Roofing systems aid in protecting our work environment from the everyday struggles of cold and heat. They are the shields that keep our employees safe and our business operational when Mother Nature sends her fury. Roofs are arguably subject to more adverse conditions — especially hail — than any other part of your building.

What is hail?

Hail is precipitation in the form of small balls or lumps usually consisting of concentric layers of clear ice and compact snow.

6,045 major hail storms in 2017. 10.7 million properties were affected by hail.
During the past five years, claims related to wind and hail damage in the US accounted for almost 40 percent of all insured losses, averaging approximately $15 billion annually and growing each year.

**ESTIMATED US PROPERTIES AFFECTED BY HAIL, 2013–2017 (IN MILLIONS)**

Source: https://www.iii.org/fact-statistic/facts-statistics-hail

**HOW TO REDUCE THE IMPACT TO YOUR BUILDING**

1. **Know your risk.**

Check the National Severe Storms Laboratory to see if your area is prone to hail greater than three-fourths inch in diameter. It is also important to know your applicable hail deductible as it can be different than your all other perils (AOP) deductible.

2. **Consider a roof with a hail resistant rating.**

Every business should consider, when replacement is needed, upgrading their roof to a system with a hail resistance rating if they are in an area with a history of hail events. Work with your designers and contractors to understand your options and the risks involved. Approved roof assemblies will aid in protecting your roof and business from excessive hail damage. Some examples include a concrete paver ballasted roof, or a slag or gravel surfacing. Roof types more susceptible to hail damage include roof coverings with blisters or cracks, light metal roofs, and smooth coverings such as single-ply and built-up roofs. Unfortunately, no roof type is 100 percent hail-proof.
FM Global has developed Standard 4473, Specification Test Standard for Impact Resistance Testing of Rigid Roofing Materials by Impacting with Freezer Ice Balls. The UL 2218 classification set a standard for impact resistant roofing whereby materials were rated on their resistance to impacts with steel balls simulating 90 mph hailstones of various sizes. Classifications for impact resistance are expressed as Class 1, 2, 3 or 4, which relate to a roof covering’s ability to withstand impact. Impact-resistant roofing materials that are rated Class 4 provide the best resistance to hail damage.

3. Implement a good roof maintenance plan.

This can extend the life of your roof and roof mounted equipment. Be sure to include the following in the plan:

- Repair all blisters or cracks in roof coverings immediately.
- Make sure any ballasted roof coverings are level and have no bare spots.
- Keep drains, downspouts and gutters clean.
- Make sure skylights are protected or install skylights that have impact ratings.
- Choose equipment that can survive hail impact or protect any roof-mounted equipment with guards or shields.

Unfortunately, last-minute action plans are not usually possible before hail storms, meaning prevention plans are key in keeping your facility safe. This means having roofs with an impact resistance rating, protecting HVAC and roof-mounted equipment, and implementing proper maintenance plans.

References
https://disastersafety.org/hail/reduce-hail-damage-to-businesses/
www.nssl.noaa.gov
http://www.rmiia.org/catastrophes_and_statistics/Hail.aspx
Our Mission

To be the worldwide value and service leader in insurance brokerage, risk management, employee benefits and retirement services

Our Goal

To be the best place to do business and to work