

## Braden Roofing News Vol. 2 The Home Owner's Guide to Hail

Welcome to Braden Roofing News Volume 2. We hope this article will help you better understand exactly what hail damage is and how it affects your home (and pocketbook). We appreciate your interest.

The most frequently cited authority on hail damage is Haag Engineering. Haag Engineering is a company in which has conducted numerous studies regarding hail damage. Most insurance companies measure hail damage by the guidelines recommended by Haag.

### COMPOSITION SHINGLE HAIL DAMAGE

The first place to look for hail damage on any roof is on the vents and ridges. Ridges are especially prone to damage (see photo #1).

**Photo #1**



**Hail often damages ridge shingles.**

Frequently, vents will be damaged by hail hits. Dents in metal vents are a good hint that the entire roof needs to be closely examined for hail hits. Plastic vents will frequently shatter, leaving big, gaping holes (see photo #2). Not only do these holes indicate hail damage, but they also indicate the need for a quick emergency repair.

**Photo #2**



**Hail hits can leave large leak-prone holes in vents.  
Duct tape can provide a quick emergency repair.**

Hail damage on a composition shingle typically manifests itself as bruise or small dent in the shingle. Usually, the granulation is displaced, exposing the asphalt (see photos #3, #4, and #5). When you touch the hail hit, you can usually feel a soft spot in the shingle. The reason you can feel this soft spot is that the fiberglass matting of the shingle has been broken. When the fiberglass matting of the shingle has broken, the asphalt has no backing, and tends to simply melt away in the summertime. This is why hail damage is sometimes not apparent on a shingle roof until after the roof has been cooked in the summer sun. It is always a good idea for the adjustor or roofer to feel for these soft spots in the shingle, **EVEN IF YOU CANNOT SEE ANY APPARENT HAIL DAMAGE.**



**Photo #3**



**Photo #4**



**Photo #5 Hail hits on composition shingle.**

Note, some insurance companies will tell you that a hail hit is not a hit unless the dent transposes through, and can be felt on the back of the shingle. Balderdash! If the asphalt has been exposed, it is a hail hit. Anything else just reinforces that diagnosis. AND, if you can FEEL a hit but not see it, it is STILL a hail hit.

It is a good idea to have the roofer mark out the Haag square himself, rather than waiting for the subjective judgment of an adjuster. A Haag square is usually but not necessarily 10' x 10'. A Haag square is 100 square feet, but sometimes a roof facing will not allow for a perfectly square area to be marked. When this is the case, it is okay to mark out an area, say 5' x 20'. With chalk, we circle as many legitimate hail hits as we can find. Haag usually requires at least five or six hits per square before a roof can be "totaled" out. Some insurance companies will total out the entire roof if just one facing has been totaled, but you should not assume this.

## WOOD SHAKE HAIL DAMAGE

On the surface of things, it may appear that diagnosing damage on a wood shake roof seems easier than on a composition roof, but that is not necessarily the case.

First of all, let us define a hail hit on a shake roof as the insurance companies would see it. A hail hit MUST have the following:

1. A hail impact point
2. A crack or break in the wood, exposing fresh, orange, non-weathered wood.

A simple dent or ding mark in the shake doesn't count. The insurance companies could care less about that.

Haag requirements for a shake roof are much more demanding. For a roof which is just five years old or less, Haag requires about 30 hits per square. Obviously, a newer roof will need to have been really clobbered to qualify for total replacement. For a roof 6 to 10 years old, 25 hits are required. That number drops to 20 for a roof 10 to 15 years old. A roof older than 15 years only requires about 10 hits per square.

The reason for the difference in hit counts has to do with the "repair ability" of a roof. Another consideration in the repair ability of a roof is the shingle thickness, course length, and whether the roof was installed with nails or with staples. A thicker roof on a tighter course and installed with staples will be substantially more difficult to repair than a standard application. Any one of those three considerations (and especially the staples) may cause a roof to be "un-repairable". An un-repairable roof should be totaled out, regardless of Haag standards. Many insurance companies will balk at this caveat, but it is true nonetheless.

Please note that a crack or break in a shingle may NOT BE APPARENT JUST BY LOOKING AT THE SHINGLE!!! Please look at photo #6. The hail crack is not apparent to simple observation. This is frequently the case with edgegrain and slashgrain shingles (and not so much so with flatgrain). Most shake roofs will have a mixture of edgegrain, slashgrain, and flatgrain shingles. To determine if an edgegrain or slashgrain shingle has hail damage, you MUST PHYSICALLY FEEL THE SHINGLE.

**Photo #6**



**Edgegrain wood can hide cracks. Do you see the hail crack in this shingle?**

Rare, indeed, is the insurance adjustor who takes time to feel every darn shingle in a Haag square. Many don't even get on the rooftop. At Braden Roofing, we feel that visual inspection, even from the rooftop, is not adequate to accurately gauge hail damage. Observe photo #7. This is the same shingle as in photo #6, with the crack physically separated out for easy observation.

**Photo #7**



**This is the same shingle as in Photo #6 with the crack now easily seen. This kind of crack is often missed by adjusters and roofers alike.**

Photo #8 shows a shingle with multiple hits causing multiple cracks. For purposes of Haag diagnosis, this would count as multiple hits, even though only one shingle is actually affected.

**Photo # 8**



**Multiple hits and cracks on the same shingle count as multiple hits per HAAG**

Photo #9 shows what is commonly referred to as a “butt rot hit” (no, I am not making this up!). This is the most controversial of hail hits.



**Photo #9 Butt rot hits still count if fresh wood is exposed.**

First of all, the lowest edge (butt end) of a shake shingle, as it ages, begins to deteriorate and soften faster than the rest of the shingle. As such, a hail hit on this part of the shingle will tend to break the wood more easily. In the past, many insurance companies have rejected this hit in their Haag count. However, most insurance companies will now count a butt rot hit IF fresh (orange) wood is exposed. Photo #9 shows a shingle that we feel should qualify under Haag.

Sometimes, a customer may ask us if hail damage really shortens the life of a roof. Generally speaking, the answer is yes, as split shingles expose the felt underlayment of a shake roof to more weathering. Sometimes a legitimate hail hit as defined by Haag will not truly shorten the life of a roof, as in photo #10. In this picture, we see that a hail hit has torn the edge of the shingle, exposing fresh wood, and thus, qualifying for Haag. Will this hit (all other things being equal) shorten the life of this roof? Probably, but not by itself though. Nonetheless, we should still count this as a hit per Haag. Most Haag qualifying hail hits, however, do indeed shorten the life of a roof.



**Photo #10 This hit qualifies for HAAG because fresh wood is exposed.**

**Photo #11**



**Age related cracks do not qualify as hail damage.**

Please note that not all cracks in shake shingles are caused by hail. Shake shingles will frequently crack due to age and weathering. Such damage, while certainly a problem for a wood shake roof, does NOT qualify as hail damage under Haag guidelines. Photo #11 shows a shake shingle which has been clobbered by hail, and also has concurrent cracks. However, it is obvious that the cracks were due to weathering, not hail. This is not considered hail related damage.

For more information or to schedule a roofing estimate, please contact:

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