

**INITIAL STATEMENT OF REASONS
FOR
PROPOSED BUILDING STANDARDS
OF THE
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
REGARDING THE 2007 AND 2010 CALIFORNIA EXISTING BUILDING CODE (CEBC), APPENDIX CHAPTER A3
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 10
(SEISMIC STRENGTHENING)
HCD EF 02/10**

The Administrative Procedure Act requires an Initial Statement of Reasons to be available to the public upon request when rulemaking action is being undertaken. The following are the reasons for proposing this emergency rulemaking action:

STATEMENT OF SPECIFIC PURPOSE AND RATIONALE:

(Government Code Section 11346.2 requires a statement of specific purpose of **EACH** adoption, amendment or repeal and the rationale of the determination by the agency that EACH adoption, amendment or repeal is reasonably necessary to carry out the purpose for which it is proposed.

- When repealing adopted California original standards, summarize the effect of the standards and explain why the standard is no longer necessary.
- When amending a standard, explain the standard proposed to be modified, explain the effect of the proposed modification, explain the inadequacy of the standards being modified, and explain why the proposed amendment is necessary.)

Specific Proposed Regulatory Actions:

HCD proposes to adopt by reference the 2009 International existing Building Code (IEBC), Appendix Chapter A3, with amendment into the 2007 and 2010 California Existing Building Code. HCD also proposes to add an updated reference standard to Appendix A "Referenced Standards". California amendments update the 2009 edition of the IEBC, provide clarity, specificity and direction to the code user and implement and make specific existing state laws. Proposed California amendments also incorporate code change proposals for the 2012 IEBC submitted to the International Code Council (ICC) at the 2009/2010 Code Development Hearings, which were approved at ICC Final Action Hearings in May 2010. HCD's incorporation of ICC approved changes to the 2012 IEBC will provide the most up-to-date requirements into the California Existing Building Code. HCD conducted a focus group meeting in May 2010 where stakeholders provided additional editorial and corrective comments resulting in amendments.

APPENDIX CHAPTER A3

PRESCRIPTIVE PROVISIONS FOR SEISMIC STRENGTHENING OF CRIPPLE WALLS AND SILL PLATE ANCHORAGE OF LIGHT, WOOD-FRAME RESIDENTIAL BUILDINGS

SECTION A301 GENERAL

Section A301.1 Purpose.

HCD proposes to adopt the above-listed model code section with amendment. This is an editorial amendment to ensure consistent terminology.

Section A301.2 Scope.

HCD proposes to adopt the above-listed model code section with amendment. This proposal makes editorial changes relocating requirements for alternative design methods to the section of Appendix Chapter A3 and removes an unnecessary reference to historic buildings in the Appendix. This proposal further clarifies that wall anchorage in Exception 3 applies to flexible diaphragms. The modification differentiates between the treatment of flexible and rigid diaphragms, recognizing that both can occur in the same building. This proposal clarifies the intent of the first paragraph of this section. The balance of the section, not shown, remains unchanged by this proposal. Appendix Chapter A3 originated as stand-alone provisions in various jurisdictions in California. In those conditions, it was appropriate to include scoping provisions to indicate that retrofit was only required or advised in areas of higher seismic risk. However, with their use in the IEBC, the provisions are either used to satisfy triggered upgrades via IEBC Section 101.5.4.2 or used for a voluntary seismic upgrade (allowed under IEBC Section 707.6). For both reasons, the scoping of the appendix chapter should not restrict their use to certain seismic design categories. The

sections of the IEBC where seismic upgrade triggers occur (see Sections 502.2.2, 707.5, or 807.4) do not distinguish between seismic design categories, so neither should the appendix chapter. The intent of this proposal is to permit this chapter's use at the option of the registered design professional regardless of seismic design category.

With the proposed modification, Appendix Chapter A3 could be used in all seismic design categories, although the following should be noted:

- Structures assigned to SDC A are exempt from most seismic provisions per ASCE 7-05 Section 11.7
- Dwellings in low seismic design categories are exempt from all seismic provisions per IBC Section 1613.1
- Residential buildings would not be assigned to Seismic Design Category F

Section A301.3 Alternative design procedures.

HCD proposes to adopt the above-listed model code section with amendment. This proposal is mostly editorial. It relocates three sentences from current Section A301.2 to Section A301.3 and makes coordinating revisions. These three sentences are clearly about alternative methods. They belong in Section A301.3, so this proposal moves them there, and edits them slightly for consistent terminology.

Once these sentences are relocated to Section A301.3, the current reference to Section A301.2 (in Section A301.3) is no longer needed. The other changes shown in Section A301.3 are editorial, for consistent terminology. In Section A304.1.1, the final sentence duplicates the relocated provision above and is proposed for deletion.

An added sentence allows the use of equivalent alternative prescriptive standards; some jurisdictions have in place an approved plan set already in use that is equal or better in seismic structural safety.

There is one substantive change: In the last of the three relocated sentences, the current call for "test data" is proposed for revision. The International codes typically allow alternatives, and test data are not always required. Reasonable alternatives can also be justified on the basis of engineering analysis, proprietary data, conventional methods, or other consensus documents derived from test data, but not necessarily based on that data directly. Approval of the enforcing agency is still required, and the key issues are identified in the rest of the sentence, which remains unchanged.

This proposal also responds to stakeholder comments received at an HCD focus group meeting.

SECTION A302 DEFINITIONS

ADHESIVE ANCHOR.

HCD proposes to adopt the above-listed model code section with amendment. This proposal is primarily editorial. It renames and revises the definitions of the two anchor types for consistency with definitions now used in ACI 318 Appendix D and other ICC-ES resources. It also makes editorial revisions as needed to reflect the revised terminology.

COMPOSITE PANEL.

HCD proposes to delete this definition. A new definition for composite panel is included in the new definition for wood structural panel. This change provides clarity and is consistent with the CBC definition. This proposal responds to stakeholder comments received at an HCD focus group meeting.

ENFORCING AGENCY.

HCD proposes to add the definition for enforcing agency. This addition provides clarity and is consistent with the CBC definition.

EXPANSION ANCHOR.

HCD proposes to adopt the above-listed model code section with amendment. This proposal is primarily editorial. It renames and revises the definitions of the two anchor types for consistency with definitions now used in ACI 318 Appendix D and other ICC-ES resources. It also makes editorial revisions as needed to reflect the revised terminology.

ORIENTED STRAND BOARD (OSB).

HCD proposes to delete this definition. A new definition for oriented strand board is included in the new definition for wood structural panel. This change provides clarity and is consistent with the CBC definition. This proposal responds to stakeholder comments received at an HCD focus group meeting.

PLYWOOD.

HCD proposes to delete this definition. A new definition for plywood is included in the new definition for wood structural panel. This change provides clarity and is consistent with the CBC definition. This proposal responds to stakeholder comments received at an HCD focus group meeting.

WAFERBOARD.

HCD proposes to delete this definition. Waferboard is a wood product not in production any longer. This deletion is intended to keep the code up to date with materials currently available. This proposal responds to stakeholder comments received at an HCD focus group meeting.

WOOD STRUCTURAL PANEL.

HCD proposes to replace the existing definition with the language provided in the CBC for consistency between the codes. This definition for wood structural panel also includes three sub-definitions that apply to this appendix as well. Composite panel, oriented strand board and plywood have been proposed for deletion in the definitions so these new definitions will replace them and retain consistency with the CBC. This proposal responds to stakeholder comments received at an HCD focus group meeting.

SECTION A303 STRUCTURAL WEAKNESSES

HCD proposes to adopt the above-listed model code section with amendment. This proposal makes the provision more consistent and enforceable. The intent of this section is to identify non-conforming conditions expected to lead to deficient performance. The conditions should be objectively defined, as they are for all but Item 1. Therefore, this proposal modifies Item 1 to make it consistent with the rest of the section. This proposal also contains editorial changes for consistency.

Approval of alternate conditions remains a possibility under Section A301.3, but “approval” is not the subject of Section A303.

SECTION A304 STRENGTHENING REQUIREMENTS**Section A304.1.1 Scope.**

HCD proposes to adopt the above-listed model code section with amendment. The final sentence duplicates the relocated provision in Section 301.3 and is proposed for deletion.

Section A304.1.3 Floor joists not parallel to foundations.

HCD proposes to adopt the above-listed model code section with amendment. In the last paragraph of Section A304.1.3, $\frac{3}{4}$ ” plywood is referenced as 23/32” as this is more common at lumberyards. The reference to the figures is updated to account for the amendments to the figures.

Section A304.1.4 Floor joists parallel to foundations.

HCD proposes to adopt the above-listed model code section with amendment. The reference to the figures is updated to account for the amendments to the figures.

Section A304.2.2 Evaluation of existing foundations.

HCD proposes to adopt the above-listed model code section with amendment. This proposal is primarily editorial, for clarity and consistency of terminology. The exception allows interior foundation walls to resist lateral forces coming from the perimeter of the building. The design professional responsible for the new non-perimeter foundation should also check the diaphragm as part of this offset load path.

Section A304.2.3 Details for new perimeter foundations.

HCD proposes to adopt the above-listed model code section with amendment. In Section A304.2.3, a general reference to the building code is proposed so that subsequent Sections A304.2.5 and A304.2.6 don't each need to refer to the building code. The final sentence of the section is merely relocated from Exception 1. Since the referenced details have no provisions for minimum under-floor clearances, this allowance for enforcing agency discretion is not actually an Exception. This is an editorial change. Exception 2 is edited for consistent terminology.

Section A304.2.4 New concrete foundations.

HCD proposes to adopt the above-listed model code section with amendment. Section A304.2.4 is merely re-titled for consistency.

Section A304.2.5 New hollow-unit masonry foundations.

HCD proposes to adopt the above-listed model code section with amendment. Section A304.2.5 is clarified by the addition of a minimum grout strength consistent with the code for new construction, a reflection of standard practice that improves these prescriptive provisions.

Section A304.2.6 New sill plates.

HCD proposes to adopt the above-listed model code section with amendment. This proposed amendment is part of a series of new amendments to Sections A304.2.3 through A301.2.6, including both substantive and editorial revisions for clarity and consistency of terminology. In Section A304.2.6, references to the building code are unnecessary because a general requirement was added to Section A304.2.3. New provisions address sill plates on new foundations. The construction of new footings will likely require a new sill plate. The proposal makes requirements for this new member and connectors. This proposal also responds to stakeholder comments received at an HCD focus group meeting.

Section A304.3.1 Existing perimeter foundations.

HCD proposes to adopt the above-listed model code section with amendment. This proposal renames and revises the definitions of two anchor types for consistency with ACI 318 Appendix D and ICC-ES resources. This proposal also adds a reference to manufacturer's recommendations, which is standard practice, especially for expansion anchors, which are typically proprietary. Verification by the enforcing agency is adequately covered in Section A304.5, so a sentence has been proposed for deletion to avoid duplication. This proposal includes editorial changes to provide clarity and consistency.

Section A304.3.2 Placement of anchors.

HCD proposes to adopt the above-listed model code section with amendment. The sentence about "lengths of sill plate less than 30 inches" duplicates a requirement already in Table A3-B, referenced in the previous sentence. It is proposed for deletion to avoid duplication. Other revisions are editorial to ensure consistent terminology. This proposal also responds to stakeholder comments received at an HCD focus group meeting.

Section A304.3.3 New perimeter foundations.

HCD proposes to adopt the above-listed model code section with amendment. This is an editorial amendment to ensure consistent terminology.

Section A304.4.1 General.

HCD proposes to adopt the above-listed model code section with amendment. This is an editorial amendment to improve clarity and consistent terminology.

Section A304.4.1.1 Sheathing installation requirements.

HCD proposes to adopt the above-listed model code section with amendment. This is an editorial amendment to improve clarity and consistent terminology. It also is consistent with an amendment to Figure A3-7. The proposed deletion avoids conflict with the current code. Currently, nail placement is 3/8 inch from the edge of a stud, so the existing standard will rule. This proposal also responds to stakeholder comments received at an HCD focus group meeting.

Section A304.5 Quality control.

HCD proposes to adopt the above-listed model code section with amendment. This proposal renames this section "INSPECTIONS". It is not the inspector's duty to check quality control, but to check for compliance through inspections. This proposal renames the definitions of two anchor types for consistency with ACI 318 Appendix D and ICC-ES resources. This is an editorial amendment to improve clarity and consistent terminology. This proposal also responds to stakeholder comments received at an HCD focus group meeting.

Section A304.5.1 Nails.

HCD proposes the above-listed new California amendment. The chapter makes many references to nails, but does not always indicate "Common Wire Nails". Many different types of nails are sold at lumber supply yards and hardware stores, so choosing the appropriate type of nail may be confusing. Furthermore, the substitution of inadequate nails is commonplace where diameter and length are not specified. This proposal clarifies what is required by requiring nails used with heavy framing connectors to be in accordance with an approved report.

Section A304.6 Phasing of the strengthening work.

HCD proposes to delete the requirement to work on parallel sides of a structure at the same time. This proposal removes an unnecessary and possibly costly provision; single-family residences do not always have parallel sides, making it difficult to implement the original requirement. This proposal responds to stakeholder comments received at an HCD focus group meeting.

TABLE A3-A.

HCD proposes to adopt the above-listed model code table with amendment. Editorial changes in terminology are for consistency. The requirement for washer size is amended to be consistent with the IRC and Figure A3-3. This proposal responds to stakeholder comments received at an HCD focus group meeting.

TABLE A3-B.

HCD proposes to adopt the above-listed model code table with editorial amendment for consistency.

FIGURE A3-1—NEW REINFORCED CONCRETE FOUNDATION SYSTEM

HCD proposes to delete existing FIGURE A3-1—NEW REINFORCED CONCRETE FOUNDATION SYSTEM and substitute proposed FIGURE A3-1—NEW REINFORCED CONCRETE FOUNDATION SYSTEM.

Proposed revision to Figure A3-1 does the following:

- Deletes nails shown at floor sill plate, as they are not required and do not apply to any work required by Sections A304.2.3 and A304.3.3 that reference this Figure.
- Corrects table to add vertical reinforcing requirements for foundations supporting one story. The 2009 table has column heading text in the wrong row and mistakenly omits data for 1-story houses.
- Requires two #4 continuous bars for the lower footing section in lieu of one #4 continuous, as well as horizontal reinforcing at 16 inches on center. This is standard practice and is more appropriate for a prescriptive detail, especially when the footing is 18" wide, to help account for expansive or otherwise marginal soil not explicitly addressed by the prescriptive retrofit design.
- Requires 3" clear dimension to the edge of the footing to ensure code compliance for footings cast against the earth.
- Adds a note clarifying sill plate may be new or existing when foundation is replaced.
- Adds a note to "clean and roughen" the footing, standard practice for foundations made with two pours.
- Corrects leader for reference to "H"
- Calls out #4 vertical bars to clarify the intent of the table. Calls for alternating hooks which is a good standard practice.
- Other editorial clarifications, including consistent terminology for "floor framing," "sill plate," "sole plate" (the horizontal plate above the floor line), and "anchors".
- Changes in wording for clarity on footnote "C" regarding expansive soil. No change in regulatory effect. This proposal responds to stakeholder comments received at an HCD focus group meeting.

FIGURE A3-2—NEW HOLLOW-MASONRY UNIT FOUNDATION WALL

HCD proposes to delete existing FIGURE A3-2—NEW HOLLOW-MASONRY UNIT FOUNDATION WALL and substitute proposed FIGURE A3-2—NEW CONCRETE MASONRY FOUNDATION.

Proposed revision to Figure A3-2 does the following:

- Deletes nails shown at floor sill plate, as they are not required and do not apply to any work required by Sections A304.2.3 and A304.3.3 that reference this Figure.
- Corrects typo. Sill plate call-out should read "2x6".
- Corrects graphical inconsistency for depth of embedment and height above grade.
- Requires two #4 continuous for the lower footing section in lieu of one #4 continuous. This is standard practice and is more appropriate, especially when footing is 18" wide.
- Other editorial clarifications, including consistent terminology for "enforcing agency," "floor framing," "sill plate," "sole plate" (the horizontal plate above the floor line), and "anchors".

- Changes in wording for clarity on footnote “C” regarding expansive soil. No change in regulatory effect. This proposal responds to stakeholder comment at an HCD focus group meeting.

FIGURE A3-3—SILL PLATE BOLTING TO EXISTING FOUNDATION

HCD proposes to delete FIGURE A3-3—SILL PLATE BOLTING TO EXISTING FOUNDATION and substitute proposed FIGURE A3-3—SILL PLATE BOLTING TO EXISTING FOUNDATION.

Proposed revision to Figure A3-3 does the following:

- Deletes nails shown at floor sill plate, as they are not required and do not apply to any work required by Section A304.3.1 that references this Figure.
- Clarifies that filling oversized holes with adhesive is required only for adhesive anchors, not expansion anchors.
- Changes washer requirement and size to match current code requirements.
- Requires that new anchors be installed clear of existing reinforcing.
- Other editorial clarifications, including consistent terminology for “floor framing,” “sill plate,” “sole plate” (the horizontal plate above the floor line), and “anchor”.

FIGURE A3-4A—SILL PLATE BOLTING IN EXISTING FOUNDATION—ALTERNATE

HCD proposes to delete FIGURE A3-4A—SILL PLATE BOLTING IN EXISTING FOUNDATION—ALTERNATE and substitute FIGURE A3-4A—ALTERNATE SILL PLATE BOLTING IN EXISTING FOUNDATION WITHOUT CRIPPLE WALLS AND FLOOR FRAMING NOT PARALLEL TO FOUNDATIONS.

Proposed revision to Figure A3-4A does the following:

- Deletes nails shown at floor sill plate, as they are not required and do not apply to any work required by Section A304.3.1 that references this Figure. The correct citation is Section A304.1.3
- Adds notes regarding shims. Typical hardware (Simpson, for example) limits shim thickness to 1-1/2”.
- Revises plate detail to indicate that 1/4” screws are used from the shim to the sill. Extends the leader from the 5/16” diameter holes to the center-top hole in the metal plate. Changes reference to “lag screws” in the 5/16” call out to “holes” since the upper holes in the metal plate must be 5/16” to accept a 1/4” lag screw.
- Adds note to isolate wood shim from the foundation with moisture barrier.
- Revises title.
- Other editorial clarifications, including consistent terminology for “floor framing,” “sill plate,” “naturally durable wood” “sole plate” (the horizontal plate above the floor line), and “anchors”. These clarifications respond to stakeholder comments received at an HCD focus group meeting.

FIGURE A3-4B—SILL PLATE BOLTING TO EXISTING FOUNDATION WITHOUT CRIPPLE WALL AND FRAMING PARALLEL TO THE FOUNDATION WALL

HCD proposes to delete FIGURE A3-4B—SILL PLATE BOLTING TO EXISTING FOUNDATION WITHOUT CRIPPLE WALL AND FRAMING PARALLEL TO THE FOUNDATION WALL and substitute proposed FIGURE A3-4B—ALTERNATE SILL PLATE ANCHOR TO EXISTING FOUNDATION WITHOUT CRIPPLE WALL AND FLOOR FRAMING PARALLEL TO FOUNDATIONS.

Proposed revision to Figure A3-4B does the following:

- Deletes nails shown at floor sill plate, as they are not required and do not apply to any work required by the section that references this Figure.
- References shim requirements on Figure A3-4A.
- Revises title.

FIGURE A3-4C—SILL PLATE BOLTING IN EXISTING FOUNDATION—ALTERNATE

HCD proposes to delete FIGURE A3-4C—SILL PLATE BOLTING IN EXISTING FOUNDATION—ALTERNATE and substitute FIGURE A3-4C—SILL PLATE ANCHORING TO EXISTING FOUNDATION ALTERNATE.

Proposed revision to Figure A3-4C does the following:

- Indicates 1½” maximum dimension for shim.
- Adds note that shim should be preservative treated or redwood as it is in contact with the ground.
- Adds note for shim to be foundation grade redwood or preservative treated wood. If preservative treated wood is used, it shall be isolated from the foundation with a moisture barrier.

FIGURE A3-5—CRIPPLE WALL BRACING WITH WOOD STRUCTURAL PANEL ON EXTERIOR FACE OF CRIPPLE STUDS

HCD proposes to delete FIGURE A3-5—CRIPPLE WALL BRACING WITH WOOD STRUCTURAL PANEL ON EXTERIOR FACE OF CRIPPLE STUDS and substitute proposed FIGURE A3-5—CRIPPLE WALL BRACING WITH NEW WOOD STRUCTURAL PLANEL ON EXTERIOR FACE OF CRIPPLE STUDS.

Proposed revision to Figure A3-5 does the following:

- Deletes nails shown at floor sill plate, as they are not required and do not apply to any work required by the section that references this Figure.
- Adds references to other Figures.
- Other editorial clarifications, including consistent terminology for “floor framing,” “sill plate,” “sole plate” (the horizontal plate above the floor line), and “anchors”.

FIGURE A3-6—CRIPPLE WALL BRACING WITH WOOD STRUCTURAL PANEL ON INTERIOR FACE OF CRIPPLE STUDS

HCD proposes to delete FIGURE A3-6—CRIPPLE WALL BRACING WITH WOOD STRUCTURAL PANEL ON INTERIOR FACE OF CRIPPLE STUDS and substitute proposed FIGURE A3-6—CRIPPLE WALL BRACING WITH WOOD STRUCTURAL PANEL ON INTERIOR FACE OF CRIPPLE STUDS.

Proposed revision to Figure A3-6 does the following:

- Deletes nails shown at floor sill plate, as they are not required and do not apply to any work required by the section that references this Figure.
- Adds note to caution against splitting the block and to recommend pre-drilling.
- Other editorial clarifications, including consistent terminology for “floor framing,” “sill plate,” “sole plate” (the horizontal plate above the floor line), and “anchors”.

FIGURE A3-7—PARTIAL CRIPPLE STUD WALL ELEVATION

HCD proposes to delete FIGURE A3-7—PARTIAL CRIPPLE STUD WALL ELEVATION and substitute proposed FIGURE A3-7—PARTIAL CRIPPLE STUD WALL ELEVATION.

Proposed revision to Figure A3-7 does the following:

- “Vertical splice at double stud”: Changes 16d face nail of studs to 10d @ 4” on center. 16d nails are 3 ½” thus potentially penetrating ½” past double 2x4’s. 10d nails at reduced spacing will lead to less chance of splitting but give even greater capacity.
- “Vertical splice at single stud”: Deletes ½” requirement for nail to edge of stud, as this is not required for new construction.
- Clarifies the requirement for stud thickness at vertical panel joints.
- Editorial change for clarity, the term “framing clip” replaces “sheet metal connectors”. This change responds to stakeholder comments received at an HCD focus group meeting.

- Other editorial revisions, including corrections to leader lines and more accurately displayed field nail spacing.

FIGURE A3-8—ALTERNATE BLOCKING WHERE RIM JOIST OR BLOCKING HAS BEEN OMITTED

HCD proposes to delete FIGURE A3-8—ALTERNATE BLOCKING WHERE RIM JOIST OR BLOCKING HAS BEEN OMITTED. HCD proposes to insert three new figures: FIGURE A3-8A—TYPICAL FLOOR TO CRIPPLE WALL CONNECTION (FLOOR JOISTS NOT PARALLEL TO FOUNDATIONS), FIGURE A3-8B—TYPICAL FLOOR TO CRIPPLE WALL CONNECTION (FLOOR JOISTS PARALLEL TO FOUNDATIONS), and FIGURE A3-8C—TYPICAL FLOOR TO MUDSILL CONNECTIONS.

This proposal updates and replaces Figure A3-8, and it makes corresponding revisions to the text. The 2009 figure proposed for replacement or modification is rarely used, as it has been found to be impractical or of limited capacity. 2009 Figure A3-8 attempted to address the floor-to-cripple wall attachment with a plywood gusset concept for both parallel and nonparallel floor framing conditions. However, the approach was both uneconomical and of limited capacity due to a poor connection between the top of the gusset and the floor diaphragm. In 2009 Figure A3-8, there is no attachment between the top of the plywood gusset and the floor diaphragm. Thus, the detail relies for shear transfer on compression of a plywood gusset with an unsupported top.

The proposed figure illustrates preferred approaches for creating a load path between the existing floor structure and either the top of the cripple wall (Figures A3-8A and A3-8B) or the sill plate (Figure A3-8C). These new Figures systematically address the four most common conditions found in houses eligible for Appendix Chapter A3 with reliable and cost effective details. Similar to portions of 2009 Figure A3-8, these new details utilize readily available and well-documented metal fasteners.

The 2009 details have been modified to provide a simpler and more reliable attachment to the floor diaphragm that does not risk damage to the interior flooring.

FIGURE A3-9—CONNECTION OF CRIPPLE WALL TO FLOOR SHEATHING WHEN FLOOR FRAMING IS PARALLEL TO WALL

HCD proposes to delete FIGURE A3-9—CONNECTION OF CRIPPLE WALL TO FLOOR SHEATHING WHEN FLOOR FRAMING IS PARALLEL TO WALL and substitute FIGURE A3-9—ALTERNATE FLOOR FRAMING TO CRIPPLE WALL CONNECTION.

This proposal updates and replaces Figure A3-9, and makes corresponding revisions to the text. The 2009 figure proposed for replacement or modification is rarely used, it has been found to be impractical or of limited capacity. 2009 Figure A3-9 attempted to address the floor-to-cripple wall attachment with a plywood gusset concept for both parallel and nonparallel floor framing conditions. However, the approach was both uneconomical and of limited capacity due to a poor connection between the top of the gusset and the floor diaphragm. 2009 Figure A3-9 indicates an attachment to the floor diaphragm, but this attachment would be made with shot nails or wood screws into the existing flooring, which is not recommended.

Proposed Figure A3-9 is a modification of 2009 Figure A3-8 with the upper portion of 2009 Figure A3-9 retained as an alternative for cases where the plywood gusset approach might be suitable. The 2009 details have been modified to provide a simpler and more reliable attachment to the floor diaphragm that does not risk damage to the interior flooring.

FIGURE A3-10—FLOOR PLAN – CRIPPLE WALL BRACING LAYOUT

HCD proposes to adopt FIGURE A3-10—FLOOR PLAN – CRIPPLE WALL BRACING LAYOUT from the model code with amendment. The amendment corrects measurements for consistency with the current code. This correction responds to stakeholder comments received at an HCD focus group meeting.

Proposed Figure A3-10 specifies the bracing requirements for 1-, 2- and 3-story buildings.

APPENDIX A REFERENCED STANDARDS

ASTM

HCD proposes to add *A 653/A 653M-08 Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process* as referenced in the California Building Code. This amendment provides consistency with the CBC.

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

(Government Code Section 11346.2(b)(2) requires an identification of each technical, theoretical, and empirical study, report, or similar document, if any, upon which the agency relies in proposing the regulation(s).)

International Code Council 2009/2010 Code Development Cycle, "Proposed Changes to the 2009 edition of the International Existing Building Code". (Posted 08/25/2009.)

International Code Council 2009/2010 Code Development Cycle, "Report of the Public Hearing on the 2009 edition of the International Existing Building Code". (Posted 12/17/2009.)

CONSIDERATION OF REASONABLE ALTERNATIVES

(Government Code Section 11346.2(b)(3)(A) requires a description of reasonable alternatives to the regulation and the agency's reason for rejecting those alternatives. In the case of a regulation that would mandate the use of specific technologies or equipment or prescribe specific action or procedures, the imposition of performance standards shall be considered as an alternative.)

None. There were no alternatives available to HCD. HCD is required by statute to adopt model codes by reference.

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

(Government Code Section 11346.2(b)(3)(B) requires a description of any reasonable alternatives that have been identified or that have otherwise been identified and brought to the attention of the agency that would lessen any adverse impact on small business. Include facts, evidence, documents, testimony, or other evidence upon which the agency relies to support an initial determination that the action will not have a significant adverse impact on business.)

HCD has determined that this regulatory action would not have an adverse impact on small business.

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

(Government Code Section 11346.2(b)(4) requires the facts, evidence, documents, testimony, or other evidence on which the agency relies to support an initial determination that the action will not have a significant adverse economic impact on business.)

None.

DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS

(Government Code Section 11346.2(b)(5) requires a department, board, or commission within the Environmental Protection Agency, the Resources Agency, or the Office of the State Fire Marshal to describe its efforts, in connection with a proposed rulemaking action, to avoid unnecessary duplication or conflicts with federal regulations contained in the Code of Federal Regulations addressing the same issues. These agencies may adopt regulations different from these federal regulations upon a finding of one or more of the following justifications: (A) The differing state regulations are authorized by law and/or (B) The cost of differing state regulations is justified by the benefit to human health, public safety, public welfare, or the environment. It is not the intent of this paragraph to require the agency to artificially construct alternatives or to justify why it has not identified alternatives.)

These regulations neither duplicate nor conflict with federal regulations.