

INITIAL STATEMENT OF REASONS
FOR
PROPOSED BUILDING STANDARDS
OF THE
OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT

REGARDING THE
2007 CALIFORNIA BUILDING CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2, VOLUME 2, STRUCTURAL

The Administrative Procedure Act (APA) requires that an Initial Statement of Reasons be available to the public upon request when a rulemaking action is being undertaken. The following information required by the APA pertains to this particular rulemaking action:

STATEMENT OF SPECIFIC PURPOSE AND RATIONALE:

CHAPTER 16A – STRUCTURAL DESIGN

Section 1602A.1

Definition of the term “Alternative System”, which is widely used in the 2007 California Building Code (CBC), is added to provide clarity.

Sections 1614A.1.3

Revision to commentary Section R2.2 in ACI 318-08 indicate that intermediate precast concrete shear walls will produce walls having minimum strength and toughness equivalent to ordinary reinforced concrete structural walls of cast-in-place concrete. ASCE 7-05 Table 12.2-1 prohibits the use of ordinary reinforced concrete shear walls in Seismic Design Categories D, E & F, because of low ductility and potential loss of structural integrity during design earthquake. Since intermediate precast concrete shear walls are equivalent to ordinary cast-in-place concrete walls, they are prohibited in this section.

Sections 1614A.1.7 & 1614A.1.17

Results from Applied Technology Council (ATC) ATC - 63: “Qualification of Building System Performance and Response Parameters”, indicate that buildings may fail at an unacceptable low seismic level if designed to American Society of Civil Engineers (ASCE) ASCE 7-05 minimum base shear requirements. ASCE 7-05 Supplement No. 2, which is adopted as part of this rulemaking, will mitigate this deficiency in the minimum base shear requirement.

CHAPTER 19A – CONCRETE

Section 1917A.2

American Concrete Institute (ACI) has created a new standard, ACI 503.7-07, "Specification for Crack Repair by Epoxy Injection", which provides guidance for the repair of cracks that intersect at least one accessible surface of concrete or masonry. Section 1917A.2 is added to adopt the new ACI 503.7-07 standard for crack repairs, thereby eliminating the need for design criteria for concrete and masonry repairs.

CHAPTER 35 – REFERENCED STANDARDS

Supplements to two referenced standards, ASCE 7-05 and ASCE 41-06, that have been issued since the adoption of 2007 CBC are being adopted in this chapter. Also, reference to ACI 503.7-07 is adopted for crack repair by epoxy injection for concrete and masonry.

APPENDIX CHAPTER 1 – ADMINISTRATION

Section 104.11.4

This section codifies the current OSHPD practice of requiring earthquake monitoring instruments when using an alternative Lateral Force Resisting System (LFRS), based on recommendations of the Hospital Building Safety Board (HBSB). This is a clarification of the requirement in Appendix Chapter 1, Section 104.11 as currently interpreted by OSHPD. Alternative LFRS are not addressed or only partially addressed in the 2007 CBC, hence require considerable engineering judgment by engineering community and the enforcement agency. Because the performance of these systems are not fully documented, earthquake instrumentation to monitor their performance is desirable.

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

- ASCE 7-05 “Minimum Design Loads for Buildings and Other Structures”
- ASCE 41-06 “Seismic Rehabilitation of Existing Buildings”
- ACI 318-08 “Building Code Requirements for Structural Concrete and Commentary”
- ACI 503.7-07 “Specification for Crack Repair by Epoxy Injection”

CONSIDERATION OF REASONABLE ALTERNATIVES

The alternative to these proposed regulations would be to leave regulations as they are. The alternative was rejected, since it would leave design requirements that are outdated from the current national standards.

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

There will be no overall adverse cost impact on small business.

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

The regulations proposed will have no overall cost impact on business, since they are equivalent to current requirements in the Code.

DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS

The proposed code changes do not duplicate or conflict with federal regulations..