

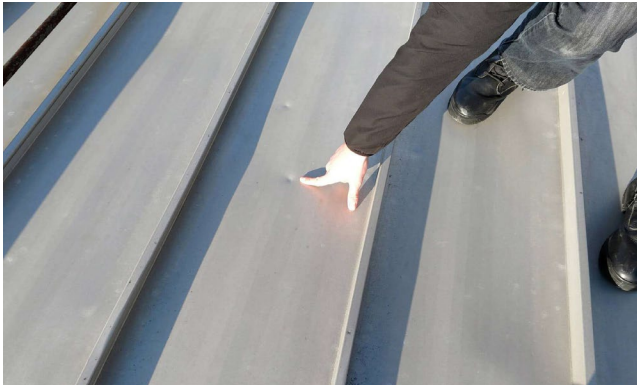
Checklist to Spot Roof Hail Damage

Roof hail damage can be hard to spot, especially if you've never seen it before. But if your roof has been damaged by hail, your building may be vulnerable to roof leaks and rapid deterioration of your roofing systems.

This checklist is a guide to help you survey your facility for possible hail damage to your roof. Please note – climbing on a roof can be dangerous so always practice safety when performing any roof-related task. A flat roof is safer and easier to check for damage. We do not advise you climbing on a steep roof or if you don't have the proper safety equipment.

To help you recognize what hail damage looks like, the following are a few pictures of actual roof hail damage.

What exactly does hail damage on a roof look like?



Dings and dimples to metal roofs are a sign of storm damage.



Lay chalk flat on the surface and rub up and down to find hail dings on a metal roof.



Roof vents that are dented point to signs the roof has sustained damage.



HVAC units can sustain damage to the condenser fins.



Hail hits are black in color due to loss of granules, which may expose the roof felt.



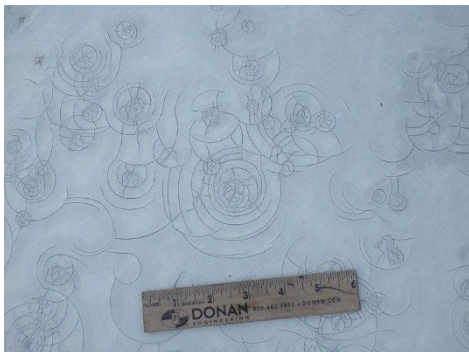
On tar and gravel roofs, the pea gravel must be kept even on the roof at all times. High winds can cause the gravel to move and pile up. Check for cracking or blistering that can lead to failure.



Skylights and window damaged by hail can resemble this image.



The modified bitumen roof has cracks or fractures where water can accumulate underneath the surface and pool. This excessive moisture can result in plant growth.



Look for cracks, crow's feet, and concentric semi-circle patterns in the thermoplastic polyolefin membrane indicating storm damage.



Hail can displace the granules or fracture the underlying reinforcement of the modified bitumen.

The checklist on the following pages will help you assess whether you may need further assistance in evaluating your facilities.

Location:

Checklist Date:

Survey conducted by:

Building Exterior Hail Damage Indicators

- Dented gutters and downspouts**
Look for dents and dings on gutters and downspouts. If a hailstorm has struck your area, hailstone impacts will often show up in small dents and dimples on metal gutters and downspouts.
- Damaged siding**
Check the building siding for splatter marks, dents, cracks, paint chips, or holes. In heavy hailstorms, this damage will be obvious. But smaller hailstones, especially when multiple events occur, can also cause damage to the roof.
- Damaged windowsills and casings**
Check windowsills and casings for small cracks, dents, and dings. Check caulking for tears or signs of impact. Also, check window glass for small cracks.
- Torn window screens and awnings**
Hail sometimes causes tears or holes in metal, fiberglass window screen mesh, and vinyl and polyester/acrylic fabric.
- Broken or cracked glass**
Look for any impact marks, cracked or broken glass on doors, windows, and skylights.
- Door dents or paint damage**
Inspect metal doors for dings or dents, or look for chipped paint or stain on wood doors.
- Shredded plants and flowers**
Look for hail-damaged flower beds and bushes whose leaves have been stripped or beaten down by a heavy hailstorm.
- Algae or moss growth on roof**
May indicate roof damage that holds and harbors moisture. Also indicates the roof may have sustained hail damage from previous storms.
- Dented AC condenser on roof**
Check the air conditioner unit housing for dents or damage from hail. Check the condenser coil fins for dents.

Hail Damage Indicators at Ground Level

- Blown off shingles**

Look for broken bits or loose shingles that may have fallen off around the building and on the grounds. Hail is usually accompanied by high winds. If you see shingles on the grounds, you may have wind or hail damage on the roof.
- Granules in gutters**

Hail damage on the roof will cause granules to break loose at the site of each hail stone impact. If you notice shingle granules in your gutters, you may have hail damage on your roof.
- Damaged landscape lights**

Look for cracked or broken light fixtures on the grounds or on the sides of the building.
- Dented wall vents**

Dents in the soft metal of various wall vents may point to potential roof damage.
- Damaged to painted wood surfaces**

Check any painted wood surfaces around the building for dimples or paint chips. Look for freshly exposed wood.
- Dented or splattered metal surfaces**

Splatter marks or dents on exterior metal electrical panels or other metal surfaces may indicate the direction and size of hail stones.
- Broken or fallen tree branches and leaves**

Check the grounds for any broken/fallen tree branches and leaves. Heavy windstorms that bring down large limbs or branches are sometimes accompanied by large hailstones. Trees will lose many leaves from the hail strikes.

Hail Damage Indicators on the Roof

- Dented roof vents**
Roof vents are often made of lightweight metal. Dent in the metal or cracks in plastic vents often means the roof was hit with heavy hail.
- Dented metal flashing and roof fascia**
Inspect metal flashing around the roof and fascia for dents or dings. These are relatively easy to spot.
- Paint chipped satellite dish**
Look for chipped, spatter marks or damaged satellite dish components.
- Broken and/or cracked skylights**
Check for cracked or broken glass if your roof has skylights.
- Missing shingles**
Check the roof for any missing shingles or shingles tabs that may have blown off.
- Wind damaged/loose shingles**
Look for any shingles that are easily pulled up or flapping from the wind from storm damage.
- Hail hits on shingles**
Hail hits on shingles may show subtle spots of granule displacement, bruises in shingle surface, or holes. If you see any dark spots on uniform shingle surfaces or dimpled areas, you most likely have hail damage.
- Curled shingles**
Hail-damaged shingles may experience curling or stress cracks over time. They age faster than non-damaged shingles.
- Dents on metal roofs**
Check metal roofs for any dents or dings. Color with chalk laid flat against the surface to find subtle dings.
- Punctures to soft roofing materials**
Look for punctures or cracks in soft roofing materials, like PVC or weathered roof patch compounds.
- Cracked slate or clay tiles**
Clay and slate tiles may be cracked and broken from large hail hits.

Things to Look for Inside Your Buildings

- Known water leaks**
If you noticed any slow or recurring water leaks inside your buildings, you should check to see if the moisture intrusion is a result of hail damage on your roof.
- Water stains on ceilings or walls**
Look for any water stains on the ceilings (corners especially) for sign of roof leakage. Look for bubbling paint, where water gets trapped between drywall and paint during a storm.
- Water stains in or around light fixtures**
Check out all indoor light fixtures. Can-style lights are often more prone to show water leakage.
- Mold or mildew on walls or ceiling**
If you notice mold or mildew on any interior wall or ceiling, you may have a leaking roof, water pipe, or air conditioning condensation line. Condensation may also form on air conditioning ductwork that is not insulated.
- Attic water seepage or wet insulation**
If you have access, check the attic rafters for water stains and/or wet insulation that may indicate roof leaks during heavy rain.