Division of the State Architect (DSA) documents referenced within this publication are available on the DSA Forms or DSA Publications webpages.

PURPOSE

This Interpretation of Regulations (IR) clarifies how DSA determines when a rehabilitation, as defined in California Administrative Code (CAC) Section 4-314, is required to an existing certified school building in accordance with CAC Sections 4-306 and 4-309(c), Item 1. CAC Section 4-309(c), Item 1 addresses the case when the cost of a reconstruction, alteration, or addition of an existing building exceeds 50 percent of its replacement value. This clarification is intended to promote consistent implementation and enforcement of the project cost versus replacement value comparison, referred to as the “cost comparison” throughout this IR.

SCOPE

This IR is applicable to projects with scope including reconstruction, alteration, addition, or any combination thereof to one or more existing certified school buildings.

This IR is not applicable to reconstruction projects for the repair of fire damage in accordance with the Exception listed in CAC Section 4-309(a). This IR does not address conditions requiring rehabilitation per CAC Section 4-309(c) Items 2 or 3 when the project cost is less than 50 percent of the replacement value and scope of work thresholds are exceeded. Similarly, this IR does not address voluntary upgrades to the lateral force resisting system of an existing building as defined in CAC Section 4-309(d).

Frequently used terms are defined in the Glossary below.

BACKGROUND

The CAC contains numerous provisions addressing new construction work in existing certified school buildings, which is generally categorized as reconstruction, alteration, or addition. When certain characteristics of such projects exceed the thresholds defined in CAC Section 4-309(c), a rehabilitation of the existing building is required.

CAC Sections 4-306 defines the requirements of rehabilitation projects of existing certified school buildings. Section 4-307 defines the requirements of rehabilitation projects of non-conforming buildings being converted into school buildings, which is not addressed by this IR.

The rehabilitation requirement of CAC Section 4-309(c), Item 1 intends to ensure that when significant financial investment is made to alter or otherwise modernize an existing school building, corresponding safety standards are also addressed.
1. GENERAL REQUIREMENTS

1.1 Cost Comparison by Building

The term “project” is frequently used in reference to construction work performed in multiple existing buildings under a single application number. However, the cost comparison shall be made separately for each individual building. Therefore, the term “project cost” used throughout this IR refers specifically to costs associated with each existing building separately.

1.1.1 Costs associated with the work to each existing building shall be detailed separately in cost estimates, bids, or final actual cost statements used for the purpose of the comparison. General project costs (e.g., general conditions, overhead, profit, insurance, etc.) shall be allocated to each building in accordance with the building’s relative percentage of the overall direct construction costs. Site work is not considered a “general project cost” for this determination but is treated as a separate cost entity similar to a building.

1.1.2 Replacement value for the cost comparison shall be determined by Section 3 below.

1.1.3 Existing buildings on many school campuses have historically been constructed with interconnecting exterior covered walkways. Such existing covered walkways commonly consist of light frame construction with or without columns and often do not include building separation details as required by current seismic code provisions. Existing covered walkways of this nature shall not be used to combine otherwise separate buildings for the purpose of the cost comparison.

1.2 Division of Projects

In accordance with CAC Section 4-309, school construction projects shall not be subdivided to avoid a rehabilitation required by cost. As such, the cost of any previous reconstruction, alteration, and/or addition project completed no more than three years prior to the submittal date of the proposed project must be included with the project cost defined in Section 2 below.

1.3 Project Types

The terms reconstruction, alteration, and addition are used in the CAC to categorize project types and associated requirements. In practice, a single project may include multiple scopes of work that could be described by these same terms. For example, a project might be said to include reconstruction of water damage in one location, a 1,200 square foot addition at the opposite end, and alterations to classrooms in between. The project cost and corresponding cost comparison for this building as described in Section 2 below consists of the sum of all three of these work scopes.

2. PROJECT COST

The project cost used in the cost comparison is outlined in CAC Section 4-322 and includes all costs associated with the reconstruction, alteration, and/or addition to the existing building, except as specifically amended by CAC Section 4-309(c). The project cost shall represent the current cost of construction appropriate to the region where the building is located.

2.1 Included Costs

Project costs consist of those costs associated with the work defined on the plans and specifications including all items normally considered to be covered in the contractor's bid and/or fee such as general conditions, overhead, profit, labor and materials, bond, and insurance. This includes but is not limited to the following scope items:

2.1.1 Demolition.

2.1.2 Permanent equipment.
2.1.3  Finishes.

2.1.4  Maintenance items.

2.1.5  Voluntary lateral force-resisting system modifications to buildings designated by a geologic hazard report as being located within 50 feet of the trace of an active fault.

2.1.6  Subgrade preparation of building pad.

2.1.7  Fees paid to construction managers for performance of construction work in accordance with CAC Section 4-322. Refer also to IR A-3: Construction Management Services for Public School Projects.

2.2  Excluded Costs

The following scope items may be excluded from the determination of project cost for the purpose of the cost comparison:

2.2.1  Air-conditioning equipment and insulation materials costs: For purposes of this provision, air-conditioning equipment includes heating, ventilation, and air-conditioning (HVAC), air conditioning units, heating units, or ventilation units, and does not include ductwork or utility services (i.e., electrical and/or gas service) to the equipment.

2.2.1.1  Installation costs for the work of Section 2.2.1 above may also be excluded.

2.2.1.2  Costs of removing and replacing finishes required to accomplish the work of Section 2.2.1 above shall not be excluded.

2.2.2  Voluntary lateral force-resisting system modifications (inclusive of costs to remove and replace finishes required to accomplish the upgrade) other than defined in Section 2.1.5 above.

2.2.3  Furniture and furnishings.

2.2.4  Site work beyond five feet from the footprint of the building.

2.2.5  Fees paid to DSA per CAC Article 4.

2.2.6  Fees paid to architects, engineers, or others for design services.

2.2.7  Fees paid for inspection and testing services.

2.3  Project Cost Types

During the course of a project the cost is determined by different means, which yield differing degrees of certainty. Some common means of determining cost are described as follows and are used to establish the reporting requirements in Section 4 below.

2.3.1  Cost Estimate

As outlined in CAC Section 4-317(f) an estimate of cost is required for submission of a project application to DSA. Cost estimates are typically commissioned by the school district and prepared by a professional familiar with the latest construction cost trends in the geographical region of the project. The estimated cost used in the cost comparison should include bid and construction contingencies to guard against unforeseen increases that could result in the bid and/or final cost exceeding 50 percent of the replacement value.

2.3.2  Contractor's Bid

After a project is approved by DSA, a competitive bidding process typically follows with the participation of multiple prospective general contractors. The winning bid forms the basis of the construction contract and generally includes items outlined in CAC Section 4-322.
2.3.3 Final Actual Cost

As described in CAC Sections 4-322 and 4-339, the final actual project cost is determined upon completion of construction and is used in the project certification process. This cost is documented on form DSA 168: Statement of Final Actual Project Cost and Instructions and includes adjustments made to the bid price during the course of construction (i.e., change orders and contingency funds spent).

3. REPLACEMENT VALUE

The replacement value of the existing building used in the cost comparison represents the funds required to construct a new a building of the same size and intended use. The representative replacement building would be required to comply with the current California Building Code (CBC). The replacement value shall not be escalated for projected increases in construction cost over time but shall be considered in current dollars.

The replacement value shall be determined in accordance with Section 3.1 or 3.2 below based upon the definition of square footage in the Glossary below. Questions or concerns regarding the determination of replacement value shall be directed to a Supervising Architect, Supervising Structural Engineer, or Regional Manager of the DSA Regional Office to which the project will be submitted.

3.1 Valuation for K-12 Public School Projects

The replacement value shall be determined based on the cost of school construction in California as established by the Office of Public School Construction (OPSC). For its use in the dispensation of School Facility Program (SFP) Grants the State Allocation Board of OPSC has adopted construction cost values based on the RS Means Construction Cost Index, including current replacement costs. These values are given on a cost per square foot basis and are adjusted annually at the State Allocation Board’s January meeting.

3.1.1 OPSC adopted construction cost values for 2021 are as follows:

3.1.1.1 Typical Replacement Cost: $412 per square foot.

3.1.1.2 Toilet Replacement Cost: $742 per square foot.

3.1.2 The replacement value for each building subject to reconstruction or alteration shall be the cost per square foot established by OPSC multiplied by the total square footage of the existing building.

3.1.3 The replacement value for each building subject to an addition shall be the cost per square foot established by OPSC multiplied by the total square footage of the existing building alone, excluding the square footage of the proposed addition.

3.1.4 Where the existing building contains restrooms, shower rooms, and/or locker rooms, the cost listed in Section 3.1.1.2 above is permitted to be applied to the square footage of those spaces only. The cost listed in Section 3.1.1.1 above shall be applied to the square footage of all other spaces of the building.

3.2 Valuation for Community College Projects

The replacement value shall be determined based on the construction cost per gross square footage values used by the California Community Colleges Chancellor’s Office. These cost values are differentiated by room type and are available to community college districts and their design professionals through the online application FUSION. The cost per square foot values can be accessed by selecting View Cost Guidelines from the Admin panel on the FUSION home page. The values will display in tabular format in a new window titled JCAF Cost Guidelines.
DSA will also accept the OPSC basis of replacement value determined in accordance with Section 3.1 above for community college projects.

3.2.1 The replacement value for each building subject to reconstruction or alteration shall be determined based on the square footage of the existing building in accordance with Section 3.2.3 below.

3.2.2 The replacement value for each building subject to an addition shall be determined based on the square footage of the existing building alone, excluding the square footage of the proposed addition, in accordance with Section 3.2.3 below.

3.2.3 The replacement value shall be determined using the cost per gross square foot values in the community college table identified in Section 3.2 above as follows:

3.2.3.1 Based on its current program, the existing building use shall be distributed on a percentage basis into categories defined in the table. Any support space (e.g., halls, stairs, etc.) or other use not identified in the table shall be distributed proportionately to defined categories such that the total of all categories sums to 100 percent.

3.2.3.2 An effective replacement value cost shall be determined by multiplying each use percentage by the applicable cost per gross square foot from the table and summing the total. While the table contains multiple columns of cost data, the values shall be taken from the only column presenting the costs in terms of gross square footage (GSF).

3.2.3.3 The replacement value of the existing building shall be determined by multiplying the effective cost defined in Section 3.2.3.2 above and the square footage defined in Section 3.2.1 or 3.2.2 above.

3.3 Included Value

The cost per square foot values identified in Section 3.1 and 3.2 above already include costs associated with the construction work such as general conditions, overhead, profit, labor and materials, bond, and insurance; therefore, these items shall not be added to the replacement value.

3.4 Excluded Value

The following scope items are not included in the replacement value for the purpose of the cost comparison and shall not be added to the replacement value determined in accordance with Section 3.1 or 3.2 above:

3.4.1 Demolition of the existing building.

3.4.2 Site work beyond five feet from the footprint of the building.

3.4.3 Fees paid to DSA per CAC Article 4.

3.4.4 Fees paid to architects, engineers, or others for design services.

3.4.5 Fees paid for inspection and testing services.

4. REPORTING REQUIREMENTS

All projects whose scope of work includes reconstruction, alteration, and/or addition shall provide a cost comparison specific to each affected existing school building with submission of the project application. When DSA determines the project cost provided at submission has sufficient uncertainty to warrant further verification, one or more additional cost comparisons will be required.
4.1 Project Application Submission

In accordance with form DSA 3: Project Submittal Checklist, Part 4, Section B.1.c, the cost comparison justification shall be submitted for each existing building subject to reconstruction, alteration, and/or addition. The design professional shall provide the information needed for the cost comparison, both the project cost estimate and the replacement value of the existing building, at project submission.

4.1.1 Project cost shall be determined in accordance with Section 2 above and based on the estimated cost per Section 2.3.1 above.

4.1.2 The replacement value shall be determined based on the valuation of Section 3 above.

4.2 Award of Construction Contract

Should the cost comparison provided by Section 4.1 above yield a cost less than but sufficiently close to 50 percent of the replacement value, DSA may determine further verification is warranted. Uncertainties in estimated costs and other variables will be considered to determine when further verification is necessary. In such cases, DSA will require a second cost comparison be submitted for the designated existing building(s) with the form DSA 102-IC: Construction Start Notice/Inspection Card Request.

4.2.1 Project cost shall be determined in accordance with Section 2 above and based on the successful bid per Section 2.3.2 above. The DSA-approved construction documents shall require the bids to include a breakdown of cost by building to facilitate this cost comparison. If the project is delivered by a contractual method that does not include bidding, DSA may require the project cost be defined at this phase by the design-build or similarly responsible entity.

4.2.2 The replacement value shall be the same as used in the original cost comparison per Section 4.1.2 above.

4.2.3 Should the second cost comparison conclude that the project cost for reconstruction, alteration, and/or addition to any existing school building exceeds 50 percent of the replacement value, options available to the school district to achieve compliance with CAC Section 4-309(c) include the following:

4.2.3.1 All or a portion of the work in the building(s) where rehabilitation is required may be removed from the project scope. The design professional shall prepare and submit to DSA for review an Addendum or Revision, as dictated by the status of the construction contract to remove the scope of work as required. DSA will not issue inspection cards (DSA 152: Project Inspector Card) for the project until the Addendum or Revision is approved by DSA.

4.2.3.2 The construction documents may be revised by Addendum or Revision to include the rehabilitation of the building(s) as required. Construction of the affected building(s) must be postponed by the school district to allow time for the design, review, and approval of the rehabilitation scope. DSA will not issue inspection cards (DSA 152) for the affected building(s) until the Addendum or Revision is approved by DSA.

4.2.3.3 Other project specific options may be approved by the DSA Regional Office to reconcile the previously unforeseen rehabilitation requirement at this stage in the project. The school district and their design team shall meet immediately with a DSA Supervising Architect, Supervising Structural Engineer, or Regional Manager to discuss any proposed alternate means of compliance.
4.3 During Construction

Should the cost comparison provided in Section 4.2 above yield a cost less than but sufficiently close to 50 percent of the replacement value, DSA may require cost comparison updates throughout the construction phase. If at any point the project cost is projected to exceed 50 percent of the replacement value, DSA may issue a Stop Work Order in accordance with IR A-13: Stop Work and Order to Comply.

4.4 Construction Completion

Should the cost comparison provided by Section 4.2 or 4.3 above yield a cost less than but sufficiently close to 50 percent of the replacement value, DSA may again determine further verification is warranted. Uncertainty in the extent of cost changes during construction (e.g., change orders) will be considered to determine when further verification is necessary. In such cases, DSA will require a final cost comparison be submitted for the designated existing building(s) with the DSA 168: Statement of Final Actual Project Cost and Instructions.

4.4.1 Project cost shall be determined in accordance with Section 2 above and based on the final actual project cost per Section 2.3.3 above. In such cases, the form DSA 168 shall be appended with supplemental information defining the breakdown of cost by building to facilitate this comparison.

4.4.2 The replacement value shall be the same as used in the original cost comparison per Section 4.1.2 above.

4.4.3 Should the final cost comparison conclude that the project cost for reconstruction, alteration, and/or addition to any existing school building exceeds 50 percent of the replacement value, certification of the project will be withheld by DSA. Rehabilitation of the subject school building(s) is required under a separate application number.

Certification of the original reconstruction, alteration, and/or addition project will be contingent upon and linked to certification of the rehabilitation project.

4.4.4 In lieu of the requirements of Section 4.4.3 above, other project-specific options may be approved by the DSA Regional Office to reconcile the previously unforeseen rehabilitation requirement at this stage in the project. The school district and their design team shall meet immediately with a DSA Supervising Architect, Supervising Structural Engineer, or Regional Manager to discuss any proposed alternate means of compliance.

REFERENCES:

2019 California Code of Regulations (CCR) Title 24
   Part 1: California Administrative Code (CAC), Sections 4-306, 4-307, 4-309, 4-314, 4-322, 4-339
   Part 2: California Building Code (CBC)
GLOSSARY

Addition
As defined in CAC Section 4-314. For the purposes of this IR, the concept of “sharing use" as contained in the definition of addition shall be taken to mean any configuration that allows the user internal passage from the existing building to the addition (or vice versa) without travelling outside.

Alteration
As defined in CAC Section 4-314.

Certified Building
As defined in CAC Section 4-314.

Furniture and Furnishings
Articles or building accessories that are not specified and defined on the construction documents. Such items are often owner-supplied and sometimes owner-installed.

Reconstruction
As defined in CAC Section 4-314.

Square Footage
For the determination of replacement value determined in accordance with Sections 3.1 and 3.2 above, the enclosed building area measured from the outside face of the exterior walls. This differs from the definition of Gross Floor Area in CBC Section 202.