

SECTION 503 - FIRE APPARATUS ACCESS ROADS

503.2 Specifications. Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.8.

503.2.4 Turning radius. The required turning radius of a fire apparatus access road shall be determined by the fire code official. See Appendix D for minimum design requirements.

503.2.5 Dead ends. Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) in length shall be provided with an approved area for turning around fire apparatus. See Appendix D for minimum design requirements.

503.2.7 Grade. The grade of the fire apparatus access road shall be within the limits established by the fire code official based on the fire department's apparatus.

503.2.7.1 Grade Increases. The gradient for fire apparatus access roads may be increased when the following conditions are met:

- 1) All grades in excess of 10%, but not in excess of 12.0%, may be approved when all of the following conditions exist:
 - a) The length of the grade does not exceed 300 feet from the beginning point of the grade to the termination point of the grade.
 - b) The termination point of the grade is not within 150 feet of a down-hill intersection, cul-de-sac, or hammerhead.
 - c) The last 75 feet of a down-hill slope approaching an intersection is not greater than 5%.
 - d) A grade indicating sign, showing the international symbol for a grade, as well as the numerical percentage of the grade, is installed within 75 feet of the start of both the up-hill and down-hill portions of the grade.
- 2) All grades in excess of 12.0% may be approved when all of the following conditions exist:
 - a) The termination point of the grade is not within 150 feet of a down-hill intersection, cul-de-sac, or hammerhead.
 - b) The last 75 feet of a down-hill slope approaching an intersection is not greater than 5%.
 - c) A grade indicating sign, showing the international symbol for a grade, as well as the numerical percentage of the grade, is installed within 75 feet of the start of both the up-hill and down-hill portions of the grade.
 - d) All structures on a fire department access road with a grade greater than 12.0% are provided with a public water supply sufficient to meet the fire flow requirements of Table B105.1 and hydrant distribution to meet the requirement of Table C105.1.
 - e) ALL structures regulated by the International Building Code with access off a fire department access road with a grade greater than 12.0% **MUST** be provided with a fire sprinkler system in accordance with Section 903.3.

503.2.8 Angles of approach and departure. The angles of approach and departure for fire apparatus access roads shall be within the limits established by the fire code official based on the fire department's apparatus. The maximum angle of approach and departure shall not exceed 8%.

503.3 Marking (Fire Lanes). Where required by the fire code official, approved signs or other approved notices or markings that include the words **NO PARKING – FIRE LANE – TOW AWAY ZONE** shall be provided for fire apparatus access roads (fire lanes) to identify such roads or prohibit the obstruction thereof. The means by which fire lanes are designated shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.