



ROOF WATCH

YOUR COMPANY NAME AND PHONE NUMBER HERE

Storm Damage

By Kurt Baumgartner

By Summer time we are well into the storm season. Hail, heavy rain, high winds and tornadoes are all common this time of year.

Damage from these weather phenomena can of course be obvious. Most know if they have been hit by a tornado or if they have leaks after a severe storm. You call the insurance company and your roofing professional and start the repair or rebuilding process.

But sometimes your property goes through a severe storm with no apparent damage. Don't be so sure. Hail, high winds and even tornadoes can do serious damage that may not be noticed for quite some time.

First, let's talk about hail. Even moderate hail can do damage to some single-ply and older built-up roofs.

PVC membranes may suffer tiny shatter areas that may not leak for quite some time. The normal expansion and contraction of the membrane will eventually open these cracks enough to permit the entry of water into the system.

Older built-up roofs, especially smooth-surfaced ones, may have blistered areas or areas with voids that will let even smaller hail penetrate the top ply. This allows water to enter the system, though no visible leak occurs. The presence of this water will eventually deteriorate the membrane.

Small hail can also damage the fins on condensing units and roof-top equipment, if it is driven by high wind.

Large hail can cause immediate leakage, but not always. Membranes that are resistant to hail can be damaged, yet exhibit no symptoms for one or two weathering cycles. For instance, EPDM (rubber roofing) can be damaged by large hail but will not exhibit problems for a while. Small gull-wing cuts can start to appear long after hail hits.



Ominous summer storms may sometimes result in roofing system damage that is difficult to detect.

Shingle roofs will suffer granule loss that will expose the underlying reinforcement and asphalt to UV degradation that will dramatically shorten the life of the roof. The same is true for granule-surfaced modified bitumen roofing and fiberglass cap sheets. Gravel-surfaced built-up roofs may have some of the gravel driven into the top plies, which can allow moisture penetration that makes the membrane slowly deteriorate.

High winds and even tornadoes can also do phantom damage that is not immediately obvious. High winds are amplified by all roof structures. Parapets, large open doors and varying slopes increase the speed and pressure that high winds exert. Bear in mind that wind does not slow down as it climbs the side of a building and crosses the roof - it in fact speeds up. Various irregular shapes on and around the roof and even the building structure itself produce lift, just like an aircraft's wing. This lift may

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YOUR COMPANY ADDRESS HERE



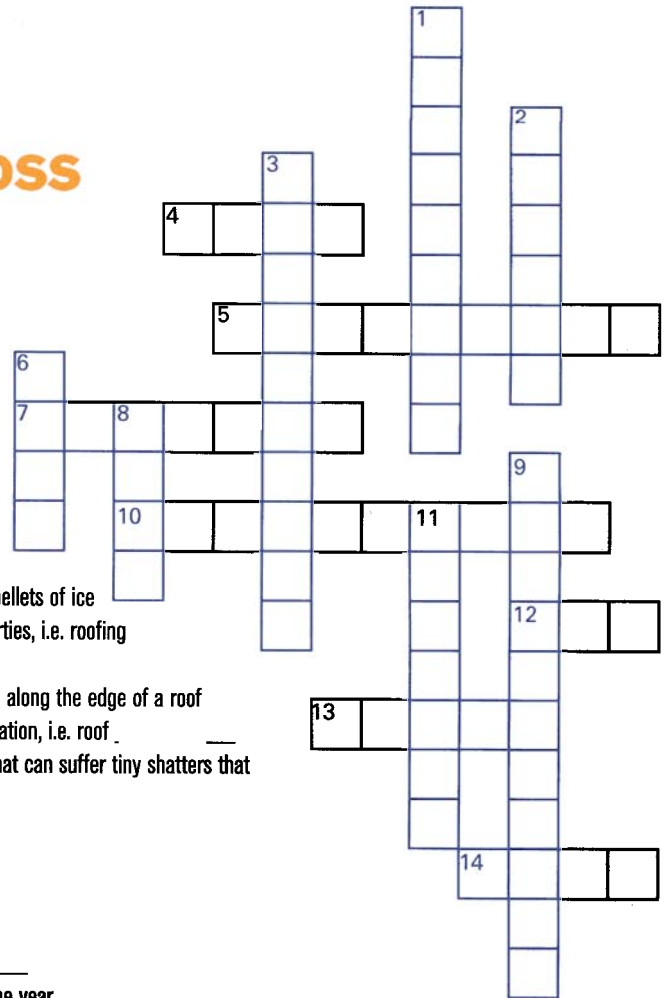
Politeness and consideration for others are like investing pennies and getting dollars back.
– Thomas Sowell

You must give some time to your fellow men. Even if it's a little thing, do something for others – something for which you get no pay but the privilege of doing it.
– Albert Schweitzer

It is a mistake to regard age as a downhill grade toward dissolution. The reverse is true. As one grows older, one climbs with surprising strides.
– George Sand

Do not go where the path may lead, go instead where there is no path and leave a trail.
– Ralph Waldo Emerson

Storm Damage Criss-Cross Puzzle



Across

4. Precipitation in the form of pellets of ice
5. An arrangement between parties, i.e. roofing maintenance
7. Low protective wall or railing along the edge of a roof
10. A careful and critical examination, i.e. roof _____
12. Type of roofing membrane that can suffer tiny shatters that may not leak for some time
13. Drip, drip, drip!
14. Sometimes it blows!

Down

1. Event, i.e. **weather** _____
2. Usually warmest season of the year
3. Type of roofing system that has only one layer of membrane
6. Rubber roofing
8. Sometimes it pours!
9. A mixture of ingredients to make a component or unit, i.e. _____ shingles
11. A whirlwind

Storm Damage

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partially or even totally destroy the attachment of your roof to the substrate. Even though this attachment may be lost, the roof may look just fine if it was lifted and laid back down in place. However, the next high wind can have catastrophic results as it does not have to overcome the attachment as the first wind did. This can be true of all membranes, as well as composition shingles.

Even if your roof shows no apparent damage after a severe storm, contact your insurance company right away and call your roofing professional to inspect your roof for damage. Some tests may need to be performed to determine the extent of the damage, but the expense is well worth it because you may face much more extensive damage if you do nothing. Plus it always helps to have as much evidence as possible when dealing with an insurance adjuster.

Call the number on the back of this issue of *Roof Watch* if your building is hit by damaging storms, even if damage is not apparent to you. You'll avoid frustration with your insurance company if problems are detected immediately, as well as headaches caused by leaks that could result later from undiagnosed roof system damage.

An even better idea is to call today and establish a roofing maintenance agreement that will provide inspections and maintenance at a fixed annual fee. Such an agreement can help you avoid unexpected expenses and keep your roofing system functioning within your budget.

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