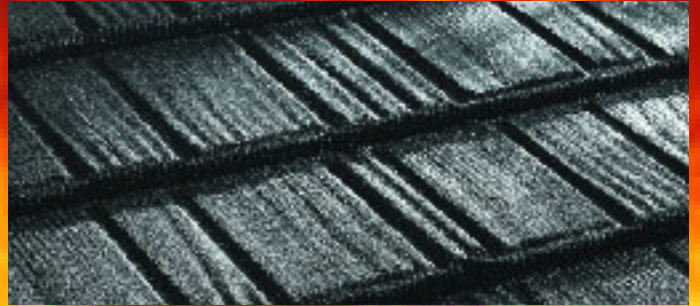


Lightweight,  
Enduring and  
Attractive Roof Systems

# Fire Resistant Roofing Solutions

Keeping your home protected



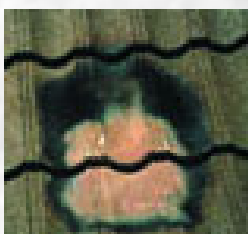
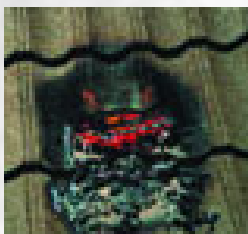
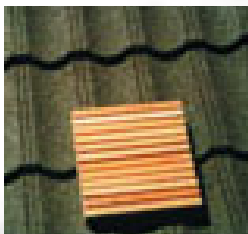
# AHI Roofing provides fire resistant solutions

making buildings safer, stronger and more durable.

In many countries around the world, timber shake and shingle roofs are common. Similarly, concrete and clay tile roofs are used globally, especially for new constructions.

Homeowners, however, often do not realise the inherent dangers associated with those materials, particularly the dangers associated with fire.

“Burning Brand Test” on AHI Roofing, part of the test procedure conducted in accordance with Test Standard UL790, “Tests for Fire Resistance of Roofing Covering Materials” (ASTM E-108)



## THE DANGERS OF TIMBER OR ASPHALT TILES

■ Timber shake and shingle roofs are typically chosen for their natural beauty. But they can curl, split, absorb water and swell. Moreover, they are susceptible to high winds and even in the best conditions they can quickly fail. Water ingress through leaking shake roofs, often after only five years, require shake roofs to be patched, usually unsuccessfully. No longer does the shake roof display any of its former beauty.

Asphalt tiles are also prone to deterioration over time. More important however, is the risk of the timber shake roof or the asphalt tile roof catching fire and inflicting loss and damage on the home and homeowner. Timber or asphalt tiles are highly combustible and can easily support and fuel flames. Wind-blown embers from bush and scrub fires, nearby house and building fires, fireplaces and fireworks have all caused shake and asphalt roofs to burst into flames.

Even after additional fire resistance treatments to timber or asphalt roofs they can still burn.

## RISKS WITH CLAY AND CONCRETE TILES

■ Heavy-weight concrete and clay tile roofs also have their problems. They can crack or break, they are susceptible to high winds, may require extensive frame reinforcement in new and re-roofing applications, and they can create problems with interior fires.

In addition, the weight of the clay or concrete roof tiles can put excessive stress on rafters weakened by fire damage. In many instances, buildings can be completely destroyed when the risk of a heavy roof collapsing means that fire-fighters are unable to enter the building safely.

Surrounded by destruction, including homes covered in other Class A roof products, this roof from AHI Roofing survived the most severe of tests.



## Proven around the world

First produced in 1957, systems from AHI Roofing are now manufactured in factories around the world and are marketed in more than 70 countries. Over a million roofs have been successfully installed by a worldwide network of trained contractors.

■ Proof of the fire-resistant qualities of AHI Roofing products is demonstrated by test results and classifications provided by authorised agencies:

- Class A, B or C Fire Rating, ICBO Evaluation Service Inc., when installed in accordance with the Uniform Building Code.
- Class A, B or C Fire Rating, Underwriters Laboratories Inc. in accordance with Test Standard UL 790 "Tests for Fire Resistance of Roofing Covering Materials" (ASTM E-108).
- Class A, B or C Fire Rating, Southern Building Code Congress International, Inc. (SBCCI) in accordance with the Standard Building Code.
- External fire exposure test, DD ENV 1187 - test method 1 (DIN 4102.7).

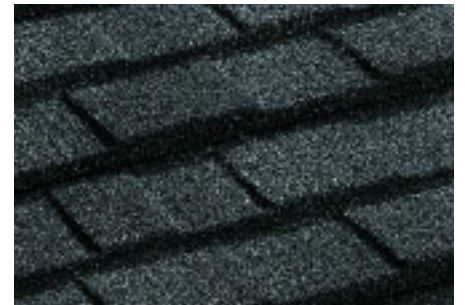
- Nonflammable Material Certificate NM - 8744, issued under the Building Standard Laws of Japan.

Fire resistant materials from AHI Roofing have been approved by testing laboratories and appraisal authorities worldwide. Copies of test reports and appraisal certificates are available on request.

## The fire resistant solution from AHI Roofing

A safe roofing solution must be extremely fire resistant to prevent hot embers from external fires spreading. The ideal roof will be lightweight yet strong and securely interlocked to prevent it collapsing if an interior fire becomes established.

■ Roofing materials manufactured by AHI Roofing are made from non-combustible, high-quality aluminium-zinc coated steel.



## Lightweight and strong

Tiles made by AHI Roofing are light, weighing in at a mere 7kg per square metre, which is approximately one seventh the weight of concrete and clay tiles. With every tile being securely fastened at eight points, there is little chance of a roof collapsing.

■ AHI Roofing products are tested to comply with or exceed relevant building codes and regulations.

# Fire Resistant Roofing Solutions

Keeping your home protected.



■ Orange, California. This home was completely destroyed by an interior fire. As the fire burned the heavy tile roof began to collapse. With concrete tiles now becoming a danger, the Fire Department was unable to fight the fire from within the house.



■ This roof at 30kg/m<sup>2</sup> is over four times heavier than tiles made by AHI Roofing. There is an added danger of the fire-weakened rafters collapsing under the weight of the roof, both during and after the fire.



■ The home on the left was re-roofed with tiles from AHI roofing. More than 50 surrounding houses burned. Although the fascia boards blistered and charred, and windows cracked in the severe heat, the house with the roof from AHI Roofing did not burn.

## AHI ROOFING AT A GLANCE

- Lightweight and strong.
- Can be installed on to steel or timber battens.
- Easily installed on a simple frame or structure.
- Engineered to be safe in strong winds.
- Variety of colours and textures.
- Tile, Shake or Shingle profiles.



## 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 9001:2000 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. Copies of test reports and appraisals are available from your AHI Roofing distributor.



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](mailto:export@ahiroofing.co.nz)

[www.ahiroofing.com](http://www.ahiroofing.com)