

**FINAL EXPRESS TERMS
OF PROPOSED ADMINISTRATIVE STANDARDS
OF THE DIVISION OF THE STATE ARCHITECT - STRUCTURAL SAFETY (DSA-SS)**

**REGARDING THE 2007 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 1**

Chapter 4

LEGEND FOR EXPRESS TERMS

1. Proposed new text: All such language appears underlined.
2. Repealed text: All such language appears in ~~strikeout~~.

4-307. Rehabilitation of an Existing Nonconforming Building for Use as a School Building

(a) An existing nonconforming building rehabilitated for use as a school building is considered, for the purpose of the application of Title 24, to be a new school building. Plans and specifications for rehabilitation of any existing nonconforming building, or portion thereof, for use as a school building shall provide for the retrofit necessary for compliance with the health and safety standards contained in Title 24, C.C.R., currently effective edition.

Existing materials or systems not specifically prescribed in current safety standards ~~may~~ are permitted to be evaluated for equivalency and approved in accordance with Section 4-304. The seismic evaluation and retrofit design shall comply with the provisions of ~~Division VI-R, Chapter 16A~~ Sections 3415 through 3421, Part 2, Title 24, C.C.R.

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Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17280, 17295, 81130 and 81133.

4-308. Reconstruction or Alteration Projects Not in Excess of \$25,000 in Cost.

Projects involving only reconstruction or alterations whose estimated costs do not exceed \$25,000 do not require approval by DSA, but such approval can be obtained at the request of the school board and by compliance with these regulations. The cost of work classified as maintenance as defined in Section 4-314 shall not be considered for purposes of this section. The regulations of the Division of the State Architect /Access Compliance and the California State Fire Marshal may apply to any project, including maintenance, regardless of cost. Section 4-302.

In authorizing and completing the design and construction of projects with an estimated cost below \$25,000 as described in this section, the school board assumes responsibility for employing an architect or a registered engineer to prepare the plans and specifications and for adequate inspection of the materials and work of construction to ensure compliance with the currently effective provisions of Title 24, C.C.R.

The dollar amount cited in this section shall be increased on an annual basis, according to an inflationary index governing construction costs that is selected and recognized by the Division of the State Architect. This annually adjusted dollar amount shall be published by DSA and made available to school boards and the public.

School construction projects shall not be subdivided for the purpose of evading the cost limitations of this section.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17280, 17295, 81130 and 81133.

4-309. Reconstruction or Alteration Projects in Excess of \$25,000 in Cost.

(a) General. Plans and specifications for any reconstruction or alteration project exceeding \$25,000 in cost shall be submitted to DSA for approval in accordance with Section 4-315, except as provided within this section. When the estimated cost of a reconstruction or alteration project exceeds \$25,000 but does not exceed \$100,000, and a licensed structural engineer determines that the project does not include any work of a structural nature, approval of the project plans and specifications by DSA is not required, provided the following three items are completed:

1. The structural engineer shall submit a written statement to DSA, indicating that the project does not contain any work of a structural nature.
2. The design professional in general responsible charge of the project shall certify, in writing, that the plans and specifications for the project meet any applicable fire and life-safety standards, and do not specify any work of construction that is regulated by the accessibility standards of Title 24. This certification shall be submitted to DSA, and shall bear the stamp and signature of the design professional.
3. Within 10 days of the completion of the project, a DSA-certified project inspector shall sign and submit a verified report to DSA, indicating that the project was completed in conformance with the plans and specifications. (See Section 4-336 Verified Reports).

The dollar amount cited in this section shall be increased on an annual basis, according to an inflationary index governing construction costs that is selected and recognized by the Division of the State Architect. This annually adjusted dollar amount shall be published by DSA and made available to school boards and the public.

School construction projects shall not be subdivided for the purpose of evading the cost limitations of this section.

All new construction work which is part of a reconstruction or alteration project shall comply with currently effective regulations.

EXCEPTION: Fire damage repair may be accomplished utilizing the approved plans and specifications for the original construction work. All regulations and standards in effect at the time of approval shall be complied with except that the testing and inspection requirements of current regulations shall apply to the reconstruction work. Minor modifications to the original approved plans may be made, subject to the approval of DSA, provided that they do not reduce the structural capacity of the building.

~~Minor~~ Structural modifications to the existing structural system not exceeding the limits defined in Section 4-309(c)2 A and B are permitted provided these modifications comply with the regulations in effect when the plans and specifications for the original construction were approved are permitted to be evaluated and designed in compliance with the wind and seismic provisions contained in Part 2, Title 24 that are applicable to new buildings. Alternatively, the seismic provisions for voluntary lateral-force resisting system modifications contained in Section 3415.11, Part 2, Title 24, are permitted to be used, and wind forces are permitted to be determined in accordance with the Simplified Procedure in Section 6.4 of ASCE 7.

(b) Existing Non-complying Nonstructural Elements. Existing non-complying nonstructural elements discovered during the design or construction of a reconstruction, alteration or addition to an existing complying school building and directly affected by the work of construction shall be corrected to comply with the bracing and anchorage requirements of currently effective regulations.

(c) Required Structural Rehabilitation. Existing school buildings for which a reconstruction, alteration or addition project is proposed shall be evaluated, and retrofitted as required to ~~conform to~~ comply with currently effective regulations applicable to the rehabilitation of structural systems per Section 4-307. Wind and seismic forces shall be considered, with ~~under~~ the following conditions:

1. When the cost of the reconstruction, alteration, or addition project exceeds \$25,000 and 50% of the replacement value of the existing building. Maintenance work and air-conditioning equipment and insulation materials costs need not be included in the percentage of replacement value calculation.

2. When the cost of the reconstruction, alterations, or addition project exceeds \$25,000 but does not exceed 50% of the replacement value of the existing building and the proposed modifications, either:

~~A. Increase the existing lateral force story shear in any story by more than 5 percent, or~~

~~B. Reduce the lateral force resisting capacity in any story or in the total building by no less than 5 percent.~~

~~Exception: Rehabilitation of the building is not required under Section 4-309(c)2 when the lateral story shear design load requirements under which the building was originally certified is greater than the lateral seismic load for the altered building under currently effective regulations.~~

A. Increase the effective seismic weight or wind force in any story by more than 10 percent, or:

B. Decrease the design capacity of any existing structural component by more than 5 percent, unless the component has the capacity to resist the retrofit design forces.

If the base shear capacity has been increased since the original construction, the percent change in base shear is permitted to be calculated relative to the increased capacity.

~~(d) Other Requirements. Individual lines of lateral force resisting elements which are to be altered or which are to be affected by other modifications shall be analysed to determine the effects of increased loading or reduced capacity. The analysis shall show that the affected portion of the structure complies with Section 4-309(a) or (c) as appropriate.~~ **Voluntary Lateral Force Resisting System Modifications.** Alterations to existing structural components or additions of new structural components that do not exceed the limitations of Section 4-309(c)2 and are initiated for the purpose of increasing the strength or stiffness of the lateral force resisting system of an existing structure are permitted to be evaluated and designed in accordance with Section 3415.11 of Part 2, Title 24, for voluntary lateral-force resisting system modifications.

(e) When structural damage due to an earthquake is repaired, all portions of the structure associated to this damage shall be retrofitted to comply with currently effective regulations.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17280, 17295, 81130 and 81133.

4-314. Definitions.

"School Building" as defined in Sections 17283 and ~~81130~~ 81130.5 of the act is interpreted to include all structures and utility systems or facilities necessary to the complete functioning of the structures, used or designed to be used for instructional purposes, or intended to be entered by pupils or teachers for school purposes, or structures operated as school units, the failure of which would endanger pupils or teachers on school grounds or in school buildings. (See Section 4-310 for teacher residences.) "School Building" is also defined to include dwellings, including utility systems or facilities necessary to the complete functioning of the dwellings, used by pupils, teachers and school employees, that are part of a campus where the primary use is for school purposes.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17280, 17283, 17405, 81130 and 81529.

4-317. Plans, Specifications, Calculations and Other Data.

(a) **General.** When an application for approval of plans and specifications is filed, it shall be accompanied by three complete sets of the plans and specifications, a copy of the structural design calculations, the site data and a fee payment calculated on the estimated cost. The three complete sets of plans and specifications include the set required by Section 5-103 of Title 24, Part 1, California Code of Regulations. (See Section 4-320)

(b) Plans.

1. Plans shall designate the use or occupancy of all parts of the school buildings and shall give such other information as may be required to indicate the nature of the work proposed and to show compliance with the act and these regulations. The plans shall be legible and sufficiently detailed and cross-referenced to show clearly the pertinent features of the construction, and shall have sufficient dimensions to be readily interpreted. Where a project includes several school buildings, the plans for each shall be drawn independently except that details common to all need not be repeated.

The architect or engineer in general responsible charge or the professional engineer delegated responsibility for the design of the structural system of the project shall design and detail the anchorage and bracing of nonstructural elements. The details for the bracing and anchorage of nonstructural elements shall be shown on the drawings adjacent to the nonstructural elements to which they apply.

~~The attachment of the following items shall be designed to resist the forces prescribed in Part 2, Title 24 C.C.R., but need not be detailed on the plans:~~

- ~~A. Equipment weighing less than 400 pounds supported directly on the floor or roof.~~
- ~~B. Furniture required to be attached in accordance with Part 2, Title 24, C.C.R.~~
- ~~C. Temporary or movable equipment.~~
- ~~D. Equipment weighing less than 20 pounds supported by vibration isolators.~~
- ~~E. Equipment weighing less than 20 pounds suspended from a roof or floor or hung from a wall.~~

2. Plans and specifications which when submitted are obviously incomplete or incorrect, shall be returned to the designer with a request for compliance with these regulations before checking is started by DSA.

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(e) Site Data. Site data for all school sites shall include a soil investigation report including subsurface site work, laboratory testing, an evaluation of site soil conditions, a recommendation for the type of foundations to be used and an allowable design value for the soil-bearing capacity.

For new school sites located in an Alquist-Priolo Earthquake Fault Zone or a Seismic Hazard Zone or in the Seismic Safety Element of the Local General Plan as described in Section 17212 of the Education Code, a geologic and earthquake hazard report shall be submitted with the application. The report shall include an evaluation of both known and potentially active local and regional fault systems and of slope stability and liquefaction potential as hazards to school structures. In accordance with Education Code Section 17212.5, DSA may require a similar geologic and earthquake hazard study for a new school site outside of the boundaries of any special studies zone.

For existing school sites DSA may require the District to employ a California-certified engineering geologist in consultation with a California-registered geotechnical engineer to prepare a geologic hazards statement evaluating the potential for geologic and earthquake damage for projects involving alterations, rehabilitation, additions or new construction. A geologic and earthquake hazard report as indicated above may be required for existing sites in accordance with Sections 17212.5 and 81033.5 of the Education Code. Geologic hazard reports shall include an evaluation of potential for damage due to flooding.

No school building shall be constructed, rehabilitated, reconstructed, or relocated within 50 feet of the trace of a geologic fault along which surface rupture can reasonably be expected to occur within the life of the school building an active fault, which has experienced surface displacement within Holocene time (approximately 11,000 years).

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17212, 17212.5, 17299, 81033, 81033.5 and 81135.

4-355. Advisory Board.

(a) General. The State Architect may appoint an advisory board whose duty it is to serve in an advisory capacity to DSA in connection with technical or structural matters and with reference to regulations and requirements pertaining to the administration of the Act. This board shall also act as a board of review ~~to which appeal can be made by school boards, architects, structural engineers, or other interested parties in case of disagreement with~~

the decisions, rulings or acts of DSA relating to enforcement of Title 24 for building projects under the jurisdiction of DSA.

(b) Membership. The board shall consist of ~~16~~ 17 members appointed by the State Architect. Of the appointive members: two shall be structural engineers; two shall be architects; one shall be a geotechnical engineer; one shall be a general contractor; one shall be a local building official; one shall be an electrical engineer; one shall be a mechanical engineer; two shall be school district personnel; one shall be a project inspector; one shall be a fire and panic safety representative; one shall ~~be a member of the DSA Universal Design Board~~ represent the field of accessibility compliance; one shall represent community colleges personnel; and two shall be members of the general public.

Each member shall be appointed for a term of four years and shall hold office until the appointment and qualification of his or her successor or until one year has elapsed since the expiration of the term for which he or she was appointed, whichever first occurs. No person shall serve as a member of the board for more than two consecutive terms. The State Architect may remove any member of the board for neglect of duty or other just cause. All appointed board members may vote.

The State Architect may also appoint up to three additional ex officio members. State Architect-appointed ex officio members may continue to serve until appointment of their successors by the State Architect. Appointed ex officio members may vote.

Appointive members, except for the public members and the appointed ex officio members, shall be qualified by close connection with public school and State building design and construction. They shall be appointed from nominees recommended by the governing bodies of California-based professional organizations representing school districts, architects, engineers, construction inspectors, construction managers, consultants and facility planners, contractors, building officials and fire and panic safety representatives.

There shall be eight State representative members of the board who shall be: the State Architect; the State Geologist; the Executive Director of the California Seismic Safety Commission; the State Superintendent of Public Instruction; the Chancellor, California Community Colleges; the Director of the Office of Statewide Health Planning and Development; the Deputy Director of the Department of General Services, Real Estate Services Division; and, the State Fire Marshal; or their officially designated representatives. These members are not entitled to vote.

(c) Meetings. The board shall elect its own chairperson and vice chairperson and shall convene upon the call of the chairperson or the State Architect whenever it may be necessary in his or her judgment for the board to meet. The board shall adopt such rules of procedure as are necessary to enable it to perform the obligations delegated to it. The chairperson of the board shall at his or her discretion or upon instructions from the board designate subcommittees to study and report back to the board any technical subject or matter regarding which an independent review or further study is desired or regarding which appeal is made to the board from decisions or rulings of the office. The board members will be reimbursed from the fund defined in Sections 17301 and 81137 of the Act for their reasonable actual expenses in attending meetings, but shall receive no compensation for their services.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17310 and 81142.