

# California Code Adoption for Local Jurisdictions

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Presented by  
Stuart Tom, P.E., CBO



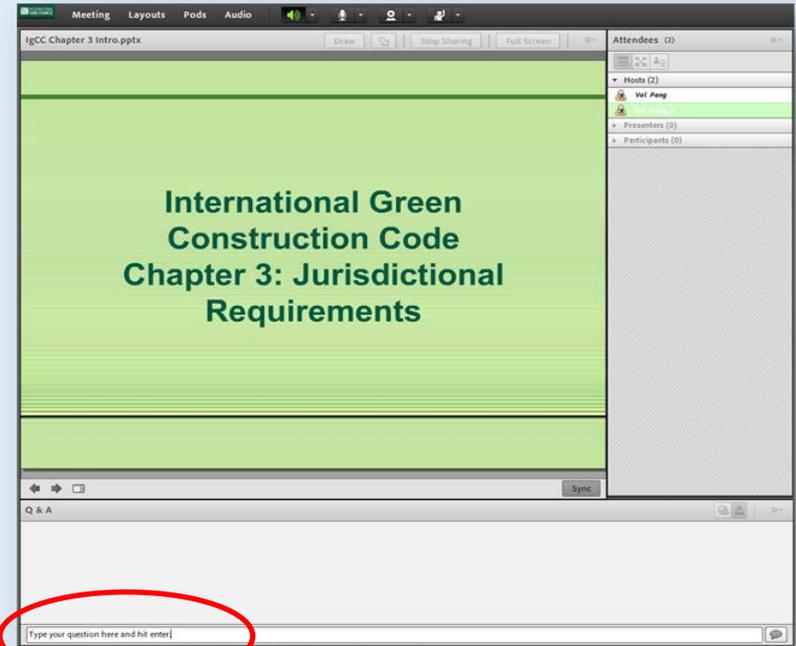
# Description

This webinar addresses the local adoption process in California. With the new codes being adopted and published for California, jurisdictions have until January 2014 to complete local amendment ordinances and file them with California Building Standards Commission.



# 10-Minute Q & A

- At any time during the presentation, please type your questions into the Q & A portion of Adobe Connect Box.
- The facilitator\speaker will respond to your questions at the end of the webinar.



**Type your questions into here.**

**Then hit enter or the send button.**



# Welcome



- Jim McGowan
- Executive Director
- California Building Standards Commission



# Presenter

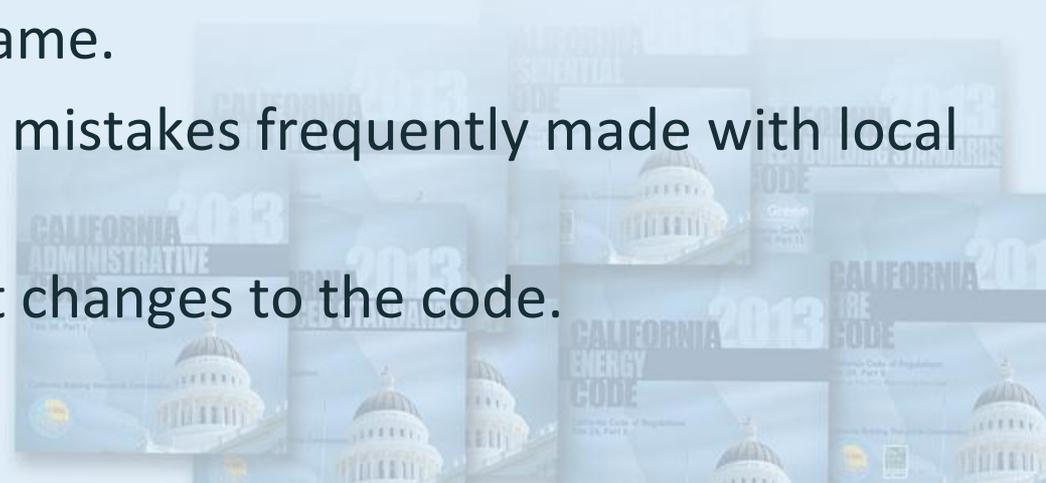


- Stuart Tom, P.E., CBO
- Glendale, California



# Objectives

- Upon completion, participants will be better able to:
  - Identify the California codes in Title 24, California Building Standards Code.
  - Describe the local adoption process and legal authorities relating to the process.
  - Describe the California code adoption timeline including local adoption time frame.
  - Describe the common mistakes frequently made with local code adoption.
  - Identify the significant changes to the code.



# Introduction

- So is it really time to adopt another code ?
- Haven't things settled down since we've been using the I-Codes for a while now ?
- Is California proposing many changes to the model codes ?
- How much of my current locally adopted code will be reusable ?
- ... I think I know what I'm doing, have I been doing it right ?



# Today's Topics

- List of codes will we be adopting
- Local adoption process & legal authorities
- Timeline
  - Where are we?
  - Where do we need to be?
  - How do we get there?
- Frequent mistakes
- Significant changes & things to be aware of



# California Codes

- What is Title-24, C.C.R. ?
  - “California Building Standards Code”
  - Organized into 12 separate parts:

**CA Administrative Code**

**CA Building Code**

**CA Residential Code**

**CA Electrical Code**

**CA Mechanical Code**

**CA Plumbing Code**

**CA Energy Code**

**CA State Historical Building Code**

**CA Fire Code**

**CA Existing Building Code**

**CA Green Building Code**

**CA Referenced Standards Code**



# Local Codes & Local Amendments

- HSC 17958 (State Housing Law)
- HSC 18941.5 (Building Standards Law)
- HSC 13869 (Fire Protection Districts)
- Local jurisdictions shall adopt the CA Building Standards Code for local enforcement within 180-days after Title-24, C.C.R. is published.
- In adopting Title-24 for local enforcement, the jurisdiction may amend the standards if such amendments are necessary to address a local geologic, topographic or climatic condition.

# HSC 17958, HSC 18941.5, HSC 13869

- A copy of HSC 17958, HSC 18941.5 and HSC 13869 are included in the back of the handout.
- Administrative Stds. vs. Building Stds.
  - Only changes to Building Standards need to be justified on the basis of a local geologic, topographic, or climatic condition.
  - Establishment of Administrative Standards does not require justification pursuant to HSC 17958, HSC 18941.5 or HSC 13869.

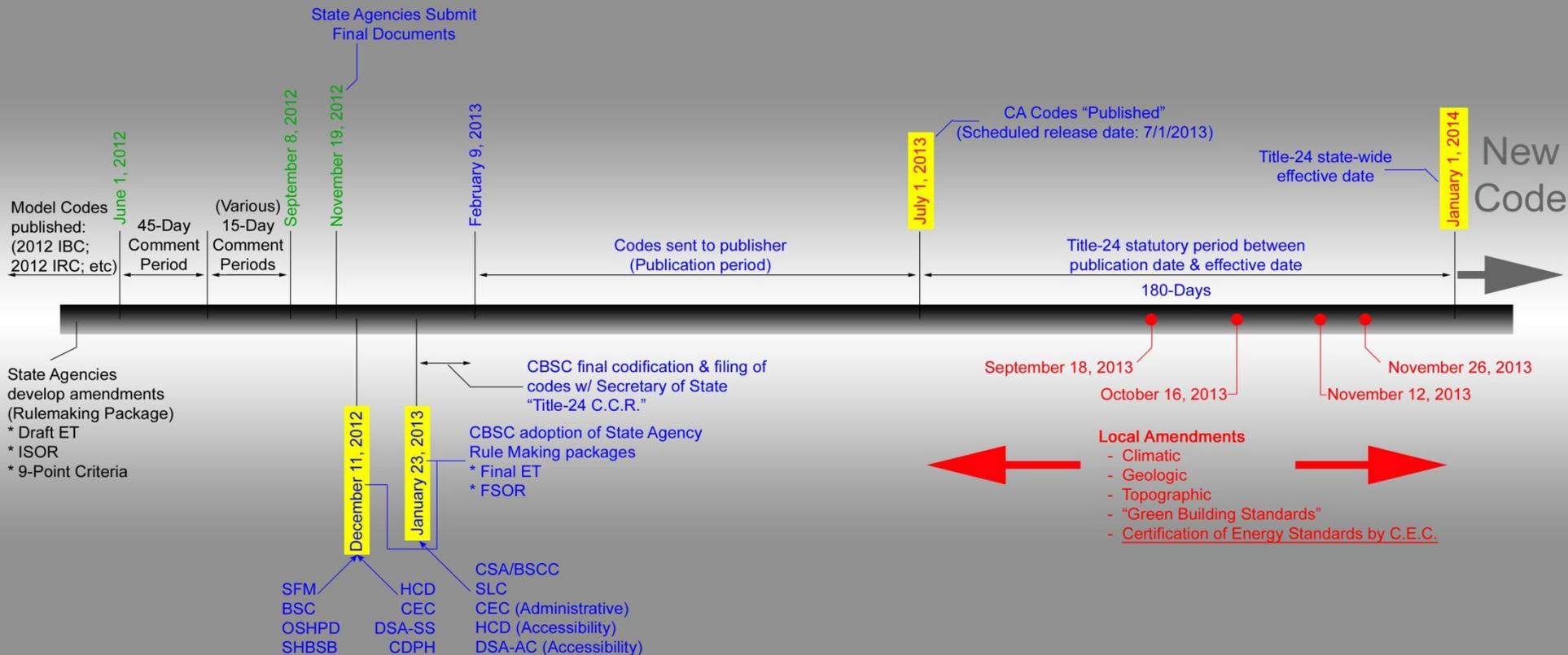


# When to Adopt a Local Code

- Within 180-days of Title 24 publication
  - May not be adopted before T-24 publication
  - Most jurisdictions deliberately time their adoption ordinances to become effective exactly 180-days after T-24 publication (or upon the “established effective date”)
  - May be adopted later than 180-days after T-24 publication, but during the interim period of time, the unamended T-24 standards must be enforced
    - Note: This occurs VERY frequently as a result of delayed adoption of Green Building Standards, especially if CEC Certification is required.



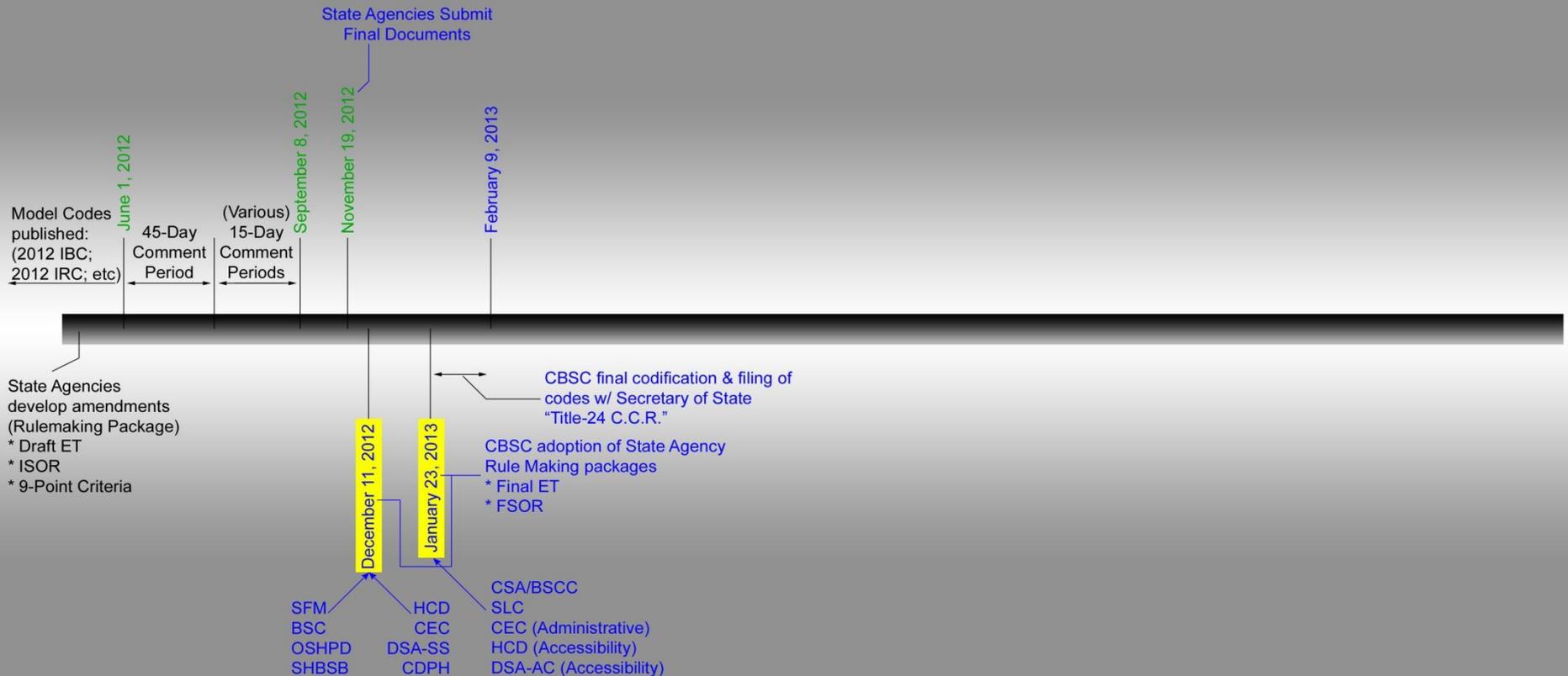
# Time Line



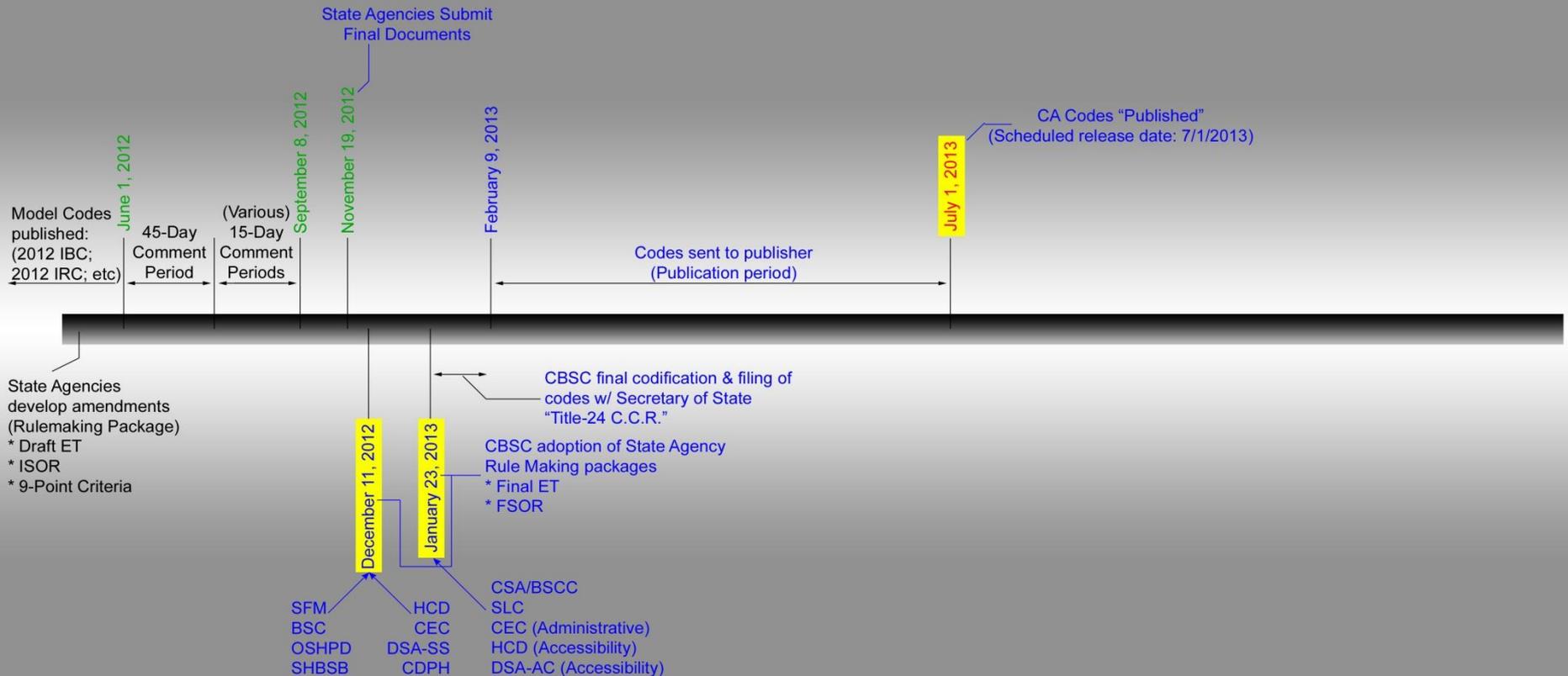
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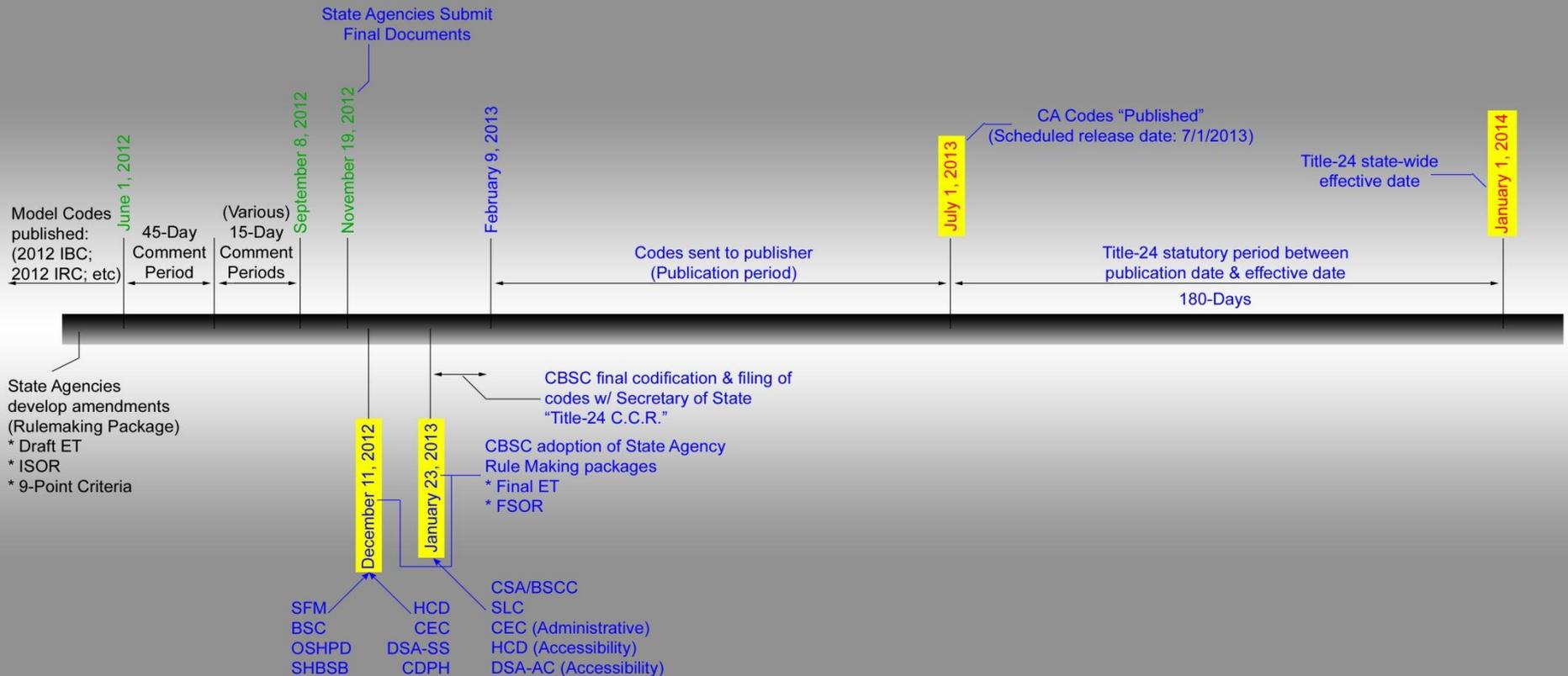
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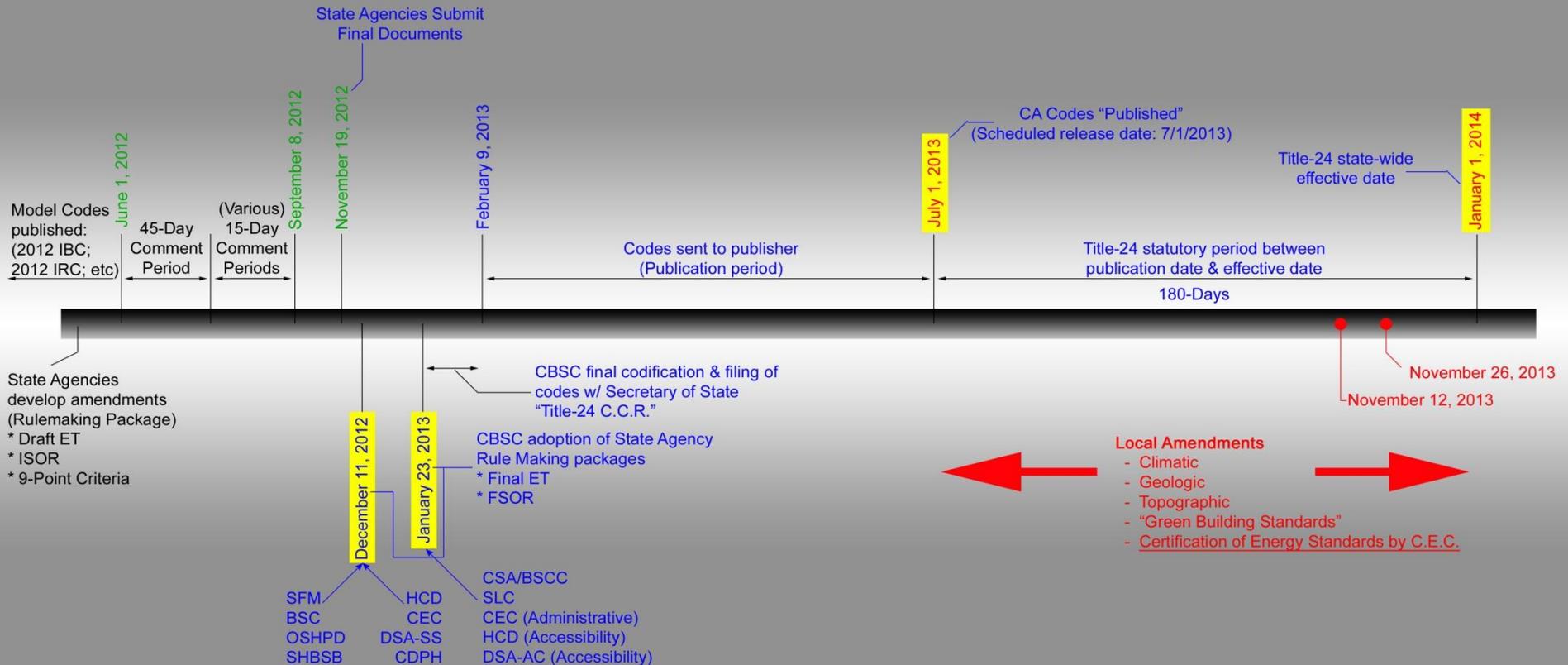
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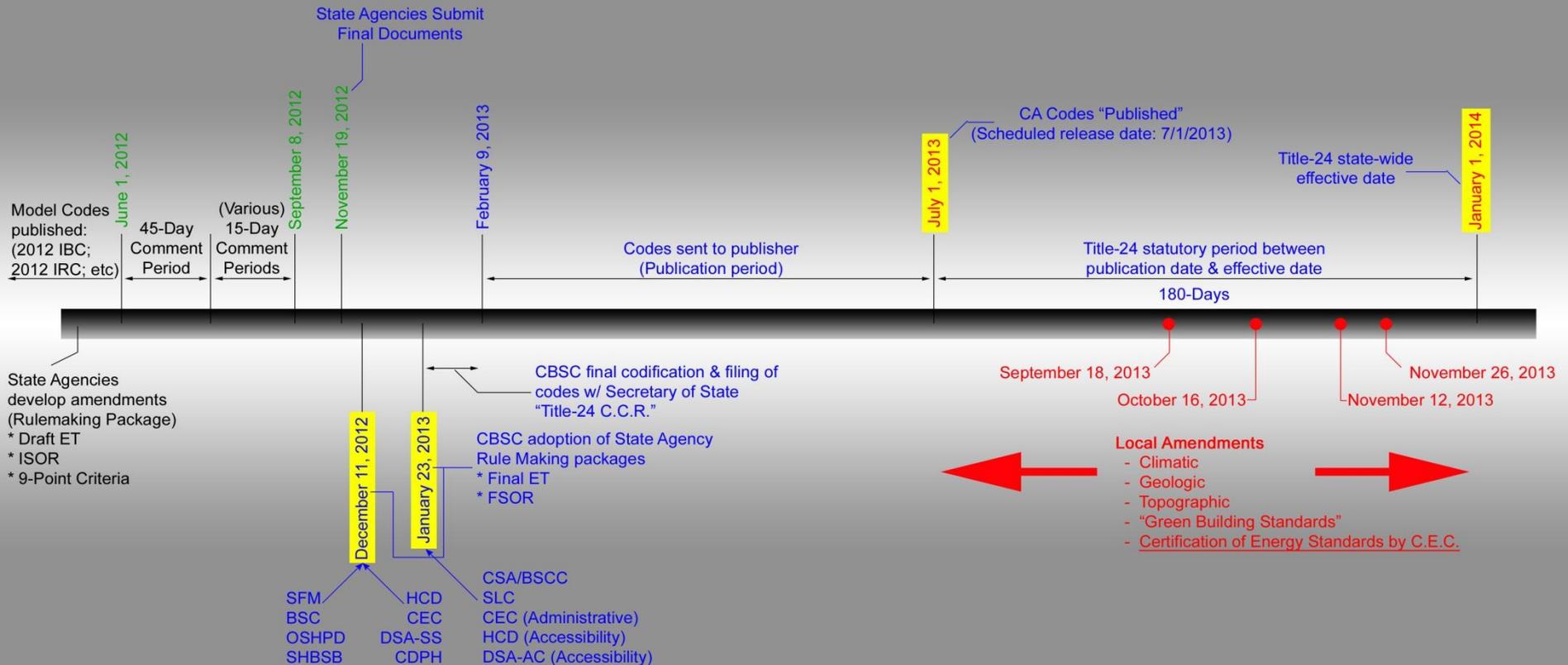
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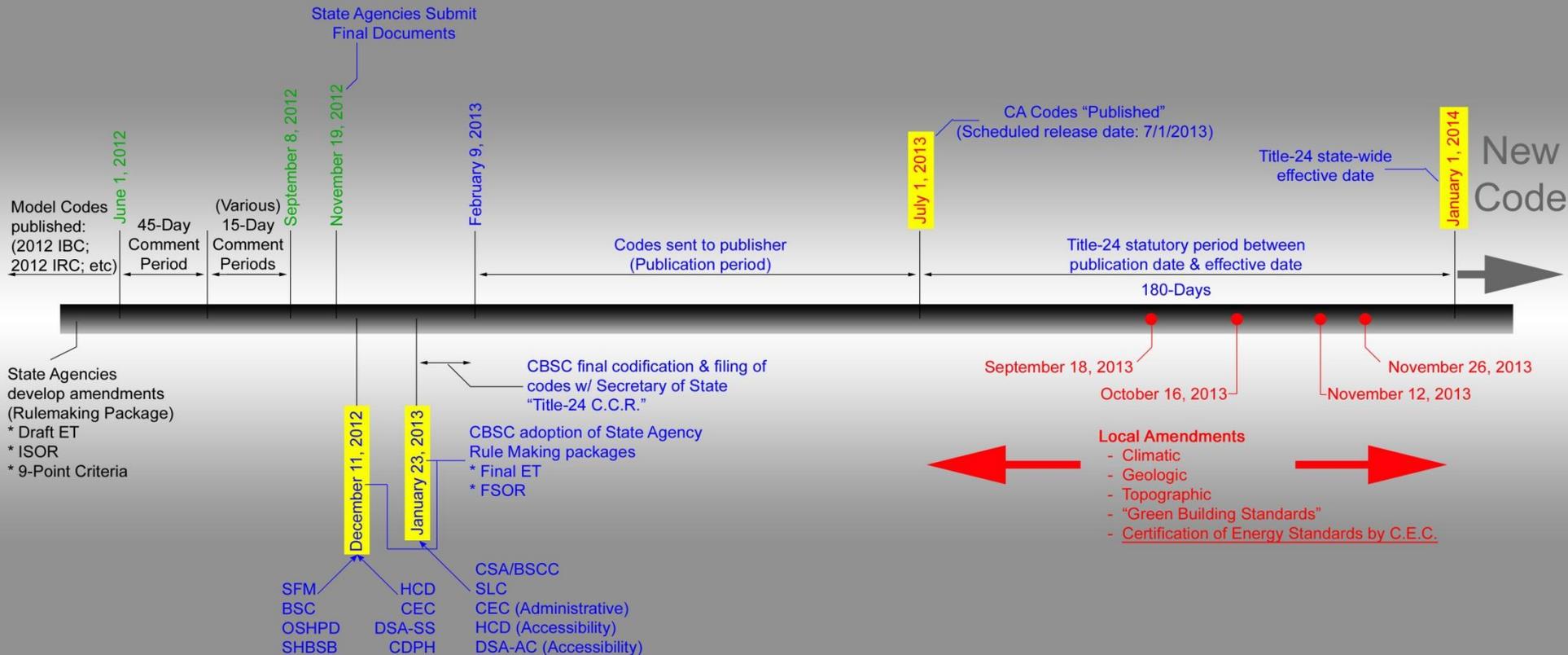
# Time Line



# Time Line



# Time Line



# How Much Time Do We Have?

July 1, 2013 – January 1, 2014

184 days

**Minus weekends/holidays**

**126 days**



# How Much Time Do We Have?

July 1, 2013 – January 1, 2014                      184 days  
**Minus weekends/holidays                      126 days**

July 1, 2013 – Nov. 12, 2013                      135 days  
**Minus weekends/holidays                      94 days**



# How Much Time Do We Have?

July 1, 2013 – January 1, 2014 184 days

**Minus weekends/holidays 126 days**

July 1, 2013 – Nov. 12, 2013 135 days

**Minus weekends/holidays 94 days**

July 1, 2013 – Sept. 18, 2013 80 days

**Minus weekends/holidays 56 days**



# What do Local Amendments Look Like?

- Follow the same format as T-24
- Best to use the same section numbering scheme and sequence
- Amendments to building standards may not be less protective than T-24
- More flexibility when amending non-building standards and administrative standards
- Examples



# What Do Justifications Look Like?

- Generally, the best format is to utilize clear text that simply explains that an amendment is necessary to adequately protect the community on the basis of a specific, local geologic, topographic or climatic condition.
- It is not acceptable to merely state that an amendment is necessary due to “... a local geologic condition ...”
  - Must identify what the local condition is.
- Each amendment requires justification.
- A particular justification may be used repeatedly.
- A justification does not need to be unique to a particular jurisdiction.
- Examples



# State Agency Amendments

Which state agencies will affect you the most?

- HCD-1
- HCD-2
- SFM
- DSA/AC
- OSHPD3



# State Agency Amendments

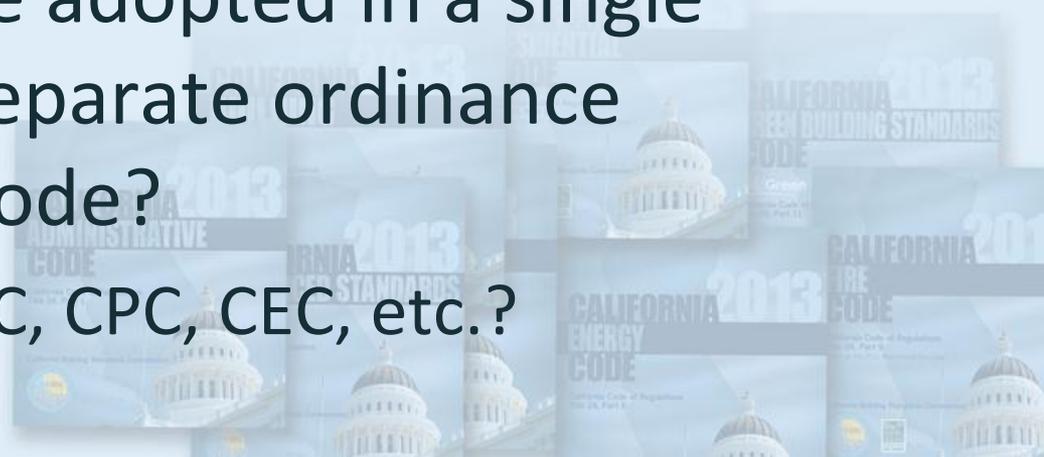
Which state agencies will affect you the most?

- HCD-1 (Hotel, Apartment, Condo, SFD)
- HCD-2 (Mobile Home Parks)
- SFM (A, C, E, H, I, L, R, High-Rise, Other)
- DSA/AC (Disabled Access)
- OSHPD3 (Licensed Clinics and Outpatient Svcs)



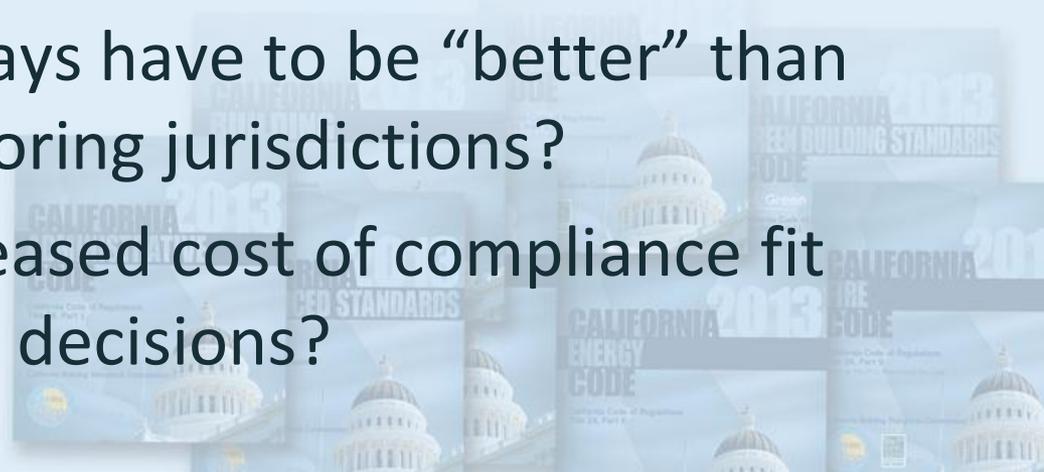
# Adoption Ordinance

- What are the key elements of a local code adoption ordinance?
- Is there a particular format that must be followed?
- Can all the codes be adopted in a single ordinance, or is a separate ordinance required for each code?
  - CBC, CRC, CFC, CMC, CPC, CEC, etc.?



# Adoption Ordinance

- How important is it that local jurisdictions adopt similar codes?
- Is bigger and stronger always better?
  - Do local codes always have to be “better” than the state code?
  - Do local codes always have to be “better” than codes from neighboring jurisdictions?
  - How does the increased cost of compliance fit into code adoption decisions?



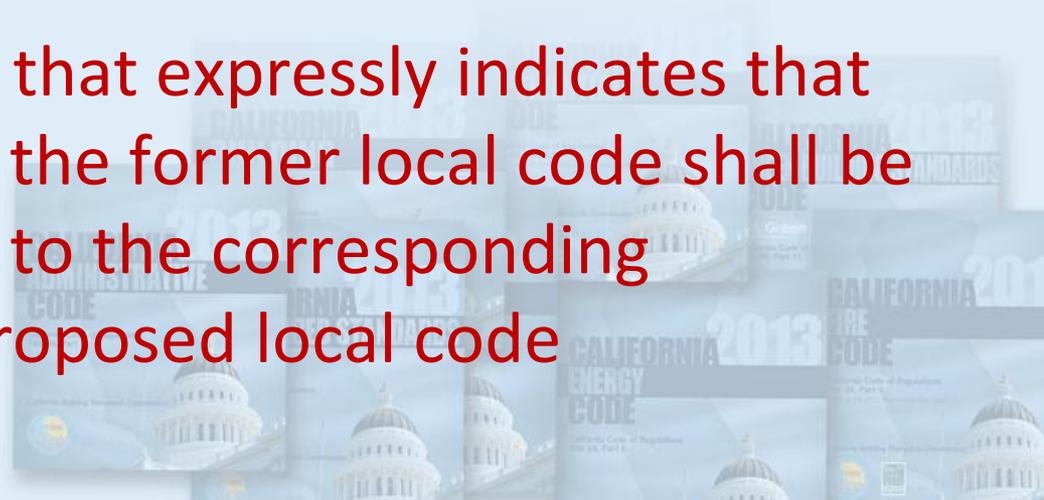
# Elements of Adoption

- Must be adopted by the governing body
  - All amendments must be adopted by ordinance; a “department policy” is not sufficient.
- Must include each standard that will be amended
- AB 210 allows “Green Building Standards” to be locally amended as Building Standards
  - **Special attention must be afforded to Green Building Standards which also influence Energy Standards**
- Amendments must be “... reasonably necessary because of local climatic, geological or topographical conditions.”



# Elements of Adoption

- Repeal of prior code
  - This is often overlooked by municipalities and is critically important to ensure that obsolete provisions are expressly repealed
- References to prior code
  - Include a provision that expressly indicates that prior references to the former local code shall be construed to apply to the corresponding provisions of the proposed local code



# Justifications

- What are the key elements of a local jurisdiction's justification to amend the code?
- Is there a particular format that must be followed?
- Can all amendments be justified at the same time?
- When is a jurisdiction required to justify their amendments?



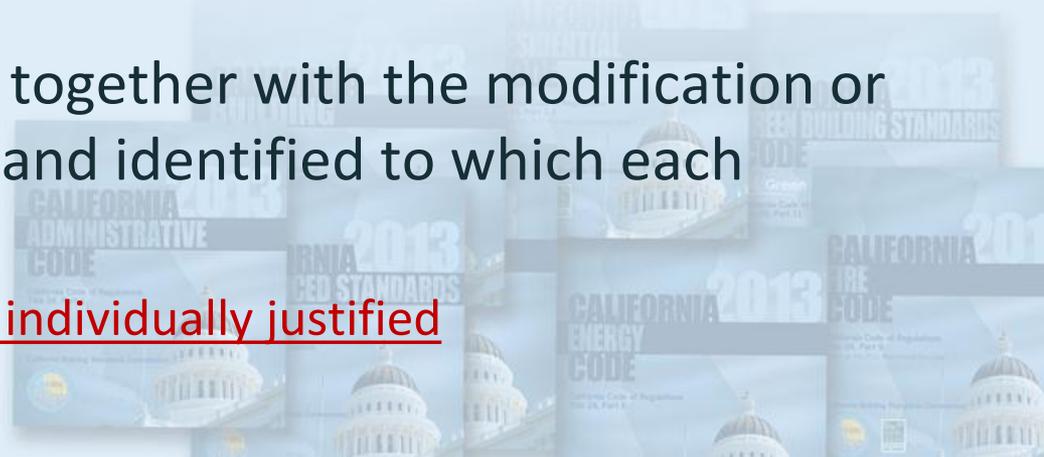
# Justifications

- Administrative standards do not require justification pursuant to HSC 17958/18941.5/13869
- Building Standards, including Green Building Standards, must be justified on the basis of one or more local climatic, geological or topographical conditions
- There is no mandated format for the justifications, as long as the findings are individually and expressly made by the governing body
  - Council Resolution is a formal, express method that is simple, and clean



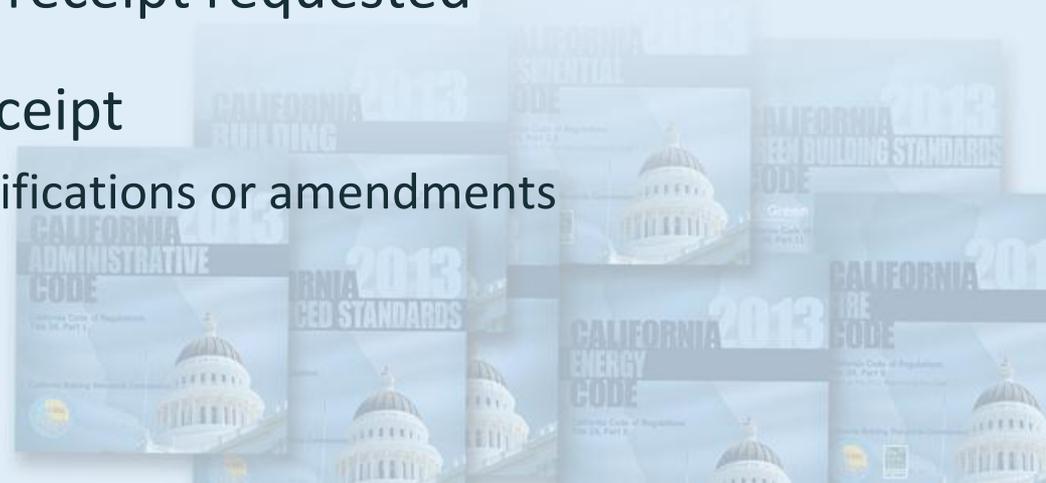
# Justifications

- “... the governing body of a city or county, **before making any modifications** or changes pursuant to Section 17958.5, shall make an express finding that such modifications or changes are reasonably necessary because of local climatic, geologic or topographical conditions.”
  - Justifications must be made first
- “Such a finding shall be available as a public record.”
- “A copy of those findings, together with the modification or change expressly marked and identified to which each finding refers ...”
  - **Each amendment must be individually justified**



# Justifications

- Justifications must be filed along with the amendments with the California Building Standards Commission
  - California Building Standards Commission
  - 2525 Natomas Park Drive, Suite 130
  - Sacramento, California 95833
  - Attention: James McGowan
- Certified mail with return receipt requested
- CBSC will acknowledge receipt
  - CBSC will not evaluate justifications or amendments
  - CBSC files a copy



# Sample Documents

- Sample City Council Staff Report
- Sample Justification Resolution
  - Excerpts: Cover Page/Matrix/Key
- Sample Adoption Ordinance
  - Excerpts: Cover Page/Several Important Aspects of Adoption Ordinances
- Building Standards Bulletin 13-03
- CEC Certification
  - Cost Effectiveness Study





**CITY OF GLENDALE CALIFORNIA  
REPORT TO CITY COUNCIL**

November 27, 2007

**AGENDA ITEM**

Dir. P.W., re: Adoption of 2008 Glendale Building and Safety Code

- (1) Ordinance For Adoption and Amending Specific Portions of the California Building Standards Code as the 2008 Glendale Building and Safety Code.
- (2) Resolution adopting findings of fact which justify amendments to the California Building Standards Code.

**COUNCIL ACTION**

Public Hearing [ ] Ordinance [ X ] Consent Calendar [ ] Action Item [ ] Report Only [ ]  
Approved for \_\_\_\_\_ calendar

**ADMINISTRATIVE ACTION**

**Submitted**

Stephen M. Zurn, Director of Public Works

Donald Biggs, Acting Fire Chief

**Prepared**

Stuart D. Torn, Building Official

David Woods, Fire Marshal

**Approved**

James E. Starbird, City Manager

**Reviewed**

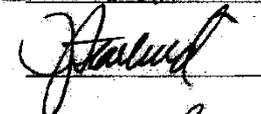
Scott Howard, City Attorney

Christina Sansone, Senior Assistant City Attorney

Signature

  
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**RECOMMENDATION**

It is recommended that the City Council adopt an ordinance adopting the Building and Safety Code of the City of Glendale, 2008.

**SUMMARY**

The Glendale Building and Safety Code is comprised of eight (8) distinct volumes as follows:

Volume I: Building Standards

**RESOLUTION NO. 07-216**

**A RESOLUTION OF THE COUNCIL OF THE CITY OF  
GLENDALE, ADOPTING LEGISLATIVE FINDINGS  
SUPPORTING AMENDMENTS AND CHANGES TO THE  
CALIFORNIA STATE BUILDING STANDARDS CODE AS  
CONTAINED IN THE GLENDALE BUILDING AND SAFETY  
CODE, 2008.**

WHEREAS, the City Council of the City of Glendale, intends to pass an ordinance adopting the California Building Standards Code which consists of the 2007 editions of the California Building Code, Plumbing Code, Mechanical Code, Electrical Code, Fire Code; the 1997 Uniform Housing Code, and making modifications and changes thereto, all of which shall comprise a portion of the Glendale Building and Safety Code, 2008; and

WHEREAS, the California Health and Safety Code Sections 17958, 17958.5 and 17958.7 require the governing body of a city, before making any modifications or changes to the California Building Standards Code, to make an express finding that such modifications or changes are reasonably necessary because of local climatic, geological or topographical conditions; and

WHEREAS, the City Council of the City of Glendale finds that a departure from the Building Standards Code is reasonably necessary due to local climatic, geological, or topographical conditions,

NOW THEREFORE the City Council of the City of Glendale, California, does hereby resolve as follows:

**SECTION 1. Legislative Findings.** Modifications and changes contained in the Glendale Building and Safety Code, 2008, are required in order to provide specific and greater protections to the public health, safety and welfare than are afforded by the California Building Standards Code

**Volume I**

Section	Title	Added to CBC	Deleted from CBC	Amended from CBC	Justification (See below for key to Justifications)
403.2	Automatic sprinkler system			X	A
503.2	Construction on contiguous lots under same ownership or occupancy	X			A
504.2	Automatic sprinkler system increase			X	B, C, & D
506.3	Automatic sprinkler system increase			X	B, C, & D
903.2	Where required	X	X		A
903.3.1.2	NFPA 13R sprinkler systems		X		A
903.3.5.2	Secondary water supply			X	A
907.14	Monitoring			X	A
907.17	Record of completion			X	A
911.1	Features			X	A
TABLE 1004.1.1	MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT			X	A
TABLE 1015.1	SPACES WITH ONE MEANS OF EGRESS			X	A
1505.1	General			X	C & D
TABLE 1505.1	MINIMUM ROOF COVERING				
	CLASSIFICATION FOR TYPES OF CONSTRUCTION			X	C & D
1505.1.3	Roof coverings within all other areas			X	C & D
TABLE 1507.3.7	CLAY AND CONCRETE TILE ATTACHMENT			X	B & C
1510.7	Roof sheathing	X			B & D
1613.7	Suspended ceilings	X			B
1614	MODIFICATIONS TO ASCE 7	X			B, C, & D
1615	SEISMIC DESIGN FOR				
	PROVISIONS FOR HILLSIDE BUILDINGS	X			B & D
1704.1	General			X	B & D
1704.4	Concrete construction			X	B & D
1704.8	Pile foundations			X	B
1709.1	General			X	A & B

Key to Justifications for Amendments to Title 24 of the California Code of Regulations

- A This amendment is necessary for administrative clarification, and does not modify a Building Standard pursuant to California Health and Safety Code Sections 17958, 17958.5 and 17958.7. This amendment establishes administrative standards for the effective enforcement of building standards throughout the City of Glendale.
- B This amendment is justified on the basis of a local geologic condition. The City is subject to earthquake hazards caused by its location on the Sierra Madre fault near the base of the San Gabriel Mountains. Said fault is the eastward extension of the same fault upon which the 1971 San Fernando earthquake originated. Other faults which potentially could cause seismic activity in the City include the Verdugo fault located near the southwest edge of the Verdugo Mountains and its branches to the east, the Sycamore Canyon fault, the Scholl Canyon fault and the Eagle Rock and San Rafael faults. The York Boulevard fault is also important in that it is a western extension of the Raymond Hill fault for which there is considerable evidence for recent geologic activity. Said faults are generally considered major Southern California earthquake faults which may experience rupture at any time. Thus, because the City is within a seismic area which includes earthquake faults within and through the jurisdictional limits of the City, the modifications and changes cited herein are designed to better limit property damage as a result of seismic activity and to establish criteria for repair of damaged property following a local emergency.
- C This amendment is justified on the basis of a local climatic condition. The seasonal climatic conditions during the late summer and fall create severe fire hazards to the public health and welfare in the city. The hot, dry weather in combination with Santa Ana winds frequently results in wildland fires in the thousands of acres of brush-covered slopes in the Verdugo and San Rafael Hills, Chevy Chase Hills, and Repetto Hills area of the City. These areas extend from the City's boundary on the east to the Angeles National Forest in the north and the Verdugo Mountains at the Burbank boundary to the west. The aforementioned conditions combined with the geological characteristics of the hills within the City create hazardous conditions for which departure from the California Building Standards Code is required.
- D Glendale topography includes significant hillsides with narrow and winding access, which makes timely response by fire suppression vehicles difficult. Additionally, long periods of dry, hot weather, combined with unpredictable seasonal winds (Santa Ana wind conditions) result in increased exposure to fire risk. The modifications and additions to the California Codes 33 are reasonably necessary to combat the hazards brought about by local climatic conditions. Glendale has a desert weather pattern with monsoon type rain followed by long periods of hot, dry weather. The heavy rains tend to oversaturate the soil for a short time period during the year, having a detrimental effect on in-ground structures affected by varying moisture conditions. The City is situated on the alluvial flood plains of the Arroyo Verdugo Wash, Sycamore, Verdugo and Scholl Canyons and the Verdugo and San Gabriel Mountain drainages which have an extensive history of slope failures causing serious floods and mud slides.

**ORDINANCE NO. 5581**

**AN ORDINANCE ADOPTING THE 2007 CALIFORNIA BUILDING CODE AS VOLUME I, THE 2007 CALIFORNIA PLUMBING CODE AS VOLUME II, THE 2007 CALIFORNIA MECHANICAL CODE AS VOLUME III, THE 2007 CALIFORNIA ELECTRICAL CODE AS VOLUME IV, THE 1997 UNIFORM HOUSING CODE AS VOLUME V, THE 2007 CALIFORNIA FIRE CODE AS VOLUME VI, THE GLENDALE SECURITY CODE AS VOLUME VII AND THE GLENDALE COMMERCIAL AND INDUSTRIAL PROPERTY MAINTENANCE CODE AS VOLUME VIII ALL OF WHICH COMPRISE THE BUILDING AND SAFETY CODE OF THE CITY OF GLENDALE, 2008.**

**BE IT ORDAINED BY THE COUNCIL OF THE CITY OF GLENDALE:**

**SECTION INT-1.** The City of Glendale hereby adopts a Building and Safety Code of the City of Glendale, 2008, hereinafter designated as the "Glendale Building and Safety Code, 2008."

**SECTION INT-2. Volume I. Building Standards.**

The City of Glendale hereby adopts the 2007 California Building Code as Volume I of the Glendale Building and Safety Code, 2008. Except as otherwise provided herein, or as later amended, Volume I of the Glendale Building and Safety Code, 2008, shall be as published in the California Building Code Volumes 1 and 2, 2007 edition, and as copyrighted in 2007 by the International Code Council, Inc. and the California Building Standards Commission, California Code of Regulations, Title 24, Part 2, Volumes 1 and 2, including all of its tables, indices, appendices, addenda and footnotes and including, by way of example, Appendix Chapter A1 of the California Existing Building Code, 2007 edition, published and copyrighted in 2007 by the International Code Council, Inc. and the California Building Standards Commission, California Code of Regulations, Title 24, Part 10, regarding seismic strengthening provisions for unreinforced masonry bearing wall buildings, which shall be incorporated into Chapter 58 of Volume I of the Glendale

**SECTION INT-8. Volume VII. Security Standards.**

Except as otherwise provided herein or as later amended, Volume VII of the Glendale Building and Safety Code, 2008 is hereby re-adopted as the Glendale Security Code, as previously adopted by Ordinance 5221.

**SECTION INT-9. Volume VIII. Commercial and Industrial Property Maintenance Standards.**

Except as otherwise provided herein or as later amended, Volume VIII of the Glendale Building and Safety Code, 2008 is hereby re-adopted as the Commercial and Industrial Property Maintenance Code, as previously adopted by Ordinance 5221.

**SECTION INT-10. Effect of Code on Past Actions and Obligations.** The adoption of the Glendale Building and Safety Code, 2008, does not affect any civil lawsuit instituted or filed or prosecutions for ordinance violations committed on or prior to the effective date of said Code, does not waive any fee or penalty due and unpaid prior to the effective date of said Code, and does not affect the validity of any bond or cash deposit posted, filed or deposited pursuant to the requirements of any ordinance.

**SECTION INT-11. References to Prior Code.** Unless superseded and expressly repealed, references in City forms, documents and regulations to the chapters and sections of the former Glendale Building and Safety Code, 2002, shall be construed to apply to the corresponding provisions contained within the Glendale Building and Safety Code, 2008. Ordinance No. 5329 of the City of Glendale and all other ordinances or parts of ordinances in conflict herewith are hereby superseded and expressly repealed.

**SECTION INT-12. Penalty.** Unless otherwise provided in said Code, any person violating any provision of the Glendale Building and Safety Code, 2008, shall be

guilty of a misdemeanor and upon conviction thereof, shall be punished by a fine not exceeding one thousand dollars, or by imprisonment in the City jail or the County jail of the County of Los Angeles for a term not exceeding six months, or both such fine and imprisonment.

**SECTION INT-13. Severability.** If any provision of this Ordinance or the application thereof to any person or circumstance is held invalid, that invalidity shall not affect other provisions or applications of this Ordinance that can be given effect without the invalid provision of application, and to this end the provisions of this Ordinance are severable.

**SECTION INT-14. Effective Date.** The provisions of the Glendale Building and Safety Code, 2008, shall be in force on or after the date upon which this Ordinance becomes effective.

**SECTION INT-15. Effective Date, Exceptions.** This ordinance becomes effective and shall be in force on January 1, 2008; provided, however that where complete plans for buildings have been filed and are pending for building permits prior to the effective date of this Ordinance, permits may be issued, and the applicant may proceed with the construction, provided physical construction is started within one hundred eighty (180) days from the date of issuance of the permit and continued to completion.

**SECTION INT-16. Four-Fifths Vote.** The City Clerk shall certify to the passage of this Ordinance by a vote of four-fifths (4/5<sup>ths</sup>) of the members of the Council of the City of Glendale and shall cause the same to be published once in the official newspaper of said City.

**5808.2 Alterations to existing structures.** Alterations to the lateral force resisting elements of structures falling within the scope of this chapter shall be analyzed as required by 5808.1.

**SECTION I-67.** Appendix Chapter 1, ADMINISTRATION, of the International Building Code, 2007 Edition, published and copyrighted by the International Code Council, is hereby adopted by reference into the Glendale Building and Safety Code, 2008, and by such reference is incorporated herein as if fully set forth.

**SECTION I-68.** Appendix Chapter 1 Section 101.2 of Volume I of the Glendale Building and Safety Code, 2008, is hereby amended to read as follows:

**101.2 Scope.** The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, used and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

**101.2.1 Appendices.** Provisions in the appendices shall not apply unless specifically adopted.

**SECTION I-69.** Appendix Chapter 1 of the Section 104.10.1 of Volume I of the Glendale Building and Safety Code, 2008, is hereby added to read as follows:

**104.10.1 Fire code official concurrence.** For those cases which may affect fire or life safety, the building official shall obtain the concurrence of the fire code official.

**SECTION I-70.** Appendix Chapter 1 Section 104.11.4 of Volume I of the Glendale Building and Safety Code, 2008, is hereby added to read as follows:

**104.11.4 Fire code official concurrence.** For those cases which may affect fire or life safety, the building official shall obtain the concurrence of the fire code official.

new regulations at the time of issuance. The building official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

**SECTION I-77.** Appendix Chapter 1 Section 105.8 of Volume I of the Glendale Building and Safety Code, 2008, is hereby added to read as follows:

**105.8 Responsibility of permittee.** Building permits shall be presumed to incorporate the provision that the applicant, the applicant's agent, employees or contractors shall carry out the proposed work in accordance with the approved plans and with all requirements of this code and any other laws or regulations applicable thereto, whether specified or not. No approval shall relieve or exonerate any person from the responsibility of complying with the provisions and intent of this code.

**SECTION I-78.** Appendix Chapter 1 Section 108.4 of Volume I of the Glendale Building and Safety Code, 2008, is hereby amended to read as follows:

**Section 108.4 Work commencing before permit issuance.** Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary permits shall be subject to a fee in addition to the normally established permit fee, equal to 100% of such normally established permit fee, or as otherwise determined by the building official.

**SECTION I-79.** Appendix Chapter 1 Section 109.3.5 of Volume I of the Glendale Building and Safety Code, 2008, is hereby amended to read as follows:

**109.3.5 Lath and gypsum board inspection.** Lath and gypsum board inspections shall be made after lathing and gypsum board, interior and exterior, is in place, but before any plastering is applied or gypsum board joints and fasteners are taped and finished.



## BUILDING STANDARDS INFORMATION BULLETIN 13-03

**DATE:** July 1, 2013

**TO:** LOCAL BUILDING OFFICIALS  
INTERESTED PARTIES

**SUBJECT:** 2013 California Building Standards Code

The 2013 edition of the California Building Standards Code, Title 24, California Code of Regulations (13 Parts) is published and available for purchase. This bulletin provides information concerning the effective date and application, the availability of the 2013 California Building Standards Code, and local amendment of the building standards.

### Effective Date and Application of the 2013 Code

January 1, 2014 is the statewide effective date established by the California Building Standards Commission for the 2013 California Building Standards Code.

As provided for in California Health and Safety Code, Section 18938.5, Building Standards Law, the 2013 building standards approved by the commission and that are effective at the local level at the time an application for a building permit is submitted, applies to the plans and specifications, for, and to the construction performed under that permit.

The 2010 California Building Standards Code remains in effect and is applicable to all plans and specifications, for, and to the construction performed under that building permit where the application for a building permit is submitted to the local jurisdiction on or before December 31, 2013.

### Availability of the 2013 California Building Standards Code

The 2013 Code may be purchased through the following publishers:

- International Code Council (ICC)
  - Online store: [www.shop.iccsafe.org](http://www.shop.iccsafe.org)
  - Email: [order@iccsafe.org](mailto:order@iccsafe.org) or [ecodes@iccsafe.org](mailto:ecodes@iccsafe.org)
  - Telephone: ICC Store (800)786-4452



**CITY OF GLENDALE, CALIFORNIA**  
Community Development Department  
**BUILDING & SAFETY DIVISION**

633 East Broadway  
Glendale, California 91206-4390  
Inspections (818) 548-4836  
Plan Check & Permits (818) 548-3200  
[www.ci.glendale.ca.us](http://www.ci.glendale.ca.us)

August 23, 2012

Mr. Joe Loyer  
California Energy Commission  
1516 Ninth Street MS37  
Sacramento, Ca 95814-5514

**Re: Green Building Ordinance and the Building Energy Efficiency Standards**

Dear Joe,

As I previously discussed with you, I have assembled a full package of materials to make the City of Glendale's filing simple for you. Enclosed herewith are the following materials, in this order:

- 1) Application cover letter to Mr. Robert Oglesby, Executive Director, dated August 23, 2012.
- 2) Agenda from the August 15, 2012 City of Glendale, Building and Fire Board of Appeals public meeting. This meeting was a regularly scheduled, publicly noticed meeting in accordance with the Ralph M. Brown Act.
- 3) Staff Report for Agenda Item VI-A (Public Hearing – Energy cost effectiveness study related to local amendments to the 2010 California Green Building Code standards.)
- 4) Final Action Letter, dated August 21, 2012, summarizing results of the public hearing. Letter signed by Mr. Keshisiah, Chairman of the City of Glendale, Building & Fire Board of Appeals.
- 5) Copy of Ordinance No. 5736, approved by the Glendale City Council on June 7, 2011.
- 6) Energy Cost Effectiveness study, dated May 18, 2012 by Michael Gabel, Gabel Associates, LLC.

I believe this is everything that you should require. If additional information is desired, please feel free to contact me at (818) 548-3200.

Respectfully,

Stuart Tom, P.E., CBO  
Building Official

## **Energy Cost-Effectiveness of Radiant Barrier Roofs in the Glendale Green Building Ordinance**

**May 18, 2012**

Report prepared for:  
Stuart Tom, P.E., CBO  
Building Official  
City of Glendale  
633 E. Broadway, Room 101  
Glendale, CA 91206  
(818) 548-3200  
Email: [STom@ci.glendale.ca.us](mailto:STom@ci.glendale.ca.us)

Report prepared by:  
Michael Gabel  
Gabel Associates, LLC  
1818 Harmon Street, Suite #1  
Berkeley, CA 94703  
(510) 428-0803  
[mike@gabelenergy.com](mailto:mike@gabelenergy.com)



Building Description	Total Annual kWh Saving	Total Annual Therms Saving	Incremental First Cost (\$)	Annual Energy Cost Savings (\$)	Simple Payback (Years)
2,150 sf Base 1 + Radiant	285	1	\$383	\$17	8.2
2,460 sf Base 2 + Radiant	124	6	\$383	\$26	18.6
Averages:	205	3	\$383	\$36	11.9

Building Description	Total Annual kWh Saving	Total Annual Therms Saving	Incremental First Cost (\$)	Annual Energy Cost Savings (\$)	Simple Payback (Years)
2,850 sf Base 1 + Radiant	317	1	\$445	\$52	8.6
2,850 sf Base 2 + Radiant	142	6	\$445	\$20	15.7
Averages:	230	4	\$445	\$40	12.1

### 3.0 Conclusions

Simple paybacks for radiant barrier in the three prototype single family homes range from 7 to 16 years in the Glendale climate, with an average payback in the 11 to 12 year range. Assuming that the useful life of roof sheathing is 30 years, and based on this analysis, radiant barriers are cost-effective as a mandatory requirement for roofing above attic spaces in Climate Zone 9.

It is also worth noting that even without radiant barrier as a local mandatory measure, it is highly likely that the vast majority of new single family homes would include a radiant barrier in order to meet the 15%-better-than-Title 24 performance requirement.

STATE OF CALIFORNIA  
STATE ENERGY RESOURCES  
CONSERVATION AND DEVELOPMENT COMMISSION

**RESOLUTION:** California Energy Commission approval of the City of Glendale's locally adopted building energy standards to require greater energy efficiency than the 2008 Building Energy Efficiency Standards.

**WHEREAS,** the City of Glendale has submitted an application to the Energy Commission for approval of a local ordinance with energy efficiency requirements meeting or exceeding those required by the 2008 Building Energy Efficiency Standards; and

**WHEREAS,** Public Resources Code Section 25402.1(h)(2) and Title 24, Part 1, Section 10-109 establish a process for local governments to apply to the Energy Commission for approval to adopt new versions of Building Energy Efficiency Standards that require additional energy efficiency measures or set more stringent energy budgets; and

**WHEREAS,** the City of Glendale submitted an application to the Energy Commission that meets all of the documentation requirements pursuant to Public Resources Code Section 25402.1(h)(2) and Section 10-106; and

**WHEREAS,** the City of Glendale has made a written commitment to actively enforce compliance both with the locally adopted energy standards and the 2008 Building Energy Efficiency Standards; and

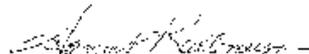
**WHEREAS,** the Energy Commission commends the City of Glendale for seeking to achieve additional energy demand reductions, energy savings and other benefits exceeding those of the 2008 Building Energy Efficiency Standards;

**THEREFORE BE IT RESOLVED** that on November 14, 2012 the Energy Commission approves the City of Glendale's locally adopted energy standards, and that these local standards may be enforced by the City of Glendale.

CERTIFICATION

The undersigned Secretary to the Commission does hereby certify that the foregoing is a full true and correct copy of a Resolution duly and regularly adopted at a meeting of the California Energy Commission held on November 14, 2012.

AYE: Weissenmiller, Douglas, McAbister, Petermar  
NAY: None  
ABSENT: None  
ABSTAIN: None

  
HARRIET KALLEMEYN, Secretariat



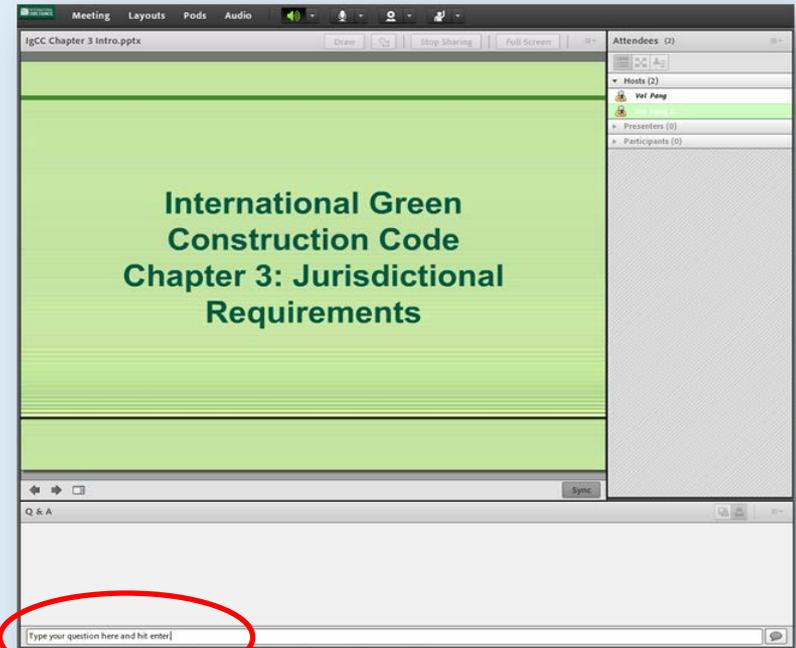
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**Then hit enter or the send button.**



# Thank You

