

STATE OF FLORIDA

Florida Fire Prevention Code

Changes Issued January 2018

Since the Sixth Edition was published this is Change Number:

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Make the following changes to your Sixth Edition of the Florida Fire Prevention Code. It is suggested you place your initials after each change, then place this sheet behind the title page.

Remove Old Pages:

Insert New Pages:

Initials:

NFPA 1, Pages 1-207 thru 1-208

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An amendment Service of

***BNI* Building News**

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18.4.1* Scope.

18.4.1.1* The procedure determining fire flow requirements for buildings hereafter constructed or moved into the jurisdiction shall be in accordance with Section 18.4.

18.4.1.2 Section 18.4 shall not apply to structures other than buildings.

18.4.1.3 Sections 18.3 and 18.4 shall be considered a recommendation for construction of one- and two-family dwellings located on in-fill lots in existing neighborhoods and subdivisions.

18.4.2 Definitions. See definitions 3.3.14.4, Fire Flow Area, and 3.3.119, Fire Flow.

18.4.3 Modifications.

18.4.3.1 Decreases in Fire Flow Requirements.

18.4.3.1.1* Fire flow requirements shall be permitted to be decreased by the AHJ for isolated buildings or a group of buildings in rural areas or suburban areas where the development of full fire flow requirements is impractical as determined by the AHJ.

18.4.3.1.2 The AHJ shall be authorized to establish conditions on fire flow reductions approved in accordance with 18.4.3.1.1 including, but not limited to, fire sprinkler protection, type of construction of the building, occupancy, development density, building size, and setbacks.

18.4.3.2 Increases in Fire Flow Requirements. The minimum required fire flow shall be permitted to be increased by the AHJ where conditions indicate an unusual susceptibility to group fires or conflagrations. An upward modification shall not be more than twice that required for the building under consideration.

18.4.4 Fire Flow Area.

18.4.4.1 General. The fire flow area shall be the total floor area of all floor levels of a building except as modified in 18.4.4.2.

18.4.4.2 Type I (443), Type I (332), and Type II (222) Construction. The fire flow area of a building constructed of Type I (443), Type I (332), and Type II (222) construction shall be the area of the three largest successive floors.

18.4.5 Fire Flow Requirements for Buildings.

18.4.5.1 One- and Two-Family Dwellings Not Exceeding 5000 ft² (464.5 m²).

18.4.5.1.1 The minimum fire flow and flow duration requirements for one- and two-family dwellings having a fire flow area that does not exceed 5000 ft²(464.5 m²) shall be 1000 gpm (3785 L/min) for 1 hour.

18.4.5.1.2* A reduction in required fire flow of 75 percent shall be permitted where the one- and two-family dwelling is provided with an approved automatic sprinkler system.

18.4.5.1.3* Where one- and two-family dwellings are proposed to be constructed in areas where water distribution systems providing fire flow were designed and installed prior to the effective date of this Code, the AHJ shall be authorized to accept the previously designed system fire flow where the one- and two-family dwellings are provided with approved automatic sprinkler systems.

18.4.5.1.4 A reduction in fire flow shall be permitted for building separation distance in accordance with 18.4.5.1.4 and Table 18.4.5.1.4.

Table 18.4.5.1.4 Permitted Fire Flow Reduction for Building Separation

| Separation Distance Between Buildings on a Single Lot | | Separation Distance to Lot Line or Easement ^a | | Permitted Fire Flow Reduction |
|---|----------------|--|---------------|-------------------------------|
| ft | m | ft | m | |
| >30 and ≤50 | >9.1 and ≤15.2 | >15 and ≤25 | >4.6 and ≤7.6 | 25% |
| >50 | >15.2 | >25 | >7.6 | 40% |

^aSee 18.4.5.1.4.3.

18.4.5.1.4.1 Where multiple buildings are located on a single lot, the building separation distance shall be the distance between the buildings.

18.4.5.1.4.2 Where a building abuts a lot line, the building separation distance shall be the distance between the building and the lot line.

18.4.5.1.4.3 Where a building is contiguous to a public right of way or no-build easement, the separation distance shall be the distance between the building to the opposite side of the right of way or no-build easement.

18.4.5.1.4.4 Where multiple buildings are located on a single lot and abut a lot line, the building separation distance for determining fire flow reduction shall be the smallest of the two distances.

18.4.5.1.5* The reductions in 18.4.5.1.2, 18.4.5.1.3, and 18.4.5.1.4 shall not reduce the required fire flow to less than 500 gpm (1900 L/min).

18.4.5.2 One- and Two-Family Dwellings Exceeding 5000 ft² (464.5 m²).

18.4.5.2.1 Fire flow and flow duration for dwellings having a fire flow area in excess of 5000 ft² (464.5 m²) shall not be less than that specified in Table 18.4.5.2.1.

18.4.5.2.2 Required fire flow shall be reduced by 75 percent and the duration reduced to 1 hour where the one- and two- family dwelling is provided with an approved automatic sprinkler system.

18.4.5.2.3 A reduction in the required fire flow shall be permitted where a one- and two-family dwelling is separated from all lot lines in accordance with Table 18.4.5.1.4.

18.4.5.2.4 Required fire flow for one- and two-family dwellings protected by an approved automatic sprinkler system shall not exceed 2000 gpm (7571 L/min) for 1 hour.

18.4.5.2.5* The reductions in 18.4.5.2.2, and 18.4.5.2.3 shall not reduce the required fire flow to less than 500 gpm (1900 L/min) for 1 hour.

18.4.5.3 Buildings Other Than One- and Two-Family Dwellings.

18.4.5.3.1 The minimum fire flow and flow duration for buildings other than one- and two-family dwellings shall be as specified in Table 18.4.5.2.1.

18.4.5.3.2 Required fire flow shall be reduced by 75 percent when the building is protected throughout by an approved automatic sprinkler system. The resulting fire flow shall not be less than 1000 gpm (3785 L/min).

18.4.5.3.3 Required fire flow shall be reduced by 75 percent when the building is protected throughout by an approved automatic sprinkler system, which utilizes quick response sprinklers throughout. The resulting fire flow shall not be less than 600 gpm (2270 L/min).

18.4.5.3.4* Required fire flow for buildings protected by an approved automatic sprinkler system shall not exceed 2000 gpm (7571 L/min) for 2 hours.

18.4.5.3.5 Required fire flow for open parking structures that are not protected throughout by an approved automatic sprinkler system shall be reduced by 75 percent where all of the following conditions are met:

- (1) The structure complies with the building code.
- (2) The structure is of Type I or Type II construction.
- (3) The structure is provided with a Class I standpipe system in accordance with NFPA 14. Class I standpipe systems of the manual dry type shall be permitted.
- (4) The resulting fire flow is not less than 1000 gpm (3785 L/min).

18.4.5.4* Required Fire Flow and Automatic Sprinkler System Demand. For a building with an approved fire sprinkler system, the fire flow demand and the fire sprinkler system demand shall not be required to be added together. The water supply shall be capable of delivering the larger of the individual demands.

18.5 Fire Hydrants.

18.5.1 Fire Hydrant Locations and Distribution. Fire hydrants shall be provided in accordance with Section 18.5 for all new buildings, or buildings relocated into the jurisdiction unless otherwise permitted by 18.5.1.1 or 18.5.1.2.

18.5.1.1 Fire hydrants shall not be required where the water distribution system is not capable of providing a fire flow of greater than 500 gpm (1893 L/min) at a residual pressure of 20 psi (139.9 kPa).

18.5.1.2* Fire hydrants shall not be required where modification or extension of the water distribution system is deemed to be impractical by the AHJ.

18.5.1.3 The provisions of 18.5.1.1 and 18.5.1.2 shall not eliminate the fire flow requirements of Section 18.4.

18.5.1.4* The distances specified in Section 18.5 shall be measured along fire department access roads in accordance with 18.2.3.

18.5.1.5 Where fire department access roads are provided with median dividers incapable of being crossed by fire apparatus, or where fire department access roads have traffic counts of more than 30,000 vehicles per day, hydrants shall be placed on both sides of the fire department access road on an alternating basis, and the distances specified by Section 18.5 shall be measured independently of the hydrants on the opposite side of the fire department access road.

18.5.1.6 Fire hydrants shall be located not more than 12 ft (3.7 m) from the fire department access road.

18.5.2 Detached One- and Two-Family Dwellings. Fire hydrants shall be provided for detached one- and two-family dwellings in accordance with both of the following:

- (1) The maximum distance to a fire hydrant from the closest point on the building shall not exceed 600 ft (183 m).
- (2) The maximum distance between fire hydrants shall not exceed 800 ft (244 m).

18.5.3 Buildings Other than Detached One- and Two-Family Dwellings. Fire hydrants shall be provided for buildings other than detached one- and two-family dwellings in accordance with both of the following:

- (1) The maximum distance to a fire hydrant from the closest point on the building shall not exceed 400 ft (122 m).
- (2) The maximum distance between fire hydrants shall not exceed 500 ft (152 m).

18.5.4 Minimum Number of Fire Hydrants for Fire Flow.

18.5.4.1 The minimum number of fire hydrants needed to deliver the required fire flow for new buildings in accordance with Section 18.4 shall be determined in accordance with Section 18.5.4.

18.5.4.2 The aggregate fire flow capacity of all fire hydrants within 1000 ft (305 m) of the building, measured in accordance with 18.5.1.4 and 18.5.1.5, shall be not less than the required fire flow determined in accordance with Section 18.4.

18.5.4.3* The maximum fire flow capacity for which a fire hydrant shall be credited shall be as specified by Table 18.5.4.3. Capacities exceeding the values specified in Table 18.5.4.3 shall be permitted when local fire department operations have the ability to accommodate such values as determined by the fire department.

18.5.4.4 Fire hydrants required by 18.5.2 and 18.5.3 shall be included in the minimum number of fire hydrants for fire flow required by 18.5.4.

