



Fire Code Requirements for New Construction

This document summarizes some of the most common fire code requirements for development sites to assist in the planning and design of construction projects within the City of Duluth.

Fire Access Roads

Fire vehicle access roads must be provided and maintained for all buildings constructed or moved into the City limits. They must extend to within 150 feet of all portions of the building.

All access roads must:

- Have 20 feet minimum curb-to-curb paved width
- Have an unobstructed height of 13 feet 6 inches
- Support the weight of emergency vehicles in all weather conditions
- Be marked with permanent NO PARKING – FIRE LANE signs
- Be less than or equal to 10% grade
- Be free of any obstruction, including in the turnarounds
 - Parking is not allowed along roadways less than 28 feet in width
 - Parking is not allowed in turnarounds

If a building or portions of a building exceed 30 feet in height, the access road must be capable of accommodating aerial fire vehicles and must:

- Have 26 feet minimum curb-to-curb paved width
- Have no overhead utility and power lines over the access road
- Have at least one of the required access routes must be located within a minimum of 15 feet and a maximum of 30 feet from the building and must be parallel to one entire side of the building

Any fire access road longer than 150 feet must include a turnaround at the end with either a cul-de-sac or another type of approved turnaround such as a hammerhead. Examples are illustrated in the appendix section of the *Minnesota State Fire Code*.

Fire access roads and specifications for compliance must be shown on construction documents submitted with building permit application for review by the Fire Marshal.

Fire Hydrants

An approved water supply capable of supplying the required fire flow for fire protection must be provided for buildings constructed or moved into the City of Duluth.

No structure shall be more than 300 feet travel distance from a fire hydrant along an approved fire access road. There are exceptions in the *Minnesota State Fire Code* that allow a longer distance between a building and a hydrant.

Where a fire hydrant is located on a fire access road, the minimum road width must be 26 feet.

Fire hydrant locations, existing and proposed new hydrants, with dimensioned distance to buildings must be shown on the site plans submitted with building permit application.

Buildings equipped with a standpipe system installed must have a fire hydrant within 100 feet of the Fire Department Connection (FDC).

Miscellaneous

New and existing buildings must have approved address identification placed in a position to be plainly visible from the street or road fronting property. These numbers must contrast with their background and be legible.

Fire protection equipment and rooms containing critical equipment must be identified with a sign or legible markings. For example, rooms containing air conditioning controls, mechanical equipment, electrical rooms, elevator equipment, sprinkler risers and valves, a fire pump, a fire alarm panel, other suppression or control elements, and roof access for buildings 4 stories or more in height.

Fire department connection (FDC) locations must be on the address side of the building, unless approved by the Fire Marshal.

A minimum of 3 feet of clearance must always be maintained around the circumference of fire hydrants, fire extinguishing equipment, standpipe outlets, etc.

The number and location of Fire Department lock box(s) shall be determined by the Fire Marshal. The City of Duluth requires the Knox brand of key boxes, obtainable at www.knoxbox.com. Mounting height of the key box must be 5-6 feet to the bottom of the box from grade and visible from the fire apparatus road.

Operational permits are required by City ordinance for any business that operates within a building within the limits of the City. Rental licenses are required for any residential property used as long-term housing for residents other than the owner of the property.