

CALIFORNIA CODE ADOPTION FOR LOCAL JURISDICTIONS



Presented by
Mia Marvelli, California Building Standards Commission
Stuart Tom, JAS Pacific



INTRODUCTION



- The International Code Council (ICC) develops model codes that are utilized throughout the world.
- The California Building Standards Commission (CBSC) establishes a state-wide Building Standards Code for use throughout California.
- Local jurisdictions may adopt local amendments to the California Building Standards Code in order to provide adequate protection to the communities they serve.



PRESENTERS

- ↗ Mia Marvelli
- ↗ Executive Director
- ↗ CA Building Standards Commission

Bio:
<https://www.dgs.ca.gov/BSC/About/CBSC-Staff/Mia-Marvelli>



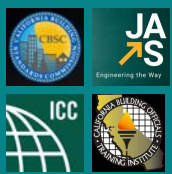


PRESENTERS

- Stuart Tom, P.E., CBO, FIAE
- JAS Pacific, President
- ICC Board of Directors

Bio:

<https://www.iasonline.org/team/stuart-tom/?back=7332>

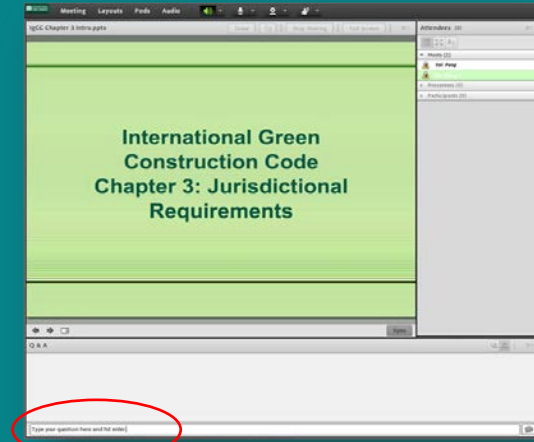


Description

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

10-Minute Q & A

- At any time during the presentation, please type your questions into the Q & A portion of the 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.

Objectives

- Upon completion, participants will be better able to:
 - Identify the California codes in Title 24, California Building Standards Code.
 - Describe the local code 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.

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?

- List of codes we will be adopting
- Local adoption process & legal authorities
- Timeline
 - Where are we?
 - Where do we need to be?
 - How do we get there?
- What's new for 2019?
- Frequent mistakes



- What is Title 24, C.C.R.?
 - “California Building Standards Code”
 - Organized into 13 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

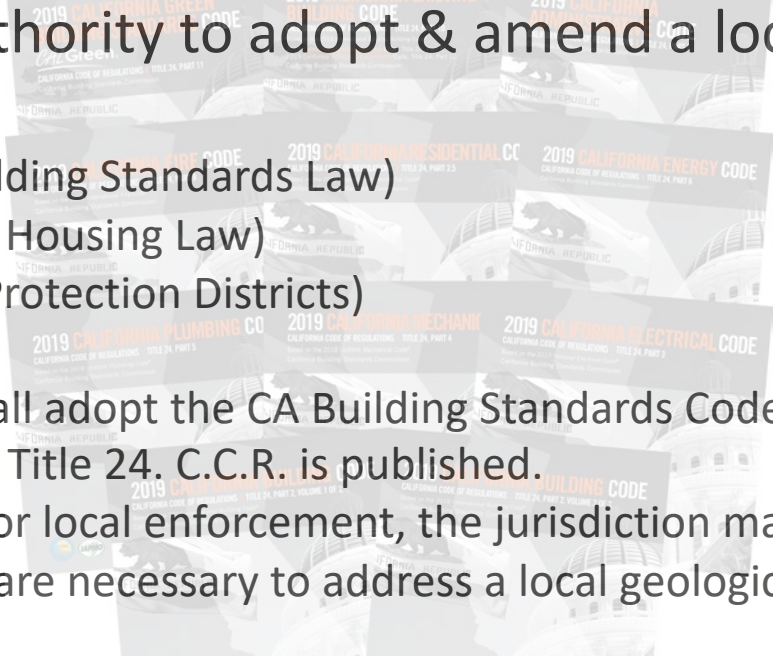
CA Fire Code

CA Existing Building Code

CA Green Building Code

CA Reference Standards Code



- 
- Where is my authority to adopt & amend a local code legally established?
 - HSC 18941.5 (Building Standards Law)
 - HSC 17958 (State Housing 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.

➤ Additional authority to adopt & amend a local code.

- HSC 17959 (Universal Design in State Housing Law)
- Gov. Code 65852.2 (Accessory Dwelling Units)
- Gov. Code 8698.4 (Homeless Shelters and Emergency Housing)
- Pub. Resources Code 25402 (Energy Code amendments)
- HSC 18959 (Historical Building Code)
- HSC 19100 (Earthquake Protection Law)

For a complete list and local ordinance filing requirements, refer to CBSC's *Guide for Local Amendments of Building Standards*

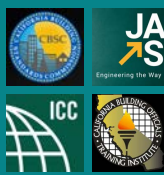
www.dgs.ca.gov/BSC > Resources > Guidebooks for Local Jurisdictions

- **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 18941.5, HSC 17958, or HSC 13869.
- **Matrix Adoption Tables**
- **Appendices**



- **Within 180-days of Title 24 publication.**
 - Most jurisdictions deliberately time their adoption ordinance 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 C.E.C. Certification is required.
 - May not be effective before effective date of Title 24.
- **When does your governing body meet?**
 - Do local ordinances typically require two (2) public readings?
 - Does your city hold preliminary meetings for “outreach” or “public comments”?

CALIFORNIA RULEMAKING TIMELINE & PROCESS

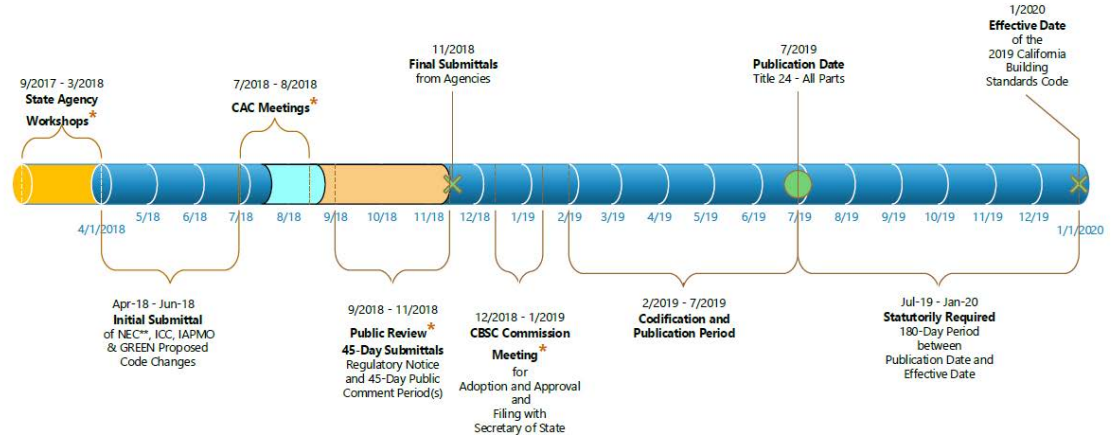


- International Code Council
- International Association of Plumbing and Mechanical Officials
- National Fire Protection Association

2019 California Building Standards Code, Title 24

2018 Triennial Code Adoption Cycle

Effective Date: January 1, 2020



Code Advisory Committees (CAC):
 SDLF – Structural Design/ Lateral Forces
 PEME – Plumbing, Electrical, Mechanical & Energy
 HF – Health Facilities
 GREEN – Green Building
 BFO – Building, Fire & Other
 ACCESS - Accessibility

*Public Participation Opportunity
 **NEC resubmittal if necessary

All dates are subject to change



➤ Rulemaking Phases

- Model Codes
- Workshops
- Initial submittal
- Code Advisory Committees
- Public comment period
- Commission action
- Codification/Publication
- 180-day wait period
- Effective date
- Errata/Supplements

➤ Rulemaking Documents

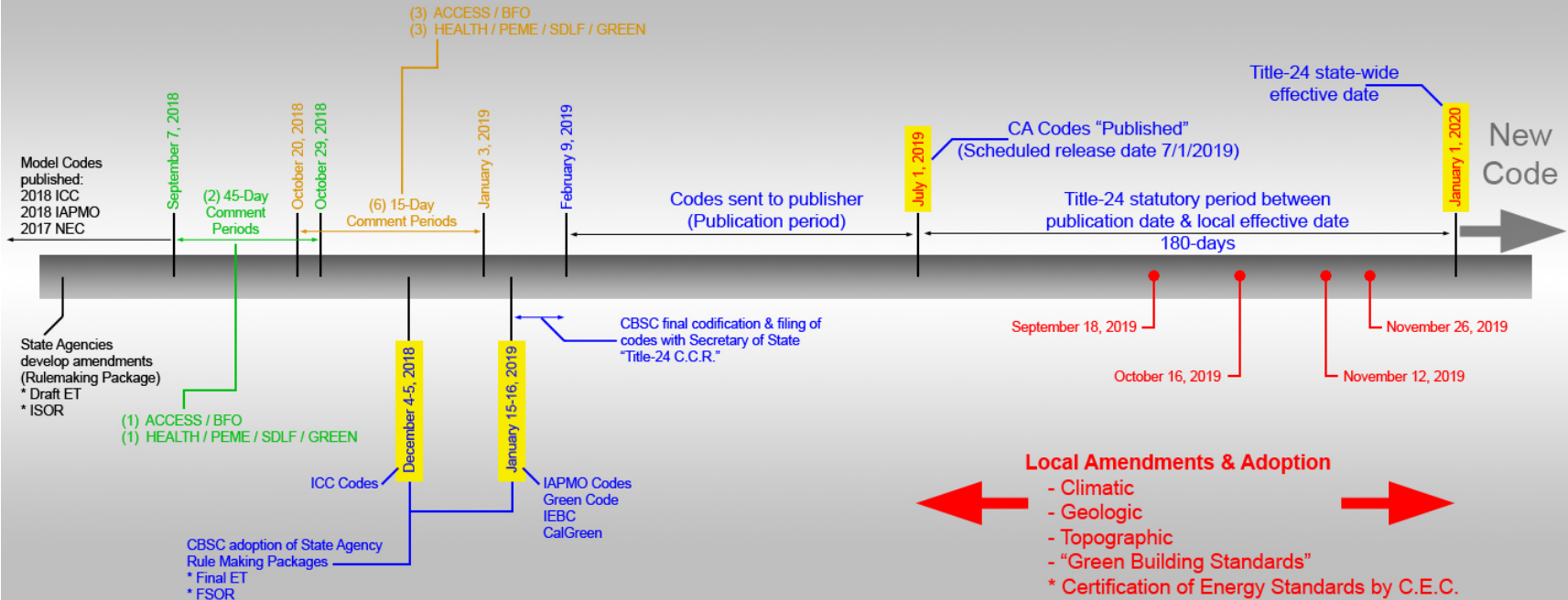
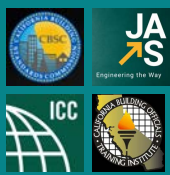
- Express Terms
- Initial Statement of Reasons
- Notice of Proposed Action
- Nine-Point Criteria
- Form 399 (Economic and Fiscal)

For a more detail refer to CBSC's *Public Guide to the Building Standards Adoption Process*

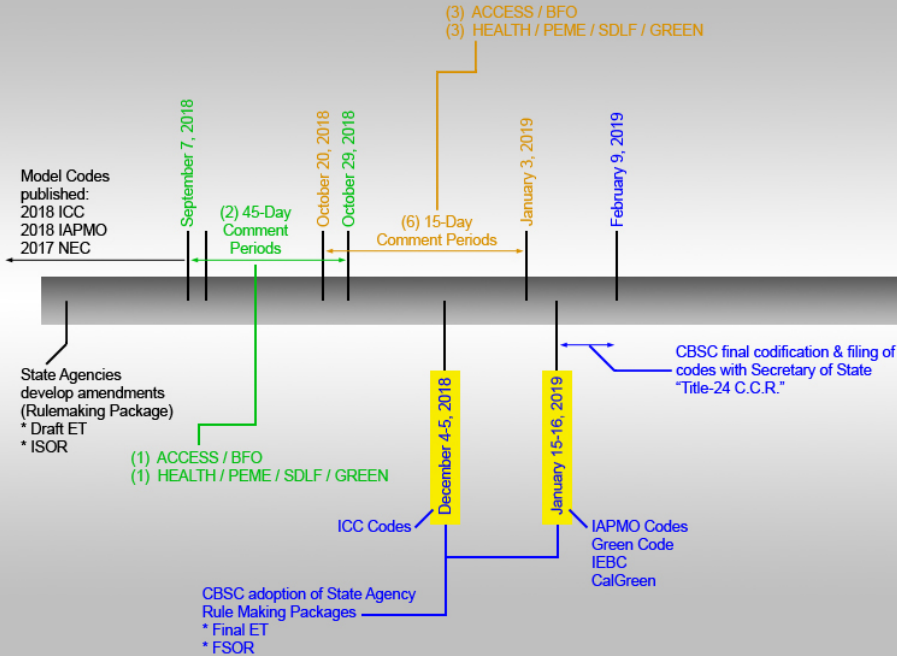
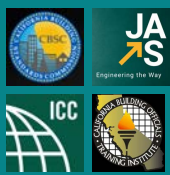
www.dgs.ca.gov/BSC > Resources >

• Guidebooks on Rulemaking

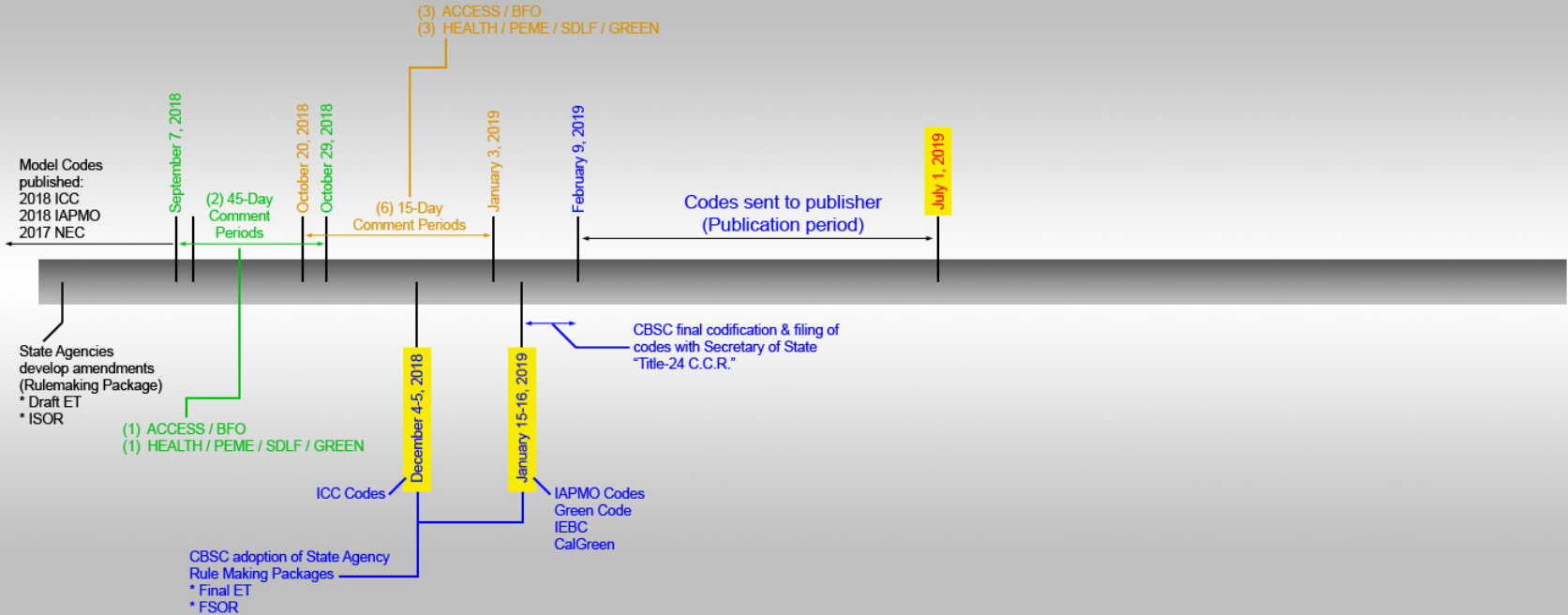
LOCAL CODE ADOPTION TIMELINE



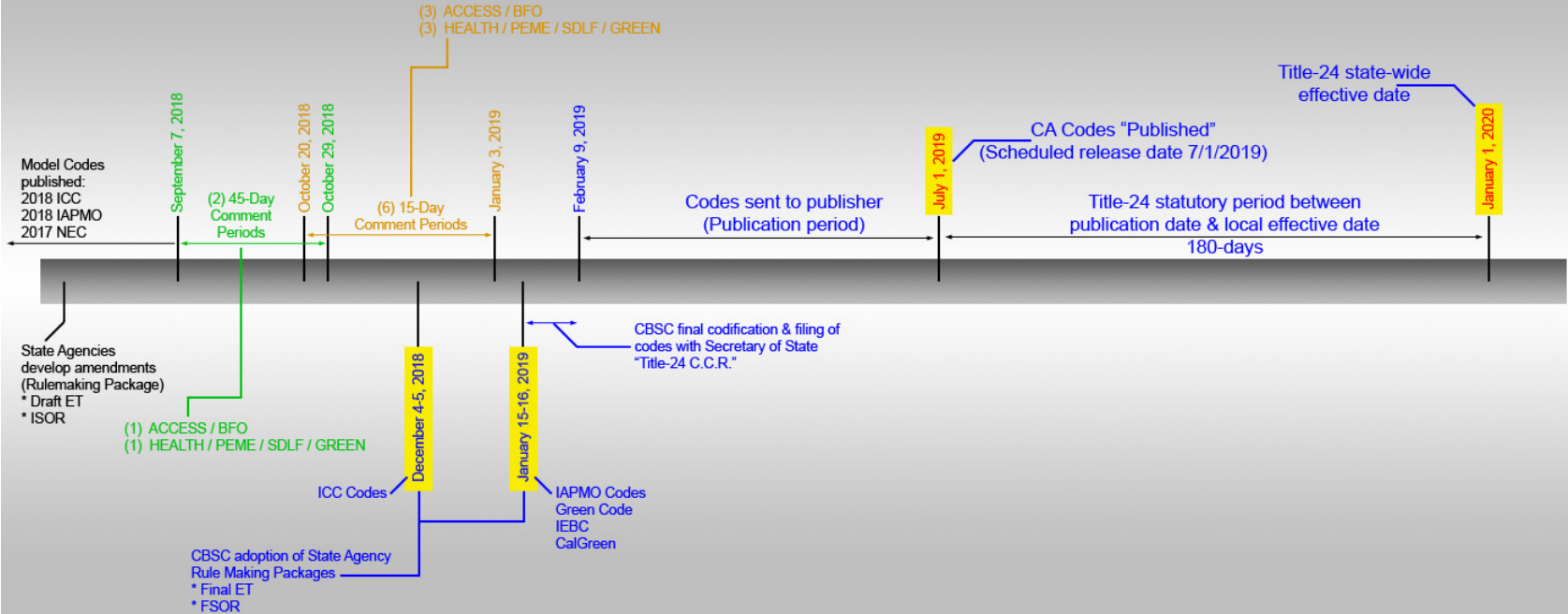
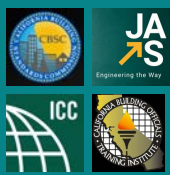
LOCAL CODE ADOPTION TIMELINE



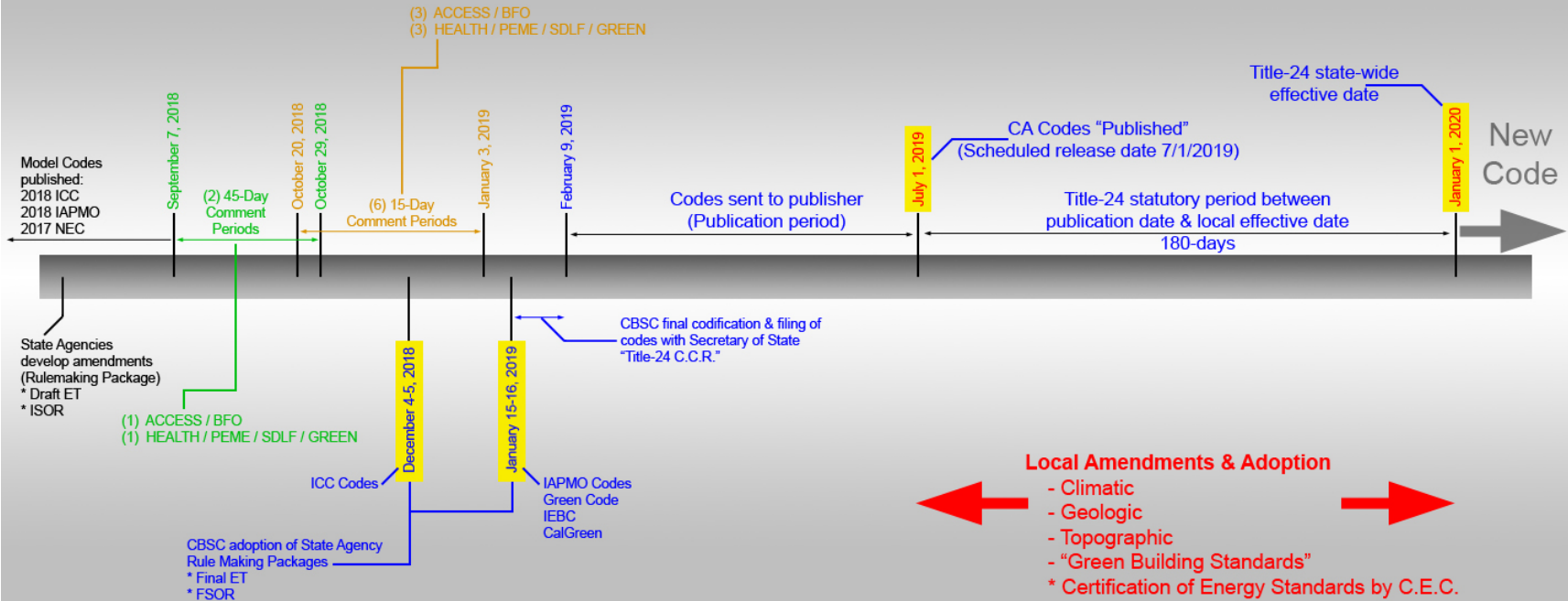
LOCAL CODE ADOPTION TIMELINE



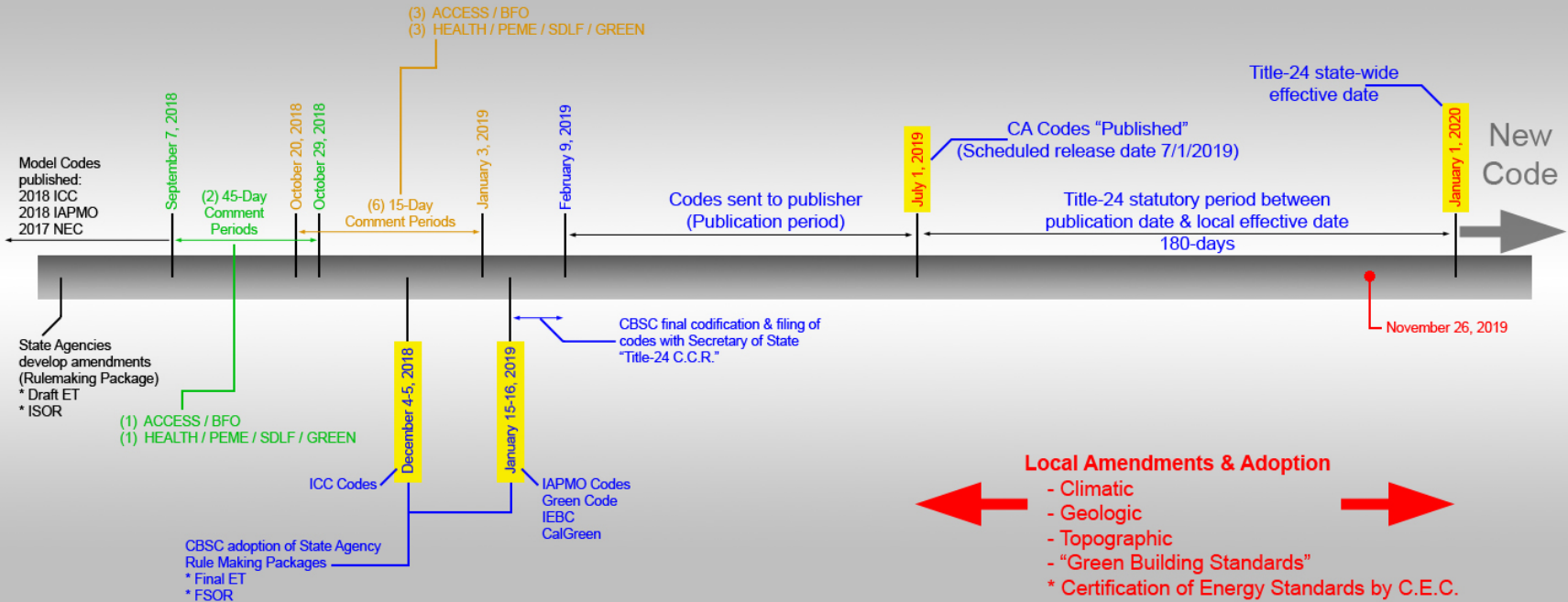
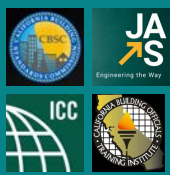
LOCAL CODE ADOPTION TIMELINE



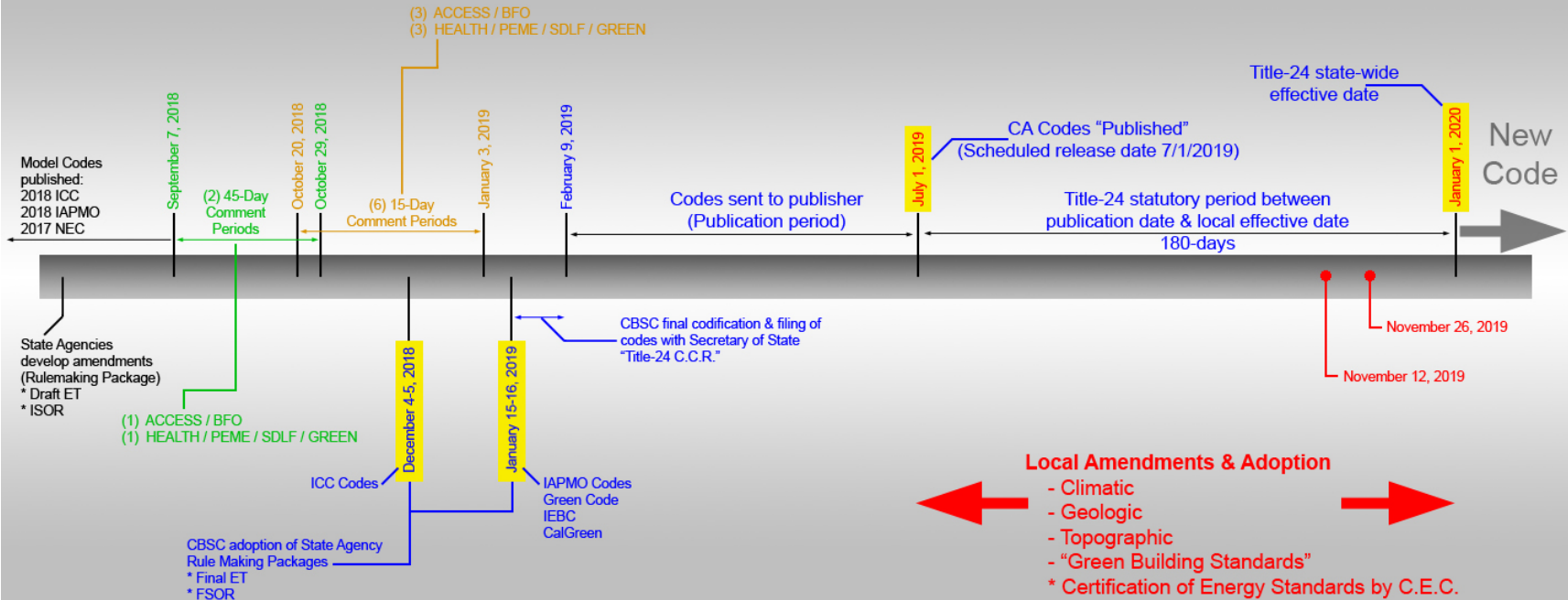
LOCAL CODE ADOPTION TIMELINE



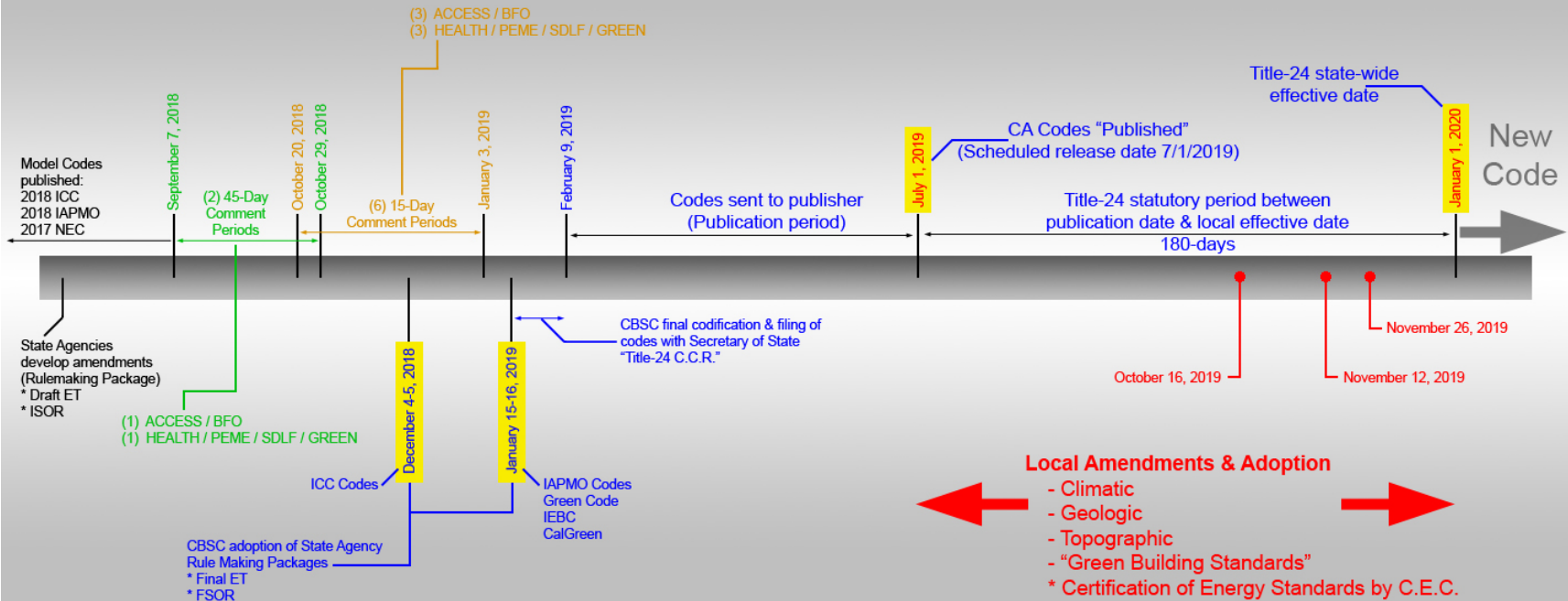
LOCAL CODE ADOPTION TIMELINE



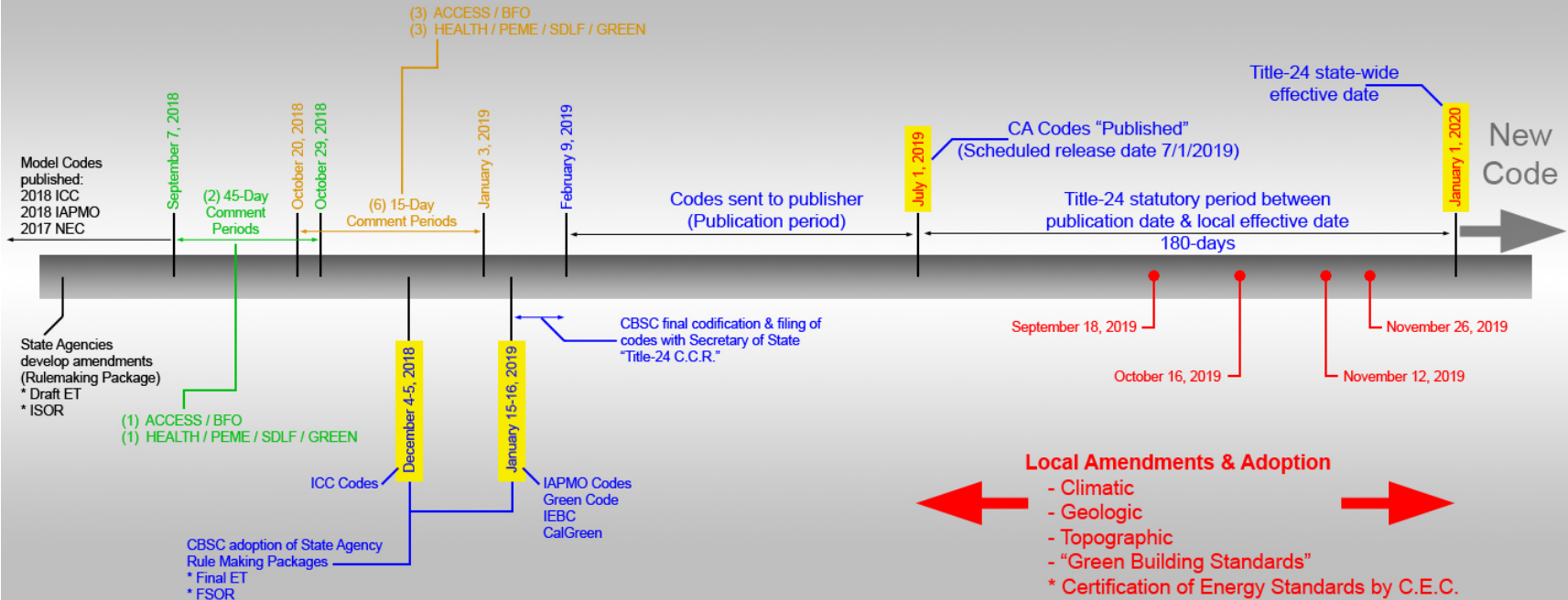
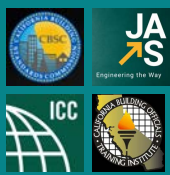
LOCAL CODE ADOPTION TIMELINE



LOCAL CODE ADOPTION TIMELINE



LOCAL CODE ADOPTION TIMELINE



HOW MUCH TIME DO WE HAVE?

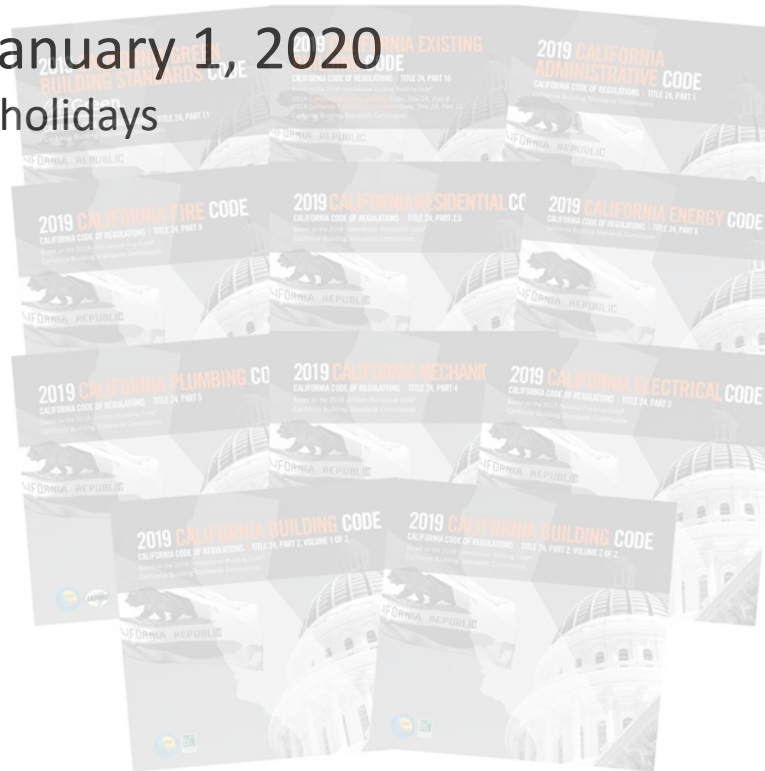


➤ July 1, 2019 → January 1, 2020

➤ Minus weekends/holidays

184 days

126 days



HOW MUCH TIME DO WE HAVE?



➤ July 1, 2019 → January 1, 2020

➤ Minus weekends/holidays

184 days

126 days

➤ July 1, 2019 → November 12, 2019

➤ Minus weekends/holidays

134 days

92 days



HOW MUCH TIME DO WE HAVE?



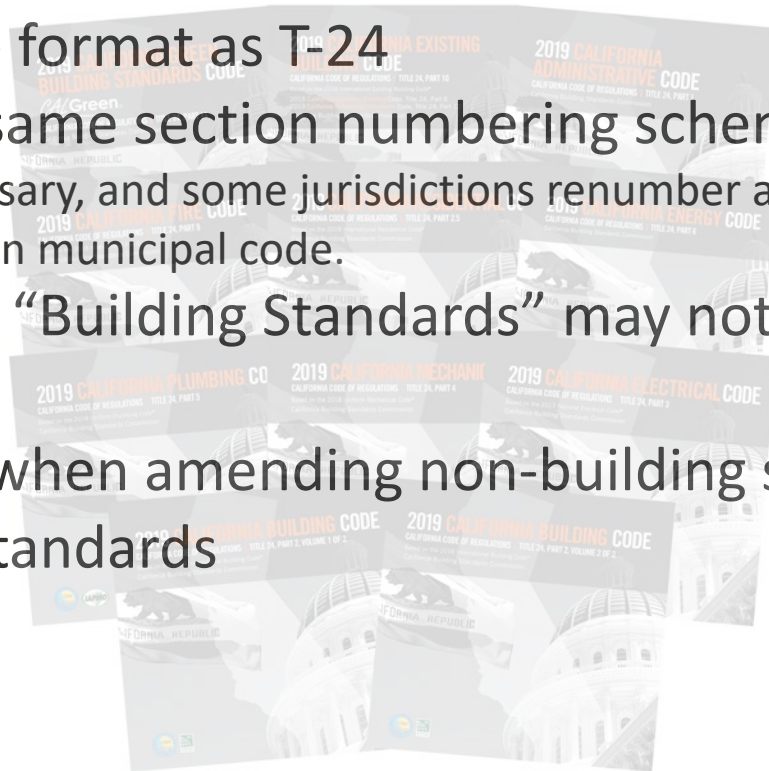
- July 1, 2019 → January 1, 2020
➤ Minus weekends/holidays
184 days
126 days
- July 1, 2019 → November 12, 2019
➤ Minus weekends/holidays
134 days
92 days
- July 1, 2019 → September 18, 2019
➤ Minus weekends/holidays
79 days
55 days



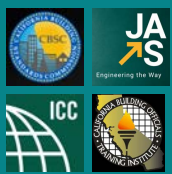
WHAT DO LOCAL AMENDMENTS LOOK LIKE?



- Follow the same format as T-24
- Best to use the same section numbering scheme and sequence
 - But it is not necessary, and some jurisdictions renumber all of the code sections to fit within their own municipal code.
- Amendments to “Building Standards” may not be less protective than T-24
- More flexibility when amending non-building standards and administrative standards
- Examples



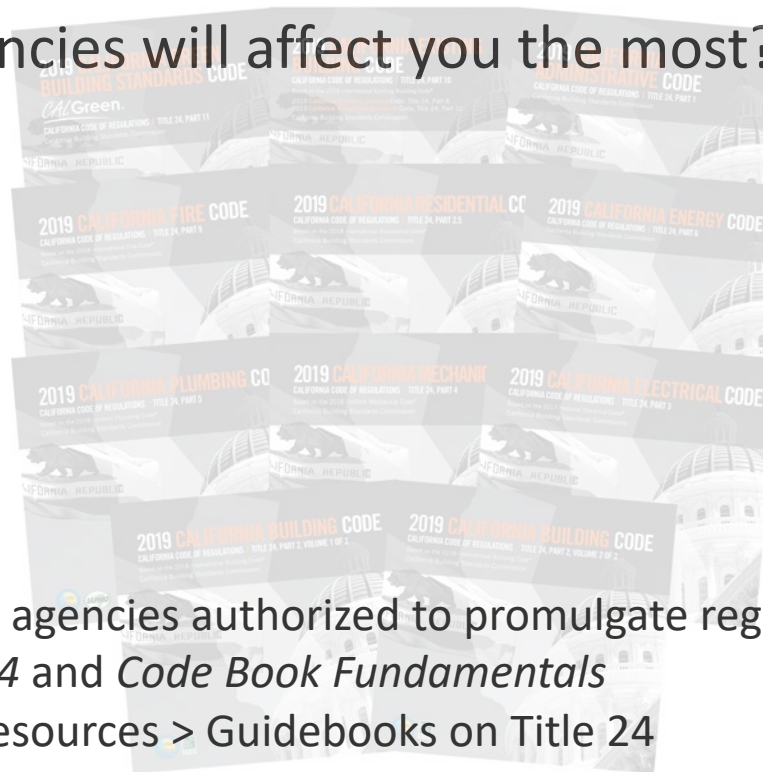
WHAT DO JUSTIFICATIONS LOOK LIKE?



- 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 local amendment requires justification.
- A particular justification may be used repeatedly.
- A justification does not need to be unique to a particular jurisdiction.
- Examples

➤ Which state agencies will affect you the most?

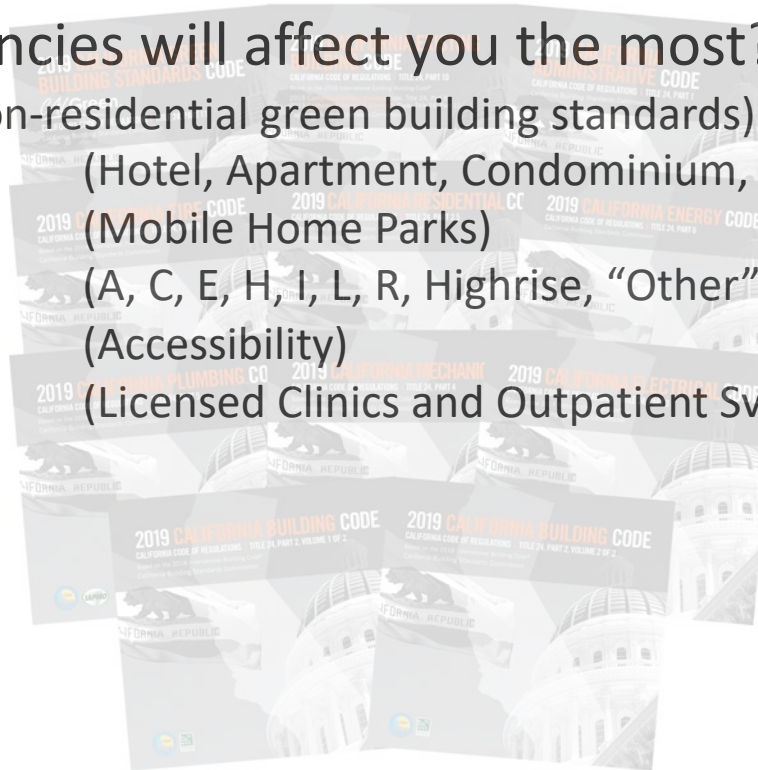
- HCD-1
- HCD-2
- SFM
- DSA/AC
- OSHPD3



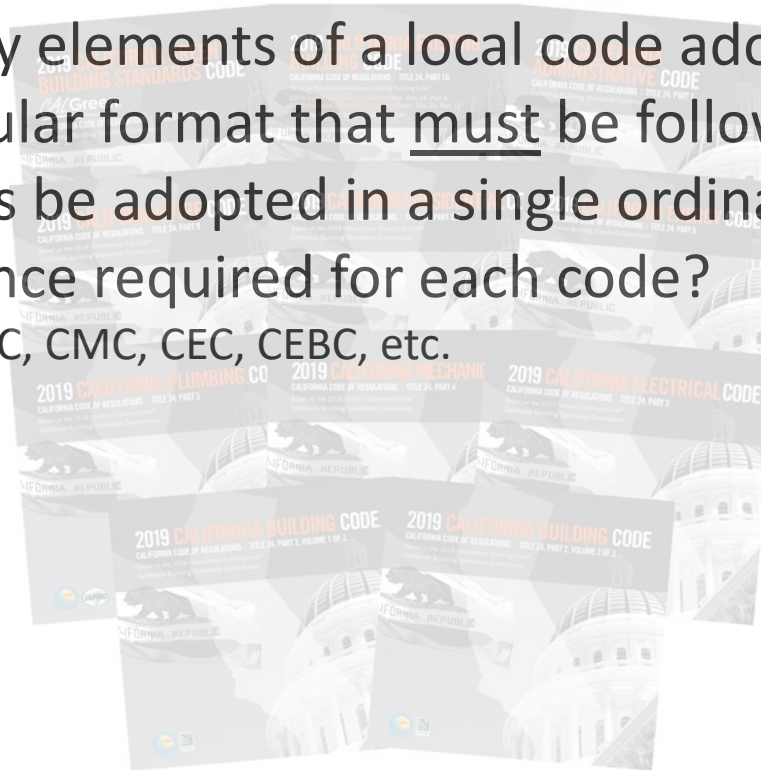
For a detailed list of state agencies authorized to promulgate regulations in Title 24, refer to CBSC's *Guide to Title 24* and *Code Book Fundamentals*

www.dgs.ca.gov/BSC > Resources > Guidebooks on Title 24

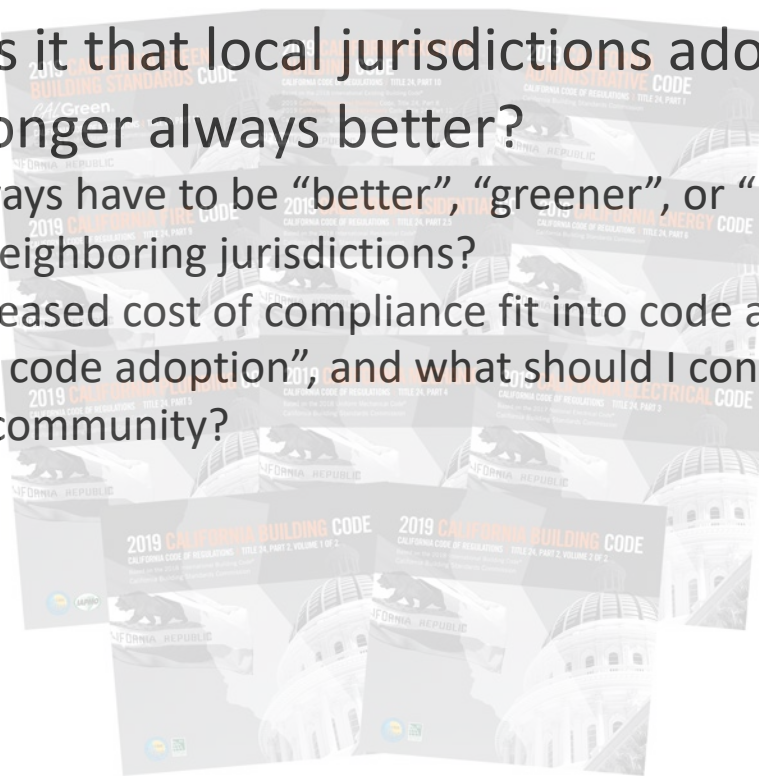
- Which state agencies will affect you the most?
- BSC-CG (non-residential green building standards)
 - HCD-1 (Hotel, Apartment, Condominium, SFD)
 - HCD-2 (Mobile Home Parks)
 - SFM (A, C, E, H, I, L, R, Highrise, “Other”)
 - DSA/AC (Accessibility)
 - OSHPD3 (Licensed Clinics and Outpatient Svcs)



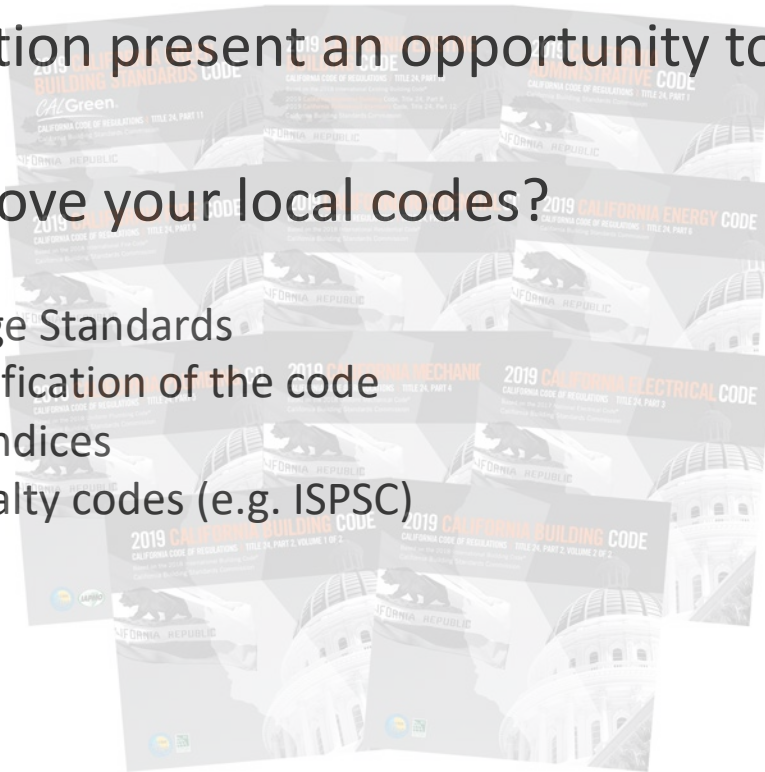
- What are the key elements of a local code adoption ordinance?
- Is there a particular format that must be followed?
- Can all the codes be adopted in a single ordinance, or is a separate ordinance required for each code?
 - CBC, CRC, CFC, CPC, CMC, CEC, CEBC, etc.



- How important is it that local jurisdictions adopt similar codes?
- Is bigger and stronger always better?
 - Do local codes always have to be “better”, “greener”, or “more energy efficient” than codes from neighboring jurisdictions?
 - How does the increased cost of compliance fit into code adoption decisions?
 - What is “balanced code adoption”, and what should I consider when developing the local code for my community?



- Does code adoption present an opportunity to improve your local codes?
- *Should* you improve your local codes?
 - WUI Standards
 - Grading & Drainage Standards
 - Prescriptive simplification of the code
 - Adoption of appendices
 - Adoption of specialty codes (e.g. ISPSC)



- Must be adopted by the governing body
 - All amendments must be adopted by ordinance; a “department policy” is not sufficient
 - “Contract Cities” must adopt their own code, even if adoption is “by reference”
- 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.”
- Appendices

- Appendices
- Not a part of Title 24 unless adopted by a state agency or local jurisdiction

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE APPENDIX G – FLOOD-RESISTANT CONSTRUCTION

(Not adopted by state agencies)

Adopting agency	BSC	BSC- CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	SS/CC	1	2	3	4								
Adopt entire chapter																					
Adopt entire chapter as amended (amended sections listed below)																					
Adopt only those sections that are listed below																					
Chapter / Section																					

APPENDIX G

FLOOD-RESISTANT CONSTRUCTION

The provisions contained in this appendix are not mandatory unless specifically adopted by a state agency, or referenced in the adopting ordinance.

SECTION G101 ADMINISTRATION

G101.1 Purpose. The purpose of this appendix is to promote the public health, safety and general welfare and to minimize

G101.3 Scope. The provisions of this appendix shall apply to all proposed development in a flood hazard area established in Section 1612 of this code, including certain building work exempt from permit under Section 105.2.

G101.4 Violations. Any violation of a provision of this



CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE APPENDIX C – GROUP U – AGRICULTURAL BUILDINGS

(Matrix Adoption Tables are non-regulatory, intended only as an aid to the user.
See Chapter 1 for state agency authority and building applications.)

- Appendices
- Not mandatory unless specifically referenced in the adopting ordinance

Adopting agency	BSC	BSC- CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	SS/CC	1	2	3	4								
Adopt entire chapter			X																		
Adopt entire chapter as amended (amended sections listed below)																					
Adopt only those sections that are listed below																					
Chapter / Section																					

APPENDIX C GROUP U—AGRICULTURAL BUILDINGS

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

SECTION C101 GENERAL

C101.1 Scope. The provisions of this appendix shall apply exclusively to agricultural buildings. Such buildings shall be classified as Group U and shall include the following uses:

SECTION C102 ALLOWABLE HEIGHT AND AREA

C102.1 General. Buildings classified as Group U Agricultural shall not exceed the area or height limits specified in Table C102.1.

- Appendices
 - Not mandatory unless specifically adopted by a state agency **or** referenced in the adopting ordinance
 - NOTE: HCD adopts entire chapter.
 - SFM adopts specific sections

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE APPENDIX I – PATIO COVERS

(Matrix Adoption Tables are non-regulatory, intended only as an aid to the user.
See Chapter 1 for state agency authority and building applications.)

Adopting agency	BSC	BSC-CG	SFM	HCD			DSA			OSHDPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	SS/CC	1	2	3	4								
Adopt entire chapter				X																	
Adopt entire chapter as amended (amended sections listed below)																					
Adopt only those sections that are listed below			X																		
Chapter / Section																					
I101			X																		
I102			X																		
I103			X																		

APPENDIX I PATIO COVERS

The provisions contained in this appendix are not mandatory unless specifically adopted by a state agency, or referenced in the adopting ordinance.

SECTION I101 GENERAL

I101.1 General. Patio covers shall be permitted to be detached from or attached to dwelling units. Patio covers

approved translucent or transparent plastic not more than 0.125 inch (3.2 mm) in thickness, glass conforming to the provisions of Chapter 24 or any combination of the foregoing.

ELEMENTS OF ADOPTION APPENDICES EXAMPLES



- Appendices
- Not mandatory unless specifically referenced in the adopting ordinance.

CALIFORNIA RESIDENTIAL CODE – MATRIX ADOPTION TABLE APPENDIX X – EMERGENCY HOUSING

(Matrix Adoption Tables are nonregulatory, intended only as an aid to the code user.
See Chapter 1 for state agency authority and building applications.)

Adopting agency	BSC	BSC- CG	SFM	HCD			DSA			OSHPD					BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC	
				1	2	1/AC	AC	SS	SS/CC	1	1R	2	3	4									5
Adopt entire chapter			X																				
Adopt entire chapter as amended (amended sections listed below)																							
Adopt only those sections that are listed below																							
Chapter / Section																							

APPENDIX X EMERGENCY HOUSING

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

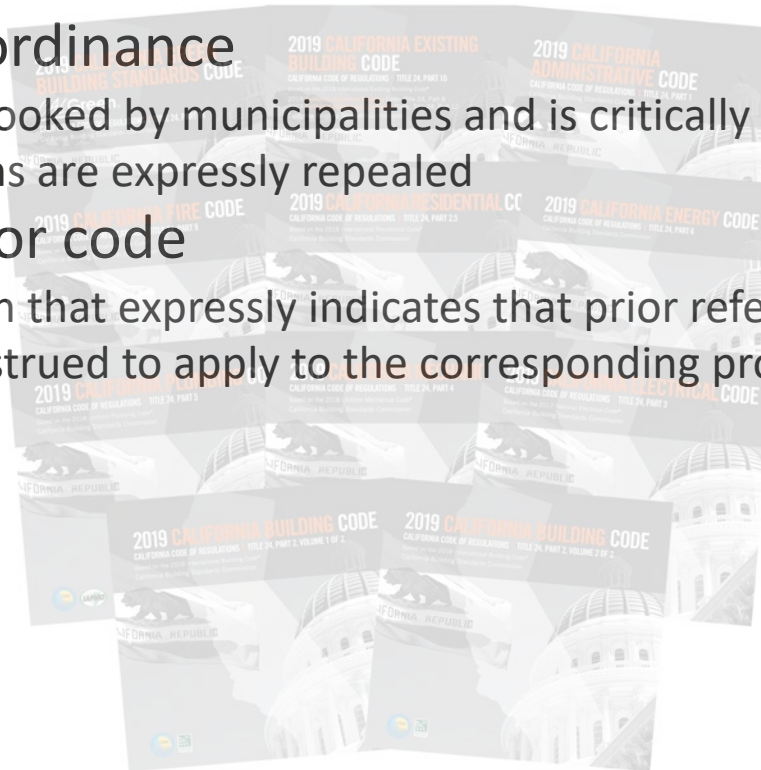
SECTION AX101 GENERAL

AX101.1 Scope. This appendix shall be applicable to emer-

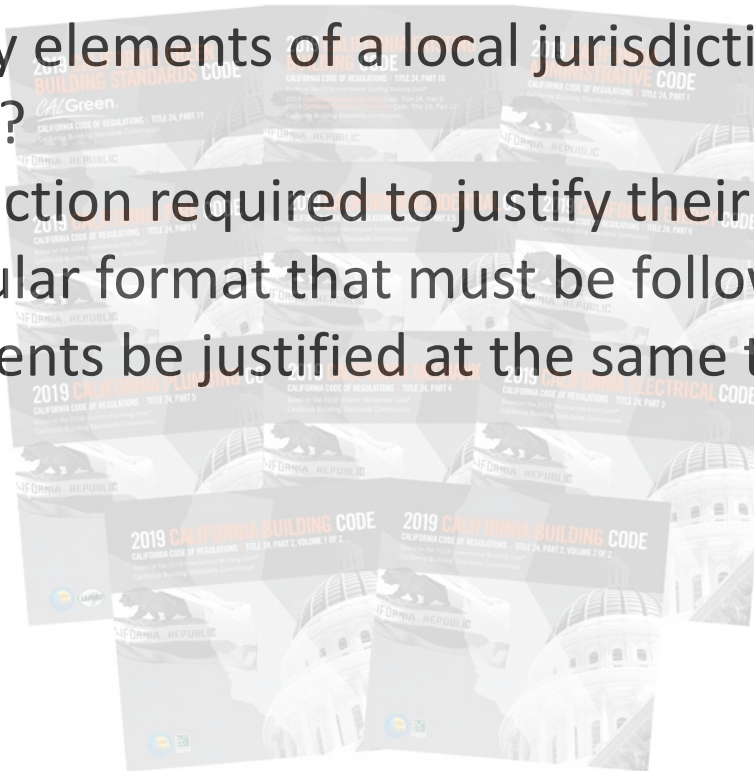
gency housing facilities is limited exclusively to the occupants of the emergency housing, personnel involved in operating the housing, and other emergency personnel.

- Very few substantial changes from the codes we are enforcing now.
- The 2016 Intervening Code Adoption Cycle addressed many changes that would have otherwise been included in the 2019 rulemaking packages.
 - Effective date: 7/1/2018
 - Early adoption of many provisions that were adopted into the 2018 I-Codes.
 - The 2019 California Rulemaking Packages “delete” many previously adopted provisions, because they are now part of the model I-Codes.
- 2018 International Existing Building Code chapters were reorganized
- ... If you’ve adapted to the 7/1/2018 Title 24 Supplement, you won’t see many surprises in the 2019 edition.

- **Repeal of prior ordinance**
 - This is often overlooked by municipalities and is critically important to ensure that obsolete provisions are expressly repealed
- **Reference 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



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



- Amendments to Administrative Standards do not require justification pursuant to HSC 18941.5/17958/13869
- Amendments to 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
 - A Council Resolution is a formal express method that is simple and clean.

- *“... 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 shall 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 and amendments must be filed with the California Building Standards Commission

2525 Natomas Park Drive, Suite 130
Sacramento, California 95833
Attention: Ordinance Filing

➤ Certified mail with return receipt request is recommended

➤ File electronically ordinancefiling@dgs.ca.gov

➤ PREFER readable PDF (SB 1442, Statute 2016)

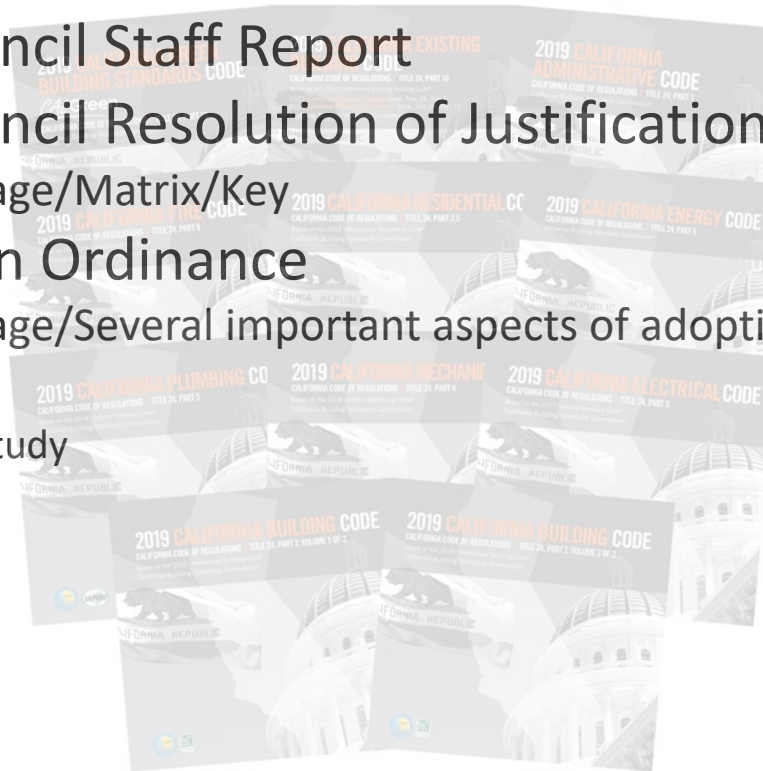
➤ CBSC will acknowledge receipt

➤ CBSC will not evaluate justifications or amendments

➤ CBSC will post on our website www.dgs.ca.gov/BSC > Codes > Ordinances



- Sample City Council Staff Report
- Sample City Council Resolution of Justifications
 - Excerpts: Cover Page/Matrix/Key
- Sample Adoption Ordinance
 - Excerpts: Cover Page/Several important aspects of adoption ordinances
- CEC Certification
 - Cost Effectiveness Study



Adopted
11/15/16
Sinanyan/Najerian
Absent: Friedman

RESOLUTION NO. 16-196

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, 2017.

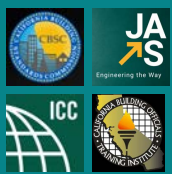
WHEREAS, the City Council of the City of Glendale, intends to pass an ordinance adopting the California Building Standards Code which consists of the 2016 editions of the California Building Code, Residential Code, California Existing Building Code, Plumbing Code, Mechanical Code, Electrical Code, Fire Code, Green Building Standards Code, 1997 Uniform Housing Code, and making modifications and changes thereto, all of which shall comprise a portion of the Glendale Building and Safety Code, 2017; 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 express findings 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 California 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, 2017, 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 due to local climatic, geological, and topographical conditions. The legislative findings for such modifications and changes are made pursuant to Sections 17958.5 and 17958.7



Section IA – 47.

1505.1.3 Roof coverings within all other areas.

This amendment is the same as in the 2008, 2011 and 2014 Glendale Building and Safety Code. This amendment prohibits the use of wood roof covering material, and requires other roof coverings to have a Class A rating, or be made of materials meeting the requirements of a Class B roofing assembly in non-high fire hazard areas.

(Justification: Topographic and Climatic– See justification C and D in the attached matrix)

Section IA – 48.

1507.3.1 Deck requirements.

This amendment is the same as in the 2014 Glendale Building and Safety Code. This amendment requires concrete and clay tiles to be installed only over solid structural sheathing boards. The change is necessary because there were numerous observations of tile roofs pulling away from wood framed buildings following the 1994 Northridge Earthquake. The SEAOSC/LA City Post Northridge Earthquake committee findings indicated significant problems with tile roofs was due to inadequate design and/or construction. Therefore, the amendment is needed to minimize such occurrences in the event of future significant earthquakes.

(Justification: Geologic – see justification B in the attached matrix)

Section IA – 49.

Table 1507.3.7 CLAY AND CONCRETE TILE ATTACHMENT.

This amendment is the same as in the 2008, 2011 and 2014 Glendale Building and Safety Code. This amendment changes the minimum number of fasteners for tile roofing material from one fastener to two fasteners per tile even on relatively flat roofs, and increases the minimum side lap requirement for roofing felt. This amendment specifies nailing edge distances to ensure a sturdy connection. This amendment also establishes corrosion resistance characteristics for nails to mitigate water intrusion and water-accelerated corrosion of fastening material which results from heavy rains which occur throughout the local region.

(Justification: Geologic and Climatic – see justification B and C in the attached matrix)

Section IA – 50.

1510.8 Roof sheathing.

This amendment is the same as in the 2008, 2011 and 2014 Glendale Building and Safety Code, renumbered from Section 1510.7 to match the new code format. This amendment requires existing buildings to be provided with a plywood diaphragm when roofing material is stripped from the structure, if such buildings do not have such a diaphragm,

(Justification: Geologic and Topographic– see justification B and D in the attached matrix)

Section IA – 51.

1613.5.2 Structural Separation.

This amendment is the same as in the 2008, 2011 and 2014 Glendale Building and Safety Code, renumbered from Sections 1617.1.3 to match the new code format. This amendment is a revision to Section 12.12.3 equation 12.12-1 of ASCE 7-10 reference document.

The inclusion of the importance factor in this equation has the unintended consequence of reducing the minimum seismic separation distance for important facilities such as hospitals, schools, police and fire stations from adjoining structures. The proposal to omit the importance factor from Equation 12.12-1 will ensure that a safe seismic separation distance is provided.

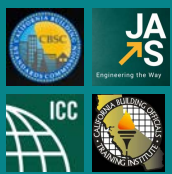
(Justification: Geologic and Topographic – See justification B in the attached matrix)

Volume IA						
ORD SEC	Section	Title	Added to CBC	Deleted from CBC	Amended from CBC	Justification (See below for key to Justifications)
IA-27	Chapter 1 Division II, 119	ON SITE CONSTRUCTION TRASH AND DEBRIS CONTROL	X			A
IA-28	Chapter 1 Division II, 120	DISASTER REPAIR AND RECONSTRUCTION	X			A
IA-29	Chapter 1 Division II, 121	SANDBLASTING	X			A
IA-30	[F] 403.3	Automatic sprinkler system			X	B, C, & D
IA-31	[F] 903.3.5.2	Secondary water supply			X	B, C, & D
IA-32	503.2	Construction on contiguous lots under same ownership or occupancy	X			A
IA-33	TABLE 504.3	ALLOWABLE BUILDING HEIGHT IN FEET ABOVE GRADE PLANE			X	A, B, C & D
IA-34	TABLE 504.4	ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE			X	A, B, C & D
IA-35	TABLE 506.2	ALLOWABLE AREA FACTOR (A _p =NS, S1, S13R, OR SM as applicable) IN SQUARE FEET			X	A, B, C & D
IA-36	[F] 903.2.20	Where required	X			A, B, C & D
IA-37	[F] 903.3.1.2	NFPA 13R sprinkler systems		X		B, C, & D
IA-38	[F] 906.8	Cabinets			X	B, C, & D
IA-39	[F] 906.9.1	Extinguishers weighing 40 pounds or less.			X	A
IA-40	[F] 907.6.5	Monitoring			X	B, C, & D
IA-41	[F] 907.1	Certification, Maintenance Contract, Identification of Certificated Systems	X			A
IA-42	[F] 913.7	Fire pumps and pump rooms.	X			B, C, & D
IA-43	TABLE 1004.1.2	MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT			X	A
IA-44	TABLE 1006.2.1	SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY			X	A
IA-45	1505.1	General			X	C & D
IA-46	TABLE 1505.1	MINIMUM ROOF COVERING CLASSIFICATION FOR TYPES OF CONSTRUCTION			X	C & D
IA-47	1505.1.3	<i>Roof coverings within all other areas</i>			X	C & D
IA-48	1507.3.1	Deck Requirements	X			B
IA-49	TABLE 1507.3.7	CLAY AND CONCRETE TILE ATTACHMENT			X	B
IA-50	1510.8	Roof sheathing	X			B & D
IA-51	1613.5.2	Structural Separation	X			B
IA-52	1613.5.3	Values for Vertical Combinations	X			B & D

**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 California 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 Building Standards Code 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





ORDINANCE NO. _____

AN ORDINANCE ADOPTING THE 2016 CALIFORNIA BUILDING CODE AS VOLUME IA, THE 2016 CALIFORNIA RESIDENTIAL CODE AS VOLUME IB, THE 2016 CALIFORNIA EXISTING BUILDING CODE AS VOLUME IC, THE 2016 CALIFORNIA PLUMBING CODE AS VOLUME II, THE 2016 CALIFORNIA MECHANICAL CODE AS VOLUME III, THE 2016 CALIFORNIA ELECTRICAL CODE AS VOLUME IV, THE 1997 UNIFORM HOUSING CODE AS VOLUME V, THE 2016 CALIFORNIA FIRE CODE AS VOLUME VI, THE GLENDALE SECURITY CODE AS VOLUME VII AND THE GLENDALE COMMERCIAL, INDUSTRIAL PROPERTY MAINTENANCE CODE AS VOLUME VIII AND THE 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE AS VOLUME IX ALL OF WHICH COMPRISE THE BUILDING AND SAFETY CODE OF THE CITY OF GLENDALE, 2017.

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, 2017, hereinafter designated as the "Glendale Building and Safety Code, 2017."

SECTION INT-2. Volume IA. Building Standards.

The City of Glendale hereby adopts the 2016 California Building Code as Volume IA of the Glendale Building and Safety Code, 2017. Except as otherwise provided herein, or as later amended, Volume IA of the Glendale Building and Safety Code, 2017, shall be as published in the California Building Code Volumes 1 and 2, 2016 edition, and as copyrighted in 2015 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. Volume IA of the Glendale Building and Safety Code, 2017, shall include the Historic Building Code, 2016 edition, published and copyrighted in 2015 by the California Building Standards Commission, California Code of Regulations, Title 24 Part 8. Said California Building

edition, and as copyrighted in 2015 by the International Code Council, Inc. and the California Building Standards Commission, California Code of Regulations, Title 24, Part 11, including all of its tables, indices, appendices, addenda and footnotes. Said California Green Building Standards Code is hereby referred to and by such reference is incorporated herein as if fully set forth. The voluntary provisions in Appendix Chapter A-4 and Chapter A-5 are not adopted as mandatory compliance features at this time.

SECTION INT-13. Effect of Code on Past Actions and Obligations. The adoption of the Glendale Building and Safety Code, 2017, 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-14. 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, 2014, shall be construed to apply to the corresponding provisions contained within the Glendale Building and Safety Code, 2017. Ordinance No. 5813 and No. 5861 of the City of Glendale and all other ordinances or parts of ordinances in conflict herewith are hereby superseded and expressly repealed.

SECTION INT-15. Penalty. Unless otherwise provided in said Code, any person violating any provision of the Glendale Building and Safety Code, 2017, 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



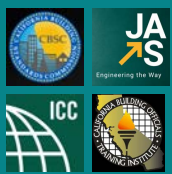
the County of Los Angeles for a term not exceeding six months, or both such fine and imprisonment.

SECTION INT-16. Severability. If any provision of this Ordinance or the application thereof to any person or circumstance is held invalid by a court of competent jurisdiction, 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-17. Effective Date, Exceptions. This ordinance becomes effective and shall be in full force on January 1, 2017; 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 in strict compliance with former Building and Safety Code, 2014, provided however physical construction is started within one hundred eighty (180) days from the date of issuance of the permit and continued to completion according to said former Building and Safety Code, 2014.

SECTION INT-18. Four-Fifths Vote. The City Clerk shall certify to the passage of this Ordinance by a vote of four-fifths (4/5^{ths}) of the members of the Council of the City of Glendale and shall cause a summary of the same to be published once in the official newspaper of said City.





required to comply with all applicable 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 IA-12. Chapter 1 Division II Section 105.8 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

105.8 Responsibility of permittee. Building permits shall be presumed by the city to incorporate all of the work that the applicant, the applicant's agent, employees and/or contractors shall carry out. Said proposed work shall be in accordance with the approved plans and with all requirements of this code and any other laws or regulations applicable thereto. No city approval shall relieve or exonerate any person from the responsibility of complying with the provisions of this code nor shall any vested rights be created for any work performed in violation of this code.

SECTION IA-13. Chapter 1 Division II Section [A] 107.3.4 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 107.3.4 Design professional in responsible charge.

It shall be required that all documents submitted for review the building official shall be prepared by a registered design professional, the building official shall be authorized to require the owner or the owner's authorized agent to engage and designate on the building permit application a registered design professional who shall act as the registered design professional in responsible charge. If the circumstances require, the owner or the owner's authorized agent shall designate a substitute registered design professional in responsible charge who shall perform the duties required of the original registered design professional in responsible charge. The building official shall be notified in writing by the owner or the owner's authorized agent if the registered

SECTION IA-47. Section 1505.1.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

1505.1.3 Roof coverings within all other areas. *The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class B. No wood roof covering shall be installed.*

SECTION IA-48. Section 1507.3.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

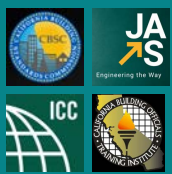
1507.3.1 Deck requirements. Concrete and clay tile shall be installed only over solid structural sheathing boards.

SECTION IA-49. Table 1507.3.7 of Volume IA of the Glendale Building and Safety Code, 2014 is hereby amended to read as follows:

TABLE 1507.3.7

CLAY AND CONCRETE TILE ATTACHMENT^{a, b, c}

GENERAL—CLAY OR CONCRETE ROOF TILE			
Maximum Nominal design Wind Speed, V_{nd} (mph)	Mean roof height (feet)	Roof slope up to < 3:12	Roof slope 3:12 and over
85	0-60	Two fasteners per tile.	Two fasteners per tile. Two fasteners on slopes of 7:12 and less for tiles with installed weight exceeding 7.5 lbs./sq. ft. having a width no greater than 16 inches.
100	0-40	Flat tile without vertical laps, two fasteners per tile.	
100	> 40-60	The head of all tiles shall be nailed. The nose of all eave tiles shall be fastened with approved clips. All rake tiles shall be nailed with two nails. The nose of all ridge, hip and rake tiles shall be set in a bead of roofer's mastic.	
110	0-60	The fastening system shall resist the wind forces in Section 1609.5.3 minimum 2 fasteners per tile.	
120	0-60	The fastening system shall resist the wind forces in Section 1609.5.3 minimum 2 fasteners per tile.	
130	0-60	The fastening system shall resist the wind forces in Section 1609.5.3 minimum 2 fasteners per tile.	
All	>60	The fastening system shall resist the wind forces in Section 1609.5.3 minimum 2 fasteners per tile.	



SECTION IA-103. Section 3308.4 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

3308.4 Mixing Mortar on Public Property. The mixing or handling of mortar, concrete or other material on public property, when authorized by the director of public works under a street use permit issued under Section 3308.3 of this Code, shall be done in a mechanical mixer or in a tight box in such a manner as to prevent dripping or splashing on public property.

SECTION IA-104. Appendix F, RODENTPROOFING, of the California Building Code, 2016 edition, published and copyrighted by the International Code Council and California Building Standards Commission is hereby adopted into Volume IA of the Glendale Building and Safety Code, 2017, by reference and by such reference is incorporated herein as if fully set forth.

SECTION IA-105. Appendix I, PATIO COVERS, of the California Building Code, 2016 edition, published and copyrighted by the International Code Council and the California Building Standards Commission is hereby adopted into Volume IA of the Glendale Building and Safety Code, 2017, by reference, as further amended herein, into the Glendale Building and Safety Code 2017, and by such reference, is incorporated herein as if fully set forth.

SECTION IA-106. Appendix I, Section I105.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

I105.1 Design loads. Patio covers shall be designed and constructed to sustain, within the stress limits of this code, all dead loads plus a minimum vertical live load of 10 pounds per square foot (0.48 IN/m²) except that snow loads shall be used where such snow loads exceed this minimum. Such patio covers shall be designed to resist the minimum wind and seismic loads set forth in this code. Solar energy systems shall not be installed on patio covers designed by this Section.

➤ Guide for Local Amendments of Building Standards

➤ <https://www.dgs.ca.gov/BSC/Codes/Local-Code-Ordinances>

➤ California Code Adoption webinar

➤ same webpage

GUIDE FOR LOCAL AMENDMENTS OF BUILDING STANDARDS

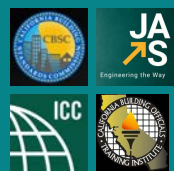
Information for local government and Fire Protection Districts on the requirements of state law for local amendments to building standards.





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



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:

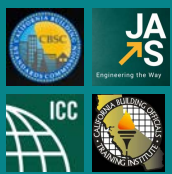
- 1) Application cover letter to Mr. Robert Oglesby, Executive Director, dated August 23, 2012.
- 2) Agenda from the August 15, 2012 City of Glendale, Building and Fire Board of Appeals public meeting. This meeting was a regularly scheduled, publicly noticed meeting in accordance with the Ralph M. Brown 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. Keshishah, 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,

A handwritten signature in black ink, appearing to read "Stuart Tom".

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

Report prepared by:

Michael Gabel
Gabel Associates, LLC
1818 Harmon Street, Suite #1
Berkeley, CA 94703
(510) 428-0803
mike@gabelenergy.com

Building Description	Total Annual KWh Saving	Total Annual Therms Saving	Incremental First Cost (\$)	Annual Energy Cost Savings (\$)	Simple Payback (Years)
2,450 sf Base 1 + Radiant	295	1	\$383	\$47	8.2
2,450 sf Base 2 + Radiant	124	6	\$383	\$25	15.6
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	\$28	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 10-106 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.

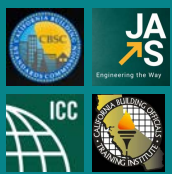
AYE: Weisenmiller, Douglas, McAllister, Peterman

NAY: None

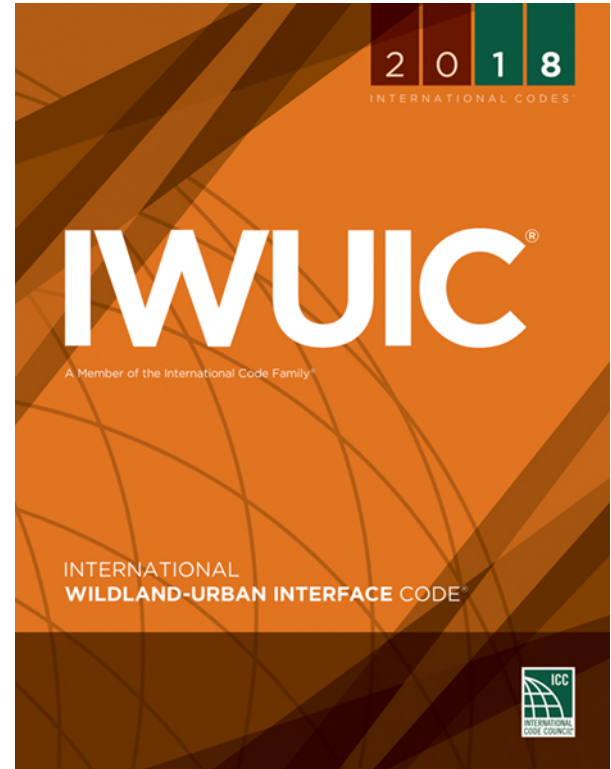
ABSENT: None

ABSTAIN: None

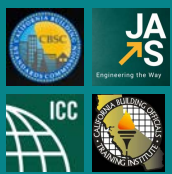

HARRIET KALLEMEYN, Secretariat



OTHER ICC RESOURCES



LOCAL ADOPTION OF OTHER MODEL CODES



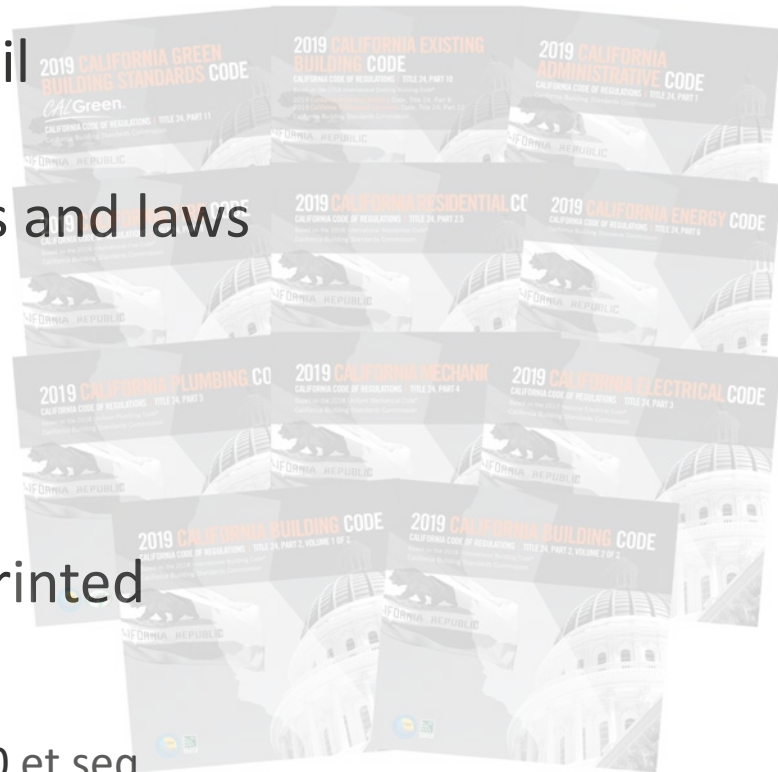
➤ State Law or regulations prevail

➤ Wildland Urban Interface reg's and laws

- CBC, Chapter 7A
- CRC, Section R337
- CFC, Section 4906
- Public Resources Code (law) 4291
- Government Code (law) 51182

➤ Swimming Pool Safety Act reprinted

- CBC, Section 3109
- CRC, Appendix V
- Health and Safety Code (law) 115920 et seq.



THANK YOU !!

Stuart Tom, P.E., CBO, FIAE

stuart@JASPacific.com

stom@iccsafe.org

www.iccsafe.org

Mia Marvelli, Executive Director

Building Standards Commission

Mia.Marvelli@dgs.ca.gov

www.dgs.ca.gov/BSC

