

SIGNIFICANT CHANGES TO THE

# CALIFORNIA FIRE CODE

2016 EDITION

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#### 2016 EDITION

Kevin Reinertson Fulton R. Cochran, C.B.O., C.F.C.O. Kevin H. Scott

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ISBN: 978-1-60983-641-2

Cover Design: Lisa Triska Project Head: Steve Van Note Publications Manager: Mary Lou Luif

Layout: Sue Brockman

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First Printing: July 2016

PRINTED IN THE U.S.A.

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### **Preface**

he purpose of *Significant Changes to the California Fire Code*, 2016 Edition, is to familiarize fire officials, building officials, plans examiners, fire inspectors, design professionals and others with many of the important changes in the *2016 California Fire Code* (CFC). This publication is designed to assist code users in identifying the specific code changes that have occurred and, more important, in understanding the reasons behind the changes. It is also a valuable resource for jurisdictions in their code adoption process.

Only a portion of the total number of code changes to the CFC are discussed in this book. The changes selected were identified for a number of reasons, including their frequency of application, special significance or change in application. However, the importance of the changes not included is not to be diminished. The 2015 International Fire Code® (IFC®) is the basis for the CFC. Further information on all code changes to the 2015 IFC is in the Complete Revision History to the 2015 I-Codes, available from the International Code Council® (ICC®).

Significant Changes to the California Fire Code, 2016 Edition, is arranged to follow the general layout of the CFC, including code sections and section number format. The table of contents, in addition to providing guidance in the use of this publication, allows for a quick identification of those significant code changes that occur in the 2016 CFC.

Throughout the book, each change is accompanied by a photograph or an illustration to assist in and enhance the reader's understanding of the specific change. A summary and a discussion of the significance of the change are also provided. Each code change is identified by type, be it an addition, modification, clarification or deletion.

The code change itself is presented in a legislative format similar to the style utilized for code change proposals. Deleted code language is shown with a strikethrough, and new code text is indicated by underlining. As a result, the actual 2016 CFC code language is provided as well as a comparison with the 2013 CFC language, so the user can easily determine changes to the specific code text.

As with any code change text, *Significant Changes to the California Fire Code*, 2016 Edition, is best used as a companion to the 2016 CFC. Because only a limited discussion of each change is provided, the reader should reference the code itself in order to gain a more comprehensive understanding of the code change and its application.

The commentary and opinions set forth in this text are those of the authors and do not necessarily represent the official position of ICC. In addition, they may not represent the views of any enforcing agency because such agencies have the sole authority to render interpretations of the CFC. In many cases, the explanatory material is derived from the reasoning expressed by code change proponents.

Comments concerning this publication are encouraged and may be directed to ICC at significantchanges@iccsafe.org.

### **About the International Fire Code®**

Fire code officials, fire inspectors, building officials, design professionals, contractors and others involved in the field of fire safety recognize the need for a modern, up-to-date fire code. The *International Fire Code*® (IFC), 2015 edition, is intended to meet these needs through model code regulations that safeguard the public health and safety in all communities, large and small. The IFC is kept up to date through ICC's open code development process. The provisions of the 2012 edition, along with those code changes approved through 2013, make up the 2015 edition.

One in a family of International Codes<sup>®</sup> published by ICC, the IFC is a model code that regulates minimum fire safety requirements for new and existing buildings, facilities, storage and processes. It addresses fire prevention, fire protection, life safety and safe storage and use of hazardous materials. The IFC provides a total approach of controlling hazards in all buildings and sites, regardless of the hazard being indoors or outdoors.

The IFC is a design document. For example, before a building is constructed, the site must be provided with an adequate water supply for fire-fighting operations and a means of building access for emergency responders in the event of a medical emergency, fire or natural or technological disaster. Depending on the building's occupancy and uses, the IFC regulates the various hazards that may be housed within the building, including refrigeration systems, application of flammable finishes, fueling of motor vehicles, high-piled combustible storage and the storage and use of hazardous materials. The IFC sets forth minimum requirements for these and other hazards and contains requirements for maintaining the life safety of building occupants, the protection of emergency responders, and to limit the damage to a building and its contents as the result of a fire, explosion or unauthorized hazardous material discharge and electrical systems. The IFC is available for adoption and use by jurisdictions internationally. Its use within a governmental jurisdiction is intended to be accomplished through adoption by reference, in accordance with proceedings establishing the jurisdiction's laws.

### About the California Fire Code

California Fire Service, fire prevention officers, building officials, design professionals, and others involved in the building construction industry recognize the need for a modern, up-to-date California specific fire prevention code addressing the design, construction, installation and use of buildings systems through requirements emphasizing performance. The 2015 International Fire Code is the basis for the 2016 California Fire Code (CFC) and is intended to meet these needs through model code regulations that safeguard the public health and safety in all communities, large and small.

The CFC is one in a family of California building codes (California Code of Regulations, Title 24) that are published on a triennial basis. This comprehensive fire code establishes minimum regulations for building systems by means of prescriptive and performance-related provisions.

It is founded on broad-based principles that make possible the use of new materials and new building designs. The California Building Standards Commission (CBSC) is responsible for the administration of each code cycle, which includes the proposal, review and adoption processes. Supplements and errata are issued throughout the cycle.

### **Acknowledgments**

Significant Changes to the California Fire Code, 2016 Edition, is the result of a collaborative effort, and the authors are grateful for the assistance and contributions by the following talented staff of ICC Business and Product Development: Hamid Naderi, P.E., C.B.O., Senior Vice President; Doug Thornburg, A.I.A., C.B.O., Vice President and Technical Director, Products and Services; and Jay Woodward, Senior Staff Architect. The authors would also like to thank Adria Reinertson, Deputy Fire Marshal, Riverside County; Andrew Henning, Deputy State Fire Marshal III, Office of the State Fire Marshal; Tom Hammerberg, President/Executive Director of American Fire Alarm Association; Howard Hopper, Regulatory Services Program Coordinator with Underwriters Laboratories LLC; John Taecker, Senior Regulatory Engineer with Underwriters Laboratories LLC; and Bob Davidson, Davidson Code Concepts, LLC.

ICC is grateful for the support and contributions of the California State Fire Marshal's Office; and Randy Metz (Fire Prevention Officer, Southern Division) and Robert Marshall ((Fire Prevention Officer, Northern Division) of the California Fire Chiefs Association.

### **About the Authors**

#### **Kevin Reinertson**

Deputy Fire Marshal
Riverside County Fire Department
Office of the Fire Marshal

Kevin Reinertson has been actively involved in code development, fire prevention, and code enforcement for 25 years. Kevin has served as the State Fire Marshal's representative on the California Building Standards Code Coordinating Council and the California Building Officials/California Fire Chiefs Building Fire Advisory Committee. He was also a past chair of the Sacramento Valley Association of Building Officials Code Review and Development Committee.

Kevin Reinertson joined the Riverside County Fire Department, California, in 2015 as a Deputy Fire Marshal in charge of Special Projects, where he assists in the development, improvement, delivery, and management of the Office of the Fire Marshal.

Prior to coming to Riverside County, Kevin Reinertson worked at the California State Fire Marshal's Office (OSFM) where he was appointed Division Chief of the Code Development and Analysis Division in 2011 and oversaw the adoption of the initial I-Codes in 2006 and subsequent years up to the adoption of the 2016 California Fire and Building Codes. During his tenure at the OSFM, Kevin was involved with many committees and initiatives including:

- Flammability Standards for Building Insulation Materials Committee
- Residential Fire Sprinklers and the California Codes Task Force
- Governor's Office Solar Photovoltaic Guidelines Committee
- Governor's Office Hydrogen Fuel Vehicle Stations Guidebook Task Group
- Task Group 400
- High-Rise Task Force

Kevin's involvement in fire and building codes really stems from his work in designing and drafting building plans for his father's architectural firm. Before finding his way to the California Office of the Fire Marshal, Kevin was a District Representative II for the California Department of Housing and Community Development which administers the building construction codes for residential occupancies for statewide application, as well as a Building Inspector and Plans Examiner for the City of Roseville and Sacramento County.

Through the years, Kevin Reinertson has been the recipient of several awards including the Cal Chiefs NorCal Fire Prevention Officers Section "Charles H. Gray Memorial" award for promoting fire and life safety through code development processes throughout the community. Kevin was also the recipient of the CAL FIRE "Leadership" award for superior performance and demonstrating the ability to motivate others to positive action and to seek solutions to problems. Additionally, he was the recipient of the California Building Officials "Fire Official of the Year" award for significant achievement in protecting, promoting, and ensuring the safety of the public and the Sacramento Valley Association of Building Officials Chuck Coen award for recognition of outstanding effort in code development.

### Fulton R. Cochran, C.B.O., C.F.C.O.

Deputy Fire Marshal – Retired Henderson, Nevada

Fulton has been involved in the fire service for over 35 years. He started as a volunteer firefighter in his hometown of Manitou Springs, Colorado. Wanting a career in the fire service, he worked as a career firefighter and then moved into fire prevention. He was Fire Marshal in Breckenridge, Colorado, and an active member of the Fire Marshals Association of Colorado prior to moving to Southern Nevada. For the past 20 years, Fulton was with the City of Henderson, Nevada, where he was the Deputy Fire Marshal – Engineering.

During his tenure, the City of Henderson was the fastest growing city in the country for over 10 years. During this explosive growth, Fulton managed the fire plan check team that reviewed the following:

- Master planned communities with over 10,000 homes
- Major infrastructure projects such as a 600-MGD water treatment plant
- Major commercial sites such as a regional mall and large strip centers
- Regional distribution centers greater than 750,000 square feet with high-piled storage
- Chemical plants with multiple hazards
- High-rise hotels and casinos
- High-rise hospital and medical office complexes.

Fulton has participated in code development starting with the legacy organization ICBO, and he attended his first code development hearing in 1985. Fulton has worked with the International Code Council (ICC) on numerous committees and councils. He was the International Association of Fire Chiefs (IAFC) representative on the Performance Code drafting committee. In 2007, he was appointed to the Fire Code Council, and in 2010 he was elected as Chairman of this Council. When ICC reformulated the Councils in 2011, creating the current Fire Service Membership Council (FSMC), Fulton was again selected by the governing committee to be the Chairman of the Council, a position he continues to hold after being reelected most recently in Atlantic City during the 2013 Annual Business Meeting.

Fulton is currently a member of the ICC Board for International Professional Standards (BIPS), which oversees the ICC certification and testing programs. He represents the fire service on the Codes and Standards Council, which advises the ICC Board regarding the technical code committees and code development. Fulton was a member of the cdpACCESS steering committee charged with developing the framework of this program and recommending these actions to the ICC Board of Directors.

In 2013, Fulton was honored by ICC as the recipient of the Fire Service Person of the Year award.

During his tenure at Henderson, Fulton has been involved in numerous code adoptions with extensive local amendments. He is an active member of the Southern Nevada Fire Code Committee and is a two-term past President of the Southern Nevada Chapter of ICC. Fulton is also the former chair of the EduCode Committee of the Southern Nevada Chapter for code training and professional development.

#### Kevin H. Scott

President

KH Scott & Associates LLC

Kevin Scott is President of KH Scott & Associates LLC. Kevin has extensive experience in the development of fire safety, building safety and hazardous materials regulations. Kevin has actively worked for over 25 years in the development of fire code, building code and fire safety regulations at the local, state, national and international levels. Kevin previously worked as a Senior Regional Manager with the International Code Council, and before that, he was Deputy Chief for the Kern County Fire Department, California, where he worked for 30 years. He has developed and presented many seminars on a

variety of technical subjects including means of egress, high-piled combustible storage, hazardous materials, and plan review and inspection practices.

Kevin was a member of the original IFC Drafting Committee that worked to create the first edition of the IFC. He served for seven years on the IFC Code Development Committee and was chairperson for the committee from 2001 to 2004. Kevin has actively participated in numerous technical committees to evaluate specific hazards and technologies, and create regulations specific to those hazards. Some of the more significant committees are

- High-piled Combustible Storage Committee
- Hydrogen Gas Ad Hoc Committee
- Task Group 400
- Technical Advisory Committee on Retail Storage of Group 'A' Plastic Commodities
- Underwriter's Laboratories Fire Council.

Kevin's constant work to improve fire and life safety has been recognized on many levels. His contributions were acknowledged by various organizations when they presented him with the following awards:

- Mary Eriksen-Rattan Award in 2013—presented by the Southern California State Fire Prevention Officers' Association
- William Goss Award in 2009—presented by the California State Firefighters Association
- Fire Official of the Year Award in 2005—presented by the California Building Officials
- Robert W. Gain Award in 2003—presented by the International Fire Code Institute.

# **About the International Code Council®**

The International Code Council is a member-focused association. It is dedicated to developing model codes and standards used in the design, build and compliance process to construct safe, sustainable, affordable and resilient structures. Most U.S. communities and many global markets choose the International Codes. ICC Evaluation Service (ICC-ES) is the industry leader in performing technical evaluations for code compliance fostering safe and sustainable design and construction.

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