Wind Versus Non-Wind Related Damage

By

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Structures fail as a result of many environmental influences such as wind, earthquake, flooding, solar induced deterioration, hail, and snow. Structural losses due to wind may be covered. Other perils may not. The claims administrator is often placed in the position to determine the cause of the loss so that a decision regarding extension or denial of coverage can be made. The following thoughts may prove helpful in assessing such claims.

Inspecting the building or receiving photographs of the building is advisable to determine the nature of the damage patterns. Data concerning the wind condition at the time of the loss is often helpful. The National Oceanographic and Atmospheric Administration (NOAA) maintains a variety of weather records throughout the country. Local radio stations, local airports and local utility companies also maintain private weather stations. Obviously if the wind conditions were less than 10 MPH at the time of the loss, little credence can be given to a wind damage claim in a properly maintained and designed structure.



Figure 1

Figure 2

Figure 1 is a view of a home that is leaning against the building on the left in the photograph. There is no indication of torn shingles, downed trees or fascia damage. Figure 2 shows the basement area where the 100 year old pole foundation is in its final stages of deterioration.

If the winds were high at the time of the loss, damage pattern analysis is next on the agenda.



Figure 3

Figure 3 shows fascia damage to a home which is relatively minor wind damage. Figure 4 shows denting to an empty grain bin. This is a result of wind pressure against a marginally designed sidewall.



Figure 4



Figure 5

Figure 5 shows a parking lot light post that fell during a wind storm where wind speeds were clocked at 55 MPH. This structure failed due to an inadequate weld at the base pier, resulting in

metal fatigue as shown in Figure 6. The swaying of the pole in the wind resulted in a fatigue fracture and the collapse of the pole.



Figure 6



Figure 7

Figure 7 is a view of a peeled off roof membrane, a result of 75 MPH winds at a school. Inadequate nailers at the base of the membrane contributed to the failure.



Figure 8

Figure 8 is a view of a collapsed interior nonload bearing wall in a large warehouse. The large warehouse exterior doors were open at the time of the storm and the interior wall could not handle the pressure. Figure 9 shows an uneven wire mesh fence. The vertical movement of the fence posts is likely a result of frost heaves and not wind loading.



Figure 9

Figure 10 is a view of an awning that collapsed on a calm day after a snow storm. Fittings securing the awning to the home show severe downward deformations characteristic of snow loading and not wind loading.



Figure 10

When viewing the scene, orientation of and damage to other structures is of interest. If the claim suggests wind damage, lack of damage to surrounding trees or buildings may indicate that some other influence caused the loss or that a structural defect was involved.

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