic oil passes through a relief orifice should the bottom plate fail). SCCD also requires new hydraulic elevators to have a sealed PVC casing (to surround the entire cylinder and provide additional protection to the double-bottom cylinder investment and against environmental contamination).

6. Performance, Operating Qualities, Vibration Control and Sound Control

Performance:

- Contract Speed: Maximum ten percent (10%) speed variation under any loading condition in either direction.
- Hydraulic Pressure: Hydraulic components shall be factory tested for 600 PSI. Maximum operating pressure shall be 425 PSI.
- Door Open Times: 2.3 - 2.5 Seconds.
- Door Close Times: 3.0 Seconds or minimum without exceeding kinetic energy and closing force allowed by code.
- Door Dwell Times: Separate adjustable timers with initial settings at 5.0 seconds for both car and hall calls. Door dwell times shall be canceled by registration of car calls or by pressing the "door close" button.
- Leveling: Within three-eighths (3/8) inch under any loading condition.
 - Level into floor at all times, do not overrun floor and level back.

Operating Qualities:

- Transition: Starting and stopping shall be smooth and comfortable.
- Slowdown, stopping and leveling shall be without jars or bumps.
- Full Speed: Riding shall be free from vibration and sway.

Vibration Control:

- Specify effective sound isolation materials to isolate pumping plant from building structure to prevent objectionable noise and vibration transmission to occupied building spaces.

Sound Control:

- Maximum acoustical output level shall not exceed:
 - 80 dBA measured 3 feet from any piece of equipment in machine room.
 - 50 dBA measured in center of elevator cars and 5 feet above the cab floor during all sequences of operation.
 - 45 dBA measured in elevator lobbies 10 feet from the elevator doors.

7. Finishes

SCCD's preferred finishes include:

- No. 4 Satin Stainless Steel for interior doors, exterior doors, and for door jambs.
- Interior cab walls wear best with textured, rigidized stainless steel, with its increased impact resistance, graffiti resistance, and reflection control that hides scratches and

eliminates oil-canning. Rigidized Metals Corporation's 5.WL is an acceptable textured stainless steel; equivalent textured stainless steel (e.g., 6.WL, 1.NA, 2.WL, 1.CS, and 1.HM) are also acceptable.

- Designers should plan on replacing existing cab finishes that do not conform to these design standards, except in the case of freight-only elevators.
- Stainless Steel grab bars, no aluminum or brass.
- The sill shall be extruded aluminum, recessed to allow for finished floor.
- The finished flooring shall be the same resilient flooring as adjacent spaces.

8. Signage

- Permit holder shall be displayed within the elevator.
- The hallway signage warning occupants to use the stairway for exit in case of fire should be combined with the hall call button, in one brushed metal plaquard.

9. Key Switches

Key switches shall be keyed to the College's master key system. This requirement ensures that operating personnel do not have to carry or duplicate additional keys, and emergency response personnel (particularly fire responders) have the appropriate keys. Each function and/or lock shall be keyed alike.

Coordinate the design of the elevator controls key switches with the work of the security system designer and hardware specifier. Note that the appropriately pinned cylinders will be provided to the elevator contractor for installation.

10. Ceilings and Lighting

SCCD goal for elevator lighting includes an evenly and adequately lit cab using energy efficient lamps with long service lives. To that end, designers should specify any of the following lighting options:

- Suspended opaque acrylic ceiling grills, acting as lighting diffusers to the fluorescent strip lights above that include electronic ballasts and four foot T8 lamps
- Suspended silver parabolic lenses, acting as lighting diffusers to the fluorescent strip lights above that include electronic ballasts and four foot T8 lamps
- No. 4 Stainless steel panels with recessed, fluorescent down cans

Emergency Lighting:

- Specify a battery driven and self-recharging emergency car lighting unit, mounted on top of car, with sufficient capacity to operate emergency lights in continuous operation for four hours and the alarm bell for one hour.

- Within 5 seconds of loss of normal power activate two lamps as part of normal cab lighting. Surface mounted lights are not acceptable.
- Specify a test button in service cabinet.

11. Telephone

Specify a complete system consisting of a telephone and automatic dialer and push button to activate system. The telephone shall not be on the District's VOIP internal communications system, because category 6 cabling has a bending radius constraint inconsistent with the requirements of the elevator shaft; specify a POTS line. Mount behind a pattern of holes as an integral part of car operating panel. The automatic dialer shall be programmed to call the elevator contractor's telephone monitoring service (see Section 14 Warranty and Service, below).

12. Card Readers

Elevators with exterior access shall be tied to the College's Electronic Access Control System (EACS), for after-hours access. See [Design Standard for Electronic Safety and Security](#). The EACS shall also be used if floors or areas of the building are to be isolated from each other during or after hours.

Coordinate the design of the elevator controls with the work of the security system designer. Specify that the elevator contractor is to include required wiring from the cab and elevator lobbies to the machine room, and that the final connections of the card readers shall be made by the security system integrator.

13. Protective Pads

Each cab must have its own set of pads provided in a heavy duty duffle bag with handles. This requirement ensures that each cab can be protected even during concurrent furniture/fixture/occupant moving operations, that maintenance personnel can handily carry the pads from the storage location to the cab for ease of installation, and that the pads are protected during periods of storage.

- Pads shall cover all walls with cutout sections for car operating panels.
- Specify heavy duty stainless steel buttons attached to cab panels for hanging.

14. Permits

- Specify that contractor is responsible for arranging and paying for inspections by governing authorities and obtaining operating permits.
- The operating permit shall list as the owner: Solano Community College District, 4000 Suisun Valley Road, Fairfield, CA 94534.

15. Warranty and Service

The elevator contractor shall warrant the new or renovated elevator for a period of 12 months following substantial completion of the general contractor's contract. Under no circumstances shall the elevator warranty period commence prior to the governing authority issuing an operating permit for the elevator.

SCCD typically uses one elevator service company to perform all its elevator service on existing elevators, including telephone monitoring service, monthly preventive maintenance service, callback repairs, entrapment rescues and 5-year load testing. However, we require new or renovated elevators to be fully serviced for the first 12 month period by the same elevator contractor who installed and is warranting the unit, and this requirement should be specified in the construction specifications.

Specify the following activities and criteria to be included as part of this requirement:

- Prior to commencing the 12 month maintenance service period, execute a standard elevator maintenance service agreement with the Solano Community College District, through the office of the Director of Facilities.
- Provide complete monthly maintenance on entire elevator system for a period of 12 months. This shall minimally include:
 - Examination: Include systematic examination with monthly adjustment and lubrication of elevator equipment. Whenever required provide replacement of defective parts with parts of same manufacture as required for proper operation. Contractor is not responsible for repairs to car enclosures, door panels, frames, sills or platform flooring resulting from normal usage or misuse, accidents and negligence.
 - Testing: Include any testing required by Code authorities including monthly testing of Firefighters' Service.
 - Performance Standards: Maintain smooth starting, stopping, ride qualities and accurate leveling at all times.
 - Call-Backs: Provide 24 hour emergency call-back service at no additional cost to Owner. Emergency call-back includes trapped passengers and incidents where serious equipment or building damage may occur. Respond to trouble calls within one hour.
 - Telephone Monitoring: The automatic dialer shall be programmed to call the elevator contractor's telephone monitoring service. Coordinate through the District's Office of the Vice Chancellor of Facilities for the College's callback notification protocol.
- Final Service and Inspection: Two weeks before expiration of the year's maintenance, the equipment shall be lubricated, fully serviced, adjusted to the standards designated and emergency service operation devices shall be checked. A representative of the District will make a complete inspection.

- Elevator Shutdowns:
 - Should the elevator become inoperative, repair or replace minor components within 24 hours of notification of failure and return to service. Complete service and repairs of major components within 72 hours.
 - The District may order the work done by other contractors at the Contractor's expense for failure to comply with the requirements noted above.
 - Extend maintenance and responsibility for correct operation to devices repaired or replaced by others under these circumstances.
- Follow-Up Tests: Test all safety devices and emergency operations at 6 month intervals or sooner and submit written report on each test. Perform tests at times that do not interfere with College operations.
- Maintenance Tool and Software Manuals: Provide maintenance tools, supporting software, instruction manuals and all documentation required for maintenance of the entire system including trouble shooting, diagnostics and adjusting. All diagnostic tools and equipment required for adjusting and troubleshooting shall be an integral / "on-board" feature of the microprocessor controller, and shall not require recharging, reprogramming or be of the automatic destruct type.
- Maintenance Materials: The elevator service contractor shall provide a metal cabinet in the machine room containing a reasonable supply of expendable parts required for prompt replacement. Replenish parts used for routine maintenance to ensure an adequate supply is available. Cabinet and all contents shall become property of SCCD and shall not be removed upon expiration of maintenance period.

Approved Manufacturers:

o Elevator Manufacturers

- ThyssenKrupp Elevator Corp.
- Schindler Elevator Co.
- Otis Elevator Co.

o Microprocessor Controllers

- MotionControl Engineering
- Or equivalent nonproprietary

o Cab and Entrance Manufacturers

- Elevator manufacturer
- Tyler Elevator Products
- H & B Elevators
- Sterling Corporation
- Swiss Dane



Substitutes Allowed:

Yes, if performance and quality equivalency can be evidenced.

Associated Design Standards and Construction Specifications

Design Standard on Building, Floor, Room, Stair, Elevator, Equipment and Outlets Designation.
Design Standard on Electronic Safety and Security.

End of Document



DESIGN STANDARD for Emergency Response Related

Purpose:

The purpose of this design standard is to help ensure that emergency response vehicles and personnel have quick, clear, and easy access to all areas of any District campus in the event of an emergency.

SCCD is committed to working with local agencies to insure that safety standards and access for emergency vehicles and other devices as discussed in the District's "PACEP" Safety Committee will meet best practices of the industry.

Design Standard:

Fire department service areas

Fairfield Campus is served primarily by the Cordilia Fire Department.

Vacaville Campus is served primarily by City of Vacaville Fire Department.

Vallejo Campus is served primarily by City of Vallejo Fire Department.

General Site Access

- It is important that emergency vehicles have driving access close to all campus buildings, central campus areas and exterior plaza areas; a good goal is to provide EVA access to within 150 feet of all exterior portions of each building.
- Provide a minimum 20-foot width on all Emergency Vehicle Access (EVA) lanes, to allow adequate space for two emergency vehicles to pass each other going in opposite directions. Where this cannot be provided for the entire length of the EVA lanes (due to existing structural or landscape feature), a passing lane or other accommodation will be reviewed by SCCD and the appropriate emergency response agencies.
- The EVA lanes must have a minimum 13" canopy clearance for emergency response vehicles.
- Paving for EVA lanes must be capable of supporting fire trucks (60,000 pound minimum loading requirement, subject to review and acceptance by the respective emergency response agencies).
- Ideally EVA lanes should be "looped" to allow alternate means to access central and critical areas of the campus. Where this cannot be provided, hammer-head turnarounds will be required (subject to the acceptance of the respective emergency response agencies).
- Fire trucks require a 52' outside diameter turning circle, if this is not feasible, confirm with the fire department if they will accept a 3-point turning configuration.

Knox Boxes and Padlocks

- The fire department prefers that Knox boxes are placed throughout the campus, for easy and multiple key set access.
- SCCD has standardized on Knox-Box 3200 Series for fire department key storage.



- Install recessed Knox boxes at each major entrance in new construction.
- Install recessed Knox boxes at each major entrance in renovation projects, if feasible; otherwise install surface-mounted units.
- Install Knox padlocks on gates; these can be daisy-chained with standard padlocks for college use.

Fire Sprinklers

- See **Design Standard for Basic Fire Protection System Design**.
- All new construction shall be fully sprinklered.
- Major renovation of an existing building should include retrofit sprinklering of the building.
- Minor renovation of an existing building should include standpipes installed outside the buildings so that fire fighters have a water source for their hoses.

Standpipes

- Install standpipes in stairwells in new construction. The local fire departments prefer that the standpipes are at the main floors, not at intermediate landings. Include the ground/first floor landing, even if not required by code.

Fire Alarm Systems

- See **Design Standard for Fire Alarm Systems**.

Approved Manufacturers:

Knox-Box 3200 Series
Others per referenced Design Standards.

Substitutes Allowed:

Knox-Box substitution to be approved by Director of Facilities.
Others per referenced Design Standards.

Associated Design Standards and Construction Specifications

Design Standard for Basic Fire Protection System Design.
Design Standard for Fire Alarm Systems.

End of Document

Cutsheet Attachments:
Knox-Box 3200 Series



Knox-Box® 3200 Series
LIFT-OFF DOOR MODEL

High Security Industrial/Government Key Box



Recessed Mount
with Face Flange

Surface Mount

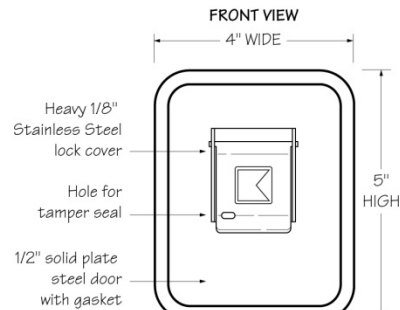
The number one high-security KNOX-BOX® is used for most commercial applications including businesses, schools, government and public buildings, community associations and apartment complexes. The 3200 Series KNOX-BOX with lift-off door holds keys, access cards and other small items necessary for emergency access.

Features and Benefits

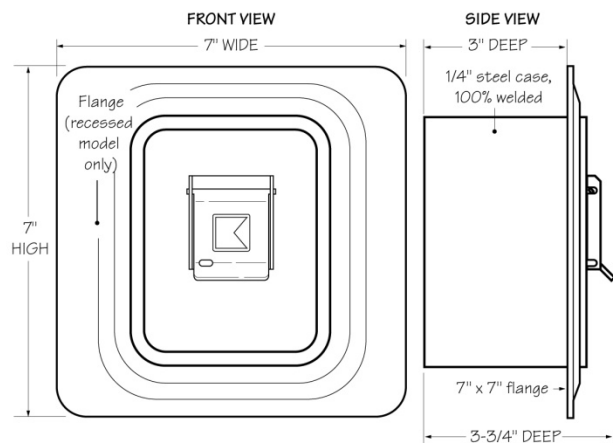
- Holds up to 10 keys and access cards in interior compartment
- Ensures high security. Box and lock are UL® Listed
- Includes a Knox-Coat® proprietary finishing process that protects Knox products up to four times better than standard powder coat
- Resists moist conditions with a weather resistant door gasket
- Colors: Black, Dark Bronze or Aluminum
- Weight: Surface mount - 8 lbs.
Recessed mount - 9 lbs.

Options

- Alarm tamper switches (UL Listed)
- Recessed Mounting Kit (RMK) for recessed models only
- Inside switch for use on electrical doors, gates and other electrical equipment



3200 Surface Mount



3200 Recessed Mount

Ordering Specifications

To insure procurement and delivery of the 3200 Series KNOX-BOX, it is suggested that the following specification paragraph be used:

KNOX-BOX surface/recessed mount with lift-off door, with/without UL Listed tamper switches. 1/4" plate steel housing, 1/2" thick steel door with interior gasket seal. Box and lock UL Listed. Lock has 1/8" thick stainless steel dust cover with tamper seal mounting capability.

Exterior Dimensions: Surface mount body - 5"H x 4"W x 3-3/4"D

Recessed mount flange- 7"H x 7"W

Lock: UL Listed. Double-action rotating tumblers and hardened steel pins accessed by a biased cut key.

Finish: Knox-Coat® proprietary finishing process

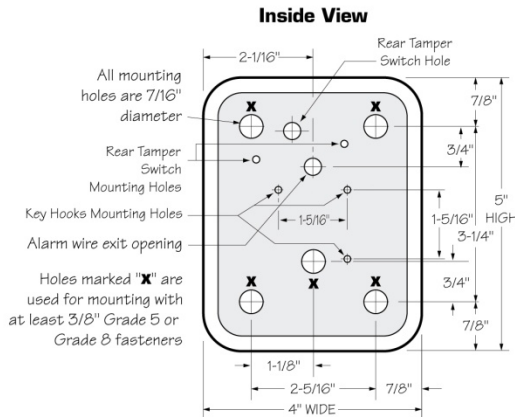
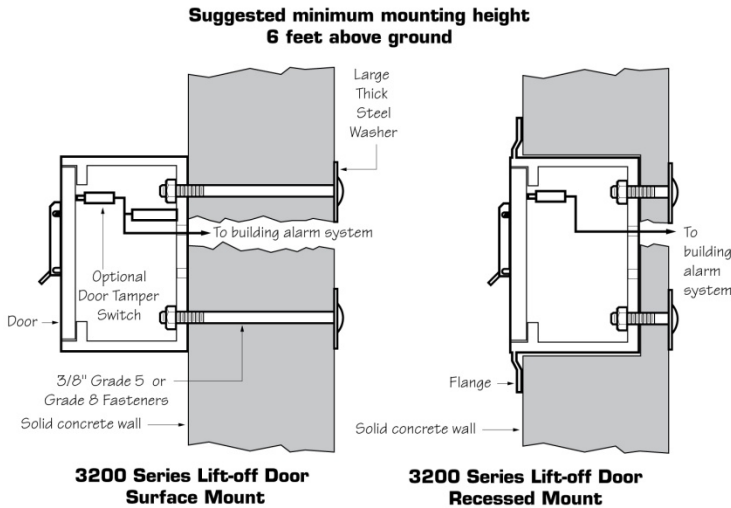
Colors: Black, Dark Bronze or Aluminum

P/N: 3200 Series KNOX-BOX (mfr's cat. ID)

Mfr's Name: **KNOX COMPANY**



Knox-Box® 3200 Series
LIFT-OFF DOOR MODEL - MOUNTING DIAGRAM



Attention: KNOX-BOX® is a very strong device that MUST be mounted properly to ensure maximum security and resist physical attack.

Knox® Rapid Entry System
The Knox Company manufactures a complete line of high security products including Knox-Box key boxes, key vaults, cabinets, key switches, padlocks, locking FDC caps, plugs and electronic master key security systems. For more information or technical assistance, please call Customer Service at 1-800-552-5669.

Recessed Mounting Kit

The 3200 Recessed Mounting Kit (RMK) is used for recessed models only. It contains a shell housing and mounting hardware to be cast-in-place in new concrete or masonry construction. After construction is completed, the KNOX-BOX mounts inside the recessed shell housing. The RMK may only be used in new concrete or masonry construction.

Installation In Cast Concrete

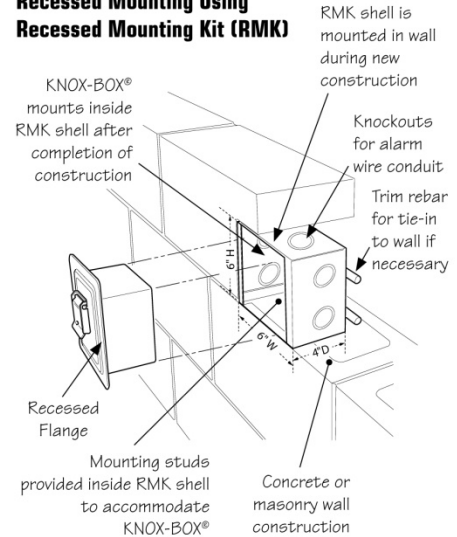
The optional Recessed Mounting Kit is for use in new concrete or masonry construction only. The kit includes a shell housing and mounting hardware to be cast-in-place. The KNOX-BOX is mounted into the shell housing after construction is completed.

Dimensions

Rough-in Dimensions: 6-1/2"H x 6-1/2"W x 5"D

IMPORTANT: Care should be taken to insure that the front of the RMK shell housing, including the cover plate and screw heads, is flush with the finish wall. The RMK must be plumbed to insure vertical alignment of the vault.

Recessed Mounting Using Recessed Mounting Kit (RMK)



DESIGN STANDARD for Exterior Paint

Purpose:

This design standard has the purpose of creating a consistent application of painting requirements throughout the Solano Community College District. The intent is to create a standard of quality for maintenance and reliability throughout all renovation and new building projects.

Note: these Design Standards are a tool to clarify direction and streamline project execution for design professionals, construction managers and other participants in capital improvement projects. They represent the District's "strong preference" and should be applied, when possible, without compromising the creativity of the overall design. Final disposition, color, size, product choice etc. should conform to the best extent possible where equivalent substitutes are allowed in the Design Standard. If equivalent substitutes are allowed only "if performance and quality equivalency can be evidenced" or the consultant wishes to deviate from the written design standards for other reasons, then the consultant needs to provide evidence/justification and seek District approval as outlined in the [Open this Document First: Standards Process.pdf](#). In all cases the written design standards do not diminish or eliminate the standard of care owed by the consultant to SCCD or relieve, in any manner whatsoever, a consultant from any professional responsibility, duty or due diligence required toward that work.

Design Standard:

1. Exterior Paint

- SCCD has standardized on latex (water based) paints for the outdoor environment for the following reasons:
 - Water-based paints are the safest option for the people who handle them and the environment.
 - Latex paints have a less objectionable odor, which makes them good for repaints and painting in occupied areas, where solvent odor is an issue.
 - They clean up with soap and water; there's no need to work with hazardous and/or flammable solvents, and no used solvent to dispose of afterwards.
 - Latex paints dry faster, and can be recoated sooner; this makes them a good choice for painting in occupied areas, where someone might touch or brush up against the freshly painted surface.
 - Latex paint binders hold up better in sun-exposed areas, because they're more resistant to UV (ultraviolet) radiation.
 - Latex paint films are less prone to yellowing over time, especially with white, light off-white and pastel colors.
 - Latex paint films are more breathable; they allow small amounts of water vapor to pass through the film, so the chance of blistering is reduced. This is especially important when the surface being painted is slightly damp.

- Latex paint films have better gloss and color retention, so they'll keep a 'like-new' appearance longer.

2. Exterior Color Palette

- Each of the campuses has an exterior color palette that creates continuity across the District sites but also addresses each campus' uniqueness. See [Attachments](#) for Campus Color Palettes. Note Trespa Panel Colors have been used as a basis for some of the colors provided because in some instances buildings may introduce colors through building panel materials in lieu of paint, and there is a desire to match the quality of color saturation provided by these panels should they be introduced via painting.
 - All Campuses Field Colors:
 - Color similar to Kelly Moore Apple White, KM_OW206-1
 - Color similar to Sherwin Williams Elder White, SW 714
 - Color similar to Trespa Stonebeige, A0511
 - All Campuses Exterior Columns:
 - Exposed Concrete, Sandblasted, Smooth Finish **or**
 - Color similar to Sherwin Williams Extra White, SW 7006
 - Accent Colors for Fairfield and Vacaville: the intent is for buildings to opt for only one to two accent colors out of these pair of choices:
 - Color similar to Trespa Pacific Board, NW04 or Trespa Sienna Brown, A10.4.5
 - Color similar to the range provided by Trespa Dark Mahogany, NW19
 - Color similar to Trespa Ocean Grey, A22.3.1 or Trespa Powder Blue, A22.2.4
 - Color similar to Trespa Sun Yellow, A05.1.4 or Trespa Gold Yellow, A04.1.7
 - Color similar to Trespa Spring Green, A37.2.3 or Trespa Forest Green, A34.8.1
 - Accent Colors for Vallejo: the intent is for buildings to opt for only one to two accent colors out of these pair of choices:
 - Color similar to Trespa Pacific Board, NW04 or Trespa Sienna Brown, A10.4.5
 - Color similar to the range provided by Trespa Dark Mahogany, NW19
 - Color similar to Trespa Ocean Grey, A22.3.1 or Trespa Steel Blue, A24.4.1
 - Non-Public/Utility Buildings on any campus have the option of being painted to match Trespa Mid Beige A08.2.1.
 - Exterior Mullions for Fairfield: *Kawneer Finish No. 40 Dark Bronze Anodized Aluminum*, Aluminum Association Specification # AA-M10C22A44. See [Design Standard on Doors and Door Frames](#).
 - Exterior Glazing for Fairfield: to match *Viracon VE1-2M*, see [Design Standard on Glazing](#) for exceptions.
 - Exterior Mullions for Vallejo and Vacaville Centers: *Kawneer Finish No. 14 Clear Anodized Aluminum*, Aluminum Association Specification # AA-M10C22A41. See [Design Standard on Doors and Door Frames](#).
 - Exterior Glazing for Vallejo and Vacaville Centers: to match *PPG Industries, Inc. Solargray with Solarban 60*, see [Design Standard on Glazing](#) for exceptions.

Approved Manufacturers:

Latex Paint: Sherwin Williams.

Substitutes Allowed:

Yes, if performance and quality equivalency can be evidenced.

Associated Design Standards and Construction Specifications:

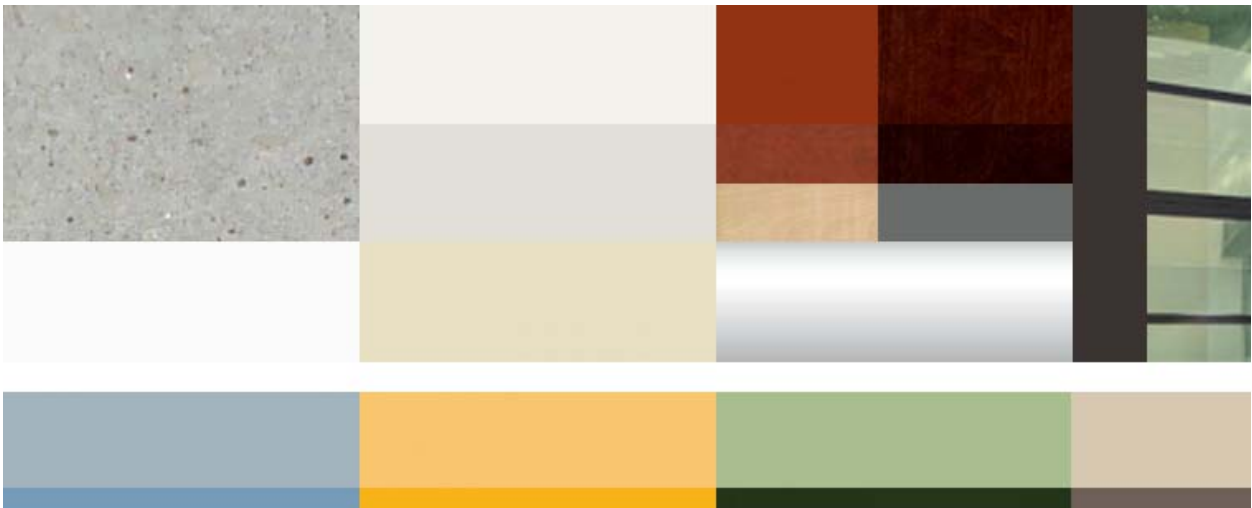
Design Standard for Interior Paint

End of Document

Attachments:

Fairfield Exterior Color Palette, Vacaville Exterior Color Palette, Vallejo Exterior Color Palette

Fairfield Exterior Color Palette:



Vacaville Exterior Color Palette:



Vallejo Exterior Color Palette:





DESIGN STANDARD for Flagpoles

Purpose:

The purpose of this design standard is to ensure consistency in the provision of flagpoles at each campus, which are functionally appropriate to each college's environment.

Design Standard:

- Flagpoles shall be aluminum, unpainted.
- Flagpole heights shall be appropriate to the site, generally 30'.
- Flagpoles shall have a round gold finial at the top.
- Flagpoles shall have light fixtures at the base, for nighttime illumination. This ensures that the flags can be displayed at night, negating the need for staff to raise and lower the flags on a daily basis.
- Flags shall be weatherproof material, appropriate for 24/7/365 exposure.
- Comply with rules for use and display of the flag (36 United States Code 173-178)

Substitutes Allowed:

Not applicable.

Associated Design Standards and Construction Specifications

Not applicable.

End of Document

DESIGN STANDARD for Flooring

Purpose:

The purpose of this Standard is to standardize the Flooring for District sites based on the following criteria:

- Durability
- Ease of Maintenance
- Aesthetics
- Sustainability: products that reduce water and energy consumption, are sustainably produced, and assist with quality of indoor air.
- Acoustics
- Cost (initial and total cost)

Note: these Design Standards are a tool to clarify direction and streamline project execution for design professionals, construction managers and other participants in capital improvement projects. They represent the District's "strong preference" and should be applied, when possible, without compromising the creativity of the overall design. Final disposition, color, size, product choice etc. should conform to the best extent possible where equivalent substitutes are allowed in the Design Standard. If equivalent substitutes are allowed only "if performance and quality equivalency can be evidenced" or the consultant wishes to deviate from the written design standards for other reasons, then the consultant needs to provide evidence/justification and seek District approval as outlined in the [Open this Document First: Standards Process.pdf](#). In all cases the written design standards do not diminish or eliminate the standard of care owed by the consultant to SCCD or relieve, in any manner whatsoever, a consultant from any professional responsibility, duty or due diligence required toward that work.

Design Standard:

1. Flooring Recommendations by Room Type:

See Table on the next page.

Flooring Recommendations by Room Type:

Room Use	Option 1	Option 2	Option 3
Lobby/Entries	Terrazzo or Stone Tile	Stained Concrete with transparent sealer appropriate for use	Linoleum or Carpet
Door Entrance Area	Walk-Off Mat placed on top of Lobby Material Do not specify Aluminum Grate Walkway		
Public Hallways/Corridors	Linoleum	Carpet	Stained Concrete with transparent sealer appropriate for use
Classrooms	Carpet	Linoleum	Stained Concrete with transparent sealer appropriate for use
Laboratories/ Kitchen Areas	Stained Concrete sealed with transparent sealer specific to Laboratory use	Linoleum where chemicals are not a concern	Vinyl Sheet Flooring with welded seams and integral coves where chemicals are a concern
Offices and Office Areas	Carpet		
Restrooms	Ceramic Tile		
Study Areas, Lounges etc.	Carpet	Linoleum at areas with sinks	
Service Areas and Service Hallways	Concrete with transparent sealer specific to maintenance use	Vinyl Sheet Flooring with welded seams and integral coves where chemicals are a concern	
Custodial Spaces	Ceramic Tile	Concrete with transparent sealer specific to maintenance use	

2. Flooring Specifics:

- A. Concrete with Transparent Sealer appropriate for specific use, Stained in Public Areas:
One sustainable approach to buildings is to use less building materials. In rooms and hallway/corridors where acoustics are less of a concern (or handled by other finish materials) the concrete used in the floor slab can be utilized as the floor finish, as long as it is sealed with a sealer appropriate for the room/space use. In public areas, the concrete should be stained to provide visual interest.
- With new buildings, design professionals should review concrete specification to ensure best staining results and review concrete joint locations to enhance the visual appearance of the floor.
 - Sealers should address appropriate use (for example expected chemicals, moisture, cleanability performance) as well as code requirements for anti-slip etc.
 - Example sealers are sealers from Rustoleum.
 - Locations: see Table under item #1.

B. Terrazzo /Stone Tile:

Both Terrazzo and Stone Tiles have the advantages of being extremely durable, easy to maintain (as long as they are sealed correctly), made of natural materials (some versions of Terrazzo also contain recycled glass and are even more sustainable) and aesthetically pleasing. They do require a sealer to address both water penetration and slip resistance, and are relatively more expensive than other flooring materials. However, for special use areas such as entrance lobbies they are permitted if project budgets can accommodate it.

- Locations: see Table under item #1.

C. Linoleum Flooring:

Sheet Linoleum is an extremely durable product made of natural materials that are naturally anti-bacterial and biodegradable, yet very resistant to water, easy to clean, relatively low maintenance, aesthetically pleasing, and cost effective. Since it is easy to cut, it can be combined into different colors and patterns.

- The product does require experienced installers, and specifications should list criteria for ensuring adequate experience.
- Heat-Welded Seams.
- Specify Low Maintenance Coating (such as Armstrong NATURCote UV-cured coating).
- Product: Armstrong Commercial Flooring Linoleum.
- Locations: see Table under item #1.

D. Vinyl Sheet Flooring:

In certain laboratory classrooms, kitchen areas and service areas it might be necessary to specify vinyl sheet flooring with heat-welded seams and integral cove base due to the chemicals or activities in the room that require specialized clean up/containment. Vinyl Sheet Flooring is not a sustainable/green product and should not be used for any other application.

- Material: heavy-duty resilient sheet flooring.
- Thickness: 0.10"
- Locations: only at laboratories and service areas that warrant this flooring.
- Products: Armstrong Sheet Vinyl or Altro High Performance Safety Flooring.

E. Carpet:

SCCD selected the Tarkett Company, Tandus Carpets at the District Standard because of the ease of installation (and replacement by maintenance personnel), its environmental benefits (including cradle to grave, high recycled content, virtually zero VOCs), elegant aesthetics, use of no wet adhesives (avoids offgasses), static control and its affordability. Products are available both as rolled and modular tile, and logos can be cut into the carpet.

- Rolled Goods: 6' or 12' wide.
- Modular Goods: 24" x 24".
- Backing: Powerbond ER3.
- Product: Tandus Carpets.
- Style: Choose from most popular styles (to ensure manufacturer continuity with providing that particular style), such as Aftermath II, Longitude, Monumento and Ratio.



F. **Rubber Base:**

Rubber is the preferred (sustainable) base material, that is also durable:

- 4" Topset rubber cove base.
- Long rolls to minimize seams.
- Minimize joints
- No joints in corners.
- Score corners.
- No pieces less than 24"
- Use full length sections around columns and appurtenances.
- Roll out base during installation.
- Product: BurkeMercer, Type TS.

G. **Ceramic Tile:**

As described in the **Design Standard for Restrooms** the **Design Standard for Custodial Spaces**:

- Provide ceramic mosaic tile in 2" x 2" size for restrooms, 6" x 6" in custodial spaces.
- Provide ceramic tile in colors that camouflage dirt and stains.
- Number of colors not to exceed 5 different colors for restrooms, 1 for custodial.
- Provide a 12-inch wide darker color border on floor, in a color that has a matching cove tile base at restrooms only.
- Pattern within border can be random (makes for easier replacement), at restrooms only.
- Select grout color to minimize appearance of stains.
- Provide same colored grout for both floors and walls, this will allow installer to complete installation in a single installation, thereby reducing cost to District.
- Products: Dal Tile or American Olean.

3. Flooring Colors:

- Design Teams should provide District with at least (2) choices for Color Palettes that encompass all finish materials, including flooring finishes. District may opt to adopt a particular palette as a District Standard for that campus in the future.

Approved Manufacturers:

Per above.

Substitutes Allowed:

Yes, if performance and quality equivalency can be evidenced.

Associated Design Standards and Construction Specifications

Design Standard for Restrooms
Design Standard for Custodial Spaces

DESIGN STANDARD for Glazing

Purpose:

The purpose of this Standard is to standardize the glazing on each District Site for the architectural cohesiveness of each campus, while ensuring that the visibility requirements, the energy performance requirements and the quality criteria are met.

The desire is to move away from the existing dark glazing on the Fairfield campus to a more visible glazing that allows inside activities to be showcased. A glazing with a “greenish” look is the *preferred* color due to its compatibility with the rest of the Fairfield exterior color palette for Fairfield (see Design Guidelines). For the Vallejo and Vacaville sites, the *preference* is to replicate the existing “greyish” look that already exists at the recently built Centers. District understands that glazing choices are affected by many considerations, including energy performance for the project, which is why deviations from the preferred colors will be considered on a project basis.

Note: these Design Standards are a tool to clarify direction and streamline project execution for design professionals, construction managers and other participants in capital improvement projects. They represent the District’s “strong preference” and should be applied, when possible, without compromising the creativity of the overall design. Final disposition, color, size, product choice etc. should conform to the best extent possible where equivalent substitutes are allowed in the Design Standard. If equivalent substitutes are allowed only “if performance and quality equivalency can be evidenced” or the consultant wishes to deviate from the written design standards for other reasons, then the consultant needs to provide evidence/justification and seek District approval as outlined in the [Open this Document First: Standards Process.pdf](#). In all cases the written design standards do not diminish or eliminate the standard of care owed by the consultant to SCCD or relieve, in any manner whatsoever, a consultant from any professional responsibility, duty or due diligence required toward that work.

Design Standard:

1. Exterior Fairfield Campus:

- Tinted Low-E Glass Units: ASTM E774, Class A; double pane with dual silicone sealed edge; 1 inch overall thickness.
- Properties:
 - Visible Light Transmittance: 70 percent
 - Shading Coefficient: 0.44
 - Solar Heat Gain Coefficient: 0.38
 - U-Value: 0.29 Winter/0.26 Summer
 - Preferred Glass Color: per *Viracon VE1-2M*
- Product: *Viracon VE1-2M*.
- Silkscreens: permitted, review with District’s Project Manager.

2. Exterior Vacaville and Vallejo Campus:

- Tinted Low-E Glass Units: ASTM E774, Class A; double pane with dual silicone sealed edge; 1 inch overall thickness.
- Properties:
 - Visible Light Transmittance: 35 percent
 - Shading Coefficient: 0.32
 - Solar Heat Gain Coefficient: 0.28
 - U-Value: 0.29 Winter/0.27 Summer
 - Preferred Glass Color: per *PPG Industries, Inc. Solargray with Solarban 60*
 - Silkscreens: permitted, review with District's Project Manager.
- Product: *PPG Industries, Inc. Solargray with Solarban 60*.
- Silkscreens: permitted, review with District's Project Manager.

3. Interior Glazing (All Sites):

- Clear, 1/4" tempered glazing, unless otherwise required by Fire-rated or Code conditions.
- Silkscreens: permitted and encouraged for interior conditions where some privacy is required, review selection with District's Project Manager.

Approved Manufacturers:

Per above.

Substitutes Allowed:

For Exterior Glazing: glazing color deviations will be considered on a project by project basis, regardless glazing must perform to these minimum requirements: visible transmittance is no lower than 35%, and energy performance criteria satisfies energy targets for particular project.

Associated Design Standards and Construction Specifications

Design Standard for Doors and Door Frames.

End of Document

DESIGN STANDARD for Interior Paint

Purpose:

The purpose of this design standard is to create a standard for the quality, maintenance, reliability, and indoor air quality of Interior Paint throughout all renovation and new building projects.

The District is limiting the number of paint colors within buildings for both sustainability reasons and maintenance reasons. For regular maintenance, Districts require extra paint to perform touch ups etc. and having numerous paint colors means that multiple cans of extra paint have to be stored, correctly identified and used. If the District is out of that particular color, and the paint is no longer available from the manufacturer, that paint color has to be matched. All of these tasks require extra maintenance hours that having one or two colors of paint would not require. Unfortunately, paint also has a limited shelf life (typically only 3 years in the right conditions), and countless numbers of unused extra paint cans get disposed each year by institutions as large as SCCD. This is not environmentally sound. Limiting the District paint colors to one classic color that is less likely to be discontinued by the manufacturer means that less paint has to be stored and fewer maintenance hours are needed. Color richness in buildings should be achieved through other materials such as flooring, wall coverings/wall paneling, ceilings, furniture etc. However, should cost prohibit the use of materials that can provide color interest, the District will permit the limited use of feature painted walls in certain instances to create visual interest within a room or space.

Note: these Design Standards are a tool to clarify direction and streamline project execution for design professionals, construction managers and other participants in capital improvement projects. They represent the District's "strong preference" and should be applied, when possible, without compromising the creativity of the overall design. Final disposition, color, size, product choice etc. should conform to the best extent possible where equivalent substitutes are allowed in the Design Standard. If equivalent substitutes are allowed only "if performance and quality equivalency can be evidenced" or the consultant wishes to deviate from the written design standards for other reasons, then the consultant needs to provide evidence/justification and seek District approval as outlined in the [Open this Document First: Standards Process.pdf](#). In all cases the written design standards do not diminish or eliminate the standard of care owed by the consultant to SCCD or relieve, in any manner whatsoever, a consultant from any professional responsibility, duty or due diligence required toward that work.

Design Standard:

1. Typical Interior Paint

- SCCD has standardized on latex (water based) paints for the indoor environment for the following reasons:

- Water-based paints are the safest option for the people who handle them and the environment (Zero to Low VOC).
- Latex paints have a less objectionable odor, which makes them good for repaints and painting in occupied areas, where solvent odor is an issue.
- They clean up with soap and water; there's no need to work with hazardous and/or flammable solvents, and no used solvent to dispose of afterwards.
- Latex paints dry faster, and can be recoated sooner; this makes them a good choice for painting in occupied areas, where someone might touch or brush up against the freshly painted surface.
- Latex paint binders hold up better in sun-exposed areas, because they're more resistant to UV (ultraviolet) radiation.
- Latex paint films are less prone to yellowing over time, especially with white, light off-white and pastel colors.
- Latex paint films are more breathable; they allow small amounts of water vapor to pass through the film, so the chance of blistering is reduced. This is especially important when the surface being painted is slightly damp.
- Latex paint films have better gloss and color retention, so they'll keep a 'like-new' appearance longer.
- Latex paint films are more elastic, so they can expand and contract with the substrate better; this means they'll be less likely to crack and peel over time.
- SCCD has standardized on one color: Sherwin Williams, Navajo White, Zero VOC.

2. Whiteboard Paint for Teaching Walls

- In lieu of providing pre-made whiteboards, SCCD has standardized on providing teaching walls painted with high-performance dry erase formula paint per the following:
 - Product: IdeaPaint Pro or demonstrated equivalent.
 - Field applied, durable dry erase coating.
 - LEED compliant (Low VOC).
 - Color: White.
 - Substrate: Gypsum Board Level 5 finish.
 - Application: HVLP Spray application per professional installer, final finish to be smooth and free of texture.
 - Warranty: 10 years.
 - Location: one wall in room (certain room types may require more than one), from base to ceiling level.
 - Special Considerations: do not locate any wall-mounted items such as strobes, fire alarm pull stations, phones on this wall, unless they have been specifically approved by end users. Outlets should be located no higher than 18" above finish floor, unless approved by end users.
 - Manufacturer Qualifications: minimum of 3 years manufacturing dry-erase coatings.

Approved Manufacturers:

Latex Paint: Sherwin Williams.

Whiteboard Paint: IdeaPaint.



Substitutes Allowed:

Yes, if performance and quality equivalency can be evidenced.

Associated Design Standards and Construction Specifications:

Design Standard for Exterior Paint

End of Document

DESIGN STANDARD for Restrooms

Purpose:

Restrooms should be consistent throughout Solano Community College District (SCCD) to provide aesthetically pleasing, clean, well lit restrooms with durable fixtures, fittings and finishes that are cost effective to maintain.

- Products should be selected based on the following criteria:
- Durability
- Ease of Maintenance (including availability of parts)
- Ease of Operation
- Anti Graffiti Properties
- Aesthetics
- Sustainability: products that reduce water and energy consumption, are sustainably produced, and assist with quality of indoor air.

Note: these Design Standards are a tool to clarify direction and streamline project execution for design professionals, construction managers and other participants in capital improvement projects. They represent the District's "strong preference" and should be applied, when possible, without compromising the creativity of the overall design. Final disposition, color, size, product choice etc. should conform to the best extent possible where equivalent substitutes are allowed in the Design Standard. If equivalent substitutes are allowed only "if performance and quality equivalency can be evidenced" or the consultant wishes to deviate from the written design standards for other reasons, then the consultant needs to provide evidence/justification and seek District approval as outlined in the [*Open this Document First: Standards Process.pdf*](#). In all cases the written design standards do not diminish or eliminate the standard of care owed by the consultant to SCCD or relieve, in any manner whatsoever, a consultant from any professional responsibility, duty or due diligence required toward that work.

Design Standard:

A. Entries and Signage:

- 1) Entries to restrooms should be well-signed and easily located.
 - a) If the entry is hidden in an alcove, provide a double-sided flag-type sign (one perpendicular to the wall plane) that clearly marks the restroom location in the hallway leading to the alcove.
 - b) Unless approved by Director of Facilities, restrooms must have entry doors.

- c) Per the discretion of the Director of Facilities, high-use restrooms in new buildings may consider door-less restrooms with privacy wall entries. This will facilitate entry/exit traffic into these high-use restrooms. Note: door-less restrooms must provide more stringent negative air pressurization to eliminate odor pollution in adjacent areas.
- d) Regardless of whether it has a door or not, each restroom should be numbered and clearly signed, so that the room can be easily found and matched with the SCCD space inventory. See [Design Standard on Building, Floor, Room, Stair, Elevator, Equipment and Outlets Designation](#).

B. Door Related:

- 1) Comply with [Design Standard for Door Hardware](#) and provide:
 - a) Public multi-stall restrooms remain unlocked except when locked by maintenance/security personnel.
 - b) Public single stall restrooms remain unlocked except when locked by maintenance/security personnel.
 - c) Staff single stall restrooms remain locked at all times and indicate clearly when the room is occupied.
 - d) All restroom entry doors require a kick plate to protect door from custodial carts.
- 2) Provide Wood door per [Design Standard for Doors and Door Frames](#).
- 3) Provide Hollow Metal door frames per [Design Standard for Doors and Door Frames](#).
- 4) Provide Door Thresholds as follows:
 - a) Provide a light-colored marble threshold, size to match width of door jamb, to transition between restroom ceramic tile and hallway finish. Height of threshold should comply with CBC Code requirements for Accessibility.
 - b) Provide Schluter™ Schiene or Schluter™ Deco transition piece to separate finishes between restroom and adjacent hallway at cased opening/jamb.

C. Restroom Finishes

- 1) These standards apply to New Buildings and Major Renovations. When renovating restrooms that are more than 20 years old, gut and replace everything down to the original wall studs. For restrooms that have been built or remodeled in the last 20 years, replace those items that are feasible and cost effective to match these standards.
- 2) The SCCD standard for [Restroom Floors](#) is as follows:
 - a) Provide ceramic mosaic tile in 2" x 2" size.
 - b) Provide ceramic tile in colors that camouflage dirt and stains.
 - c) Number of colors not to exceed 5 different colors.
 - d) Provide a 12-inch wide darker color border on floor, in a color that has a matching cove tile base.
 - e) Pattern within border can be random (makes for easier replacement).
 - f) Select grout color to minimize appearance of stains.

- g) Provide same colored grout for both floors and walls, this will allow installer to complete installation in a single installation, thereby reducing cost to District.
- 3) The SCCD standard for **Restroom Walls** is as follows:
- a) Provide ceramic tile to start above built-up cove tile base (6" tall in total) to approximately 6 inches below the ceiling. Exact height should be determined by full tile heights. Providing this gap at ceiling avoids the cost of scribing the wall tile to an imperfect ceiling line.
 - b) Provide ceramic tile in a 6" x 6" size, semi-gloss finish.
 - c) Provide one predominant light colored tile for majority of wall.
 - d) Provide bull-nose version of this tile for the top row.
 - e) Provide a wall tile accent band in one of the floor tile colors at a visually appealing height (about two-thirds of total wall tile height measured from the floor).
 - f) District currently applies 286 wipe epoxy graffiti sealant on wall tile. In the event that tile companies start to provide built-in anti-graffiti coatings on their tile products, design teams should bring these tile products to District Facilities attention for evaluation.
 - g) Use same grout color as floor grout (see above).
- 4) The SCCD standard for **Restroom Ceilings and 6" Band at Top of Wall** is as follows:
- a) Provide gypsum board painted District Standard White Color in semi-gloss finish. Refer to **Design Standard for Interior Paint**.

D. Toilet Compartments and Urinal Screens

- 1) Basis of Design: Bobrick Washroom Equipment, Inc; Sierra Series Toilet Partitions and Urinal Privacy Screens, gap-free and vandal resistant. Color: **SC02 Desert Beige**. District chooses this manufacturer because it meets the District criteria for performance, sustainability and maintenance. District preference for one color is to enhance the ability to quickly repair/replace these as needed by stocking components from this one manufacturer in one color.
- 2) Toilet Compartments should perform to the following criteria:
 - a) Material: all Stiles, Panels, Doors and Screens shall be Solid Color Reinforced Composite material and edges of material shall be the same color as the surface. Toilet partitions constructed of High Density Polyethylene (HDPE) or High Density Polypropylene will not be acceptable.
 - b) Design: interlocking design with no sight lines between Doors and Stiles.
 - c) Material shall have a non-ghosting, graffiti-resistant surface integrally bonded to core through a series of manufacturing steps requiring thermal and mechanical pressure.
 - d) Stiles and doors shall be 3/4" (19 mm); Panels shall be 1/2" (13mm).
 - e) Graffiti Resistance (ASTM D 6578): Passed cleanability test; 5 staining agents.
 - f) Scratch Resistance (ASTM D 2197): Maximum load value exceeds 10 kilograms.
 - g) Impact Resistance (ASTM D 2794): Maximum impact force exceeds 30 inch-pounds.
 - h) Smoke Developed Index (ASTM E 84): Less than 450.
 - i) Flame Spread Index (ASTM E 84): Less than 75.

- j) Sustainability Contribution: partition material shall contribute to the following sustainability goals (per USGBC's LEED credits):
- Materials and Resource Credits MR5.1 and MR5.2 – Regional Materials; submit manufacturer's calculation of value of recycled content for specified products, calculated in accordance with USGBC LEED certification requirements.
 - Materials and Resource Credit MR7- Certified Wood; submit manufacturers certification that a minimum of 50% of wood based materials are certified in accordance with Forest Stewardship Council (FSC) Guidelines.
 - Indoor Environmental Quality Credit IEQ 4 - No Added Urea Formaldehyde; submit manufacturer's certification that composite and agrifiber products contain no added urea-formaldehyde resins and that laminating used to fabricate on-site and shop-applied composite wood and agrifiber contain no added urea-formaldehyde resins.
- k) Hardware:
- Compliance: Operable with one hand, without tight grasping, pinching, or twisting of the wrist, and force to operate does not exceed five pounds.
 - Emergency Access: Hinges, latch allow door to be lifted over keeper from outside compartment on in-swing doors.
 - Materials: 18-8, Type 304, heavy-gauge stainless steel with satin finish. Chrome-plated "Zamak", aluminum, or extruded plastic hardware not acceptable.
 - Fastening: Hardware secured to door and stile by through-bolted, theft-resistant, pin-in-head Torx stainless steel machine screws into factory-installed, threaded brass inserts. Fasteners secured directly into core not acceptable.
 - Threaded Brass Inserts: Factory-installed; withstand direct pull force exceeding 1500 lb (680 kg) per insert.
 - Hardware Type: Institutional Hardware (.67).
 - Latching: 14 gauge (2 mm) sliding door latch, 11 gauge (3.2mm) keeper; latch slides on a shock-resistant nylon track. Twist-style door latch operation not acceptable.
 - Hinges: 16-gauge (1.6 mm) stainless steel, self-closing, 3 section hinges.
 - Mounting Brackets: 18 gauge (1.2mm) stainless steel and extend full height of panel.
 - U-Channels: Secure panels to stiles
 - Angle Brackets: Secure stiles-to-walls and panels-to-walls.
- l) Compartment Hooks: In each toilet compartment, furnish and install a Bobrick B212 Clothes Hook and Bumper at 38 to 40" AFF for a barrier-free installation. Utilize through-bolted, stainless steel, pin-in-head Torx sex bolt fasteners.
- m) Stiles: Floor-Anchored stiles furnished with expansion shields and threaded rods.
- Leveling Devices: 7 gauge, 3/16 inches (5 mm) thick, corrosion-resistant, chromate-treated, double zinc-plated steel angle leveling bar bolted to stile; furnished with 3/8 inch (10 mm) diameter threaded rods, hex nuts, lock washers, flat washers, spacer sleeves, expansion anchors, and shoe retainers.

- Stile Shoes: One-piece, 22 gauge (0.8 mm), 18-8, Type 304 stainless steel, 4 inch (102 mm) height; tops with 90 degree return to stile. One-piece shoe capable of adapting to 3/4 inch (19 mm) or 1 inch (25 mm) stile thickness and capable of being fastened (by clip) to stiles starting at wall line.
- n) Wall Posts: Pre-drilled for door hardware, 18-8, Type 304, 16 gauge (1.6 mm) stainless steel with satin finish; 1 inch (25 mm) x 1-1/2 inches (38 mm) x 58 inches high (1473 mm).
- o) Anchors: Expansion shields and threaded rods at floor connections as applicable. Threaded rods secured to supports above ceiling as applicable. Supports above ceiling furnished and installed as Work of Section 055000.
- p) Overhead Braced Headrail: shall be satin finish, extruded anodized aluminum headrails, 0.065 inch (1.65 mm) thick with anti-grip profile.
- q) Warranty: furnish 10 year limited warranty for panels, doors, and stiles against breakage, corrosion, de-lamination, and defects in factory workmanship. Furnish 1 year guarantee against defects in material and workmanship for stainless steel door hardware and mounting brackets.

E. Lighting

- 1) Lighting should be designed to provide consistent and adequate lighting throughout the restroom.
- 2) Design lighting at and around the mirror to ensure that glare is minimized.
- 3) Provide appropriate placement and access of light fixtures for quick and easy maintenance removal or replacement of lamps and ballasts. Consider what is involved for someone to access a fixture to change a lamp or ballast.
 - a) Lighting should be placed on the ceiling in an open space, in the middle of the restroom to ensure quick and easy access to the fixture. Lighting should illuminate the stalls as well as the circulation area.
 - **Do not** place light fixtures over toilets or inside partitioned areas. Access is too difficult and time consuming for maintenance and lamp/ballast removal and replacement.
 - b) Select equipment that can be easily maintained by one person using only their hands.
 - **Do not** specify light fixtures that require tools to remove/replace the lenses and lamps.
 - c) Install motion sensors for restroom lighting control to save energy and provide flexibility for restroom use after hours.
 - Specify a style that will be able to “see” motion in as many areas of the room as possible, including to the extent possible the areas within the toilet partitions; this is likely to be a ceiling-mounted sensor (or 2) in multi-stall restrooms.
 - A wall switch/sensor combination may suffice in a single stall restroom.
 - Specify a time delay on the motion sensor of 30 minutes.

F. Plumbing Fixtures:

- 1) Comply with [Design Standard for Plumbing Fixtures](#) for plumbing fixtures, hose bibs and floor drains in each restroom. Note District is considering Waterless Urinals to reduce water consumption.

G. Plumbing Isolation Valves

- 1) Plumbing isolation valves shall be installed for each restroom, to be located in an access panel of no less than 8" x 8" clear for ease of access, and preferably inside the restroom itself.

H. Accessories

- 1) Mount Accessories to comply with accessibility requirements per most recent Building Codes. Where "ADA Compliant Height" is used in this Standard it refers to both the clearances around that item that are required, as well as the height of whatever *component* of that item that needs to be located per ADA code requirements.
- 2) Basis of Design: Bobrick Washroom Equipment, Inc.
 - a) Toilet Tissue and Seat Cover Dispensers/Napkin Disposals
 - i) Bobrick B-357 Classic Series for all multi-stall restrooms. This unit mounts centered through the toilet partition, can be used from both sides and is serviced from one side. Capacity: 0.8 gal. (3.0L). Holds 1000 toilet seat covers and four rolls of tissue, two for each compartment. It also features theft-resistant spindles.
 - ii) Bobrick B-3571 or 3574 as needed to achieve accessible clearances within stalls.
 - iii) In wall conditions where a recessed unit is not physically possible, specify Bobrick B-4288 ConturaSeries® surface-mounted multi-roll toilet tissue dispenser, Bobrick B-4221 ConturaSeries® surface-mounted seat-cover dispenser, and Bobrick B-270 ConturaSeries® surface-mounted sanitary napkin disposal.
 - b) Towel Dispensers and Waste Containers
 - i) Bobrick B-3944 : provide combination unit multi-fold towel dispenser/semi-recessed waste containers placed near the sinks and toward the door. Note waste can depth has to be 8" for anything less does not accommodate the waste produced.
 - In Multi-Stall Restrooms provide one B-3944 at ADA compliant height and one B-3944 at standard height.
 - In all other restrooms where only one B-3944 is required mount it at ADA compliant height.
 - ii) Restrooms should be designed to accommodate an additional free-standing waste cans area of four (4)-square feet near the door, inside the restroom. This waste cans area should not interfere with required clearances at or around the door.
 - iii) District is considering high velocity hand dryers in lieu of towel dispensers to lower paper waste, which will revise the product selection above.
 - c) Mirrors, Shelves and Hooks
 - i) Multi-Stall Restrooms:
 - Continuous mirror over restroom sinks area.
 - One full-length mirror, Bobrick B165 2460.
 - One 2' Stainless Steel Shelf, Bobrick B-298x24, in close proximity of mirror and within view of mirror reflection, mounted at ADA compliant height.
 - Two wall-mounted hooks, Bobrick B6707, in close proximity of mirror and within view of mirror reflection, mounted at ADA compliant height.



- ii) Single Restrooms:
 - Single-sized mirror over each sink, with a shelf for all other restrooms. Bobrick B166 1836.
 - One wall-mounted hook, Bobrick B6707, in close proximity of mirror and within view of mirror reflection, mounted at ADA compliant height.
- iii) All Restrooms:
 - Provide Graffiti-film on mirrors that do not change mirror reflective properties including color.
- d) Soap Dispensers
 - i) Wall-mounted on wing (return) walls where mirror is continuous, at ADA compliant heights.
 - ii) Wall-mounted between mirrors, at ADA compliant heights, at all other restrooms.
 - iii) Dispensers shall be mechanically fastened, tape mounted installation is prohibited.
- e) Sanitary Napkin/Tampon Vendor
 - i) Provide at multi-stall restrooms.
 - ii) Provide Bobrick B-4706C ConturaSeries® Recessed Napkin/Tampon Vendor.
- f) Diaper Changing Stations
 - i) Provide in both male and female multi-stall restrooms in community-use facilities such as Student Centers, Student Services, Library Learning Resource Center, Gymnasiums and Theaters.
 - ii) If a unisex family single stall restroom is provided in the facility, locate the Baby Changing Station in that restroom in lieu of locating in male and female multi-stall restrooms.
 - iii) Provide Bobrick (Koala Bear) KB110-SSRE, Horizontal, Recessed Mounted Baby Changing Station, mounted at ADA compliant height.
 - iv) Locate in an area where the use of the Baby Changing Station will not interfere with access requirements for the restroom. **Do not** locate Baby Changing Stations in stalls.
 - v) Provide Signage indicating “Baby Changing Station” on restroom doors where a Baby Changing Station is provided.

Approved Manufacturers:

- Ceramic Tile: Daltile, American Olean or Equivalent.
- Toilet Partitions: Bobrick Washroom Equipment, Inc; Sierra Series Toilet Partitions or Demonstrated equivalent if approved in writing by Director of Facilities.
- Toilet Accessories: Bobrick Washroom Equipment, Inc or Equivalent.

Substitutes Allowed:

Yes, if performance and quality equivalency can be evidenced.

Associated Design Standards and Construction Specifications

Design Standard on Building, Floor, Room, Stair, Elevator, Equipment and Outlets Designation.
Design Standard on Door Hardware.



Design Standard on Doors and Door Frames .
Design Standard on Interior Painting.
Design Standard for Plumbing Fixtures

End of Document

DESIGN STANDARD for Vending Spaces

Purpose:

The purpose of this design standard is to ensure consistency in the provision of vending spaces at each campus, in a manner that is aesthetically pleasing to the environment, yet convenient for all users.

Design Standard:

- Vending machines should be installed at high traffic locations around each campus, for the convenience of students, staff and visitors. Machines shall vend beverages and snacks.
- Design professionals shall inquire during the design phase as to whether vending machines are desired in the facility, as well as quantities and locations.
- Wherever possible, create vending rooms (with open doorways, no doors) off the entrance lobby for vending machines, so that the machines are accessible without visually detracting from an orderly and aesthetically pleasing instructional environment.
- Where vending rooms are not possible, create recessed alcoves for vending machines.
- Where vending machines are to be installed at an exterior location, plan for extra security measures against vandalism. These measures will be provided by Vending Provider but Design Professionals should be aware of them:
 - Machines to be caged and lockable.
 - A minimum of 3/8" wedge anchor into concrete, minimum 3" embed.
 - Identify trip hazards.
- SCCD is currently under contract with Pepsi for beverage and Canteen for snack vending machine sales, respectively.

Substitutes Allowed:

Not applicable.

Associated Design Standards and Construction Specifications

Not applicable.

End of Document



DESIGN STANDARD for Wall and Corner Protection

Purpose:

The purpose of this design standard is to protect interior surfaces that are vulnerable to excessive wear and tear due to high volumes of traffic, movement of furniture and custodial/supply carts. The need to maintain a neat and orderly appearance, while prolonging the life of interior finishes, needs to be balanced with the College aesthetic values in appearing welcoming but not overly institutional.

Note: these Design Standards are a tool to clarify direction and streamline project execution for design professionals, construction managers and other participants in capital improvement projects. They represent the District's "strong preference" and should be applied, when possible, without compromising the creativity of the overall design. Final disposition, color, size, product choice etc. should conform to the best extent possible where equivalent substitutes are allowed in the Design Standard. If equivalent substitutes are allowed only "if performance and quality equivalency can be evidenced" or the consultant wishes to deviate from the written design standards for other reasons, then the consultant needs to provide evidence/justification and seek District approval as outlined in the [*Open this Document First: Standards Process.pdf*](#). In all cases the written design standards do not diminish or eliminate the standard of care owed by the consultant to SCCD or relieve, in any manner whatsoever, a consultant from any professional responsibility, duty or due diligence required toward that work.

Design Standard:

Corner Protection

- Corners need to be protected by full-height surface mounted corner guards in high volume areas like Elevator Lobbies, Restrooms and Service Areas.
- At aesthetically important areas such as building lobbies consider Flush Mounted Corner Guards.
- Other Hallway/Corridor corners should be protected by a 4' high corner guard.
- Products: Stainless Steel if appropriate or InPro Corp, Aluminum Surface Mount Corner Guards in Antique White.

Wall Protection: Classrooms

- In classrooms with moveable furniture provide a Chair Rail to protect wall surfaces and furniture from furniture dents caused by furniture scraping wall surfaces.
 - Simple profile Wood chair rails, 2" to 3" tall are preferred. Wood finish to match/coordinate with other interior finishes/colors.



Wall Protection: Corridors/Hallways

- In Corridors/Hallways with high traffic provide a Chair Rail to protect wall finishes from custodial and supply carts.
 - Simple profile Wood chair rails, 2” to 3” tall are preferred. Wood finish to match/coordinate with other interior finishes/colors.
- Given the propensity to post multiple notices in these types of hallways/corridors, design professionals should provide areas within these corridors/hallways where these notices would be posted. To help hide the multiple pinpricks from notice posting, design teams should specify:
 - Wallcoverings similar to Carnegie’s Xorel Wallcoverings with X-Protect Wall backing. These wallcoverings are sustainably produced and are free of PVC, chlorine, plasticizers, heavy metals and ozone depleting chemicals, making them extremely low VOC. They are also easily cleaned with water based solvents and bleach.
 - Wallcoverings should be either full height or above chair rail to ceiling.

Wall Protection: Custodial Service Sinks and similar service areas

- Service areas that accommodate supply carts or experience intensive activity that may damage wall surfaces should be specified with Rigid Sheet Wall protection similar to the wall area around the Custodial Service Sink (see [Design Standard for Custodial Spaces](#)) and per below:
 - Material: Rigid Sheet Vinyl Material
 - Thickness: no less than 0.040”
 - Height: 48 inches Above Finish Floor.
 - Product: InPro Corp. Wall Protection
 - Standard Color: [Antique White](#)

Approved Manufacturers:

Per above.

Substitutes Allowed:

Yes, if performance and quality equivalency can be evidenced.

Associated Design Standards and Construction Specifications

Not Applicable

End of Document

DESIGN STANDARD for Window Treatments

Purpose:

Indoor spaces at SCCD should be naturally daylight to the best extent possible for numerous health, well-being and sustainability reasons. However, window shading may be required for solar shading, black-out and provision of privacy at different times of the day. The District wishes to standardize the treatment of windows to provide a consistent aesthetic look to the campus and to implement solutions that are cost effective to maintain.

Note: these Design Standards are a tool to clarify direction and streamline project execution for design professionals, construction managers and other participants in capital improvement projects. They represent the District's "strong preference" and should be applied, when possible, without compromising the creativity of the overall design. Final disposition, color, size, product choice etc. should conform to the best extent possible where equivalent substitutes are allowed in the Design Standard. If equivalent substitutes are allowed only "if performance and quality equivalency can be evidenced" or the consultant wishes to deviate from the written design standards for other reasons, then the consultant needs to provide evidence/justification and seek District approval as outlined in the [*Open this Document First: Standards Process.pdf*](#). In all cases the written design standards do not diminish or eliminate the standard of care owed by the consultant to SCCD or relieve, in any manner whatsoever, a consultant from any professional responsibility, duty or due diligence required toward that work.

Design Standard:

Each building should have one consistent treatment for all exterior windows that need shading. In other words do not provide some windows with vertical blinds and others with roller shades. The decision on which of the following treatments should be provided should be based on the predominant use of the building. For example a predominantly public or classroom building should provide Solar Roller Shades while a predominantly office building should provide vertical blinds.

1. Public and High Use Spaces: Solar Roller Shades

For buildings with many public spaces like lobbies, lounges, meeting rooms and high use areas like classrooms, laboratories etc, provide Solar Roller Shades. These offer the following performance and maintenance features:

- The shade cloth filters the sunlight, lowers solar heat gain, and improves occupant comfort by reducing eye strain due to glare.
- The shade cloth is an open weave and therefore allows some transparency that affords a visual connection to the exterior environment. During daylight hours, this also provides some degree of privacy. (For security reasons, it should be understood that at night, however, the situation is reversed, and the view to the outside is obscured, but the view to the interior is unimpeded).

- The flat surface and washable fabric is easy to clean. This ease of maintenance allows for easy and regular cleaning by our custodial crews, limiting dust in the indoor environment and improving indoor air quality.
- Damaged fabric can be easily replaced by local staff, reducing the life-cycle cost of ownership.
- Manufacturer offers 25 year on-site parts warranty on all products, further reducing SCCD's life cycle cost of ownership.
- Installation technicians are manufacturer-certified, ensuring quality in installation.

Guidelines for application:

- Shades shall be single layer installations.
 - In special circumstances where a room has a programmatic requirement of complete black out capability a simple and economical black out curtain using a rod and ring system should be designed.
- Side channels shall not to be used.
- Cord-stays shall be specified for all manually-operated shades.
- Metal on metal gearing mechanism, and metal chains for operation shall be specified. This configuration provides a higher ratio of pull action to shade movement.
- Shades covering heights of over 15 feet shall be motorized, to prevent possible operator injury from heavy lifting.
- The shade fabric shall be a maximum of 8 ft in width, to prevent possible operator injury from heavy lifting.
- Shade widths should be equally spaced across an opening if longer than 8'-0" in width. Where mullions occur within the opening, matching the mullion spacing is preferred. Minimum allowable shade width shall be governed by the actual size of the opening, or the condition where if the width were added to the next adjacent opening, the combined width would result in a shade greater than 8 feet.
- When multiple shades are to be operated in unison (e.g., a forum-sized lecture room, a library, a large conference room or event space), the shades shall be motorized and have ganged controls.
- Where the top rail will be visible, specify a metal fascia to match the color of the shade. Specify the longest possible lengths for fascias, for the best aesthetic effect.
- When possible, specify inside mounting.

MechoShade Systems is the preferred manufacturer of solar roller shades, approved products:

- **1000 Series Dense Vertical Weave** with 2-3% Openness Factor provides a uniform color on either side of the window. This is the preferred product, as it provides an acceptable level of solar control while also offering transparency. Note that darker colored shade cloth affords greater transparency and enhanced views to the outside environment.
Color: [1004 Black/Brown](#).



- **0700 Series Blackout** ShadeCloths are an opaque vinyl/fiberglass/vinyl laminated shadecloth that is appropriate for multi-media area functions. 0700 Series provides insulation and opacity at the window wall. If installing blackout shades in combination with solar shades, place blackout shade at plane closest to the window.
Color: [0706 Oyster](#).

2. Other Areas: Vertical Shades

For buildings with predominantly offices and lower use areas provide Vertical Blinds. The following is based on Levelor Vertical Blinds:

- Vinyl Vertical Blinds with curved vanes
- Vane Color: [Brushed Aluminum](#).
- Vanes to stack to one side.
- Cordless Wand Control.
- Where possible, specify inside mounting.
- Where rail is visible, provide a Valance: DesignLine – Tailored, color coordinated with Vane Color.

3. Glazing within Doors

Glazing in Doors should be specified with fritted screens integral in the glazing or should have coatings applied to the glazing surface. Do not specify blinds (either integral or surface mounted) for glazing in doors.

Approved Manufacturers:

- Mechoshade
- Levelor

Substitutes Allowed:

No substitutes allowed.

Associated Design Standards and Construction Specifications

Not Applicable.

End of Document