

Lightning

A PERFORMANCE REPORT IN THE EVENT OF LIGHTNING

enduring roof systems crafted in nature's image





AHI Roofing systems are made from sheet steel coated with stone chips. Experience shows that metal roofs are no more vulnerable to a lightning strike than any other non-metallic substrate. Indeed, the likelihood of a lightning strike is determined only by the height and location of the building.

LIGHTNING STRIKES ON BUILDINGS

About 20 per cent of lightning in North America is known as vertical lightning which is lightning that reaches the ground. The most likely targets for vertical lightning are the tallest objects in the vicinity such as trees, power poles, pylons, fences, aerials, prominent hills and buildings.

If a building is the highest object then the likely target will be the building's highest point such as chimney, television aerial or lightning conductor. Passage of the lightning to the ground will follow the shortest conducting path which could be a proper lightning conductor, a wet wall or the edge of the building.

A well-earthed building will be undamaged by the passage of the lightning. However, a building with a wooden or thatched roof would be a special fire risk if not protected by a lightning conductor.



Well earthed building undamaged by passage of lightning.

METAL ROOFS AND LIGHTNING

In New Zealand more than fifty per cent of houses have metal roofs while there are also a significant number of metal roofs in the Florida Keys. Both locations are subject to frequent and violent electrical storms and yet there is no evidence – in either place – of more lightning strikes on metal roofs than on any other roof type.

Metal clad roofs are now also a common choice for industrial and commercial buildings. This trend does not make the structure any more vulnerable to a lightning strike than one roofed with a non-metallic substrate. Because water is an excellent conductor of electricity, a wet bitumen-type roof for example, is as good an electrical conductor as a metal roof.



Metal clad roofs no more vulnerable to lightning than non-metallic roofs.

AHI ROOFING SYSTEMS. THE SIMPLE SOLUTION.

AHI Roofing is the world leader in the development, manufacture and marketing of stone-coated steel roofing materials which provide safety, security and peace of mind in the most extreme environments and weather conditions.

Enduring roof systems. Crafted in nature's image. Manufactured to the highest international standards. AHI Roofing is registered to ISO 9001 which

recognises the quality management systems standards now accepted in more than one hundred and fifty countries. This certification recognises the commitment of AHI Roofing to quality, productivity, cost competitiveness and customer satisfaction. Tested and proven.

AHI Roofing systems have been tested and proven under a wide range of extreme natural conditions.



A FLETCHER BUILDING COMPANY

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