

## Hail Damages to Roof Systems #5 Metal Roofs and Rooftop Accessories

Hail is a natural, destructive force that can cause severe damages to residential, commercial and industrial roof systems. Analysis and confirmation of "true" hail damages must be performed by personnel with both technical training and extensive field training expertise of the natural and physical natures of both hailstones and roof systems.

Metal panel roof systems are generally resistant to typical hail impacts. Some insignificant mild denting can occur without causing loss of function, life or aesthetics.

Very large, huge and dense hailstones can cause severe and "sharp peening" and subsequent damages to metal roof systems.

Softer material such as copper and aluminum are more susceptible to actual hail damages.



Huge hailstones of up to greater than 5.00" in diameter can cause severe damages and actually punctured this standing seam steel metal roof, leaving large holes the sizes of small footballs.



While not all hail dents to rooftop metals are harmful, inspecting these adjacent services can give credence to actual hailstone sizes and the severity of a questioned hail event.



Hail is NOT selective and will impact exterior surfaces. Therefore, other exposed surfaces should also be examined when performing hail damages analysis to roof systems.



- Soft and vulnerable HVAC cooling fins can memorialize hailstone sizes and frequencies as well, as directional paths of particular hail events.
- Examination of soft, vulnerable exposed materials is recommended to collaborate hail sizes and frequencies which may have impacted the roofing materials.



- Other soft and vulnerable materials such as this aged vinyl siding can memorialize hailstone sizes and frequencies as well as directional paths of particular hail events. However, actual damage sizes left in thin plastic sidings can be much larger than the actual hailstones sizes.
- Examination of soft vulnerable exposed exterior materials is recommended to collaborate hail sizes, frequencies and directional paths of hailstones which may have impacted the roofing materials.



While very unusual, very large and dense hailstones can also damage high impact, resistant materials such as this concrete driveway damaged in the April 10, 2001 severe hail event which devastated North St. Louis County, Missouri.

