

## ORDINANCE NO. 19-18

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF COSTA MESA, CALIFORNIA, AMENDING SECTIONS 5-1, 5-1.1 AND 5-1.3 AND ADDING SECTION 5-1.4 OF CHAPTER I OF TITLE 5 AND SECTIONS 7-14 AND 7-15 OF CHAPTER II OF TITLE 7 OF THE COSTA MESA MUNICIPAL CODE BY ADOPTING THE 2019 EDITIONS OF THE CALIFORNIA BUILDING, CONSTRUCTION AND FIRE CODES AND RELATED MODEL CODES WITH APPENDICES AND AMENDMENTS THERETO, AND REPEALING THE ADOPTION OF THE 2016 EDITIONS OF THE CALIFORNIA CODES AND AMENDMENTS THERETO, AND ADOPTING THE ORANGE COUNTY GRADING AND EXCAVATION CODE WITH AMENDMENTS THERETO, WITH THE EFFECTIVE DATE OF JANUARY 1, 2020

THE CITY COUNCIL OF THE CITY OF COSTA MESA DOES HEREBY ORDAIN AS FOLLOWS:

Section 1.

Section 5-1 of Chapter I, Title 5, of the Costa Mesa Municipal Code is hereby amended to read as follows:

**Sec. 5-1. Construction Codes Adopted.**

For the purpose of prescribing regulations for erecting, construction, enlargement, alteration, repair, improving, removal, conversion, demolition, occupancy, equipment use, height, and area of buildings and structures, the following construction codes subject to the modifications set forth in this Chapter, are hereby adopted: the California Building Code, 2019 Edition, based on the 2019 International Building Code as published by the International Code Council, including Chapter 1, Division II; the California Residential Code, 2019 Edition, including Appendix H Patio Covers and Appendix V Swimming Pool Safety Act based on the 2019 International Residential Code as published by the International Code Council, including Chapter 1, Division II; the California Green Building Standards Code, 2019 Edition; the California Plumbing Code, 2019 Edition, based on the 2018 Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials; the California Mechanical Code, 2019 Edition, based on the 2018 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials; the California Electrical Code, 2019 Edition, based on the 2017 National Electrical Code as published by the National Fire Protection Association; the International Property Maintenance Code, 2019 Edition, as published by the International Code Council; the Uniform Code For The Abatement of Dangerous Buildings, 1997 Edition, as published by the International Code Council. For the purpose of prescribing regulations for grading and excavations, the Orange County Grading and Excavation Code is hereby adopted. The provisions of these Construction Codes as amended by this chapter shall constitute the Building Regulations of the City of Costa Mesa. Where the

California Code of Regulations and State Building Standards Code of Regulations differ from any sections of the Construction Codes, State regulations shall prevail over the Construction Codes.

One (1) copy of all the above codes and standards therefore are on file in the office of the building official pursuant to Health and Safety Code Section 18942(d)(1) and are made available for public inspection.

Notwithstanding the provisions of the above-referenced construction codes, all fees for services provided pursuant to the construction codes shall not take effect until a resolution for such fees is adopted by the City Council pursuant to California Government Code Sections 66016 and 66020.

## Section 2.

Section 5-1.1 of Chapter I, Title 5, of the Costa Mesa Municipal Code is hereby amended to read as follows:

### **Sec. 5-1.1. Amendments to the 2019 California Building Code.**

- a) Amend item number 2 under "Building" in Section 105.2, Work exempt from permit, as follows:
  - 2. Fences less than 30 inches in height above grade.
  - 4. Retaining walls that are less than 30 inches in height above grade measured to the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.
- b) Section 105.5 is amended as follows:

**105.5 Expiration.** Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 12 months after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. 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.

Time limitation for permit expiration as the result of code enforcement shall be as per notice of violation or as otherwise determined by the Building Official.

### **c) Add Section 903.0 Automatic Sprinkler Systems**

Automatic sprinkler systems shall comply with this chapter and Chapters 9 and 80 of the amended Fire code. Where conflicts occur the amended fire code shall govern.

**TABLE 1505.1<sup>a</sup>**  
**MINIMUM ROOF COVERING CLASSIFICATIONS**  
**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 = 304.8 mm, 1 square foot = 0.0929 m<sup>2</sup>.

a. Unless otherwise required in accordance with Chapter 7A.

- d) **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.
- e) Section 1505.5 is amended, by the deletion of the entire section.
- f) Section 1505.7 is amended, by the deletion of the entire section.
- g) Add Section 3109 and amend Section 3109.4.4.1 by adding the following definition:

**PRIVATE POOL**, is any constructed pool, permanent or portable, and over 18 inches deep which is intended for non-commercial use as swimming pool by not more than three owner families and their guests.

- j) Section 3109.2 is amended as follows:

**3109.2 Construction permit; safety features required.** New or remodel pools or spas, at a private single-family home, shall have an enclosure complying with the amended California Residential Code Appendix V.

### Section 3

Section 5-1.3 of Chapter I, Title 5, of the Costa Mesa Municipal Code is hereby added to read as follows:

#### **Sec. 5-1.3. Amendments to the 2019 California Residential Code.**

- a) Amend item number 2 under "Building" in Section R105.2, Work exempt from permit, as follows:
  - 2. Fences less than 30 inches in height above grade.
  - 4. Retaining walls that are less than 30 inches in height above grade measured to

the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.

b) Section 105.5 is amended as follows:

**105.5 Expiration.** Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 12 months after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. 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.

Time limitation for permit expiration as the result of code enforcement shall be as per notice of violation or as otherwise determined by the Building Official.

c) Amend table R301.2(1), as follows:

**TABLE R301.2(1)**  
**CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA**

**TABLE R301.2(1)**  
**CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA**

GROUND SNOW LOAD	WIND DESIGN				SEISMIC DESIGN CATEGORY <sup>f</sup>	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP <sup>e</sup>	ICE BARRIER UNDERLAYMENT REQUIRED <sup>h</sup>	FLOOD HAZARDS <sup>g</sup>	AIR FREEZING INDEX <sup>i</sup>	MEAN ANNUAL TEMP <sup>j</sup>	
	Speed <sup>d</sup> (mph)	Topographic effects <sup>k</sup>	Special wind region <sup>l</sup>	Wind-borne debris zone <sup>m</sup>		Weathering <sup>a</sup>	Frost line Depth <sup>b</sup>	Termite <sup>c</sup>						
Zero	110	No	No	No	D <sub>2</sub> or E	Negligible	12-24"	Very Heavy	43	No	Yes/No	0	60	

**MANUAL J DESIGN CRITERIA <sup>n</sup>**

ELEVATION	LATITUDE	WINTER HEATING	SUMMER COOLING	ALTITUDE CORRECTION FACTOR	INDOOR DESIGN TEMPERATURE	DESIGN TEMPURATURE COOLING	HEAT TEMPERATURE DIFFERENCE
98	34	37	91		70	75	
COOLING TEMURATURE DIFFERENCE	WIND VELOCITY HEATING	WIND VELOCITY COOLING	COINCIDENT WET BULB	DAILY RANGE	WINTER HUMIDITY	SUMMER HUMIDITY	
7			69	27		7 (50% RH)	

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s.

- a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index (i.e., "negligible," "moderate" or "severe") for concrete as determined from the Weathering Probability Map [Figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.
- b. The frost line depth may require deeper footings than indicated in Figure R403.1(1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
- c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
- d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R301.2( 4)]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
- e. The outdoor design dry-bulb temperature shall be selected from the columns of 971/2-percent values for winter from Appendix D of the *California Plumbing Code*. Deviations from the Appendix D temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official.
- f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.
- g. The City of \_\_\_\_\_ does not have any Flood Hazards Zones. (OR, if yes) See City's FIRM maps for Flood Hazard Locations.
- h. In accordance with Sections R905.2.7.1, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall fill in this part of the table with "NO."
- i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99%) value on the National Climatic Data Center data table "Air Freezing Index- USA Method (Base 32°)" at [www.ncdc.noaa.gov/fpsf.html](http://www.ncdc.noaa.gov/fpsf.html).
- j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)" at [www.ncdc.noaa.gov/fpsf.html](http://www.ncdc.noaa.gov/fpsf.html).
- k. In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
- l. In accordance with Figure R301.2(4)A, where there is local historical data documenting unusual wind conditions, the jurisdiction shall fill in this part of the table with "YES" and identify any specific requirements. Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
- m. In accordance with Section R301.2.1.2.1, the jurisdiction shall indicate the wind-borne debris wind zone(s). Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
- n. The jurisdiction shall fill in these sections of the table to establish the design criteria using Table 1a or 1b from ACCA Manual J or established criteria determined by the jurisdiction.
- o. The jurisdiction shall fill in this section of the table using the Ground Snow Loads in Figure R301.2 (6).

- d) **Add Section R313.0. Automatic Fire Systems.** Fire sprinklers shall be as required in this code and Chapters 9 and 80 of the amended Fire Code. Where there are conflicts the Fire Code shall govern.
- e) **Amend 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. Classes A or 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 also 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 oz/ft<sup>2</sup> copper sheets installed over combustible decks.

f) **Amend R902.1.3 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.

g) **Amend 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 EG107 and with the weathering requirements contained in Health and Safety Code Section 13132.7(j).

Health and Safety Code Section 13132.7 (j) No wood roof covering materials shall be sold or applied in this state unless both of the following conditions are met:

- (1) The materials have been approved and listed by the State Fire Marshal as complying with the requirements of this section.
- (2) The materials have passed at least five years of the 10-year natural weathering test. The 10-year natural weathering test required by this subdivision shall be conducted in accordance with Standard 15-2 of the 1994 edition of the Uniform Building Code at a testing facility recognized by the State Fire Marshal.

e) Appendix V, amend section AV100.2(a) as follows:

Except as provided in Section AV100.5, when a building permit is issued for the construction of a new swimming pool or spa or the remodeling of an existing swimming pool or spa at a private single-family home, the respective swimming

pool or spa shall be equipped with item #1 below AND at least one additional following seven drowning prevention features:

f) Appendix V, amend section AV100.2(a) #1 as follows:

1. An enclosure that meets the requirements of AV100.3 and isolates the swimming pool and spa from the private single-family home. Any walls of the residential structure or accessory structures used to complete the isolation enclosure must have door openings equipped with protection as required in AV100.2 (a) #4 or #5. Any such door protection device provided for this purpose may not be used to comply with the second drowning prevention feature requirement.

### Section 5.5

Section 5-1.4 of Chapter I, Title 5, of the Costa Mesa Municipal Code is hereby added to read as follows:

#### **Sec. 5-1.4. Adoption of the Orange County Grading and Excavation Code.**

Orange County Grading and Excavation Code adopted with modifications. The Orange County Grading and Excavation Code is hereby adopted with modifications.

#### **Sec. 5-1.4.1 Amendments to the Orange County Grading and Excavation Code.**

Article 8 of Title 7 of the Codified Ordinances of the County of Orange, including the Grading Manual, is adopted in its entirety, except that section 7-1-805(i) and 7-1-805(l) are modified as follows:

Section 7-1-805(i) (i). A fill less than one (1) foot in depth which (1) is placed on a natural grade with a slope less steep than five horizontal to one vertical (5:1),(2) does not exceed fifty (50) cubic yards on any one lot and (3) does not obstruct a drainage course. This does not exempt the project proponent from submitting a compaction report, to the Building Official, for review and approval, on the fill placed.

Section 7-1-805(l). A fill less than three (3) feet in depth for a landscape planter, which does not exceed fifty (50) cubic yards on any one lot and does not obstruct a drainage course.

### Section 6.

Sections 7-14 and 7-15 of Chapter II, Title 7, of the Costa Mesa Municipal Code are hereby amended to read as follows:

#### **Chapter II. – FIRE PREVENTION**

#### **Sec. 7-14. Adoption of the California Fire Code.**

California Fire Code Adopted with Modifications. The California Fire Code, 2019 Edition, is hereby adopted with modifications. Other modifications are made as hereinafter set forth in this Title of the Costa Mesa Municipal Code and appropriate findings have been made and filed where required. The California Fire Code, which is based on the International Fire Code, is adopted as noted above and a copy is on file in the office of the City Clerk. This document shall be known and referred to hereafter as the "Fire Code" for the City of Costa Mesa.

### **Sec. 7-15 Amendments to the 2019 California Fire Code**

#### **Chapter 1 Scope and Administration**

**Chapter 1 Scope and Administration** is adopted in its entirety except that Section 105.6.16 (10), 105.6.16 (11), and 105.6.16.1 is excluded; section 105.7.1.1 is added, and 110.4 is included with the following amendment:

**Section 105.7.1.1 Private Fire Underground System** is hereby added as follows:

**105.7.1.1 Private Fire Underground System.** A separate construction permit is required for the installation or modification of private fire underground system. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.

**Section 110.4 Violation penalties** is hereby revised as follows:

**110.4 Violation penalties.** Persons who violate a provision of this code or fail to comply with any of the requirements thereof or who 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 a misdemeanor punishable as provided in Section 1-33 of the Costa Mesa Municipal Code. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

#### **Chapter 2 Definitions**

**Chapter 2 Definitions** is adopted in its entirety without amendments:

#### **Chapter 3 General Requirements**

**Chapter 3 General Requirements.** Adopt Chapter 3 in its entirety except that Sections 308.1.4, 311.5 through 311.5.5, 318, and 319 is excluded; and with the following amendments:

**Section 305.6 Hazardous Conditions** is hereby added as follows:

**305.6 Hazardous conditions.** Outdoor fires burning wood or other solid fuel are not allowed when any of the following conditions applies:

1. when predicted sustained winds exceed 8 MPH and relative humidity is less than 25%, or a red flag condition has been declared when an official sign was caused to be posted by the fire code official, or a public announcement is made
2. No outdoor fires using any fuel type are permitted when predicted sustained winds exceed 20 MPH or when such fires present a hazard as determined by the fire code official.

**Section 305.7 Disposal of rubbish** is hereby added as follows:

**305.7 Disposal of rubbish.** Rubbish, trash or combustible waste material shall be burned only within an approved incinerator and in accordance with Section 307.2.1.

**Section 307 Open Burning, Recreational Fires and Portable Outdoor Fireplaces** is hereby revised as follows:

**Section 307 Open Burning, Recreational Fires, Fire Pits, Fire Rings, and Portable Outdoor Fireplaces**

**Sections 307.6 Outdoor Fireplaces, Fire Pits, Fire Rings, or similar devices used at Group R Occupancies** is hereby added as follows:

**307.6 Outdoor Fireplaces, Fire Pits, Fire Rings, or similar devices used at Group R Occupancies.** Outdoor fireplaces, fire pits, fire rings, or similar exterior devices used at Group R occupancies shall comply with this section.

**Exception:** Barbeques, grills, and other portable devices intended solely for cooking.

**Section 307.6.1 Gas-fueled devices** is hereby added as follows:

**307.6.1 Gas-fueled devices.** Outdoor fireplaces, fire pits and similar devices fueled by natural gas or liquefied-petroleum gas are allowed when approved by the Building Department and the device is designed to only burn a gas flame and not wood or other solid fuel. At R-3 occupancies, combustible construction and vegetation shall not be located within three feet of an atmospheric column that extends vertically from the perimeter of the device. At other R occupancies, the minimum distance shall be ten feet. Where a permanent Building Department approved hood and vent is installed,

combustible construction may encroach upon this column between the bottom of the hood and the vent opening. Where chimneys or vents are installed, they shall have a spark arrester as defined in Section 202.

**Section 307.6.2 Devices using wood or fuels other than natural gas or liquefied-petroleum gas** is hereby added as follows:

**307.6.2 Devices using wood or fuels other than natural gas or liquefied-petroleum gas.** Permanent outdoor fireplaces burning wood or other solid fuel shall be constructed in accordance with the California Building Code with clearance from combustible construction and building openings as required therein. Fires in a fireplace shall be contained within a firebox with an attached chimney. The opening in the face of the firebox shall have an installed and maintained method of arresting sparks.

The burning of wood or other solid fuel in a device is not allowed within 25 feet of combustible structures unless within an approved permanent fireplace. Conditions which could cause a fire to spread within 25 feet of a structure or to vegetation shall be eliminated prior to ignition. Fires in devices burning wood or solid fuel shall be in accordance with Sections 305, 307, and 308.

**Exceptions:**

1. Portable fireplaces and fire rings/pits equipped with a device to arrest sparks shall be located at least 3' from combustible construction at R-3 occupancies,
2. Portable fireplaces, and fire pits/rings equipped with a device to arrest sparks, shall be located at least 15 feet from combustible structures at other R occupancies.

**Section 308.1.6.3 Sky lanterns** is hereby revised as follows:

**308.1.6.3 Sky lanterns.** A person shall not ignite, release, or cause to be released a sky lantern.

**Chapter 4  
Emergency Planning and Preparedness**

**Chapter 4: Emergency Planning and Preparedness.** Adopt only the sections, subsections, and amendment listed below:

401 – 401.9

402

403.2

403.5 – 403.5.4

403.10.2.1.1

403.13 – 403.13.3

404.5 – 404.6.6

407

**Section 407.5** is revised as follows:

**407.5 Hazardous Materials Inventory Statement.** Where required by the fire code official, each application for a permit shall CMF&R's Chemical Classification Packet in accordance with Section 5001.5.2.

## **Chapter 5 Fire Service Features**

**Chapter 5 Fire Service Features** is adopted in its entirety with the following amendments:

**SECTION 503.2 Specifications.** is revised as follows:

**503.2 Specifications.** Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.8. and the Costa Mesa Fire & Rescue Department Plan Submittal Checklist Specifications.

**Section 510.1 Emergency responder radio coverage in new buildings** is revised as follows:

**510.1 Emergency responder radio coverage in new buildings.** All new buildings shall have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communication systems utilized by the jurisdiction, measured at the exterior of the building. This section shall not require improvement of the existing public safety communication systems. The Emergency Responder Radio Coverage System shall comply with the Orange County Sheriff's Department, Communications and Technology Division guidelines and specifications and, where the functionality or performance requirements in the California Fire Code are more stringent, this code.

### **Exceptions:**

1. In buildings or structures where it is determined by the fire code official that the radio coverage system is not needed.

## **Chapter 6 Building Services and Systems**

**Chapter 6 Building Services and Systems** is adopted in its entirety without amendments:

## **Chapter 7** **Fire and Smoke Protection Features**

**Chapter 7 Fire and Smoke Protection Features** is adopted in its entirety without amendments.

## **Chapter 8** **Interior Finish, Decorative Materials and Furnishings**

**Chapter 8 Interior Finish, Decorative Materials and Furnishings** is adopted in its entirety without amendments.

## **Chapter 9** **Fire Protection and Life Safety Systems**

**Adopt Chapter 9 Fire Protection and Life Safety Systems** is adopted in its entirety with the following amendments:

**Section 901.11 False Alarms** is hereby added as follows:

**901.11 False Alarms.** False alarms shall not be given, signaled or transmitted or caused or permitted to be given, signaled or transmitted in any manner.

(a) The owner and any person in possession of any building shall be assessed a fee to be set by resolution whenever the Fire Department is required to respond to more than two false alarms during a one-year period consisting of January 1- December 31 of any given year. Continued false alarms generated from the same location within the same one-year period shall also be assessed a fee set by resolution for each successive false alarm.

(b) Notwithstanding Subsection (a), whenever the Fire Department is required to respond to a false alarm while the system is being repaired or otherwise modified, and the person performing the work has failed to notify the Fire Department in advance that such work was being done, the persons performing the work shall also be assessed a fee set by resolution for each such occurrence.

(c) For purposes of this Section, "false alarm" shall mean the activation of any local or central station alarm because of malfunction, including, but not limited to, mechanical or electrical defects, water surges, or because of improper installation, operation testing or maintenance of such system. Whenever the Fire Department responds to the location of a false alarm and finds that there is no evidence of a fire or of external causes beyond the control of the owner or person in possession that may have caused the alarm, the activation shall be presumed to be a false alarm. Not included as a false alarm will be those activations caused by earthquakes or other phenomena beyond the control of the owner or person in possession.

(d) Whenever an owner, person in possession or alarm system workman is notified of such assessment and believes that he should be excused from paying because any

occurrences did not constitute a false alarm, as defined above, he or she shall have the right to appeal said assessment to the Fire Chief within ten (10) calendar days of his receipt of the notice of assessment. The Fire Chief is authorized to excuse the assessment if he determines that a false alarm as defined, did not occur.

(e) Any person, firm or corporation who receives notification of penalties due and fails to pay such penalties within the specified amount of time, no less than 30 days, a 10 percent per month late fee will be assessed until penalties have been paid.

**Section 903.3.5.3 Hydraulically calculated systems** is hereby added as follows:

**903.3.5.3 Hydraulically calculated systems.** The design of hydraulically calculated fire sprinkler systems shall not exceed 90% of the water supply capacity.

**Exception:** When static pressure exceeds 100 psi, and when required by the fire code official, the fire sprinkler system shall not exceed the water supply capacity specified by Table 903.3.5.3.

## **Chapter 10 Means of Egress**

**Chapter 10 Means of Egress** is adopted in its entirety without amendments.

## **Chapter 11 Construction Requirements for Existing Buildings**

**Chapter 11 Construction Requirements for Existing Buildings.** Adopt only those sections and subsections listed below:

1103.7  
1103.7.3  
1103.7.3.1  
1103.7.8 – 1103.7.8.2  
1103.7.9 – 1103.7.9.10  
1103.8 – 1103.8.5.3  
1103.9.1  
1107  
1113  
1114  
1115  
1116

## **Chapter 12 Energy Systems**

**Chapter 12 Energy Systems** is adopted in its entirety with the following amendment added:

**1201.1.1 Other Systems** Where required by the fire code official, other systems and operations including but not limited to battery systems assembly, battery reconditioning and storage, research and development of battery storage systems, electric vehicle manufacturing and testing, and battery charging systems for cars and carts inside of buildings or structures, shall comply with this chapter.

Exception: When approved by the fire code official, charging stations for electric vehicles located in open parking garages of Type I or II construction.

## **Chapter 20 Aviation Facilities**

**Chapter 20 Aviation Facilities** is adopted in its entirety without amendments.

## **Chapter 21 Dry Cleaning**

**Chapter 21 Dry Cleaning** is adopted in its entirety without amendments.

## **Chapter 22 Combustible Dust-Producing Operations**

**Chapter 22 Combustible Dust-Producing Operations** is adopted in its entirety without amendments.

## **Chapter 23 Motor Fuel-Dispensing Facilities and Repair Garages**

**Chapter 23 Motor Fuel-Dispensing Facilities and Repair Garages** is adopted in its entirety without amendments.

## **Chapter 24 Flammable Finishes**

**Chapter 24 Flammable Finishes** is adopted in its entirety without amendments.

## **Chapter 25 Fruit and Crop Ripening**

**Chapter 25 Fruit and Crop Ripening** is deleted in its entirety.

## **Chapter 26 Fumigation and Insecticidal Fogging**

**Chapter 26 Fumigation and Insecticidal Fogging** is deleted in its entirety.

**Chapter 27  
Semiconductor Fabrication Facilities**

**Chapter 27 Semiconductor Fabrication Facilities** is adopted in its entirety without amendments

**Chapter 28  
Lumber Yards and Agro-Industrial, Solid Biomass and Woodworking Facilities**

**Chapter 28 Lumber Yards and Agro-Industrial, Solid Biomass and Woodworking Facilities** is adopted in its entirety with the following amendments:

**Section 2801.2 Permit** is hereby revised as follows:

**2801.2 Permit.** Permits shall be required as set forth in Section 105.6 and 105.6.29.

**Section 2808.14 Emergency Contact** is hereby added as follows:

**2808.14 Emergency Contact.** The contact information of a responsible person or persons shall be provided to the Fire Department and shall be posted at the entrance to the facility for responding units. The responsible party should be available to respond to the business in emergency situation.

**Chapter 29  
Manufacture of Organic Coatings**

**Chapter 29 Manufacture of Organic Coatings** is adopted in its entirety without amendments.

**Chapter 30  
Industrial Ovens**

**Chapter 30 Industrial Ovens** is adopted in its entirety without amendments.

**Chapter 31  
Tents, Temporary Special Event Structures and Other Membrane Structures**

**Chapter 31 Temporary Special Event Structures and Other Membrane Structures** is adopted in its entirety with the following amendments:

**Section 3103.9 Structural stability and anchorage required** is hereby revised as follows:

**3103.9 Structural stability and anchorage required.** Tents or membrane structures and their appurtenances shall be designed and installed to withstand the elements of weather and prevent collapsing. Documentation of structural stability shall be furnished to the fire code official. Anchorage shall be installed to meet or exceed the Costa Mesa Fire & Rescue Tent Guideline.

**Chapter 32  
High-Piled Combustible Storage**

**Chapter 32 High-Piled Combustible Storage** is adopted in its entirety without amendments.

**Chapter 33  
Fire Safety During Construction and Demolition**

**Chapter 33 Fire Safety During Construction and Demolition** is adopted in its entirety without amendments.

**Chapter 34  
Tire Rebuilding and Tire Storage**

**Chapter 34 Tire Rebuilding and Tire Storage** is adopted in its entirety without amendments.

**Chapter 35  
Welding and Other Hot Work**

**Chapter 35 Welding and Other Hot Work** is adopted in its entirety without amendments.

**Chapter 36  
Marinas**

**Chapter 36 Marinas** is adopted in its entirety without amendments.

**Chapter 37  
Combustible Fibers**

**Chapter 37 Combustible Fibers** is adopted in its entirety without amendments.

**Chapter 39  
Processing and Extraction Facilities**

**Chapter 39 Processing and Extraction Facilities** is adopted in its entirety without amendments.

**Chapter 48**  
**Motion Picture and Television Production Studio Sound Stages, Approved**  
**Production Facilities and Production Locations**

**Chapter 48 Motion Picture and Television Production Studio Sound Stages, Approved Production Facilities and Production Locations** is adopted in its entirety without amendments.

**Chapter 49**  
**Requirements for Wildland-Urban Interface Fire Areas**

**Chapter 49 Requirements for Wildland-Urban Interface Fire Areas** is adopted in its entirety without amendments.

**Chapter 50**  
**Hazardous Materials – General Provisions**

**Chapter 50 Hazardous Materials – General Provisions** is adopted in its entirety without amendments.

**Chapter 51**  
**Aerosols**

**Chapter 51 Aerosols** is adopted in its entirety without amendments.

**Chapter 53**  
**Compressed Gases**

**Chapter 53 Compressed Gases** is adopted in its entirety without amendments.

**Chapter 54**  
**Corrosive Materials**

**Chapter 54 Corrosive materials** is adopted in its entirety without amendments.

**Chapter 55**  
**Cryogenic Fluids**

**Chapter 55 Cryogenic Fluids** is adopted in its entirety without amendments.

## Chapter 56 Explosives and Fireworks

**Chapter 56 Explosives and Fireworks** is adopted in its entirety with the following amendments:

**Section 5608.2 Firing** is hereby added as follows:

**5608.2 Firing.** All fireworks displays, regardless of mortar, device, or shell size, shall be electrically fired.

**Section 5608.3 Application for Permit** is hereby added as follows:

**Section 5608.3 Application for Permit.** A diagram of the grounds on which the display is to be held showing the point at which the fireworks are to be discharged, the fallout area based on 100 feet per inch of shell size, the location of all buildings, roads, and other means of transportation, the lines behind which the audience will be restrained, the location of all nearby trees, telegraph or telephone line, or other overhead obstructions shall be provided to CMFR.

**Section 5609.1 General** is revised as follows:

**5609.1 General.** Where the temporary storage of consumer fireworks, I.4G is allowed by Section 5601.1.3, Exception 4, such storage shall comply with the applicable requirements of NFPA 1124. In addition to the requirements of NFPA 1124, all temporary stands for the display and sale of fireworks shall be located, maintained and operated subject to the following provisions:

**5609.2.** No fireworks display or stand shall be erected within one hundred (100) feet of any gasoline dispensing device or room in which vehicles containing gasoline are repaired or within thirty-five (35) feet of any other structure. Minimum setback from a public sidewalk shall be five (5) feet; setback from street curbing shall be not less than ten (10) feet where no sidewalk exists.

**5609.3.** There shall be maintained in each premises or stand within which fireworks are sold or offered for sale, a fire extinguisher with a minimum rating of 2A, 10BC located adjacent to each exit.

**5609.4.** No person shall light or cause or permit to be lighted any fireworks open flame, match, lighter, or any other article or material within any such stand or within fifty (50) feet thereof.

**5609.5.** No smoking shall be allowed in any structure used for the sale and display of fireworks or within fifty (50) feet of said structure. "No smoking" signs shall be displayed prominently and in a number prescribed by the fire chief.

**5609.6.** All such temporary stands shall be constructed to existing city requirements and specifications.

**5609.7.** All such temporary stands for the display and sale of fireworks shall obtain an electrical permit from the City of Costa Mesa prior to performance of any electrical work. An electrical permit shall be required for the use of a portable generator or other temporary power source.

**5609.8.** All power and lighting shall be GFCI protected. Battery-powered equipment, electrical equipment, and electrical cords that are used in conjunction with a CFRS facility area shall be listed and shall be used in accordance with their listing.

**5609.9.** Where temporary electrical conductors are placed on top of an outdoor surface to connect the permanent power source to the temporary CFRS facility's temporary electrical system, the conductors shall be provided with physical protection against damage caused by pedestrian or vehicular traffic.

**5609.10.** Reserved.

**5609.11.** The permittee shall strictly comply with all of the provisions of the State Fireworks Law, Sections 12500 et seq. of the Health and Safety Code of the State of California.

**5609.12.** Fireworks shall be stored and kept only in the permittee's sale booth. It shall be unlawful to store any fireworks intended for sale in any building, residence, garage, home or automobile within the City of Costa Mesa.

**5609.13.** There shall be at least one (1) adult in attendance during any open or sale hours of the fireworks stand. No person under the age of eighteen (18) years, and no person who is physically or mentally unable to move himself shall be permitted within a fireworks stand.

**5609.14.** The permittee shall provide an adult night watchman to act and serve during the hours of storage. Under no circumstances shall any night watchman sleep within any fireworks stand.

**5609.15.** No alcoholic beverages shall be allowed on the premises.

**5609.16.** All fireworks fuses shall be taped.

**5609.17.** All permits must be posted in a conspicuous place.

## Chapter 57 Flammable and Combustible Liquids

**Chapter 57 Flammable and Combustible Liquids.** Adopt Chapter 57, with the exception of Section 5707, in its entirety and with the following amendment:

**Section 5701.1.1 On-Demand Mobile fueling** is added as follows:

**Section 5701.1.1 Mobile fueling.** On-demand mobile fueling of Class I, II, and III liquids into the fuel tanks of vehicles is prohibited.

## **Chapter 58 Flammable Gases and Flammable Cryogenic Fluids**

**Chapter 58 Flammable Gases and Flammable Cryogenic Fluids.** Adopt Chapter 58, with the exception of Section 5809, in its entirety and with the following amendment:

**Section 5801.1 Scope** is revised as follows:

**Section 5801.1 Scope.** The storage and use of flammable gases and flammable cryogenic fluids shall be in accordance with this chapter, NFPA 2 and NFPA 55. Compressed gases shall also comply with Chapter 53 and cryogenic fluids shall also comply with Chapter 55. Flammable cryogenic fluids shall comply with Section 5806. Hydrogen motor fuel-dispensing stations and repair garages and their associated above-ground hydrogen storage systems shall also be designed, constructed and maintained in accordance with Chapter 23. Mobile fueling of gaseous and liquid hydrogen, compressed natural gas (CNG), and liquefied natural gas (LNG) into the fuel tanks of vehicles is prohibited.

**Exceptions:**

1. Gases used as refrigerants in refrigeration systems (see Section 605).
2. Liquefied petroleum gases and natural gases regulated by Chapter 61.
3. Fuel-gas systems and appliances regulated under the California Mechanical Code and the California Plumbing Code other than gaseous hydrogen systems and appliances.
4. Pyrophoric gases in accordance with Chapter 64.

## **Chapter 59 Flammable Solids**

**Chapter 59 Flammable Solids** is adopted in its entirety without amendments.

**Chapter 60**

**Highly Toxic and Toxic Materials**

**Chapter 60 Highly Toxic and Toxic Materials** is adopted in its entirety without amendments.

**Chapter 61**  
**Liquefied Petroleum Gases**

**Chapter 61 Liquefied Petroleum Gases** is adopted in its entirety without amendments.

**Chapter 62**  
**Organic Peroxides**

**Chapter 62 Organic Peroxides** is adopted in its entirety without amendments.

**Chapter 63**  
**Oxidizers, Oxidizing Gases, and Oxidizing Cryogenic Fluids**

**Chapter 63 Oxidizers, Oxidizing Gases, and Oxidizing Cryogenic Fluids** is adopted in its entirety without amendments.

**Chapter 64**  
**Pyrophoric Materials**

**Chapter 64 Pyrophoric Materials** is adopted in its entirety without amendments.

**Chapter 65**  
**Pyroxylin (Cellulose Nitrate) Plastics**

**Chapter 65 Pyroxylin (Cellulose Nitrate) Plastics** is adopted in its entirety without amendments.

**Chapter 66**  
**Unstable (Reactive) Materials**

**Chapter 66 Unstable (Reactive) Materials** is adopted in its entirety without amendments.

**Chapter 67**  
**Water-Reactive Solids and Liquids**

**Chapter 67 Water-Reactive Solids and Liquids** is adopted in its entirety without amendments.

## **Chapter 80 Referenced Standards**

**Chapter 80 Referenced Standards** is adopted in its entirety with the following amendments:

**NFPA 13, 2016 Edition, Standard for the Installation of Sprinkler Systems** is hereby amended as follows:

**Section 6.7.3** is hereby revised as follows:

**6.7.3** Fire department connections (FDC) shall be of an approved type. The location shall be approved and be no more than 150 feet from a public hydrant. The FDC may be located within 150 feet of a private fire hydrant when approved by the fire code official. The size of piping and the number of 2½" inlets shall be approved by the fire code official. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red or as approved. When the fire sprinkler density design requires more than 500 gpm (including inside hose stream demand), or a standpipe system is included, four 2½" inlets shall be provided.

**Section 8.3.3.1** is hereby revised as follows:

**8.3.3.1** When fire sprinkler systems are installed in shell buildings of undetermined use (Spec Buildings) other than warehouses (S occupancies), fire sprinklers of the quick-response type shall be used. Use is considered undetermined if a specific tenant/occupant is not identified at the time the fire sprinkler plan is submitted. Sprinklers in light hazard occupancies shall be one of the following:

- (1) Quick-response type as defined in 3.6.4.8
- (2) Residential sprinklers in accordance with the requirements of 8.4.5
- (3) Quick response CMSA sprinklers
- (4) ESFR sprinklers
- (5) Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standard-response sprinklers
- (6) Standard-response sprinklers used where individual standard-response sprinklers are replaced in existing light hazard systems

**Section 8.15.1.2.7** is hereby revised as follows:

**8.15.1.2.7** Concealed spaces filled with noncombustible insulation shall not require sprinkler protection when approved by the fire code official.

**Section 8.17.1.1** is hereby revised as follows:

**Section 8.17.1.1 Local Waterflow Alarms.** A local waterflow alarm shall be provided on every sprinkler system having more than 20 sprinklers for all sprinkler systems and shall be connected to the building fire alarm or water flow monitoring system where provided. Group R occupancies not requiring a fire alarm system by the California Fire Code shall be provided with at least one approved interior alarm device in each unit, or interconnection to the unit smoke alarm system. Sound levels in all sleeping areas shall be a minimum of 15 DBA above the average ambient sound or a minimum of 75 DBA with all intervening doors closed. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over current protection (GFI), serving normally operated appliances in the residence).

**Section 8.17.2.4.6** is hereby revised as follows:

**Section 8.17.2.4.6. Fire Department Connections.** Fire department connections shall be located at the nearest point of fire department apparatus accessibility or at a location approved by the authority having jurisdiction. They shall be installed immediately adjacent to the approved fire department access road and such that hose lines can be readily and conveniently attached to the inlets without interference from nearby objects including buildings, fence posts, or other fire department connections.

**Section 11.1.1.1** is hereby added as follows:

**11.1.1.1** When fire sprinkler systems are required in buildings of undetermined use other than warehouses, they shall be designed and installed to have a fire sprinkler density of not less than that required for an Ordinary Hazard Group 2 use, with no reduction(s) in density or design area. Warehouse fire sprinkler systems shall be designed to Figure 16.2.1.3.2 (d) curve "G". Use is considered undetermined if a specific tenant/occupant is not identified at the time the sprinkler plan is submitted. Where a subsequent use or occupancy requires a system with greater capability, it shall be the responsibility of the occupant to upgrade the system to the required density for the new use or occupancy.

**Section 11.2.3.1.1.1** is hereby added as follows:

**11.2.3.1.1.1** The available water supply for fire sprinkler system design shall be determined by one of the following methods, as approved by the fire code official:

- 1) Subtract the project site elevation from the low water level for the appropriate pressure zone and multiply the result by 0.433;

- 2) Use a maximum of 40 psi, if available;
- 3) Utilize the CMFR water-flow test form/directions to document a flow test conducted by the local water agency or an approved third party licensed in the State of California.

**Section 23.1.3 (43)** is hereby revised as follows:

**Section 23.1.3 (43).** Size and location of hydrants showing size and number of outlets and if outlets are to be equipped with independent gate valves. Whether hose houses and equipment are to be provided, and by whom, shall be indicated. Static and residual hydrants that were used in the flow tests shall be shown. Water supply certification shall be not more than six months prior to the plan submittal to the authority having jurisdiction.

**NFPA 13D 2016 Edition, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes** is hereby amended as follows:

**Section 4.7 Stock of Spare Sprinklers** is hereby added as follows:

**Section 4.7.1** A supply of at least two sprinklers for each type shall be maintained on the premises so that any sprinklers that have operated or been damaged in any way can be promptly replaced.

**Section 4.7.2** The sprinklers shall correspond to the types and temperature ratings of the sprinklers in the property.

**Section 4.7.3** The sprinklers shall be kept in a cabinet located where the temperature to which they are subjected will at no time exceed 100°F (38°C).

**Section 4.7.4** A special sprinkler wrench shall be provided and kept in the cabinet to be used in the removal and installation of sprinklers. One sprinkler wrench shall be provided for each type of sprinkler installed.

**Section 7.1.2** is hereby revised as follows:

**Section 7.1.2** The sprinkler system piping shall not have a separate control valve installed unless supervised by one of the following methods:

- (1) Central station, proprietary or remote station alarm service.
- (2) Local alarm service that causes the sounding of an audible signal at a constantly attended location Reserved.
- (3) Valves that are locked open Reserved.

**Section 7.3 Pressure Gauges** is hereby revised as follows:

**Section 7.3.1.** Where a dry system is installed, a pressure gauge shall be installed to indicate system air pressure. At least one water pressure gauge shall be installed on the riser assembly.

**Section 7.6 Alarms** is hereby revised as follows:

**Section 7.6 Alarms.** Local waterflow alarms shall be provided on all sprinkler systems in homes not equipped with smoke alarms or smoke detectors in accordance with NFPA 72. Exterior water flow alarm indicating devices shall be listed for outside service and audible from the street from which the house is addressed. Exterior audible devices shall be placed on the front or side of the structure and the location subject to final approval by the fire code official. Additional interior alarm devices shall be required to provide audibility throughout the structure. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dba above the average ambient sound level but not less than 75 dba. Audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

**Exception:**

- (1) When an approved water flow monitoring system is installed, interior audible devices may be powered through the fire alarm control panel.
- (2) When smoke detectors specified by the CBC or CRC are used to sound an interior alarm upon water flow switch activation.

**Section 8.3.4** is hereby revised as follows:

**Section 8.3.4** – Amended. Sprinklers shall not be required in garages, open attached porches, carports, and similar structures.

**Section A.8.4.4** is hereby added for reference as follows:

**A.8.3.4** Although NFPA 13D does not require garages to be sprinkler protected, some authorities having jurisdiction take it upon themselves to add this requirement locally. In such circumstances, residential or quick-response sprinklers with a two sprinkler design in the garage with the same piping used in the rest of the dwelling can be used. It is recognized that residential sprinklers have not been tested specifically for fires in garages, but field experience has shown that the sprinklers help to alert occupants to the fact that there is a fire, to reduce the possibility of flashover, and to improve the chances for occupants to escape.

**Section 8.3.5** is hereby revised as follows:

**Section 8.3.5** Sprinklers shall not be required in attics with or without storage, penthouse equipment rooms, elevator machine rooms, concealed spaces dedicated for exclusively to and containing only dwelling unit ventilation equipment, floor/ceiling spaces, elevator shafts, crawl spaces, and other concealed spaces that are not

intended for living purposes.

**Section 8.3.5.1.1** is hereby revised as follows:

**Section 8.3.5.1.1** Where the fuel-fired equipment is above all of the occupied areas of the dwelling unit, ~~no~~-sprinkler protection shall be required in the concealed space.

**Section 8.3.5.1.3** is hereby added as follows:

**Section 8.3.5.1.3** All attics shall be protected with an intermediate temperature quick response sprinklers which shall be located to protect attic penetrations created by the access scuttles or mechanical equipment.

**NFPA 13R 2016 Edition, Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies** is hereby amended as follows:

**Section 6.6.6** is hereby revised as follows:

**Section 6.6.6** Sprinklers shall not be required in attics, penthouse equipment rooms, elevator machine rooms, concealed spaces dedicated for exclusively to and containing only dwelling unit ventilation equipment, crawl spaces, floor/ceiling spaces, noncombustible elevator shafts where the elevator cars comply with ANSI A17.1, Safety Code for Elevators and Escalators, and other concealed spaces that are not intended for living purposes or storage and do not contain fuel-fired equipment

**Section 6.16.1** is hereby revised as follows:

**Section 6.16.1** A local water-flow alarm shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in Chapter 9 of the California Fire Code as requiring a fire alarm system shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 DBA above the average ambient sound or a minimum of 75 DBA with all intervening doors closed. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm, residential smoke detection or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence. There shall also be a minimum of one exterior alarm indicating device, listed for outside service and audible from the access roadway that serves that building.

**NFPA 14, 2013 Edition, Installation of Standpipe and Hose Systems** is hereby amended as follows:

**Section 7.3.1.1** is hereby deleted in its entirety and replaced as follows:

~~7.3.1.1 Hose connections and hose stations shall be unobstructed and shall be located not less than 3 ft (0.9 m) or more than 5 ft (1.5 m) above the floor.~~

7.3.1.1 Class I and III Standpipe hose connections shall be unobstructed and shall be located not less than 18 inches or more than 24 inches above the finished floor. Class II Standpipe hose connections shall be unobstructed and shall be located not less than 3 feet or more than 5 feet above the finished floor.

**NFPA 24, 2016 Edition, Standard for the Installation of Private Fire Service Mains and Their Appurtenances** is hereby amended as follows:

**Section 6.2.8.1** is hereby added as follows:

6.2.8.1 All indicating valves controlling fire suppression water supplies shall be painted OSHA red.

**Exceptions:**

1. Brass or bronze valves on sprinkler risers mounted to the exterior of the building may be left unpainted.
2. Where OS&Y valves on the detector check assembly are the only control valves, at least one OS&Y valve shall be painted red.

**Section 6.2.9** is hereby amended as follows:

All connections to private fire service mains for fire protection systems shall be arranged in accordance with one of the following so that they can be isolated:

- (1)\* A post indicator valve installed not less than 40 ft (12 m) from the building
  - (a) For buildings less than 40 ft (12 m) in height, a post indicator valve shall be permitted to be installed closer than 40 ft (12 m) but at least as far from the building as the height of the wall facing the post indicator valve.
- (2) A wall post indicator valve
- (3) An indicating valve in a pit, installed in accordance with Section 6.4
- (4)\* A backflow preventer with at least one indicating valve not less than 40 ft (12 m) from the building
  - (a) For buildings less than 40 ft (12 m) in height, a backflow preventer with at least one indicating valve shall be permitted to be installed closer than 40 ft (12 m) but at least as far from the building as the height of the wall facing the backflow preventer.
- (5)\* When approved by the Costa Mesa Fire & Rescue Department, A nonindicating valve, such as an underground gate valve with an approved roadway box, complete with T-wrench, located not less than 40 ft (12 m) from the building
  - (a) For buildings less than 40 ft (12 m) in height, a nonindicating valve, such as an underground gate valve with an approved roadway box,

complete with T-wrench, shall be permitted to be installed closer than 40 ft (12 m) but at least as far from the building as the height of the wall facing the non-indicating valve.

- (6) Control valves installed in a fire-rated room accessible from the exterior
- (7) Control valves in a fire-rated stair enclosure accessible from the exterior as permitted by the AHJ

**Section 10.1.5** is hereby added as follows:

**10.1.5** All ferrous pipe and joints shall be polyethylene encased per AWWA C150, Method A, B, or C. All fittings shall be protected with a loose 8-mil polyethylene tube or sheet. The ends of the tube or sheet shall extend past the joint by a minimum of 12 inches and be sealed with 2 inch wide tape approved for underground use. Galvanizing does not meet the requirements of this section.

**Exception:** 304 or 316 Stainless Steel pipe and fittings

**Section 10.4.1.1** is hereby revised as follows:

**10.4.1.1** All bolted joint accessories shall be cleaned and thoroughly coated with asphalt or other corrosion-retarding material after installation.

**Exception:** Bolted joint accessories made from 304 or 316 stainless steel.

**Section 10.4.1.1.1** is hereby added as follows:

**10.4.1.1.1** All bolts used in pipe-joint assembly shall be 316 stainless steel.

**Section 10.4.3.2** is hereby deleted and replaced as follows:

**10.4.3.2** Where approved, private fire service mains supplying systems within the building shall be permitted to extend more than 10 ft (3.0 m) under the building when all the requirements of 10.4.3.2.1, through 10.4.3.2.4 are met. Where fire service mains enter the building adjacent to the foundation, the pipe may run under a building to a maximum of 24 inches, as measured from the interior face of the exterior wall to the center of the vertical pipe. The pipe under the building or building foundation shall be 304 or 316 stainless steel and shall not contain mechanical joints or it shall comply with 10.4.3.2.1 through 10.4.3.2.4.

## Appendices

**Appendix A** is deleted in its entirety without amendments.

**Appendix B** is adopted in its entirety without amendments outlined in CMFR Plan Submittal Checklist Specifications.

**Appendix BB** is adopted in its entirety without amendments.

**Appendix C** is adopted in its entirety without amendments.

**Appendix CC** is adopted in its entirety without amendments.

**Appendix D** is deleted in its entirety without amendments.

**Appendix E** is deleted in its entirety without amendments.

**Appendix F** is deleted in its entirety without amendments.

**Appendix G** is deleted in its entirety without amendments.

**Appendix H** is adopted in its entirety without amendments.

**Appendix I** is deleted in its entirety without amendments.

**Appendix J** is deleted in its entirety without amendments.

**Appendix K** is deleted in its entirety without amendments.

**Appendix L** is deleted in its entirety without amendments.

**Appendix M** is deleted in its entirety without amendments.

**Appendix N** is adopted in its entirety without amendments.

**Appendix O** is deleted in its entirety without amendments.

**Section 7. Severability.**

If any section, subsection, 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 of the City of Costa Mesa hereby declares that it would have adopted this ordinance and each section, subsection, sentence, clause, phrase or portion thereof irrespective of the fact that any one or more sections, subsection, sentence clause, phrases or portions be declared valid or unconstitutionally.

**Section 8. Inconsistencies; Repeal of 2016 Building, Construction and Fire Codes.**

Any provision of the Costa Mesa Municipal Code or appendices thereto inconsistent with the provisions of this Ordinance, to the extent of such inconsistencies and no

further, are repealed or modified to that extent necessary to affect the provisions of this Ordinance, including the 2016 California Codes and amendments thereto set forth in Titles 5 and 7.

*Section 9. Penalties.*

Unless otherwise provided for by state law, any violation of this Ordinance for which a penalty is not provided for hereinabove shall be punishable pursuant to the provisions of section 1-33 and/or section 5-6 of the Costa Mesa Municipal Code.

*Section 10. Effective date.*

The Mayor shall sign and the City Clerk shall attest to the passage of this Ordinance. The City Clerk shall cause the same to be published and/or posted in a manner required by law. This Ordinance shall become effective on January 1, 2020 pursuant to Government Code section 36937(e) and Health & Safety Code sections 17958 and 18941.

**PASSED AND ADOPTED this 19th day of November, 2019.**

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Katrina Foley, Mayor

APPROVED AS TO FORM:

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Kimberly Hall Barlow, City Attorney

ATTEST:

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Brenda Green, City Clerk

STATE OF CALIFORNIA      )  
COUNTY OF ORANGE      ) ss  
CITY OF COSTA MESA      )

I, BRENDA GREEN, City Clerk of the City of Costa Mesa, hereby certify that the above foregoing Ordinance No. 19-xx as introduced and considered section by section at a regular meeting of said City Council held on the 5th day of November, 2019, and thereafter passed and adopted as a whole at the regular meeting of said City Council held on the 19th day of November, 2019, by the following roll call vote:

AYES:      COUNCIL MEMBERS:  
NOES:      COUNCIL MEMBERS:  
ABSENT:      COUNCIL MEMBERS:

IN WITNESS WHEREOF, I have hereby set my hand and affixed the Seal of the City of Costa Mesa this 19th day of November, 2019.

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Brenda Green, City Clerk