

**FINAL STATEMENT OF REASONS  
FOR  
PROPOSED BUILDING STANDARDS  
OF THE  
DIVISION OF THE STATE ARCHITECT–STRUCTURAL SAFETY (DSA-SS AND DSA-SS/CC)  
  
REGARDING THE 2016 CALIFORNIA BUILDING CODE,  
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2  
AND  
THE 2016 CALIFORNIA EXISTING BUILDING CODE,  
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 10  
(DSA-SS and DSA-SS/CC EF 01/17)**

The Administrative Procedure Act requires that every agency shall maintain a file of each rulemaking that shall be deemed to be the record for that rulemaking proceeding. The rulemaking file shall include a final statement of reasons. The Final Statement of Reasons shall be available to the public upon request when rulemaking action is being undertaken. The following are the reasons for proposing this particular rulemaking action:

**UPDATES TO THE INITIAL STATEMENT OF REASONS:**

(Government Code Section 11346.9(a)(1) requires an update of the information contained in the initial statement of reasons. If update identifies any data or any technical, theoretical or empirical study, report, or similar document on which the state agency is relying that was not identified in the initial statement of reasons, the state agency shall comply with Government Code Section 11347.1)

No data or any technical, theoretical or empirical study, report, or similar document on which the Division of the State Architect (DSA) is relying, has been added to the rulemaking file that was not identified in the Initial Statement of Reasons.

The DSA rulemaking file number DSA-SS and DSA-SS/CC EF 01/17 emergency regulations, approved by the Commission on January 29, 2017 have been modified during the certifying rulemaking process. DSA began the certifying rulemaking to make the emergency regulations permanent per Government Code Sections 11346.2 through 11347.3 by posting the original emergency regulations text for the 45-day public comment period. Seven (7) comments were received during the 45-day public comment period including comments submitted by DSA staff suggesting amendments to better align with model code provisions. One comment was received during the subsequent 15-day public comment period.

**MANDATE ON LOCAL AGENCIES OR SCHOOL DISTRICTS**

(Pursuant to Government Code Section 11346.9(a)(2), if the determination as to whether the proposed action would impose a mandate, the agency shall state whether the mandate is reimbursable pursuant to Part 7 of Division 4. If the agency finds that the mandate is not reimbursable, it shall state the reasons for the finding(s)). (If the determination as to whether the proposed regulation would impose a local mandate, the agency shall state whether the mandate is reimbursable pursuant to Government Code Part 7 (commencing with Section 17500) of Division 4. If the agency finds that the mandate is not reimbursable, it shall state the reasons for the findings)

DSA has determined that the proposed regulatory action would not impose a mandate on local agencies or school districts.

**OBJECTIONS OR RECOMMENDATIONS MADE REGARDING THE PROPOSED REGULATION(S)**

(Government Code Section 11346.9(a)(3)) requires a summary of EACH objection or recommendation regarding the specific adoption, amendment, or repeal proposed, and explanation of how the proposed action was changed to accommodate each objection or recommendation, or the reasons for making no change. This requirement applies only to objections or recommendations specifically directed at the agency's proposed action or to the procedures followed by the agency in proposing or adopting the action, or reasons for making no change. Irrelevant or repetitive comments may be aggregated and summarized as a group.

The text with proposed changes was made available to the public for a 45-day public comment period from September 8, 2017 through October 23, 2017. There was a subsequent 15-day public comment period from November 2, 2017 through November 17, 2017.

**45-DAY PUBLIC COMMENT PERIOD - COMMENTS RECEIVED BY DSA**

**COMMENTS #1:** Robert K. Wangel  
Koppers Performance Chemicals, Inc.  
1016 Everee Inn Road; P.O. Drawer O, Griffin, GA 30224-0249  
Phone: (770) 233-4236  
Email: Wangel RK@koppers.com

**SUBJECT:** Several general and specific comments and recommendations were presented, as well as 11 exhibits in support of the submitted comments and recommendations.

**COMMENT --** The comments and recommendations were primarily focused on inclusion of preservative-treated members for assemblies used to construct weather-exposed balconies and elevated walking surfaces and are summarized below:

- The definitions of "preservative-treated wood" and "naturally durable wood" are in need of updating;
- Provisions for "field treatment of preservative-treated wood" after it is cut, bored, etc., are needed;
- Newer "non-arsenical preservative treated products" are being misused, which leads to premature failures;
- The proposed increase in live loads will do little to correct the issues with exterior elevated elements;
- Increasing ventilation, adding flashing, and increasing the live and dead loads will not be enough to solve the problems;
- Language should include not only direct rain, but also indirect rain;
- The commenter also suggests that the proposed language should be more detailed and specific, and includes language that he would like to see in the regulations.

**RESPONSE --** DSA recognizes the importance of considering the comments and recommendations posed, and appreciates the commenter's point of view and suggestions. The comments may have merit; however, DSA's intent for this emergency rulemaking was to eliminate delay in adopting measures already adopted by ICC in the 2018 International Building Code (IBC) and the 2018 International Existing Building Code (IEBC), which will be the model code for the 2019 California Building Code (CBC). The language proposed for the 45-day comment period with all modifications proposed for the 15-day comment period is coordinated with the California Building Standards Commission (BSC) and the Department of Housing and Community Development (HCD). The nature of these comments and recommendations, if developed further at this time, would result in substantive change to the currently-proposed language; substantive change would necessitate an additional 45-day comment period and likely stakeholder input. Due to time constraints of the certifying rulemaking process, DSA proposes to re-evaluate and potentially consider each of these comments and recommendations in a future rulemaking cycle. This will afford enough time to conduct pre-cycle workshop(s), focus group meetings and code advisory committee review.

No changes to the Final Express Terms were made as a result of this comment.

**COMMENTS #2:** Daniel Cooper  
Email: codeguy411@aol.com

**SUBJECT:** Commenter notes confusing wording in Part 2, Section 110.3.8.1.

**COMMENT --** Express Terms language reads "...impervious moisture barrier system shall **be not be** concealed...". Commentor asked for clarification of requirement.

**RESPONSE--** DSA agrees to correct this inadvertent typographical error ("be not be"). The language should read "not be". This typographical error was noticed by the BSC during the January 2017 hearing wherein the Commission voted to adopt the

emergency provisions. The typo was corrected in the adopted version of DSA EF-01/07 but inadvertently showed up again in the DSA EF-01/17 45-day Express Terms. This correction will provide consistency with the current emergency provisions already in place and approved by the BSC on January 27, 2017 as well as the 45-day Express Terms submitted by BSC and HCD. DSA corrected the language, as reflected in the DSA EF-01/17 15-day Express Terms submitted for public comment period which ended November 17, 2017. No additional comments on this item were received during the 15-day public comment period. Therefore, DSA has included this corrected language in the Final Express Terms.

**COMMENTS #3:** Amir Rudyan; AVM Industries Inc.  
8245 Remmet Ave., Canoga Park, CA 91304  
Phone: (818) 888-0050  
Email: amir@avmindustries.com

**SUBJECT:** The Commenter acknowledges that the proposed changes to the building standards regarding Exterior Elevated Elements (EEEs) are “a good start”; yet expresses concerns that the emergency provisions do not do enough to address the problem of failure of waterproofing membranes in exterior balcony and elevated walking surface assemblies.

**COMMENT 3.1 --** Comments are focused on the topic of waterproofing membranes. The Commenter asserts that membranes applied directly over plywood are ill-advised because of: 1) joint movement, 2) fasteners backing out, and 3) straps or other hardware possessing sharp corners/edges. All these factors were stated to contribute to membrane failure in wood-framed EEE systems. The recommendation is to not permit membranes to be installed directly over plywood substrates.

**RESPONSE--** DSA believes the emergency provisions proposed to be made permanent by this rulemaking will provide enhanced safeguards, until such time as any further amendments are proposed and adopted. Additionally, DSA believes that concerns about the suitability of substrate materials and systems are beyond the scope of this rulemaking, and are better suited to be taken up with manufacturers.

No changes to the Final Express Terms were made as a result of this comment.

**COMMENT 3.2 --** The Commenter raised several other issues that can affect either wood or concrete substrates but are of particular concern for wood-framed EEEs, including: 1) insufficient slope, 2) insufficient drainage or improper drain mats, 3) poor flashing, 4) inadequate membrane thickness, 5) improper waterproofing prep, and 6) improper protection.

**RESPONSE --** The DSA-proposed measures may mitigate the stated issues. Additional amendments may be needed; if so, this can be assessed and addressed in a future rulemaking. Due to time constraints of the certifying rulemaking process, DSA proposes to re-evaluate and potentially consider each of these comments in a future rulemaking cycle. This will afford enough time to conduct pre-cycle workshop(s), focus group meetings and code advisory committee review.

No changes to the Final Express Terms were made as a result of this comment.

**COMMENTS #4:** Ron Takiguchi  
California Building Officials (CALBO), State Code Committee  
1022 G Street, Sacramento, CA 95814  
Phone: (818) 238- 5238  
Email: rtakiguchi@burbankca.gov

**SUBJECT:** The Commenter believes there may be confusion as to the applicability of EEE due to the way the measures have been written, and notes that CALBO provided technical clarifications and/or suggestions essential to the EEE regulations during the May 25, 2017 California Building Standards Commission meeting.

**COMMENT 4.1 --** The Commenter notes that the provisions as currently written appear to apply to recessed design as well as cantilevered design. The broad scope of the current language implies that rated egress elements would be included in the group of elements subject to these provisions. The commenter proposes draft language as summarized below in order to try to clarify the proposed EEE regulations:

- Clarifying language addressing specifically the status of decks, platforms and other such elements, with regard to the terms used in the measures;
- A definition of “balcony” to be incorporated into Section 202 of Part 2 and Part 10;
- A definition of “exterior elevated walking surface”, meeting specific conditions.

**RESPONSE** -- DSA agrees that the stated issues should be considered. Due to time constraints of the certifying rulemaking process, DSA did not have sufficient time to analyze the recommendations, but proposes to evaluate and potentially consider these comments in a future rulemaking cycle. This will afford enough time to conduct pre-cycle workshop(s), focus group meetings and code advisory committee review.

No changes to the Final Express Terms were made as a result of this comment.

**COMMENT 4.2** -- The Commenter also recommends that the suggested definitions be italicized throughout Parts 2 and 10, signifying that Chapter 2 definitions provide the defined terms.

**RESPONSE** -- The method of highlighting a defined term is beyond the scope of this rulemaking. Note however, that this topic has been brought to the attention of the Coordinating Council of agencies, in light of a recent action in the model code (2018 IBC) to remove the listing of defined terms from the beginning of each chapter. DSA requests that the Commenter submit their suggestion regarding definition identification to be considered globally, across some or all parts of Title 24, in a separate action.

No changes to the Final Express Terms were made as a result of this comment

**COMMENTER #5:** Kyle Krause  
El Dorado County; Community Development Services  
Building Department  
2850 Fair Lane Court, Placerville, CA 95667  
Phone: (530) 621-4520  
Email: kyle.krause@edcgov.us

**SUBJECT:** The Commenter generally recommends that exterior balconies and elevated walking surfaces be constructed of decay-resistant framing members.

**COMMENT** – In the cover transmittal, the Commenter requests additional 45-day comment period(s), to incorporate items of further consideration which are summarized below:

- The Commenter stipulates the need for EEE structural members to be resistant to decay, since there may be issues with impervious moisture barriers, due to improper installation, material defects, or building movement-caused degradation;
- The Commenter contends that the proposed measures rely on successful performance of systems, and that prescriptive means of regulation would provide a higher level of protection; hence the recommendation for requiring supporting framing for EEEs to be preservative-treated.
- The Commenter also encourages state agencies to propose legislation addressing existing buildings, since current law may allow existing buildings to be repaired and/or altered using only original materials/methods, citing H&SC Sect 17922.

**RESPONSE** – DSA agrees that the stated issues should be considered. However, the nature of these comments and recommendations, if developed further at this time, would result in substantive change to the currently-proposed language; substantive change would necessitate an additional 45-day comment period and likely stakeholder input. Due to time constraints of the certifying rulemaking process, DSA did not have sufficient time to analyze the recommendations, but proposes to evaluate and potentially consider each of these comments in a future rulemaking cycle. This will afford enough time to conduct pre-cycle workshop(s), focus group meetings and code advisory committee review.

No changes to the Final Express Terms were made as a result of this comment

**COMMENTER #6:** Mark Gilligan  
1327 Blake Street, Berkeley, CA 94702  
Phone: (510) 548-8029  
Email: mark@gilligan.name

**SUBJECT:** The Commenter recommends disapproval of the proposed Building Standards because the cost of compliance is disproportionate to risk, the proposals do not provide statute-required information, and the proposals exceed authority of the state agency.

**COMMENT DSA-SS - 1** – Commenter suggests that proper 45-day comment period was not provided.

**RESPONSE** – Proper notice of the 45-day public comment period (September 8, 2017 through October 23, 2017), per Government Code 11346.4 was given and posted on the BSC website.

No changes to the Final Express Terms were made as a result of this comment.

**COMMENT DSA-SS - 2** – Commenter suggests that the emergency rulemaking was not appropriate, and that state agencies have misplaced their priorities.

**RESPONSE** – DSA was directed by legislation to review the topic of EEE and propose regulatory provisions if necessary or warranted. DSA considered possible ways to enhance code measures; given that the triggering event in mid-2015 was too late for development within the triennial cycle for the 2016 codes, the emergency measure was an appropriate means to provide fundamental measures to improve public safety until such time as further considerations could be made for the next triennial cycle (to produce the 2019 codes).

No changes to the Final Express Terms were made as a result of this comment.

#### **Part 2, Section 107.2.7**

**COMMENT DSA-SS - 3** –Commenter contends that by requiring compliance with manufacturer's instructions, DSA is delegating authority to the manufacturer, and that DSA does not have authority to delegate such authority to a manufacturer, and is therefore in violation of H&SC Section 18930(a)(4) AND (6).

**RESPONSE** – It is common practice for the codes to defer to referenced standards and to rely on manufacturers' instructions, rather than inserting such detailed criteria into the codes. Part 2 Section 1705.1.1 exists to assist the local jurisdiction in ensuring that proper level of expertise is applied to any observation/inspection. The provisions do not require compliance with instructions— simply the supplying of instructions.

No changes to the Final Express Terms were made as a result of this comment.

#### **Part 2, Section 110.3.8.1**

**COMMENT DSA-SS - 4** –Commenter purports that there may not be clarity of what constitutes an approval due to inspection

**RESPONSE** – These inspections are no different than any other inspection; many commonly-used building materials have installation instructions. Approval would be to the satisfaction of the jurisdiction based on their authority.

No changes to the Final Express Terms were made as a result of this comment.

**COMMENT DSA-SS - 5** – Commenter states that proposed reference to Section 1705.1.1 / Item 3 of Part 2 is inappropriate for the same reasons noted in comment DSA-SS – 3 on Part 2, Section 107.2.7.

**RESPONSE** -- It is common practice for the codes to defer to referenced standards and to rely on manufacturers' instructions, rather than inserting such detailed criteria into the codes. Part 2 Section 1705.1.1 exists to assist the local jurisdiction in ensuring that proper level of expertise is applied to any observation/inspection. The provisions do not require compliance with instructions— simply the supplying of instructions.

No changes to the Final Express Terms were made as a result of this comment.

#### **Part 2, Section 2304.12.2.6**

**COMMENT DSA-SS - 6** –Commenter believes that ventilating the supporting structure of EEEs will be problematic for instances where conditioned space occurs below the balcony or elevated walking surface.

**RESPONSE** – The primary objective of this amendment is to improve the long term durability of assemblies that do not lie over conditioned space. However, DSA has received other comments during this comment period noting suggestions for improving definitions or providing clarity as to what constitutes a "balcony" or "exterior elevated walking surface". DSA agrees that this issue of definitions should be studied further. Due to time constraints of the certifying rulemaking process, DSA did not have sufficient time to analyze the recommendations, but proposes to evaluate and potentially consider these comments in a future rulemaking cycle. This will afford enough time to conduct pre-cycle workshop(s), focus group meetings and code advisory committee review.

No changes to the Final Express Terms were made as a result of this comment.

**COMMENT DSA-SS - 7** – Commenter asks if proposed venting requirements are compatible with exterior wall fire rating requirements.

**RESPONSE** – State Fire Marshal has reviewed the emergency regulations, as well as these certifying proposals. There are methods to mitigate EEE venting, as with soffits and other architectural appendage assemblies, currently available within the Codes.

No changes to the Final Express Terms were made as a result of this comment.

**Part 10, Section 101.8**

**COMMENTS DSA-SS - 8, DSA-SS - 9, and DSA-SS - 10** – Commenter suggests that the first 3 lines of text of the proposed language are all required by existing law and therefore need not be repeated. Commenter also contends that the phrase “owner’s designated agent” exceed DSA’s authority, and is an attempt to implement a maintenance code within Part 10.

**RESPONSE** – Regulations serve to clarify and interpret statute. The text of the three lines is from model code language that appeared in Chapter 34 of Part 2, under Section 3401.2. During model code transition of Chapter 34 into the Existing Building Code, the model text was not migrated to their Existing Building Code, but instead went into their Maintenance Code, which California does not adopt. Thus, in order to affect the emergency measures with the same historical safeguards, the language was incorporated as a new section within Part 10, for existing buildings in order to define requirements and responsibility for maintenance of buildings and structures

No changes to the Final Express Terms were made as a result of this comment.

**COMMENT DSA-SS - 11** – Commenter claims it to be improper to give a building official authority to require re-inspection to determine compliance with Part 10, citing that a finding must first be made.

**RESPONSE** – DSA’s proposed language does not include a provision that would give DSA authority to require re-inspection.

No changes to the Final Express Terms were made as a result of this comment.

**COMMENT DSA-SS - 12** – Commenter suggests that passage of Senate Bill 721 will cause confusion, and that it is inappropriate to produce regulation within section 101.8 until such time as it becomes law.

**RESPONSE** – Inclusion of this proposed measure was made based on the response put forth above, for comments DSA-SS - 8, DSA-SS - 9, and DSA-SS - 10.

No changes to the Final Express Terms were made as a result of this comment.

**Part 10, Section 106.2.6**

**COMMENT DSA-SS - 13** -- (same comment as DSA-SS – 3) Commenter contends that by requiring compliance with manufacturer’s instructions, DSA is delegating authority to the manufacturer, and that DSA does not have authority to delegate such authority to a manufacturer, and is therefore in violation of H&SC Section 18930(a)(4) AND (6).

**RESPONSE** -- It is common practice for the codes to defer to referenced standards and to rely on manufacturers’ instructions, rather than inserting such detailed criteria into the codes. Part 2 Section 1705.1.1 exists to assist the local jurisdiction in ensuring that proper level of expertise is applied to any observation/inspection. The provisions do not require compliance with instructions— simply the supplying of instructions.

No changes to the Final Express Terms were made as a result of this comment.

**COMMENT DSA-SS - 14** – Commenter suggests that proposed measures for requirements to include moisture barrier details and installation instruction within construction documents be stipulated only in Part 2—not in Part 10.

**RESPONSE** – Currently, renovation of balconies and exterior elevated walkways usually permits a restoration to levels of codes in effect at the original time of construction. Given the frequency of observed issues with EEE, and in light of the obligation to protect the health, safety, and wellbeing of the public, the proposed measures will ensure higher safety levels, due to enhanced methods of construction for these assemblies.

No changes to the Final Express Terms were made as a result of this comment.

**Part 10, Section 109.3.10**

**COMMENT DSA-SS - 15** -- (same as comment DSA-SS – 4) Commenter purports that there may not be clarity of what constitutes an approval due to inspection.

**RESPONSE** – These inspections are no different than any other inspection; many commonly-used building materials have installation instructions. Approval would be to the satisfaction of the jurisdiction based on their authority.

No changes to the Final Express Terms were made as a result of this comment.

**COMMENT DSA-SS - 16** -- Commenter suggests that proposed measures for moisture barrier inspection requirements be stipulated only in Part 2—not in Part 10.

**RESPONSE** – Currently, renovation of balconies and exterior elevated walkways usually permits a restoration to levels of codes in effect at the original time of construction. Given the frequency of observed issues with EEE, and in light of the obligation to protect the health, safety, and wellbeing of the public, the proposed measures will ensure higher safety levels, due to enhanced forms of inspection for these assemblies.

No changes to the Final Express Terms were made as a result of this comment.

**COMMENT 17** – Commenter believes that Section 109.3.10 is redundant, since Part 10 specifies that Part 2 special inspection provisions apply to work done on existing buildings, just as on new, and states that is not in conformance with H&SC 18930(a)(1).

**RESPONSE** – Separate mention of the requirements within Part 10 do not necessarily constitute “duplication”. Administrative measures are not typically accomplished by use of pointers.

No changes to the Final Express Terms were made as a result of this comment.

**COMMENTER #7:** Diane Gould, Supervising Structural Engineer  
Division of the State Architect  
Codes and Standards Unit  
1102 Q Street, Suite 5100, Sacramento, CA 95811  
Phone: (916) 324-6959  
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**SUBJECT:** Commenter submitted comments to the proposed building standards, since the 2018 model codes were recently published, containing largely similar provisions.

**COMMENT** – DSA commented on its own 45-day certifying rulemaking package. In light of recent publication of the ICC model codes for IBC and IEBC (2018 edition), DSA finds that it is beneficial to align the language of the emergency provisions to be consistent with the published model code provisions. The emergency regulations were largely modeled upon the draft text of the model codes; the original Finding of Emergency includes information in this regard, under the heading of “Background”. DSA recommends that the certified building standards become consistent with published final language of the model codes.

**RESPONSE** – DSA staff concurred with the comment, and made minor typographic and editorial adjustments in response to the comment and per H&SC 18930(a)(7), which requires that published standards or model codes are incorporated into the building standards. As a result of the comment, DSA published revised language for a 15-day public comment period, bearing the additions, deletions and changes to the 45-day proposal.

#### **15-DAY PUBLIC COMMENT PERIOD - COMMENTS RECEIVED BY DSA**

**COMMENTER:** Robert K. Wangel  
Koppers Performance Chemicals, Inc.  
1016 Everee Inn Road; P.O. Drawer O, Griffin, GA 30224-0249  
Phone: (770) 233-4236  
Email: [Wangel RK@koppers.com](mailto:Wangel RK@koppers.com)

**SUBJECT:** Commenter submitted a 15-day comment package essentially identical to their 45-day comment package.

**COMMENT** – Commenter recommends approve as amended by their July 10 and October 4 submissions and 13 exhibits; also re-states a global recommendation to require that EEE structural framing components be preservative-treated to ground contact retention levels.

**RESPONSE** – The commenter’s 15-day comment package includes the same technical comments as were included in their 45-day public comment period submission. Therefore, DSA’s responses to Mr. Wangel’s 15-day comment package are the same as the

DSA's responses for Mr. Wangel's 45-day comment package, as noted earlier in this document. The 15-day comment package from Mr. Wangel did not include any new comments related to DSA's amended proposal for the 15-day public comment period.

No changes to the Final Express Terms were made as a result of this comment.

**DETERMINATION OF ALTERNATIVES CONSIDERED AND EFFECT ON PRIVATE PERSONS**

(Government Code Section 11346.9(a)(4)) requires a determination with supporting information that no alternative considered would be more effective in carrying out the purpose for which the regulation is proposed or would be as effective and less burdensome to affected private persons than the adopted regulation, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law.

DSA has determined that no alternative considered would be more effective in carrying out the purpose for which the regulations are proposed, be as effective or less burdensome to affected private persons than the adopted regulations, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law. The measures are similar to model code language (2018 IBC and IEBC).

**REJECTED PROPOSED ALTERNATIVE THAT WOULD LESSEN THE ADVERSE ECONOMIC IMPACT ON SMALL BUSINESSES:**

(Government Code Section 11346.9(a)(5)) requires an explanation setting forth the reasons for rejecting any proposed alternatives that would lessen the adverse economic impact on small businesses, including the benefits of the proposed regulation per 11346.5(a)(3).

There were no proposed alternatives. DSA has determined that the proposed regulations will have no adverse impact on small businesses.