

INSURANCE SERVICES OFFICE FIRE RATING METHODS

Two fire rating methods have been developed by the Insurance Services Office (ISO).

What is ISO?

The Insurance Services Office, Inc. (ISO) is a subsidiary of Verisk Analytics, and provides data, underwriting, risk management and legal/regulatory services.

The first method rates properties that exceed 15,000 sq. ft. The Specific Commercial Property Evaluation Schedule (SCOPEs) is used by the ISO to rate most properties that exceed 15,000 sq. ft. or that are of fire-resistive construction, house manufacturing, contain hazardous occupancies, or are protected by an automatic sprinkler system.

These properties are surveyed by ISO and specific rates are calculated using SCOPEs. Factors considered include:

- Basic construction
- Roof construction
- Wall materials
- Floor and roof materials, including supports and assembly
- Vertical openings through floors and/or roofs
- Building dimensions including height, number of stories and floor areas
- Defined fire areas, if any
- Combustible floor and roof spaces
- Combustible interior construction
- Combustible interior finish including exposed insulation type and flame spread rating
- Combustible exterior attachments
- Building conditions including housekeeping
- Occupancy and related occupancy hazards
- Exposure and exposed wall openings
- Public protection, meaning exterior protection by municipal fire departments
- Private protection, meaning portable extinguishers, standpipe and hose, automatic fire alarms, sprinklers, etc.

Application of SCOPEs factors, using a system of points and percentages, produces a building grade which, when multiplied by the building conversion factor, gives you an 80% co-insurance building rate. (The application of the co-insurance



Learn the two methods for determining fire rating for your metal building.



clause is explained in the MBMA Insurance Facts document.) This rate times the building value equals the insurance cost. This is part of an overall rate if the owner is the occupier of the building.

The contents rate is computed by multiplying the gross building grade in points by the building conversion factor to arrive at a contents base in points. Contents susceptibility charges and points are modified by the contents conversion factor and added to the contents base to produce gross contents grades. These grades, subject to credits for internal protection, are equal to the 80% co-insurance contents rates. The contents rate times the contents value produces the contents insurance cost. This is added to the building insurance to produce a total insurance cost.

$$\text{BUILDING GRADE} \times \text{BUILDING CONVERSION FACTOR} = 80\% \text{ CO-INSURANCE RATE}$$

$$\text{RATE} \times \text{BUILDING VALUE} = \text{INSURANCE COST}$$

$$\text{GROSS BUILDING GRADE} \times \text{BUILDING CONVERSION FACTOR} = \text{CONTENTS BASE}$$

$$\text{CONTENTS RATE} \times \text{CONTENTS VALUE} = \text{INSURANCE COST}$$

The second rating method is used on smaller, non-sprinklered, non-fire-resistive, non-manufacturing buildings. This rating is performed by insurance companies and producers using the ISO Fire Class Rate Manual. These properties will not always be surveyed or rated by ISO.

The Fire Class Rate Manual is a simplified rating method based on construction, type of occupancy, municipal protection classification, and exposure. Eighty percent of co-insurance rates for these buildings are merely looked up in tables. No analysis is done on building features except that charges may be applied for substandard conditions such as unsafe electrical wiring, poor physical condition, and housekeeping or exposure.

Of the two rating methods, SCOPES is preferred for metal buildings because of their superior features as described in other bulletins in this series. To determine eligibility for using SCOPES, be certain to fill out the MBMA Insurance Information Fact Sheet available at www.mbma.com.