

**FINAL STATEMENT OF REASONS
FOR PROPOSED BUILDING STANDARDS OF THE
OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
REGARDING THE 2019 CALIFORNIA BUILDING CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2, VOLUME 2**

(OSHPD 03/18)

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:

The Office of Statewide Health Planning and Development (OSHPD) is making the following change to the initial statement of reasons for the proposed actions associated with this rulemaking.

Section 1702A.1: State amended definition “Periodic special inspection” as a subsection under “Special Inspection” is being repealed and not moved to Chapter 2, as it would duplicate the model code definition, now adopted.

MANDATE ON LOCAL AGENCIES OR SCHOOL DISTRICTS

OSHPD 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).

- ***Public comments received during the 45-Day Public Comment Period from September 14, 2018 to October 29, 2018.***

Chapter 16

Commenter: James Mwangi, PhD, SE

It will be extremely burdensome for the Designer to keep the OSHPD integrated provisions from being applied to non-OSHPD projects. The manner in which the amendments are interspersed into the Chapter will cause confusion. Please amend by moving all of the provisions to a separate section at the end of the Chapter as DSA-SS/CC has done.

OSHPD Response: Separate contiguous sections for OSHPD categories 1R, 2 and 5 may be considered for inclusion into future editions of the California Building Code. Currently, sections specific only to OSHPD categories 1R, 2 and 5 are clearly labeled with the acronym [OSHPD 1R, 2 & 5]. The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this chapter.

Chapter 17

Commenter: James Mwangi, PhD, SE

It will be extremely burdensome for the Designer to keep the OSHPD integrated provisions from being applied to non-OSHPD projects. The manner in which the amendments are interspersed into the Chapter will cause confusion. Please amend by moving all of the provisions to a separate section at the end of the Chapter as DSA-SS/CC has done.

OSHPD Response: Separate contiguous sections for OSHPD categories 1R, 2 and 5 may be considered for inclusion into future editions of the California Building Code. Currently, sections specific only to OSHPD categories 1R, 2 and 5 are clearly labeled with the acronym [OSHPD 1R, 2 & 5]. The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this chapter.

Chapter 18

Commenter: James Mwangi, PhD, SE

It will be extremely burdensome for the Designer to keep the OSHPD integrated provisions from being applied to non-OSHPD projects. The manner in which the amendments are interspersed into the Chapter will cause confusion. Please amend by moving all of the provisions to a separate section at the end of the Chapter as DSA-SS/CC has done.

OSHPD Response: Separate contiguous sections for OSHPD categories 1R, 2 and 5 may be considered for inclusion into future editions of the California Building Code. Currently, sections specific only to OSHPD categories 1R, 2 and 5 are clearly labeled with the acronym [OSHPD 1R, 2 & 5]. The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this chapter.

Chapter 19

Commenter: James Mwangi, PhD, SE

It will be extremely burdensome for the Designer to keep the OSHPD integrated provisions from being applied to non-OSHPD projects. The manner in which the amendments are interspersed into the Chapter will cause confusion. Please amend by

moving all of the provisions to a separate section at the end of the Chapter as DSA-SS/CC has done.

OSHPD Response: Separate contiguous sections for OSHPD categories 1R, 2 and 5 may be considered for inclusion into future editions of the California Building Code. Currently, sections specific only to OSHPD categories 1R, 2 and 5 are clearly labeled with the acronym [OSHPD 1R, 2 & 5]. The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this chapter.

Chapter 21

Commenter: James Mwangi, Phd, SE

It will be extremely burdensome for the Designer to keep the OSHPD integrated provisions from being applied to non-OSHPD projects. The manner in which the amendments are interspersed into the Chapter will cause confusion. Please amend by moving all of the provisions to a separate section at the end of the Chapter as DSA-SS/CC has done.

OSHPD Response: Separate contiguous sections for OSHPD categories 1R, 2 and 5 may be considered for inclusion into future editions of the California Building Code. Currently, sections specific only to OSHPD categories 1R, 2 and 5 are clearly labeled with the acronym [OSHPD 1R, 2 & 5]. The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this chapter.

Section 2103.5

Commenter: John Chrysler, TMS 402/602 Committee

This provision is not only duplicative (TMS602, Article 2.2, ASTM C476, Section 3, Note 2) it is not enforceable since compliance for air entrainment is not defined in the code. Conflicts with Nine Point Criteria, Items 1 and 4.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to “Section 2103.5” proposed in this rulemaking; therefore, the comments are outside this rulemaking process. This provision is the same as approved for Community Colleges in 2016 CBC Section 2114.

Section 2103.5

Commenter: Jason Thompson, Masonry Alliance for Codes and Standards

The entire section conflicts with the verification requirements established by the National Referenced Masonry Standard (TMS 402, Section 3.1, TMS 602, Article 1.4) through a consensus process. The proposed additional testing is costly and does not

identify any possible material deficiencies sooner than the frequency set forth by the National Masonry Standard.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to “Section 2103.5” proposed in this rulemaking; therefore, the comments are outside this rulemaking process. This provision is the same as approved for Community Colleges in 2016 CBC Section 2114.

Section 2104.2.1

Commenter: Jason Thompson, Masonry Alliance for Codes and Standards
Mortar protrusions provide a mechanical interlock between the grout and mortar and the National Masonry Reference Standard (TMS 602, Article 3.3 B.2.c) limits mortar protrusions to less than 1/2 inch. Mortar protrusions of this size have no negative structural impact on the masonry wall. I have not seen any data that indicates limiting mortar protrusions to 1/4 inch provides any structural advantage to masonry.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to “Section 2104A.1.3.1” proposed in this rulemaking that affects Section 2104.2.1; therefore, the comments are outside this rulemaking process. This provision is the same as approved for Community Colleges in 2016 CBC Section 2114.3.1.

Section 2104.2.1

Commenter: Jason Thompson, Masonry Alliance for Codes and Standards
Last paragraph addressing the 'description of grouting procedures'. This provision is ambiguous cannot be uniformly applied since there is no referenced criteria for describing grouting procedures other than complying with detailed grouting requirements contained in the National Masonry Referenced Standard and Code (TMS 402/602).

OSHPD Response: Agree the last paragraph which states that grouting procedures are subject to approval by OSHPD is redundant language, as all construction documents are subject to approval by the authority having jurisdiction. This sentence will be removed in the next rule making cycle.

Section 2104.2.1

Commenter: John Chrysler, TMS 402/602 Committee

1st paragraph – “... mortar droppings or other foreign material.” Conflicts with the Reference National Standard, TMS 602, Article 3.2 D. Conflicts with Nine Point Criteria, Item 1.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to Section 2104A.1.3.1 proposed in this rulemaking that affects Section 2104.2.1; therefore, the comments are outside this rulemaking process. This provision is the same as approved for Community Colleges in 2016 CBC Section 2114.3.1.

Section 2104.2.1

Commenter: John Chrysler, TMS 402/602 Committee

4th paragraph – “ Reinforcement, embedded items and bolts shall be solidly embedded in grout” duplicates the Referenced National Standard, TMS 602, Articles 3.4 B.2 and 3.4 D.1. Conflicts with Nine Point Criteria Item 1.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to Section 2104A.1.3.1 proposed in this rulemaking that affects Section 2104.2.1; therefore, the comments are outside this rulemaking process. This provision is the same as approved for Community Colleges in 2016 CBC Section 2114.3.1.

Section 2104.2.1

Commenter: John Chrysler, TMS 402/602 Committee

4th paragraph – “ Reinforcement and embedded items ... prior to grouting” duplicates the Referenced National Standard, TMS 602, Article 3.2 A. This sentence also conflicts with allowable placement tolerances (CBC 2104.1, TMS 602, Article 3.4 B.11) which was addressed by TMS 602, Article 3.4 B.1. Conflicts with Nine Point Criteria Item 1.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to Section 2104A.1.3.1 proposed in this rulemaking that affects Section 2104.2.1; therefore, the comments are outside this rulemaking process. This provision is the same as approved for Community Colleges in 2016 CBC Section 2114.3.1.

Section 2104.2.1

Commenter: John Chrysler, TMS 402/602 Committee

5th paragraph – “All units shall be free of dust and dirt” duplicates the Referenced National Standard, TMS 602, Article 3.3 B.8a. Conflicts with Nine Point Criteria Item 1.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to Section 2104A.1.3.1 proposed in this rulemaking that affects Section 2104.2.1; therefore, the comments are outside this rulemaking process. This provision is the same as approved for Community Colleges in 2016 CBC Section 2114.3.1.

Section 2104.2.1

Commenter: John Chrysler, TMS 402/602 Committee
6th paragraph duplicates the Referenced National Standard, TMS 602, Article 3.5 E.1b. Conflicts with Nine Point Criteria Item 1.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to Section 2104A.1.3.1 proposed in this rulemaking that affects Section 2104.2.1; therefore, the comments are outside this rulemaking process. This provision is the same as approved for Community Colleges in 2016 CBC Section 2114.3.1. This provision is the same as approved for Community Colleges in 2016 CBC Section 2114.3.1.

Section 2104.2.1

Commenter: John Chrysler, TMS 402/602 Committee
7th paragraph duplicates the Referenced National Standard, TMS 602, Article 3.5 E.1a and 3.5 F. Conflicts with Nine Point Criteria Item 1.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to Section 2104A.1.3.1 proposed in this rulemaking that affects Section 2104.2.1; therefore, the comments are outside this rulemaking process. This provision is the same as approved for Community Colleges in 2016 CBC Section 2114.3.1.

Section 2104.2.1

Commenter: John Chrysler, TMS 402/602 Committee
8th paragraph essentially duplicates the Referenced National Standard, TMS 602, Article 3.5. In addition, “subject to the approval of OSHPD” is capricious in the greatest sense since individuals will not consistently evaluate grouting procedures. Conflicts with Nine Point Criteria Items 1 and 4.

OSHPD Response: Agree the last paragraph which states subject to approval by OSHPD is redundant language, as all construction documents are subject to approval by the authority having jurisdiction. This sentence will be removed in the next rule making cycle.

Section 2104.2.1

Commenter: Gary Peifer, Bricklayers, Tilesetters and Allied Craftworkers Local 3
The limitation of ¼” mortar projection (vs ½ inch in TMS 602) is arbitrary and adds unnecessary cost to masonry construction. A mortar projection of up to 1/2 inch maintains clearance for reinforcement cover and provides mechanical interlock with the grout. There is an appropriate limitation already contained in the National Masonry Standard.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to Section 2104A.1.3.1 proposed in this rulemaking that affects Section 2104.2.1; therefore, the comments are outside this rulemaking process. This provision is the same as approved for Community Colleges in 2016 CBC Section 2114.3.1.

Section 2105.2

Commenter: Jason Thompson, Masonry Alliance for Codes and Standards
Paragraph 1: A design value is calculated, not assumed. If the word 'minimum' was added and the word 'assumed' deleted in the first sentence, then this provision would make sense. The second sentence of first paragraph is a duplicative requirement of the National Masonry Referenced Standard (TMS 402, Section 3.1, TMS 602, Articles 1.4 and 1.6 A).

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to “Section 2105.2” proposed in this rulemaking; therefore, the comments are outside this rulemaking process.

Section 2105.2

Commenter: Jason Thompson, Masonry Alliance for Codes and Standards
Exception Paragraph 1, First 2 Sentences-Higher design values should be Engineering Judgement. In any event, these two sentences are confusing and ambiguous. The A/E do not submit test results-laboratories do. Are the tests for the particular project, or tests in general? What type of strength is intended? Compressive strength? What is the published Standard for a 'stiffness test'?

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to “Section 2105.2” proposed in this rulemaking; therefore, the comments are outside this rulemaking process.

Section 2105.2

Commenter: Jason Thompson, Masonry Alliance for Codes and Standards Exception, Paragraph 1, Third Sentence-"The design shall take into account the mortar joint depth" makes no sense whatsoever. The masonry industry considers mortar joint depth as a horizontal dimension and considered for masonry performance in any masonry. Code requires a minimum mortar joint depth of the face shell for hollow unit masonry. Design of the masonry system takes into account the mortar joint configuration.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to "Section 2105.2" proposed in this rulemaking; therefore, the comments are outside this rulemaking process.

Section 2105.2

Commenter: Jason Thompson, Masonry Alliance for Codes and Standards Exception, Paragraph 1, Last Sentence limiting masonry design to 3,000 psi-There is no basis for this limitation. Higher design strengths may be more structurally advantageous and have been proven throughout California and the nation for decades. Limiting design strength will cause thicker masonry walls translating into excessive and unnecessary cost

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to "Section 2105.2" proposed in this rulemaking; therefore, the comments are outside this rulemaking process.

Section 2105.2

Commenter: Jason Thompson, Masonry Alliance for Codes and Standards Exception, Paragraph 2-Comprehensive Quality Assurance provisions are contained in the National Masonry Referenced Standard (TMS 402, Section 3.1, TMS 602, Article 1.4). The core test has no rationale basis, does not verify compliance of specified (compressive) strength and adds an unnecessary cost because it is a destructive test.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to "Section 2105.2" proposed in this rulemaking; therefore, the comments are outside this rulemaking process. This provision is the same as approved for Community Colleges in 2016 CBC Section 2114.6.

Section 2105.2

Commenter: John Chrysler, TMS 402/602 Committee

Exception, 2nd paragraph – “When an f’m greater ... contract specifications.” is duplicative since the method of quality control is clearly contained in the National Referenced Standard, TMS 402, Section 3.1 and TMS 602, Article 1.6. If anything, the proposed language should require that the minimum QA Level should be required. Conflicts with Nine Point Criteria, Item 1.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to “Section 2105.2” proposed in this rulemaking; therefore, the comments are outside this rulemaking process.

Section 2105.3

Commenter: Jason Thompson, Masonry Alliance for Codes and Standards

The entire section conflicts with the verification requirements established by the National Referenced Masonry Standard (TMS 402, Section 3.1, TMS 602, Article 1.4) through a consensus process. The proposed additional testing is costly and does not identify any possible material deficiencies sooner than the frequency set forth by the National Masonry Standard.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to “Section 2105.3” proposed in this rulemaking; therefore, the comments are outside this rulemaking process.

Section 2105.3

Commenter: John Chrysler, TMS 402/602 Committee

2nd Paragraph – The referenced to TMS 402, Section 7.4.4.2.2 is simply wrong since it has nothing to do with strength requirements. It is a Seismic Restriction for certain types of materials.

OSHPD Response: The reference to TMS 402 Section 7.4.4.2.2 for mortar will be removed as an amendment at the commission meeting and replaced with language from Section 2105A.3. The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There will be no new amendments to “Section 2105.3” involving this language proposed in this rulemaking.

Section 2105.3

Commenter: John Chrysler, TMS 402/602 Committee

2nd Paragraph – All of the references to mortar testing conflict with ASTM Standards C270, C780 and C1586. All of the ASTM Standards state that mortar should be specified by property or proportion, not both. There are at least 9 references in the Standards explaining why field mortar testing is not representative of mortar strength in the wall. Conflicts with Nine Point Criteria, item 1.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to “Section 2105.3” involving this language proposed in this rulemaking; therefore, the comments are outside this rulemaking process.

Section 2105.3

Commenter: John Chrysler, TMS 402/602 Committee

3rd Paragraph – The reference to ASTM C1586 is simply wrong. C1589 is Quality Assurance of Mortars and has nothing to do with testing. The National Reference Standard lists verification requirements in the Quality Assurance Tables with testing requirement for mortar (if applicable) through TMS 602 Article 2.1A, ASTM C270, ASTM C780 and grout (if applicable) through TMS602 Article 2.1 A, ASTM C270, ASTM C780 and grout (if applicable) through TMS 602 Article 2.2B. Conflicts with Nine Point Criteria, item 1.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to “Section 2105.3” proposed in this rulemaking involving this language; therefore, the comments are outside this rulemaking process.

Section 2105.4

Commenter: Jason Thompson, Masonry Alliance for Codes and Standards

2105.4 cannot be justified for hollow unit masonry. The coring requirement was developed and for 50 years was limited to separate ‘wythes’ of masonry, then in 2010 the term ‘face shells’ was improperly added with no rationale. Destructively coring masonry walls is a significant cost burden to the State and has no appreciable benefit.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to “Section 2105.4” proposed in this rulemaking; therefore, the comments are outside this rulemaking process. This provision is the same as approved for Community Colleges in 2016 CBC Section 2114.6.2.

Section 2105.4

Commenter: Jason Thompson, Masonry Alliance for Codes and Standards
Since there is no published Standard to follow for the extraction, transportation and testing of masonry cores, laboratories use different testing protocol rendering inconsistent and often erroneous test reports.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to “Section 2105.4” proposed in this rulemaking; therefore, the comments are outside this rulemaking process. This provision is the same as approved for Community Colleges in 2016 CBC Section 2114.6.2.

Section 2105.4

Commenter: Gary Peifer, Bricklayers, Tilesetters and Allied Craftworkers Local 3
Coring of masonry walls adds significant and unnecessary repair cost due to destructive testing. Cored masonry walls are no better than masonry walls that are not cored so the State is wasting a lot of money with this requirement. There is no rationale for coring single wythe masonry walls.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to “Section 2105.4” proposed in this rulemaking; therefore, the comments are outside this rulemaking process. This provision is the same as approved for Community Colleges in 2016 CBC Section 2114.6.2.

Section 2105.5

Commenter: John Chrysler, TMS 402/602 Committee
This is a duplication of the National Referenced Standard (TMS 602, Articles 1.4 B.3 and 1.4 B.4) which conflicts with Nine Point Criteria, Item 1.

OSHPD Response: This provision is a pointer to TMS 402 for masonry prism testing and is necessary to complete the CBC provisions from the reference to prism testing given in Section 2105.2, where there is no identical provision to Section 2105.2 contained in TMS 402 or 602.

Section 2105.6

Commenter: John Chrysler, TMS 402/602 Committee
This is a duplication of the National Referenced Standard (TMS 602, Article 1.4 B.2) which conflicts with Nine Point Criteria, Item 1.

OSHPD Response: This provision is a pointer to TMS 402 for masonry unit strength testing and is necessary to complete the CBC provisions from the reference to this

testing given in Section 2105.3, where there is no identical provision to Section 2105.3 contained in TMS 402 or 602.

Section 2106.1.1.1

Commenter: Jason Thompson, Masonry Alliance for Codes and Standards
Designers determine the appropriate amount of reinforcement in masonry. There is no rationale for arbitrarily doubling the prescriptive amount (0.003 vs. 0.002 in the National Consensus Standard) and reducing spacing by 50% (24 in. vs. 48 in. in National Consensus Standard), it has not been evaluated for economic benefit impact, and is more likely to trigger over-reinforced masonry elements resulting in less ductile performance.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to “Section 2106.1.1.1” proposed in this rulemaking; therefore, the comments are outside this rulemaking process. This provision is the same as approved for Community Colleges in 2016 CBC Section 2114.7.

Section 2106.1.1.1

Commenter: Jason Thompson, Masonry Alliance for Codes and Standards
Paragraph 5-The requirement of reinforcement around openings is contained in the National Referenced Masonry Standard (TMS 402, Section 7.3.2.3.1) and determined by consensus to be appropriate. There is no known research to suggest that increasing the reinforcement around openings is significantly beneficial and there is no economic analysis to substantiate the additional cost.

OSHPD Response: TMS 402 Section 7.3.2.3.1 for reinforcement at openings only applies to Detailed Plain (unreinforced) Masonry Shear Walls. Unreinforced masonry shear walls are not permitted in Seismic Design Category D, which is the minimum for hospital and SNF buildings in California. The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to “Section 2106.1.1.1” proposed in this rulemaking; therefore, the comments are outside this rulemaking process. This provision is the same as approved for Community Colleges in 2016 CBC Section 2114.7.

Section 2106.1.1.2

Commenter: Jason Thompson, Masonry Alliance for Codes and Standards
The National Referenced Masonry Standard requires column ties at 8 inch spacing (TMS Section 7.4.4.2.1) for full column height. The proposed spacing could actually be less conservative than the National Standard (16x16 column with #9 vertical bars and 1/2 inch tie = 9 inches) and there is no known research to substantiate the spacing.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to “Section 2106.1.1.2” proposed in this rulemaking; therefore, the comments are outside this rulemaking process. This provision is the same as approved for Community Colleges in 2016 CBC Section 2114.7.

Section 2106.1.1.2

Commenter: Gary Peifer, Bricklayers, Tilesetters and Allied Craftworkers Local 3
The National Referenced Masonry Standard, TMS 402-16, Section 7.4.4.2.1 requires column ties spaced at 8 inches for the full column height which is more economical than the proposed language. As stated, the proposed spacing could space ties at more than 8 inches apart (less conservative than the National Standard).

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to “Section 2106.1.1.2” proposed in this rulemaking; therefore, the comments are outside this rulemaking process. This provision is the same as approved for Community Colleges in 2016 CBC Section 2114.7.

Section 2106.1.1.3

Commenter: Jason Thompson, Masonry Alliance for Codes and Standards
This paragraph is unenforceable because it uses the word 'may'. Lateral support requirements are contained in the National Referenced Masonry Standard, TMS 402, Chapter 4.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to “Section 2106.1.1.3” proposed in this rulemaking; therefore, the comments are outside this rulemaking process.

Section 2106.1.1.4

Commenter: Jason Thompson, Masonry Alliance for Codes and Standards
The National Referenced Masonry Standard contains anchor bolt provisions based on engineering design, not prescriptive requirements. No known rationale exists for the proposed prescriptive anchor bolt requirements and does not consider how the anchors are embedded into the masonry. No economic impact study was provided for these anchor bolt requirements.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters

under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to “Section 2106.1.1.4” proposed in this rulemaking; therefore, the comments are outside this rulemaking process. This provision is the same as approved for Community Colleges in 2016 CBC Section 2114.7.

Section 2107.4

Commenter: Jason Thompson, Masonry Alliance for Codes and Standards
The National Masonry Referenced Standard restricts the maximum bar size to one-half the cell dimension. There is no known research to show that the one-quarter limitation is structurally advantageous.

OSHPD Response: The use of one-quarter of the cell dimension for the maximum bar size results in less reinforcing bar congestion at lap splices and more grout cover which has been shown by experimental testing to enhance the rebar bond and result in less splitting of the CMU under rebar yield.

Section 2107.4

Commenter: Jason Thompson, Masonry Alliance for Codes and Standards
There is absolutely no justification to limit the bar size to #9. There are other limitations based on the size of grout space or width of wall, but for 12 inch and 16 inch walls and large columns, a #11 bar may be justified and there should be adequate room for grout placement.

OSHPD Response: The #9 maximum bar size results in less reinforcing bar congestion at lap splices and more grout cover which has been shown by experimental testing to enhance the rebar bond and result in less splitting of the CMU under rebar yield. The use of #10 and #11 rebar results in lap splices 8’ or longer exceeding the typical story height. There has been no masonry shear wall nor coupling beam tests with #10 and #11 rebar or any of the larger rebar sizes under seismic cyclic loads for Seismic Design Categories D, E and F to substantiate shear wall or coupling beam ductility. The #9 maximum rebar size is consistent with the current TMS 402 Strength Design requirements. There is no substantiation based upon ductility that ASD should permit larger than a #9 maximum rebar size.

Section 2107.4

Commenter: John Chrysler, TMS 402/602 Committee
This maximum bar size of 1/8th nominal wall thickness is a duplication of the National Referenced Standard (TMS 402), Section 6.1.2.5 which conflicts with Nine Point Criteria item 1. The National Standard also applies to all masonry, not just Allowable Stress Design.

OSHPD Response: TMS 402 Section 6.1.2.5 only addresses the maximum rebar size of one-eighth of the least nominal member dimension. The limitations on the maximum rebar size in Section 2107.4 are also based upon one-quarter of the least dimension of the cell, course or collar joint and not larger than a #9.

Section 2107.6

Commenter: Jason Thompson, Masonry Alliance for Codes and Standards
This provision is contained in the National Masonry Standard for elements of SDC D and above. The proposed language has no rationale to apply to an undefined term 'masonry components'.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to “Section 2107.6” proposed in this rulemaking; therefore, the comments are outside this rulemaking process.

Section 2110.1

Commenter: Jason Thompson, Masonry Alliance for Codes and Standards
The stress restriction is duplicative with the National Reference Standard, TMS 402, Section 13.1.1.2 (explained in Commentary) and there is no guidance on what is meant by designing glass block for seismic forces.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to “Section 2110.1” proposed in this rulemaking; therefore, the comments are outside this rulemaking process. This provision is the same as approved for Community Colleges in 2016 CBC Section 2114.9.

Section 2110.1

Commenter: John Chrysler, TMS 402/602 Committee
The proposed language does not make sense. The stress restriction is duplicative with the National Reference Standard, TMS 402, Section 13.1.1.2 (explained in Commentary) and there is no guidance on what is meant by designing glass block for seismic forces.

OSHPD Response: The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this section identified with the acronym [OSHPD 1R, 2 & 5]. There are no new amendments to “Section 2110.1” proposed in this rulemaking; therefore, the comments are outside this rulemaking process. This provision is the same as approved for Community Colleges in 2016 CBC Section 2114.9.

Section 2104A.1.3.1.2.2

Commenter: John Chrysler, TMS 402/602 Committee

This proposal is partially duplicative and partially conflicting with the National Referenced Standard, TMS 602, Article 3.5D. There is no known rationale to limit grout lift height to 4 feet, then allow an exception for a higher grout lift height. This should be amended to simply reference the National Standard. Conflicts with Nine Point Criteria, items 1 and 6.

OSHPD Response: OSHPD and DSA field staff have confirmed that a maximum grout lift of 4 ft on typical 8" CMU walls is necessary to inspect and produce an acceptable quality grouted masonry wall. Grout lifts up to 5'-4" are permitted for 10" CMU walls which have larger grout spaces to facilitate inspection. The 4' grout lift comes from the existing language in Chapter 21A.

Section 2104A.1.3.1.2.2

Commenter: Jason Thompson, Masonry Alliance for Codes and Standards
The consensus process of the National Masonry Referenced Standard, TMS 602, Specification for Masonry Structure, has determined that a low-lift grout height of 5 ft- 4 in. without cleanouts is not detrimental to the structural integrity of masonry. Requiring a maximum grout lift of 4 ft, then providing an exception is confusing and not rationally justified.

OSHPD Response: OSHPD and DSA field staff have confirmed that a maximum grout lift of 4 ft on typical 8" CMU walls is necessary to inspect and produce an acceptable quality grouted masonry wall. Grout lifts up to 5'-4" are permitted for 10" CMU walls which have larger grout cores to facilitate inspection. The 4' grout lift comes from the existing language in Chapter 21A.

Section 2104A.1.3.1.2.2

Commenter: Gary Peifer, Bricklayers, Tilesetters and Allied Craftworkers Local 3
Grout lift restrictions are contained in the National Masonry Standard and it is confusing to require different provisions, then reference exceptions that are only partially consistent with the National Masonry Standard. This unjustified restriction adds considerable cost to masonry construction.

OSHPD Response: OSHPD and DSA field staff have confirmed that a maximum grout lift of 4 ft on typical 8" CMU walls is necessary to inspect and produce an acceptable quality grouted masonry wall. Grout lifts up to 5'-4" are permitted for 10" CMU walls which have larger grout cores to facilitate inspection. The 4' grout lift comes from the existing language in Chapter 21A.

Section 2105A.5

Commenter: John Chrysler, TMS 402/602 Committee
This is a duplication of the National Referenced Standard (TMS 602, Articles 1.4 B.3 and 1.4 B.4) which conflicts with Nine Point Criteria, Item 1.

OSHPD Response: This provision is a pointer to TMS 402 for masonry prism testing and is necessary to complete the CBC provisions from the reference to prism testing

given in Section 2105A.2, where there is no identical provision to Section 2105A.2 contained in TMS 402 or 602.

Section 2105A.6

Commenter: John Chrysler, TMS 402/602 Committee

This is a duplication of the National Referenced Standard (TMS 602, Article 1.4 B.2) which conflicts with Nine Point Criteria, Item 1.

OSHPD Response: This provision is a pointer to TMS 402 for masonry unit strength testing and is necessary to complete the CBC provisions from the reference to this testing given in Section 2105A.3, where there is no identical provision to Section 2105A.3 contained in TMS 402 or 602.

Section 2107A.4

Commenter: Jason Thompson, Masonry Alliance for Codes and Standards

There is absolutely no justification to limit the bar size to #9. There are other limitations based on the size of grout space or width of wall, but for 12 inch and 16 inch walls and large columns, a #11 bar may be justified and there should be adequate room for grout placement.

OSHPD Response: This amendment will be removed as an amendment at the commission hearing to align with DSA as this section is no longer contained in the 2018 IBC and was not appropriately identified in the 45 day express terms.

Section 2107A.4

Commenter: John Chrysler, TMS 402/602 Committee

This maximum bar size of 1/8th nominal wall thickness is a duplication of the National Referenced Standard (TMS 402), Section 6.1.2.5 which conflicts with Nine Point Criteria, item 1. The National Standard also applies to all masonry, not just Allowable Stress Design.

OSHPD Response: This amendment will be removed as an amendment at the commission hearing to align with DSA as this section is no longer contained in the 2018 IBC and was not appropriately identified in the 45 day express terms.

Chapter 22

Commenter: James Mwangi, PhD, SE

It will be extremely burdensome for the Designer to keep the OSHPD integrated provisions from being applied to non-OSHPD projects. The manner in which the amendments are interspersed into the Chapter will cause confusion. Please amend by moving all of the provisions to a separate section at the end of the Chapter as DSA-SS/CC has done.

OSHPD Response: Separate contiguous sections for OSHPD categories 1R, 2 and 5 may be considered for inclusion into future editions of the California Building Code. Currently, sections specific only to OSHPD categories 1R, 2 and 5 are clearly labeled

with the acronym [OSHPD 1R, 2 & 5]. The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been relocated from the A chapters to the non-A chapters under the 2019 CBC. The applicable amendments in the A chapter are replicated in this chapter.

Chapter 23

Commenter: James Mwangi, PhD, SE

It will be extremely burdensome for the Designer to keep the OSHPD integrated provisions from being applied to non-OSHPD projects. The manner in which the amendments are interspersed into the Chapter will cause confusion. Please amend by moving all of the provisions to a separate section at the end of the Chapter as DSA-SS/CC has done.

OSHPD Response: Separate contiguous sections for OSHPD categories 1, 1R, 2, 4 and 5 may be considered for inclusion into future editions of the California Building Code. Currently, sections specific only to OSHPD categories 1, 1R, 2, 4 and 5 are clearly labeled with the acronym [OSHPD 1, 1R, 2, 4 & 5] or variations of that depending on the applicable OSHPD categories to the provision. The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been incorporated in the 2019 CBC. Note that there is no A chapter for Chapter 23 and DSA/CC has no separate contiguous provisions in Chapter 23.

Chapter 24

Commenter: James Mwangi, PhD, SE

It will be extremely burdensome for the Designer to keep the OSHPD integrated provisions from being applied to non-OSHPD projects. The manner in which the amendments are interspersed into the Chapter will cause confusion. Please amend by moving all of the provisions to a separate section at the end of the Chapter as DSA-SS/CC has done.

OSHPD Response: Separate contiguous sections for OSHPD categories 1, 1R, 2, 4 and 5 may be considered for inclusion into future editions of the California Building Code. Currently, sections specific only to OSHPD categories 1, 1R, 2, 4 and 5 are clearly labeled with the acronym [OSHPD 1, 1R, 2, 4 & 5] or variations of that depending on the applicable OSHPD categories to the provision. The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been incorporated in the 2019 CBC. Note that there is no A chapter for Chapter 24 and DSA/CC has no separate contiguous provisions in Chapter 24.

Chapter 25

Commenter: James Mwangi, PhD, SE

It will be extremely burdensome for the Designer to keep the OSHPD integrated provisions from being applied to non-OSHPD projects. The manner in which the amendments are interspersed into the Chapter will cause confusion. Please amend by moving all of the provisions to a separate section at the end of the Chapter as DSA-SS/CC has done.

OSHPD Response: Separate contiguous sections for OSHPD categories 1, 1R, 2, 4 and 5 may be considered for inclusion into future editions of the California Building Code. Currently, sections specific only to OSHPD categories 1, 1R, 2, 4 and 5 are clearly labeled with the acronym [OSHPD 1, 1R, 2, 4 & 5] or variations of that depending on the applicable OSHPD categories to the provision. The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been incorporated in the 2019 CBC. Note that there is no A chapter for Chapter 25 and DSA/CC has no separate contiguous provisions in Chapter 25.

Chapter 26

Commenter: James Mwangi, PhD, SE

It will be extremely burdensome for the Designer to keep the OSHPD integrated provisions from being applied to non-OSHPD projects. The manner in which the amendments are interspersed into the Chapter will cause confusion. Please amend by moving all of the provisions to a separate section at the end of the Chapter as DSA-SS/CC has done.

OSHPD Response: Separate contiguous sections for OSHPD categories 1, 1R, 2, 4 and 5 may be considered for inclusion into future editions of the California Building Code. Currently, sections specific only to OSHPD categories 1, 1R, 2, 4 and 5 are clearly labeled with the acronym [OSHPD 1, 1R, 2, 4 & 5] or variations of that depending on the applicable OSHPD categories to the provision. The provisions for hospital buildings as defined by new OSHPD categories 1R, 2 and 5 have been incorporated in the 2019 CBC. Note that there is no A chapter for Chapter 26 and DSA/CC has no separate contiguous provisions in Chapter 26.

Chapter 35

Commenter: John Chrysler, TMS 402/602 Committee

The correct address for TMS is: 105 South Sunset, Suite Q, Longmont, CO 80501-6172.

OSHPD Response: The address in Chapter 35 of the model code (2018 IBC) will be used instead, which is correct.

DETERMINATION OF ALTERNATIVES CONSIDERED AND EFFECT ON PRIVATE PERSONS

OSHPD has determined that no alternative 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. The proposed regulations will not have a cost impact to private persons.

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

OSHDP has determined that the proposed regulations will not have an adverse economic impact on small businesses. The proposed regulations are technical modifications that will provide clarification and consistency within the code.