



Los Angeles Community College District Design Standards

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LACCD Facilities Design Standards– Doors, Frames Campus Facility Standards Cross- Reference Div. 8

All Items Are Numbered for Ease of Reference

GENERAL -

1. Fire doors in office complexes shall have vision glass.
2. Staircase fire doors shall have a vision plate (window) as part of the assembly unless automatic hold-open devices are employed.
3. All public-access doors (i.e. classrooms, offices, conference rooms, etc.) shall have a vision plate or a sidelight.
4. Pairs of doors shall use removable mullions.
5. All doors shall be installed with the manufacturers recommended door frames.
6. Provide drip edge on all exterior flush mounted doors.
7. **All doors, frames shall be approved by the Facilities Director prior to ordering.**

STEEL DOORS AND FRAMES

1. Immediately after installation, any rusted or damaged areas of prime coat shall be sanded smooth and touch-up of compatible air-drying primer shall be applied.
2. Check and readjust operating hardware items, leaving steel doors and frames undamaged and in proper operating condition.
3. Edge seam: T-edged, continuously welded the full height of the door, ground smooth and filled.
4. Perimeter channel shall 14 gauge and continuous.
5. Doors shall be 1 ¾ inch thick.
6. Doors shall be full flush seamless and in accordance with the following:
 - a. Face: 18 gauge heavy duty
 - b. Galvanized: 690 exterior
 - c. Core: R-12 polyurethane, honeycomb
7. Fabricate steel door and frame units shall be rigid, neat in appearance and free from defects, warp or buckle.
 - a. Fabricate exposed faces of doors and panels from only cold-rolled steel
 - b. Clearances shall be not more than 1/8 inch at jambs and heads except between non-fire-rated pairs of doors not more than ¼ inch.
 - c. Clearance at the bottom shall be not more than 1/4 inch



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8. Fabricate frames, concealed stiffeners, reinforcement, edge channels, louvers and moldings from either cold-rolled or hot-rolled steel.
 - a. Fasteners shall be concealed unless otherwise indicated.
 - b. Fabricate frames shall be a minimum 18 gauge cold-rolled steel.
 - c. Fabricate frames shall have mitered, coped, or welded corners.
 - d. Exterior frames shall be formed from 16 gauge galvanized steel.
9. Exposed fasteners (screws and bolts) shall be countersunk. Screws and bolts can be either flat or oval head.
10. When patching or repairing existing frames:
 - a. Fill all holes left from existing hardware that will not be used.
 - b. Fill all dents and scrapes in existing frames.
 - c. Sand smooth for new paint
11. Prepare doors and frames to receive mortised and concealed hardware in accordance with the final Door Hardware Schedule provided by the hardware supplier.
 - a. Reinforce doors and frames to receive surface-applied hardware.
 - b. Locate hardware as indicated on final shop drawings.
12. Painting by Factory:
 - a. Solvent clean to remove oil, grease, soils and other contaminants.
 - b. Prime coat shall be 2.0-3.0 mils.
 - c. Intermediate coat shall be 2.0-3.0 mils.
 - d. Finish coat shall be 2.0-3.0 mils.
13. Painting by Shop
 - a. Clean, treat and paint exposed surfaces of steel door and frame units, including galvanized surfaces.
 - b. Clean steel surfaces of mill scale, rust, oil, grease, dirt and other foreign materials before application of paint.
 - c. Apply shop coat of prime paint of even consistency to provide uniformly finished surface ready to receive fresh paint.
14. Except on weather-stripped or fire-rated doors, drill stops to receive 3 silencers on strike jambs and two silencers on heads of double-door frames.
15. Provide minimum 26 gauge steel plaster guards or mortar boxes at back of hardware cutouts where mortar or other materials might obstruct hardware operation and to close off interior of openings.
16. Fit hollow metal doors accurately in frames.
17. Place frames prior to construction of enclosing walls and ceilings. Set frames accurately, plumb and level, in position, aligned, and braced securely until permanent anchors are set. After wall



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construction is completed, remove temporary braces and spreaders leaving surfaces smooth and undamaged.

- a. In masonry construction, locate three wall anchors per jamb to hinge location on hinge jamb and at corresponding heights on strike jamb
 - b. In metal stud partitions, install at least three wall anchors per jamb at hinge and strike levels. In closed steel stud partitions, attach wall anchors to studs with screws.
18. Paint applied by shop after fabrication:
- a. Primer shall be rust-inhibitive enamel or paint, either air-drying or baking, suitable as a base for specified finish paints.
 - b. No metal doors shall be left with only a prime coat. Any doors that do not have a factory-applied finish coat shall be given two coats of finish paint. Color to be approved by the college.
19. Materials:
- a. Steel sheets and strip, hot-rolled – Commercial quality carbon steel, pickled and oiled.
 - b. Steel sheets, cold-rolled – Commercial quality carbon steel.
 - c. Steel sheets, galvanized – Zinc-coated carbon steel sheets of commercial quality.
 - d. Supports and anchors – Fabricate of not less than 18 gauge sheet steel, galvanized where used with galvanized frames. Inserts, bolts and fasteners where built into exterior wall shall be hot-dip galvanize.

WOOD DOORS –

1. Hollow-core wood flush doors shall not be used unless written approval is received from the Facilities Director.
2. All wood doors shall be of 1 ¾ inch thickness and shall be prepared to receive the college standard lock set.
3. Wood doors shall not be modified in any manner to cause the weight of the door to exceed the frame and/or hinge support.
4. All doors are to be protected to ensure that the doors will be without damage or deterioration at the time of Substantial Completion.
5. All doors damaged during construction shall be refinished, to the college's satisfaction, or replaced.
6. Operation of doors
 - a. Door frames are to comply with the indicated requirements for type, size, location, and swing characteristics.
 - b. All doors are to be installed with plumb-jamb and level heads.
7. All doors with defects will be rejected.



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8. Prepare doors and frames to receive mortised and concealed hardware in accordance with final Door Hardware Schedule provided by hardware supplier.
 - a. Reinforce doors to receive surface-applied hardware using a minimum top core width of 6 inches. Drilling for surface-applied hardware may be done on-site.
 - b. Locate hardware as indicated on final shop drawings.
9. Transparent Finishing
 - a. Doors are to be finished at the factory.
 - b. Finish shall be manufacturer's standard finish with performance requirements comparable with either AWI-6 catalyzed lacquer or AWI System TR-4 conversion varnish.
 - c. Finish shall be premium grade.
 - d. Satin sheen shall be used.
 - e. Stain shall be approved by the college.
10. Interior flush wood doors
 - a. Shall be solid core doors with transparent finish
 - b. Door face shall have 5 plies.
 - c. The face shall have a hardwood finish.
 - d. The door shall be rated grade A.
 - e. The core shall be particleboard or gypsum with blocking at hinge, closer, panic and other stress areas.
 - f. Any deviations from the standard shall be approved by the Facilities Director.
11. Fire-rated solid core doors shall have faces and grade to match non-rated doors
 - a. Constructed as required to provide fire-resistance rating indicated, with blocking at hinge, closer, panic and other stress areas.
 - b. Fire rated doors and frames shall be labeled with the rating clearly visible.
12. Installation of doors
 - a. All finishes shall be restored prior to installation.
 - b. Factory fitted doors at new frames shall be aligned in frames for uniform clearance at each edge.
 - c. Job-fit doors at existing frames shall align and fit doors in frames with uniform clearances and bevels as indicated below; do not trim stiles and rails in excess of limits set by manufacturer or permitted with fire-rated doors.
 - i. For non-rated doors, provide 1/8 inch at jambs and heads, 1/16 inch per leaf at meeting stiles for pairs of doors, and 1/8 inch from bottom of door to top of decorative floor finish or covering. Where threshold is shown or scheduled, provide ¼ inch clearance from bottom of door to top of threshold.



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- ii. Bevel fire-rated doors 1/8 inch in 2 inches (3 1/2 degrees) at lock and hinge edges.
- iii. Bevel non-rated doors 1/8 inch in 2 inches (3 1/2 degrees) at lock and hinge edges.

ACCESS DOORS AND PANELS

1. Access doors and panels shall be located in such a way as to allow the door to completely open and close for the unit to operate.
2. Doors and panels shall be of adequate size to allow for proper maintenance.
3. Doors and panels shall be installed wherever there are concealed valves and fire dampers.
4. All control devices, specialties, valves, dampers, etc. shall be so located as to provide for easy access for adjustment and maintenance.
5. Provide Bauco, JL Industries, Karp Associates, Lauco, Milcor or approved equal access doors for all concealed control devices, except those mounted above lay-in ceilings.
6. Access doors shall be adequately sized for the devices served with a minimum size of 24 by 24 inches. Any deviation must be approved by the Facilities Director.
7. Access doors shall be of proper construction for type of construction where installed.
8. Access doors shall be properly labeled. The labeling shall be applied with pressure sensitive tape or can be etched in the access panel door.
9. In areas, where tampering may be an issue, a key-lockable panel shall be installed.
 - a. Doors shall be prime coated for painting by others. Solvent clean to remove oil, grease, soils and other contaminants.
 - b. Prime coat shall be 2.0-3.0 mils.
10. The exact location of all access doors shall be approved by the Facilities Director.

OVERHEAD DOORS

1. Overhead doors shall be of commercial grade and shall have coil springs.
2. Tracks shall be installed in such a way as to not inhibit vehicular traffic.