

How do adjacent buildings affect insurance rate or loss costs - what is "exposure"?

If a building is isolated with no surrounding structures and it burns, the fire must normally start in that building. On the other hand, if there are neighboring structures and they catch fire, the fire may well spread and involve both buildings. This hazard, the tendency of fire to spread from one structure to another, is recognized in fire insurance rates or loss costs by "exposure" charges. These charges vary with degree of hazard as follows:

1. The greater the distance between buildings, the lower the charge will be. At some distance, depending on wall construction of both the exposed and exposing buildings, a charge will no longer be made.
2. The greater the combustibility of the construction of either exposing and/or the exposed structure, the higher the charge will be.

The greater the hazard of the occupancy of the exposing structure, the higher the charge will be.

The concept of "exposure" effects on insurance rates or loss costs can be better understood by considering the computation of charges for a specific example (see below).

The Specific Commercial Property Evaluation Schedule considers the following factors in the Exposure Hazard Charge Table:

Construction of Facing Wall of Exposure (masonry and frame)

Occupancy Hazard Categories (light, moderate and high hazards)

Length-Height of Facing Wall of Exposure Distance

In our example, the Exposure Hazard Charge produced would be 95 for Building A and 50 for Building B.

The exposure charge in points is computed by multiplying the Exposure Hazard Charge by the Exposure Condition factor.

The Exposure Condition Table evaluates the relative hazard of radiation and ignition from the wall or roof of the exposure to the wall or roof of the building rated.

In our example, the Exposure Condition factor would be .6 for Building A and 0 for Building B.

Thus, the charge in points for our two examples would be:

Building A - $95 \times .6 = 57$ points
Building B - $50 \times 0 = 0$ points

Considering the metal building, Building A, an exposing fire creates two problems. First, and the main consideration, if there are any openings in the wall facing the neighboring building (the exposed wall) such as windows, doors, ventilation louvers, etc., a fire can penetrate these openings and involve the inside of the building. Secondly, if the heat from the fire is of high enough intensity, either due to small separation distance or due to the severity of the exposing fire, the metal wall can suffer severe damage and even deform to the extent that openings are created. These considerations produced the 57 exposure charge in the loss cost for Building A.

In the case of the masonry building, Building B, openings in the wall create the same exposure problems as in the metal building. The masonry wall, however, is not subject to severe fire damage from an exposing fire. This difference would produce a difference in exposure charges to a masonry building compared to a metal building. In the example, the point charge to the metal building was 57. If the masonry building had unprotected wall openings and the same separation distance, the exposure charge to the masonry building would have been 20. The difference in these charges is due to the difference in damageability of the walls. There are solutions to this problem with regard to Building A, the metal building, as follows:

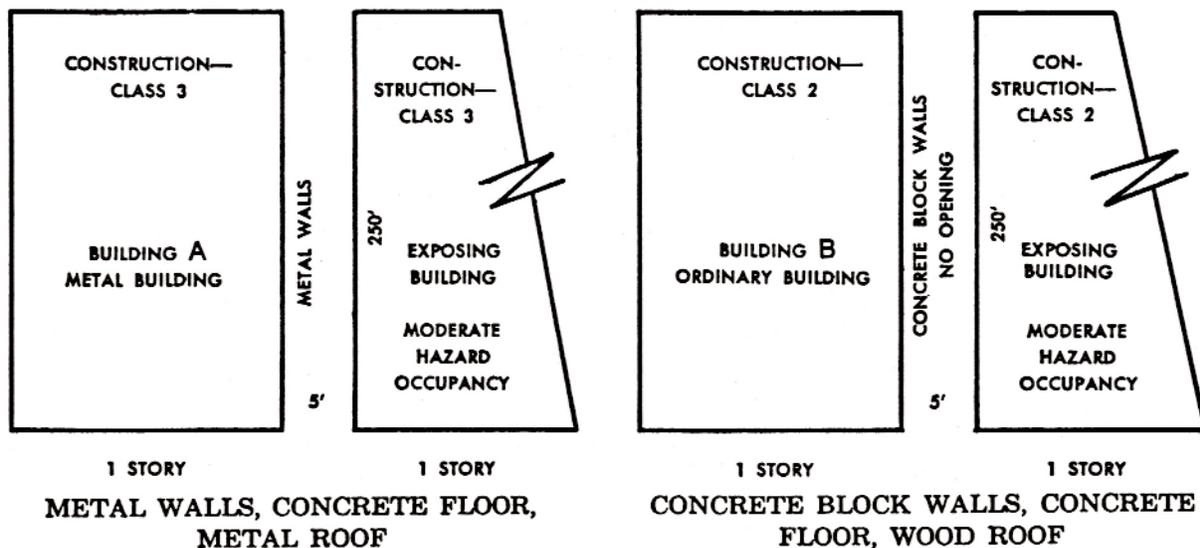
1. Locate the building a sufficient distance from the exposing structure so that an exposure charge is no longer made. (The local ISO office can tell you what this distance is.) In this case, it would have been 21 ft.

2. Replace the exposed wall of the metal building with a solid masonry wall without openings. In this case, the separation distance can usually be reduced to near zero from a rating or loss costing standpoint.

If Section D of the MBMA "INSURANCE INFORMATION CHECK SHEET" is properly completed, an analysis of exposure effects on fire insurance rates or loss costs can be made more easily.

An insurance agent or broker should be aware of these facts. A visit with the ISO office can provide specific answers to individual problems.

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