INITIAL STATEMENT OF REASONS
FOR
PROPOSED BUILDING STANDARDS
OF THE
OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT

REGARDING PROPOSED CHANGES TO THE
CALIFORNIA BUILDING CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2 – VOLUME 2

The Administrative Procedure Act (APA) requires that an Initial Statement of Reasons (ISOR) be available to the public upon request when rulemaking action is being undertaken. The following information required by the APA pertains to this particular rulemaking action:

STATEMENT OF SPECIFIC PURPOSE, PROBLEM, RATIONALE and BENEFITS

The purpose of this proposed action is to adopt the 2019 California Building Code (2019 CBC) based on new information since the adoption of 2016 CBC.

Title 24, Part 2, Volume 2
Chapter 16 – Structural Design

Section 1601.1.1 – This Chapter has been amended to apply to buildings in OSHPD categories 1R, 2, and 5. These include acute care hospital buildings OSHPD 1R, Skilled nursing and intermediate care facility buildings OSHPD 2, and Acute Psychiatric hospital buildings OSHPD 5. Previously this Chapter only applied to freestanding OSHPD 2 buildings that were single story wood or light steel frame construction.

Section 1601.1.2 – Identifies which chapters and amendments apply to each Category of buildings regulated by OSHPD.

Section 1601.1.4 – Since this chapter now applies to both single story and multistory buildings of all construction types, OSHPD amendments to ASCE 7, in Chapter 16A now apply to OSHPD 1R, 2, and 5 buildings. No change in regulatory effect. Exception identifies that this amendment does not apply to OSHPD 2 buildings that are single story wood or light steel frame construction. No change in regulatory effect.

Section 1601.2 – Identifies which OSHPD buildings are regulated by this section.

Section 1603.1 – Identifies which OSHPD buildings are regulated by this section.

Table 1604.5 – Identifies the applicable risk category for design of buildings regulated by this Chapter.

Table 1607.1 – Identifies that this section also applies to OSHPD 1R and 5 buildings, previously only applicable to OSHPD 2 buildings regulated by this chapter in the 2016 CBC.

Sections 1612.3, 1613.1, 1613.2.1, 1613.2.5, 1613.2.5.1, 1613.2.5.2 – Identifies exception in these sections also applies to OSHPD 1R and 5 buildings, previously only applicable to OSHPD 2 buildings regulated by this chapter in the 2016 CBC.

Section 1613.3 – Design of ballasted photovoltaic panel systems on roofs is still evolving, and review time for approval of the design could be significant relative to construction cost. These systems are therefore considered as an alternative system requiring research reports and tests. This requirements is consistent with existing amendment in Chapter 16A.

Section 1613.4 – Non-Structural components required for life safety have to be functional after an earthquake, therefore they have been assigned an importance factor of 1.5 which also requires these components to have special seismic certification to ensure functionality. This is consistent with the requirements in the 2016 CBC.

Title 24, Part 2, Volume 2
Chapter 16A – Structural Design

Section 1601A.1.1 – Repealed provisions for OSHPD 2 buildings as these provisions are now addressed in Chapter 16.

Section 1603A.1, 1603A.1.5, – Editorial. Sections renumbered to align with changes in model code or its reference standard.

Section 1603A.2 – Editorial.
Repeal provisions for OSHPD 2 buildings as these provisions are now addressed in Chapter 16.
Pointer to requirements for existing buildings which are addressed in the CEBC. Requirements for OSHPD 1 buildings are addressed in the “A” Chapters of the CEBC. Requirements for OSHPD 4 buildings are addressed in non “A” Chapters therefore its reference is deleted.

Section 1604A.3.1 – Editorial. Sections renumbered to align with changes in model code or its reference standard.

Table 1604A.5 – Clarifies which buildings and type of service are required to comply with Risk Category IV standards.

Section 1605A.1.1 – Amendment is revised for consistency with newly added ASCE 7 Section 12.13.5, “Strength Design for Foundation Geotechnical Capacity”. Resistance Factor (Ø) is set to 1.0 only for load combinations with overstrength factor is specific to geotechnical capacities with Resistance Factors for Strength Design of Soil–Foundation Interface given in Table 12.13-1. Note: when strength design or allowable stress design is used, all load combinations are required to be considered. The California amendments further amplify the overturning loads applied to the foundations at least by a factor of 2. The minimum resistance factor Ø for lateral resistance is 0.5. The minimum resistance factor Ø for vertical resistance is 0.45. When amplified loads are applied to the structure the maximum soil bearing stress is further amplified when soil is designed not to take tension loads. The net effect in the sizing of the foundations will generally be equal to or greater than other load combinations as required by ASCE 7. The design of the reinforcement in the foundation for the amplified loads will always be greater than model code and footing size may be needed to be increased anyway to minimize congestion caused by the additional reinforcement required because of the amplified loads.

Table 1607A.1 – Footnote number revised to align with updates in model code.

Section 1613A.2.3, 1613A.2.4 – Editorial. Sections updates because of changes in model code. No change in regulatory effect.

Section 1613A.4.1 – Deletion of exception for seismically isolated structures and adopt revised ASCE 7 requirements additional allowance for Ordinary or Intermediate steel moment frames.

Section 1616A.2 – Deletion of definition for High Rise Buildings as the definition in Chapter 2 is similar.

Section 1617A - Renumbered from 1616A to 1617A due to numbering changes in model code – typical throughout this section.

Section 1617A.1.1 - Renumbered from 1616A to 1617A due to numbering changes in model code – typical throughout this section. Application of the “A” chapter in the CEBC to OSHPD 4 buildings has been deleted. This is an error in the 2016 CBC. Chapter 34A does not apply to OSHPD 4 buildings.

Section 1617A.1.2 – Clarifies that only non-building structures designed similar to building are to be design and detailed per Chapter 12. Limitations in the applicability for other structures not similar to buildings would not apply.

Section 1617A.1.3 (CBC 2016) – Revision in ASCE 7-16 adequately address the site-specific ground motion hazard analysis requirements, hence the existing amendment is removed.

Section 1617A.1.4 item G - Prohibit use of cantilevered column systems of Steel special cantilever column systems and special reinforced concrete moment frames for hospital buildings using the R factors from Table 12.2-1 of ASCE 7-16 for hospital buildings. These are non-redundant systems. Cantilevered column systems are permitted to be designed as essentially elastic structures or as non-building structures in Chapter 15 of ASCE 7.

Section 1617A.1.6 – Clarifies that amplified loads that apply only to the vertical elements of the lateral force resisting system are required to be considered in the design of the lower portion in a two stage analysis. Amplification of loads applied to beams or by diaphragm offsets that do not affect the level at which the amplified load are applied do not need to be considered as amplified forces when analyzing the lower portion of the structure.

Section 1617A.1.10 ASCE 7, Section 12.3.3. Exception to allow used of prohibited horizontal and vertical irregularities for Seismic Design Categories D through F where the total deflection is less than ten percent of the allowable deflection. When applying the irregularity check on a structure that is very stiff on 3 sides (for example, full-length shear walls on 3 sides with an open front), calculated deflections will be very small, resulting in a very small denominator in the equation used to check torsional irregularity, thereby causing allowed limits to be exceeded. Damage or collapse of such rigid structures is unlikely to occur at such low levels of building drift. This exception is necessary for buried structures where one side is required to be open for entry such as a loading dock. The ASCE 7-22 committee is looking at making modifications to this provision to permit structures with extreme torsional irregularities provided the drifts are less than 75% of model code, but with load combination that include orthogonal effects of 100% and 30% in each orthogonal direction applied simultaneously. The proposed provision is conservative and a step in that direction.

Section 1617A.1.12 - Repealing previous amendment, which was added to provide alignment with ASCE 7-16, which is now the adopted reference standard. (ASCE 7-16 Section 12.8.1.3). No change in regulatory effect.

Section 1617A.1.13 - Previous amendment language repealed because ASCE 7-16 Section 12.9.1.4 now contains provisions for scaling design values of combined response.

Section 1617A.1.14 - Previous amendment language repealed because ASCE 7-16 Section 12.10.2.1 now contains equivalent provisions.

Section 1617A.1.16 - Change in section number: Horizontal Seismic Load Effect with Overstrength was Section 12.4.3.2 in ASCE7-10; now Section 12.4.3.1 in ASCE 7-16

Section 1617A.1.17 – Requirements for Skilled Nursing and Acute Psychiatric hospitals have been relocated to the non “A” chapters and adopt model code requirements. This Chapter now only applies to buildings providing acute care services. Therefore, existing amendments that do not apply have been deleted, and includes exceptions for SPC-1 and SPC-2 buildings that do not have the same functionality performance expectations after an earthquake as higher rated SPC buildings.

Section 1617A.1.18 – Exceptions to the exemptions from anchoring and bracing requirements of ASCE 7 for movable and mobile equipment have been clarified and modified to accommodate the normal functionality of the equipment to allow moving the equipment when required for cleaning, maintenance or storage.

Section 1617A.1.21 - Repealing previous amendment, which was added to the 2016 CBC to provide alignment with ASCE 7-16, which is now the adopted reference standard. The other proposed modifications in this section are for clarification or editorial in nature.

Section 1617A.1.22 – Clarifies that design of access floors as special access floors only apply when these access floors are within the covered building envelope. They do not apply when pavers are used for landscaping and exterior conditions which do not impact patient safety.

Section 1617A.1.23 – (Modification to ASCE 7 Section 13.6.2.1) HVACR systems are currently qualified for use in hospital buildings using the OSHPD Special Seismic Certification Program (OSP). New HVACR standards have been introduced in ASCE 7, and review to these standards must be evaluated for functionality and consistency in performance with OSHPD approved procedures. Use of AHRI Standards 1270 and 1271, which requires strength and stiffness of mechanical components not specified in any standards, are therefore considered as an alternative system. This is consistent with ASCE 7-16 Section 13.3.1.4, which requires independent peer review in accordance with ASCE 7-16 Section 1.3.1.3.4, when higher floor spectra is used. An alternative system will permit OSHPD to act as reviewer instead of requiring an independent peer reviewer.

Repealing previous amendments which were added to align the 2016 CBC with ASCE 7-16, which is now the current reference standard. Additional modification to ASCE 7 Tables 13.5-1 and 13.6-1 have been made where **t**here are nonstructural components referenced in these Tables where design requires an R_p = 1.5 and an Omega of 2. The California amendments require all non-structural components to have an I_p of 1.5. Force demands on components with low R_p values are considered essentially elastic. Therefore additional considerations for over strength beyond the elastic limit is overly conservative when coupled with the I_p = 1.5. In addition only prequalified anchors in concrete are permitted. These anchors have resistance factors corresponding to a 5% fractile limit which give the required conservatism needed.

Section 1617A.1.24 - Repealing previous amendments thereby allowing the proposed language to parallel the new ASCE 7-16 language; the intent of previous amendments is generally maintained through new proposed language. The new proposed language permits exemptions from bracing requirements consistent with ASCE 7 for distribution systems for Conduit, Cable Tray, and Raceways where I_p = 1.0. Additional limitations have been added to limit the maximum rod length and load that can be hung per rod. Absent these exemptions, the number of braces required could become excessive and there is no room to accommodate all the braces especially in a corridor of a hospital building.

Section 1617A.1.25 - Repealing previous amendments thereby allowing the proposed language to parallel the new ASCE 7-16 language; the intent of previous amendments is generally maintained through new proposed language. The new proposed language permit exemptions from bracing requirements consistent with ASCE 7 for distribution duct systems with I_p =1.0. Additional limitations have been added to limit the maximum rod length and load that can be hung per rod. Absent these exemptions, the number of braces required could become excessive and there is no room to accommodate all the braces especially in a corridor of a hospital building.

Section 1617A.1.26 - Repealing previous amendments thereby allowing the proposed language to parallel the new ASCE 7-16 language; the intent of previous amendments is generally maintained through new proposed language. The new proposed language permit exemptions from bracing requirements consistent with ASCE 7-16 for distribution systems for piping and tubing systems with I_p =1.0. Additional limitations have been added to limit the maximum rod length and load that can be hung per rod. Absent these exemptions, the number of braces required could become excessive and there is no room to accommodate all the braces especially in a corridor of a hospital building.
The provisions for the exception to bracing of piping systems require pipes to be connected to components with flexible connections. These provisions clarify the intent of the exception when flexible connections are not required, as it was causing non-uniform enforcement in the field as to when flexible connections are and are not required.
The requirement for flexible connections at seismic joints is required regardless if the pipe is braced to accommodate differential movement between buildings.

Section 1617A.1.27 - Updating reference pointer.

Section 1617A.1.28 - Updating reference pointer.

Section 1617A.1.29 - Repeal amendments for CBC 16167A.1.29. ASCE 7-16 revised the Linear Response History procedure and moved it to Section 12.9 .2. Per 12.9.2.5, for force-based quantities, design base shear must not be less than that determined by Equivalent Lateral Force (ELF). However for displacement-based

quantities, normalization to ELF is not required; need only multiply the computed response history quantities by the appropriate Cd/R in the direction of interest.

Section 1617A.1.30 - Repeal amendments for 2016 CBC 1616A.1.30. Chapter 16 of ASCE 7 is re-written to focus on Nonlinear Response History analysis and now includes corresponding acceptance criteria.

Section 1617A.1.31 - ASCE 7-10 Section 16.2.3 did not indicate how to combine the live load requirement, so previous amendment for 2016 CBC 1616A.1.31 was provided to clarify that it shall be per the standard load combinations. ASCE 7-16 now provides direction in Section 16.3.2; therefore, repeal previous amendment for CBC 16167A.1.31.

Section 1617A.1.32 - Repeal amendment language for 2016 CBC 1616A.1.32 because ASCE 7 Section 16.2 now contains provisions for ground motion selection and refers to Section 11.4.1 for definition of near-fault sites

Section 1617A.1.33 - Repeal amendments for 2016 CBC 1616A.1.33. Chapter 16 of ASCE 7 is re-written to focus on Nonlinear Response History analysis and now includes corresponding acceptance criteria.

Section 1617A.1.34 - Repeal amendments for 2016 CBC 1616A.1.34. Chapter 16 of ASCE 7 is re-written to focus on Nonlinear Response History analysis and now includes corresponding acceptance criteria.

Section 1617A.1.37 - Repealing previous amendment, because similar provisions are now included in ASCE 7 Section 17.6.4. No regulatory change.

Section 1617A.1.38 - Continued amendment language, edited to adjust for re-numbering due to adjustments made to ASCE 7. Also, for clarity, remove language regarding DE and retain reference to MCE_R.

Section 1617A.1.39 – Clarifying the requirement for Earthquake motion measuring instrumentation and post earthquake structural monitoring. This requirement is typically included in the design criteria for these buildings, language from the 2013 CBC was repealed in the 2016 CBC but is reintroduced for clarity and continuity of requiring instrumentation for seismically isolated buildings or buildings with damping devices. Each building has a unique characteristic and information gained from seismic instrumentation data is invaluable in reducing the seismic risk and increasing building resiliency.

Section 1617A.1.41 – Peer review requirements have been relocated from existing 2016 CBC Chapter 34A to this section. No new regulations are proposed.

Title 24, Part 2, Volume 2
Chapter 17 - Special Inspections and Tests

Section 1701.1.1 – Added applicability of this Chapter to include OSHPD 1R, 2 and 5 buildings regulated by OSHPD.

Section 1701.1.2 – Clarifies which amendments apply to which type of buildings regulated by OSHPD. This chapter specifically exempts any new testing, inspection and observation requirements for OSHPD 2, single story, Type V, skilled nursing or intensive care facilities of wood or light steel-frame construction that were previously not regulated by this chapter.

Section 1701.1.3 – Identifies which amendments apply to buildings regulated by OSHPD with the appropriate tag.

Sections 1703.4 – Existing amendments in Chapter 17A have been replicated in this section without change to now apply to OSHPD 1R, 2 and 5 buildings. New amendments introduced in this cycle are also included. Reason statements for the new amendments are found in the corresponding "A" Chapter section.

Sections 1704.2 –
Clarifies which requirements in which material chapters also apply to the testing inspection and observation of structural and non-structural systems and components. This requirement is similar to the requirement in Section 1701A.3.

Existing OSHPD amendment in Section 1704A.2 has also been repeated here for consistency with the existing amendment for these buildings. No net change in regulatory effect.

Specifically exempting the approved agency to be hired by the contractor. Hospital and Skilled nursing facility owners cannot also be contractors for their projects. Independent agency/contractor is required. No net change in regulatory effect.

Sections 1704.2.3, 1704.2.4, 1704.2.5.1, 1705.2.1, 1705.2.3.1, 1705.2.4.1, 1705.2.5, 1705.2.6, 1705.3, 1705.3.3, 1705.3.3.1, 1705.3.4, 1705.3.5, 1705.3.6, 1705.3.7 1705.3.8, 1705.4, 1705.4.1, 1705.5.3, 1705.5.4, 1705.5.5, 1705.5.6, 1705.6.1, 1705.7.1, 1705.13.1.1, 1705.13.1.2, 1705.13.2, 1705.19, 1705.19.1 – Existing amendments in Chapter 17A have been replicated in these sections without change to now apply to OSHPD 1R, 2 and 5 buildings. New amendments introduced in this cycle are also included. Reason statements for the new amendments are found in the corresponding "A" Chapter section.

Sections 1704.3.2 - Requirements for special seismic certification requirements are limited to life safety components and equipment and components supporting patients on life support.

Table 1705.3 – Added footnote to require adhesive anchors installed in upward inclined or horizontal positions to be performed by an ACI/CRSI certified adhesive anchor installer. This requirement is the same as required in the existing amendment in Chapter 17A. No change in regulatory effect.

Section 1705.13.3.1 – Clarifies original intent. This requirement is an exception and only applies to OSHPD 2 buildings supporting sub-acute beds.

Section 1705.17 - This amendment is added to align with the new table for risk categories for OSHPD 1R, OSHPD 2 and 5 buildings that previously were in risk category III or IV, could now be in a lower risk category. No change in regulatory effect.

Title 24, Part 2, Volume 2
Chapter 17A - Special Inspections and Tests

Section 1701A.1.1 – Repeal exception for OSHPD 2 as provisions for these buildings are now addressed in Chapter 17.

Section 1701A.3 – Deleted reference to Chapter 34A and this chapter is relocated to appropriate sections in the CEBC.

Section 1702A.1: In the 2016 CBC, 1702A was for definitions; the 2018 IBC replaced this section with "New Materials." Therefore, previous amendment definitions are being either removed or relocated as shown below.

Relocated definitions to Section 202: PROJECT INSPECTOR, Quality Assurance (QA), Quality Control (QC),
Removing definition: Continuous special inspection - Deleting language for "continuous special inspection" since Section 202 definition is sufficient.
Relocating to Section 202 and amending definition: Periodic special inspection. - (see Chapter 2 Express Terms and Statement of Reasons).

Section 1703A.4: Repealed reference to certification by ISO 17025 for approved agency. OSHPD has created an OSHPD PreApproved Agency program where accreditations for testing laboratories/agencies are verified. This requirement is no longer required.

Section 1704A.2 – Repealed OSHPD 1 & 4 language for inspection agency to be accredited to ISO 17020 as deemed to comply. Building Official's approval is required, therefore this section is not necessary.
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Section 1704A.2.5 - Striking language for approved fabricator and aligns with DSA requirements. Past projects have indicated the need for Special inspections at the fabricator shop is required for adequate oversite of the fabrication process, and is required by H&SC § 129830 which mandates continuous inspection and reasonable diligence required for work conducted away from the site.

Section 1704A.2.5.1 – Since OSHPD is discontinuing approved fabricators, this section is deleted.

Section 1704A.5, Item #1 – Minor editorial deletion in line with previous deletions.

Section 1704A.6 - Removing new model code reference for structural observation requirement for risk category IV buildings (section 1704.6.1). This is already mandated by the CAC and is being provided by the Testing, Observation and Inspection program. Deletion of Sections 1704.6.2, and 1704.6.3 are continued deletions.

Section 1705A.2.1 –
Fabricator approval is not permitted by OSHPD. Exceptions to the quality assurance procedures specified in AISC 360 cannot be conducted in the absence of an OSHPD approved special inspector.

Providing reference pointers in the tables and recognizing tests and special inspections already required in other sections; no new testing or special inspections being added nor proposed.
Adding items 1c, 3d, 4c, 5a7, 5a8, and 5b5 to explicitly recognize their special inspection requirements. Special inspection has been required previously and is currently for these items. No net regulatory change occurs with proposed additions.

Section 1705A.2.2 – Added testing to cold form steel deck requirements as some of the inspection work could also be considered to be a test and acknowledging that testing is part of the referenced table and section.

Section 1705A.2.4.1 - Clarifying language as to the intent of the existing amendment. Special inspection is required for all light-framed steel trusses regardless of span length. 2211.1.3.3 has a new reference to AISI 240 Chapter D for QC requirements of trusses fabricated without QC. The proposed language is merely pointing to that section.

Section 1705A.2.5 - Providing reference to existing code sections

Relocated language for inspector verification of end-welded stud shear connectors to the proposed new Section 1705A.2.6. Adding reference to recognized reference standard for welding of steel reinforcing, AWS D1.4.

Repealed exception for exempting quality control and quality assurance inspections at the premises of the fabricator, as the section for approved fabricator is deleted. OSHPD no longer has pre-approved fabricators exempt for special inspection at the fabricator shop.

Section 1705A.2.6 - No new special inspections or tests are being proposed. Proposed language provides a reference pointer to the requirements.

Section 1705A.3.1 - Proposed language also provides a reference pointer to the requirements for fabricated items that requires special inspection as applicable.

Section 1705A.3.2 - Providing reference pointers and acknowledging amendments applicable in those referenced sections. No net change in requirements occurs with the proposed language.

Section 1705A.3.4 - Proposed language provides a reference pointer to the requirements. Exception language provides clarification of reasonable actual field practice of special inspection requirements for prestress or posttensioned cables or tendons.

Section 1705A.3.7 - No new special inspections or tests are being proposed. Proposed language provides a reference pointer to the requirements.

Section 1705A.3.8 - No new special inspections or tests are proposed. Proposed language provides a reference pointer to the requirements.

TABLE 1705A.3 - Providing reference pointers and recognizing tests and special inspections already required in other sections; no new testing or special inspections being added nor proposed.

Section 1705A.4 - Updating reference standard nomenclature to the 2016 edition of the TMS. Due to revisions in the reference standard, the previous language is being repealed and modified accordingly. However, these proposed modifications result in no net changes to requirements. Reference pointers to other existing special inspection and testing requirements for masonry are proposed, but do not result in any new requirements.

Section 1705A.4.1 - Updating reference standard nomenclature to the 2016 edition of the TMS. Due to revisions in the reference standard, the previous language is being repealed and modified accordingly. However, these proposed modifications result in no net changes to requirements.

Section 1705A.5.4 - Updating section reference in reference standard.

Section 1705A.6.2 - Section added to provide a pointer reference to the requirements. No new special inspections or tests result from the proposed language.

Section 1705A.6.3 - Section added to provide a pointer reference to the requirements. No new special inspections or tests result from the proposed language.

Section 1705A.7 - Proposed amendment provides a pointer reference to requirements applicable to driven deep foundations. No new special inspections or tests result from the proposed amendment.

Section 1705A.8 - Proposed amendment provides a pointer reference to requirements applicable to cast-in-place deep foundations. No new special inspections or tests result from the proposed amendment.

Sections 1705A.12.1.1 and 1705A.12.1.2 - Removing current 2018 IBC exception language for both sections since the CAC requires special inspections for all OSHPD 1 buildings. The proposed amendment will remove the exception for certain types of structures, which is consistent with past removal amendments.

Section 1705A.12.6 - Removed Seismic Design Category 'C' for consistency with other previous item removal amendments since Seismic Design Category 'D' is the minimum for all OSHPD buildings.

Sections 1705A.13.1.1 and 1705A.13.1.2 - Proposed deletions of "Exception" language are consistent with previous deletion amendments.

Sections 1705A.13.2 – Based on industry input, proposed language allows approved alternative testing protocols to in addition to FM 1950, which a non-mandatory standard and is consistent with requirements in NFPA 13.

Sections 1705A.13.3 – Based on industry requirements for shake table testing of computers and routers, etc. retesting of such components are not required per ICC-ES AC 156 criteria if equivalency of input shake table testing satisfies the minimum requirements in ICC-ES AC 156 up to the design ground motion equipment is special seismically qualified for.

Sections 1705A.13.3.1 – Revised and clarified requirements for special seismic certification. Equipment satisfying the new definition of Mobile equipment are exempt from the requirements of special seismic certification. Elevator machines and governors have also been exempted from special seismic certification because evidence of elevator damage from past earthquakes have shown that the modes of failure for the elevators are unrelated to these items or methods of shake table testing of these components will not capture these modes of failure. Minor changes/clarifications to the other exempt items have been added consistent with current implementation of the OSHPD OSP program and PIN 55. Exemption # 6 that was originally permitted for electrical sub-components are being expanded to all mechanical and electrical components up to 10 lbs. These very light sub-components when limited to 10% of the overall weight don't generate enough seismic force to alter the behavior.

Title 24, Part 2, Volume 2
Chapter 18 – Soils and Foundations

Section 1801.1.1 – Added applicability of this Chapter to include OSHPD 1R, 2 and 5 buildings regulated by OSHPD.

Section 1801.1.2 – Clarifies all amendments in this chapter are adopted by OSHPD.

Section 1801.1.3 – Identifies which amendments apply to buildings regulated by OSHPD with the appropriate tag.

Sections 1803.1, 1803.5.4, 1805.2, 1807.1.1, 1807.1.3, 1807.1.4, 1807.1.5, 1807.2, 1807.2.2, 1807.2.4, 1808.8, 1808.8.6, 1809.3, 1809.7, 1809.8, 1809.9, 1809.12, 1809.14, 1810.3.2.4, 1810.3.5.3.3, 1810.3.8.3.3, 1810.3.8.3.4, 1810.3.9.4.2.1, 1810.3.10.4.1, 1810.3.11, 1810.4.1.5, 1811, 1811.1, 1811.2, 1811.3, 1811.4, 1812, 1812.1, 1812.2, 1812.3, 1812.4, 1812.4.1, 1812.4.2, 1812.4.3, 1812.5, 1812.6, 1812.7, 1812.8, 1813, 1813.1, 1813.2, 1813.3, 1813.4, 1813.5 – Existing amendments or deletions in Chapter 18A have been replicated in these sections without change to now apply to OSHPD 1R, 2 and 5 buildings. New amendments introduced in this cycle are also included. Reason statements for the new amendments are found in the corresponding “A” Chapter section.

Section 1803.3.1 – Clarifies that amendments that previously applied to OSHPD 1, 2 and 4 categories also apply to the two new OSHPD categories, OSHPD 1R and OSHPD 5. Amendment specifically exempts single story type V construction for skilled nursing and intermediate care facilities of wood or light steel-frame construction. No change in regulatory effect.

Section 1803.6, 1803.7, 1808.2 – Identifies that amendment that previously applied to OSHPD 2 also apply to the two new OSHPD categories, OSHPD 1R and OSHPD 5. Amendment specifically exempts single story type V construction for skilled nursing and intermediate care facilities of wood or light steel-frame construction. No change in regulatory effect.

Sections 1807.1.6 – Prescriptive design of concrete and masonry walls are not permitted by OSHPD. Previously this chapter only applied to single story wood or light steel-frame construction. Since the chapter is expanded to include other OSHPD categories, this amendment is required. No change in regulatory effect.

Section 1808.8, Table 1808.8.1 – Existing amendments or deletions in Chapter 18A have been replicated in these sections without change to now apply to OSHPD 1R, 2 and 5 buildings. New amendments introduced in this cycle are also included. Reason statements for the new amendments are found in the corresponding “A” Chapter section.

Section 1810.3.1.5.1 – Identifies that amendment that previously applied to OSHPD 2 also apply to the two new OSHPD categories, OSHPD 1R and OSHPD 5.

Title 24, Part 2, Volume 2
Chapter 18A – Soils and Foundations

Section 1801A.1.1 – Deleted exception for OSHPD 2, as requirements for these buildings are now covered in Chapter 18 irrespective of number of stories or type of construction.

Section 1803A.6 – Editorial change for consistency with ASCE 7-16. Updated requirements to use the current Next Generation Attenuation (NGA) relations or NGA-West 2 for determination of the site specific ground motion. Permit alternate attenuation relations not used in the 2014 USGS maps as a substitution subject to the approval by the building official similar to exiting provisions in the code.

Section 1807A.2.2 - Last sentence of paragraph is new model code language in 2018 IBC. Add "A" to section reference 1803.2 in this new sentence; no change in regulatory effect.

Section 1810A.3.8.3.3 - In SDC D, E and F, the use of Ωo E loads for prestressed concrete piles in the Exception should not result in the use of minimum fixed prescriptive non-seismic transverse reinforcing specified for precast non-prestressed concrete piles in Section 1810.3.8.1. The maximum spiral transverse steel ratio 0.021 will limit the effect of the Ωo E axial load. The Exception is not consistent with ACI 318-14 Section 18.13.4.3 which requires the same pile transverse reinforcing ratio equations irrespective of the use of Ωo E or E loads. The Exception added to 1810.3.8.3.3 item 5 for SDC D, E and F for the use of pile fixed non-seismic prescriptive transverse reinforcement was not added to item 6 for prestressed concrete pile rectangular hoop transverse reinforcement and is inconsistent. Therefore, the Exception is removed.

Section 1810A.3.8.3.4 - Add exception permitting an increase in the prestressed concrete pile axial load limit under Ωo E forces. This is similar to/ consistent with ACI 318-14 Section 18.4.3.6.

Section 1810A.3.11 - Foundation design methodologies for a combined pile raft system have not been adequately established which would determine the relative load sharing between the piles and the raft foundation bearing. A pile raft foundation is designated as an alternate system under Section 104.11 for that reason.

Section 1811A.3 - Updated amendment to coordinate with latest issue of PTI DC35.1 Recommendations for Prestressed Rock and Soil Anchors, similar to provisions of 1812A.4.1 #6.

Section 1812A.2 - Updated amendment to coordinate with latest issue of PTI DC35.1 Recommendations for Prestressed Rock and Soil Anchors Similar to provisions of 1812A.4.1 #6

Section 1812A.4 - Delete reference to year of publication; no regulatory change.

Section 1812A.4.1 - Update amendment language to include title of publication and delete reference to year of publication; no regulatory change.
New amendment language coordinates with change from 1 to 2 years in 1812A.2 Duration above. Also, is similar to provision s in 1811A.3 #7.

Section 1812A.4.3 - Update amendment language to include title of publication and delete reference to year of publication; no regulatory change.

Section 1812A.5 - Update amendment language to include title of publication and delete reference to year of publication; no regulatory change.

Title 24, Part 2, Volume 2
Chapter 19A - Concrete

Section 1901.1.1 – Added applicability of this Chapter to include OSHPD 1R, 2 and 5 buildings regulated by OSHPD.

Section 1901.1.2, 1901.1.4 – Clarifies all amendments in this chapter are adopted by OSHPD. Identifies which amendments apply to buildings regulated by OSHPD with the appropriate tag.

Section 1901.3.1, 1901.3.2, 1901.3.3, 1901.3.4, – Identifies that amendment that previously applied to OSHPD 2 also apply to the two new OSHPD categories, OSHPD 1R and OSHPD 5.

Section 1901.3.4.2, – Clarified proper ASTM standard to be used in the field when tension tests of post installed anchors are required. Similar amendment is also included in the “A” Chapter section.

Editorial change, reference to “test report” is replaced by “evaluation report” for consistency of terminology with common usage.

Section 1901.3.4.3 – Editorial. Design tension could be strength design or allowable stress. “Factored” is not required.

Section 1903.2, – Added pointer to additional testing requirements for anchorage to concrete. No change in regulatory effect.

Sections 1903.4, 1903.5, 1903.6, 1903.7, 1903.8, 1906, 1908.5, 1908.7, 1908.9, 1908.10.2, 1908.11, 1908.12 , 1911, 1911.1, 1911.2, 1911.3 – Existing amendments in Chapter 19A have been replicated to these sections without change to now apply to OSHPD 1R, 2 and 5 buildings. New amendments introduced in this cycle are also included. Reason statements for the new amendments are found in the corresponding "A" Chapter section.

Section 1908.1 – Identifies the reference standard adopted for shotcrete construction and clarifies surface preparation requirements prior to shotcrete application. Specifies a minimum concrete strength of 3000 psi required for applications using shotcrete. This is different from the minimum shotcrete strength of 4000 psi required for hospital construction as required by ACI 506R for structural concrete.

Section 1908.3 – Requires structural walls with high reinforcing to conform to coarse aggregate requirements. The use of larger size aggregate will enhance the aggregate interlock in the shotcrete and the shear capacity of the wall under cyclic seismic loads.

Section 1910 – Additional requirements for various section in Chapter 19A not covered by chapter 19 are included in this section. No new amendments are proposed.

Section 1910.2 – Clarifies Identifies the reference standard adopted for shotcrete construction and clarifies surface preparation requirements prior to shotcrete application. Specifies a minimum concrete strength of 3000 psi required for applications using shotcrete. This is different from the minimum shotcrete strength of 4000 psi required for hospital construction as required by ACI 506R for structural concrete.

The following sections are replicated from existing sections in Chapter 19A with no change in regulatory effect.
Section 1910.1.1 – same as Section 1901A.5 item 12.
Section 1910.2.1 – same as Section 1903A.7
Section 1910.2.2 – same as Section 1910A.1
Section 1910.2.3 – same as Section 1910A.2
Section 1910.2.4 – same as Section 1910A.3
Section 1910.3 – Adopts the modifications to ACI 318 similar to existing amendments in Chapter 19A. The following sections are replicated from existing sections in Chapter 19A with no change in regulatory effect.
Section 1910.3.1 – same as Section 1905A.1.7
Section 1910.3.2 – same as Section 1905A.1.11
Section 1910.3.3 – same as Section 1905A.1.12
Section 1910.3.4 – same as Section 1905A.1.9

Title 24, Part 2, Volume 2
Chapter 19A - Concrete

Section 1901*A*.1.1 – Deleted exception for OSHPD 2, as requirements for these buildings are now covered in Chapter 19 irrespective of number of stories or type of construction.

Section 1903*A*.2, 1903A.4, 1903A.5, 1903A.6, 1903A.7, 1905A.1, 1905A1.1, through 1905A.1.7, 1905A.1.10, 1905A.1.11, 1905A.1.12 – Continued amendments or deletions.

Section 1903*A*.8 – Providing clarifying language for allowance of and requirements associated with fusion welding of holding wire often used in reinforcing steel cages. Proposal provides quality control requirements associated with reinforcing having fusion welded holding wires.

Section 1905*A*.1 - This proposal revises the 2016 CBC section reference since section 1905A.1.13 is being repealed in the 2019 CBC and subsequent section numbers are adjusted.

Section 1905A.1.8 - This Chapter 19, Section reference is updated in the 2018 IBC and references revised NDS and AISI sections.

Section 17.2.3.5.2 Exception 1.1 - Proposal revises the 2013 NDS Table reference to align with the 2018 NDS.

Section 17.2.3.5.2 Exception 2 - Proposal revises the 2013 AISI S100 reference to align with the 2018 AISI S100.

Section 1905A.1.13 ACI 318, Table 21.2.2 - Section 1905A.1.13 is being repealed since this language no longer occurs in ACI 318-14 Section 18.13. Replacement language in ACI 318 states that the foundation provisions supplement the Building Code foundation provisions. Since Chapter 18A requirements is more specific than the ACI reference standard, this amendment is not needed.

Section 1905*A*.1.14 - Section reference revised due to repeal of 2016 CBC section 1905A.1.13.

Section 1905*A*.1.15 - Section reference revised due to repeal of 2016 CBC section 1905A.1.13.

Section 1908*A*.1 – Minimum shotcrete compressive strength for OSHPD 1 & 4 buildings is increased to 4000 psi for consistency with DSA and current practice. Specific provision of ACI adopted is being referenced. Minor editorial changes to give more flexibility for surface preparation.

Section 1908*A*.3 - Providing clarifying general language since nearly all structural shotcrete walls are also shear walls. Updating reference pointer due to updated ACI 506R-16 from ACI 506R-05.

Section 1908*A*.9 - Editorial change for alignment with DSA-SS. Striking previous 2016 Intervening Code Cycle amendment language since proposed amendments address previous intent.

Section 1908*A*.12 – Proposal provides clarification of applicable reference standards. ACI 506.2-13 was previously added during the 2016 Intervening Codey Cycle; ACI 506R-16 is the current industry standard as a guide and commentary for shotcrete.

Section 1910*A*.5.2 - Editorial referencing appropriate ASTM standard for field tension testing for verification of proper installation of post installed anchors in concrete.

Section 1910*A*.5.3 - Editorial changes to clarify intent of requirements and allowances.

TITLE 24, PART 2, VOLUME 2
CHAPTER 20 - ALUMINUM

Section 2003 - Clarification that testing requirements also apply as they do for steel.

Section 2001.1.1, 2001.1.2 – Added identification and applicability of all categories of buildings regulated by OSHPD.

Section 2003.1 –
Clarification that the welding reference applicable to aluminum is AWS D1.2 rather than AWS D1.1.
Added inspection requirements for OSHPD 1R, 2 and 5 buildings which were previously considered as OSHPD 1 buildings subject to the same inspection requirements. No net change in regulatory effect.

TITLE 24, PART 2, VOLUME 2
CHAPTER 21 - MASONRY

Section 2101.1.1, 2101.1.2 – Added applicability of this Chapter to include OSHPD 1R, 2 and 5 buildings regulated by OSHPD.

Sections 2101.2, 2101.2.2, 2103.1, 2103.4, 2103.5, 2104.1, 2104.2, 2104.2.1, 2104.3, 2105.2, 2105.3, 2105.4, 2105.5, 2105.6, 2106.1.1, 2107.1, 2107.4, 2107.5, 2107.6, 2109, 2110.1, – Existing amendments in Chapter 21A have been replicated in these sections without change to now apply to OSHPD 1R, 2 and 5 buildings. New amendments introduced in this cycle are also included. Reason statements for the new amendments are found in the corresponding "A" Chapter section. No net change in regulatory effect.

Title 24, Part 2, Volume 2
Chapter 21A - Masonry

Section 2101*A*.1.1 – Deleted exception for OSHPD 2, as requirements for these buildings are now covered in Chapter 21 irrespective of number of stories or type of construction.

Section 2101A.1.3 - Existing prohibition of prescriptive design (which was initially borrowed from empirical provisions of the code) of masonry partition walls contained in TMS 402-13 Sections 14.2.3.3 and 14.2.3.6 is retained. TMS 402-13 prohibition applied to 5 psf & 10 psf lateral loads, TMS 402-16 increased the lateral loads to 50 psf and removed the prohibition without any basis in test or experience data. In high Seismic Design Category Risk Category IV buildings, failure of partition walls will not permit buildings to remain functional (which is required by statute for hospital buildings in California) and will hamper evacuation after a major earthquake endangering life safety.

Section 2102A.1 - Striking previous amendment since the model code now locates all definitions in Chapter 2; thus, terms are no longer listed in Section 2102A.

Definition – Wall - Amendment relocated to Section 202.

Section 2103A.3.1 - Updating TMS reference for TMS 602-16.

Section 2103A.4 - Proposed language provides consistency with current sampling and testing provisions for unidentified reinforcing similar to the requirements for unidentified reinforcing bars in concrete.

Section 2104A.1 –
Minor editorial change by adding 'A' to the section number reference.
Architectural cast stone masonry consists of irregular shaped units that are unlike CMU and has no explicit seismic design provisions or seismic detailing requirements.

Section 2104A.1.3.1.1 - This section has often been confused with hollow unit masonry. Section title is, therefore, proposed to be changed to as shown.

Section 2104A.1.3.1.1.1.1, Item 2 - Providing clarifying language for code intent.

Section - 2104A.1.3.1.1.1.2 –
Item 2 - Editorial change to provide alternate nomenclature for wire size.
Item 4 - Providing clarifying language for code intent.

Section 2104A.1.3.1.2.1 –
General – Added requirement that open-end unit are required for constructability and better bond between the grout and the adjacent masonry unit.
Providing pointer references for struck language to remove unnecessary redundancies and simply usage of requirements. No net change in regulatory effect through providing pointer references in lieu of struck language.
Item 2 - Updating reference for TMS 602-16.

Section 2104A.1.3.1.2.2 - Allowing an increase in wall height for the low-lift grout method when the base of the grout pour can be easily cleaned due to the increased access provided by larger celled units.

Section 2105A.1 - Providing pointer references to clarify applicable testing requirements.

Section 2105A.2 - Removing pointer reference to core testing, which is not associated with compressive strength. Adding pointer reference to recognize the allowance for either unit strength or prism test methods for use of f'_m=2000 psi maximum in design.
Exception - Providing a pointer reference for the proposed prism test section being added. No net regulator change. Referenced section in proposed deletion is not applicable to compressive strength testing or verification. Coring requirements still apply per 2105A.4 regardless of this reference being removed.

Section 2105A.3 - Providing clarifying language and pointer to the reference standard containing requirements for mortar type based on Seismic Design Category D for alignment with DSA. Providing a pointer reference for the proposed prism test section being added. No net regulator change.
Exception – Providing editorial and clarifying language for regulatory intent.

Section 2105A.4 - Exception – Providing editorial and clarifying language for regulatory intent.

Section 2105A.5 - Proposed new section provides guidance on when the applicable prism test method applies. No net regulatory change from previous CBC requirements.

Section 2105A.6 - Proposed new section provides guidance on when the unit strength method is permitted. No net regulatory change from previous CBC requirements.

Section 2106A.1.1 – Updating TMS reference for TMS 402-16.
Item 1, Exception - Horizontal reinforcing spacing requirements relaxed for non-bearing non-shear walls, whether interior or exterior.

Section 2107A.1 – Deleting model code pointer reference since the numbering was changed from the last model code version. No net change from previous CBC version.

Section 2107A.2.1 – Repealing previous amendment since the 2018 IBC model code has the same intent language in the next paragraph.

Section 2107A.4 – Providing consistency with strength design requirements and previous model code intent. Reinforced masonry with bar size greater than #9 would have constructability issues and has performance in seismic applications is unclear.

Section 2107A.5 – Editorial modifications to update references to TMS 402-16.

Section 2107A.6 – Editorial modifications to update references to TMS 402-16. Limit maximum flexure reinforcing ratio of special reinforced masonry walls to limit brittle modes of failure regardless if wall is flexure or shear controlled.

Title 24, Part 2, Volume 2
Chapter 22 – Steel

Section 2201.1.1 – Added applicability of this Chapter to include OSHPD 1R, 2 and 5 buildings regulated by OSHPD.

Section 2201.1.2 – Added identification of amendments in this Chapter to include OSHPD 1R, 2 and 5 buildings regulated by OSHPD.

Section 2201.1.4 – Added identification that a new section has been added that also need to be complied with for OSHPD 1R, 2 and 5 buildings. This section is similar to the amendments in the Steel “A” Chapter.

Section 2204.1.1 – A minimum higher pre-heat temperature is added above the typically lower default Table 3.3 temperatures in AWS D1.1-15 for welding connections with restraint. A post weld heat treatment for the purposes of minimalizing hydrogen induced cracking (not necessarily stress relieving) is added for highly restrained welded connections. This minimum higher pre-heat temperature and post weld heat treatment has been shown in recent projects to mitigate steel fractures due to connection restraint when welding during construction.

Section 2204.4, 2205.1, 2205.2.1.2, 2205.3, 2205.3.1, 2205.3.2, 2205.4, 2205.4.1, 2205.4.2, 2206.2.1, 2207.4, 2207.6, 2208.1, 2210.1, 2210.1.1.2, 2210.2, 2211.1.1.2, 2211.1.3, 2211.2, 2213, 2213.1, 2213.2 - Existing amendments in Chapter 22A have been replicated in these sections without change to now apply to OSHPD 1R, 2 and 5 buildings. New amendments introduced in this cycle are also included. Reason statements for the new amendments are found in the corresponding "A" Chapter section. No net change in regulatory effect.

Title 24, Part 2, Volume 2
Chapter 22A – Steel

Section 2201*A*.1.1 – Deleted reference to skilled nursing and intermediate care facilities and exception for OSHPD 2, single story construction, as requirements for these buildings are now covered in Chapter 22 irrespective of number of stories or type of construction.

Section 2204A.1.1 – A minimum higher pre-heat temperature is added above the typically lower default Table 3.3 temperatures in AWS D1.1-15 for welding connections with restraint. A post weld heat treatment for the purposes of minimalizing hydrogen induced cracking (not necessarily stress relieving) is added for highly restrained welded connections. This minimum higher pre-heat temperature and post weld heat treatment has been shown in projects to mitigate steel fractures due to connection restraint when welding during construction.

Section 2204A.4 - clarification of code intent for embedment of shear lugs. Clarifies that anchor bolts at base plate connections subject to high shear force, should be checked for combined tension, bending and shear when shear load is not transferred to the foundation by other means such as shear lugs.

Section 2205A.4.2 Section A4 – Added requirements for permanently making locations of protected zones in steel lateral force resisting elements. Invariably welding or shot pins are being added to these areas inadvertently in the field. Additionally a pointer has been added to conform with fire life safety requirements for application of marking using primers and paints to structural steel members.

Section 2205A.4.3 Section I2 – Permitting exception for shot pins to be added when necessary to beam flanges in a protected zones, based on acceptable performance of recent full scale beam column joints tested with shot pins in the protected zones. Limitations have be added on the maximum shot pin penetration depth as a percentage of the member thickness also based on observations of the tested specimens.

Section 2205A.4.4 – 2205A.4.10 – Sections have been renumbered to accommodate new section added for marking in protected zones.

Section 2205A.5.2 – Item #8 is added to the requirements for testing and inspection of prequalified SidePlate moment connections currently not required in AISC 358 Chapter 11. Adequate testing and inspection performed at the time of fabrication can prevent costly field repairs.

Section 2208A.1 – Design of steel cables with glass or polymer fabric material acting as a tensile membrane structure is a non-standard material type, and requires additional review time for determining applicability, and approval of the design could be significant relative to construction cost. These systems are therefore considered as an alternative system requiring research reports and tests.

Section 2210A.1 – Added pointer for strength determination of power actuated fasteners for connections in concrete.

Section 2210A.2 – Reference standard for design of cold form steel structural systems AISI S400 has been added in the 2018 IBC, and is therefore included here.

Section 2211A.1.1.1 - Minimum SDC permitted for all occupancies is SDC D. This section is not required.

Section 2211A.1.1.2 - Relocation only: no regulatory change to amendment language.
Relocation of amendment language and update of references in response to changes in material standards. Cold-formed steel seismic force resisting systems are now contained in AISI S400. Sections E5 (Cold-formed steel light frame shear walls with wood-based structural panel sheathing on one side and gypsum board sheathing on the other side), E6 (Cold-formed steel light frame shear walls with gypsum board or fiber board sheathing) and E7 (Conventional construction cold-formed steel light frame strap braced wall systems) are not permitted in accordance with Section 1617A.1.4. No change in regulatory effect.

Section 2211A.1.2 - Relocation only: no regulatory change to amendment language

Section 2211A.1.3 - Relocation only: no regulatory change to amendment language

Section 2211A.1.3.1 - Relocation only: no regulatory change to amendment language, which adds A to reference 1705A.2

Section 2211A.1.3.2 - Relocation only: no regulatory change to amendment language

Section 2211A.1.3.3 - Relocation only: no regulatory change to amendment language which adds A to reference 1704A.2.5 and 1705A.2

Section 2211A.2 - Composite assembly design uses gypsum board sheathing as structural composite with the steel studs and requires load testing to assess strength.

Numerous penetrations in the sheathing do not lend itself to this system. Non-structural members in light frame construction in AISI S220 have loading limits which will limit their use as interior partition AISI S240 and S100 are added to clarify where design of higher partition wall loading is required.

Section 2213A.1 – Increased sample testing of high strength bolts per lot from 3 to 9 but kept the limit of 3 per 400 bolts. This is because the number of bolts per lot could range in the thousands, and 3 bolts is not adequate as a representative sample.

Title 24, Part 2, Volume 2
Chapter 23 - Wood

Section 2301.1.1, 2301.1.2 – Added applicability of this Chapter to include the two new OSHPD categories, OSHPD 1R and OSHPD 5.

Section 2301.1.4, 2303.1.3.1, 2303.1.4.1, 2303.4.1.4.1, 2303.4.3.1, 2304.3.4, 2304.4.1, 2304.10.1.1, 2304.12.1.2, 2304.12.1.4.1, 2308.2.7, 2309.1.1 – Clarifies that amendments that previously applied to OSHPD 1, 2 and 4 categories also apply to the two new OSHPD categories, OSHPD 1R and OSHPD 5. No change in regulatory effect.

Section 2304.12.1.4.1 – Section is clarified so that curb is 6” above the floor and pavement, which was the original intent.

Title 24, Part 2, Volume 2
Chapter 24 – Glass and Glazing

Section 2401.1.1, 2401.1.2 – Added identification and applicability of all categories of buildings regulated by OSHPD.

Section 2403.2.1 – Clarifies that amendments that previously applied to OSHPD 1, 2 and 4 categories also apply to the two new OSHPD categories, OSHPD 1R and OSHPD 5. Amendment specifically exempts single story type V construction for skilled nursing and intermediate care facilities of wood or light steel-frame construction. No change in regulatory effect.

Sections 2410, 2410.1 – Clarifies that amendments that previously applied to OSHPD 1, 2 and 4 categories also apply to the two new OSHPD categories, OSHPD 1R and OSHPD 5. Amendment specifically exempts single story type V construction for skilled nursing and intermediate care facilities of wood or light steel-frame construction.

Sections 2410.1.1, 2410.1.2, 2410.1.4 - Editorial change to use the acronym for Structural Sealant Glazing (SSG), instead of the full phrase.
No change in regulatory effect.

Sections 2411, 2411.1, 2411.1.1, 2411.1.2 – New section is added for use of thermal barriers composite in aluminum mullion systems, currently considered as an alternative system. The section clarifies the specific sections in the national standard AAMA TIR-A8 that apply to design, testing and inspection of such systems. Amendment specifically exempts single story type V construction for skilled nursing and intermediate care facilities of wood or light steel-frame

Title 24, Part 2, Volume 2
Chapter 25 – Gypsum Board, Gypsum Panel Products and Plaster

Sections 2501.1.1, 2501.1.2, 2501.1.13, 2503.2, 2504.2, 2504.2.1, 2505.3, 2507.3, 2508.6.6, 2514.1 – Clarifies that amendments that previously applied to OSHPD 1 and 4 categories also apply to the two new OSHPD categories, OSHPD 1R, 2 and OSHPD 5. Amendment specifically exempts single story type V construction for skilled nursing and intermediate care facilities of wood or light steel-frame construction. No change in regulatory effect.

Title 24, Part 2, Volume 2
Chapter 26 –Plastic

Section 2601.1.1, 2601.1.2 – Added identification and applicability of all categories of buildings regulated by OSHPD.

Section 2603.11.1, 2603.12.3 – Amendment made to coordinate with existing DSA amendment requiring design of cladding and foam sheathing supports and attachments to be submitted to the enforcing agency. Designs for anchorage and supports of attachments for cladding over foam sheathing are already required to be submitted to the Office. This language further clarifies that. No change in regulatory effect.

Section 2603.13.3 – New section is added to the 2018 IBC for cladding attachment over foam sheathing to wood framing. Amendment made to coordinate with DSA amendment requiring design of cladding and foam sheathing supports and attachments to be submitted to the enforcing agency. Designs for anchorage and supports of attachments for cladding over foam sheathing are already required to be submitted to the Office. This language further clarifies that. No change in regulatory effect.

Title 24, Part 2, Volume 2
Chapter 34A - Existing Structures

This contents of this chapter are relocated to appropriate sections of Title 24, Part 10, (CEBC), Chapters 2, 3A, 4A and 5A and this chapter is deleted from the CBC. See Initial Statement of Reasons in Title 24, Part 10 for revisions and changes to this chapter.

Title 24, Part 2, Volume 2
Chapter 35 - Referenced Standards

References in this chapter are updated for consistency with amendments in all other chapters.

TECHNICAL, THEORETICAL, AND EMPIRICAL STUDY, REPORT, OR SIMILAR DOCUMENTS

2018 IBC: International Building Code.
2018 IEBC: International Existing Building Code.
ASCE 7-16: Minimum Design Loads for Buildings and Other structures with Supplements Nos. 1 & 2.
ASCE 24-14: Flood Resistant Design and Construction.
ASCE 41-13: Seismic Evaluation and Retrofit of Existing Buildings. This is consistent with the reference standard in ASCE 7-16 and has not been updated to the latest version of ASCE 41 for consistency with the new seismic performance category SPC-4D, where non-conforming buildings upgraded to this standard are permitted to provide General Acute Care service to 2030 and beyond. Updates in the ASCE 41-17 will cause inconsistency in performance of these buildings. The full impact of the updates in ASCE 41-17 has not yet evaluated for buildings being evaluated/upgraded to SPC-4D. Once the impact of the changes are quantified, future versions of the code will be adopt the most current version of ASCE 41 with necessary amendments.
ACI 318-14: Building Code Requirements for Structural Concrete and Commentary.
AISC 360-16: Specification for Structural Steel Buildings
AISC 341-16: Seismic Provisions for Structural Steel Buildings.
AISC 358-16: Prequalified Connections for Special and Intermediate Steel Moment Frames for Seismic Applications.
TMS 402-16: Building Code Requirements for Masonry Structures.
TMS 602-16: Specification for Masonry Structures.
AWC NDS-18: National Design Specification (NDS) for Wood Construction.
AWC SDPWS-2015: Special Design Provisions for Wind and Seismic.

STATEMENT OF JUSTIFICATION FOR PRESCRIPTIVE STANDARDS

Health and Safety Code (H&SC) Section 18941 requires consistency with state and nationally recognized standards for building construction in view of the use and occupancy of each structure to preserve and protect the public health and safety.

CONSIDERATION OF REASONALBLE ALTERNATIVES

The alternative to these proposed regulations would be to leave regulations as they are which will be inconsistent with H&SC 18941 requirements.

REASONABLE ALTERNATIVES THE AGENCY HAS IDENTIFIED THAT WOULD LESSEN ANY ADVERSE IMPACT ON SMALL BUSINESS.

There will be no adverse impact on small business.

FACTS, EVIDENCE, DOCUMENTS, TESTIMONY, OR OTHER EVIDENCE OF NO SIGNIFICANT ADVERSE IMPACT ON BUSINESS.

The regulations proposed have no net overall cost impact on business, since they are equivalent to current requirements in the Code. Adoption of the new OSHPD categories OSHPD 1R, 2, and 5 with modified definitions for structural requirements should lower the cost of construction for these buildings. New definitions for Fixed, Movable and Mobile equipment and components are also less restrictive than current requirements and will improve the functionality and efficiency of operations for the hospitals. Requirement for special seismic certification for elevator motors and governors is no longer required. Alternate loading protocols and testing procedures other than FM 1950 are being permitted as satisfying the requirements for design and testing of distribution system component bracing. This option could be adopted as is a potential cost savings.

Technical update to the national standards for structural design are incorporated, mostly by reference.

ASSESSMENT OF EFFECT OF REGULATIONS UPON JOBS AND BUSINESS EXPANSION, ELIMINATION OR CREATION

The Office of Statewide Health Planning and Development (OSHPD or Office) has assessed whether or not and to what extent this proposal will affect the following:

- **The creation or elimination of jobs within the State of California.**

  There will be no adverse impact, but potential for new construction of skilled nursing and acute psychiatric facilities to be constructed could increase as they do no not have to meet hospital building requirements for multistory construction.

- **The creation of new businesses or the elimination of existing businesses within the State of California.**

  There will be no adverse impact.

- **The expansion of businesses currently doing business with the State of California.**

  There will be no significant positive ~~or~~ adverse impact.

- **The benefits of the regulation to the health and welfare of California residents, worker safety, and the state's environment.**

  There will be no significant positive or adverse impact.

ESTIMATED COST OF COMPLIANCE, ESTIMATED POTENTIAL BENEFITS, AND RELATED ASSUMPTIONS USED FOR BUILDING STANDARDS

The regulations proposed will have a potential benefit for both skilled nursing facilities and hospitals as they are aligned with model codes and functional operational needs. Other changes are mostly technical update to incorporate model code changes to comply with statute nine point criteria. Technical updates to the national standards for structural design are incorporated, mostly by reference.

DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS

These regulations do not duplicate or conflict with federal regulations.