STATE OF CALIFORNIA
BUILDING STANDARDS COMMISSION

PUBLIC COMMENT on PROPOSED BUILDING STANDARDS

For Publication in Title 24, California Code of Regulations

Instructions

1. Use of this form is optional. Its use will help the California Building Standards Commission (CBSC) and other state proposing agencies to correctly administer your comments.
2. For matters to be considered by a CBSC Code Advisory Committee (CAC), written comments should be received in the CBSC office 7 days before the scheduled CAC meeting to help ensure CAC consideration.
3. For matters subject to a 45-day or 15-day Public Comment period announced by a Notice of Proposed Action (NOPA), written comments must be received on or before the close of the comment period identified in the NOPA available at CBSC website http://www.bsc.ca.gov/ . Written and oral comments may be provided at the CBSC public meeting to consider the proposed building standards.
4. Separate comment submittals are necessary for CAC and Public Comment periods. Separate comment forms are necessary for each state agency proposal.
5. This form is available in Fill-and-Print format at CBSC website http://www.bsc.ca.gov/. Otherwise print the form, type or complete by hand and attach additional sheets if necessary.
6. Submit comments to the CBSC, 2525 Natomas Park Drive, Suite 130, Sacramento, CA 95833-2936, or by Email at cbsc@dgs.ca.gov. Please do not FAX comments.
7. For assistance, call the CBSC at (916) 263-0916, or Email CBSC at cbsc@dgs.ca.gov.

Commenter Identification and Contact Information

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Proposed Building Standard Identification

Title 24 Part No. 2 and 10 Section No. Multiple see attached

Proposing State Agency Division of the State Architect

The proposed building standards is: (*check one*)

- ☐ Before a CAC
- ☒ In a 45-day Comment Period
- ☐ In a 15-day Comment Period.

Your recommendation based on the criteria of Health and Safety Code Section 18930(a) printed on the reverse side is:

- ☐ Approve
- ☒ Disapprove
- ☐ Further Study Required
- ☐ Approve as Amended

Comment/Suggestion on Title 24 Proposed Building Standard:

See additional reasons for disapproval in the attached pages.

Disapprove because the cost is out of proportion to other risks that result in more loss of life.

Disapprove because the proposals did not provide the information required by statute.

Disapprove because the proposed language exceeds the legal authority of the state agencies involved.

Identification of Attachments

☐ X- Check if you have attached additional pages. The number of pages attached: 6

For CBSC Office Use Only: Date Received: Rulemaking Item #

Health and Safety Code Section 18930(a) reads:

(a) Any building standard adopted or proposed by state agencies shall be submitted to, and approved or adopted by, the California Building Standards Commission prior to codification. Prior to submission to the commission, building standards shall be adopted in compliance with the procedures specified in Article 5 (commencing with Section 11346) of Chapter 3.5 of Part 1 of Division 3 of Title 2 of the Government Code. Building standards adopted by state agencies and submitted to the commission for approval shall be accompanied by an analysis written by the adopting agency or state agency that proposes the building standards which shall, to the satisfaction of the commission, justify the approval thereof in terms of the following criteria:

(1) The proposed building standards do not conflict with, overlap, or duplicate other building standards.

(2) The proposed building standard is within the parameters established by enabling legislation and is not expressly within the exclusive jurisdiction of another agency.

(3) The public interest requires the adoption of the building standards. The public interest includes, but is not limited to, health and safety, resource efficiency, fire safety, seismic safety, building and building system performance, and consistency with environmental, public health, and accessibility statutes and regulations.

(4) The proposed building standard is not unreasonable, arbitrary, unfair, or capricious, in whole or in part.

(5) The cost to the public is reasonable, based on the overall benefit to be derived from the building standards.

(6) The proposed building standard is not unnecessarily ambiguous or vague, in whole or in part.

(7) The applicable national specifications, published standards, and model codes have been incorporated therein as provided in this part, where appropriate.

(A) If a national specification, published standard, or model code does not adequately address the goals of the state agency, a statement defining the inadequacy shall accompany the proposed building standard when submitted to the commission.

(B) If there is no national specification, published standard, or model code that is relevant to the proposed building standard, the state agency shall prepare a statement informing the commission and submit that statement with the proposed building standard.

(8) The format of the proposed building standards is consistent with that adopted by the commission.

(9) The proposed building standard, if it promotes fire and panic safety, as determined by the State Fire Marshal, has the written approval of the State Fire Marshal.

Changes Proposed by Division of the State Architect Structural Safety Section

These comments are Based on the Express Terms Issued by the Division of the State Architect Structural Safety Section dated September 5, 2017, dealing with balconies and elevated walking surfaces.

DSA-SS - 1.) The 45-day notice period was not provided. I am apparently on the list of interested individuals but was made aware of these changes on September 28 which is less than 45 days from the deadline for comments.

DSA-SS - 2.) Given that the risks being addressed have been a fact of life for many years and the annualized loss has been small this suggests that emergency rulemaking is not appropriate. It is hard to understand what is the emergency that demands immediate action. While the loss of life associated with the exterior elements is regrettable it is minuscule in comparison to other risk. This suggests that the state agencies have misplaced their priorities.

Part 2

Section 107.2.7

Reference to walking surface also includes roofs where there is access by the building occupants. This means that the venting and other proposed requirements such as requiring access to spaces between the joists will apply to conditioned spaces below the roof.

DSA-SS - 3.) By requiring compliance with manufacturer's instructions, the Division of the State Architect is improperly delegating legislative authority to the manufacture of the product with no limitation placed on the manufacturer. The manufacturer's instructions will have the force of law. The applicable legal concepts are the non-delegation doctrine and the separation of powers provisions in the California Constitution. Because of the separation of powers provisions in the California Constitution the Legislature, and hence state agencies, do not have the authority to delegate the authority implied by this provision.

The plain language of CBC Section 1705.1.1 item 3 makes it clear that it is the intent to use manufacturer's installation instructions to impose requirements that have not been properly adopted. It is recognized that these comments cannot address the validity of the existing Section 1705.1.1 but the existence of Section 1705.1.1 cannot be used to justify this new provision.

Construction documents have traditionally required compliance with manufacturer's instructions to insure the validity of the manufactures warranty, a matter not properly regulated by these provisions, and in some situations to assure that product was installed properly. While the building code is properly concerned with the proper installation of the product, trying to do so by requiring compliance with the manufacturer's installation instructions creates a situation where the manufacture can impose requirements on the owner of the property.

This provision lets that manufacturer impose commercial terms and provisions unrelated to life safety on the owner of the project, by means of manufacturer's installation instructions. There are no limits on what can be claimed to be manufacturer's instructions. For example, the manufacturer could: impose requirements related to esthetic issues or require that any special inspections be performed by an entity of their choosing.

Because the owner of the project is unable to know the content of the manufacturer's instructions prior to permitting and bidding this provision is in conflict with H&SC Sections 18930(a)(4) and or (6).

In the absence of this provision the project owner could resolve any disagreements in the courts without endangering the occupancy permit of the project, but with this provision the manufacturer or contractor could hold the project hostage because the owner is compelled to do what the manufacturer wants.

This provision would prohibit the design professional from using a product in a manner not recommended by the manufacturer. While not normally recommended this may sometimes be appropriate and in the owner's best interest. Given the lack of detailed provisions in the code related to the design and detailing of waterproofing systems it is inappropriate to limit the project owner's options.

While the owner could address some of these problems by limiting the manufacturers who can bid on the project this is not possible if all the manufacturers adopt similar requirements or when the products are specified in terms of performance criteria. It should be noted that the Legislature has in Health and Safety Code Section 18941 expressed a preference for code provisions that are "…written on a performance basis consistent with state and nationally recognized standards…" The proposed provisions are in tension with the desires of the Legislature.

Section 110.3.8.1

DSA-SS - 4.) Given that there are effectively no detailed regulations related to design of the impervious moisture barrier it is not clear what would be the basis of the approval by the jurisdiction after the inspection. The entity having jurisdiction can only enforce the regulations and cannot empower inspectors or building officials with the authority to impose new requirements. All regulations must be formally adopted or they are not enforceable. Thus, it should be made clear that approval has to do with compliance with the construction documents and not some other criteria imposed by the enforcement agency.

DSA-SS - 5.) The reference to CBC Section 1705.1.1 Item 3 is inappropriate for the reasons that have been noted in the comments on proposed CBC Section 107.2.7.

Section 2304.12.2.6

DSA-SS - 6.) This would require ventilation of joists that supported elevated walkways and balconies when there was conditioned space below and where sheet rock was applied to the bottom of the joists. It is believed that providing the required ventilation will be problematic in these situations.

DSA-SS - 7.) Is the venting requirements compatible with the fire ratings required of exterior walls? Believe that the Fire Marshall has to pass on all changes related to fire protection.

Suggest that the venting requirement can be inconsistent with fire blocking requirements of the CBC. Has the State Fire Marshal passed on these provisions?

Part 10

Section 101.8

DSA-SS - 8.) The first three sentences of the proposed provision are already clearly required by existing law and thus need not be repeated in the building code.

DSA-SS - 9.) The words "owner's designated agent" are unnecessary. Do not believe that the CBSC has the legal authority to impose regulations related to the laws of agency.

DSA-SS - 10.) The proposed language is an attempt to implement a maintenance code. As such this requirement is improperly being located in the CEBC. Such a requirement is not compatible with the definition of a Building standard, in Health and Safety Code Section 18909(a), since it neither "…regulates, requires, or forbids the method of use, properties, performance, or types of materials used in the construction, alteration, improvement, repair, or rehabilitation of a building, structure…". Thus, the CBSC does not have the authority to impose this requirement by way of the CEBC.

DSA-SS - 11.) It is inappropriate to give the building official carte blanc to require that the owner hire an engineer to perform inspections. Without specific criteria this is an improper delegation of authority to the building official. Without this provision the building official already has the more limited authority to require inspections when there is reason to believe that there is a code violation.

Government code Section 11346.3(d) requires a finding of necessity before a business can be required to submit a report. Thus, it is improper to give the building official authority to require an inspection report unless the building official can make a finding that it is necessary for the health or safety.

DSA-SS - 12.) The legislature is currently considering Senate Bill 721 which addresses similar subject matter. It is suggested that it is inappropriate to adopt regulation in this area until the Legislature has resolved this matter. If SB 721 is passed then this regulation will be irrelevant and its existence in the regulations will cause confusion. If SB 721 is not passed then it will indicate that the Legislature does not wish to impose regulations of this type.

Section 106.2.6

DSA-SS - 13.) Refer to the comments for comparable provisions in Part 2 Section 107.2.7

DSA-SS - 14.) Suggest that what should be on the construction documents is better limited to the California Building Code not the CEBC. Where do you stop? Is this the start of a movement to make the CEBC stand alone and not require the reference to the CBC or the CRC?

Section 109.3.10

DSA-SS - 15.) Refer to the comments for comparable provisions in Part 2 Section 110.3.8.1

DSA-SS - 16.) Suggest that the CEBC is not the place to specify detail construction provisions such as the inspection provisions. Where do you stop? Is this the start of a movement to make the CEBC stand alone and not require the reference to the CBC or the CRC?

If the remainder of the provisions of this proposal, but not this section, were to be adopted the same inspection requirements would apply. This section is redundant since the CEBC already makes it clear that the CBC special inspection provisions apply to any work done on existing construction.

The Fundamental Problem that is Being Ignored.

The concern about balconies and elevated walking structures focuses on the wrong problem. We are focusing on the failures of balconies and elevated walking surfaces when the problem is more general. We have extrapolated an isolated failure of a loss of life to imply that there is a significant risk to other people when in reality the annualized risk is miniscule. As a result, we are trying to reduce the this relatively small risk when our building regulations are tuned to accept much larger risks.

If we can address the fundamental problem then the potential for deck collapses will also be greatly reduced.

It has been improperly assumed that the problem was due either to moisture introduced during construction or that by providing ventilation that the rot would not have occurred.

The underlying problem is one of failures of the building membrane, either due to design or construction, that resulted in water intrusion that in turn cause rot and water damage. These failures occur early in the life of the building and when, fixed the buildings tend to have long life. The problem with balconies and elevated walking surfaces is a small subset of the underlying problem.

This is not a new problem. Early life failures of building water proofing membranes have been a fact of life for at least 40 years. In fact, there are a number of lawyers who track when multi-unit residential buildings are constructed so they can contact the building owners before the 10 year statute of repose runs out. These lawyers then bring in consultants who often will find water problems which establish the basis for litigation. Many of these buildings have balconies and elevated structures.

Considerable amounts of money are spent every year on litigation and repairs of building membranes. This is big money but for some reason not something we are motivated to address.

You can also easily find similar elements on much older buildings.

We should ask why this rather narrow action is necessary for an event that results in a low annualized loss of life. It is suggested that the agencies proposing these code changes are motivated by emotion as opposed to more objective criteria.

We should ask why since this is a longstanding problem why have we not seen more failures of balconies in the last 40 years. It is suggested that a major reason that there have not been more collapses and loss of life is because those who use and own the building take action when there is evidence of water damage or of changes in stiffness of walking surfaces.

Inevitably these sorts of failures do not occur without any warning. The Berkeley balcony collapse is no exception. It has been reported that there had been signs of water damage and reports of the balcony deflecting prior to the collapse but nobody did anything. If the building owner had taken action in response to these symptoms there would have been no loss of life.

While we can take steps to reduce the number of building membranes failures we will not be able to eliminate all of them. The other fact of life is that irregardless of the quality of the original construction failures will occur if no action is taken when there is evidence of water problems or structural distress.

There is a need for our building codes to address the design and construction of building membranes but, with the exception of requiring inspections to confirm compliance with the construction documents, to do so would require the development of a comprehensive system of regulations addressing these issues. Such a system of regulations does not currently exist and this is a non-trivial task that will take considerable time to develop and implement.

Development of comprehensive building membrane regulations is complicated by the number of materials, products, and systems that have to be considered. Many of these products and systems are proprietary These regulations will impact the acceptable building membrane solutions traditionally used, likely resulting in a disruption in the market for these products and systems. There is the real possibility that systems that have successfully been used will no longer be acceptable.

While the adoption of these regulations may feel good they come at a cost inconsistent with the risk and more importantly they do not address the underlying problem that annually results in significant cost and disruption.

The proposals are based on a flawed understanding of the cause of the rot. The implication is that if there had been enough ventilation the rot would not have occurred. It has also been suggested that the rot was the result of moisture introduced during construction.

The pictures of the failed deck joists showed that the rot was concentrated at a distance from the wall which suggests that there was a concentration of water at this location over a considerable time period. If the moisture was introduced during construction we should have seen the rot as having ben more distributed. This suggests that the source of the water was the result of a break in the waterproofing system which allowed water to accumulate between the floor sheathing and the top of the joists. It is suggested that the mandated ventilation would be relatively ineffective in dissipating the water provided by this mechanism.

Some have suggested that the ventilation while not preventing the rot could have delayed the failure. The problem with this approach is that if nobody was responding to the symptoms you would still end up with a collapsed balcony.

In this context the only thing that explains these code changes is that politicians and others are responding emotionally.