

Rural Building Site Requirements

The following information is provided for in regards to fire protection requirements for rural Chaska. The requirements are from the 2007 Minnesota Fire Code.

On Site Fire department Access roads- Fire department access roads when shall be constructed to support the weight of an 80,000-pound fire apparatus, have a clear minimum width of twenty feet and shall be surfaced so as to provide all weather driving capabilities. Any fire department access road in excess of 150 feet in length shall also be provided with an approved turn around for fire apparatus. Dual access roads are required when developments contain multiple dwelling units.

On Site Fire Department Access Roads When Required - When any portion of the structure is more than 150 feet from a city or County road. Dual access roads are required when developments contain multiple dwelling units.

Exception:

- 1) There are not more than two group R-3 or group U occupancies
- 2) The building is equipped throughout with an approved automatic fire sprinkler system

On site Water supply - An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises upon which facilities, buildings or portions of buildings are here after constructed or moved into or within the jurisdiction.

Water Supply - Shall consist of one the following, reservoirs with drafting hydrants, pressure tanks, elevated tanks, water mains or other fixed systems capable of providing the required fire flow.

On site Water Supply When Required – Where a portion of the facility or building is hereafter constructed or moved into the or within the jurisdiction is more than 300 feet from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the building.

Exception:

- 1) For Group R-3 and Group U occupancies, the distance requirement shall be 400 feet.
- 2) When the building is protected with an approved automatic fire sprinkler system

As you can see the majority of these requirements can be ignored when a cost affordable fire sprinkler system is installed throughout the building. These system are a very simple but yet effective fire protection systems. Fire department access roads and on site water supplies can only assist a fire department after a fire has developed. A fire sprinkler system will extinguish a fire during the early stages of a fire and provide the time that is required for you and your loved ones to escape your home should a fire strike. These systems are very simple and only flow approximately 15 gallons per minute and only the sprinkler head in the area of fire origin will flow water. Chances of an accidental trip are about 1 in 16,000,000. The other advantage of these systems is the cost savings in the reduction of your insurance premiums. Insurance

companies have long understood the advantages these systems offer and therefore offer as much as 15 percent reduction in annual premium cost.

The following information is provided to show the typical insurance cost for a \$1,000,000 home. To determine your savings remember the typical savings is about 10 percent of the total premium when the building is equipped with a fire sprinkler system and additional 10 percent can be saved when the system is monitored by an alarm company.

Homeowner's Insurance annual cost on a \$1,000,000.00 home

Within 6 miles of a fire station

No fire sprinklers	\$4040.00	
Fire sprinklers	\$3636.00	Savings \$404.00
Fire Sprinklers and monitored alarm system	\$3240.00	Savings \$808.00

Greater than 6 miles of a fire station, no sprinklers

No fire sprinklers	\$6000.00	
Fire Sprinklers	\$5400.00	Savings \$600.00
Fire Sprinklers and Monitored alarm system	\$4800.00	Savings \$1200.00

Complete cost of a fire sprinkler system with a holding tank and pressure pump for a 6000 sq. foot home.

Sprinkler system average cost per square foot	\$ 1.31 @ 6000 Square feet	\$7860.00
Pressure pump and tank		<u>\$2500.00</u>
	Total cost	\$10360.00

Insurance savings to system pay out

- Within 6 miles and fire sprinklers - 25 years
- Within 6 miles and monitored - 12 years
- Greater than 6 miles and fire sprinklers - 17 years
- Greater than 6 miles fire sprinklers and monitored - 8.6 years

* Insurance cost provided by American Family Insurance, Sprinkler cost provided by the National Fire Sprinkler Association.

In closing fire sprinkler systems are the most cost affordable alternative and one that will continue to save money thru insurance premium savings not mention the peace of mind it will give you and your family knowing you will be protected in the untimely nature of a fire.