

09-3-2007 Sonoma County Fire Prevention Officer's (SCFPO) Amendments to the 2007 California Fire Code.

## **FIRE ACCESS & WATER SUPPLIES**

### **CHAPTER 5 FIRE SERVICE FEATURES**

#### **SECTION 501 GENERAL**

Subsection 501.1 is amended to read as follows:

**Amended - 501.1 Scope.** Fire service for buildings, structures and premises shall comply with this chapter. This section applies to residential and commercial developments. Single family residential projects in approved rural areas shall comply with the Fire Safe Standards. Design and construction shall be in accordance with the following sections unless otherwise authorized by the fire code official in accordance with 104.9 Alternative Materials and methods.

#### **SECTION 502 DEFINITIONS**

Subsection 502 is amended to read as follows:

**Amended - FIRE APPARATUS ACCESS ROAD.** A road that provides fire apparatus access from a fire station to a facility, building or portion thereof. This is a general term inclusive of all other terms such as fire lane, public street, private street, parking lot lane and access roadway. Public streets maybe defined by the standards of the local agency having jurisdiction over the project.

**Added - FLOOR AREA.** The floor area used for calculating the required fire flow shall be the total floor area of all floor levels within the exterior walls that are under the horizontal projection of the roof, except as modified in Section B104

#### **SECTION 503 FIRE APPARATUS ACCESS ROADS**

Subsection 503.2.6 is amended to read as follows:

**503.2.6 Bridges and elevated surfaces.** Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with AASHTO Standard Specifications. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges when required by the fire code official. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, approved barriers, approved signs or both shall be installed and maintained when required by the fire code official.

**SECTION 505  
PREMISES IDENTIFICATION**

Section 505.1 is amended to read as follows:

**505.1 Address numbers.** New and existing buildings shall have approved illuminated address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numerals or alphabet letters. Numbers shall be a minimum of 4 inches (102 mm) high with a minimum stroke width of 0.5 inch (12.7 mm).

**Exception:** rural residential as approved by the fire code official

**SECTION 508  
FIRE PROTECTION WATER SUPPLIES**

**508.5 Fire hydrant systems.** Fire hydrant systems shall comply with Sections 508.5.1 through 508.5.6.

Subsection 508.5.1 is amended to read as follows:

**508.5.1 Where required.** Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 150 feet (45.179 m) from a hydrant on a fire apparatus access 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.

**CHAPTER 47  
REQUIREMENTS FOR WILDLAND-URBAN  
INTERFACE FIRE AREAS**

Section 4707 is amended to read as follows:

**4707 Defensible Space.** New buildings located within a designated Fire Hazard Severity Zone shall comply with the defensible space requirements of California Public Resources Code Section 4291.

Appendix B is adopted and amended as follows:

**APPENDIX B  
FIRE-FLOW REQUIREMENTS FOR BUILDINGS**

**SECTION B101  
GENERAL**

Section B101.1 is amended as follows:

**B101.1 Scope.** The procedure for determining fire-flow requirements for buildings or portions of buildings hereafter constructed shall be in accordance with this appendix. This appendix does not apply to structures other than buildings. This section applies to residential and commercial developments. Single family residential projects in approved rural areas shall comply with the Fire Safe Standards. Design and construction shall be in accordance with the following sections unless otherwise authorized

by the fire code official in accordance with 104.9 Alternative Materials and methods.

## **SECTION B102 DEFINITIONS**

Section B102.1 is amended as follows:

**FIRE-FLOW.** The flow rate of a water supply, measured at 20 pounds per square inch (psi) (138 kPa) residual pressure, measured in the water main in the vicinity of the flowing hydrant, that is available for fire fighting.

**FLOOR AREA.** The floor area used for calculating the required fire flow shall be the total floor area of all floor levels within the exterior walls that are under the horizontal projection of the roof, except as modified in Section B104.3.

## **SECTION B105 FIRE-FLOW REQUIREMENTS FOR BUILDINGS**

Section B105.1 is amended to read as follows:

**B105.1 One- and two-family dwellings.** The minimum fire-flow requirements for one- and two-family dwellings having a fire-flow calculation area which does not exceed 3,600 square feet (344.5 m<sup>2</sup>) shall be 1500 gallons per minute (3785.4 L/min). Fire-flow and flow duration for dwellings having a fire-flow calculation area in excess of 3,600 square feet (344.5 m<sup>2</sup>) shall not be less than that specified in Table B 105.1.

Section B105.2 is amended to read as follows:

**B105.2 Buildings other than one- and two-family dwellings.** The minimum fire-flow and flow duration for buildings other than one- and two-family dwellings shall be as specified in Table B105.1.

**Exception:** A reduction in required fire-flow of up to 50 percent, as approved, is allowed when the building is provided with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2. The resulting fire-flow shall not be less than 1,500 gallons per minute (5678 L/min) for the prescribed duration as specified in Table B105.1.

Table B105.1 is amended to read as follows:

Foot note A has been deleted.

## **APPENDIX C FIRE HYDRANT LOCATION AND DISTRIBUTION**

### **SECTION 101 GENERAL**

Section C101.1 is amended as follows:

**C101.1 Scope.** Fire hydrants shall be provided in accordance with this appendix for the protection of buildings, or portions of buildings, hereafter constructed. This section applies to residential and commercial developments. Single family residential projects in approved rural areas shall comply with the Fire Safe Standards. Design and construction shall be in accordance with the following sections

unless otherwise authorized by the fire code official in accordance with 104.9 Alternative Materials and methods.

## **SECTION C102 LOCATION**

Section C102.1 is amended as follows:

**C102.1 Fire hydrant locations.** Where fire hydrants are required, they shall be provided along required fire apparatus access roads and adjacent public streets.

## **SECTION C105 DISTRIBUTION OF FIRE HYDRANTS**

Section C105.1 is amended as follows:

**C105.1 Hydrant spacing.** The average spacing between fire hydrants shall not exceed that listed in Table C 105.1.

**Exception:** The fire chief is authorized to allow deviations from this code where existing fire hydrants provide all or a portion of the required fire hydrant service.

Table C105.1 is amended to read as follows:

- f. For commercial, industrial and multifamily residential average spacing shall be no greater than 300 feet.
- g. A Fire hydrants shall be located within 50 feet of the FDC, or as approved by the fire code official

## **APPENDIX D FIRE APPARATUS ACCESS ROADS**

### **SECTION D101 GENERAL**

Section D101.1 is amended to read as follows:

**D101.1 Scope.** Fire apparatus access roads shall be in accordance with this appendix as amended and all other applicable requirements of the International Fire Code. This section applies to residential and commercial developments. Single family residential projects in approved rural areas shall comply with the Fire Safe Standards. Design and construction shall be in accordance with the following sections unless otherwise authorized by the fire code official in accordance with 104.9 Alternative Materials and methods.

## **SECTION D102 REQUIRED ACCESS**

Section D102.1 is amended to read as follows:

**D102.1 Access and loading.** Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with an asphalt, concrete or other approved driving surface capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds (34050 kg) or as approved by the code official.

## **SECTION D103 MINIMUM SPECIFICATIONS**

Section D103.1 is deleted.

Section D103.2 is amended as follows:

**D103.2 Grade.** The grade of fire apparatus access roads shall be in accordance with the local agency requirement for public streets or as approved by the fire chief.

Section D103.3 is amended as follows:

**D103.3 Turning radius.** The minimum turning radius shall be determined by the fire code official or as approved by local standards.

Section D103.4 is amended to read as follows:

**D103.4 Dead ends.** Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) shall be provided with width and turnaround provisions in accordance with the local agency requirements for public streets or as approved by local standards.

Table D103.4 is deleted

Section D103.6 is amended to read as follows:

**D103.6 Signs.** Where required by the fire code official, fire apparatus access roads shall be marked with permanent NO PARKING-FIRE LANE signs complying with C.V.C. ( California Vehicle Code)

Section D103.6.1 is deleted

Section D103.6.2 is deleted

## **SECTION D104 COMMERCIAL AND INDUSTRIAL DEVELOPMENTS**

Section D104.1 is amended as follows:

**D104.1 Buildings exceeding three stories or 30 feet in height.** Buildings or facilities exceeding 30 feet (9144 mm) or three stories in height shall have at least two means of fire apparatus access for each structure.

Section D104.2 is amended to read as follows:

**D104.2 Buildings exceeding 62,000 square feet in area.** Buildings or facilities having a gross building area of more than 62,000 square feet (5760 m<sup>2</sup>) shall be provided with two separate and approved fire apparatus access roads.

**SECTION D106  
MULTIPLE-FAMILY RESIDENTIAL DEVELOPMENTS**

Section D106.1 amended to read as follows:

**D106.1 Projects having more than 50 dwelling units.** Multiple-family residential projects having more than 50 dwelling units shall be provided with two separate and approved fire apparatus access roads.

Section D106.2 is deleted.

**SECTION D107  
ONE- OR TWO-FAMILY RESIDENTIAL DEVELOPMENTS**

Section D107.1 is amended to read as follows:

**D107.1 One- or two-family dwelling residential developments.** Developments of one- and two-family dwellings where the number of dwelling units exceeds 50 shall be provided with two separate and approved fire apparatus access roads and shall meet the requirements of section D104.3.

## **FIRE SPRINKLERS**

Section 903.2. is amended to read as follows:

**Section 903.2 Where Required.** An approved automatic sprinkler system shall be installed and maintained in all newly constructed buildings.

### **Exceptions:**

1. Detached Group U occupancies 1000 sq. ft. or less. Agricultural buildings and private riding arenas as approved by the Fire Code Official.
2. Detached pool houses up to 1000 sq. ft. in floor area within 50 feet of the pool and limited to a single bathroom.
3. A room above a detached garage used for storage only that does not contain a bathroom, cooking or refrigeration facilities or connections for such facilities.
4. Detached non-combustible motor vehicle fuel dispensing canopies classified as a Group M occupancy.
5. Car Ports of non-combustible construction
6. B or M occupancies 500 sq. ft or less.

Subsection 903.2.1 is amended to read as follows:

**Section 903.2.1 Additions.** Additions to existing commercial and residential buildings that increase square feet (based on the following percentages) calculated by the existing gross floor area shall meet the requirements for a newly constructed building:

<b>Square Feet</b>	<b>Increase</b>
0-1000 sq ft:	200% or 2000 sq ft. maximum cumulative total
1001-4000 sq ft:	100%
>=4001 sq ft:	50%

Subsection 903.2.2. is amended to read as follows:

**903.2.2 Alteration or Repairs.** For alterations or repairs to existing building(s) involving demolition, removal, or repair due to fire damage of more than 50% of the structure, the building shall meet the requirements for a newly constructed building.

### **Exceptions:**

1. One time alterations or additions made solely for the purpose of complying with the Americans with Disabilities Act.
2. County unincorporated areas

Subsection 903.2.3 is amended to read as follows:

**903.2.3 Changes of Occupancy.** Any change of occupancy when the proposed new occupancy classification is more hazardous based on life and fire risk, as determined by the Fire Code Official, including the conversion of residential buildings to condominiums; the building shall meet the requirements for a newly constructed building.

Subsections 903.2.4 through 903.2.13 are deleted.

Section 903.3 is amended to read as follows:

**903.3 Installation Requirements.** Sprinkler systems shall be installed in accordance with NFPA 13, NFPA 13R, if approved by the Fire Code Official, and NFPA 13D.

Subsections 903.3.1 through 903.3.7 are deleted.

Subsection 903.4 is amended to read as follows:

**903.4 Sprinkler System Monitoring and Alarms.** Except for Group R, Division 3 Occupancies, all valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels, water flow switches shall be electronically supervised. Valves when used for standpipes are excluded from this provision unless required by the Fire Code Official.

Subsection 903.4.1 is amended to read as follows:

**903.4.1 Signals.** Alarm, supervisory and trouble signals shall be distinctly different and shall be automatically transmitted to an approved central station, remote supervising station or propriety supervising station as defined in NFPA 72, or when approved by the Fire Code Official, shall sound an audible alarm at a constantly attended location.

Subsection 903.4.2 is amended to read as follows:

**903.4.2 Alarms.** Every new fire alarm system installed for the purpose of evacuation, including those systems activated solely by fire sprinkler systems shall be designed so that occupants of the building shall be notified audibly and visually within each separate occupancy and/or dwelling unit.

Subsections 903.4.3 through 903.6.1 are deleted.

Subsection 905.3.1 is amended to read as follows:

**905.3.1.1 Stories.** A Class I standpipe system shall be installed in buildings three or more stories in height and shall be provided with approved outlets provided on each floor level, including the roof when roof access is provided.

Subsection 905.3.2, 905.3.3, and 905.4.6 are deleted.

Subsection 905.9 exception 2 is deleted.

Subsection 907.2.8.3 all wording after “as required by section 907.2.10.” is deleted

Subsection 907.2.8.1 Exception 2 is amended to read as follows:

2. Manual fire alarm boxes are not required throughout the building when the following conditions are met.
  - 2.1 The building is equipped throughout with an automatic fire sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 and
  - 2.2 Within each residential unit the notification devices will activate upon sprinkler water flow and

2.3 At least one manual fire alarm box is installed in an approved location.

Subsection 907.2.9 Exception 2 is amended to read as follows.

2. Manual fire alarm boxes are not required throughout the building when the following conditions are met.

2.1 The building is equipped throughout with an automatic fire sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 and

2.2 Within each residential unit the notification devices will activate upon sprinkler water flow and

2.3 At least one manual fire alarm box is installed in an approved location.