

City of Garden Grove

INTER-DEPARTMENT MEMORANDUM

To: Scott C. Stiles From: Lisa Kim  
Dept.: City Manager Dept.: Community and Economic  
Development  
Subject: Introduction of an Ordinance adopting the 2016  
California Uniform Building  
Codes with modifications.  
(Action Item)  
Date: 11/22/2016

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OBJECTIVE

To introduce an Ordinance adopting the 2016 Edition of the California Codes with certain amendments and certain Uniform Codes, including findings supporting the modifications.

BACKGROUND

The State's Health and Safety Code establishes that the Building and Fire Standards Code (Title 24, California Code of Regulations) as published by the California Building and Standards Commission every three (3) years, is the applicable code for occupancy throughout the State.

The Building Standards Commission published the 2016 California Building and Fire Standards Code on July 1, 2016, and it becomes effective January 1, 2017. During this waiting period, local governments may adopt modifications that impose more restrictive building and fire standards to the California Building and Fire Standards Code when deemed necessary because of local climatic, geological, or topographical conditions.

DISCUSSION

The attached Ordinance adopts and amends the 2016 Editions of the California Building, Residential, Plumbing, Electrical, Mechanical, Energy, Historical Building, Fire, Existing Building and Green Building Codes, adopted by the State of California; and adopts the 2015 Edition of the International Property Maintenance Code, and the 2015 Edition of the Uniform Swimming Pool, Spa, and Hot Tub Code.

The Community and Economic Development Department and Fire Department are recommending changes and modifications to the 2016 California Building Code, California Residential Code, California Plumbing Code, and California Fire Code. The

proposed modifications are intended to increase safety to life and property from fire and other hazards. A majority of the proposed modifications are carried over from previous code adoption.

FINANCIAL IMPACT

There is no financial impact to the City.

RECOMMENDATION

It is recommended that the City Council:

- Hold a Public Hearing for consideration of the California Building and Fire Standards Code, 2016 Edition and certain Uniform Codes, along with the findings supporting the respective amendments; and
- Conduct the first reading and introduce the attached Ordinance.

By: Alana Cheng, Senior Analyst

**ATTACHMENTS:**

<b>Description</b>	<b>Upload Date</b>	<b>Type</b>	<b>File Name</b>
Ordinance	11/17/2016	Cover Memo	11-22-16__2016_BUILDING_AND_FIRE_CODE.pdf

ORDINANCE NO.

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF GARDEN GROVE AMENDING TITLE 18 OF THE GARDEN GROVE MUNICIPAL CODE AND ADOPTING BY REFERENCE THE FOLLOWING PRIMARY CODES WITH CERTAIN AMENDMENTS, DELETIONS, AND ADDITIONS THERETO: CALIFORNIA BUILDING CODE, 2016 EDITION; CALIFORNIA RESIDENTIAL CODE, 2016 EDITION; CALIFORNIA ELECTRICAL CODE, 2016 EDITION; CALIFORNIA MECHANICAL CODE, 2016 EDITION; CALIFORNIA PLUMBING CODE, 2016 EDITION; CALIFORNIA ENERGY CODE, 2016 EDITION; CALIFORNIA HISTORICAL BUILDING CODE, 2016 EDITION; CALIFORNIA FIRE CODE, 2016 EDITION; CALIFORNIA EXISTING BUILDING CODE, 2016 EDITION; CALIFORNIA GREEN BUILDING STANDARDS CODE, 2016 EDITION; AND CERTAIN SECONDARY CODES INCLUDING THE INTERNATIONAL PROPERTY MAINTENANCE CODE, 2015 EDITION, AS PUBLISHED BY THE INTERNATIONAL CODE COUNCIL; AND THE UNIFORM SWIMMING POOL, SPA, AND HOT TUB CODE, 2015 EDITION, AS PUBLISHED BY THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS

***City Attorney Summary***

***This Ordinance adopts and amends the 2016 Editions of the California Building, Residential, Plumbing, Electrical, Mechanical, Energy, Historical Building, Fire, Existing Building and Green Building Codes, adopted by the State of California. This Ordinance adopts the 2015 Edition of the International Property Maintenance Code. This Ordinance adopts the 2015 Edition of the Uniform Swimming Pool, Spa, and Hot Tub Code.***

A. Recitals.

(i) Article 2 of Chapter 1 of Part 1 of Division 1 of Title 5 of the California Government Code authorizes the adoption, by reference, of the California Building Code, 2016 Edition; the California Residential Code, 2016 Edition; the California Electrical Code, 2016 Edition; the California Mechanical Code, 2016 Edition; the California Plumbing Code, 2016 Edition; the California Energy Code, 2016 Edition; the California Historical Building Code, 2016 Edition; the California Fire Code, 2016 Edition; the California Existing Building Code, 2016 Edition; and the California Green Building Standards Code, 2016 Edition as adopted into the California Code of Regulations, Title 24, Parts 2 through 6 and Parts 8 through 11 respectively (collectively, the "California Building Standards Code"); the International Property Maintenance Code, 2015 Edition; and the Uniform Swimming Pool, Spa, and Hot Tub Code, 2015 Edition.

(ii) Pursuant to the provisions of the California Health and Safety Code Section 17958, 17958.5 and 17958.7, it is determined that the amendments of building standards within the California Building Standards Code in this Ordinance are

reasonably necessary because of local climatic, geological, or topographical conditions.

(iii) Adoption by reference of those additional Uniform Codes is not subject to Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code.

(iv) A duly noticed Public Hearing, as required by California Government Code Section 50022.3, has been conducted and concluded prior to the adoption of this Ordinance.

(v) All legal prerequisites to the adoption of this Ordinance have occurred.

B. Ordinance

NOW, THEREFORE, the City Council of the City of Garden Grove does hereby find, determine and ordain as follows:

SECTION 1: Title 18 of the Garden Grove Municipal Code, entitled Building Codes and Regulations, of the City of Garden Grove is hereby amended as set forth herein, provided that said amendments shall not apply to, or excuse any violation thereof occurring prior to the effective date of this Ordinance and provided further that the California Codes and Uniform Codes as adopted herein by reference and amended by Ordinance Nos. 2835 and 2800 of this City shall continue to be applicable to construction for which permits have been issued prior to the effective date of this Ordinance.

SECTION 2: Chapter 04 of Title 18 of the Garden Grove Municipal Code is hereby repealed and replaced in its entirety to read as follows:

**Chapter 04**  
**CODES ADOPTED BY REFERENCE**

Section:

18.04.010 Codes Designated — Filing.

18.04.010 Codes Designated — Filing. Section 18.04.010 of said Garden Grove Municipal Code is hereby added to read as follows:

The California Building Code, 2016 Edition, based on the 2015 International Building Code as published by the International Code Council, including Division II of Chapter 1, and appendices H, I and J; California Residential Code, 2016 Edition, based on the 2015 International Residential Code as published by the International Code Council, including Division II of Chapter 1, and appendices H, J and V; California Electrical Code, 2016 Edition, based on the 2014 National Electrical Code as published by the National Fire Protection Association; California Mechanical Code, 2016 Edition, based on the 2015 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials, including appendices B and C; California Plumbing Code, 2016 Edition, based on

the 2015 Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials, including appendices A, B, C, D, G, H, and I; California Energy Code, 2016 Edition, as published by the International Code Council; California Historical Building Code, 2016 Edition, based on the 2015 International Building Code as published by the International Code Council; California Fire Code, 2016 Edition, based on the 2015 International Fire Code as published by the International Code Council, including appendices B, BB, C, CC and D; California Existing Building Code, 2016 Edition, based on the 2015 International Existing Building Code as published by the International Code Council; and the California Green Building Standards Code, 2016 Edition, as published by the International Code Council; as adopted into the California Code of Regulations, Title 24, Parts 2 through 6, and 8 through 11 respectively; International Property Maintenance Code, 2015 Edition as published by the International Code Council; and Uniform Swimming Pool, Spa, and Hot Tub Code, 2015 Edition as published by the International Association of Plumbing and Mechanical Officials; are hereby adopted by reference as the Building Codes and Regulations of the City of Garden Grove, together with amendments set forth in Chapters 12, 14, 24 and 32 below.

**SECTION 3:** Chapter 12 of Title 18 of the Garden Grove Municipal Code is hereby repealed and replaced in its entirety to read as follows:

**Chapter 12  
BUILDING CODE**

Sections:

18.12.010	Section 101.1	Amended — Title.
18.12.020	Section 113	Amended — Board of Appeals.
18.12.030	Section 105.2	Amended — Work exempt from permit.
18.12.040	Section [F]903.2	Amended — Where required.
18.12.050	Table 1505.1	Amended — Roofing Classification.
18.12.060	Section 1505.1.3	Amended — Roof coverings within all other areas.

18.12.010 Section 101.1 Amended — Title. Section 101.1 is hereby amended to read as follows:

**101.1 Title.** These regulations shall be known as the Building Code of the City of Garden Grove, hereinafter referred to as "this Code."

18.12.020 Section 113 Amended — Board of Appeals. Section 113 is hereby amended and restated to read as follows:

**113 Board of Appeals.** The Administrative Board of Appeals for the City shall hear and decide appeals of orders, decisions or determinations made by the Building Official relative to the application and interpretations of the Building

Codes and Regulations of the City of Garden Grove including, without limitation, this Code. Refer to GGMC Title 2, Chapter 54.

18.12.030 Section 105.2 Amended — Work exempt from permit. Item#2 under Building is hereby amended to read as follows:

- 2. Masonry and/or concrete fences not over three (3) feet high and other fences not over seven (7) feet high.

18.12.040 Section [F]903.2 Amended — Where required. Section [F]903.2 is hereby amended by adding the following after the first paragraph:

Notwithstanding any other provisions in this Code, approved automatic sprinkler systems shall be installed and maintained in accordance with the latest edition of NFPA Standard 13 throughout all new buildings or structures, regardless of fire walls, with a gross floor area of 6,000 square feet or more, or with a total height of 55 feet or more above grade, or containing three or more stories.

Buildings or structures which presently exceed 6,000 square feet of floor area constructed prior to the adoption of this Code, upon or to which any alteration or additions are to be made which would add more than 2,000 square feet to the existing square footage of this building, shall have automatic sprinklers installed, as required herein and above.

Buildings or structures which presently do not exceed 6,000 square feet of floor area, to which any alterations or additions are made, and after such alterations or additions the floor area will exceed 8,000 square feet, shall have automatic sprinkler systems installed, as required herein and above. (Balance of Section to remain unchanged.)

18.12.050 Table 1505.1 Amended — Roofing Classification. Table 1505.1 is hereby amended by the deletion of Table 1505.1 and the addition of a new Table 1505.1 thereto to read as follows:

**TABLE 1505.1<sup>a</sup>  
 MINIMUM ROOF COVERING CLASSIFICATION  
 FOR TYPES OF CONSTRUCTION**

IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
B	B	B	B	B	B	B	B	B

For SI: 1 foot = 304.8mm, 1 square foot = 0.0929m<sup>2</sup>  
 a. Unless otherwise required in accordance with Chapter 7A.

18.12.060 Section 1505.1.3 Amended – Roof coverings within all other areas. Section 1505.1.3 is hereby amended by the deletion of the entire section and the addition of a new section thereto, 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 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.

SECTION 4: Chapter 14 of Title 18 of the Garden Grove Municipal Code is hereby repealed and replaced in its entirety to read as follows:

**Chapter 14  
RESIDENTIAL CODE**

Sections:

18.14.010	Section R101.1	Amended — Title.
18.14.020	Section R112	Amended — Board of Appeals.
18.14.030	Section R902.1	Amended — Roofing covering materials.
18.14.040	Section R902.1.3	Amended — Roof coverings in all other areas.
18.14.050	Section R902.2	Amended — Fire-retardant-treated shingles and shakes.

18.14.010 Section R101.1 Amended — Title. Section 101.1 is hereby amended to read as follows:

**R101.1 Title.** These provisions shall be known as the Residential Code of the City of Garden Grove, and shall be cited as such and will be referred to herein as "this Code."

18.14.020 Section R112 Amended — Board of Appeals. Section R112 is hereby amended and restated to read as follows:

**R112 Board of Appeals.** The Administrative Board of Appeals for the City shall hear and decide appeals of orders, decisions or determinations made by the Building Official relative to the application and interpretations of the Building Codes and Regulations of the City of Garden Grove including, without limitation, this Code. Refer to GGMC Title 2, Chapter 54.

18.14.030 Section R902.1 Amended - Roof covering materials. Section R902.1 is hereby amended to read as follows:

**R902.1 Roofing covering materials.** Roofs shall be covered with materials as set forth in Sections R904 and R905. A minimum Class A or B roofing shall be installed in areas designated by this section or where the edge of the roof is less than

3 feet from a lot line. Class A and B roofing required by this section to be listed shall be tested in accordance with UL 790 or ASTM E 108.

**Exceptions:**

1. Class A roof assemblies include those with coverings of brick, masonry and exposed concrete roof deck.
2. Class A roof assemblies include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile, or slate installed on noncombustible decks.
3. Class A roof assemblies include minimum 16 ounces per square foot copper sheets installed over combustible decks.
4. Class A roof assemblies include slate installed over underlayment over combustible decks.

18.14.040 Section R902.1.3 Amended - Roof coverings in all other areas.  
Section R902.1.3 is hereby amended to read as follows:

**R902.1.3 Roof coverings in 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 alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class B.

18.14.050 Section R902.2 Amended — Fire-retardant-treated shingles and shakes. The first paragraph of Section R902.2 is hereby amended to read as follows:

**R902.2 Fire-retardant-treated shingles and shakes.** Fire-retardant-treated wood shakes and shingles are wood shakes and shingles complying with UBC Standard 15-3 or 15-4 which are impregnated by the full-cell vacuum-pressure process with fire-retardant chemicals, and which have been qualified by UBC Standard 15-2 for use on Class A or B roofs. Fire-retardant-treated wood shakes and shingles shall comply with ICC-ES EG107 and with the weathering requirements contained in Health and Safety Code Section 13132.7 (j). Each bundle shall bear labels from an ICBO accredited quality control agency identifying their roof-covering classification and indicating their compliance with ICC-ES EG 107 and with the weathering requirements contained in Health and Safety Code Section 13132.7(j).

SECTION 5: Chapter 24 of Title 18 of the Garden Grove Municipal Code is hereby repealed and replaced in its entirety to read as follows:

**Chapter 24  
PLUMBING CODE**

Sections:

18.24.010 Section 610.8 Amended — Size of Meter and Building  
Supply Pipe Using Table 610.4.



18.24.020 Table 610.4 Amended — Fixture Unit Table for Determining Water Pipe and Meter Sizes.

18.24.010 Section 610.8 Amended — Size of Meter and Building Supply Pipe Using Table 610.4. The last paragraph of Section 610.8 is hereby amended to read as follows:

No building supply pipe shall be less than one (1) inch in diameter for single-family dwellings and 3/4 inch in diameter for all other buildings.

18.24.020 Table 610.4 Amended — Fixture Unit Table for Determining Water Pipe and Meter Sizes. Footnote Number 2 of Table 610.4 is hereby amended to read as follows:

2. Building supply - not less than 1" diameter for each single-family dwelling unit, and not less than 3/4" diameter for all other buildings.

SECTION 6: Chapter 32 of Title 18 of the Garden Grove Municipal Code is hereby repealed and replaced in its entirety to read as follows:

**Chapter 32  
FIRE CODE**

Sections:

18.32.010	Section 103.2	Amended — Appointment.
18.32.020	Section 109.4	Amended — Violation penalties.
18.32.030	Section 202	Amended — Definition of fireworks.
18.32.040	Section 507.5.1	Amended — Where required.
18.32.050	Section 903.2	Amended — Where required.
18.32.060	Section 2306.2.3	Amended — Aboveground tanks located outside, above grade.

18.32.010 Section 103.2 Amended — Appointment.  
Section 103.2 is hereby amended to read as follows:

**103.2 Appointment.** The Fire Code Official shall be appointed by the chief appointing authority of the jurisdiction.

18.32.020 Section 109.4 Amended — Violation penalties.  
Section 109.4 is hereby amended to read as follows:

**109.4 Violation penalties.** Persons who shall violate a provision of this Code or shall fail to comply with any of the requirements thereof or who shall erect, install,

alter, repair, or do work in violation of the approved construction documents or directive of the Fire Code Official, or of a permit or certificate used under provisions of this Code, shall be guilty of either a misdemeanor, infraction or both, punishable by a fine of not more than \$1,000 dollars. Each day that the violation continues after due notice has been served shall be deemed a separate offence. Penalties shall be prescribed by local Ordinance.

18.32.030 Section 202 Amended — Definition of fireworks. The definition for "Fireworks, 1.4G" within Section 202 is hereby amended to read as follows:

**Fireworks, 1.4G.** Small fireworks devices containing restricted amounts of pyrotechnic composition designed primarily to produce visible or audible effects by combustion, including safe and sane fireworks as defined in Division 11, part 2 of the Health and Safety Code of the State of California. Such 1.4G fireworks which comply with the construction, chemical composition and labeling regulations of the DOTn for Fireworks, UN 0336, and the U.S. Consumer Product Safety Commission as set forth in CPSC 16 CFR Parts 1500 and 1507, are not explosive materials for the purpose of this Code.

18.32.040 Section 507.5.1 Amended — Where required. Section 507.5.1 is hereby amended to read as follows:

**507.5.1 Where required.** Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is located more than the distance allowed in APPENDIX C – FIRE HYDRANT LOCATIONS AND DISTRIBUTION from a hydrant on a fire apparatus road, as measured by an approved route around the exterior of the facility or building, on site fire hydrants and mains shall be provided where required by the Fire Code Official.

**Exception:**

1. For Group R-3 and Group U occupancies, the distance requirement shall be no more than 600 feet when fire sprinklers are installed throughout the structure in accordance with NFPA 13D.

18.32.050 Section 903.2 Amended — Where required. Section 903.2 is hereby amended by adding the following after the first paragraph to read as follows:

Notwithstanding any other provisions in this Code, approved automatic sprinkler systems shall be installed and maintained in accordance with the latest edition of NFPA Standard 13 throughout all new buildings or structures, regardless of fire walls, with a gross floor area of 6,000 square feet or more, or with a total height of 55 feet or more above grade, or containing three or more stories.

Buildings or structures which presently exceed 6,000 square feet of floor area constructed prior to the adoption of this Code, upon or to which any alteration or additions are to be made which would add more than 2,000 square feet to the

existing square footage of this building, shall have automatic sprinklers installed, as required herein and above.

Buildings or structures which presently do not exceed 6,000 square feet of floor area, to which any alterations or additions are made, and after such alterations or additions the floor area will exceed 8,000 square feet, shall have automatic sprinkler systems installed, as required herein and above. (Balance of Section to remain unchanged.)

18.32.060 Section 2306.2.3 Amended — Aboveground tanks located outside, above grade. The first paragraph of section 2306.2.3 is hereby amended to read as follows:

**2306.2.3 Aboveground tanks located outside, above grade.** Above-ground tanks shall not be used for the storage of Class I, II or III liquid motor fuels except as provided in this section. NOTE: Class I and Class II liquids shall not be dispensed into the fuel tank of a motor vehicle from aboveground tanks except when approved by the Fire Chief. (Balance of Section to remain unchanged.)

SECTION 7: Findings. Pursuant to the provisions of the California Health & Safety Code Section 17958.7, it is determined that the amendments of building standards within the California Building Standards Code in this Ordinance are reasonably necessary because of local climatic, geological, or topographical conditions, and as more specifically described below.

1. The city of Garden Grove has a semi-arid Mediterranean type climate which predisposes all fuels, including wood shingles, to rapid ignition and spread of fire.
2. Hot, dry Santa Ana winds are common to all areas within the city of Garden Grove. These winds, which can cause small fires to spread quickly, are contributing factor to the high fire danger in the city and create the need for an increased level of fire protection.
3. The city of Garden Grove is located in a highly active seismic area. The Newport-Inglewood Fault Zone (NIFZ) which runs through Orange County was the source of the destructive 1933 Long Beach earthquake.
4. The viability of the public water system would be questionable after a major seismic event. This would leave tall buildings vulnerable to uncontrolled fires due to a lack of available water and an inability to pump sufficient quantities of any available water to floors above the 75-foot level.
5. The city of Garden Grove is in a suburban area which is almost fully developed. The extensive development, when coupled with the semi-arid climate, drought conditions, and Santa Ana winds, results in a significant potential for large, disastrous fires.

6. Untreated wood roofs cause or contribute to serious fire hazard and to the rapid spread of fires when such fires are accompanied by high winds. Pieces of burning wooden roofs become flying brands and are carried by the wind to other locations and thereby spread fire quickly.
7. The local water supply is "hard" and contains high amounts of minerals which can negatively affect the plumbing used for supply and drain lines in buildings.

The amended Code Sections and the corresponding Findings #'s are as follows:

<u>Code Section</u>	<u>Findings #'s</u>
CBC 105.2	2,3
CBC 903.2	1,2,4,5,6
CBC Table 1505.1	1,2,5,6
CBC 1505.1.3	1,2,5,6
CRC R902.1	1,2,5,6
CRC 902.1.3	1,2,5,6
CRC 902.2	1,2,5,6
CPC 610.8	4,5,7
CPC Table 610.4	4,5,7
CFC Section 109.4	1,2,5,6
CFC Section 202	1,2,3,4,5,6
CFC 507.5.1	1,2,4,5,6
CFC 903.2	1,2,4,5,6
CFC 2306.2.3	1,2,4,5,6

SECTION 8: Filing with the California Building Standards Commission. A copy of this Ordinance shall be filed with the California Building Standards Commission by the City Clerk of the City of Garden Grove as required by Health & Safety Code Section 17958.7.

SECTION 9: Severability. If any section, subsection, subdivision, sentence, clause, phrase, or portion of this Ordinance is, for any reason, held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have adopted this Ordinance and each section, subsection, subdivision, sentence, clause, phrase, or portion thereof, irrespective of the fact that any one or more section, subsection, subdivision, sentence, clause, phrase, or portion thereof be declared invalid or unconstitutional.

SECTION 10: The Mayor shall sign and the City Clerk shall certify to the passage and adoption of this Ordinance and shall cause the same, or the summary thereof, to be published and posted pursuant to the provisions of law. This Ordinance shall take effect thirty (30) days after adoption.