

# GERARD ROOF HAIL RESISTANT

 **GERARD**  
The worry-proof roof

# HAIL

Hail is formed when drops of water freeze together in the cold upper regions of thunderstorm clouds. A frozen droplet begins to fall from a cloud during a storm, but is pushed back up into the cloud by a strong updraft of wind. As the hailstone moves upwards through the cloud it meets liquid water droplets, which freeze onto it, adding another layer. The hailstone eventually falls to earth when its weight can no longer be supported by the cloud, or when the updraft slows down or ceases.



Hailstones can severely damage crops, vehicles and buildings. Roofs are particularly vulnerable. Increasing extreme changes in our climate necessitate more resistant roofing materials.



Clay tiles after the hailstorm



Clay tiles after the hailstorm



Clay tiles after the hailstorm in Črnomelj\*



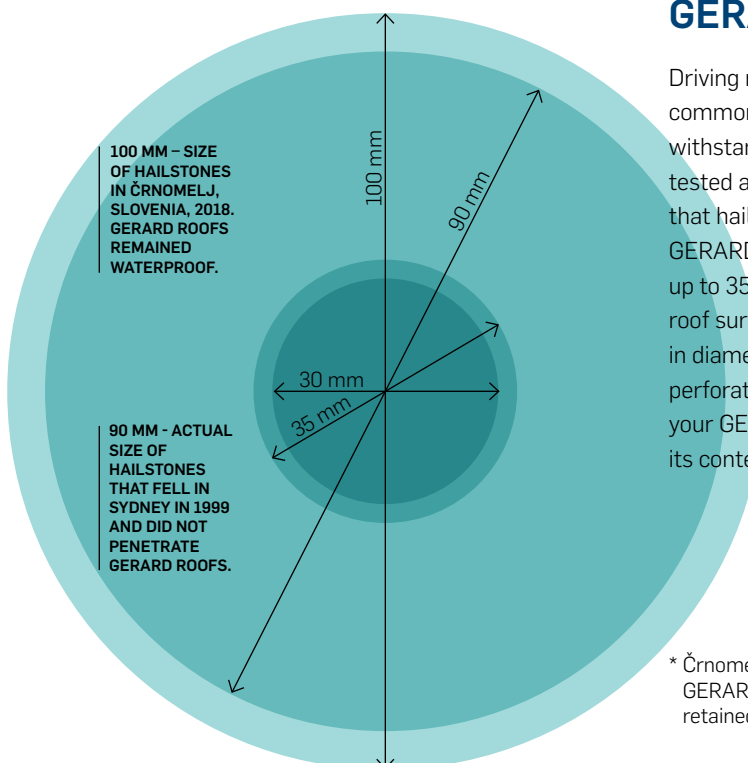
Asbestos fiber cement roof after the hailstorm



Concrete tiles after the hailstorm in Črnomelj\*



GERARD tiles after the hailstorm in Črnomelj\*



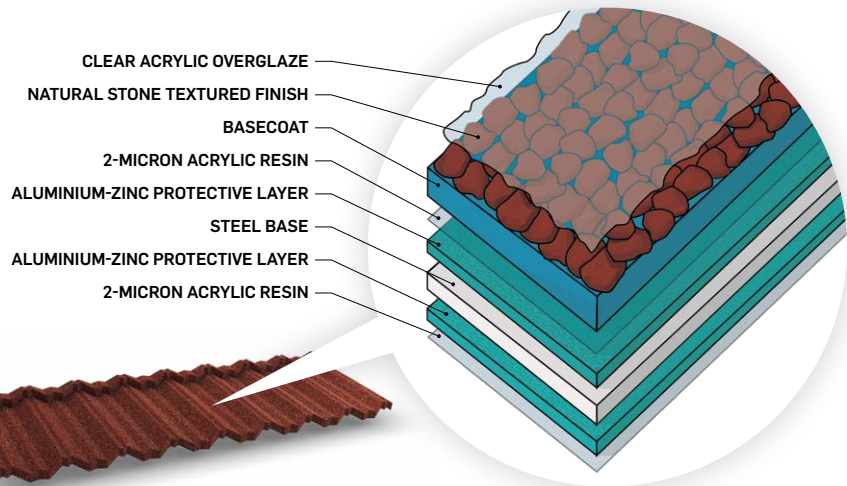
## GERARD IS HAIL RESISTANT

Driving rain, high humidity and hailstones are relatively common types of weather and a roof must be able to withstand these conditions. Our roofs have been endurance tested at extreme sites around the world. Tests have shown that hailstones up to 30mm in diameter will not even dent a GERARD roof. The same tests suggest that, whilst hailstones up to 35mm in diameter may dent a textured GERARD roof surface in severe conditions, hailstones up to 100mm in diameter still will not penetrate the textured finish or perforate the steel membrane. Through driving rain or hail your GERARD roof will weatherproof your home and protect its contents.

\* Črnomelj, Slovenia, 2018, size of hailstones: diameter 10cm. GERARD roof had some visible damage, but was not penetrated and retained its weather security.

## MATERIAL STRUCTURE OF GERARD TILE

GERARD pressed steel tiles are made by chemically fusing layers of high-quality raw materials into individual lightweight pressed steel panels (or tiles). When secured together they create a roof with remarkable strength, durability and visual appeal.

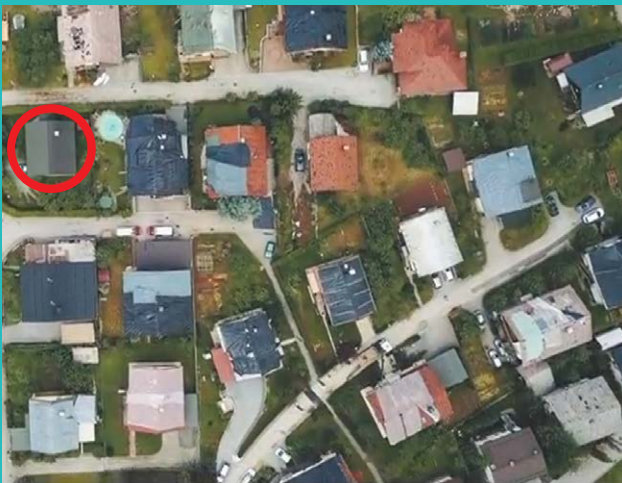


## ACTUAL CASES



Sydney Australia, 1999

In Sydney Australia, a severe hail storm on 14th April 1999 produced hail stones reaching 90 mm in diameter. During the five-and-a-half hour storm, many slate, clay and concrete tile roofs were cracked and broken. In the photograph, the roof of the house on the right was significantly damaged; the GERARD roof next door retained its weather security, protecting the home and its contents.



GERARD roof among other roofs after the hailstorm in Črnomelj, Slovenia

On 8th June 2018 a hailstorm with extremely huge hailstones 10cm in diameter hit the South East region of Slovenia. Most devastated was Črnomelj municipality where the roofs of over 1700 private houses and non-residential buildings were destroyed.

GERARD roofs proved to be hail resistant. In spite of the extreme size of the hailstones, GERARD roofs remained waterproof; the roof surface was slightly deformed, but not penetrated. This was not the case with other types of roofs.



View from GERARD roof after the hailstorm in Črnomelj, Slovenia



Saint Sornin in France was devastated on 5th July 2018. GERARD roof remained waterproof





HAIL RESISTANT



LIGHTWEIGHT



WIND & STORM  
RESISTANT



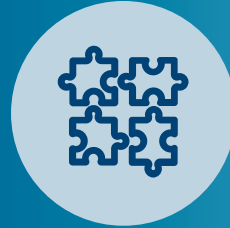
SNOW & ICE  
RESISTANT



FIRE RESISTANT



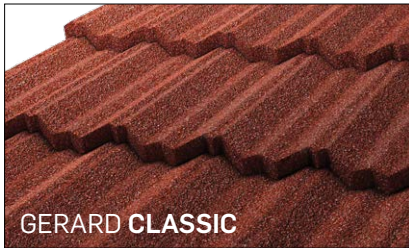
NOISE RESISTANT



STRUCTURE



VENTILATION



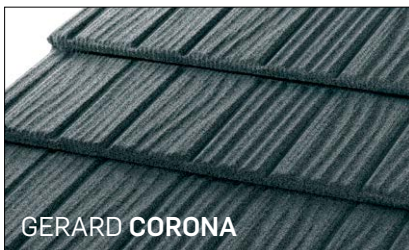
GERARD CLASSIC



GERARD HERITAGE



GERARD DIAMANT



GERARD CORONA



GERARD SENATOR



GERARD MILANO



GERARD ALPINE



GERARD ELEGANTA



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