

# *Hail and Snow*

TESTED AND PROVEN IN HAIL AND SNOW  
A PERFORMANCE REPORT

enduring roof systems crafted in nature's image



## AHI ROOFING - TESTED AND PROVEN IN HAIL AND SNOW

AHI Roofing systems have been proven under all possible and extreme weather conditions around the world including large hailstones and heavy snow loads.



### THE HAIL TEST

The hailstones test by Australia's Commonwealth Scientific and Industrial Research Organisation's division of building, construction and engineering. The test method used was in accordance with the CSIRO's recommendations for 'Resistance of roof coverings to impact of hailstones'.

The test roof was mounted at 28 degrees. Various-sized ball bearings were dropped from two metres. Each drop point received three blows from a single-size of bearing; any resultant damage was then noted.

Translating the size and weight of bearings used into hailstones showed that no damage was caused by hailstones up to 30 mm diameter. At 35 mm diameter hailstones might crush the stone chip coating on the crest of the roof but there were still no dents.

Larger hailstones could crush the stone chip coating and cause small dents. However the stone chip coating was still not completely penetrated **even with hailstones up to 90mm diameter.**



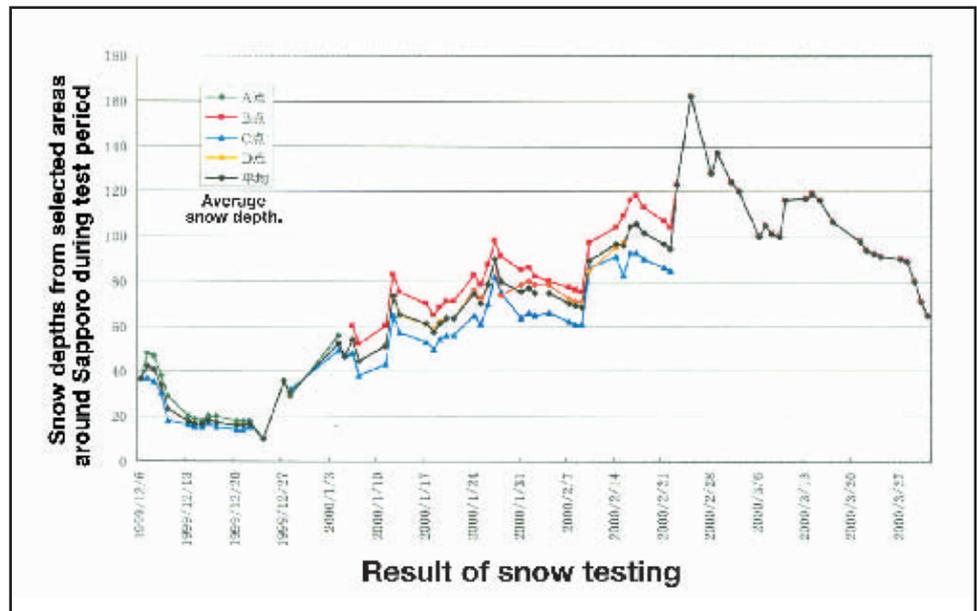
### THE SNOW TEST

The testing ground chosen was in Hokkaido, Japan, which is well known for high snow falls. The conditions of snow build-up were measured over four months in the peak of winter, and all after-effects were noted.

The interior temperature of the test house was maintained at approximately 20°C.

Over the period of the test the maximum snow depth on the roof was 50cm. Throughout the period of snow build-up and the subsequent thawing the AHI Roofing system maintained a constant barrier. There was no evidence of leakage anywhere in the roof area.

As snow on the eaves melted there was no tendency for snow to build up in the gutters. Icicles formed on the tiles but these were easily accommodated by the guttering. Most importantly, no damage was seen to have been caused to the roof structure by the weight of the snow. The tile maintained its shape, and the stone chip coating was in good condition with no signs of delamination or discoloration.



### SAY GOODBYE TO SLIDING SNOW

The stone surface of all AHI Roofing's roof tiles is a potential life saver. Its rough texture holds snow in place until it melts naturally and harmlessly. Dangerous snow sliding is therefore eliminated without the need for expensive and unsightly snow stops.



7 DECEMBER



7 MARCH

### FURTHER TESTING

#### • Concentrated Force on Roofing Tiles test

by Cyclone Testing Station, Australia. Standard AS1562-1973.

### 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

90-104 Felton Mathew Ave, Glen Innes

PO Box 18071, Glen Innes,

Auckland, New Zealand

**Telephone:** (64 9) 978 9010

**Facsimile:** (64 9) 978 9069

**Email:** export@ahiroofing.co.nz

