



# Miami-Dade Fire Rescue

## Access Road Requirements

The requirements identified in this document are minimum standards. The Authority Having Jurisdiction, based on specific fire fighting/and or EMS needs, may require necessary modifications to these minimum standards on a case-by-case basis.

Fire department access roads must be provided for every community, facility, building, or portion of a building. Set-up sites, fire lanes, and slopes in a project must be able to accommodate a truck with dimensions as follows.

Overall length:	47 feet
Bumper to bump:	36 feet
Wheelbase length:	256 inches

### **Requirements for changes of elevation on Fire Department access roads per the Florida Fire Prevention Code NFPA 1: Chapter 18**

- Angle of approach: 2.8 degrees max = (1: 20 ratio) =(5%)
- Brake-over angle: 7 degrees max = (1: 8.14 ratio) =(12.3%)
- Angle of departure: 2.8 degrees max = (1: 20ratio) =(5%)
- Driving inclines 2.8 degrees max = (1: 20 ratio) =(5%)

### **Required dimensions for fire department access roads**

- All pertinent dimensions of fire department access roads such as drivable roadway width, turn radii, cul-de-sacs, and T or Y turn-arounds must be identified on a site plan. All sidewalks and green space shall be identified separate from roadway dimensions.
- The minimum dimensions for fire department access roads shall be 20 feet unobstructed width (two-way traffic) and not less than 13 feet 6 inches of unobstructed vertical clearance per the Florida Fire Prevention Code NFPA 1: 18.2.3.4.1.2. The AHJ will accept one-way traffic lanes to be a minimum of 15 feet unobstructed width.

- Dead end fire department access roads exceeding 150 feet shall be provided with approved provisions for the turning around of fire apparatus per the Florida Fire Prevention Code NFPA 1: 18.2.3.4.4. An approved turn-around shall be by means described below.
  - A minimum 50 feet outside radius cul-de-sac of which must be a suitable surface as described in *Emergency vehicle support capability* and approved by the AHJ.
  - A T-Turn or Y-Turn with an extension of the “T or Y” to be a minimum of 46 feet from the edge of each side of the roadway (not the center of the roadway) which must be a suitable surface as described below and approved by the AHJ.

### **Building access**

- A fire department access road shall extend to within 50 feet of a single exterior door providing access to the interior of any and all buildings per the Florida Fire Prevention Code NFPA 1: 18.2.3.2.1.
- Fire department access roads shall be provided such that any portion of the facility or any portion of an exterior wall of the first story of the building is located not more than 150 feet (450 feet if fully sprinklered) from a fire department access road as measured by an approved route around the exterior of the building or facility per the Florida Fire Prevention Code NFPA 1: 18.2.3.2.2 and NFPA 1:18.2.3.2.2.1.

### **Gated communities or properties**

- Gates to communities or properties shall be a minimum 15 feet clear width if the approach to and/or departure from the gate is not within a turn radius.
- Gates that are within a turn radius shall be a minimum 20 feet clear width
- Fire Department access to gated communities shall be by Knox Key Switch model 3502 ONLY or Knox padlock model 3770, 3771, 3772 on manual gates (where permitted).

### **Emergency vehicle support capability**

- Fire department access roads shall be designed and maintained to support a minimum of 32 tons and shall be provided with a surface suitable for all-weather driving capabilities per the Florida Fire Prevention Code NFPA 1: 18 2.3.4.5.

### **Aerial apparatus set-up sites**

- Set-up sites shall be provided at each building over 3 stories in height. Set-up sites shall be located at a minimum on two sides of the building at the approximate center of each side for firefighting and rescue operations. Depending upon the building configuration, additional set-up sites may be required by the AHJ.

- Sites shall be no closer than 10 feet and no further than 30 feet from any building. Each site shall be a minimum 21 feet wide and 47 feet long with a cross slope no greater than 5 percent.
- Sites shall comply with the requirements of the emergency vehicle support capabilities above and also capable of withstanding any point forces resulting from outriggers

**Fire hydrants, sprinkler systems, and other fire related devices**

- Clearance from landscaping, parking or other obstructions around fire hydrants and fire department connections to sprinkler systems shall be a minimum of five feet in front of and to the sides of each appliance.
- Any required fire sprinkler post indicator valve and/or fire department connection shall be located not less than 40 feet from the protected building.
- The fire department connection shall be within 150 feet of the closest fire hydrant.

**Should you desire to review your plans with the Miami Dade Fire Rescue Department prior to submittal of an application, please:**

- **Contact Fire Water Engineering at 786-315-2771 to set up a consultation meeting.**
- **Consultation meeting has a fee of \$215.00 (1<sup>st</sup>) hour or portion thereof and \$79.00 each additional hour or portion thereof.**