DSA IR 16-1

RELOCATABLE BUILDINGS AND MODULAR ELEVATOR TOWERS: 2025 CBC

Disciplines: All

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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) defines special design, construction and placement requirements for relocatable buildings and modular elevator towers.

The provisions of this IR apply to 2025 pre-check (PC) plans for new relocatable buildings and modular elevator towers, and for other new relocatable construction, alteration or relocation of existing certified buildings and elevator towers submitted to DSA under the 2025 California Building Code (CBC) after January 1, 2026.

SCOPE

This IR is applicable to the placement of new relocatable buildings and new modular elevator towers on a school site, and alteration or relocation of existing relocatable buildings and elevator towers submitted to DSA under the 2025 CBC. All portions of a relocatable school building and a modular elevator tower shall conform to all requirements of the building standards adopted for public schools in California Code of Regulations (CCR) Title 24 except as specifically described in this IR and in *IR PC-6: Pre-Check (PC) Design Criteria for Relocatable Buildings* and *IR PC-3: Pre-Check (PC) Design Criteria for Modular Elevator Towers*. Design Criteria for the superstructures of these building types is covered in more detail in IR PC-3 and IR PC-6. The State Fire Marshal regulations and the regulations for accessibility must be followed without modification. Each time relocatable buildings are moved, plans shall be submitted to DSA for approval.

BACKGROUND

As defined in the CBC, a relocatable building is any building with an integral floor structure which is capable of being readily moved. DSA-approved relocatable buildings may be used on public school campuses as permanent buildings and may also be used during modernization projects on a temporary basis or as non-temporary emergency relocatable buildings in accordance with *IR A-1: Temporary Approval for School Use of DSA Approved Relocatable Buildings*.

Additional information regarding the design and site application of relocatable buildings and modular elevator towers can be found in the following documents:

- *IR PC-3: Pre-Check (PC) Design Criteria for Modular Elevator Towers*
- *IR PC-6: Pre-Check (PC) Design Criteria for Relocatable Buildings*
- Procedure (*PR) 07-01: Pre-Check Approval*
- *PR 18-02: CALGreen/Energy Code Review (CGE) for Pre-Check (PC) Building Designs and the Construction, Relocation and/or Alteration of Relocatable Buildings*
- *IR 11B-10 Scoping and Path of Travel Upgrade Requirements for Facility Alteration, Addition and Structural Repair Projects*

RELOCATABLE BUILDINGS AND MODULAR ELEVATOR TOWERS: 2025 CBC

1. SITE PLAN REQUIREMENT

A site plan is required which shall include all of the following:

1.1 Fully dimensioned location of the proposed relocatable building(s) in relation to other buildings on the site. Show all buildings and structures on the site and their corresponding DSA application numbers. Indicate accessible route(s) to the proposed building(s).

1.2 Elevation of finished and original grade at each corner of each building and the elevation of the finished floor. Show elevation of adjacent exterior finished grade at each corner of the building if different from foundation grade, and the elevation of the top and bottom of stairs and ramps.

1.3 Location of means of access and egress to and from each building including accessibility compliance requirements and location of safe dispersal area(s).

1.4 Location of all utilities, including underground fire alarm conductors serving each building, from the source to the point of connection. Include a signed statement on the drawings from the appropriate responsible engineer indicating their verification of the location of the utilities shown as existing and that their capacity is adequate for the additional load. If the source of utilities is located in or on an existing building, show the DSA application number under which the building was approved.

1.5 Location of fire apparatus access roads, fire protection water supplies, and other fire services features pursuant to *PL 26-01: Requirements for Fire Service Features and Request for Alternate Materials and Methods for Fire Service Features*. Specify if the project is located in a Moderate, High, or Very-High Fire Hazard Severity Zone (FHSZ), and if located in a State Responsibility Area (SRA) or a Local Responsibility Area (LRA). Refer to the Cal-Fire/OSFM FHSZ Map Viewer for the designated FHSZ in an SRA, or contact the Local Fire Authority (LFA) for the adopted FHSZ in an LRA.

1.6 Where automatic fire sprinklers are required to be installed in the relocatable building, the site plan shall include the following:

- Water supply test data.
- Underground fire water source, routing, pipe type and size.
- Underground pipe thrust block or restraint types and locations.
- Post indicator valve and fire department connection locations.
- Reference to details for seismic expansion loops for utility connections between buildings.

1.7 Location of any Photovoltaic (PV) energy systems including the associated PV power output and battery storage that is required per the PC plans and the Title 24 requirements for the project. If no PV is required, that shall also be indicated on the front sheet or site plan for the project.

2. BASIC REQUIREMENTS

2.1 Protection Against Deterioration

The following measures shall be taken to protect the building from deterioration due to decay, termite damage and rust:

2.1.1 Drainage shall be provided to prevent water from ponding beneath buildings.

2.1.2 Under-floor ventilation shall be provided in accordance with CBC 1202.4. The ventilation calculation shall be based on the “net” area, considering the porosity of the screen over the openings. Where the ventilation openings are blocked by the ramp/landing structure (i.e., sold skirts), the net area of ventilation openings through the skirts shall be provided with an area equal to or greater than the blocked openings.

2.1.3 Cold-formed steel structural members shall have a material thickness not less than 33 mils (20 gauge) and shall be protected by rust-inhibitive coating in accordance with the American Iron and Steel Institute (AISI) S220 Section A4 and AISI S240 Section A4, accordingly.

2.1.4 Structural steel members shall be protected by a rust-inhibitive coating for protection against deterioration in accordance with CBC Section 2201A.3.

2.1.5 Steel deck diaphragms shall have a material thickness in accordance with CBC Section 2208A and shall be protected by galvanizing to a minimum coating weight of G60.

2.1.6 The minimum thickness of non-structural steel roof decking and wall siding is 26 gauge, protected with a durability coating.

2.1.7 The under-floor clearance shall be in accordance with Section 2.2.1 below. In no case shall the under-floor clearance at any point of all building floor framing members be less than two inches regardless of the measures taken to prevent deterioration.

2.1.8 Fasteners in contact with preservative-treated wood shall be hot-dipped zinc-coated galvanized or have equivalent corrosion resistance.

2.1.9 A weather-resistant exterior wall envelope shall be provided in accordance with CBC Section 1402.2.

2.2 Grade Clearance Detailing

This section specifies the requirements for maintaining clearances for decay and termite protection at the base of the building. Where the specified clearances cannot be provided, wood shall be naturally durable or preservative-treated. This section also specifies requirements for protection of the framing and installation of mowstrip and flashing when the exterior grade is higher than the bottom of the floor framing members.

2.2.1 Under-Floor Clearance

Under-floor clearance and the treatment of wood members (including the floor sheathing) in close proximity to exposed ground shall meet the requirements of CBC Section 2304.12.1.1. If a rat slab is provided within the perimeter of the foundation or the building is placed on pavement, the minimum clearance requirements of CBC Section 2304.12.1.1 for providing naturally durable or preservative-treated wood need not be met. For additional exception regarding floor sheathing, see Section 2.2.3 below.

2.2.2 Adjacent Exterior Grade Clearance

Clearance from exterior grade to untreated wood construction, including, but not limited to, wall framing and wall sheathing as well as floor framing and floor sheathing in contact with exterior walls shall meet the requirements of CBC Section 2304.12.1.2. For exceptions to these requirements, see Section 2.2.3 below. In addition, by meeting the requirements of this section, the concrete curb for stud walls adjacent to unroofed paved areas per CBC Section 2304.12.1.4.1 may be excluded.

2.2.2.1 Equivalent Means of Protection Against Decay, Termites and Deterioration

In lieu of providing naturally durable or preservative-treated wood per Section 2.2.2 above and rust-inhibitive coating over exposed steel and welds, details providing an equivalent means of protection against decay, termite and deterioration may be considered by DSA when *both* of the following items are provided:

- A form *DSA 1-AMM: Request for Alternate Design, Materials and Methods of Construction* shall be submitted for DSA review and approval of any alternate detailing using the Alternate Means and Methods procedure defined in California Administrative Code (CAC) Section 4-304 and CBC Section 104.2.3.
- A statement shall be provided on the construction documents stating that the building design uses an alternate means of compliance for foundation durability requirements per CBC Sections 1402.2 and 1403.2 for providing a weather-resistant exterior wall envelope and continuous water-resistive barrier on walls down to top of foundation wall, and CBC Section 2304.12.1.2 for protection against decay and termites along the adjacent exterior grade, as well as protection against steel deterioration per CBC Section 2201A.3.

2.2.2.2 Exterior Grade Higher than the Bottom of Floor Framing

Where the surface of the adjacent exterior grade is higher than the bottom of the floor framing on any side of any relocatable building or modular elevator tower of wood or metal construction, *all* of the following requirements shall be met in addition to those in Sections 2.2.1 and 2.2.2 above:

- All wood in the substructure and floor framing (including floor sheathing) shall be naturally durable or preservative-treated in accordance with CBC Section 2304.12.1.2 and 2304.12.1.3 for protection against decay and termites.
- Underfloor ventilation in accordance with Section 2.1.2 above shall be provided.
- Clearance from exterior grade to untreated wood siding shall meet the requirements of CBC Section 2304.12.1.5.
- All steel (including steel embedments) and any welds exposed to air shall have a rust-inhibitive coating for protection against deterioration in accordance with CBC Section 2201A.3 and AISI S240 Section A4.
- A weather-resistant exterior wall envelope extending down to top of foundation wall shall be provided in accordance with CBC Section 1402.2.
- A continuous water-resistive barrier extending down to top of foundation wall shall be provided on the sides of the structure where the adjacent exterior grade is higher than the bottom of the floor framing, in accordance with CBC Section 1403.2.

- Walls that retain earth and enclose interior spaces and floors below grade (e.g., perimeter floor framing that extends below the top of exterior paving where moisture will affect the floor framing of the interior space) shall be waterproofed and dampproofed in accordance with CBC Section 1805A.1. The dampproofing material shall consist of bituminous material per CBC Section 1805A.2.2 or other approved methods or materials. It shall be installed on the exterior surface of the wall and perimeter floor framing, on the sides that retain earth, and shall extend from the top of foundation wall to above ground level.

Note: For exceptions, see Section 2.2.3 below.

2.2.3 Exceptions for Single-Story Buildings with Floor Area 2,160 Sq. Ft. or Less

The following exceptions apply:

- The minimum clearance requirements of CBC Section 2304.12.1.1 for providing preservative-treated wood floor sheathing need not be met.

  Note: This exception does not apply for floor joists which must still meet the requirements stated in Section 2.2.1 above.

- The minimum clearance requirements for providing naturally durable or preservative-treated wood wall framing, wall sheathing, floor framing and floor sheathing per Sections 2.2.2 and 2.2.2.2 above need not be met.

  Note: When the building uses light-framed walls with wood structural panels as the lateral force resisting system and the exterior grade is higher than the bottom of the floor framing, the exception above shall not apply for the wall framing and wall sheathing.

- The minimum clearance requirements of CBC Section 2304.12.1.5 for providing preservative-treated wood siding need not be met.

- The requirements for providing a weather-resistant exterior wall envelope and continuous water-resistive barrier in accordance with CBC Sections 1402.2 and 1403.2 need not be met.

- The requirements for providing waterproofing and dampproofing in accordance with CBC Section 1805A.1 need not be met.

Note: When any of the above exceptions in this section are used, a waiver of durability is required per Section 2.3 below. In addition, flashing, concrete mowstrip/walkway and concrete cover shall be provided as shown in Figure 1 below.

2.3 Request for a Waiver of Durability

2.3.1 A waiver of durability may be requested for relocatable buildings with substandard foundation materials or substandard decay and termite prevention detailing and will result in a conditional approval as noted in Section 2.4 below. A request for a waiver of durability will only be accepted for single-story buildings with floor area of 2,160 Sq. Ft. or less and is required when any of the following conditions exists:

2.3.1.1 A non-permanent foundation is used in accordance with Section 3.2 below.

2.3.1.2 A permanent exterior foundation is used in accordance with Section 3.1 below, and either of the following conditions exists:

2.3.1.2.1 The distance from the exterior exposed ground or pavement to untreated wood wall framing (including the wall sheathing) is less than required by CBC Section 2304.12.1.2.

2.3.1.2.2 Any portion of the exposed structure (including steel embeds) is below the exterior exposed ground or pavement.

Note: Use of the sheet metal flashing shown in Figure 1 below does not relieve the owner from the requirement for a waiver of durability.

The request for a waiver of durability may be made on the application form or by letter from the applicant or an agent of the applicant. A request for waiver from the building manufacturer or leasing company will not be accepted. This written request shall be submitted to DSA before the construction documents are approved by DSA.

2.4 Conditional Approval

When a request is made for a waiver of durability, the applicant thereby acknowledges that a conditional approval is acceptable.

The conditional approval will state that the approval is based on modified durability requirements. The procedures for processing conditional approval are outlined below and are intended to follow the intent of California Education Code (EDC) Sections 17292 and 17405.

The DSA project approval letter will indicate, for conditional approval, that “the owner must periodically inspect for, and correct, deterioration in the building in order to maintain it in a safe condition,” and the final DSA certification letter will note that a “waiver of durability” was requested.

2.5 Electrical, Mechanical and Plumbing

All utility installations shall conform to the requirements of CCR, Title 24, Parts 3, 4 and 5. Provisions shall be made for grounding the electrical system and equipment for each individual building and this shall be shown on the drawings.

A bonded common grounding electrode shall be provided for each metal building, exposed metal frame, ramp, stair and the electrical system per *IR E-1: Grounding of Buildings Fabricated Off-Site*.

A means of access shall be provided per CBC Section 1209.1 to all under-floor utilities such as electrical, mechanical and plumbing.

3. FOUNDATIONS

This section specifies requirements for new foundation designs and clarifies when a permanent foundation is required and when a non-permanent foundation may be used. For projects that involve relocating existing buildings, refer to Section 5.2.6.2 below for foundation requirements and exceptions.

All foundations shall have a positive connection between isolated piers and the building floor structure in accordance with the American Society of Civil Engineers (ASCE) 7 Section 12.1.4. Refer to DSA IR PC-6, Section 5.9 for more detailed information regarding anchorage to permanent foundations.

3.1 Permanent Foundations

Permanent foundations are those constructed in full conformance with all CBC requirements, including materials and decay and termite prevention detailing. Exceptions to some detailing may be allowed as outlined in Section 2.2 above. Foundation walls or pedestals may be constructed of reinforced concrete or reinforced, fully grouted, concrete block masonry. The maximum allowable soil bearing pressure for permanent foundations, designed in accordance with CBC Section 1808A, shall not exceed 1500 pounds per square foot (psf), unless substantiating soil data for a higher value is submitted to and approved by DSA. Provisions shall be made to transfer the required lateral forces to grade level.

3.1.1 Modular Elevator Towers

Permanent foundations are required for all modular elevator towers.

3.1.2 Relocatable Buildings

A permanent foundation is required for a relocatable building when *any* of the following conditions exist:

- The height between the underside of the lowest floor framing members and the supporting grade exceeds 18 inches.
- The building floor area exceeds 2,160 Sq. Ft.
- The building is more than one story in height.

A non-permanent foundation, meeting the requirements of Section 3.2 below, may only be utilized when a permanent foundation is not required by this section.

3.2 Non-Permanent Foundations

Non-permanent foundations include those foundations of wood construction. A non-permanent foundation may only be utilized for relocatable buildings when all of the following requirements are met:

- The relocatable building is a single-story structure.
- The floor area of an individual building does not exceed 2,160 Sq. Ft. Refer to Section 3.2.2 below for calculation of floor area.
- The distance between the underside of the lowest floor framing member and the top of grade under the building does not exceed 18 inches.
- The relocatable building contains no concrete topping or fill on the floor or roof (including light-weight concrete).

If any one of the above conditions is not met, a permanent foundation must be provided in accordance with Section 3.1 above.

3.2.1 When a non-permanent foundation is utilized, the applicant shall initiate a request for waiver of durability in accordance with Section 2.3 above at the time the application for plan approval is filed.

3.2.2 Maximum Building Area Permitted

Relocatable buildings may be made up of one or more structurally separate portions in accordance with CBC Section 1604A.5.1. Wood foundations may be placed under multiple structurally separate portions of a relocatable building interconnected for use by doors or passage ways, provided the combined area of the separate portions does not exceed 2,160 Sq. Ft. The structurally separate portions may be of the same use or different uses.

3.2.3 The following modifications to provisions are permitted for non-permanent foundations:

3.2.3.1 A wood sill plate of foundation grade redwood or preservative-treated sawn lumber may bear directly on soil or paved surface. Grass or turf shall be cleared to bare soil under the entire area of the building. The wood sill plate may support wood cripple studs, posts, or continuous blocking and sheathing. The portions of the wood foundation above the wood sill plate need not be preservative-treated if this wood is placed above the exterior grade level. If the exterior grade is higher than the level of the wood foundation, compliance is required with Section 2.2.2.2 above.

3.2.3.2 Isolated piers and continuous footings may be constructed of stacked wood members nailed together with hot-dipped zinc-coated galvanized or equivalent corrosion-resistant nails. Nailing shall be sufficient to transfer the required lateral forces to grade level. The bottom layer of wood shall be foundation grade redwood or preservative-treated sawn lumber.

3.2.3.3 Metal frame jacks, specifically designed or justified by testing for the project, may be used as isolated piers. Metal jacks shall be attached to the structure by means of a positive connection. Overturning and bending forces due to vertical and lateral loads must be resisted in accordance with the applicable CBC provisions.

3.2.3.4 The maximum bearing pressure for wood foundations bearing on soil or paving shall not exceed 1000 psf unless substantiating soil data for a higher value is submitted to and approved by DSA. The footings and foundation structure shall be capable of resisting all loads specified in CBC. Unless the individual modules of the building are fastened together using positive connections spaced at 10'-0" O.C. max. intervals at the roof and floor level, each module and its diaphragm shall be designed as a separate unit.

3.2.3.5 The foundation shall be designed to prevent sliding on the supporting surface by attaching the wood foundation plates for the building, ramps and stairs to the ground with restraining devices. An acceptable design shall incorporate either one-inch diameter standard weight hot-dipped galvanized pipes (1.315” actual O.D.) or one-inch diameter solid steel rods, spaced at maximum of 10'-0" O.C. One pipe/rod shall be located a maximum of two feet from each corner in both directions, and a minimum of two pipes/rods per discontinuous foundation strip is required. Pipes shall penetrate into soil and/or paving a minimum of 12" measured vertically. Alternate or equivalent designs, when provided with structural calculations and details, will be considered.

3.2.3.6 Wood foundations utilizing pipe anchors described above to prevent sliding are deemed acceptable by DSA to resist uplift resulting from code-defined load combinations based upon historical performance during seismic and wind events.

3.2.3.7 The crawl space and access opening requirements of CBC Section 1209.1 need not apply to relocatable buildings utilizing non-permanent foundations.

4. SPECIAL REQUIREMENTS

4.1 Building and Elevator Tower Module Identification

Each building module and elevator tower module shall be identified as follows:

4.1.1 Building Module Identification

The manufacturer or builder shall mechanically fasten two permanent metal identification labels on each building module; one on the exterior and the other located on the interior frame above the ceiling, at the end of the module. The labels shall show the DSA application number and CBC edition under which the building construction was authorized, the manufacturer or builder's name, the serial number, the design climate zones (per Title 24, Part 6, § 140.3[a]8), the design live loads for the roof and floor framing, the design wind speed and exposure category and seismic design parameter, S_s. Refer to Figure 2 below for a sample identification label. The locations and mock-up image or figure of the identification labels shall be shown on the building plans.

For buildings that are manufactured in-plant, verified reports are required as specified in *PR 13-01: Construction Oversight Process,* and shall be attached to the building at the time of transport.

4.1.2 Elevator Tower Module Identification

For elevator towers that are manufactured in-plant, the elevator tower manufacturer or builder shall mechanically fasten two permanent metal identification labels on each tower, one on the exterior and the other located on the interior wall adjacent to the door opening. The labels shall show the DSA application number and CBC edition under which the building construction was authorized, the manufacturer or builder's name, the serial number, the design climate zones (per Title 24, Part 6, § 140.3), the design live loads for the roof, the design wind speed and exposure category, and seismic design parameter, S_s. Refer to Figure 2 below for a sample identification label (the “Design Floor Live Load” is not required for elevator tower labels). The locations and mock-up image or figure of the identification labels shall be shown on the PC building plans.

For elevator towers that are manufactured in-plant, verified reports are required as specified in PR 13-01 and shall be attached to the building at the time of transport.

4.2 Floor Live Load and Roof Snow Load Posting

When buildings are designed and constructed for a floor live load exceeding 50 psf or for any roof snow load, the building manufacturer shall post signs in a conspicuous location on each building depicting the design floor or roof loads in accordance with CBC Section 106.1. The Building Module Identification Labels required by Section 4.1.1 above shall not be construed as meeting this requirement.

4.3 Building Placement

Individual buildings may be placed adjacent to each other provided that any building will be capable of being relocated without affecting adjacent buildings and building area does not exceed limits in CBC Table 506.2 with permitted allowable increases. The clear separation between buildings shall not be less than four inches and the joint may be covered with flashings or other materials that do not prevent differential movement of the buildings. Details of covered joints shall be shown on the drawings. Details shall be provided for all utilities (e.g., fire sprinklers, etc.) passing between seismically separated buildings (i.e., flexible joints, loops, etc.), that can accommodate the seismic relative displacement in accordance with ASCE 7 Section 13.3.2.

4.3.1 Wildland Urban-Interface (WUI) Areas

Buildings relocated into or within a WUI area shall comply with the current requirements of the CWUIC for the FHSZ to which they are being relocated.

4.4 Fire Alarm and Fire Sprinkler Requirements

Fire alarm and fire sprinkler requirements for relocatable buildings depend on building use, project funding source, the date on which the school campus was initially submitted to DSA for approval, and other factors. Fire alarm and fire sprinklers are required in accordance with EDC Sections 32001 and 17074.50–17074.56, and CBC Chapter 9. Refer to policy (*PL) 11-01: Green Oaks Fire Protection Act (SB 575) Implementation*, and see Sections 5.2.7 and 5.2.8 below for additional requirements.

4.5 Flood Design

Refer to *PR 14-01: Flood Design and Project Submittal Requirements*.

4.6 Modular Elevator Towers

Elevator design and construction shall comply with the following:

4.6.1 CBC Chapter 30

4.6.2 CBC Chapter 11B

4.6.3 CFC Section 604

4.6.4 American Society of Mechanical Engineers (ASME) A17.1/CSA B44 Safety Code for Elevators and Escalators.

4.6.5 CCR, Title 8, Division 1, Chapter 4, Subchapter 6, Elevator Safety Orders.

4.6.6 *IR 30-1: Elevators: Building Materials and Systems*

5. RELOCATION OF EXISTING RELOCATABLE SCHOOL BUILDINGS

A DSA relocatable building is approved for construction under an application number for either a site-specific project or for a stockpile. When the construction of the relocatable is certified as part of a site-specific project, the certification only applies to the locations shown on the site plans for that project. If it is part of a stockpile, the certification applies only to the building structure. For either scenario, a separate application number is required to relocate the building from the site or from the stockpile to another school site. See below for definitions of “relocation”, “ alteration”, and “stockpile” and specific requirements relating to relocations.

5.1 Definitions and Project Scope for Relocation Projects

5.1.1 Relocation

The CAC defines relocation as the physical moving of any certified building either as a single unit or in parts from its original location to a new location on the same campus or on a different campus. The relocation may also be from a stockpile to a school campus.

The filing fee for a relocation project shall be based on the estimated value of the work shown on the plans and specifications, including moving costs. The value of the existing buildings need not be included.

Existing DSA relocatable buildings may be relocated under the DSA submittal process where the scope of work is defined as "Relocation of" on the form *DSA 1: Application for Approval of Plans and Specifications*. Evidence of DSA compliance for the relocatable building must be provided with the submittal. The documents provided may be either DSA's "Certificate of Compliance" letter for the project under which the building was originally constructed, or a final verified report from the in-plant inspector for the original construction of the buildings. Identification labels on the buildings must identify the original DSA application number or the module number that matches the in-plant inspection report. Refer to Section 5.4 below for methods of addressing other certification issues.

5.1.2 Alteration

The CAC defines alteration as any construction or renovation to an existing certified building other than reconstruction, rehabilitation, or addition. The relocation or moving of an existing certified school building is considered to be a relocation, not an alteration, requiring filing of the plans and specifications with, and certification by, DSA.

Any alterations to an existing DSA-compliant building as part of the relocation project shall comply with Title 24 requirements in effect at the time the project application is received by DSA. Such alteration shall be identified as “Alteration to:” on the form DSA 1 in addition to “Relocation of:”

Exception: The following requirements may be triggered regardless if the original DSA-approved building drawings are used:

- California Energy Code (Title 24, Part 6) compliance. See Section 7 below for requirements.

- CBC Chapter 11B accessibility compliance. See also DSA IR 11B-10 Scoping and Path of Travel Upgrade Requirements for Facility Alteration, Addition and Structural Repair Projects for additional information. Consult with the applicable DSA regional office if any questions arise.

5.1.3 Stockpile

A stockpile is one or more relocatable buildings that have DSA approval to be constructed under a DSA application number and held at a location other than a school site for future relocation and school use. The DSA application number assigned to the stockpile pertains to the superstructure of the buildings in the scope only and not for the foundation nor for the placement on a school site. An application to relocate the buildings from the stockpile must be obtained in accordance with the relocation procedure before moving the building from the stockpile to any school site.

5.2 Relocation Project Design and Submittal Requirements

5.2.1 In addition to the requirements in Section 1 above, complete site plans for the new site shall be provided to allow verification of site-specific design parameters, fire life safety, and accessibility compliance work:

- Plans shall indicate the application number of the original DSA-certified project which included the construction of the buildings. If the buildings are part of an uncertified project and being qualified as DSA-compliant by use of in-plant inspection reports, the site plan or cover sheet shall also indicate serial number of the modules being placed.
- Plans shall indicate whether the buildings will be moved as complete buildings, or separated into modules and then reconnected at the new location.

5.2.2 The original DSA-approved relocatable building structures are not required to be updated to current code for structural compliance unless the design parameter limits set forth in Sections 5.2.2.1 or 5.2.2.2 below are exceeded.

5.2.2.1 The structural design parameters for the new site (wind, seismic, etc.) shall be within the design parameter limits indicated on the original design drawings and verified based upon the building code under which the building was originally approved and certified. Changes that have occurred in subsequent building codes since the building was originally approved and certified, such as wind load amplifications (i.e., topographic wind load factor [K_{zt}]), or higher ground motion parameters (such as near source factors, higher S_s cap, etc.) need not be considered for this analysis. If the design parameter limits are exceeded, then the building shall be analyzed and rehabilitated as necessary in accordance with current code for the increased loading per CAC Section 4-309(c).

Exception: If the existing building has deteriorated, or is not in compliance with the building code in effect at the time of its construction, it must be rehabilitated in accordance with the current building code.

5.2.2.2 If the snow load requirements for the current code at the new site exceed the equivalent snow loads indicated on the original design drawings, the gravity elements of the building shall be strengthened to resist the increased snow loads in accordance with the current edition of CBC.

Exceptions:

1. When the ground snow load, p_g, is less than the factored roof live load used in design, this requirement need not be applied, provided the conditions outlined in the Exception of ASCE 7 Section 7.2 are met.

2. This requirement may be waived when the current roof snow load at the new site is no more than 5 percent higher than the equivalent roof snow load or roof live load from the original design.

5.2.2.2.1 Snow drift effects may be ignored if the relocated building is placed at least 20 feet away from any taller adjacent buildings.

5.2.3 Accessibility features of the relocatable building shall be in compliance with the Title 24 requirements in effect at the time the relocation project application is received by DSA.

5.2.4 Existing relocatable buildings relocated into or within a WUI area shall comply with the current requirements of the CWUIC for the FHSZ to which they are being relocated.

5.2.5 When a relocated building is placed at a new site, the following items shall apply:

5.2.5.1 The underfloor-to-grade clearance to non-preservative-treated floor sheathing in the existing relocatable building may be less than 18 inches if permitted on the original DSA-approved design drawings and based on 2013 CBC or older.

5.2.5.2 Building designs that have been approved using an alternate means of compliance for protection against decay, termites and deterioriation in accordance with Section 2.2.2.1 above shall not be relocated without DSA approval. Validation shall be required to demonstrate the equivalent level of protection will be maintained once the building is relocated to the new site.

5.2.5.3 For single-story buildings with a floor area greater than 2,160 Sq. Ft., designs that have been approved using the mowstrip and flashing as specified in Figure 1 below will continue to be permitted when an existing building is relocated to a new site.

5.2.6 In addition to the plans for the new site, the project submittal must include plans and details of the existing relocatable building as follows:

5.2.6.1 DSA-approved drawings of the existing relocatable building shall be submitted with the relocation application. The drawing set included for submittal shall include only those plans and details necessary to place the building at the new project site, including as a minimum, the cover sheet showing the design criteria, the floor plan, the foundation plan and foundation construction details, superstructure to foundation connection details and module interconnection details (if required to reassemble multiple modules). Other DSA-approved relocatable drawings shall be submitted as reference documents if needed to show existing design elements (e.g., accessibility compliance items, etc.).

5.2.6.2 DSA will accept the use of the foundation plans and details that were approved with the original relocatable PC building. The foundation plans and details may be part of a DSA "Pre-checked" (PC) foundation design that is approved for use with the specific building being relocated. Once an approved PC foundation design has been utilized for a specific relocatable building, that PC foundation may be used again for future relocations of that building. Placing the building on a current code-compliant foundation does not trigger a requirement to bring the existing building into compliance with Section 2.2.1 above.

5.2.6.3 All original DSA-approved relocatable building drawings submitted as part of building relocation will be stamped as part of the approval for relocation.

5.2.7 All fire sprinkler and fire alarm devices are required to be tied into the campus fire alarm system per CFC Section 903.4 and 903.4.1.

5.2.8 Automatic fire sprinkler systems (AFSS) shall be added to buildings (if not already installed) as required. The structural framing shall be reviewed and, if necessary, reinforced to support the additional weight of the new AFSS, including seismic loads. Complete details for any required reinforcement of framing shall be provided.

5.2.9 If high-strength bolts (i.e., Grade A325) are required, plans shall clearly indicate that new high-strength bolts are required; existing high-strength fastener assemblies shall not be re-used.

5.2.10 An existing relocatable building is permitted to be relocated to a new site provided the existing relocatable building is designed for the climate zone of the new site as indicated on the DSA-approved PC documents.

5.2.11 Refer to Appendix A below for a list of unique features associated with site inspection items that are expected to be completed by the Project Inspector (PI) for single-story relocatable building projects when construction work is 100 percent complete.

5.3 Deterioration or Existing Non-Compliant Construction

The following note shall be placed on the drawings:

"The project inspector shall observe the existing condition of the relocatable building as it is being placed for non-compliance issues such as deterioration or non-complying construction or alterations. If any condition is discovered which is not in compliance with the approved construction documents, the condition must be corrected in accordance with current Title 24, CCR requirements. A construction change document, or a separate set of plans and specifications detailing and specifying the required repair work shall be submitted to and approved by DSA before proceeding with the repair work."

5.4 Relocation of Uncertified Relocatable Buildings

Projects that include relocation of existing buildings which are part of a previously uncertified project are only permitted for the relocation of buildings for which the original building construction is DSA-compliant. See Section 5.1.1 for acceptable methods to show DSA compliance. Refer to DSA's *Project Certification Guide* (Chapter 5, Section 11 and Appendix D) on DSA's website for methods of addressing other certification issues.

6. COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS CODE (TITLE 24, PART 11)

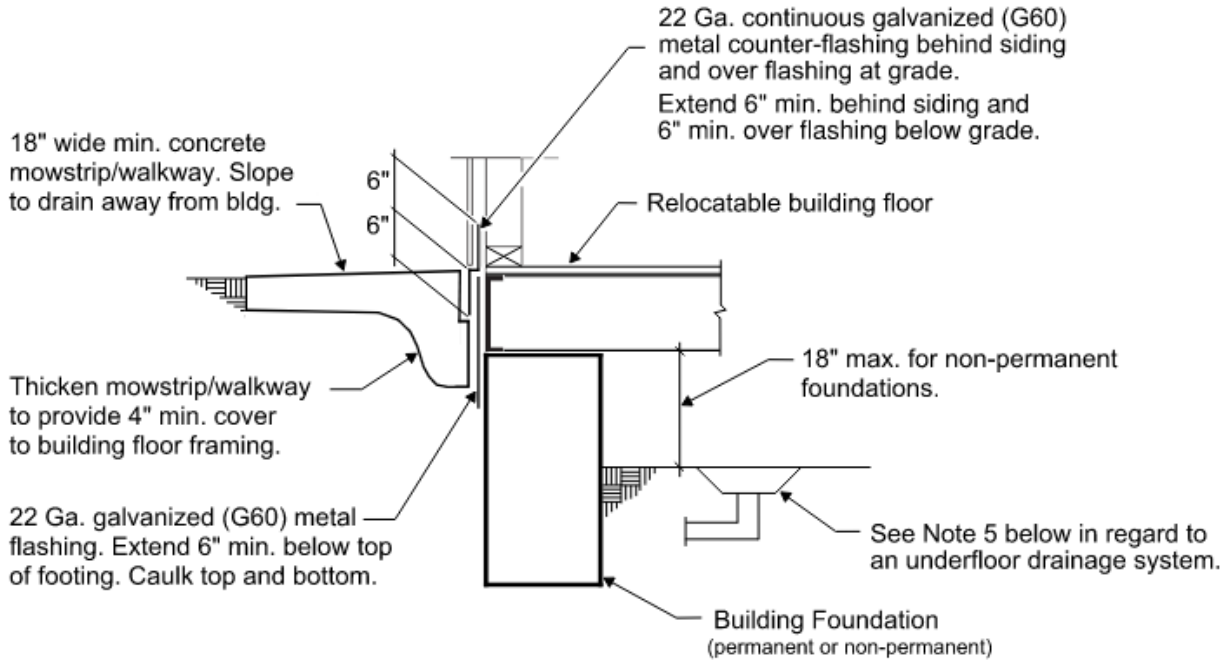
PC designs for relocatable buildings submitted to DSA must comply with the mandatory measures of the current California Green Building Standards Code (CALGreen), Title 24, Part 11. For compliance review requirements and procedures, see *PR 18-02*. Relocation of or alterations to existing certified relocatable buildings approved prior to January 1, 2014 are not required to comply with the CALGreen. Alterations to existing certified relocatable buildings approved on or after January 1, 2014, are required to be maintained in compliance with the code edition under which they were approved.

7. COMPLIANCE WITH THE CALIFORNIA ENERGY CODE (TITLE 24, PART 6)

PC designs submitted to DSA must comply with the current energy efficiency standards set forth in CCR, Title 24, Part 6, the California Energy Code. For compliance review requirements and procedures, see PR 18-02.

7.1 Relocation of a relocatable public school building does not, by itself, require the building to be updated to the current Title 24, Part 6. Refer to PR 18-02 for limitations in applications to relocate a relocatable public school building..

FIGURE 1 – See Section 2.2.3



Notes:

1. In no case shall the exterior grade elevation be higher than the interior floor elevation.
2. The detail in Figure 1 is only permitted to be used for single-story relocatable buildings with floor area 2,160 Sq. Ft. or less. In addition, a waiver of durability is required per Section 2.3 above and will result in a conditional approval per Section 2.4 above.
3. DSA will not permit the use of Figure 1 for any two-story relocatable building or single-story relocatable buildings with floor area greater than 2,160 Sq. Ft. since this detail alone does not provide a weather-resistant exterior wall envelope and continuous water-resistive barrier in accordance with CBC Sections 1402.2 and 1403.2, or waterproofing and dampproofing per CBC Section 1805A.1, and does not satisfy the requirements of CBC Section 2304.12.1.2.
4. Cross-ventilation at under-floor spaces is required per CBC Section 1202.4.
5. Refer to CBC Section 1805A.1.2 for conditions where an underfloor drainage system may be required.

FIGURE 2 – Sample Identification Label

DSA A#:	**Design Roof Live Load:**
CBC Edition:	**Design Floor Live Load:**
Manuf. or Builder's Name:	**Design Wind Speed:**
Serial Number:	**Exposure Category:**
Design Climate Zones:	**Seismic Design Parameter S_s:**

RELOCATABLE BUILDINGS AND MODULAR ELEVATOR TOWERS: 2025 CBC

REFERENCES:

2025 California Code of Regulations (CCR) Title 8, Division 1, Chapter 4, Subchapter 6, Elevator Safety Orders
2025 CCR Title 19, Division 1, Chapter 1, Article 3, Sections 3.05a and 3.16
2025 CCR Title 24
- Part 1: California Administrative Code (CAC), Sections 4-304, 4-309(c), 4-314, 4-337.
- Part 2: California Building Code (CBC), Chapters 9, 11B, 30, and Sections 104.11, 106.1, 506.2, 1202.4, 1209.1, 1402.2, 1403.2, 1604A.5.1, 1805A, 2203A, 2212A, 2304.12.
- Part 3: California Electrical Code
- Part 4: California Mechanical Code
- Part 5: California Plumbing Code
- Part 6: California Energy Code
- Part 7: California Wildland-Urban Interface Code (CWUIC)
- Part 9: California Fire Code (CFC), Chapter 5, and Sections 604, 903.4.
- Part 11: California Green Building Standards Code (CALGreen)

This IR is intended for use by DSA staff and by design professionals to promote statewide consistency for review and approval of plans and specifications as well as construction oversight of projects within the jurisdiction of DSA, which includes State of California public schools (K-12), community colleges and state-owned or state-leased essential services buildings. This IR indicates an acceptable method for achieving compliance with applicable codes and regulations, although other methods proposed by design professionals may be considered by DSA.

This IR is subject to revision at any time. Please check DSA's website for currently effective IRs. Only IRs listed on the webpage at www.dgs.ca.gov/dsa/publications at the time of project application submittal to DSA are considered applicable.

APPENDIX A: RELOCATABLE BUILDING SITE INSPECTION ITEMS

This Appendix provides some of the unique features associated with site inspection items that are expected to be completed by the Project Inspector (PI) for single-story relocatable building projects and reported on the form *DSA 155: Project Inspector Semi-monthly Report,* in accordance with CAC Section 4-337. This Appendix is not intended to be an all-inclusive list of site inspection items but rather is an aid to identify unique aspects of particular interest. The PI is still responsible for verifying all aspects of construction are complete. Once construction work is 100 percent complete and in compliance with the approved construction documents, the PI shall also submit a form *DSA 6-PI: Project Inspector Verified Report*.

1. Building identification: Permanent identification label has correct application number. For new construction, the DSA application number and serial numbers shall match in-plant inspector's form *DSA 152 IPI: In-plant Inspector Inspection Card/Verified Report*, and correct floor live load, roof live load, wind speed, seismic design parameter, and climate zone for site per the approved plans.
2. Under-floor ventilation sizes and locations are same as shown on approved plans and are unobstructed.
3. Wood foundation plates are pressure-treated and identified with tags having appropriate treatment identification.
4. Wood foundation plate size and layout and steel pipes are per approved plans.
5. Shear transfer plates, connectors, structural plywood skirting, and nailing are per approved plans.
6. Ramp slope starts a minimum of 42 inches from the door strike.
7. Electrical bonding is provided between steel frame modules and ramp.
8. Existing condition of the relocatable building, as it is being placed, for non-compliance issues such as deterioration, non-complying construction, or alterations.