

STATE OF CALIFORNIA
STATE AND CONSUMER SERVICES AGENCY
CALIFORNIA BUILDING STANDARDS COMMISSION
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Office Use Item No. _____

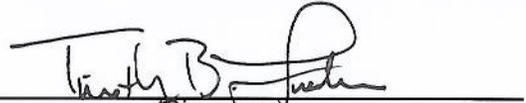
PARTICIPATION COMMENTS FOR THE NOTICE DATED AUGUST 31, 2012
Written comments are to be sent to the above address.

WRITTEN COMMENT DEADLINE: OCTOBER 15, 2012

Date: October 8th, 2012

From: Ron Fillmore--Vice President, High Performance Building; and Timothy Lueder--Global Science and Technology Director


(Signature)


(Signature)

-- Dow Corning Corporation
Agency, jurisdiction, chapter, company, association, individual, etc.

2200 W. Salzburg Road Midland MI 48686
Street City State Zip

I/We (do)(do not) agree with:

[] The Agency proposed modifications As Submitted on Section No. 2410.1.1

and request that this section or reference provision be recommended:

[] Approved [] Disapproved [] Held for Further Study [] Approved as Amended

Suggested Revisions to the Text of the Regulations:

1. *SSG shall be ~~waterproof~~ weathertight and serviceable as defined in AAMA 501.4 under design story drifts associated with the Design Earthquake and no glass fallout shall occur at the drifts determined by ASCE 7 Section 13.5.9.4 and tested in accordance with AAMA 501.4 Section 11.3.*

Reason: [The reason should be concise if the request is for "Disapproval," "Further Study," or "Approve As Amend" and identify at least one of the 9-point criteria (following) of Health and Safety Code §18930.]

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

- The proposed language as written conflicts with AAMA 501.4, which does not use the criteria of being waterproof.
- As the proposed language references testing per AAMA 501.4, the amendment proposed here helps clarify that AAMA 501.4 establishes serviceability after a seismic event by testing, while ASCE 7 sets forth the calculations to determine drift.

(3) *The public interest requires the adoption of the building standards.*

Dow Corning, as a pioneer in the science of structural glazing systems since the mid 1960's, is submitting this comment to clarify the appropriate application of AAMA 501.4 and 501.6; to ensure that ASCE 7 Section 13.5.9 is recognized as a viable method of calculation for seismic designs. Specifically our proposed revisions do the following:

- This comment helps to clarify the appropriate application of AAMA 501.4 to help ensure consistency with ASCE 7 Section 13.5.9.
- Clarify that the definition of serviceability from AAMA 501.4 is to be used in the application of Section 2410.1.1
- Clarify that ASCE has published viable methods by which to analyze a system's seismic capability
- Affirm structural silicone is a method by which glass is firmly supported as required in Chapter 24, Section 2403.2 of the California Building Code
 - [Broker, K.A., (2012), "Seismic Racking Test Evaluation of Silicone Used in a Four-Sided Structural Sealant Glazed Curtain Wall System", Journal of ASTM International, Vol 9, No. 5, Paper ID JAI 104144]
 - [Memari, A.M., (2012), "Evaluation of the Structural Sealant for Use in a Four-Sided Structural Sealant Glazing Curtain-Wall System for a Hospital Building", Journal of ASTM International, Vol 9, No. 5, Paper ID JAI 104143]

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

- A. Requiring an SSG system be waterproof is unreasonable and arbitrary, since no technical justification for it has been provided at all.

Suggested Revisions to the Text of the Regulations:

- 2. *The sealant utilized in the insulated glass units used in SSG shall be designed in accordance with ASTM C 1249. The insulated glass unit design shall ~~include compliance~~ be designed in accordance with the guidelines in with ASTM C 1249 Section 6.7.2.*
- 4. *Design methodology shall address seismic movement as ~~required by~~ discussed in ASTM C 1401 Section 30.3.4.*

Reason: [The reason should be concise if the request is for "Disapproval," "Further Study," or "Approve As Amend" and identify at least one of the 9-point criteria (following) of Health and Safety Code §18930.]

- (1) *The proposed building standards do not conflict with, overlap, or duplicate other building standards.*
 - A. ASTM C1249 and ASTM C1401 are ASTM Guides. ASTM Guides are not compliance documents, rather they are design guidelines. ASTM Specifications can be complied with, however Guides are recommendations. Requesting compliance or using the word "requirement" with an ASTM Guide conflicts with the content and intent of an ASTM Guide.

HEALTH & SAFETY CODE SECTION 18930

SECTION 18930. APPROVAL OR ADOPTION OF BUILDING STANDARDS; ANALYSIS AND CRITERIA; REVIEW CONSIDERATIONS; FACTUAL DETERMINATIONS

- (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.
 - (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.