

## EARTHQUAKE RATES

Insurance for earthquake loss is offered throughout the United States. The commercial earthquake classifications, rates, and territories are published in the Insurance Service Office's (ISO) Commercial Lines Manual. Two geographic areas are considered by the manual. These are the 13 western states (including Hawaii and Alaska) and all other states (including the District of Columbia).

Whatever your area, you can be assured that the rates that apply to metal buildings will be, in most cases, as low or lower than rates for other types of construction. One point to remember, when discussing the subject of earthquakes with your customers, is that different terminology, different classifications of earthquake damage, different earthquake zones, and, in fact, different end results are contemplated by the code authorities and the property insurance carriers. However, this bulletin will be based strictly on property insurance considerations related to earthquakes.

There are 15 earthquake building classifications. Each is based on the construction type and, in particular, the construction features that make the building more resistant to or more susceptible to earthquake damage. In addition, there are classifications for special earthquake-resistive construction (specific rating required), buildings under construction and special structures such as bridges, tanks, greenhouses, etc.

To complicate things further, there are five earthquake zones (many states are in several zones, designated by counties). There are contents rate grades in each zone.

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The following table indicates relative rate levels for each rating district for representative construction classes using the highest rate zone in each district.

| Building   | Western States                   |                     | Other States                     |                     |
|--|----------------------------------|---------------------|----------------------------------|---------------------|
|  | *Earthquake Bldg. Classification | Bldg. Rate (Zone 1) | *Earthquake Bldg. Classification | Bldg. Rate (Zone 2) |
| Metal Building System<br>(One story, maximum 20,000 sq. ft.)   | 2A                               | 0.143               | 2A                               | 0.057               |
| Wood Frame Buildings<br>(Maximum 3 stories and 3,000 sq. ft. ground floor area)  | 1C                               | 0.143               | 1C                               | 0.057               |
| Metal Building System<br>(Exceeding 1 story or 20,000 sq. ft.)   | 2B                               | 0.238               | 2B                               | 0.093               |
| Steel Frame Buildings<br>(Concrete floor and roof, non-load bearing exterior walls of reinforced masonry)<br>(Note: Buildings having column-free area greater than 2,500 sq. ft. do not qualify) | 3A                               | 0.285               | 3A                               | 0.112               |
| Steel Frame Buildings<br>(Floors and roof of any material and walls of any non-load bearing materials)   | 3C                               | 0.507               | 3C                               | 0.188               |
| Reinforced Concrete Buildings<br>(Structural system and floor, roof and walls)<br>(Note: Buildings having column-free area greater than 2,500 sq. ft. do not qualify)                            | 4A                               | 0.285               | 4A                               | 0.112               |
| Reinforced Concrete Buildings<br>(Walls of any material)   | 4B                               | 0.333               | 4B                               | 0.130               |
| Pre-Cast Concrete Buildings<br>(One story)   | 5A                               | 0.333               | 5A                               | 0.130               |
| Pre-Cast Concrete Buildings<br>(Exceeding one story)   | 5AA                              | 0.507               | 5AA                              | 0.188               |
| Concrete Block Buildings<br>(Load bearing walls of hollow masonry construction)  | 5C                               | 1.500               | 5C                               | 0.580               |



\*These building descriptions and classifications are from the SCOPES manual. ISO will perform additional analysis of buildings using the ISO publication, *Guide for Determination of Earthquake Classifications*, when earthquake classification verification is requested.