



ADMINISTRATIVE BULLETIN

NO. AB-108 :
DATE : April 16, 2014
SUBJECT : Permit Processing and Issuance
TITLE : **Application of California Existing Building Code, Appendix Chapter A3**

PURPOSE : The purpose of this Bulletin is to detail procedures for the application of California Existing Building Code (CEBC), Appendix Chapter A3, Prescriptive Provisions for Seismic Strengthening of Cripple Walls and Sill Plate Anchorage of Light, Wood-Frame Residential Buildings. This Bulletin also provides guidance for property owners which to take advantage of the incentive programs being offered by the California Residential Mitigation Program.

REFERENCE :
• 2013 California Existing Building Code (CEBC), Appendix Chapter A3
• California Residential Mitigation Program's Earthquake Brace and Bolt website: <http://www.earthquakebracebolt.com/>

DISCUSSION : The 2013 CEBC, Appendix Chapter A3 has been adopted as part of the California Code of Regulations, Title 24, Part 10. This code supplements the California Building Code, Title 24, Part 2. It provides prescriptive provisions for voluntary seismic strengthening of foundations, cripple walls and sill plate anchorage of certain wood-frame residential buildings.

Due to restrictions on cripple wall height, the prescriptive provisions of CEBC, Appendix Chapter A3 apply to a limited number of buildings in San Francisco. Where the prescriptive limits for height of cripple walls are exceeded, buildings may be considered to meet CEBC, Appendix Chapter A3 when approved by the Department.

The voluntary implementation of the strengthening provisions of CEBC, Appendix Chapter A3 can be expected to reduce earthquake damage in residential buildings; however such provisions are not intended to meet any specific seismic performance goal. The strengthening of individual buildings will result in an improvement in the resilience of citywide building stock and will aid the City in meeting its earthquake resilience goals such as residential shelter-in-place.

The use of these prescriptive provisions will assist San Francisco building owners in strengthening buildings by providing a clear set of construction requirements and by allowing building owners to qualify for assistance from various seismic improvement programs. Building owners using the prescriptive provisions will not need to engage the services of a registered design professional and will generally find that seismic improvement design and construction costs are reduced *compared to engineered retrofits*.

SCOPE

It is the intent of the Department of Building Inspection to allow the application of the provisions of CEBC, Appendix Chapter A3 to residential buildings of Occupancy Classifications R-3 and R-3.1.

IMPLEMENTATION

Permits seeking to comply with this Administrative Bulletin shall be in accordance with CEBC, Appendix Chapter A3. The complete adopted text of CEBC, Appendix Chapter A3 may be found at: http://www.ecodes.biz/ecodes_support/free_resources/2013California/13Building/PDFs/Chapter%20A3%20-%20Prescriptive%20Provisions%20for%20Seismic%20Strengthening.pdf

PLAN REVIEW AND PERMIT ISSUANCE

On-line, over-the-counter and other expedited forms of permit issuance shall be allowed for work that fully complies with CEBC, Appendix Chapter A3.

If proposed work does not conform to all prescriptive requirements or exceeds the scope of CEBC, Appendix Chapter A3, either over-the-counter plan review or submittal of permit application shall be required. Submitted applications will be processed in accordance with standard Department procedures.

PERMIT SUBMITTAL DOCUMENTS

Each building permit application that is submitted to comply with CEBC, Appendix Chapter A3 must clearly state in the "Project Description" portion of the application, "This Permit is for work to be performed in general conformance with California Existing Building Code, Appendix Chapter A3."

For Permits that Conform to all Prescriptive Requirements of CEBC, Appendix Chapter A3

A simplified plan shall be prepared for work that meets all of the requirements of CEBC, Appendix Chapter A3 and this bulletin. Such plan shall include:

1. approximate length and height along each wall line.
2. number of stories above each wall line or portion of wall line
3. approximate percentage of each wall line or portion of wall line proposed to be braced

This plan need not be prepared by a licensed design professional provided the proposed design does not exceed the limitations under state law requiring a licensed design professional.

Permits that fully comply with A3 shall be issued over-the-counter. Field inspection by Department staff shall verify that work is done in conformance with prescriptive requirements.

For Permits that Do Not Conform to all Prescriptive Requirements of CEBC, Appendix Chapter A3

Submittal documents prepared by a licensed design professional must accompany a permit application for work that does not conform to all of the prescriptive requirements of CEBC, Appendix Chapter A3. Such submittal documents must show:

1. A plan of the floor(s) or level(s) to be reinforced showing
 - a. approximate length and height along each wall line.
 - b. number of stories above each wall line or portion of wall line.
 - c. approximate location of proposed bracing.

2. For cripple walls that are proposed to be braced that are over 4 feet in height in buildings up to two stories, or over 14 inches in height for three story buildings, a stamped and signed analysis by a registered design professional or other submittal documentation determined acceptable by the Department *shall be submitted showing that the proposed alternatives are equivalent to CEBC, Appendix Chapter A3 in strength, deflection and capacity.*
3. For new or partial foundation construction to be undertaken as part of the CEBC, Appendix A3 upgrade work, engineered foundation plans meeting the requirements of the San Francisco Building Code prepared by a registered design professional shall be submitted.

PLAN REVIEW BY OTHER CITY AGENCIES

Review by agencies other than the Department of Building Inspection shall be in accordance with standard plan review guidelines.

Specific conditions of permit approval may be required by other City agencies. Project sponsors should carefully review all comments and notes on plans and permits regarding such conditions of approval.

FEEES

Fees for plan review and permit issuance by all agencies shall be as detailed in San Francisco codes and regulations

TRIGGERED CODE REQUIREMENTS

Water heater bracing is required to be part of all CEBC, Appendix Chapter A3 seismic strengthening work. For approved water heater bracing details, see

http://www.seismic.ca.gov/HOG/waterheaterbracing_08-11-04.pdf

Smoke detectors and carbon monoxide detectors are required to be installed at the time of this work, unless already in place.

Water conservation devices for toilets and showers may be required to be installed at the time of this work. For more information on these requirements, please see Chapter 13A of the SF Building Code for Commercial Water Conservation at:

[http://www.amlegal.com/nxt/gateway.dll/California/sfbuilding/buildingcode2013edition/chapter13acommercialwaterconservation?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:sanfrancisco_ca\\$anc=JD_BChapter13A](http://www.amlegal.com/nxt/gateway.dll/California/sfbuilding/buildingcode2013edition/chapter13acommercialwaterconservation?f=templates$fn=default.htm$3.0$vid=amlegal:sanfrancisco_ca$anc=JD_BChapter13A)

or Chapter 12A of the SF Housing Code for Residential Water Conservation at:

[http://www.amlegal.com/nxt/gateway.dll/California/sfbuilding/housingcode2013edition/chapter12aresidentialwaterconservation?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:sanfrancisco_ca\\$anc=JD_HChapter12A](http://www.amlegal.com/nxt/gateway.dll/California/sfbuilding/housingcode2013edition/chapter12aresidentialwaterconservation?f=templates$fn=default.htm$3.0$vid=amlegal:sanfrancisco_ca$anc=JD_HChapter12A)

Other code requirements may be triggered by this voluntary seismic upgrade work. Department of Building Inspection staff, including field inspection staff, can provide further information on such requirements.

INSPECTION AND SPECIAL INSPECTION

The following requirements apply to all construction work undertaken to comply with CEBC, Appendix Chapter A3.

A copy of building permit(s) and all approved construction documents issued for the work shall be available on the job site for reference by Department inspection staff.

When approved by the Department, special Inspection is not required for adhesive, expansion, or other foundation anchor elements or for other related construction when work is strictly in accordance with the prescriptive requirements of CEBC, Appendix Chapter A3. Special inspection may be required for other elements as designated by the Department in accordance with the requirements of San Francisco Building Code, Chapter 17. Approved construction documents should be carefully reviewed for any such special inspection requirements.

Final inspection shall be made by Department inspection staff confirming completion of all work necessary to conform to CEBC, Appendix Chapter A3, including proper installation of wall bracing elements.

COMPLETION OF WORK

Upon completion of permit work, including final inspection, submittal and approval of any Special Inspection documents and verification of compliance with all conditions of approval, documents confirming completion of work will become part of the permanent record at the Department of Building Inspection.

RECORDKEEPING AND REPORTING

A list of buildings by street address and by block and lot number for which work has been completed to strengthen according to CEBC, Appendix Chapter A3 will be maintained and made public on the Department's website.

Signed by:

Tom C. Hui
Tom C. Hui, S.E., C.B.O.
Director
Department of Building Inspection

4/16/14
Date

Approved by Building Inspection Commission on April 16, 2014

Attachment A: California Existing Building Code Appendix Chapter A3
http://www.ecodes.biz/ecodes_support/free_resources/2013California/13Building/PDFs/Chapter%20A3%20-%20Prescriptive%20Provisions%20for%20Seismic%20Strengthening.pdf