

# How big of a hail can photovoltaic panels protect against

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Hail damage is now the dominant solar insurance risk: Accounting for 54% of all solar loss claims at an average of \$58.4 million per claim, hail has become the primary weather-related threat ...

Designers typically create solar panels that can withstand hailstones up to 1 inch in diameter falling at terminal velocity. The International Electrotechnical Commission (IEC) 61215 ...

Solar panels with UL 61730 or IEC 61730 markings are resilient to most hail storms across the U.S. Solar panels that pass these tests can withstand between one inch to three-inch hailstones traveling ...

Hail doesn't generally damage photovoltaic (PV) systems unless the hail is at least 1 3/4 inches in diameter, or about the size of a golf ball, according to the U.S. Department of Energy.

Despite technological advances in hail-resistant panels, it is best to stay cautious and use covers for additional protection. Solar panels, with thick tempered glass, can endure hail diameters ...

However, hail with pellets larger than 3 cm can cause micro-cracks in the silicon cells. These damages, while not always visible, can progressively reduce the yield of the system. ...

In areas that have experienced very large hail (greater than 1 &#190;&quot; or 44 mm diameter), however, hail has caused significant damage to PV modules. Some measures can be taken to limit damage to PV ...

Typically, hail larger than 1.75 inches (approximately 44 mm) in diameter can cause significant damage to solar panels. Larger hailstones exert greater impact force upon striking, making ...

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