

SECTION 12 30 00
CASEWORK
Design Standard

PART 1 GENERAL

1.1 PURPOSE

Casework installed at the colleges of the San Mateo County Community College District must be designed and installed with the implicit understanding that it will be subject to decades of use, abuse and pedagogical evolution. All casework must be designed to respond to continually changing applications. All details of the casework must be made to withstand usage in strenuous applications for a minimum of 20 years. Casework must lend itself readily to change over the life of the product. Casework must accommodate multiple functions over its lifecycle. Casework must allow simple and intuitive utilization by a transient community of faculty, students and staff.

The surface area in any interior environment also contributes to the aesthetics of that environment. The surface materials will serve the institution best if they have some dirt and wear hiding capabilities, usually in the depth of color and patterning.

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

San Mateo County Community College District is strongly committed to promoting sustainability throughout their campus projects. Section 01 81 13 Sustainability of the Design Standard provides guidelines and recommendations for implementing sustainability strategies. Where relevant, specific sustainability criteria is noted in this section; however, each project team should review and cross reference that front section while developing the specific project and its documentation. Each discipline shall conform that specific performance and manufacturer information provided in the specification section is in alignment with code requirements, LEED criteria, and any other goals for sustainability.

PART 2 PRODUCT

2.1 SMCCCD'S PREFERENCE FOR COUNTERTOPS IS NATURAL STONE SUCH AS SLAB GRANITE, OR A SOLID MATERIAL SUCH AS EPOXY RESIN.

- A. Natural stone material does not contain off-gassing glues/binders; therefore, natural stone materials contribute to healthier indoor air quality.
- B. 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.
- C. Science or vocational laboratory countertops shall be cast of epoxy resin.
 - 1. Epoxy resin does not depend on a surface coating for chemical resistance.
 - 2. Molded construction allows for integral back-splashes and marine edges.
 - 3. A non-glare matte finish is attractive and easy to maintain.

2.2 COLLEGE CASEWORK MATERIAL PALETTES

- A. Each of our colleges has standardized on a limited number of casework surface materials. Each college's color palette list can be found in the Appendices to this Casework Design Standard

- B. The various casework materials are components of a comprehensive architectural finishes and furniture palette. Each college's palette provides adequate selection opportunities for each project user group, while maintaining an overall coordinated indoor environment to serve the colleges for many years to come.
- C. 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. The end user group (project steering committee) should provide guidance to the design professional as to the intent of the use of colors within the building. The design team should then develop up to three finish options using paints, flooring and furniture finishes. The end user group will provide feedback on the finish options, either selecting the preferred option or giving guidance to the design professional on which elements to combine for the final option.
- D. Digressions from this Casework Design Standard shall not be considered, unless the design professional receives prior written authorization from the Executive Director of Construction Planning or the Vice Chancellor of Facilities. Please make note that such approvals are not anticipated nor welcomed, as they undermine the sustainable, maintainable, durable, holistic criteria upon which this Casework Design Standard is based.

2.3 CASEWORK CONSTRUCTION GUIDELINES:

A. Quality Assurance - Casework

1. Casework shall be WIC Certified.
2. The use of the WIC Manual of Millwork as a standard of performance is acceptable provided the specific grades which are applicable are specified.
 - a. Minimum quality for casework shall be WIC Custom Grade.
 - b. Science and vocational laboratory casework shall be WIC Laboratory quality.
3. 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 SMCCCD 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 Reinspection 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."

B. Quality Assurance Fabricator

1. 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.

C. Casework Design Guidelines

1. Casework is to be of modular design (4'- 0" lengths) for ease of access to building site and possible reuse in future remodeling work.
2. Design drawers and shelves for heavy loading; use metal standards/rests and/or guides only with a minimum load carrying capacity of 125 pounds.
3. Specify adequate backing in stud walls for attachment of casework, and detail same on Drawings.
4. Verify if User requires locks for casework doors and/or drawers. If locks are required, verify keying requirements with User. Comply with Physical Access Controls & Security Management Design Standard for requirements for casework locks.
5. Verify if User requires glazed or full glass casework doors.
6. 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.
7. Design of shelving span shall be verified with User, since they may load same with heavy equipment, etc.
8. All edges shall have fused edging, such as 3mm PVC, and backer sheet. Self-edges, T-mold or bull-nosed laminate edges are unacceptable.
9. Design minimal design details (nooks, crannies, edges in millwork) which require additional time or labor for cleaning
10. 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 Section 09 65 00 Resilient Flooring Design Standard, for rubber base specification.
11. Design sloped wall cabinet tops, to discourage storage of items which is a safety hazard and a cleaning burden.
12. To promote professionalism in organization and appearance in academic environments, specify the installation of metal label holders on every door and drawer. Specify holders that are sized to receive commercially-available, standard office-type name badges (e.g., Avery 74552 – 2" x 3" Name Badges) that can be printed using standard office computer applications (e.g., Microsoft Word) and standard office printers.
13. 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.

D. Countertops Design Guidelines

1. Design of countertops shall be verified with User, since they may load same with heavy equipment, etc. Counter tops under fume hoods should be carefully studied for

excessive loading where radioactive shielding may be required, since this is sometimes accomplished by using lead bricks.

2. Locate sink faucets so that outlet is well over sink to prevent water splashing onto counter top.
3. Plastic laminates shall not be used in laboratory spaces or on counter tops around sinks. Consider lab tops fabricated of stone, composition stone, or molded resin.
4. Sinks shall be fabricated of a material equal to or better than counter top material. Verify required size and depth of sinks with User.
5. All edges shall have fused edging, such as 3MM PVC, and backer sheet. Self-edges, T-mold or bull-nosed laminate edges are unacceptable.

E. Hardware Design Guidelines

1. Specify adjustable metal shelf standards and rests.
2. Drawer and door pulls shall be 4" metal wire pull type, in stainless steel or satin nickel.
3. Cabinet locks: comply with requirements stated in Physical Access Controls & Security Management Design Standard.
4. Drawer Slides: 3/4 partial extension or full extension steel slides, white epoxy coated, with nylon ball bearing rollers and integral positive stops. Static load carrying capacity of minimum 125 pounds.
5. Concealed hinges, 170 degree opening, all steel construction, self-closing.
6. Catch: magnetic catch with plastic housing

2.4 APPROVED MANUFACTURERS

Refer to Appendices A, B and C

PART 3 EXECUTION

3.1 SUBSTITUTES ALLOWED?

No substitutes allowed

Pursuant to Section 3400 of the Public Contract: Certain casework surfacing materials are now in use on the particular public improvement described as San Mateo County Community College District. At each instance in Appendices A, B and C that a designated material is designated by a manufacturer's name and product number, that manufacturer's name and product number is designated to support the existing casework surfacing systems that are in place at Skyline College, College of San Mateo, Cañada College and the District Administration Building. The Contractor will furnish and install only those products as required, and no substitutions shall be deemed to be "or equal" or allowed.

3.2 ASSOCIATED DESIGN STANDARDS AND CONSTRUCTION SPECIFICATIONS

Physical Access Controls & Security Management Design Standard

Section 09 65 00 Resilient Flooring Design Standard

END OF SECTION

Appendix A to Casework Design Standard

Cañada College Casework Materials Palette

Material Type	Manufacturer/Distributor	Product	Existing Installation Areas
Slab Granite		Verde Ubatuba	Building 9 Library & Student Services
Epoxy Resin	(non-specified)	Color: Matte Black	
Plastic Laminate	Pionite	Hardrock Maple WM791	
Plastic Laminate	Pionite	Vanilla Fiber AW871	
Plastic Laminate	Nevamar	Aluminite AM6001	
Plastic Laminate	Nevamar	Café Allusion AL2004	
Plastic Laminate	Nevamar	Sienna Essence ES2003	
Plastic Laminate	Pionite	Cinnamon Fiber AT241	
Plastic Laminate	Nevamar	Jett Black S 6053	
Plastic Laminate	Wilsonart	Monticello Maple 7925-38	

End of Appendix A of Casework Design Standard

Appendix B to Casework Design Standard
College of San Mateo Casework Materials Palette

Material Type	Manufacturer/Distributor	Product	Existing Installation Areas
Granite	Intertile Distributors, Inc	Absolute Black granite GR23P	
Synthetic	Corian	Canyon	Building 10
Synthetic	Caesarstone	Quartz Reflections	Building 5
Synthetic	Caesarstone	Blizzard	Building 5
Solid Synthetic	Du Pont Corian	Color: Silt	Building 5 Break Rooms
Solid Synthetic	Du Pont Corian	Color: Aurora	Building 15 and 17 Break Rooms
Epoxy Resin	Greenstone	Black	Building 5
Epoxy Resin	(non-specified)	Color: Matte Black	Building 36
Plastic Laminate	Pionite	Hardrock Maple WM791	Building 35 Student Break Room
Plastic Laminate	Nevamar	Gray Tranquility TQ6001	Building 35 Student Break Room
Plastic Laminate	Pionite	Vanilla Fiber AW871	Building 35 Student Break Room
Plastic Laminate	Pionite Suede	Black	Building 5
Plastic Laminate	Pionite Suede	Carnation White	Building 5

End of Appendix B of Casework Design Standard

Appendix C to Casework Design Standard
 Skyline College Casework Materials Palette

Material Type	Manufacturer/Distributor	Product	Existing Installation Areas
Granite			
Epoxy Resin	(non-specified)	Color: Matte Black	
Plastic Laminate	Formica	Ebony Oxide 299-58	
Plastic Laminate	Formica	Elemental Stone 8831-58	
Plastic Laminate	Pionite	Chamomile Fiber AT291 Suede	
Plastic Laminate	Pionite	Hardrock Maple WM791	
Plastic Laminate	Pionite	Vanilla Fiber AW871	
Plastic Laminate	Wilsonart	Monticello Maple 7925-38	

End of Appendix C of Casework Design Standard