

ISO Class 2 Rating

ISO Class 2, What are the Benefits?

The Buffalo Grove Fire Department, one of only three hundred eighty three fire departments nation-wide to receive an ISO rating of "2," is an organization of 67 professionals each doing their part to protect and serve you, the residents of our Village. During 2004, the Buffalo Grove Fire Department responded to 4,495 emergency calls, an average of almost 12.5 per day.

Today's firefighter is a highly trained individual that functions as a member of a team. Firefighters are cross-trained in several areas and may function independently or as a team member. The team concept is very important to not only the Fire Department but to the residents and business owners of Buffalo Grove. Cooperation between departments within the Village infrastructure has proven to be a valuable resource and was a major factor in the Villages fire rating.

The Insurance Service Office (ISO) of Commercial Risk Services regularly performs surveys of all communities and fire districts. The ISO rating is one of the primary elements used by the insurance industry to develop premium rates for home and business. A lower ISO rating for the Village means the amount of fire insurance you pay is less. Also, the ISO rating provides a reflection of standards that have been developed over many years from the study of "pertinent fire protection conditions and performance standards."

The Fire Suppression Rating Schedule (FSRS), an integral part of the ISO review, is adopted and used in all 50 states as an objective analysis of fire suppression features (extinguishing fire) in a municipality, measuring major differences between cities and recognizing the suppression potential of those cities to handle buildings once they are burning. The entire thrust is based on a relative scale of 1 through 10 (1 being the most efficient rating), the capabilities of a community to control these fires, and thus limit the resulting loss. The Fire Suppression Rating Schedule is intended to credit any system, equipment, apparatus or personnel level which is brought to bear on the suppression problem.

Countrywide, there are almost 43,000 communities graded by ISO Commercial Risk Services, of which only 46 are rated as "Class 1." There are 383 communities rated as "Class 2." In Illinois there are 2,125 graded areas, of which only 4 are rated as "Class 1" and there are 36 "Class 2" communities, Buffalo Grove is one of these "Class 2" communities.

It would be a very lengthy process to list each of the individual points the ISO team looks at, but the highlights are described below. The review of the fire department, worth 50% of the total grading, concerns itself with the fire department's fire alarm response because of the importance of the initial attack to minimize potential loss. Items included in the review of existing engine and ladder companies, the

distribution of fire stations and apparatus, equipment carried on the apparatus, pumping capacity, department manning levels and training. The water supply review, worth 40% of the total grading, considers the actual water supply that is available for fire suppression at representative locations throughout the village. Credit **is allocated through the review and evaluation of three major features of the community's fire service: Fire Alarm Telecommunications, Fire Department and Water Supply.**

Fire Alarm Telecommunications:

The Buffalo Grove Fire Department utilizes the Northwest Central Dispatch center in Arlington Heights. This is a facility that is dedicated to the dispatch of Public Safety Agencies. In order for the ISO rating to drop (the lower the number that is awarded, the better) the dispatch center must meet or exceed the requirements. Taken into consideration are the numbers of phone lines serving the center, the number of operators on duty and the number of circuits used to transmit an alarm. The review of the fire alarm system, worth 10% of the total grading, places emphasis on the performance of handling and dispatching fire alarms.

Fire Department:

*** Pumpers (fire engines)** - The number and equipment of the in-service pumpers is compared with the number of needed pumpers and a standard equipment list. The number of needed pumpers is dependent upon the needed fire flow, up to 3500 gpm., and the response distance. Stated simply: Each fire engine has a rating of how much water it can pump in one minute. The common pumps are: 750 gpm, 1,000 gpm, 1,250 gpm and 1,500 gpm. So if there was a building on fire that required 3,500 gpm of water, we would need to have at least 3 fire engines on the scene pumping water. A combination of two 1,500 gpm engines and one 750 gpm engine would deliver 3,750 gpm of water to the fire. Keep in mind that each engine is required to have certain equipment on board. Fire flow is a calculation of the building size and height along with the amount of water pressure at the fire hydrant.

*** Training** - Trained personnel are vital for a competent fire suppression force. The training facilities and the use made of them; training at the fire station; training of officers, drivers and recruits; and pre-fire planning inspections are evaluated. Training is necessary for the firefighter to maintain a high skill level. All training that takes place must be recorded in the firefighters file. Training must also meet or exceed the requirements of the Office of the State Fire Marshal, Division of Personnel and Standards. These requirements address 34 areas of fire fighting ranging from fire department organization to water supply.

*** Distance** - The locations of the fire stations are determined by the travel distance that an engine (pumper) and a truck (a larger fire engine that has a hydraulic ladder mounted on the top) have to travel to a fire. Pumpers are rated for travel distances up to 1.5 miles where trucks are rated for travel distances up to 2.5 miles. The difference being that the "pumper" is classified as a front line vehicle designed for fire suppression. The "truck" is designed as a support vehicle. It does have the capability of flowing water on a fire, but the main purpose is the rescue

capabilities of the ladder. The Village of Buffalo Grove has one "truck" and two "quints" (a quint is a combination vehicle that qualifies as a "pumper" and a "truck." With these rated travel distances we find that there are areas outside the 2.5 mile radius. These areas are covered by neighboring communities. The coverage is called "automatic aid" and is recognized by ISO because of the intergovernmental agreement policy. "Automatic aid" allows a village to utilize the "truck" or "pumper" from a neighboring community. In many cases this helps meet the requirements of the travel distance for both the "truck" and the "pumper." For example; say the Village of Buffalo Grove has a building that is 3 miles from the fire station but is only 1.4 miles from a Wheeling fire station that has a "pumper" and a "truck." An agreement between Wheeling and Buffalo Grove will be made and if a fire is reported in that building, both Buffalo Grove Fire and Wheeling Fire will be dispatched to the location of the fire at the same time. ISO basically recognizes the piece of equipment, not so much the owner of it. Therefore, we have met the requirements of the travel distance.

Water Supply:

One final area that is graded is the water supply system of the Village. ISO looks at the type and condition of fire hydrants, the size of the supply line and the amount of water at any given location. Every building has a need for fire protection. This protection is water. The specific amount is called the required fire flow and is calculated by the building size and the gallons per minute of water flowing from the closest fire hydrant. The completion of several capital improvements throughout the Village has greatly improved the supply of water for fire protection. Some of those improvements are the 1986 addition of Lake Michigan water and the 1992 addition of the LaSalle Street reservoir.

Achieving a lower ISO rating is a difficult task, which may take many years to accomplish. Cooperation and commitment between all Village entities is essential. As the ISO rating becomes lower there is a noticeable reduction in the amount of fire insurance the home owner and business owner will pay. For the exact figure one should contact their insurance agent and ask for a comparison based on ISO ratings. Aside from the reduction in the insurance premiums, the quest for lower ISO rating has produced a well rounded professional fire department. Fire suppression, code enforcement, public education, training and special teams all operate in the team mode and the results are beneficial to the residents of Buffalo Grove both financially and the services provided by your Fire Department.