



Protecting Your Business From Hail



1. Roof Cover Systems

Roofs are the most frequently damaged part of a building due to hail.

- For steep-sloped roofs, use products with a UL 2218 Class 4 or FM 4473 Class 4 rating.
- For low-sloped roofs, use products with an FM impact rating of Severe Hail (SH) or Very Severe Hail (VSH).
 - Additionally, protect the mechanical fasteners and plates that secure insulation boards on low-sloped roof covers by placing them below a coverboard with the roof cover adhered to the coverboard.

2. Roof-Mounted Heating, Ventilation, and Air-Conditioning (HVAC) Equipment

HVAC units can be severely damaged by hail, leading to inefficient performance, energy loss, and potential business downtime.

- Have a qualified professional install “hail guards.” These specially designed protection systems cover the vulnerable parts of outdoor equipment and are a cost-effective way to reduce damage. [Learn more.](#)

3. Roof-Mounted Photovoltaic (PV) / Solar Panels

Damage to PV panels can be costly and create hazardous conditions on the roof. Hailstones can damage panel frames, glass panels, solar cells, electrical junction boxes, wiring, and structural connections.

- Select PV panels designed to International Electrotechnical Commission (IEC) standards, per the IEC 61215 code, which includes a provision for impact resistance. The code requires that panels meet the FM 4473 Class 4 impact test rating (2-inch, pure ice sphere with 36.4-Joule impact energy at a nominal speed of 76 mph) as part of the IEC requirements.
- When installing PV panels on a low-sloped roof, ensure the row spacing between the panels is wide enough for maintenance crews to service damaged panels. If the panels are installed too close together, perimeter panels may need to be removed to access interior ones.

4. Skylights

Hail can damage skylights that aren't impact rated.

- Use products that (1) meet at a minimum ASTM E1886 cyclic pressure test requirements and (2) are ASTM E1996 missile impacted rated “B,” “C,” “D,” or “E.”
- Alternatively, use products that are either FM Approved per ANSI/FM 4431 with severe hail rating, or Miami-Dade County Approved (MDCA) with current notice of acceptance.

5. Outdoor Inventory

Retailers: Car dealerships, garden centers, shed and outbuilding retailers, and others whose inventory is largely kept outside can suffer significant damage to inventory.

- Understand your risk and properly implement an emergency action plan to shelter products when hail is forecast.
- Routinely practice or conduct sunny-day drills so your employees can act quickly to protect your investment in your inventory.

Agricultural Farms: Hail damage to farms can be significant and sometimes economically crippling.

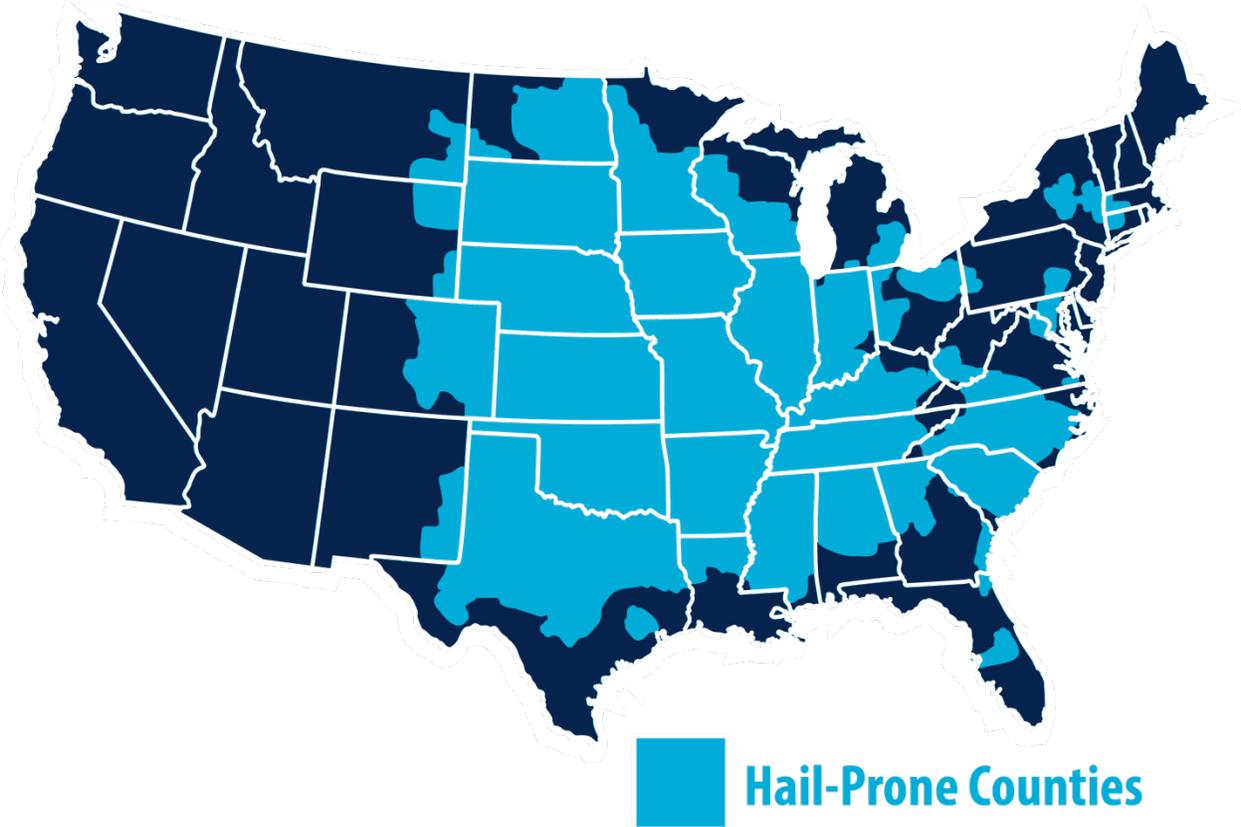
- While preventing damage may not be possible, federal crop insurance is available. Learn more from [United States Department of Agriculture.](#)



IBHS Hailstorm Demonstration

IBHS's unique capability to produce artificial hailstones and simulate realistic hail impacts lead to a full-scale demonstration at the IBHS Research Center. This unique research is leading the way for improving products and standards that will help reduce costly damage. [Click here to learn more.](#)

Are you located in a hail-prone region?



Hiring the Right Contractor

After a hailstorm, hire a qualified inspector to inspect the roof, assess the type and extent of hail damage, and recommend a plan for repair.



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