ORDINANCE NO. 2016-0052

Adopted by the Sacramento City Council

November 29, 2016

AN ORDINANCE AMENDING VARIOUS CHAPTERS AND SECTIONS OF TITLE 15 OF THE SACRAMENTO CITY CODE RELATING TO THE SACRAMENTO CITY BUILDING CODE, ADOPTING LOCAL AMENDMENTS TO THE CALIFORNIA BUILDING STANDARDS CODE, AND AMENDING SECTION 8.100.300 OF THE SACRAMENTO CITY CODE

BE IT ENACTED BY THE COUNCIL OF THE CITY OF SACRAMENTO:

SECTION 1.

In connection with the local amendments to the 2016 California Building Code, 2016 California Plumbing Code, 2016 California Mechanical Code, and 2016 California Residential Code set forth below, and pursuant to California Health and Safety Code sections 17958, 17958.5, 17958.7, and 18941.5, the City Council finds and determines that:

A. The amendments are reasonably necessary because of local climatic, geological, or topographical conditions.

B. Under this adopting ordinance, specific amendments are established that are more restrictive than those adopted by the State of California under the State Buildings Standards Code, Title 24 of the California Code of Regulations.

C. Express Finding Number 1: Climatic

Climate is one of the greatest impacts to fire behavior and other major emergency events because it cannot be controlled. The drying out of wood shakes and wild land fuels in the summer allows for easy ignition.

The building of homes within weed-covered rural areas and combustible weeds on vacant urban lots, coupled with windy conditions, is a recipe for disaster. Sacramento has four distinct seasons: summer, winter, fall, and spring. The distinctions of these seasons are an attraction to the area and one reason why significant population growth has occurred. The population growth has impacted emergency service levels causing a strain on emergency services, and the result is increased response times.

Sacramento has significant variations in weather patterns. Summers are arid and warm, winters are cool to freezing, fall and spring can bring any combination of weather patterns together. It is this cyclical uncertainty that allows weather events such as the

rapid melting of the Sierra snowpack that causes flooding in the low-lying valley areas of Sacramento. As rivers rise and fall with the runoff, access to common areas of recreation and boating is affected. The doubling of average rainfall called an "El Nino" event has occurred from time to time and causes the grass to mature and grow in excess of six feet high before it dries out. Ten square feet of land with this type of fuel exhibits an explosive force equivalent to one gallon of gasoline. Although rapid melting of the Sierra snowpack may cause flooding in low-lying valley areas, direct snowfall is rare and light in Sacramento.

Average yearly rainfall is approximately 19 inches. This rainfall normally occurs from October to April. Low-level fog (Tule fog) is present throughout the winter months, which brings visibility to almost zero feet. The fog can also cause freezing and slick roadways and is a contributing factor to serious vehicle accidents.

During the summer months, there is generally no measurable precipitation. Temperatures for this dry period range from 70 to 112 degrees Fahrenheit and are frequently accompanied by light to gusty winds. The relative humidity during summer months ranges from 2% to 30%, which is arid. The city contains many acres of grasslands, which, in conjunction with the dry and windy conditions, create a hazardous situation that has led to extensive grass and brush fires in recent years. More development is extending from the urban core into the grass-covered areas. Wind-driven fires can lead to serious consequences as occurred in similar areas of the state.

The following building standards in the 2016 California Building Standards Code are amended or added based upon this express finding:

> 2016 California Plumbing Code section 312.4, Table 312.4, and section 1101.12; 2016 California Mechanical Code section 310.1; 2016 California Building Code, Appendix I; and 2016 California Residential Code, Appendix H.
>
> 2016 California Plumbing Code section 312.4 requires certain types of buried piping to be covered with a protective coating. Table 312.4 provides the allowable length of coated and wrapped buried ferrous gas or water pipes. California Plumbing Code section 1101.12.2 requires the rainfall rate for purposes of sizing roof drains, conducters, leaders, gutters, and storm sewers. 2016 California Mechanical Code section 310.1 concerns disposal of condensate from air washers, air cooling coils, fuel burning condensing appliances, and the overflow from evaporative coolers. California Building Code Appendix I and California Residential Code, Appendix H address structural designs for patio covers.

D. Express Finding Number 2: Geological

Sacramento is subject to ground tremors from seismic events as the City is located in a Design Category D, which relates to a high risk of earthquakes. Large portions of Sacramento have very poor soil conditions. Additionally, the very low elevations are subject to a very high water table. Experience with lightly-loaded footing and foundations and concrete slabs on grade revealed structural cracks resulting in differential settlement, in addition to moisture migrating from the soil to occupied, habitable areas of buildings.

The agricultural history for many parts of Sacramento has resulted in many areas having caustic or “hot” soil conditions due to the heavy use of fertilizers, pesticides, insecticides, etc. Unprotected metal pipe, when buried in these areas, is subject to corrosion and premature failure.

The following building standards in the 2016 California Building Standards Code are amended or added based upon this express finding:

2016 California Plumbing Code section 312.4 and Table 312.4.

2016 California Plumbing Code section 312.4 requires certain types of buried piping to be covered with a protective coating. Table 312.4 provides the allowable length of coated and wrapped buried ferrous gas or water pipes.

E. Express Finding Number 3: Topographical

Sacramento is impacted by several topographical features, including major rivers, minor rivers and creeks, aqueducts, lakes, sloughs, natural parkways, open space, bridges/overpasses, freeways, railroad tracks including light rail, drainage canals, sprawling industrial facilities such as Proctor and Gamble, and a former Armed Services Depot. Traffic has to be channeled around several of these topographical features and limitations, which creates traffic congestion and delays emergency response.

Heavy traffic congestion on the City’s major streets already acts as a barrier to timely response for fire and emergency vehicles. Some roadways are expected to double their traffic flow within the next ten years. In the event of an accident or other emergency at one of the key points of intersection between a road and river or freeway, sections of the City could be isolated or response time could be sufficiently slowed so as to increase the risk of injury or damage.

Preservation of wetland areas, natural parkways, riparian corridors along rivers/streams, vernal pools, open space and endangered species habitat all have contributed to access problems as well as exemption from vegetation abatement programs. These situations, though environmentally important, increase the demands on the fire service due to the extreme fire hazard created by fuel loading and limited access.

Sacramento contains agricultural areas at the outlying city boundaries. Specific requirements are necessary because of the location of these agricultural buildings. Sacramento contains a significant inventory of existing buildings and structures. Maintaining a minimum sound transmission class rating between tenant walls and floors is desirable.

The following building standards in the 2016 California Building Standards Code are amended based upon this express finding:

2016 California Building Code section 501.2; 2016 California Residential Code section R319.1; 2016 California Building Code, Appendix C; 2016 California Residential Code, Appendix J; and 2016 California Residential Code, Appendix K.

Both 2016 California Building Code section 501.2 and California Residential Code section R319.1 concern address illumination. 2016 California Building Code, Appendix C addresses agricultural buildings. 2016 California Residential Code, Appendix J addresses existing buildings and structures. 2016 California Residential Code, Appendix K addresses sound transmission.

F. Chapter 15.20 “Amendments to the California Building Code” is affirmed as a local amendment to the 2016 California Building Code and chapter 15.32 “Amendments to the California Residential Code” is affirmed as a local amendment to the 2016 California Residential Code.

SECTION 2.

A. The following definitions in section 15.04.040 of the Sacramento City Code are amended to read as follows:

“CBC” means the California Building Code, 2016 Edition, Volumes 1 and 2.

“CEC” means the California Electrical Code, 2016 Edition.

“CGC” means the California Green Building Standards Code, 2016 Edition.

"CMC" means the California Mechanical Code, 2016 Edition.

"CPC" means the California Plumbing Code, 2016 Edition.

"CRC" means the California Residential Code, 2016 Edition.

B. Except as amended by subsection A above, section 15.04.040 remains unchanged and in full effect.

SECTION 3.

Section 15.04.050 of the Sacramento City Code is amended to read as follows:

15.04.050 Adoption of the 2016 California Building Standards Code.

The building standards included in the following parts of the 2016 California Building Standards Code, Title 24 of the California Code of Regulations, are adopted by reference and incorporated in this code, except as expressly amended or superseded by the provisions of this code:

A. The CBC including Appendix C and Appendix I, which is based on and which amends the provisions of the 2015 International Building Code, as published by the International Code Council.

B. The CRC, including Appendix H, Appendix J, and Appendix K which is based on and which amends the provisions of the 2015 International Residential Code, as published by the International Code Council.

C. The CPC which is based on and which amends the provisions of the 2015 Uniform Plumbing Code, as published by the International Association of Plumbing and Mechanical Officials.

D. The CMC, which is based on and which amends the provisions of the 2015 Uniform Mechanical Code, as published by the International Association of Plumbing and Mechanical Officials.

E. The CEC, which is based on and which amends the provisions of the 2014 National Electrical Code, as published by the National Fire Protection Association.

F. The CGC.

SECTION 4.

Section 15.08.010 of the Sacramento City Code is amended to read as follows:

15.08.010 Permits—Permit procedures.

Except as provided in this code, all permits shall be obtained as required by and in accordance with the 2016 California Building Standards Code as adopted in this Title 15.

SECTION 5.

Section 15.08.040 of the Sacramento City Code is amended to read as follows:

15.08.040 Permits—Exemptions.

No permit is required for work that is exempt from the requirement to obtain a permit as provided for in the 2016 California Building Standards Code as adopted herein.

SECTION 6.

Section 15.08.060 of the Sacramento City Code is amended to read as follows:

15.08.060 Permits—Applications.

In addition to the requirements of the 2016 California Building Standards Code as adopted in this Title 15, the following shall be included with an application for a permit:

A. All declarations, authorizations, and notices required by this code or state law including the licensed contractor declaration, the owner-builder declaration, the workers' compensation declaration, the declaration regarding construction lending agency, and the authorization to act on property owner's behalf, as applicable and fully executed; and

B. A plan review fee, where plans are required, unless a plan review fee is paid at the time of pre-application plan review; provided that:

1. If the plan review fee is to be based on an hourly rate and not the estimated value of the work to be done, a deposit shall be paid at the time of application submittal and the balance shall be billed as plan review is conducted. The plan review fee shall be paid in full prior to issuance of the building permit;

2. If the plans submitted are incomplete or are changed so as to require additional plan review, an additional plan review fee shall be charged.

SECTION 7.

Section 15.08.070 of the Sacramento City Code is amended to read as follows:

15.08.070 Permits—Permit issuance.

In addition to the requirements of the 2016 California Building Standards Code as adopted in this Title 15, the following provisions shall apply to the issuance of a permit:

A. When an owner-builder declaration has been executed with a permit application, no permit shall be issued until the notice to the property owner required under California Health and Safety Code section 19825 has been completed and signed by the owner of the property on which the proposed work is to be located and submitted to the chief building official.

B. No permit shall be issued until the applicant has paid the building permit fee (inspection) and all other required fees (including the plan review fee), taxes, and other charges; provided, that if the building permit fee (inspection) is to be based on an hourly rate and not the estimated value of the work to be done, a deposit shall be paid at the time of permit issuance, and the balance shall be billed as inspections are conducted. The building permit fee (inspection) shall be paid in full prior to final inspection approval.

C. Issuance of a building permit shall not entitle the permit holder to commence the work authorized by the permit unless and until the permit holder has obtained all other approvals required by, and has complied with, all other applicable laws, rules, and regulations relating to the proposed work.

SECTION 8.

Chapter 15.24 of the Sacramento City Code is amended to read as follows:

Chapter 15.24 AMENDMENTS TO THE CALIFORNIA PLUMBING CODE

15.24.010 Amendments to the CPC.

The CPC is amended as set forth in this chapter.

15.24.020 Title lines.

For the purposes of this chapter, and notwithstanding the provisions of section 1.04.060, the title lines (or “catchwords”) in this chapter shall be deemed to be part of such sections.

15.24.030 Local amendments to the CPC.

A. CPC section 312.4 is amended to read as follows:

Corrosion, Erosion, and Mechanical Damage. Each system of buried ferrous piping used for either potable water or gas supply shall have a protective coating of an approved type, machine applied and conforming to recognized standards. Field wrapping shall provide equivalent protection and is restricted to those short sections and fittings necessarily stripped for threading.

All buried ferrous piping shall be installed with cathodic protection. Private gas mains and laterals coming within the scope of the Federal Regulations for Pipeline Safety shall be designed and the installation supervised for compliance by a person qualified by experience and training in pipeline corrosion control methods. Supply piping for buildings shall be installed according to the same standards or by the use of Table 312.4 of this code.

When Table 312.4 is used, the piping system shall be installed according to the following requirements:

1. Galvanic anodes for cathodic protection of ferrous piping shall be buried not less than three feet below grade, and below the bottom of the pipe to be protected. They shall be not less than four feet horizontally from any buried metallic pipe. Before backfilling, the anode shall be flooded with a minimum of five gallons of water.

   Connecting of the anode to the pipe, when made less than six inches above grade, shall be with a thermite weld. Connections six inches or more above grade may be made by the use of an approved electrical service grounding clamp.

2. Water supply piping shall be isolated at the connection of the utility or private tap from the water main and at each building foundation line adjacent to the full way shut-off valve.

3. Gas supply piping shall be isolated adjacent to each building foundation line or at the appliance when located outside the building and from the serving gas supplier's service equipment.

4. Approved isolation fittings shall be located a minimum of six inches above grade, except at the water tap.

5. Any piping laid in the same trench with pipe requiring cathodic protection shall be separated laterally a minimum of 12 inches, and piping installed diagonally above pipe requiring cathodic protection shall be separated vertically a minimum of six inches. All separations shall be maintained with clean earth in accordance with CPC section 314.

   All piping regulated by this code and subject to undue corrosion, erosion or mechanical damage shall be protected in an approved manner.

B. Table 312.4 is added to Chapter 3 of the CPC to read as follows:

Table 312.4. Anode Selection Chart

Allowable Length of Coated and Wrapped Buried Ferrous Gas or Water Pipe						
Pipe Size						
Anode Size	1/2″	3/4″ & 1″	1-1/4″ & 1-1/2″	2″	3″	4″
1 lb. anode	50 ft	-	-	-	-	-
3 lb. anode	150 ft	100 ft	50 ft	50 ft	-	-
9 lb. anode	500 ft	200 ft	200 ft	150 ft	100 ft	100 ft
17 lb. anode	-	500 ft	350 ft	300 ft	250 ft	150 ft
32 lb. anode	-	-	500 ft	500 ft	450 ft	350 ft

C. Subsection 1101.12.3 is added to CPC section 1101.12 to read as follows:

For the purpose of sizing roof drains, conductors, leaders, gutters, and storm sewers, the rainfall rate used for calculations shall be three inches (3″) per hour.

SECTION 9.

Chapter 15.28 of the Sacramento City Code is amended to read as follows:

Chapter 15.28 AMENDMENTS TO THE CALIFORNIA MECHANICAL CODE

15.28.010 Amendments to the CMC.

The CMC is amended as set forth in this chapter.

15.28.020 Title lines.

For the purposes of this chapter and notwithstanding the provisions of section 1.04.060, the title lines (or "catchwords") in this chapter shall be deemed to be part of such sections.

15.28.030 Local amendments to the CMC.

Section 310.1 of the CMC is amended to read as follows:

> Section 310.1 Condensate Disposal. Condensate from air washers, air cooling coils, fuel burning condensing appliances, and the overflow from evaporative coolers and similar water supplied equipment or similar air-conditioning equipment shall be collected and discharged to an approved plumbing fixture or approved disposal area.
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> For the purpose of this section, an approved plumbing fixture shall be one of the following:
>
> 1. An approved trapped and vented receptor connected to a sanitary sewer;
>
> 2. A downspout when terminated in an approved disposal area.
>
> For the purpose of this section, an approved disposal area shall be one of the following:
>
> 1. A drywell with a rock fill;
>
> 2. A planting area large enough to accept the discharge wastes;
>
> 3. A storm drain system.

The waste pipe shall have a slope of not less than 1/8 inch per foot or one percent slope and shall be of approved corrosion-resistant material not smaller than the drain outlet size as required in either section 309.3 or 309.4 of the CMC for air-cooling coils or condensing fuel burning appliances, respectively.

Condensate or waste water shall not drain over a public way or over any improved private walkway, driveway, or improved surface.

Vertical piping from condensate pumps shall be sized not less than the pump outlet.

Approved flexible tubing shall rise vertically, immediately to a height whereby transition to rigid gravity waste pipe can occur.

SECTION 10.

Section 8.100.300 of the Sacramento City Code is amended to read as follows:

8.100.300 Ceiling heights.

Habitable spaces, laundry rooms, hallways, bathrooms and water closet compartments shall have a ceiling height of not less than seven feet, except for habitable spaces created in existing basements. The ceiling height for habitable spaces created in existing basements shall be as specified in theCRC, Appendix J.

If any room in a building has a sloping ceiling, the prescribed ceiling height for the room is required in only one-half the area thereof. No portion of the room measuring less than five feet from the finished floor to the finished ceiling shall be included in any computation of the minimum area thereof.

If any room has furred ceiling, the prescribed ceiling height is required in two-thirds the area thereof, but in no case shall the height of the furred ceiling be less than seven feet.

Adopted by the City of Sacramento City Council on November 29, 2016, by the following vote:

Ayes: Members Ashby, Carr, Guerra, Hansen, Harris, Jennings, Schenirer, Warren and Mayor Johnson

Noes: None

Abstain: None

Absent: None

Attest:

Shirley Concolino

Digitally signed by Shirley Concolino
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Shirley Concolino, City Clerk

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